Accesso Office Building Traffic Analysis

City of Hallandale Beach, FL

Prepared by

McMAHON
TRANSPORTATION ENGINEERS & PLANNERS

December 2014

ACCESSO OFFICE BUILDING
TRAFFIC ANALYSIS

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December 2014

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1.0 INTRODUCTION

McMahon Associates, Inc. (McMahon) has performed a traffic analysis for the development of a parcel of land located on the northeast corner of N. Federal Highway and NE 1st Street, in the City of Hallandale Beach. The site currently includes vacant land and a surface parking lot. The proposed development, with an anticipated buildout year of 2016, will include 27,444 square feet of office space. The site plan is included in **Appendix A**.

The following intersections were evaluated as part of this study:

- Hallandale Beach Boulevard at N. Federal Highway
- Hallandale Beach Boulevard at NE 8th Avenue
- Hallandale Beach Boulevard at NE 10th Avenue
- N. Federal Highway at NE 3rd Street

Figure 1 graphically depicts the site location, as well as the study intersection locations.

This study evaluates the traffic impacts associated with the proposed development on the surrounding roadway network for three (3) scenarios:

- Existing (2014) Conditions.
- Background (2016) Conditions: Future traffic without project traffic.
- Total (2016) Conditions: Future traffic with project traffic.

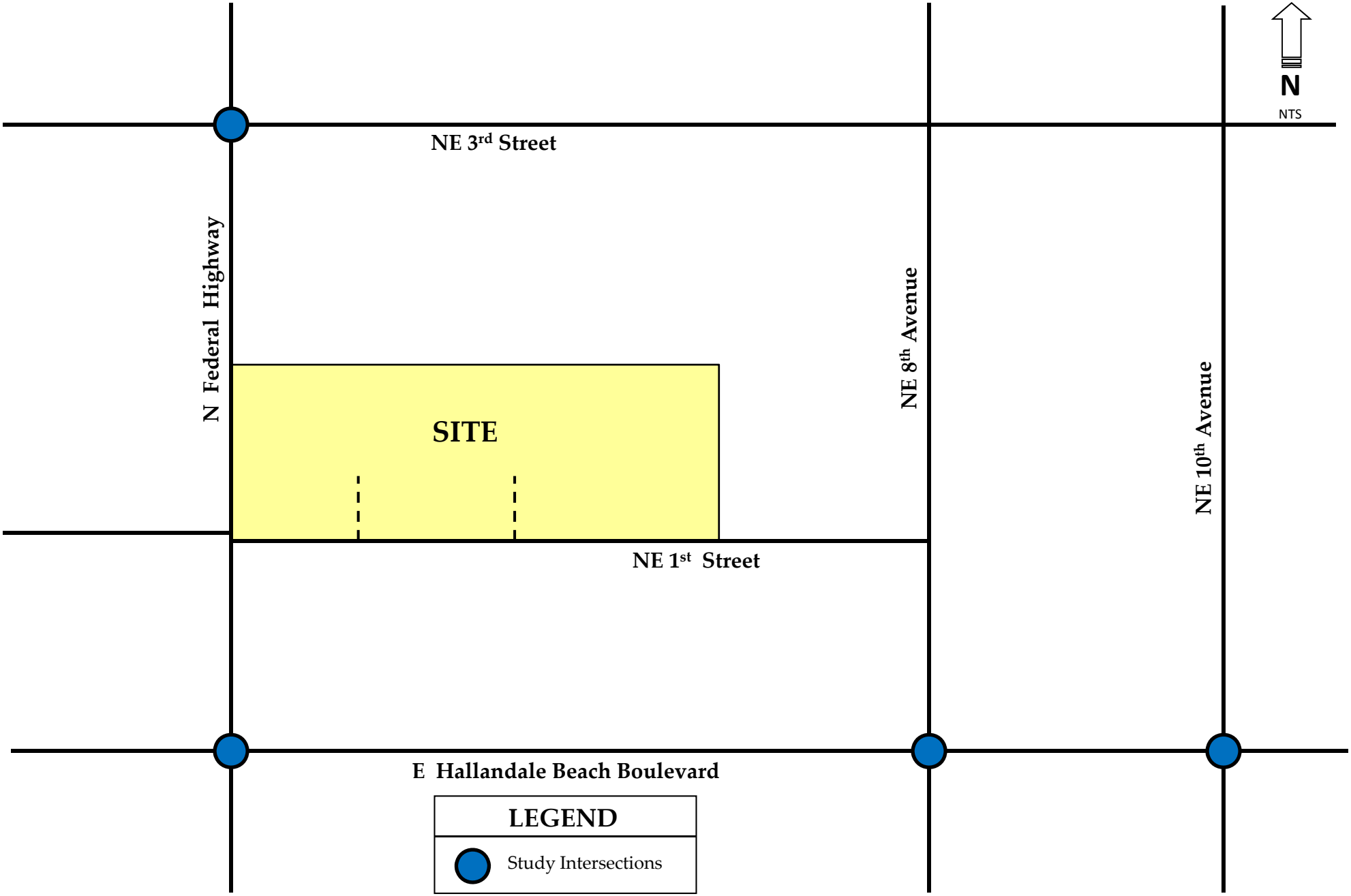

Figure 1
Site Location Map
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS
Hallandale, Florida

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2.0 EXISTING (2014) CONDITIONS ANALYSIS

2.1 Roadway Characteristics

A field review was conducted to obtain all relevant roadway characteristics, including roadway geometries, speed limit information, turn prohibitions, and signal operations information. The existing lane geometry is shown on **Figure 2**. The following information was collected:

- Hallandale Beach Boulevard is a six-lane, divided roadway with posted speed limits of 35 miles per hour (mph).
- N. Federal Highway is a six-lane, divided roadway south of Hallandale Beach Boulevard, with a posted speed limit of 45 mph. North of NE 1st Street, Hallandale Beach Boulevard is a four-lane, divided roadway with a posted speed limit of 35 mph.
- NE 3rd Street is a two-lane, undivided roadway with a posted speed limit of 25 mph.
- NE 8th Avenue is a two-lane, undivided roadway with a posted speed limit of 25 mph south of Hallandale Beach Boulevard, and a one-lane, one-way southbound roadway north of Hallandale Beach Boulevard, with a posted speed limit of 25 mph.
- NE 10th Avenue is a four-lane, undivided roadway with a posted speed limit of 20 mph south of Hallandale Beach Boulevard, and a one-lane, one-way northbound roadway north of Hallandale Beach Boulevard, with a posted speed limit of 25 mph.
- All study intersections are signalized.

2.2 Data Collection – Turning Movement Counts

Turning movement counts were collected at the study intersections on December 10, 2014 from 7:00 to 9:00 AM and from 4:00 to 6:00 PM. The turning movement counts are included in **Appendix B**. Based on the collected data, the morning peak hour occurs between 8:00 and 9:00 AM for the study intersections along Hallandale Beach Boulevard and from 7:45 to 8:45 AM for the intersection of N. Federal Highway at NE 3rd Street. The afternoon peak hour occurs between 5:00 and 6:00 PM for all the study intersections.

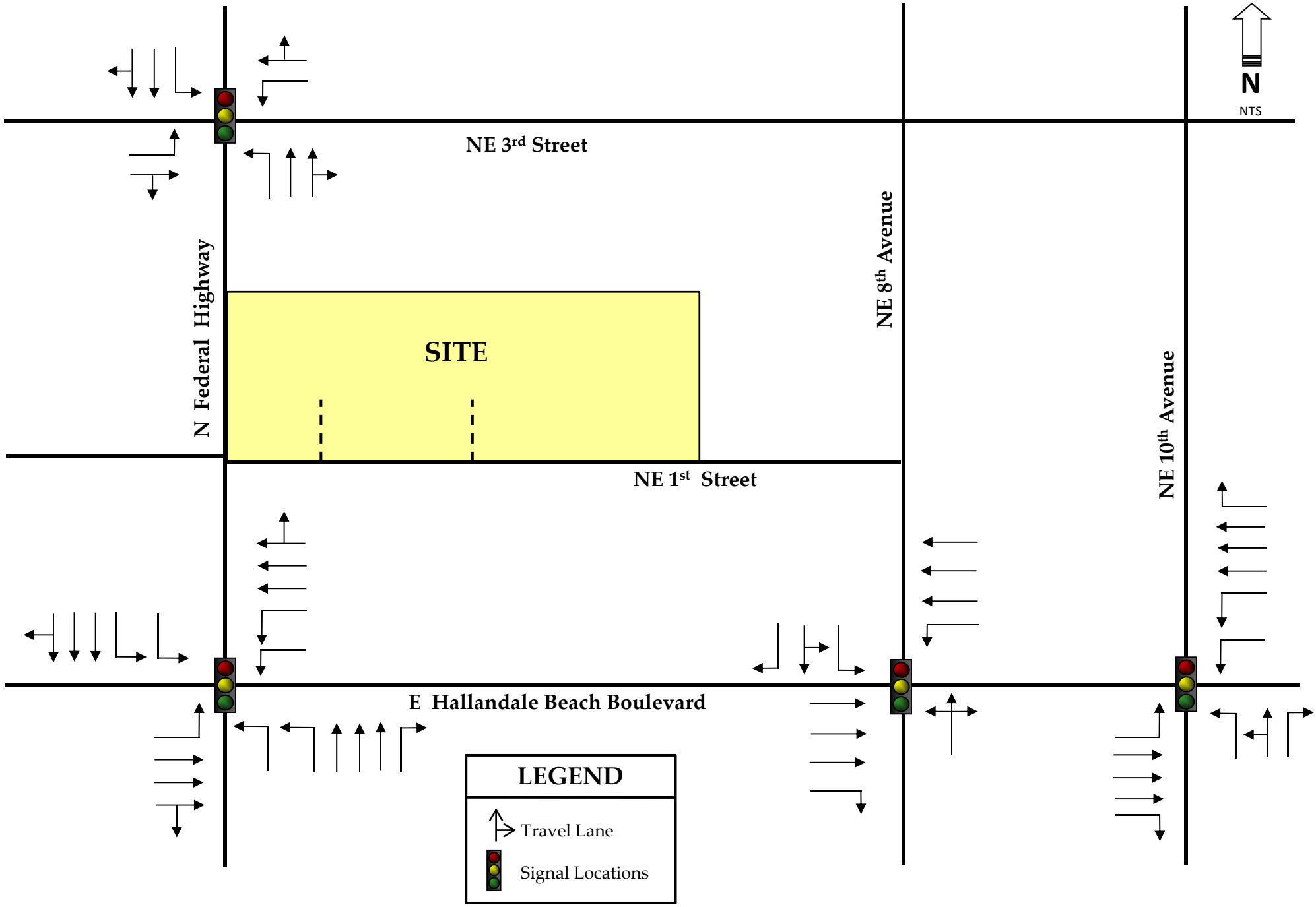

Figure 2
Existing Lane Geometry
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS
Hallandale, Florida

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2.3 Traffic Volumes

A Peak Season Conversion Factor (PSCF) was applied to existing turning movement counts to estimate peak season data. The PSCF, determined to be 1.08, was obtained from the 2013 Florida Department of Transportation (FDOT) *Peak Season Factor Category Report*, attached in Appendix B. Table B-1 and Table B-2, included in Appendix B, summarize the AM and PM peak hour existing volume calculations, respectively. **Figure 3** graphically depicts the existing (2014) traffic volumes.

2.4 Link Capacity Analysis

Link capacity analysis was performed for the study roadway segments. These included all approach and departure roadway segments at the study intersections. Level of Service (LOS) volume thresholds for Hallandale Beach Boulevard and for N. Federal Highway were based on the Broward Metropolitan Planning Organization (MPO) *Roadways Capacity and Level of Service Analysis 2013 & 2035* tables, attached in Appendix B. The LOS volume thresholds for all other roadways were obtained from the *2013 FDOT Quality/Level of Service Handbook* (2012 tables), attached in Appendix B. The thresholds are based on the roadway Class, which is based on the road speeds. Results of the link capacity analysis, summarized in **Table 1**, indicate that all roadway segments currently operate at an acceptable LOS.

2.5 Intersection Capacity Analysis

Intersection capacity analysis was performed for AM and PM peak hour conditions at the study intersections. The analysis was performed using the Synchro 8 software. The existing signal timings were obtained from Broward County and are included in **Appendix C**. Existing peak hour factors and truck factors were based on the collected data. The intersection capacity analysis worksheets are included in Appendix C**.** Results of the intersection capacity analysis, summarized in **Table 2**, indicate that Hallandale Beach Boulevard at NE 8th Avenue, Hallandale Beach Boulevard at NE 10th Avenue and N. Federal Highway at NE 3rd Street currently operate at an overall acceptable LOS. Some delays are observed along the minor streets to these intersections that exceed the adopted LOS, as priority green time is provided for the major street approaches. Hallandale Beach Boulevard at N. Federal Highway currently operates at an unacceptable LOS.

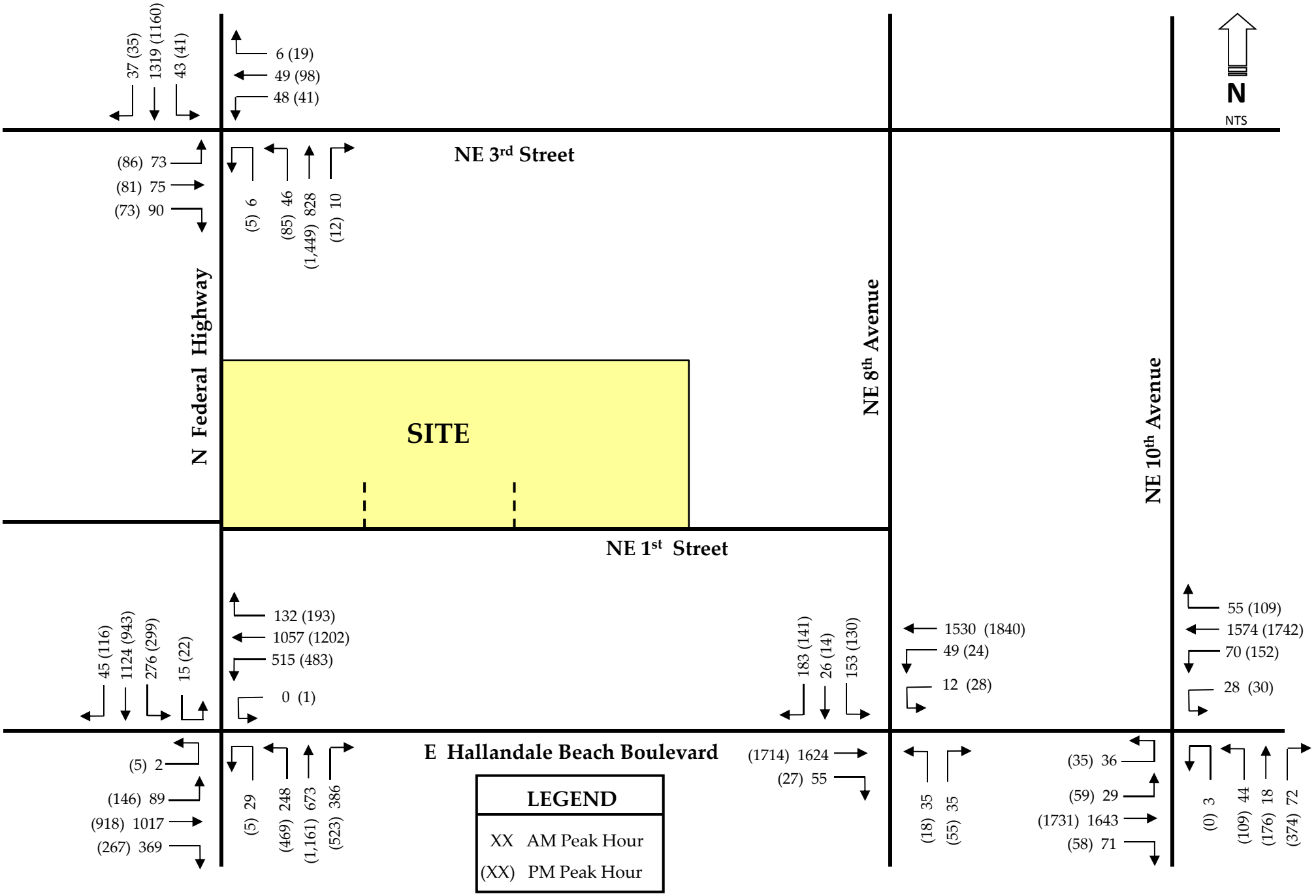

Figure 3
Existing (2014) Traffic Volumes
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS
Hallandale, Florida

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TABLE 1
EXISTING (2014) LINK CAPACITY ANALYSIS
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS

ROADWAY	SEGMENT		NO. OF LANES	ROAD CLASS	ROAD TYPE	ADOPTED LOS THRESHOLD(1)	TRAFFIC VOLUME	VOLUME TO CAPACITY (V/C)	LEVEL OF SERVICE
	FROM	TO							
AM PEAK HOUR									
E. Hallandale Beach Boulevard	NE 4th Avenue	N Federal Highway	6	Class I	State Signalized Arterials	5,390	2,829	0.52	C
	N Federal Highway	NE 8th Avenue	6	Class I	State Signalized Arterials	5,390	3,427	0.64	C
	NE 8th Avenue	NE 10th Avenue	6	Class I	State Signalized Arterials	5,390	3,433	0.64	C
	NE 10th Avenue	NE 12th Avenue	6	Class I	State Signalized Arterials	5,390	3,470	0.64	C
NE 3rd Street	NE 4th Avenue	N Federal Highway	2	Class II	Non-State, Signalized Roadway	1,197	370	0.31	C
	N Federal Highway	NE 8th Avenue	2	Class II	Non-State, Signalized Roadway	1,197	231	0.19	C
N Federal Highway	SE 2nd Avenue	E. Hallandale Beach Boulevard	6	Class II	State Signalized Arterials	4,500	3,373	0.75	D
	E. Hallandale Beach Boulevard	NE 1st Street	4	Class II	State Signalized Arterials	2,920	2,369	0.81	D
	NE 1st Street	NE 3rd Street	4	Class II	State Signalized Arterials	2,920	2,353	0.81	D
	NE 3rd Street	NE 4th Street	4	Class II	State Signalized Arterials	2,920	2,306	0.79	D
NE 8th Avenue	South of E. Hallandale Beach Boulevard	E. Hallandale Beach Boulevard	2	Class II	Non-State, Signalized Roadway	1,197	200	0.17	C
	E. Hallandale Beach Boulevard	NE 1st Street	1	Class II	Non-State, Signalized Roadway	810	362	0.45	C
NE 10th Avenue	South of E. Hallandale Beach Boulevard	E. Hallandale Beach Boulevard	4	Class II	Non-State, Signalized Roadway	2,628	281	0.11	C
	E. Hallandale Beach Boulevard	NE 1st Court	1	Class II	Non-State, Signalized Roadway	810	102	0.13	C
PM PEAK HOUR									
E. Hallandale Beach Boulevard	NE 4th Avenue	N Federal Highway	6	Class I	State Signalized Arterials	5,390	3,128	0.58	C
	N Federal Highway	NE 8th Avenue	6	Class I	State Signalized Arterials	5,390	3,740	0.69	C
	NE 8th Avenue	NE 10th Avenue	6	Class I	State Signalized Arterials	5,390	3,819	0.71	C
	NE 10th Avenue	NE 12th Avenue	6	Class I	State Signalized Arterials	5,390	4,168	0.77	C
NE 3rd Street	NE 4th Avenue	N Federal Highway	2	Class II	Non-State, Signalized Roadway	1,197	458	0.38	C
	N Federal Highway	NE 8th Avenue	2	Class II	Non-State, Signalized Roadway	1,197	292	0.24	C
N Federal Highway	SE 2nd Avenue	E. Hallandale Beach Boulevard	6	Class II	State Signalized Arterials	4,500	3,856	0.86	D
	E. Hallandale Beach Boulevard	NE 1st Street	6	Class II	State Signalized Arterials	4,500	2,902	0.64	D
	NE 1st Street	NE 3rd Street	4	Class II	State Signalized Arterials	2,920	2,830	0.97	D
	NE 3rd Street	NE 4th Street	4	Class II	State Signalized Arterials	2,920	2,790	0.96	D
NE 8th Avenue	South of E. Hallandale Beach Boulevard	E. Hallandale Beach Boulevard	2	Class II	Non-State, Signalized Roadway	1,197	138	0.12	C
	E. Hallandale Beach Boulevard	NE 1st Street	1	Class II	Non-State, Signalized Roadway	810	285	0.35	C
NE 10th Avenue	South of E. Hallandale Beach Boulevard	E. Hallandale Beach Boulevard	4	Class II	Non-State, Signalized Roadway	2,628	869	0.33	C
	E. Hallandale Beach Boulevard	NE 1st Court	1	Class II	Non-State, Signalized Roadway	810	344	0.42	C

(1) Adopted LOS threshold based on 2013 FDOT Quality Level of Service Handbook (2012 LOS Tables) for NE 3rd Street, NE 8th Avenue, and NE 10th Avenue. Adopted LOS threshold for Hallandale Beach Boulevard and Federal Highway based on Broward MPO Roadways Capacity and Level of Service Analysis 2013 & 2025 tables.

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TABLE 2
EXISTING (2014) INTERSECTION CAPACITY ANALYSIS SUMMARY
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS

SCENARIO	TIME PERIOD	OVERALL		EB		WB		NB		SB	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
E. Hallandale Beach Boulevard at N. Federal Highway	AM	78.7	E	94.8	F	100.7	F	49.3	D	62.9	E
	PM	209.2	F	66.9	E	590.2	F	70.5	E	62.7	E
NE 3rd Street at N. Federal Highway	AM	17.3	B	79.0	E	97.7	F	4.9	A	7.2	A
	PM	19.0	B	94.4	F	78.6	E	9.1	A	6.0	A
E. Hallandale Beach Boulevard at NE 8th Avenue	AM	14.2	B	9.4	A	5.7	A	35.8	D	67.3	E
	PM	14.2	B	16.7	B	4.7	A	19.3	B	55.8	E
E. Hallandale Beach Boulevard at NE 10th Avenue	AM	11.0	B	6.3	A	11.7	B	54.2	D	N/A	N/A
	PM	35.3	D	27.6	C	32.7	C	60.5	E	N/A	N/A

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3.0 BACKGROUND (2016) CONDITIONS ANALYSIS

3.1 Background Growth Rate

Traffic volumes for background traffic conditions (future conditions without project traffic) were determined for 2016 by applying a growth rate to existing volumes and adding projected volumes from committed development projects. The growth rate applied to each study roadway was based on a review of five-year, historical traffic volumes (2008 - 2013) obtained for three (3) count stations near the study intersections, which included the following: Stations 86-0590, 86-5028, and 86-5029. The historical volume data is included in Appendix B. The historical volumes indicate a decreasing trend. Therefore, a 1.0 percent compound growth rate was used for the analysis.

3.2 Committed Development Traffic

Based on coordination with the City of Hallandale Beach, traffic anticipated from five (5) committed development projects were included in the analysis. These included the following: a) Art Square, b) Hallandale Oasis, c) CVS Pharmacy, d) Beachwalk, and e) Gulfstream Point. Excerpts from the studies provided by the City are included in Appendix B. Assumptions were made, where necessary, as to the portion of committed trips from each of the committed development projects that would travel through the study intersections. Table B-1 and Table B-2, included in Appendix B, summarize the AM and PM peak hour background volume calculations, respectively. **Figure 4** graphically depicts the background (2016) traffic volumes.

3.3 Link Capacity Analysis

Link capacity analysis was performed for the study roadway segments. Results of the link capacity analysis, summarized in **Table 3**, indicate that all roadway segments are anticipated to continue to operate at an acceptable LOS, with the exception of N. Federal Highway between NE 1st Street and NE 4th Street.

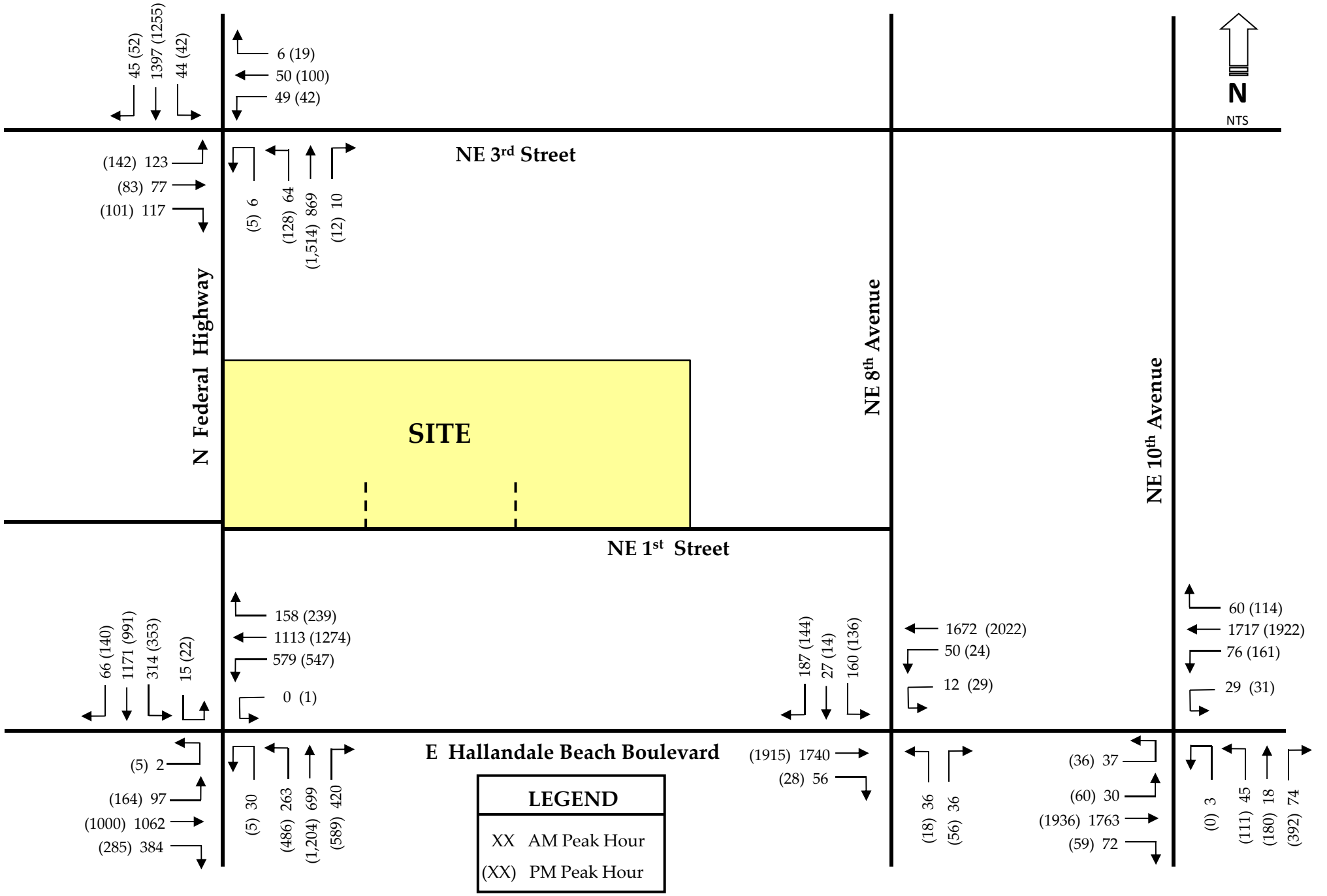

Figure 4
Background (2016) Traffic Volumes
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS
Hallandale, Florida

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TABLE 3
BACKGROUND (2016) LINK CAPACITY ANALYSIS
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS

ROADWAY	SEGMENT		NO. OF LANES	ROAD CLASS	ROAD TYPE	ADOPTED LOS THRESHOLD(1)	TRAFFIC VOLUME	VOLUME TO CAPACITY (V/C)	LEVEL OF SERVICE
	FROM	TO							
AM PEAK HOUR									
E. Hallandale Beach Boulevard	NE 4th Avenue	N Federal Highway	6	Class I	State Signalized Arterials	5,390	2,989	0.55	C
	N Federal Highway	NE 8th Avenue	6	Class I	State Signalized Arterials	5,390	3,691	0.68	C
	NE 8th Avenue	NE 10th Avenue	6	Class I	State Signalized Arterials	5,390	3,701	0.69	C
	NE 10th Avenue	NE 12th Avenue	6	Class I	State Signalized Arterials	5,390	3,748	0.70	C
NE 3rd Street	NE 4th Avenue	N Federal Highway	2	Class II	Non-State, Signalized Roadway	1,197	476	0.40	C
	N Federal Highway	NE 8th Avenue	2	Class II	Non-State, Signalized Roadway	1,197	236	0.20	C
N Federal Highway	SE 2nd Avenue	E. Hallandale Beach Boulevard	6	Class II	State Signalized Arterials	4,500	3,576	0.79	D
	E. Hallandale Beach Boulevard	NE 1st Street	4	Class II	State Signalized Arterials	2,920	2,535	0.87	D
	NE 1st Street	NE 3rd Street	4	Class II	State Signalized Arterials	2,920	2,518	0.86	D
	NE 3rd Street	NE 4th Street	4	Class II	State Signalized Arterials	2,920	2,484	0.85	D
NE 8th Avenue	South of E. Hallandale Beach Boulevard	E. Hallandale Beach Boulevard	2	Class II	Non-State, Signalized Roadway	1,197	205	0.17	C
	E. Hallandale Beach Boulevard	NE 1st Street	1	Class II	Non-State, Signalized Roadway	810	374	0.46	C
NE 10th Avenue	South of E. Hallandale Beach Boulevard	E. Hallandale Beach Boulevard	4	Class II	Non-State, Signalized Roadway	2,628	291	0.11	C
	E. Hallandale Beach Boulevard	NE 1st Court	1	Class II	Non-State, Signalized Roadway	810	108	0.13	C
PM PEAK HOUR									
E. Hallandale Beach Boulevard	NE 4th Avenue	N Federal Highway	6	Class I	State Signalized Arterials	5,390	3,359	0.62	C
	N Federal Highway	NE 8th Avenue	6	Class I	State Signalized Arterials	5,390	4,127	0.77	C
	NE 8th Avenue	NE 10th Avenue	6	Class I	State Signalized Arterials	5,390	4,211	0.78	C
	NE 10th Avenue	NE 12th Avenue	6	Class I	State Signalized Arterials	5,390	4,587	0.85	C
NE 3rd Street	NE 4th Avenue	N Federal Highway	2	Class II	Non-State, Signalized Roadway	1,197	554	0.46	C
	N Federal Highway	NE 8th Avenue	2	Class II	Non-State, Signalized Roadway	1,197	298	0.25	C
N Federal Highway	SE 2nd Avenue	E. Hallandale Beach Boulevard	6	Class II	State Signalized Arterials	4,500	4,112	0.91	D
	E. Hallandale Beach Boulevard	NE 1st Street	6	Class II	State Signalized Arterials	4,500	3,135	0.70	D
	NE 1st Street	NE 3rd Street	4	Class II	State Signalized Arterials	2,920	3,062	1.05	F
	NE 3rd Street	NE 4th Street	4	Class II	State Signalized Arterials	2,920	3,024	1.04	E
NE 8th Avenue	South of E. Hallandale Beach Boulevard	E. Hallandale Beach Boulevard	2	Class II	Non-State, Signalized Roadway	1,197	140	0.12	C
	E. Hallandale Beach Boulevard	NE 1st Street	1	Class II	Non-State, Signalized Roadway	810	294	0.36	C
NE 10th Avenue	South of E. Hallandale Beach Boulevard	E. Hallandale Beach Boulevard	4	Class II	Non-State, Signalized Roadway	2,628	903	0.34	C
	E. Hallandale Beach Boulevard	NE 1st Court	1	Class II	Non-State, Signalized Roadway	810	354	0.44	C

(1) Adopted LOS threshold based on 2013 FDOT Quality Level of Service Handbook (2012 LOS Tables) for NE 3rd Street, NE 8th Avenue, and NE 10th Avenue. Adopted LOS threshold for Hallandale Beach Boulevard and Federal Highway based on Broward MPO Roadways Capacity and Level of Service Analysis 2013 & 2025 tables.

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3.4 Intersection Capacity Analysis

Intersection capacity analysis was performed for AM and PM peak hour conditions at the study intersections. Existing signal timings were maintained. Peak hour factors and truck factors were consistent with existing conditions. Intersection capacity analysis worksheets are included in **Appendix D.** Results of the intersection capacity analysis, summarized in **Table 4**, indicate that Hallandale Beach Boulevard at NE 8th Avenue, Hallandale Beach Boulevard at NE 10th Avenue and N. Federal Highway at NE 3rd Street are expected to continue to operate at an overall acceptable LOS. Some delays are observed along the minor streets to these intersections that exceed the adopted LOS, as priority green time is provided for the major street approaches. Hallandale Beach Boulevard at N. Federal Highway will continue to operate at an unacceptable LOS.

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TABLE 4
BACKGROUND (2016) INTERSECTION CAPACITY ANALYSIS SUMMARY
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS

SCENARIO	TIME PERIOD	OVERALL		EB		WB		NB		SB	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
E. Hallandale Beach Boulevard at N. Federal Highway	AM	92.6	F	108.4	F	128.4	F	52.1	D	69.1	E
	PM	254.1	F	77.0	E	711.7	F	89.4	F	69.7	E
NE 3rd Street at N. Federal Highway	AM	22.0	C	88.8	F	126.0	F	6.2	A	8.5	A
	PM	20.1	C	80.1	F	61.3	E	10.4	B	9.7	A
E. Hallandale Beach Boulevard at NE 8th Avenue	AM	15.4	B	12.0	B	6.0	A	37.3	D	68.8	E
	PM	18.8	B	27.3	C	4.6	A	19.8	B	55.8	E
E. Hallandale Beach Boulevard at NE 10th Avenue	AM	11.2	B	6.4	A	12.1	B	54.8	D	N/A	N/A
	PM	36.8	D	27.4	C	34.8	C	66.8	E	N/A	N/A

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4.0 TOTAL (2016) CONDITIONS ANALYSIS

4.1 Project Trip Generation

The site is currently vacant. The proposed development will include 27,444 square feet of office space. Inbound and outbound trips generated by the proposed development, summarized in **Table 5,** were estimated based on trip generation rates and equations published in the Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 9th Edition. Results of the analysis indicate that the proposed development is expected to generate 491 daily trips, 68 AM peak hour trips and 109 PM peak hour trips. Excerpts from ITE are attached in Appendix B.

4.2 Project Driveway Access

The proposed development will be served by two (2) full access driveway connections to NE 1st Street. NE 1st Street provides access to N. Federal Highway west of the project site, and to NE 8th Avenue east of the project site.

4.3 Project Trip Distribution

Existing volumes and roadway characteristics were reviewed for the surrounding roadway network to determine the existing travel patterns surrounding the project site. In addition, land uses surrounding the project site were also identified and used in determining the most appropriate trip distribution for the proposed development. The project distribution is graphically shown on **Figure 5.**

4.4 Project Trip Assignment

The assignment of project trips at the study intersections, shown on **Figure 6**, was based on the project distribution and trip generation analyses. Detailed calculations of total traffic conditions for the AM and PM peak hour are summarized in Table B-1 and Table B-2, respectively, attached in Appendix B. Total (2016) traffic volumes are graphically depicted on **Figure 7**.

TABLE 5
TRIP GENERATION ANALYSIS
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS

LAND USE	ITE CODE	INTENSITY	TRIP GENERATION RATE [1]	IN	OUT	TOTAL TRIPS		
						IN	OUT	TOTAL
DAILY								
General Office Building	710	27,444 SF	Ln(T) = 0.76 Ln(X)+ 3.68	50%	50%	246	245	491
AM PEAK HOUR								
General Office Building	710	27,444 SF	Ln(T) = 0.8 Ln(X)+ 1.57	88%	12%	60	8	68
PM PEAK HOUR								
General Office Building	710	27,444 SF	T= 1.12 (X)+ 78.45	17%	83%	19	90	109

(1) Source: ITE Trip Generation Manual, 9th Edition.

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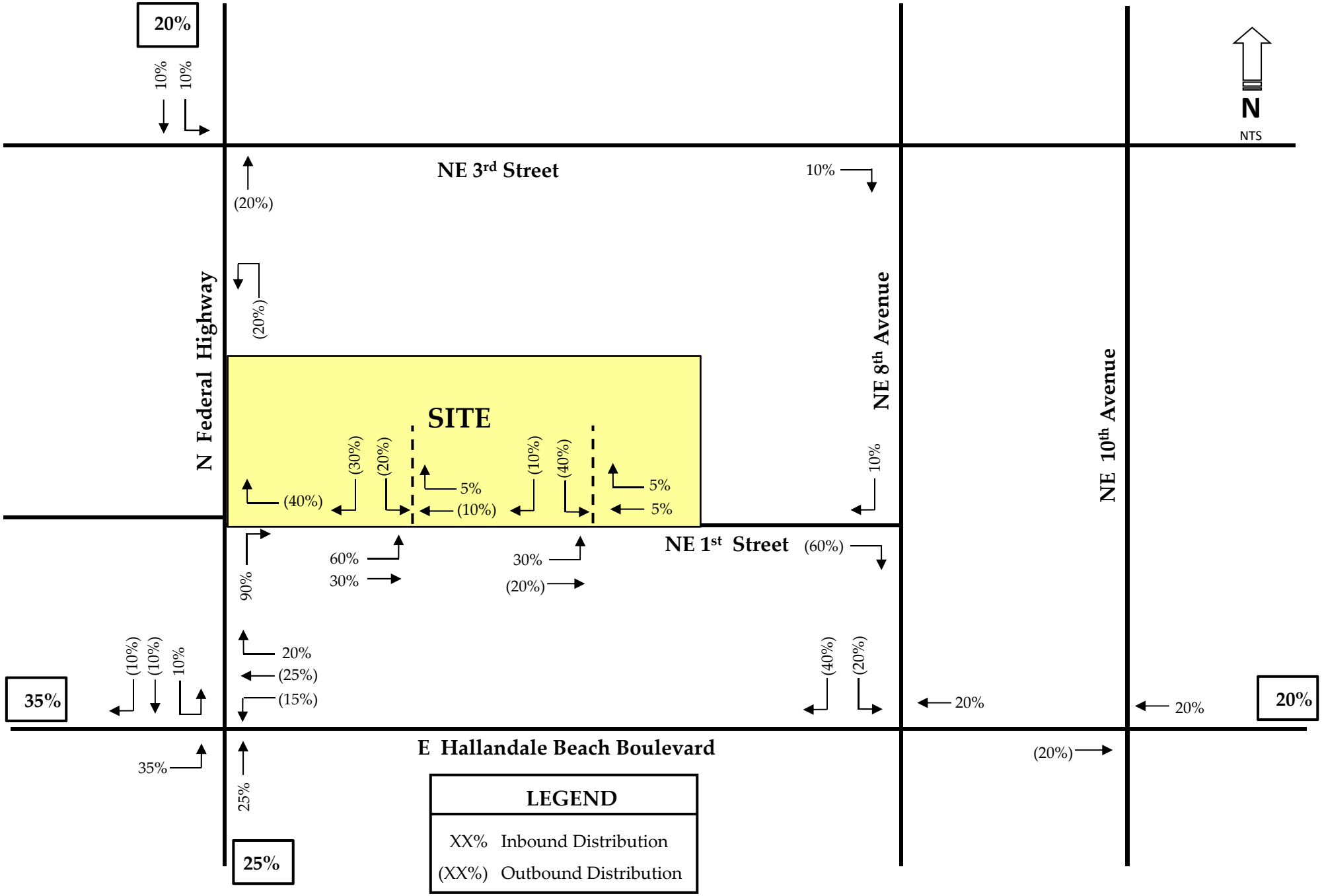

Figure 5
Project Distribution
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS
Hallandale, Florida

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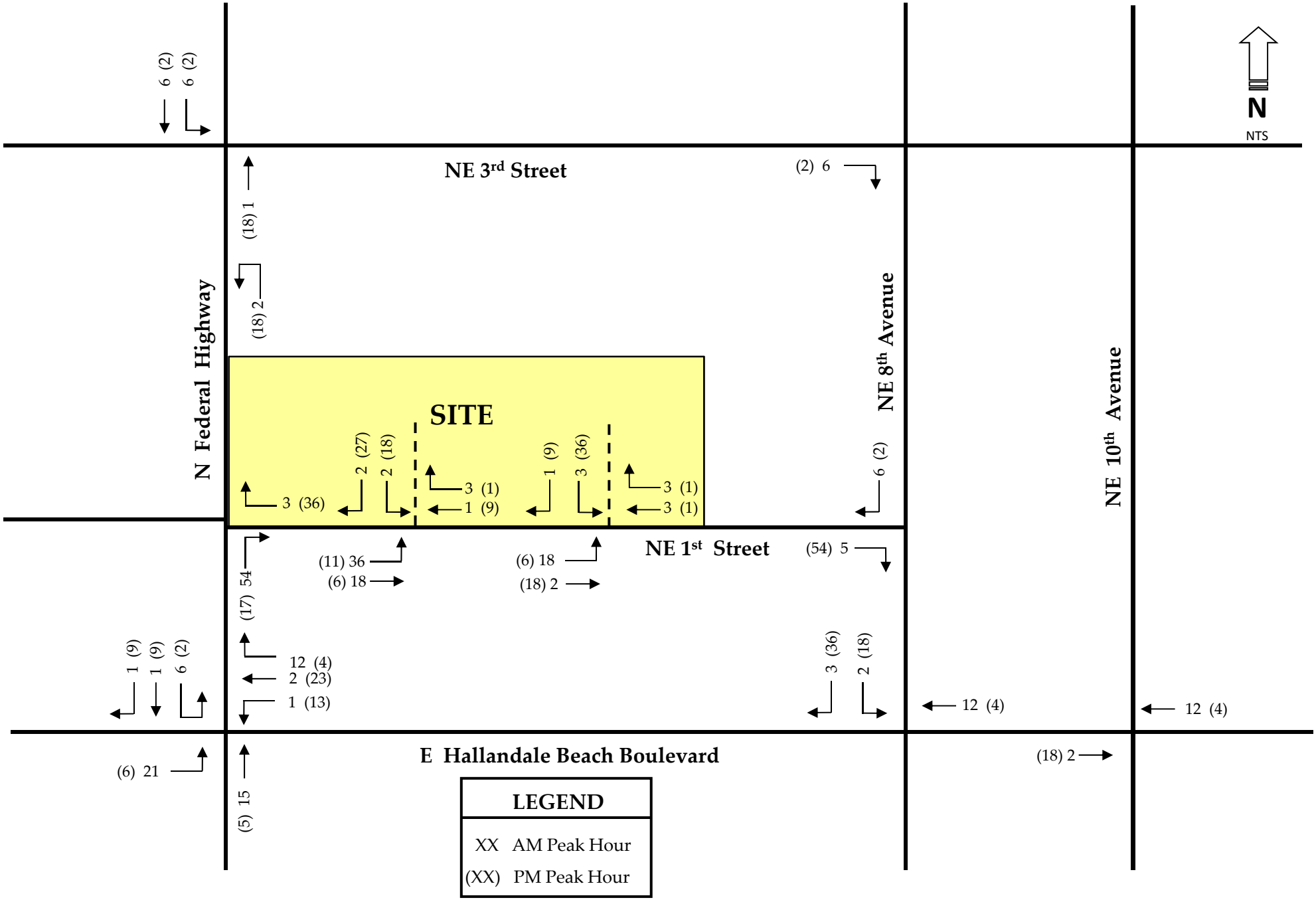

Figure 6
Project Trips
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS
Hallandale, Florida

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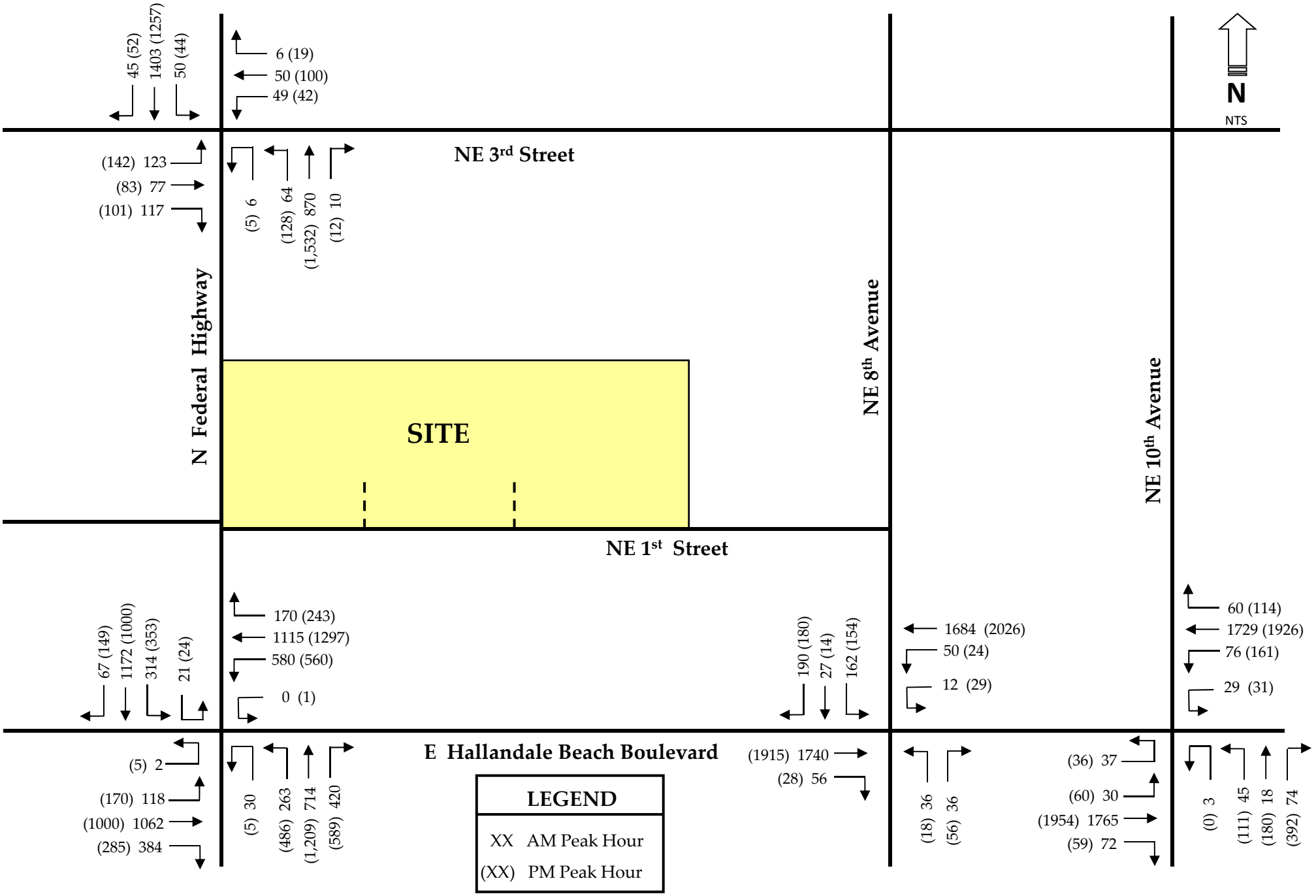

Figure 7
Total (2016) Traffic Volumes
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS
Hallandale, Florida

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4.5 Link Capacity Analysis

Link capacity analysis was performed for the study roadway segments. Results of the link capacity analysis, summarized in **Table 6**, indicate that all roadway segments are anticipated to continue to operate at an acceptable LOS at the project buildout, with the exception of N. Federal Highway between NE 1st Street and NE 4th Street, similar to background traffic conditions.

4.6 Intersection Capacity Analysis

Intersection capacity analysis was performed for AM and PM peak hour conditions at the study intersections. Existing signal timings were maintained. Peak hour factors and truck factors were consistent with existing conditions. Intersection capacity analysis worksheets are included in Appendix E**.** Results of the intersection capacity analysis, summarized in **Table 7**, indicate that Hallandale Beach Boulevard at NE 8th Avenue, Hallandale Beach Boulevard at NE 10th Avenue and N. Federal Highway at NE 3rd Street are expected to continue to operate at an overall acceptable LOS. Some delays are observed along the minor streets to these intersections that exceed the adopted LOS, as priority green time is provided for the major street approaches. Hallandale Beach Boulevard at N. Federal Highway will continue to operate at an unacceptable LOS.

TABLE 6
TOTAL (2016) LINK CAPACITY ANALYSIS
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS

ROADWAY	SEGMENT		NO. OF LANES	ROAD CLASS	ROAD TYPE	ADOPTED LOS THRESHOLD(1)	TRAFFIC VOLUME	VOLUME TO CAPACITY (V/C)	LEVEL OF SERVICE
	FROM	TO							
AM PEAK HOUR									
E. Hallandale Beach Boulevard	NE 4th Avenue	N Federal Highway	6	Class I	State Signalized Arterials	5,390	3,013	0.56	C
	N Federal Highway	NE 8th Avenue	6	Class I	State Signalized Arterials	5,390	3,706	0.69	C
	NE 8th Avenue	NE 10th Avenue	6	Class I	State Signalized Arterials	5,390	3,715	0.69	C
	NE 10th Avenue	NE 12th Avenue	6	Class I	State Signalized Arterials	5,390	3,762	0.70	C
NE 3rd Street	NE 4th Avenue	N Federal Highway	2	Class II	Non-State, Signalized Roadway	1,197	476	0.40	C
	N Federal Highway	NE 8th Avenue	2	Class II	Non-State, Signalized Roadway	1,197	242	0.20	C
N Federal Highway	SE 2nd Avenue	E. Hallandale Beach Boulevard	6	Class II	State Signalized Arterials	4,500	3,593	0.80	D
	E. Hallandale Beach Boulevard	NE 1st Street	4	Class II	State Signalized Arterials	2,920	2,597	0.89	D
	NE 1st Street	NE 3rd Street	4	Class II	State Signalized Arterials	2,920	2,525	0.86	D
	NE 3rd Street	NE 4th Street	4	Class II	State Signalized Arterials	2,920	2,497	0.86	D
NE 8th Avenue	South of E. Hallandale Beach Boulevard	E. Hallandale Beach Boulevard	2	Class II	Non-State, Signalized Roadway	1,197	205	0.17	C
	E. Hallandale Beach Boulevard	NE 1st Street	1	Class II	Non-State, Signalized Roadway	810	379	0.47	C
NE 10th Avenue	South of E. Hallandale Beach Boulevard	E. Hallandale Beach Boulevard	4	Class II	Non-State, Signalized Roadway	2,628	291	0.11	C
	E. Hallandale Beach Boulevard	NE 1st Court	1	Class II	Non-State, Signalized Roadway	810	108	0.13	C
PM PEAK HOUR									
E. Hallandale Beach Boulevard	NE 4th Avenue	N Federal Highway	6	Class I	State Signalized Arterials	5,390	3,397	0.63	C
	N Federal Highway	NE 8th Avenue	6	Class I	State Signalized Arterials	5,390	4,167	0.77	C
	NE 8th Avenue	NE 10th Avenue	6	Class I	State Signalized Arterials	5,390	4,233	0.79	C
	NE 10th Avenue	NE 12th Avenue	6	Class I	State Signalized Arterials	5,390	4,609	0.86	C
NE 3rd Street	NE 4th Avenue	N Federal Highway	2	Class II	Non-State, Signalized Roadway	1,197	606	0.51	D
	N Federal Highway	NE 8th Avenue	2	Class II	Non-State, Signalized Roadway	1,197	300	0.25	C
N Federal Highway	SE 2nd Avenue	E. Hallandale Beach Boulevard	6	Class II	State Signalized Arterials	4,500	4,139	0.92	D
	E. Hallandale Beach Boulevard	NE 1st Street	6	Class II	State Signalized Arterials	4,500	3,172	0.70	D
	NE 1st Street	NE 3rd Street	4	Class II	State Signalized Arterials	2,920	3,082	1.06	F
	NE 3rd Street	NE 4th Street	4	Class II	State Signalized Arterials	2,920	3,046	1.04	F
NE 8th Avenue	South of E. Hallandale Beach Boulevard	E. Hallandale Beach Boulevard	2	Class II	Non-State, Signalized Roadway	1,197	140	0.12	C
	E. Hallandale Beach Boulevard	NE 1st Street	1	Class II	Non-State, Signalized Roadway	810	348	0.43	C
NE 10th Avenue	South of E. Hallandale Beach Boulevard	E. Hallandale Beach Boulevard	4	Class II	Non-State, Signalized Roadway	2,628	903	0.34	C
	E. Hallandale Beach Boulevard	NE 1st Court	1	Class II	Non-State, Signalized Roadway	810	354	0.44	C

(1) Adopted LOS threshold based on 2013 FDOT Quality Level of Service Handbook (2012 LOS Tables) for NE 3rd Street, NE 8th Avenue, and NE 10th Avenue. Adopted LOS threshold for Hallandale Beach Boulevard and Federal Highway based on Broward MPO Roadways Capacity and Level of Service Analysis 2013 & 2025 tables.

McMAHON TRANSPORTATION ENGINEERS & PLANNERS

TABLE 7
TOTAL (2016) INTERSECTION CAPACITY ANALYSIS SUMMARY
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS

SCENARIO	TIME PERIOD	OVERALL		EB		WB		NB		SB	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
E. Hallandale Beach Boulevard at N. Federal Highway	AM	93.7	F	108.3	F	131.6	F	52.5	D	69.5	E
	PM	263.4	F	77.5	E	737.6	F	89.7	F	70.4	E
NE 3rd Street at N. Federal Highway	AM	21.9	C	88.8	F	126.0	F	5.8	A	8.5	A
	PM	20.1	C	80.1	F	61.3	E	10.4	B	9.7	A
E. Hallandale Beach Boulevard at NE 8th Avenue	AM	15.5	B	12.2	B	5.9	A	37.3	D	68.6	E
	PM	20.3	C	28.9	C	4.7	A	19.8	B	59.5	E
E. Hallandale Beach Boulevard at NE 10th Avenue	AM	11.2	B	6.4	A	12.1	B	54.8	D	N/A	N/A
	PM	36.7	D	27.3	C	34.8	C	66.9	E	N/A	N/A

McMAHON TRANSPORTATION ENGINEERS & PLANNERS

5.0 CONCLUSIONS AND RECOMMENDATIONS

McMahon has completed a traffic analysis for the development of a parcel of land located on the northeast corner of N Federal Highway and NE 1st Street, in the City of Hallandale Beach. The site currently includes vacant land and a surface parking lot. The proposed development, with an anticipated buildout year of 2016, will include 27,444 square feet of office space. Based on the analysis, the following can be concluded:

- Hallandale Beach Boulevard at NE 8th Avenue, Hallandale Beach Boulevard at NE 10th Avenue and N. Federal Highway at NE 3rd Street currently operate at an overall acceptable LOS. Some delays are observed along the minor streets to these intersections that exceed the adopted LOS, as priority green time is provided for the major street approaches. Hallandale Beach Boulevard at N. Federal Highway currently operates at an unacceptable LOS. For background and total traffic conditions, the intersections are expected to continue to operate at a similar LOS than existing conditions.
- The link capacity analysis indicates that the study roadway segments currently operate at an acceptable level of service. For background and total traffic conditions, all roadways are expected to continue to operate at an acceptable LOS, with the exception of N. Federal Highway between NE 1st Street and NE 4th Street.

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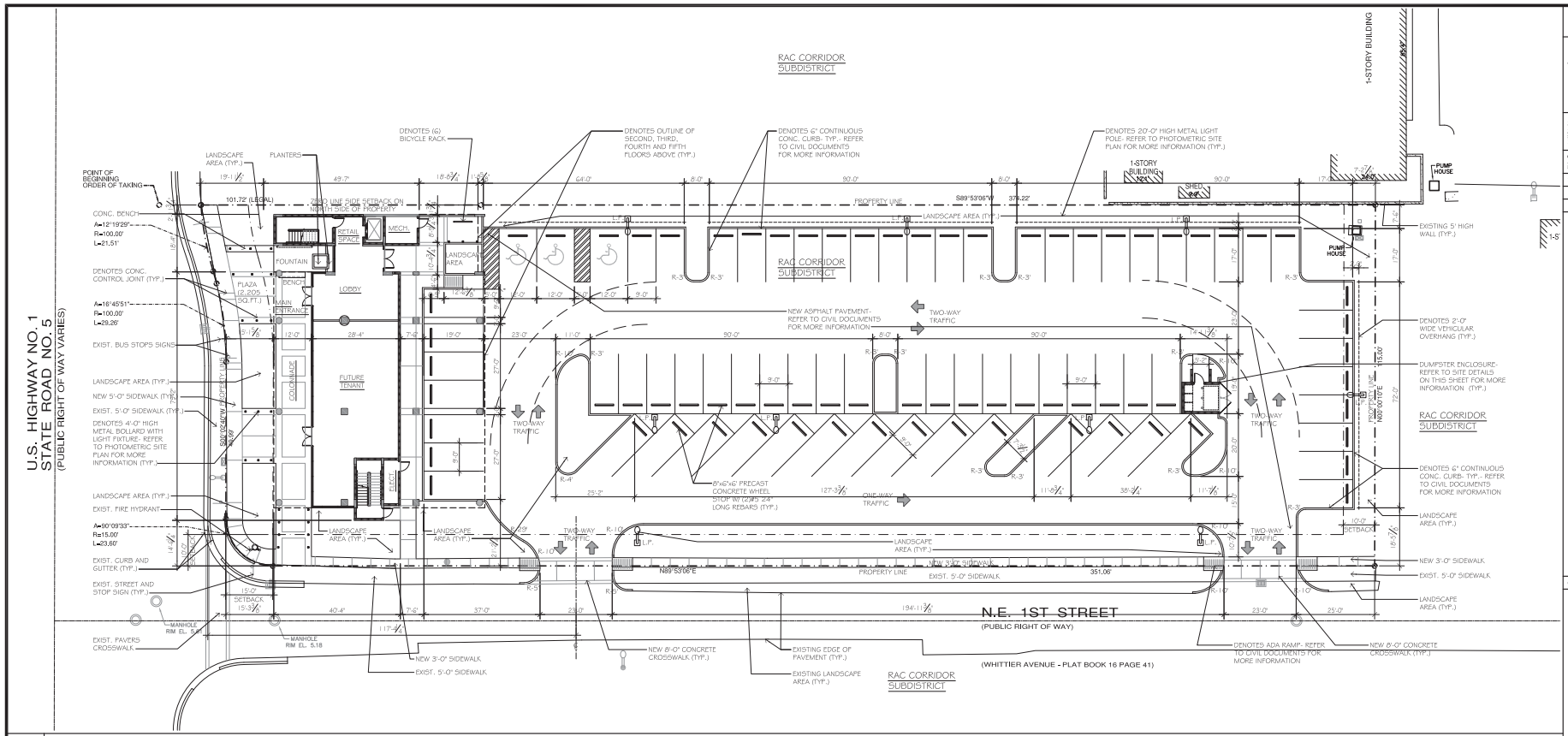
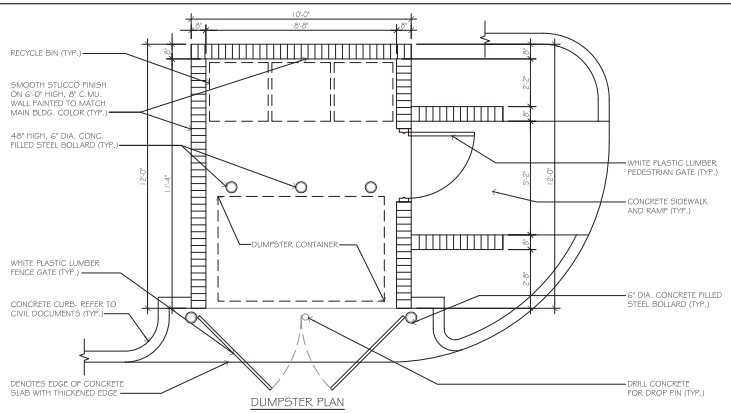
APPENDIX A

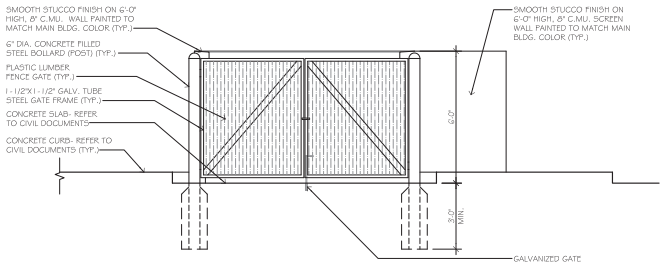
SITE PLAN



1 1/16"=1'-0" SITE PLAN



DUMPSTER PLAN



DUMPSTER ELEVATION

2 3/8"=1'-0" DUMPSTER ENCLOSURE DETAILS

AR Architecture, LLC.
7700 CONGRESS AVE., SUITE #1117
BOCA RATON, FLORIDA 33487
PH. 561.241.6376 CELL: 305.519.1178
adam@ar-architecturefirm.com

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NO.	DATE

ACCESSO OFFICE BUILDING

Prepared for Accesso Partners, LLC
Corner of U.S. Highway No.1 and N.E. 1st Street
City of Hallandale Beach, Florida 33009

CITY'S BLANK SPACE

DIRECTION: N

ADAM RYDZEWSKI
FLORIDA REGISTERED ARCHITECT
REGISTRATION NO. AR0002193

ISSUED DATE: 2014-01-14	DRAWN BY: AR
DATE PRINTED: 2014-12-23	CHECKED BY: AR
SCALE: AS NOTED	PROJECT NO.: 14-003

TITLE: SITE PLAN AND SITE DETAILS

DRAWING NO.: A-0.1

APPENDIX B

TRAFFIC VOLUME CALCULATIONS

TABLE B-1
AM TRAFFIC VOLUME CALCULATIONS
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS

INTERSECTION	SCENARIO	TRAFFIC VOLUMES															
		EBUT	EBLT	EBTH	EBRT	WBUT	WBLT	WBTH	WBRT	NBUT	NBLT	NBTH	NBRT	SBUT	SBLT	SBTH	SBRT
E. Hallandale Beach Boulevard at N. Federal Highway	Collected Count (12/10/2014)	2	82	924	342	0	477	979	122	27	230	623	357	14	256	1,041	42
	Peak-Season Conversion Factor (PSCF)(1)	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
	2014 Existing Peak-Season Traffic	2	89	1,017	369	0	515	1,057	132	29	248	673	386	15	276	1,124	45
	Compound Growth Rate (CGR) (2)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	Existing plus CGR Increase	2	91	1,037	376	0	525	1,078	135	30	253	687	394	15	282	1,147	46
	Committed Developments(3)	0	6	25	8	0	54	35	23	0	10	12	26	0	32	24	20
	2016 Background Peak-Season Traffic	2	97	1,062	384	0	579	1,113	158	30	263	699	420	15	314	1,171	66
	Project Trips	0	21	0	0	0	1	2	12	0	0	15	0	6	0	1	1
	2016 Total Peak-Season Traffic	2	118	1,062	384	0	580	1,115	170	30	263	714	420	21	314	1,172	67
NE 3rd Street at N. Federal Highway	Collected Count (12/10/2014)	0	68	69	83	0	44	45	6	6	43	767	9	0	40	1,221	34
	Peak-Season Conversion Factor (PSCF)(1)	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
	2014 Existing Peak-Season Traffic	0	73	75	90	0	48	49	6	6	46	828	10	0	43	1,319	37
	Compound Growth Rate (CGR) (2)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	Existing plus CGR Increase	0	74	77	92	0	49	50	6	6	47	845	10	0	44	1,346	38
	Committed Developments(3)	0	49	0	25	0	0	0	0	0	17	24	0	0	0	51	7
	2016 Background Peak-Season Traffic	0	123	77	117	0	49	50	6	6	64	869	10	0	44	1,397	45
	Project Trips	0	0	0	0	0	0	0	0	0	0	1	0	0	6	6	0
	2016 Total Peak-Season Traffic	0	123	77	117	0	49	50	6	6	64	870	10	0	50	1,403	45
E. Hallandale Beach Boulevard at NE 8th Avenue	Collected Count (12/10/2014)	0	0	1,504	51	11	45	1,417	0	0	32	0	32	0	142	24	169
	Peak-Season Conversion Factor (PSCF)(1)	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
	2014 Existing Peak-Season Traffic	0	0	1,624	55	12	49	1,530	0	0	35	0	35	0	153	26	183
	Compound Growth Rate (CGR) (2)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	Existing plus CGR Increase	0	0	1,657	56	12	50	1,561	0	0	36	0	36	0	156	27	187
	Committed Developments(3)	0	0	83	0	0	0	111	0	0	0	0	0	0	4	0	0
	2016 Background Peak-Season Traffic	0	0	1,740	56	12	50	1,672	0	0	36	0	36	0	160	27	187
	Project Trips	0	0	0	0	0	0	12	0	0	0	0	0	0	2	0	3
	2016 Total Peak-Season Traffic	0	0	1,740	56	12	50	1,684	0	0	36	0	36	0	162	27	190
E. Hallandale Beach Boulevard at NE 10th Avenue	Collected Count (12/10/2014)	33	27	1,521	66	26	65	1,457	51	3	41	17	67	0	0	0	0
	Peak-Season Conversion Factor (PSCF)(1)	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
	2014 Existing Peak-Season Traffic	36	29	1,643	71	28	70	1,574	55	3	44	18	72	0	0	0	0
	Compound Growth Rate (CGR) (2)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	Existing plus CGR Increase	37	30	1,676	72	29	71	1,606	56	3	45	18	73	0	0	0	0
	Committed Developments(3)	0	0	87	0	0	5	111	4	0	0	0	1	0	0	0	0
	2016 Background Peak-Season Traffic	37	30	1,763	72	29	76	1,717	60	3	45	18	74	0	0	0	0
	Project Trips	0	0	2	0	0	0	12	0	0	0	0	0	0	0	0	0
	2016 Total Peak-Season Traffic	37	30	1,765	72	29	76	1,729	60	3	45	18	74	0	0	0	0

(1) Peak Season Conversion Factor obtained from 2013 FDOT Transportation DVD.
(2) Compound growth rate of 1.0% based on review of available historical traffic counts for Station #86-0590, 86-5028 and 86-5029. Volumes indicate a decreasing trend. Therefore, a one (1) percent CGR was us
(3) Committed development information based on information provided by the City of Hallandale Beach.

Balanced Volumes

TABLE B-2
PM TRAFFIC VOLUME CALCULATIONS
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS

INTERSECTION	SCENARIO	TRAFFIC VOLUMES															
		EBUT	EBLT	EBTH	EBRT	WBUT	WBLT	WBTH	WBRT	NBUT	NBLT	NBTH	NBRT	SBUT	SBLT	SBTH	SBRT
E. Hallandale Beach Boulevard at N. Federal Highway	Collected Count (12/10/2014)	5	135	845	247	1	447	1,113	179	5	434	1,075	484	20	277	873	107
	Peak-Season Conversion Factor (PSCF)(1)	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
	2014 Existing Peak-Season Traffic	5	146	918	267	1	483	1,202	193	5	469	1,161	523	22	299	943	116
	Compound Growth Rate (CGR) (2)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	Existing plus CGR Increase	5	149	936	272	1	493	1,226	197	5	478	1,184	534	22	305	962	118
	Committed Developments(3)	0	15	63	13	0	54	48	42	0	8	20	55	0	48	29	22
	2016 Background Peak-Season Traffic	5	164	1,000	285	1	547	1,274	239	5	486	1,204	589	22	353	991	140
	Project Trips	0	6	0	0	0	13	23	4	0	0	5	0	2	0	9	9
	2016 Total Peak-Season Traffic	5	170	1,000	285	1	560	1,297	243	5	486	1,209	589	24	353	1,000	149
NE 3rd Street at N. Federal Highway	Collected Count (12/10/2014)	0	80	75	68	0	38	91	18	5	79	1,342	11	0	38	1,074	32
	Peak-Season Conversion Factor (PSCF)(1)	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
	2014 Existing Peak-Season Traffic	0	86	81	73	0	41	98	19	5	85	1,449	12	0	41	1,160	35
	Compound Growth Rate (CGR) (2)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	Existing plus CGR Increase	0	88	83	74	0	42	100	19	5	87	1,478	12	0	42	1,183	36
	Committed Developments(3)	0	54	0	27	0	0	0	0	0	41	36	0	0	0	72	16
	2016 Background Peak-Season Traffic	0	142	83	101	0	42	100	19	5	128	1,514	12	0	42	1,255	52
	Project Trips	0	0	0	0	0	0	0	0	0	0	18	0	0	2	2	0
	2016 Total Peak-Season Traffic	0	142	83	101	0	42	100	19	5	128	1,532	12	0	44	1,257	52
E. Hallandale Beach Boulevard at NE 8th Avenue	Collected Count (12/10/2014)	0	0	1,587	25	26	22	1,704	0	0	17	0	51	0	120	13	131
	Peak-Season Conversion Factor (PSCF)(1)	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
	2014 Existing Peak-Season Traffic	0	0	1,714	27	28	24	1,840	0	0	18	0	55	0	130	14	141
	Compound Growth Rate (CGR) (2)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	Existing plus CGR Increase	0	0	1,748	28	29	24	1,877	0	0	18	0	56	0	133	14	144
	Committed Developments(3)	0	0	167	0	0	0	145	0	0	0	0	0	0	3	0	0
	2016 Background Peak-Season Traffic	0	0	1,915	28	29	24	2,022	0	0	18	0	56	0	136	14	144
	Project Trips	0	0	0	0	0	0	4	0	0	0	0	0	0	18	0	36
	2016 Total Peak-Season Traffic	0	0	1,915	28	29	24	2,026	0	0	18	0	56	0	154	14	180
E. Hallandale Beach Boulevard at NE 10th Avenue	Collected Count (12/10/2014)	32	55	1,603	54	28	141	1,613	101	0	101	163	346	0	0	0	0
	Peak-Season Conversion Factor (PSCF)(1)	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
	2014 Existing Peak-Season Traffic	35	59	1,731	58	30	152	1,742	109	0	109	176	374	0	0	0	0
	Compound Growth Rate (CGR) (2)	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
	Existing plus CGR Increase	36	60	1,766	59	31	155	1,777	111	0	111	180	382	0	0	0	0
	Committed Developments(3)	0	0	170	0	0	6	145	3	0	0	0	10	0	0	0	0
	2016 Background Peak-Season Traffic	36	60	1,936	59	31	161	1,922	114	0	111	180	392	0	0	0	0
	Project Trips	0	0	18	0	0	0	4	0	0	0	0	0	0	0	0	0
	2016 Total Peak-Season Traffic	36	60	1,954	59	31	161	1,926	114	0	111	180	392	0	0	0	0

(1) Peak Season Conversion Factor obtained from 2013 FDOT Transportation DVD.
(2) Compound growth rate of 1.0% based on review of available historical traffic counts for Station #86-0590, 86-5028 and 86-5029. Volumes indicate a decreasing trend. Therefore, a one (1) percent CGR was us
(3) Committed development information based on information provided by the City of Hallandale Beach.

Balanced Volumes

McMAHON TRANSPORTATION ENGINEERS & PLANNERS

Traffic Survey Specialists, Inc.

624 Gardenia Terrace, Delray Beach, Florida 33444
Phone (561) 272-3255 www.trafficsurveyspecialists.com

HALLANDALE BEACH BOULEVARD & US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: M. GOMEZ & S. SALVO
SIGNALIZED

File Name : HBB__US1
Site Code : 00140258
Start Date : 12/10/2014
Page No : 1

Groups Printed- LIGHT VEHICLES - HEAVY VEHICLES

	US 1 From North					HALLANDALE BEACH BLVD From East					US 1 From South					HALLANDALE BEACH BLVD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
07:00	1	35	139	10	185	0	56	198	27	281	0	32	79	41	152	0	18	165	28	211	829
07:15	5	46	129	20	200	0	115	256	23	394	1	43	84	48	176	0	30	161	45	236	1006
07:30	2	58	227	9	296	1	122	205	21	349	5	44	116	61	226	0	20	151	31	202	1073
07:45	0	66	250	21	337	0	108	261	33	402	2	53	131	69	255	2	25	238	81	346	1340
Total	8	205	745	60	1018	1	401	920	104	1426	8	172	410	219	809	2	93	715	185	995	4248
08:00	6	57	267	19	349	0	112	238	25	375	4	37	134	78	253	1	20	244	86	351	1328
08:15	2	65	288	11	366	0	99	229	24	352	4	83	175	86	348	1	18	218	90	327	1393
08:30	5	61	265	6	337	0	128	219	39	386	14	59	152	85	310	0	29	210	72	311	1344
08:45	1	73	221	6	301	0	138	293	34	465	5	51	162	108	326	0	15	252	94	361	1453
Total	14	256	1041	42	1353	0	477	979	122	1578	27	230	623	357	1237	2	82	924	342	1350	5518
16:00	1	57	214	21	293	0	118	290	50	458	5	94	150	100	349	0	29	230	68	327	1427
16:15	5	73	200	24	302	1	103	286	52	442	4	88	203	98	393	0	29	248	68	345	1482
16:30	7	68	191	22	288	0	126	283	46	455	1	100	168	96	365	0	44	207	64	315	1423
16:45	8	72	167	26	273	1	116	276	48	441	4	109	220	103	436	0	37	189	59	285	1435
Total	21	270	772	93	1156	2	463	1135	196	1796	14	391	741	397	1543	0	139	874	259	1272	5767
17:00	6	63	225	22	316	0	106	285	45	436	0	108	297	140	545	0	30	226	60	316	1613
17:15	4	73	202	33	312	0	117	291	41	449	3	107	273	100	483	2	39	197	68	306	1550
17:30	3	78	218	23	322	0	106	264	41	411	0	107	261	132	500	0	38	224	73	335	1568
17:45	7	63	228	29	327	1	118	273	52	444	2	112	244	112	470	3	28	198	46	275	1516
Total	20	277	873	107	1277	1	447	1113	179	1740	5	434	1075	484	1998	5	135	845	247	1232	6247
Grand Total	63	1008	3431	302	4804	4	1788	4147	601	6540	54	1227	2849	1457	5587	9	449	3358	1033	4849	21780
Apprch %	1.3	21	71.4	6.3		0.1	27.3	63.4	9.2		1	22	51	26.1		0.2	9.3	69.3	21.3		
Total %	0.3	4.6	15.8	1.4	22.1	0	8.2	19	2.8	30	0.2	5.6	13.1	6.7	25.7	0	2.1	15.4	4.7	22.3	
LIGHT VEHICLES	63	979	3366	291	4699	4	1759	4042	586	6391	53	1181	2781	1423	5438	6	439	3252	1002	4699	21227
% LIGHT VEHICLES	100	97.1	98.1	96.4	97.8	100	98.4	97.5	97.5	97.7	98.1	96.3	97.6	97.7	97.3	66.7	97.8	96.8	97	96.9	97.5
HEAVY VEHICLES	0	29	65	11	105	0	29	105	15	149	1	46	68	34	149	3	10	106	31	150	553
% HEAVY VEHICLES	0	2.9	1.9	3.6	2.2	0	1.6	2.5	2.5	2.3	1.9	3.7	2.4	2.3	2.7	33.3	2.2	3.2	3	3.1	2.5

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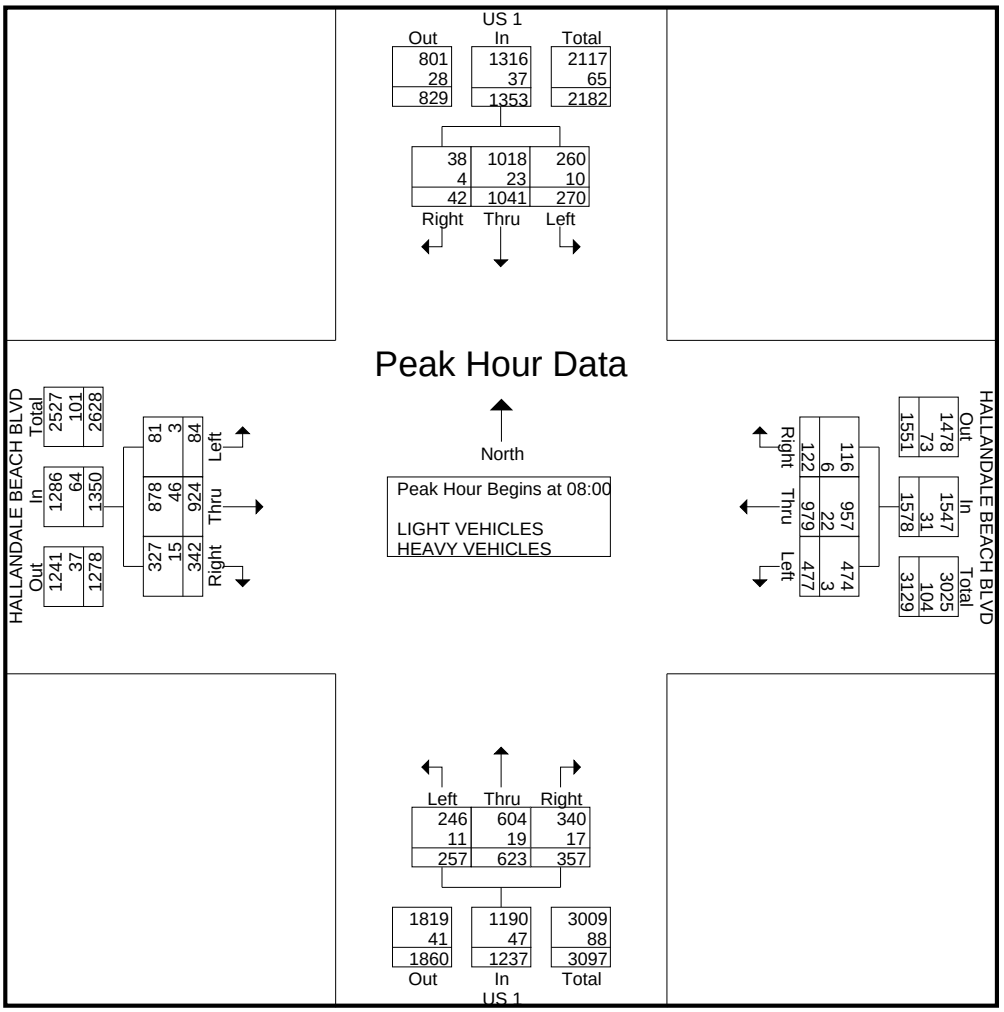
HALLANDALE BEACH BOULEVARD & US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: M. GOMEZ & S. SALVO
SIGNALIZED

File Name : HBB__US1
Site Code : 00140258
Start Date : 12/10/2014
Page No : 2

	US 1 From North					HALLANDALE BEACH BLVD From East					US 1 From South					HALLANDALE BEACH BLVD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 11:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	**6**	57	267	**19**	349	0	112	238	25	375	4	37	134	78	253	**1**	20	244	86	351	1328
08:15	2	65	**288**	11	**366**	0	99	229	24	352	4	**83**	**175**	86	**348**	1	18	218	90	327	1393
08:30	5	61	265	6	337	0	128	219	**39**	386	**14**	59	152	85	310	0	**29**	210	72	311	1344
08:45	1	**73**	221	6	301	0	**138**	**293**	34	**465**	5	51	162	**108**	326	0	15	**252**	**94**	**361**	**1453**
Total Volume	14	256	1041	42	1353	0	477	979	122	1578	27	230	623	357	1237	2	82	924	342	1350	5518
% App. Total	1	18.9	76.9	3.1		0	30.2	62	7.7		2.2	18.6	50.4	28.9		0.1	6.1	68.4	25.3		
PHF	.583	.877	.904	.553	.924	.000	.864	.835	.782	.848	.482	.693	.890	.826	.889	.500	.707	.917	.910	.935	.949
LIGHT VEHICLES	14	246	1018	38	1316	0	474	957	116	1547	27	219	604	340	1190	1	80	878	327	1286	5339
% LIGHT VEHICLES	100	96.1	97.8	90.5	97.3	0	99.4	97.8	95.1	98.0	100	95.2	97.0	95.2	96.2	50.0	97.6	95.0	95.6	95.3	96.8
HEAVY VEHICLES	0	10	23	4	37	0	3	22	6	31	0	11	19	17	47	1	2	46	15	64	179
% HEAVY VEHICLES	0	3.9	2.2	9.5	2.7	0	0.6	2.2	4.9	2.0	0	4.8	3.0	4.8	3.8	50.0	2.4	5.0	4.4	4.7	3.2



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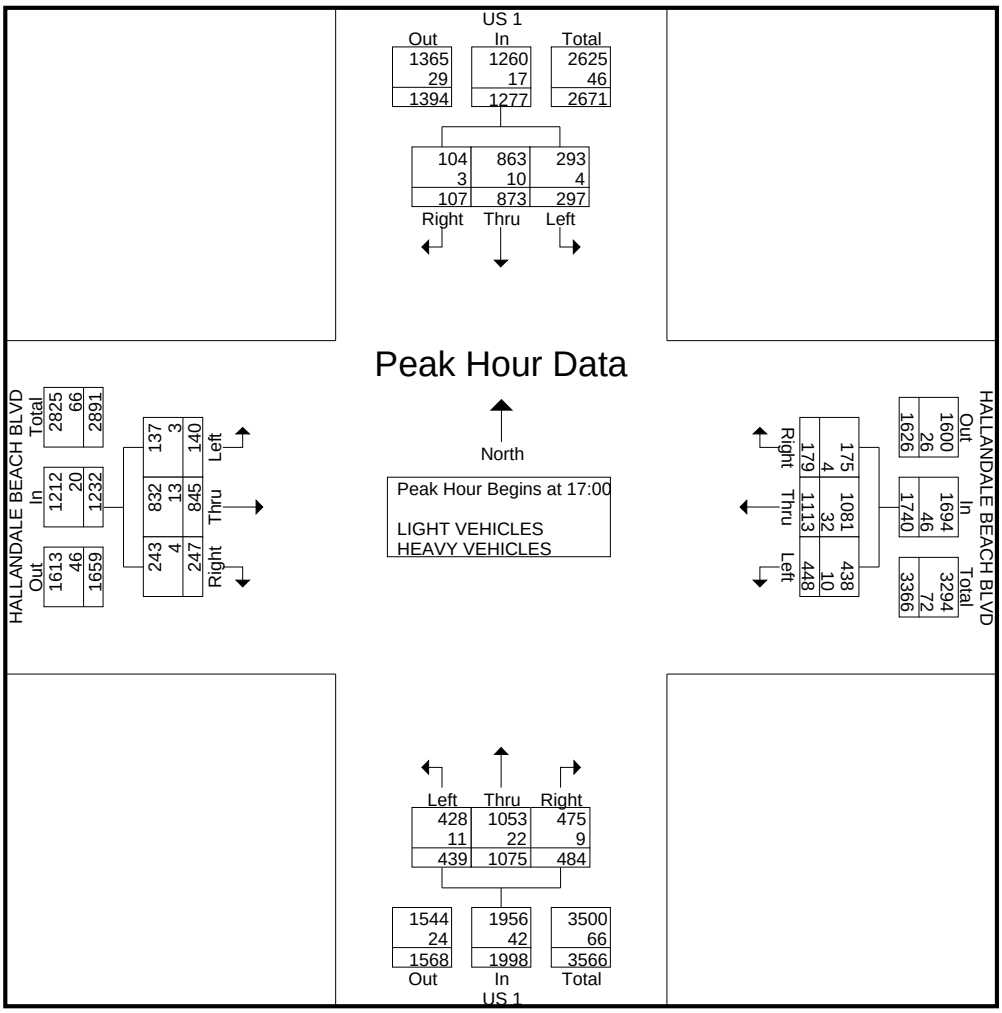
HALLANDALE BEACH BOULEVARD & US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: M. GOMEZ & S. SALVO
SIGNALIZED

File Name : HBB__US1
Site Code : 00140258
Start Date : 12/10/2014
Page No : 3

	US 1 From North					HALLANDALE BEACH BLVD From East					US 1 From South					HALLANDALE BEACH BLVD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 12:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	6	63	225	22	316	0	106	285	45	436	0	108	**297**	**140**	**545**	0	30	**226**	60	316	**1613**
17:15	4	73	202	**33**	312	0	117	**291**	41	**449**	**3**	107	273	100	483	2	**39**	197	68	306	1550
17:30	3	**78**	218	23	322	0	106	264	41	411	0	107	261	132	500	0	38	224	**73**	**335**	1568
17:45	**7**	63	**228**	29	**327**	**1**	**118**	273	**52**	444	2	**112**	244	112	470	**3**	28	198	46	275	1516
Total Volume	20	277	873	107	1277	1	447	1113	179	1740	5	434	1075	484	1998	5	135	845	247	1232	6247
% App. Total	1.6	21.7	68.4	8.4		0.1	25.7	64	10.3		0.3	21.7	53.8	24.2		0.4	11	68.6	20		
PHF	.714	.888	.957	.811	.976	.250	.947	.956	.861	.969	.417	.969	.905	.864	.917	.417	.865	.935	.846	.919	.968
LIGHT VEHICLES	20	273	863	104	1260	1	437	1081	175	1694	4	424	1053	475	1956	3	134	832	243	1212	6122
% LIGHT VEHICLES	100	98.6	98.9	97.2	98.7	100	97.8	97.1	97.8	97.4	80.0	97.7	98.0	98.1	97.9	60.0	99.3	98.5	98.4	98.4	98.0
HEAVY VEHICLES	0	4	10	3	17	0	10	32	4	46	1	10	22	9	42	2	1	13	4	20	125
% HEAVY VEHICLES	0	1.4	1.1	2.8	1.3	0	2.2	2.9	2.2	2.6	20.0	2.3	2.0	1.9	2.1	40.0	0.7	1.5	1.6	1.6	2.0



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HALLANDALE BEACH BOULEVARD & NE 8TH AVENUE, HALLANDALE BEACH, FLORIDA
COUNTED BY: I. GONZALEZ & R. MARTINEZ
SIGNALIZED

File Name : HBB_8AVE
Site Code : 00140258
Start Date : 12/10/2014
Page No : 1

Groups Printed- LIGHT VEHICLES - HEAVY VEHICLES

	NE 8TH AVENUE From North					HALLANDALE BEACH BLVD From East					NE 8TH AVENUE From South					HALLANDALE BEACH BLVD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
07:00	0	10	1	24	35	1	2	302	0	305	0	0	0	0	0	0	0	254	1	255	595
07:15	0	9	1	29	39	2	1	327	0	330	0	0	0	1	1	1	0	254	0	255	625
07:30	0	17	1	40	58	3	1	335	0	339	0	0	0	2	2	0	0	279	2	281	680
07:45	0	13	0	37	50	0	4	344	0	348	0	1	0	7	8	1	0	357	6	364	770
Total	0	49	3	130	182	6	8	1308	0	1322	0	1	0	10	11	2	0	1144	9	1155	2670
08:00	0	32	5	40	77	5	8	343	0	356	0	1	0	5	6	0	0	362	9	371	810
08:15	0	30	6	54	90	3	6	336	0	345	0	8	0	5	13	0	0	353	21	374	822
08:30	0	30	9	39	78	2	15	358	0	375	0	17	0	11	28	0	0	366	16	382	863
08:45	0	50	4	36	90	1	16	380	0	397	0	6	0	11	17	0	0	423	5	428	932
Total	0	142	24	169	335	11	45	1417	0	1473	0	32	0	32	64	0	0	1504	51	1555	3427
16:00	0	38	2	22	62	10	1	402	0	413	0	9	0	7	16	0	0	374	2	376	867
16:15	0	32	1	20	53	5	0	447	0	452	0	2	0	4	6	0	0	435	3	438	949
16:30	0	30	4	32	66	12	5	434	0	451	0	10	0	14	24	0	0	370	5	375	916
16:45	0	31	4	24	59	4	7	410	0	421	0	3	0	7	10	0	0	370	5	375	865
Total	0	131	11	98	240	31	13	1693	0	1737	0	24	0	32	56	0	0	1549	15	1564	3597
17:00	0	25	3	29	57	6	1	430	0	437	0	8	0	7	15	0	0	423	6	429	938
17:15	0	32	3	35	70	3	6	406	0	415	0	5	0	14	19	0	0	357	8	365	869
17:30	0	36	5	35	76	3	7	435	0	445	0	1	0	19	20	0	0	433	6	439	980
17:45	0	27	2	32	61	14	8	433	0	455	0	3	0	11	14	0	0	374	5	379	909
Total	0	120	13	131	264	26	22	1704	0	1752	0	17	0	51	68	0	0	1587	25	1612	3696
Grand Total	0	442	51	528	1021	74	88	6122	0	6284	0	74	0	125	199	2	0	5784	100	5886	13390
Apprch %	0	43.3	5	51.7		1.2	1.4	97.4	0		0	37.2	0	62.8		0	0	98.3	1.7		
Total %	0	3.3	0.4	3.9	7.6	0.6	0.7	45.7	0	46.9	0	0.6	0	0.9	1.5	0	0	43.2	0.7	44	
LIGHT VEHICLES	0	438	50	527	1015	74	88	6001	0	6163	0	74	0	125	199	2	0	5633	99	5734	13111
% LIGHT VEHICLES	0	99.1	98	99.8	99.4	100	100	98	0	98.1	0	100	0	100	100	100	0	97.4	99	97.4	97.9
HEAVY VEHICLES	0	4	1	1	6	0	0	121	0	121	0	0	0	0	0	0	0	151	1	152	279
% HEAVY VEHICLES	0	0.9	2	0.2	0.6	0	0	2	0	1.9	0	0	0	0	0	0	0	2.6	1	2.6	2.1

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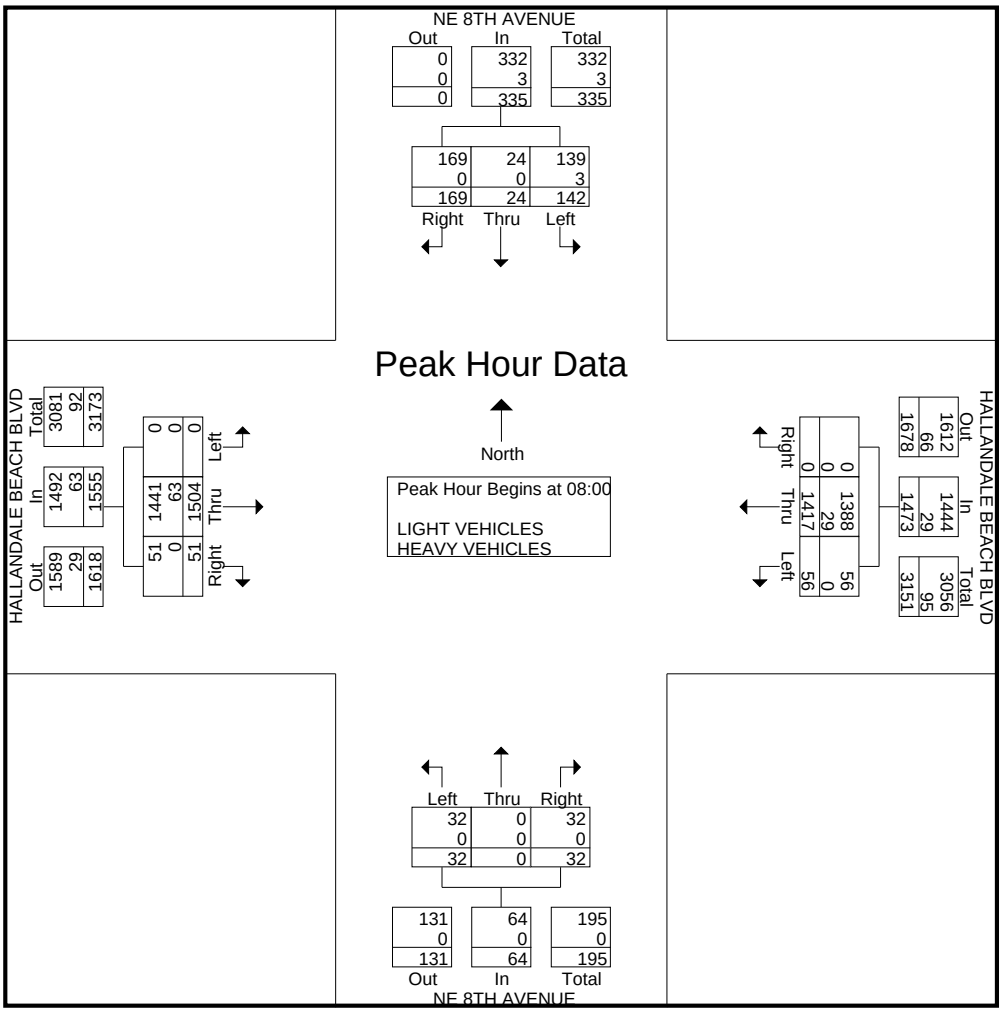
HALLANDALE BEACH BOULEVARD & NE 8TH AVENUE, HALLANDALE BEACH, FLORIDA
COUNTED BY: I. GONZALEZ & R. MARTINEZ
SIGNALIZED

File Name : HBB_8AVE
Site Code : 00140258
Start Date : 12/10/2014
Page No : 2

	NE 8TH AVENUE From North					HALLANDALE BEACH BLVD From East					NE 8TH AVENUE From South					HALLANDALE BEACH BLVD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 11:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	0	32	5	40	77	**5**	8	343	0	356	0	1	0	5	6	0	0	362	9	371	810
08:15	0	30	6	**54**	**90**	3	6	336	0	345	0	8	0	5	13	0	0	353	**21**	374	822
08:30	0	30	**9**	39	78	2	15	358	0	375	0	**17**	0	**11**	**28**	0	0	366	16	382	863
08:45	0	**50**	4	36	90	1	**16**	**380**	0	**397**	0	6	0	11	17	0	0	**423**	5	**428**	**932**
Total Volume	0	142	24	169	335	11	45	1417	0	1473	0	32	0	32	64	0	0	1504	51	1555	3427
% App. Total	0	42.4	7.2	50.4		0.7	3.1	96.2	0		0	50	0	50		0	0	96.7	3.3		
PHF	.000	.710	.667	.782	.931	.550	.703	.932	.000	.928	.000	.471	.000	.727	.571	.000	.000	.889	.607	.908	.919
LIGHT VEHICLES	0	139	24	169	332	11	45	1388	0	1444	0	32	0	32	64	0	0	1441	51	1492	3332
% LIGHT VEHICLES	0	97.9	100	100	99.1	100	100	98.0	0	98.0	0	100	0	100	100	0	0	95.8	100	95.9	97.2
HEAVY VEHICLES	0	3	0	0	3	0	0	29	0	29	0	0	0	0	0	0	0	63	0	63	95
% HEAVY VEHICLES	0	2.1	0	0	0.9	0	0	2.0	0	2.0	0	0	0	0	0	0	0	4.2	0	4.1	2.8



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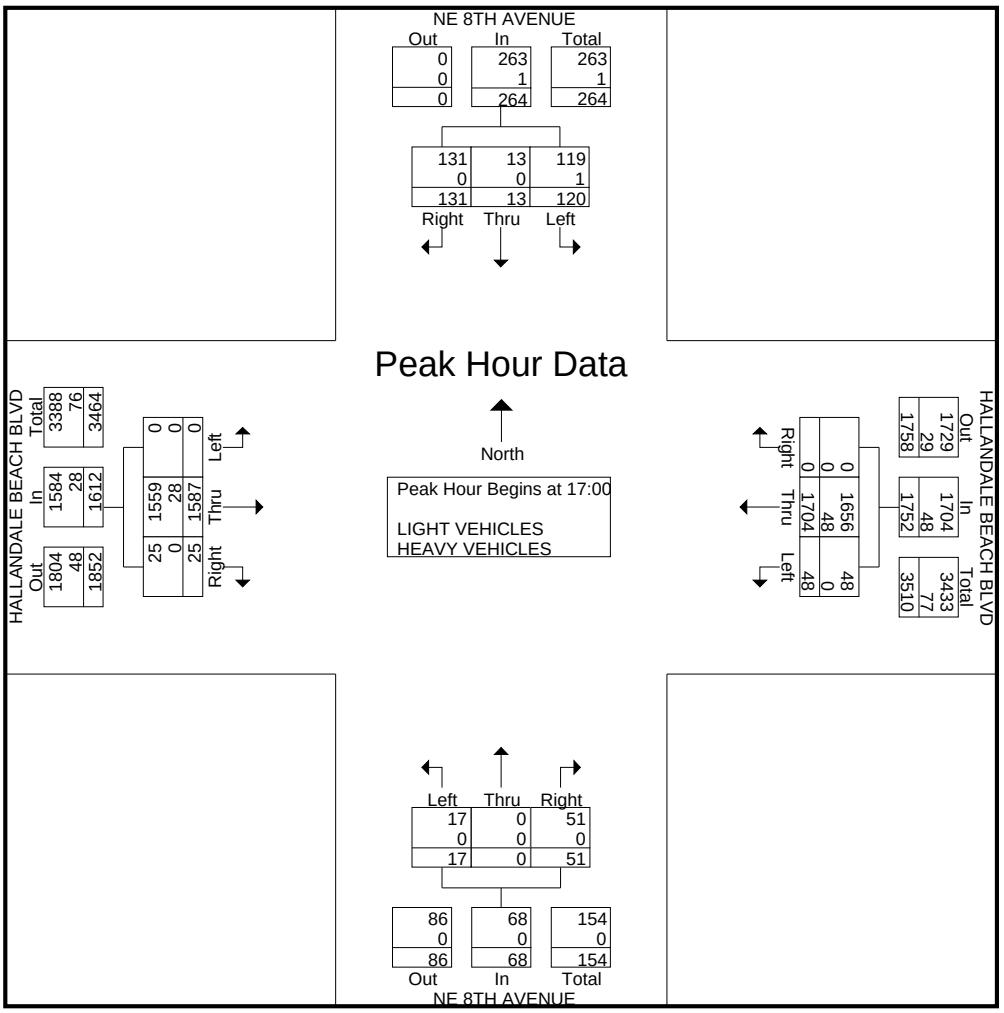
HALLANDALE BEACH BOULEVARD & NE 8TH AVENUE, HALLANDALE BEACH, FLORIDA
COUNTED BY: I. GONZALEZ & R. MARTINEZ
SIGNALIZED

File Name : HBB_8AVE
Site Code : 00140258
Start Date : 12/10/2014
Page No : 3

	NE 8TH AVENUE From North					HALLANDALE BEACH BLVD From East					NE 8TH AVENUE From South					HALLANDALE BEACH BLVD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 12:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	25	3	29	57	6	1	430	0	437	0	**8**	0	7	15	0	0	423	6	429	938
17:15	0	32	3	**35**	70	3	6	406	0	415	0	5	0	14	19	0	0	357	**8**	365	869
17:30	0	**36**	**5**	35	**76**	3	7	**435**	0	445	0	1	0	**19**	**20**	0	0	**433**	6	**439**	**980**
17:45	0	27	2	32	61	**14**	**8**	433	0	**455**	0	3	0	11	14	0	0	374	5	379	909
Total Volume	0	120	13	131	264	26	22	1704	0	1752	0	17	0	51	68	0	0	1587	25	1612	3696
% App. Total	0	45.5	4.9	49.6		1.5	1.3	97.3	0		0	25	0	75		0	0	98.4	1.6		
PHF	.000	.833	.650	.936	.868	.464	.688	.979	.000	.963	.000	.531	.000	.671	.850	.000	.000	.916	.781	.918	.943
LIGHT VEHICLES	0	119	13	131	263	26	22	1656	0	1704	0	17	0	51	68	0	0	1559	25	1584	3619
% LIGHT VEHICLES	0	99.2	100	100	99.6	100	100	97.2	0	97.3	0	100	0	100	100	0	0	98.2	100	98.3	97.9
HEAVY VEHICLES	0	1	0	0	1	0	0	48	0	48	0	0	0	0	0	0	0	28	0	28	77
% HEAVY VEHICLES	0	0.8	0	0	0.4	0	0	2.8	0	2.7	0	0	0	0	0	0	0	1.8	0	1.7	2.1



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HALLANDALE BEACH BOULEVARD & NE 10TH AVENUE, HALLANDALE BEACH, FLORIDA
COUNTED BY: R. ESPADA & T. ESPADA
SIGNALIZED

File Name : HBB10AVE
Site Code : 00140258
Start Date : 12/10/2014
Page No : 1

Groups Printed- LIGHT VEHICLES - HEAVY VEHICLES

	NE 10TH AVENUE From North					HALLANDALE BEACH BLVD From East					GULFSTREAM From South					HALLANDALE BEACH BLVD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
07:00	0	0	0	0	0	3	6	294	3	306	2	6	3	6	17	4	6	241	20	271	594
07:15	0	0	0	0	0	0	5	311	10	326	0	3	2	3	8	4	2	233	20	259	593
07:30	0	0	0	0	0	0	9	345	9	363	0	6	1	4	11	5	5	283	10	303	677
07:45	0	0	0	0	0	2	10	321	14	347	0	6	2	11	19	2	2	355	13	372	738
Total	0	0	0	0	0	5	30	1271	36	1342	2	21	8	24	55	15	15	1112	63	1205	2602
08:00	0	0	0	0	0	9	7	369	15	400	0	9	2	9	20	6	1	345	15	367	787
08:15	0	0	0	0	0	4	18	351	8	381	0	10	6	16	32	12	8	378	15	413	826
08:30	0	0	0	0	0	4	14	361	17	396	1	10	4	18	33	4	8	381	20	413	842
08:45	0	0	0	0	0	9	26	376	11	422	2	12	5	24	43	11	10	417	16	454	919
Total	0	0	0	0	0	26	65	1457	51	1599	3	41	17	67	128	33	27	1521	66	1647	3374
16:00	0	0	0	0	0	10	29	374	25	438	0	26	33	102	161	14	13	378	9	414	1013
16:15	0	0	0	0	0	2	32	419	22	475	0	22	28	57	107	11	13	418	23	465	1047
16:30	0	0	0	0	0	4	31	388	26	449	1	21	27	91	140	10	9	384	14	417	1006
16:45	0	0	0	0	0	8	31	382	27	448	0	21	45	86	152	15	16	356	16	403	1003
Total	0	0	0	0	0	24	123	1563	100	1810	1	90	133	336	560	50	51	1536	62	1699	4069
17:00	0	0	0	0	0	7	31	436	16	490	0	15	30	86	131	8	12	449	10	479	1100
17:15	0	0	0	0	0	8	39	380	27	454	0	45	51	99	195	6	13	332	14	365	1014
17:30	0	0	0	0	0	10	34	376	35	455	0	23	52	86	161	8	15	449	15	487	1103
17:45	0	0	0	0	0	3	37	421	23	484	0	18	30	75	123	10	15	373	15	413	1020
Total	0	0	0	0	0	28	141	1613	101	1883	0	101	163	346	610	32	55	1603	54	1744	4237
Grand Total	0	0	0	0	0	83	359	5904	288	6634	6	253	321	773	1353	130	148	5772	245	6295	14282
Apprch %	0	0	0	0		1.3	5.4	89	4.3		0.4	18.7	23.7	57.1		2.1	2.4	91.7	3.9		
Total %	0	0	0	0	0	0.6	2.5	41.3	2	46.5	0	1.8	2.2	5.4	9.5	0.9	1	40.4	1.7	44.1	
LIGHT VEHICLES	0	0	0	0	0	58	355	5778	286	6477	1	233	307	770	1311	127	145	5631	231	6134	13922
% LIGHT VEHICLES	0	0	0	0	0	69.9	98.9	97.9	99.3	97.6	16.7	92.1	95.6	99.6	96.9	97.7	98	97.6	94.3	97.4	97.5
HEAVY VEHICLES	0	0	0	0	0	25	4	126	2	157	5	20	14	3	42	3	3	141	14	161	360
% HEAVY VEHICLES	0	0	0	0	0	30.1	1.1	2.1	0.7	2.4	83.3	7.9	4.4	0.4	3.1	2.3	2	2.4	5.7	2.6	2.5

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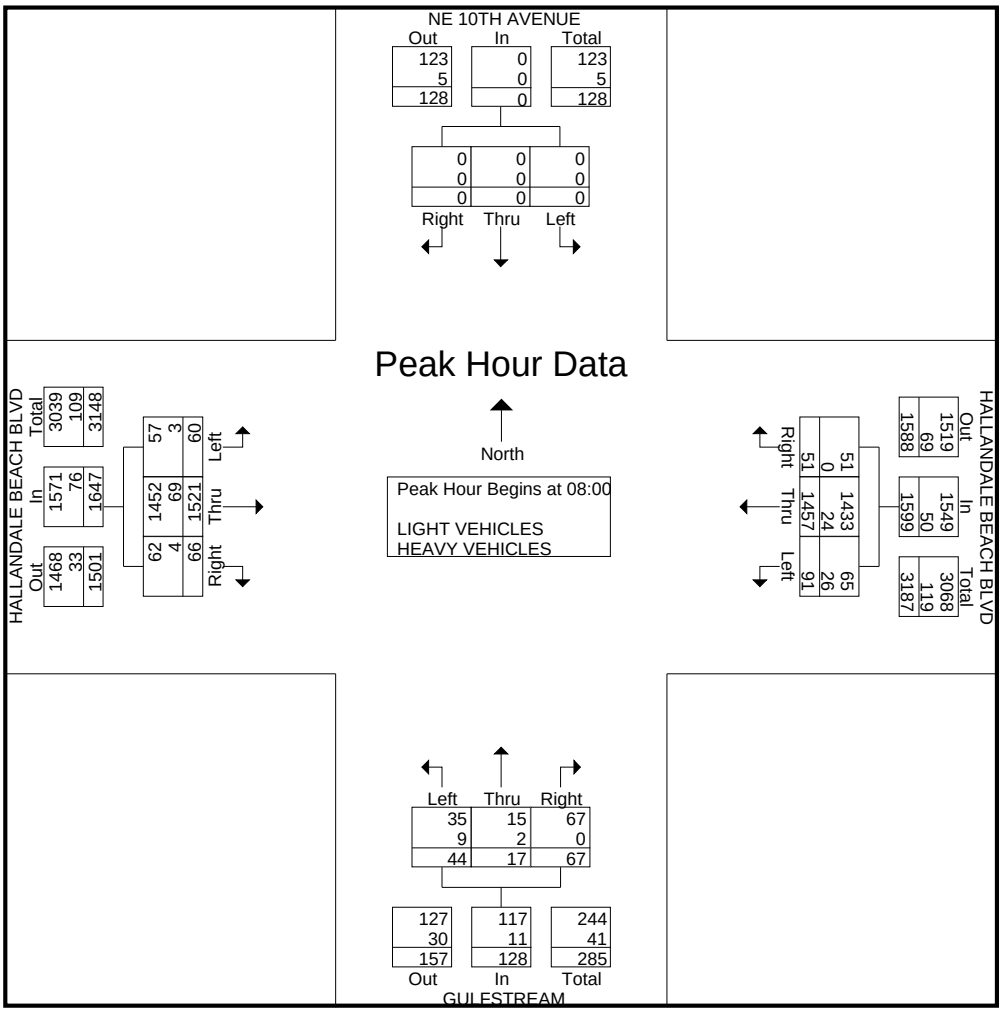
HALLANDALE BEACH BOULEVARD & NE 10TH AVENUE, HALLANDALE BEACH, FLORIDA
COUNTED BY: R. ESPADA & T. ESPADA
SIGNALIZED

File Name : HBB10AVE
Site Code : 00140258
Start Date : 12/10/2014
Page No : 2

	NE 10TH AVENUE From North					HALLANDALE BEACH BLVD From East					GULFSTREAM From South					HALLANDALE BEACH BLVD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 11:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	0	0	0	0	0	**9**	7	369	15	400	0	9	2	9	20	6	1	345	15	367	787
08:15	0	0	0	0	0	4	18	351	8	381	0	10	**6**	16	32	**12**	8	378	15	413	826
08:30	0	0	0	0	0	4	14	361	**17**	396	1	10	4	18	33	4	8	381	**20**	413	842
08:45	0	0	0	0	0	9	**26**	**376**	11	**422**	**2**	**12**	5	**24**	**43**	11	**10**	**417**	16	**454**	**919**
Total Volume	0	0	0	0	0	26	65	1457	51	1599	3	41	17	67	128	33	27	1521	66	1647	3374
% App. Total	0	0	0	0		1.6	4.1	91.1	3.2		2.3	32	13.3	52.3		2	1.6	92.3	4		
PHF	.000	.000	.000	.000	.000	.722	.625	.969	.750	.947	.375	.854	.708	.698	.744	.688	.675	.912	.825	.907	.918
LIGHT VEHICLES	0	0	0	0	0	2	63	1433	51	1549	1	34	15	67	117	32	25	1452	62	1571	3237
% LIGHT VEHICLES	0	0	0	0	0	7.7	96.9	98.4	100	96.9	33.3	82.9	88.2	100	91.4	97.0	92.6	95.5	93.9	95.4	95.9
HEAVY VEHICLES	0	0	0	0	0	24	2	24	0	50	2	7	2	0	11	1	2	69	4	76	137
% HEAVY VEHICLES	0	0	0	0	0	92.3	3.1	1.6	0	3.1	66.7	17.1	11.8	0	8.6	3.0	7.4	4.5	6.1	4.6	4.1



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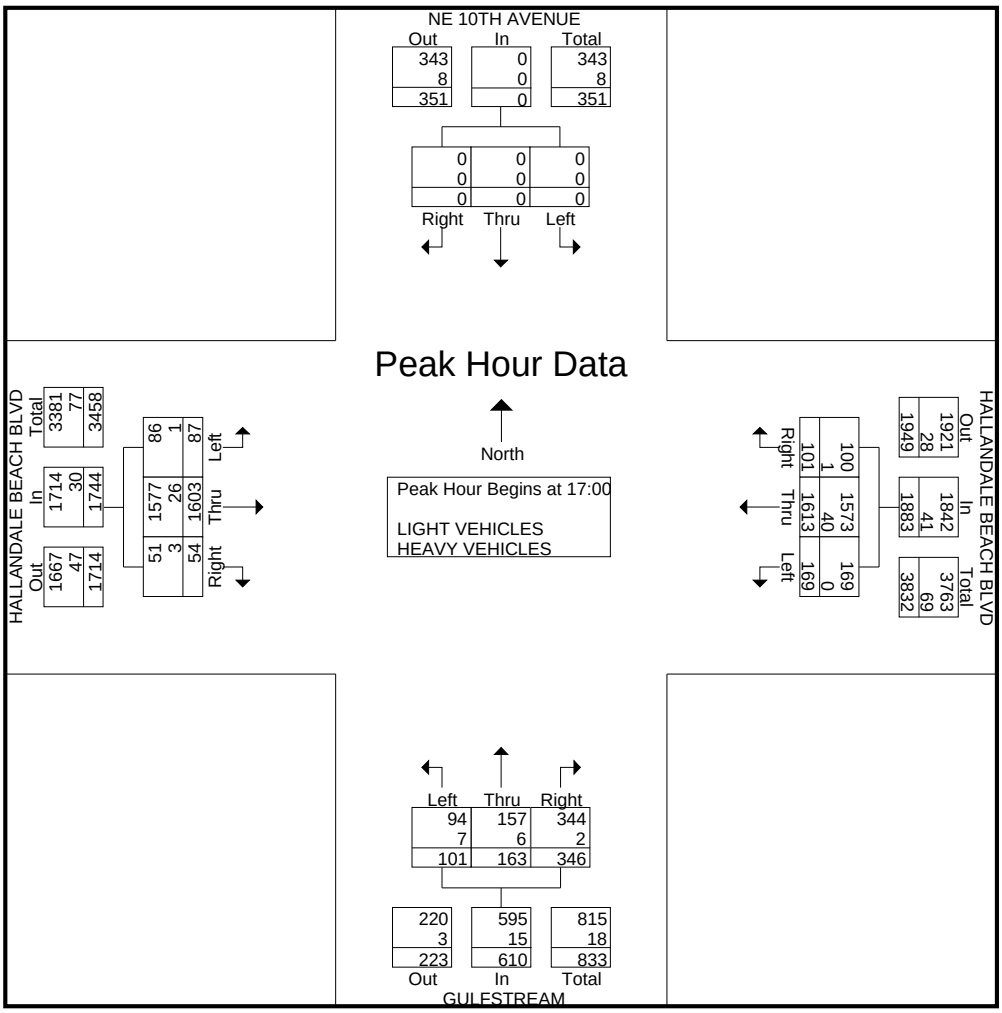
HALLANDALE BEACH BOULEVARD & NE 10TH AVENUE, HALLANDALE BEACH, FLORIDA
COUNTED BY: R. ESPADA & T. ESPADA
SIGNALIZED

File Name : HBB10AVE
Site Code : 00140258
Start Date : 12/10/2014
Page No : 3

	NE 10TH AVENUE From North					HALLANDALE BEACH BLVD From East					GULFSTREAM From South					HALLANDALE BEACH BLVD From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 12:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	0	0	0	0	7	31	**436**	16	**490**	0	15	30	86	131	8	12	**449**	10	479	1100
17:15	0	0	0	0	0	8	**39**	380	27	454	0	**45**	51	**99**	**195**	6	13	332	14	365	1014
17:30	0	0	0	0	0	**10**	34	376	**35**	455	0	23	**52**	86	161	8	**15**	449	**15**	**487**	**1103**
17:45	0	0	0	0	0	3	37	421	23	484	0	18	30	75	123	**10**	15	373	15	413	1020
Total Volume	0	0	0	0	0	28	141	1613	101	1883	0	101	163	346	610	32	55	1603	54	1744	4237
% App. Total	0	0	0	0		1.5	7.5	85.7	5.4		0	16.6	26.7	56.7		1.8	3.2	91.9	3.1		
PHF	.000	.000	.000	.000	.000	.700	.904	.925	.721	.961	.000	.561	.784	.874	.782	.800	.917	.893	.900	.895	.960
LIGHT VEHICLES	0	0	0	0	0	28	141	1573	100	1842	0	94	157	344	595	31	55	1577	51	1714	4151
% LIGHT VEHICLES	0	0	0	0	0	100	100	97.5	99.0	97.8	0	93.1	96.3	99.4	97.5	96.9	100	98.4	94.4	98.3	98.0
HEAVY VEHICLES	0	0	0	0	0	0	0	40	1	41	0	7	6	2	15	1	0	26	3	30	86
% HEAVY VEHICLES	0	0	0	0	0	0	0	2.5	1.0	2.2	0	6.9	3.7	0.6	2.5	3.1	0	1.6	5.6	1.7	2.0



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NE 3RD STREET & US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: A. PALOMINO & M. CRUZ
SIGNALIZED

File Name : 3ST__US1
Site Code : 00140258
Start Date : 12/10/2014
Page No : 1

Groups Printed- LIGHT VEHICLES - HEAVY VEHICLES

	US 1 From North					NE 3RD STREET From East					US 1 From South					NE 3RD STREET From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
07:00	0	2	153	7	162	0	7	8	0	15	3	11	118	1	133	0	7	5	7	19	329
07:15	0	7	188	6	201	0	6	11	1	18	1	12	126	1	140	0	14	10	12	36	395
07:30	0	5	246	6	257	0	7	10	1	18	1	12	151	0	164	0	7	4	5	16	455
07:45	0	12	348	8	368	0	13	14	1	28	0	9	177	1	187	0	23	15	21	59	642
Total	0	26	935	27	988	0	33	43	3	79	5	44	572	3	624	0	51	34	45	130	1821
08:00	0	6	301	10	317	0	6	11	5	22	2	11	191	4	208	0	18	21	31	70	617
08:15	0	10	293	7	310	0	13	6	0	19	3	10	186	2	201	0	13	13	13	39	569
08:30	0	12	279	9	300	0	12	14	0	26	1	13	213	2	229	0	14	20	18	52	607
08:45	0	17	295	9	321	0	8	15	0	23	2	19	204	2	227	0	15	22	24	61	632
Total	0	45	1168	35	1248	0	39	46	5	90	8	53	794	10	865	0	60	76	86	222	2425
16:00	1	9	270	4	284	0	5	15	1	21	2	26	214	5	247	0	14	18	19	51	603
16:15	0	6	253	8	267	0	10	25	4	39	3	19	269	2	293	0	21	22	13	56	655
16:30	1	9	222	8	240	0	9	19	4	32	0	11	248	4	263	0	16	20	23	59	594
16:45	0	5	253	5	263	0	8	18	2	28	3	26	303	2	334	0	8	19	16	43	668
Total	2	29	998	25	1054	0	32	77	11	120	8	82	1034	13	1137	0	59	79	71	209	2520
17:00	0	12	246	4	262	0	11	25	6	42	0	17	343	4	364	0	31	23	16	70	738
17:15	0	7	255	12	274	0	7	27	4	38	3	23	343	2	371	0	11	17	24	52	735
17:30	0	9	277	9	295	0	11	17	2	30	2	20	330	5	357	0	14	17	14	45	727
17:45	0	10	296	7	313	0	9	22	6	37	0	19	326	0	345	0	24	18	14	56	751
Total	0	38	1074	32	1144	0	38	91	18	147	5	79	1342	11	1437	0	80	75	68	223	2951
Grand Total	2	138	4175	119	4434	0	142	257	37	436	26	258	3742	37	4063	0	250	264	270	784	9717
Apprch %	0	3.1	94.2	2.7		0	32.6	58.9	8.5		0.6	6.3	92.1	0.9		0	31.9	33.7	34.4		
Total %	0	1.4	43	1.2	45.6	0	1.5	2.6	0.4	4.5	0.3	2.7	38.5	0.4	41.8	0	2.6	2.7	2.8	8.1	
LIGHT VEHICLES	2	137	4084	116	4339	0	141	253	37	431	23	256	3654	37	3970	0	244	262	263	769	9509
% LIGHT VEHICLES	100	99.3	97.8	97.5	97.9	0	99.3	98.4	100	98.9	88.5	99.2	97.6	100	97.7	0	97.6	99.2	97.4	98.1	97.9
HEAVY VEHICLES	0	1	91	3	95	0	1	4	0	5	3	2	88	0	93	0	6	2	7	15	208
% HEAVY VEHICLES	0	0.7	2.2	2.5	2.1	0	0.7	1.6	0	1.1	11.5	0.8	2.4	0	2.3	0	2.4	0.8	2.6	1.9	2.1

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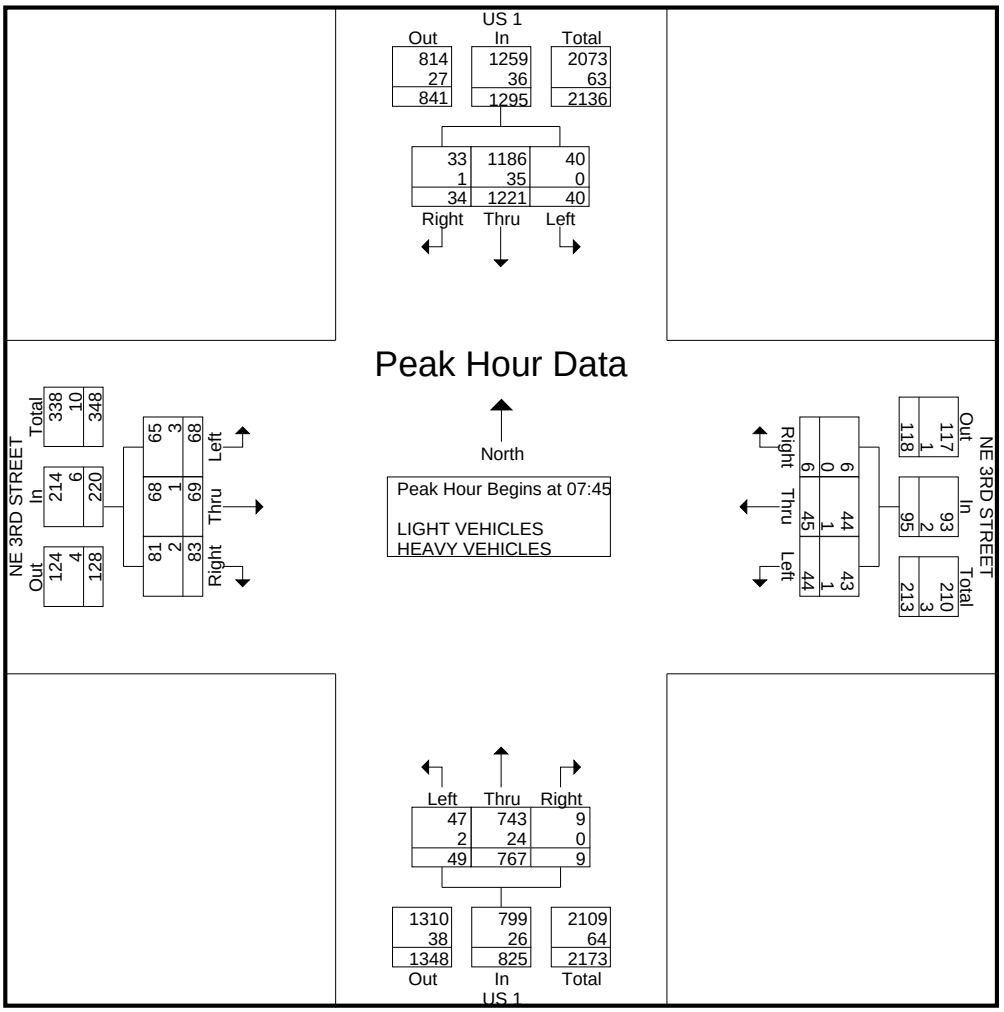
NE 3RD STREET & US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: A. PALOMINO & M. CRUZ
SIGNALIZED

File Name : 3ST__US1
Site Code : 00140258
Start Date : 12/10/2014
Page No : 2

	US 1 From North					NE 3RD STREET From East					US 1 From South					NE 3RD STREET From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 11:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	0	**12**	**348**	8	**368**	0	**13**	**14**	1	**28**	0	9	177	1	187	0	**23**	15	21	59	**642**
08:00	0	6	301	**10**	317	0	6	11	**5**	22	2	11	191	**4**	208	0	18	**21**	**31**	**70**	617
08:15	0	10	293	7	310	0	13	6	0	19	**3**	10	186	2	201	0	13	13	13	39	569
08:30	0	12	279	9	300	0	12	14	0	26	1	**13**	**213**	2	**229**	0	14	20	18	52	607
Total Volume	0	40	1221	34	1295	0	44	45	6	95	6	43	767	9	825	0	68	69	83	220	2435
% App. Total	0	3.1	94.3	2.6		0	46.3	47.4	6.3		0.7	5.2	93	1.1		0	30.9	31.4	37.7		
PHF	.000	.833	.877	.850	.880	.000	.846	.804	.300	.848	.500	.827	.900	.563	.901	.000	.739	.821	.669	.786	.948
LIGHT VEHICLES	0	40	1186	33	1259	0	43	44	6	93	4	43	743	9	799	0	65	68	81	214	2365
% LIGHT VEHICLES	0	100	97.1	97.1	97.2	0	97.7	97.8	100	97.9	66.7	100	96.9	100	96.8	0	95.6	98.6	97.6	97.3	97.1
HEAVY VEHICLES	0	0	35	1	36	0	1	1	0	2	2	0	24	0	26	0	3	1	2	6	70
% HEAVY VEHICLES	0	0	2.9	2.9	2.8	0	2.3	2.2	0	2.1	33.3	0	3.1	0	3.2	0	4.4	1.4	2.4	2.7	2.9



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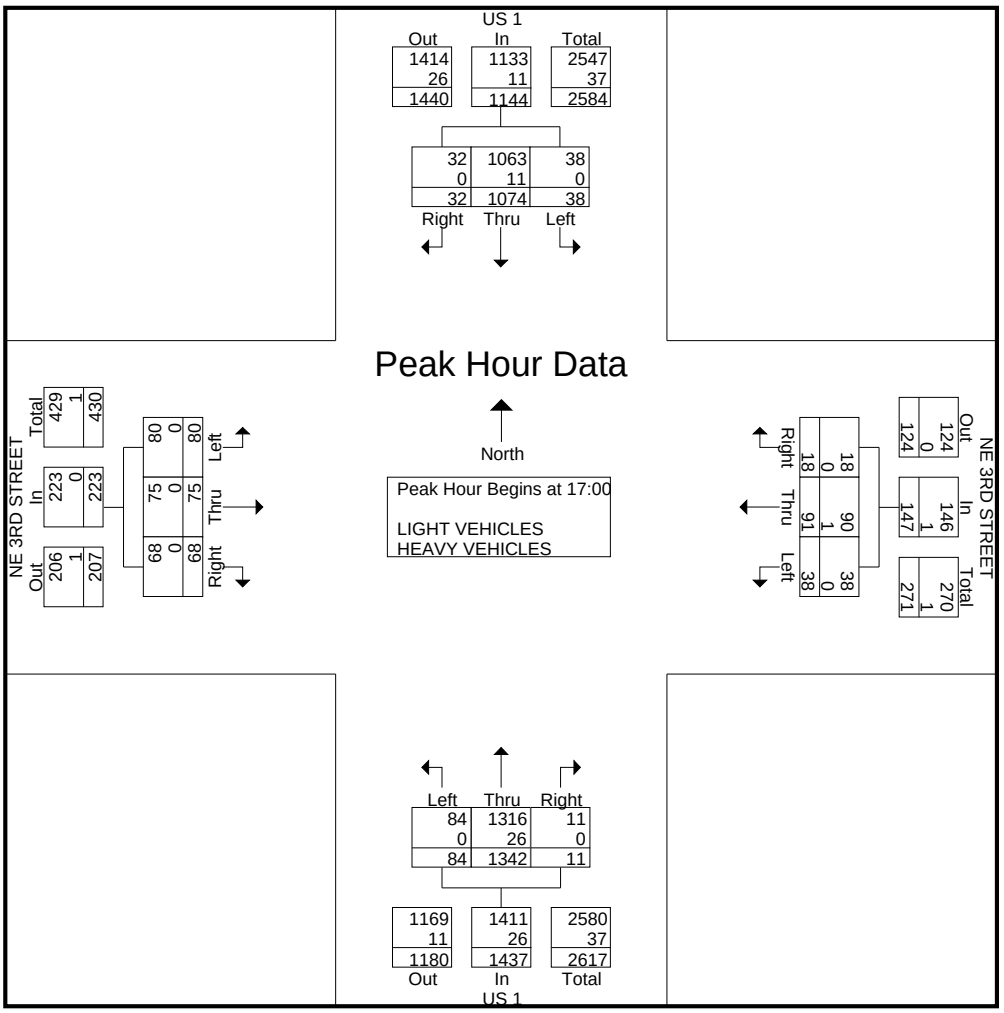
NE 3RD STREET & US 1
HALLANDALE BEACH, FLORIDA
COUNTED BY: A. PALOMINO & M. CRUZ
SIGNALIZED

File Name : 3ST__US1
Site Code : 00140258
Start Date : 12/10/2014
Page No : 3

	US 1 From North					NE 3RD STREET From East					US 1 From South					NE 3RD STREET From West					
Start Time	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	UTurn	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 12:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	**12**	246	4	262	0	**11**	25	**6**	**42**	0	17	**343**	4	364	0	**31**	**23**	16	**70**	738
17:15	0	7	255	**12**	274	0	7	**27**	4	38	**3**	**23**	343	2	**371**	0	11	17	**24**	52	735
17:30	0	9	277	9	295	0	11	17	2	30	2	20	330	**5**	357	0	14	17	14	45	727
17:45	0	10	**296**	7	**313**	0	9	22	6	37	0	19	326	0	345	0	24	18	14	56	**751**
Total Volume	0	38	1074	32	1144	0	38	91	18	147	5	79	1342	11	1437	0	80	75	68	223	2951
% App. Total	0	3.3	93.9	2.8		0	25.9	61.9	12.2		0.3	5.5	93.4	0.8		0	35.9	33.6	30.5		
PHF	.000	.792	.907	.667	.914	.000	.864	.843	.750	.875	.417	.859	.978	.550	.968	.000	.645	.815	.708	.796	.982
LIGHT VEHICLES	0	38	1063	32	1133	0	38	90	18	146	5	79	1316	11	1411	0	80	75	68	223	2913
% LIGHT VEHICLES	0	100	99.0	100	99.0	0	100	98.9	100	99.3	100	100	98.1	100	98.2	0	100	100	100	100	98.7
HEAVY VEHICLES	0	0	11	0	11	0	0	1	0	1	0	0	26	0	26	0	0	0	0	0	38
% HEAVY VEHICLES	0	0	1.0	0	1.0	0	0	1.1	0	0.7	0	0	1.9	0	1.8	0	0	0	0	0	1.3



2013 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 8600 EAST-A1A TO US1

MOCF: 0.92

WEEK	DATES	SF	PSCF
1	01/01/2013 - 01/05/2013	0.98	1.07
2	01/06/2013 - 01/12/2013	0.96	1.04
* 3	01/13/2013 - 01/19/2013	0.94	1.02
* 4	01/20/2013 - 01/26/2013	0.93	1.01
* 5	01/27/2013 - 02/02/2013	0.93	1.01
* 6	02/03/2013 - 02/09/2013	0.92	1.00
* 7	02/10/2013 - 02/16/2013	0.91	0.99
* 8	02/17/2013 - 02/23/2013	0.91	0.99
* 9	02/24/2013 - 03/02/2013	0.91	0.99
*10	03/03/2013 - 03/09/2013	0.91	0.99
*11	03/10/2013 - 03/16/2013	0.91	0.99
*12	03/17/2013 - 03/23/2013	0.91	0.99
*13	03/24/2013 - 03/30/2013	0.92	1.00
*14	03/31/2013 - 04/06/2013	0.94	1.02
*15	04/07/2013 - 04/13/2013	0.95	1.03
16	04/14/2013 - 04/20/2013	0.96	1.04
17	04/21/2013 - 04/27/2013	0.98	1.07
18	04/28/2013 - 05/04/2013	0.99	1.08
19	05/05/2013 - 05/11/2013	1.01	1.10
20	05/12/2013 - 05/18/2013	1.02	1.11
21	05/19/2013 - 05/25/2013	1.03	1.12
22	05/26/2013 - 06/01/2013	1.03	1.12
23	06/02/2013 - 06/08/2013	1.04	1.13
24	06/09/2013 - 06/15/2013	1.05	1.14
25	06/16/2013 - 06/22/2013	1.05	1.14
26	06/23/2013 - 06/29/2013	1.05	1.14
27	06/30/2013 - 07/06/2013	1.05	1.14
28	07/07/2013 - 07/13/2013	1.05	1.14
29	07/14/2013 - 07/20/2013	1.05	1.14
30	07/21/2013 - 07/27/2013	1.05	1.14
31	07/28/2013 - 08/03/2013	1.05	1.14
32	08/04/2013 - 08/10/2013	1.06	1.15
33	08/11/2013 - 08/17/2013	1.06	1.15
34	08/18/2013 - 08/24/2013	1.06	1.15
35	08/25/2013 - 08/31/2013	1.08	1.17
36	09/01/2013 - 09/07/2013	1.09	1.18
37	09/08/2013 - 09/14/2013	1.11	1.21
38	09/15/2013 - 09/21/2013	1.13	1.23
39	09/22/2013 - 09/28/2013	1.11	1.21
40	09/29/2013 - 10/05/2013	1.09	1.18
41	10/06/2013 - 10/12/2013	1.07	1.16
42	10/13/2013 - 10/19/2013	1.06	1.15
43	10/20/2013 - 10/26/2013	1.05	1.14
44	10/27/2013 - 11/02/2013	1.05	1.14
45	11/03/2013 - 11/09/2013	1.04	1.13
46	11/10/2013 - 11/16/2013	1.04	1.13
47	11/17/2013 - 11/23/2013	1.04	1.13
48	11/24/2013 - 11/30/2013	1.02	1.11
49	12/01/2013 - 12/07/2013	1.01	1.10
50	12/08/2013 - 12/14/2013	0.99	1.08
51	12/15/2013 - 12/21/2013	0.98	1.07
52	12/22/2013 - 12/28/2013	0.96	1.04
53	12/29/2013 - 12/31/2013	0.94	1.02

* PEAK SEASON

APPENDIX B: East / West Roadways Capacity and Level of Service Analysis 2013 & 2035

			2013					2013				2035					2035			
			Design	Daily Conditions				Peak Hour Conditions					Daily Conditions				Peak Hour Conditions			
ID	E/W Roadway	Segment	Code	AADT	Capacity	V/C	LOS	Volume	Capacity	V/C	LOS	Code	Volume	Capacity	V/C	LOS	Volume	Capacity	V/C	LOS
42	Hndle Bch Blvd	E of I-95	622	66053	59900	1.10	F	6275	5390	1.16	F	622	74948	59900	1.25	F	7120	5390	1.32	F
44	Hndle Bch Blvd	E of US 1	622	39500	59900	0.66	C	3753	5390	0.70	C	622	48788	49300	0.99	D	4635	5390	0.86	C
46	Hndle Bch Blvd	E of Diplomat Pkwy	622	35000	59900	0.58	C	3325	5390	0.62	C	622	38146	59900	0.64	C	3624	5390	0.67	C
1060	Moffett St	E of US 1	264	7400 e	13320	0.56	D	703	1197	0.59	D	264	12727	13320	0.96	D	1209	1197	1.01	E

Printed: 12/11/14

e - Estimated
N/A- Not Available

APPENDIX C: North / South Roadways Capacity and Level of Service Analysis 2013 & 2035

			2013					2013				2035					2035			
			Design	Daily Conditions				Peak Hour Conditions				Design	Daily Conditions				Peak Hour Conditions			
ID	N/SRoadway	Segment	Code	AADT	Capacity	V/C	LOS	Volume	Capacity	V/C	LOS	Code	Volume	Capacity	V/C	LOS	Volume	Capacity	V/C	LOS
877	US 1	N of Dade C L	632	51000	50000	1.02	F	4845	4500	1.08	F	632	74665	50000	1.49	F	7093	4500	1.58	F
879	US 1	N of Hndle Bch Blvd	432	34000	32400	1.05	F	3230	2920	1.11	F	432	46422	32400	1.43	F	4410	2920	1.51	F
937	NE/S 14 Ave	N of Hndle Bch Blvd	264	8400	13320	0.63	D	798	1197	0.67	D	264	8226	13320	0.62	D	781	1197	0.65	D

E Estimated
NA- Not Available

TABLE 4

Generalized **Peak Hour Two-Way** Volumes for Florida's **Urbanized Areas**[1]

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	1,510	1,600	**
4	Divided	*	3,420	3,580	**
6	Divided	*	5,250	5,390	**
8	Divided	*	7,090	7,210	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
2	Undivided	*	660	1,330	1,410
4	Divided	*	1,310	2,920	3,040
6	Divided	*	2,090	4,500	4,590
8	Divided	*	2,880	6,060	6,130

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
2	Divided	Yes	No	+5%
2	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding two-directional volumes in this table by 0.6

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	260	680	1,770
50-84%	190	600	1,770	>1,770
85-100%	830	1,770	>1,770	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	250	850
50-84%	*	150	780	1,420
85-100%	340	960	1,560	>1,770

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
4	4,120	5,540	6,700	7,190
6	6,130	8,370	10,060	11,100
8	8,230	11,100	13,390	15,010
10	10,330	14,040	16,840	18,930
12	14,450	18,880	22,030	22,860

Freeway Adjustments

Auxiliary Lanes Present in Both Directions	Ramp Metering
+ 1,800	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
2	Undivided	770	1,530	2,170	2,990
4	Divided	3,300	4,660	5,900	6,530
6	Divided	4,950	6,990	8,840	9,790

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
2	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as peak hour two-way volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

TABLE 7

Generalized **Peak Hour Directional** Volumes for Florida's **Urbanized Areas**[1]

12/18/12

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	830	880	**
2	Divided	*	1,910	2,000	**
3	Divided	*	2,940	3,020	**
4	Divided	*	3,970	4,040	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	370	750	800
2	Divided	*	730	1,630	1,700
3	Divided	*	1,170	2,520	2,560
4	Divided	*	1,610	3,390	3,420

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
1	Divided	Yes	No	+5%
1	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding directional volumes in this table by 1.2

BICYCLE MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	150	390	1,000
50-84%	110	340	1,000	>1,000
85-100%	470	1,000	>1,000	**

PEDESTRIAN MODE[2]

(Multiply motorized vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	140	480
50-84%	*	80	440	800
85-100%	200	540	880	>1,000

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Lanes	B	C	D	E
2	2,260	3,020	3,660	3,940
3	3,360	4,580	5,500	6,080
4	4,500	6,080	7,320	8,220
5	5,660	7,680	9,220	10,360
6	7,900	10,320	12,060	12,500

Freeway Adjustments

Auxiliary Lane	Ramp Metering
+ 1,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
1	Undivided	420	840	1,190	1,640
2	Divided	1,810	2,560	3,240	3,590
3	Divided	2,720	3,840	4,860	5,380

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
1	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the Highway Capacity Manual and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of motorized vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Planning Office
www.dot.state.fl.us/planning/systems/sm/los/default.shtm

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2013 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 0590 - SR 858 / HALLANDALE BCH BLVD - W OF SR 5/US 1

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2013	42500 C	E 19500	W 23000	9.00	53.60	10.10
2012	38500 C	E 18500	W 20000	9.00	52.20	10.10
2011	41500 C	E 18500	W 23000	9.00	52.50	2.50
2010	43000 C	E 21500	W 21500	8.35	52.69	4.10
2009	41500 C	E 20500	W 21000	8.53	53.89	2.90
2008	38500 C	E 20000	W 18500	8.81	54.16	2.90
2007	40500 C	E 20000	W 20500	8.63	55.75	2.90
2006	44000 C	E 21500	W 22500	8.40	55.34	6.90
2005	38000 C	E 19000	W 19000	8.20	51.70	6.90
2004	40500 C	E 20000	W 20500	9.10	55.30	6.90
2003	40000 C	E 20500	W 19500	8.60	57.50	4.30
2002	43000 C	E 20500	W 22500	8.70	56.40	3.50
2001	40500 C	E 19500	W 21000	9.00	60.20	5.20
2000	40500 C	E 19500	W 21000	8.90	57.80	3.90
1999	40500 C	E 20000	W 20500	9.60	62.50	4.10
1998	39500 C	E 19000	W 20500	8.70	56.10	3.50

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; F = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2013 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 5028 - SR 5 / US 1 - S OF SR 824/PEMBROKE RD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2013	34000 C	N 17000	S 17000	9.00	54.60	4.00
2012	31000 C	N 15500	S 15500	9.00	55.00	4.20
2011	38000 C	N 18000	S 20000	9.00	54.50	4.20
2010	33000 C	N 15500	S 17500	9.37	54.06	4.20
2009	31500 C	N 15500	S 16000	9.31	53.74	2.20
2008	38000 C	N 20500	S 17500	9.70	54.48	2.20
2007	36500 C	N 19000	S 17500	9.10	53.47	1.80
2006	38000 C	N 19500	S 18500	9.48	53.59	1.80
2005	35500 C	N 18500	S 17000	10.60	58.90	1.80
2004	35500 C	N 18000	S 17500	10.40	56.30	1.80
2003	33000 C	N 16500	S 16500	9.20	55.90	4.10
2002	34500 C	N 17500	S 17000	9.50	55.00	4.10
2001	35000 C	N 17500	S 17500	9.70	55.60	3.50
2000	31000 C	N 16000	S 15000	9.40	56.30	3.80
1999	31000 C	N 16500	S 14500	9.40	56.40	2.50
1998	37000 C	N 19000	S 18000	9.60	53.90	2.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; F = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2013 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 5029 - SR 858 / HALLANDALE BCH BLVD - E OF SR 5/US 1

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2013	39500 C	E 22000	W 17500	9.00	54.60	3.50
2012	45000 C	E 23000	W 22000	9.00	55.00	2.70
2011	42000 C	E 21000	W 21000	9.00	54.50	2.70
2010	42500 C	E 21000	W 21500	9.37	54.06	2.70
2009	46500 C	E 23000	W 23500	9.31	53.74	2.20
2008	55000 C	E 27000	W 28000	9.70	54.48	2.20
2007	39500 C	E 19500	W 20000	9.10	53.47	2.50
2006	45500 C	E 24000	W 21500	9.48	53.59	3.80
2005	47000 C	E 24500	W 22500	10.60	58.90	4.70
2004	49500 C	E 25500	W 24000	10.40	56.30	5.00
2003	48500 C	E 24500	W 24000	9.20	55.90	5.90
2002	48000 C	E 23500	W 24500	9.50	55.00	3.50
2001	44500 C	E 22000	W 22500	9.70	55.60	5.90
2000	46000 C	E 23000	W 23000	9.40	56.30	3.90
1999	45000 C	E 23000	W 22000	9.40	56.40	4.10
1998	46500 C	E 23500	W 23000	9.60	53.90	6.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; F = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

COMMITTED DEVELOPMENT TRAFFIC - AM PEAK HOUR
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS

INTERSECTION	DEVELOPMENT NAME	TRAFFIC VOLUMES															
		EBUT	EBLT	EBTH	EBRT	WBUT	WBLT	WBTH	WBRT	NBUT	NBLT	NBTH	NBRT	SBUT	SBLT	SBTH	SBRT
E. Hallandale Beach Boulevard at N. Federal Highway	Art Square		6						5			6			10	20	20
	Hallandale Oasis			1			7	13	7				1		0		
	CVS Pharmacy			2			1	2	1				1		1		
	Beachwalk			22			42	20	10				18		21		
	Gulfstream Point				8		4				10	6	6			4	
	Total	**0**	**6**	**25**	**8**	**0**	**54**	**35**	**23**	**0**	**10**	**12**	**26**	**0**	**32**	**24**	**20**
NE 3rd Street at N. Federal Highway	Art Square		49		25						17					25	7
	Hallandale Oasis											7				0	
	CVS Pharmacy											1				1	
	Beachwalk											10				21	
	Gulfstream Point											6				4	
	Total	**0**	**49**	**0**	**25**	**0**	**0**	**0**	**0**	**0**	**17**	**24**	**0**	**0**	**0**	**51**	**7**
E. Hallandale Beach Boulevard at NE 8th Avenue	Art Square			10				5									
	Hallandale Oasis			2				27									
	CVS Pharmacy			4				4									
	Beachwalk			61				71							4		
	Gulfstream Point			6				4									
	Total	**0**	**0**	**83**	**0**	**0**	**0**	**111**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**
E. Hallandale Beach Boulevard at NE 10th Avenue	Art Square			10				5									
	Hallandale Oasis			2			3	27	2				0				
	CVS Pharmacy			4				4									
	Beachwalk			65			2	71	2				1				
	Gulfstream Point			6				4									
	Total	**0**	**0**	**87**	**0**	**0**	**5**	**111**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**

McMAHON TRANSPORTATION ENGINEERS & PLANNERS

COMMITTED DEVELOPMENT TRAFFIC - PM PEAK HOUR
ACCESSO OFFICE BUILDING TRAFFIC ANALYSIS

INTERSECTION	DEVELOPMENT NAME	TRAFFIC VOLUMES															
		EBUT	EBLT	EBTH	EBRT	WBUT	WBLT	WBTH	WBRT	NBUT	NBLT	NBTH	NBRT	SBUT	SBLT	SBTH	SBRT
E. Hallandale Beach Boulevard at N. Federal Highway	Art Square		15						11			15			10	22	22
	Hallandale Oasis			38			10	19	10				19		19		
	CVS Pharmacy			8			4	8	4				4		4		
	Beachwalk			17			33	21	17				27		15		
	Gulfstream Point				13		7				8	5	5			7	
	Total	**0**	**15**	**63**	**13**	**0**	**54**	**48**	**42**	**0**	**8**	**20**	**55**	**0**	**48**	**29**	**22**
NE 3rd Street at N. Federal Highway	Art Square		54		27						41					27	16
	Hallandale Oasis											10				19	
	CVS Pharmacy											4				4	
	Beachwalk											17				15	
	Gulfstream Point											5				7	
	Total	**0**	**54**	**0**	**27**	**0**	**0**	**0**	**0**	**0**	**41**	**36**	**0**	**0**	**0**	**72**	**16**
E. Hallandale Beach Boulevard at NE 8th Avenue	Art Square			10				11									
	Hallandale Oasis			76				39									
	CVS Pharmacy			16				16									
	Beachwalk			60				72							3		
	Gulfstream Point			5				7									
	Total	**0**	**0**	**167**	**0**	**0**	**0**	**145**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**
E. Hallandale Beach Boulevard at NE 10th Avenue	Art Square			10				11									
	Hallandale Oasis			76			5	39	2				10				
	CVS Pharmacy			16				16									
	Beachwalk			63			1	72	1				0				
	Gulfstream Point			5				7									
	Total	**0**	**0**	**170**	**0**	**0**	**6**	**145**	**3**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**0**

McMAHON TRANSPORTATION ENGINEERS & PLANNERS

Hallandale

ArtSquare

Traffic

Impact

Study

prepared

by

Calvin, Giordano and Associates

Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS

OCTOBER 2014

Table 4: Trip Generation

ITE Code	Description	Unit	Intensity	Rate/Equation	Trips	Internal Capture	Net Trips	Entering %	Exiting %	Entering	Exiting
AM Peak											
221	Low-Rise Apartment	Dwelling Units	90	Ln(T)=0.82*Ln(X)+0.23	50		50	21%	79%	10	40
223	Midrise Apartment	Dwelling Units	268	T=0.41(X) - 13.06	97		97	31%	69%	30	67
Total Residential					***147***		***147***	***27%***	***73%***	***40***	***107***
820	Shopping Center	1,000 SF	12.755	Ln(T)=0.61*Ln(X) + 2.24	44		44	62%	38%	28	16
Total Site Trips					**192**		192	**36%**	**64%**	**68**	**123**
PM Peak											
221	Low-Rise Apartment	Dwelling Units	90	Ln(T)=0.88*Ln(X)+0.16	62		55	65%	35%	36	19
223	Midrise Apartment	Dwelling Units	268	T=0.48(X) - 11.07	118		106	58%	42%	61	44
Total Residential					***179***	10%	161	***60%***	***40%***	97	64
820	Shopping Center	1,000 SF	12.755	Ln(T)=0.67*Ln(X) + 3.31	151		136	48%	52%	65	71
Total Site Trips					**330**		297	**55%**	**45%**	**163**	**134**

4.4 Trip Distribution and Assignment

The trip distribution of the project's traffic was estimated based on the surrounding roadway network characteristics, current entering and exiting traffic volume ratios, and existing land use patterns. The trip distribution, AM peak trip assignment and PM peak trip assignment are presented in **Figure 6**, **Figure 7** and **Figure 8** respectively.

Figure 6: Trip Distribution

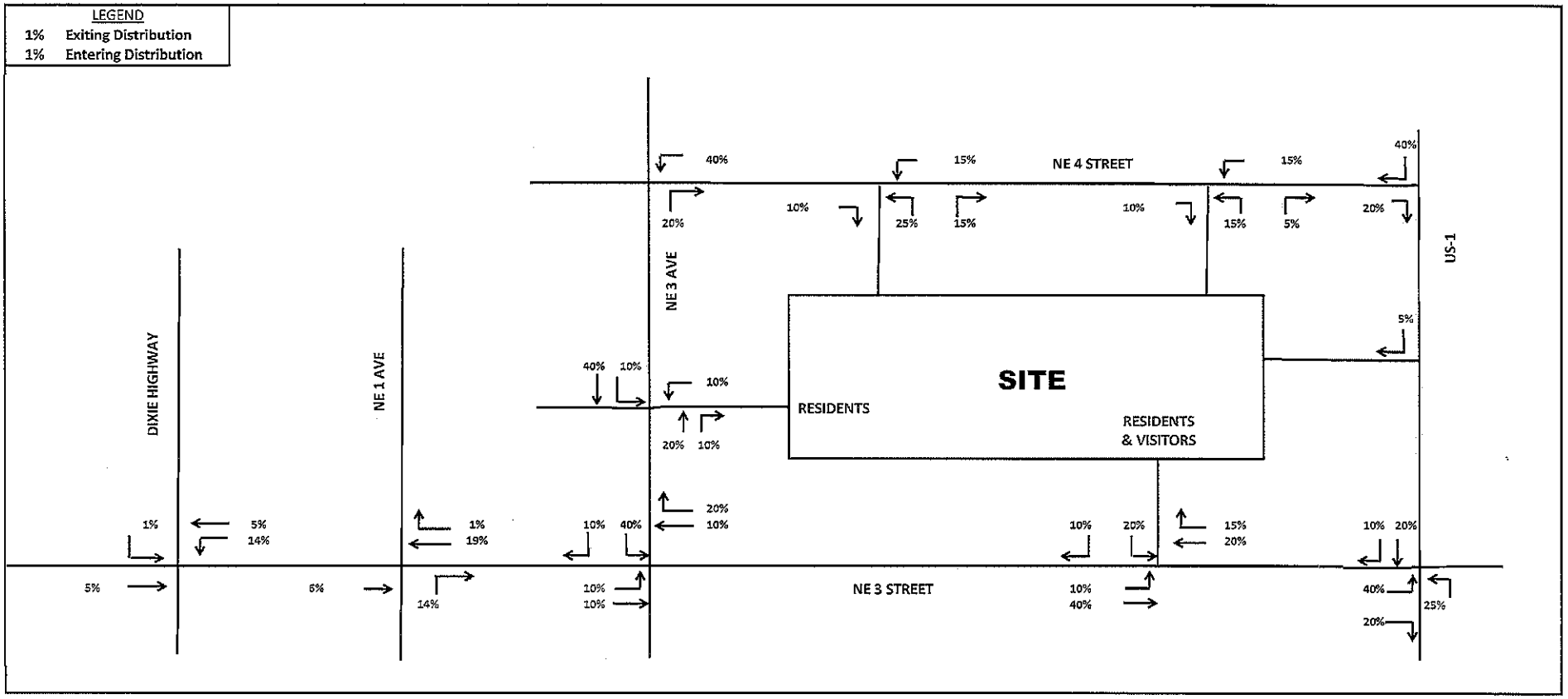


Figure 7: AM Peak Trip Assignment

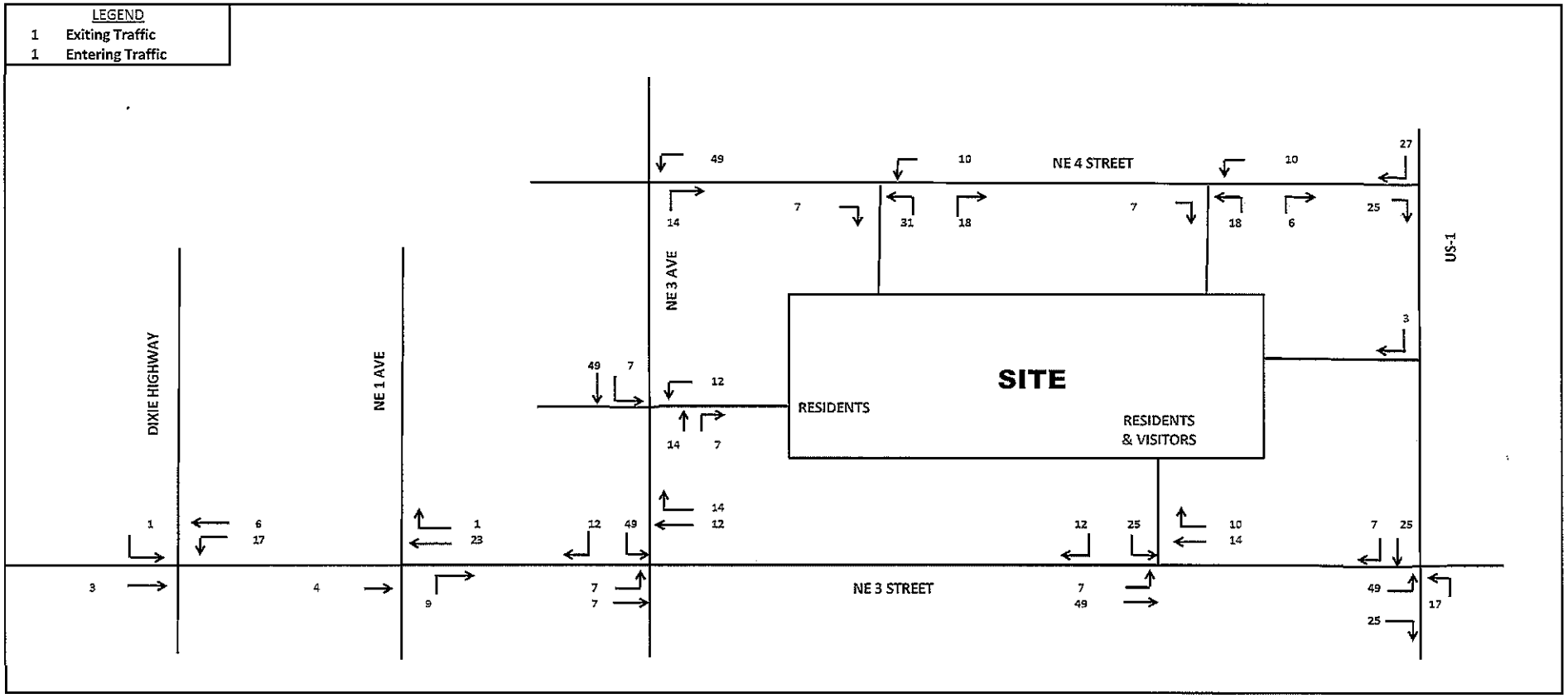
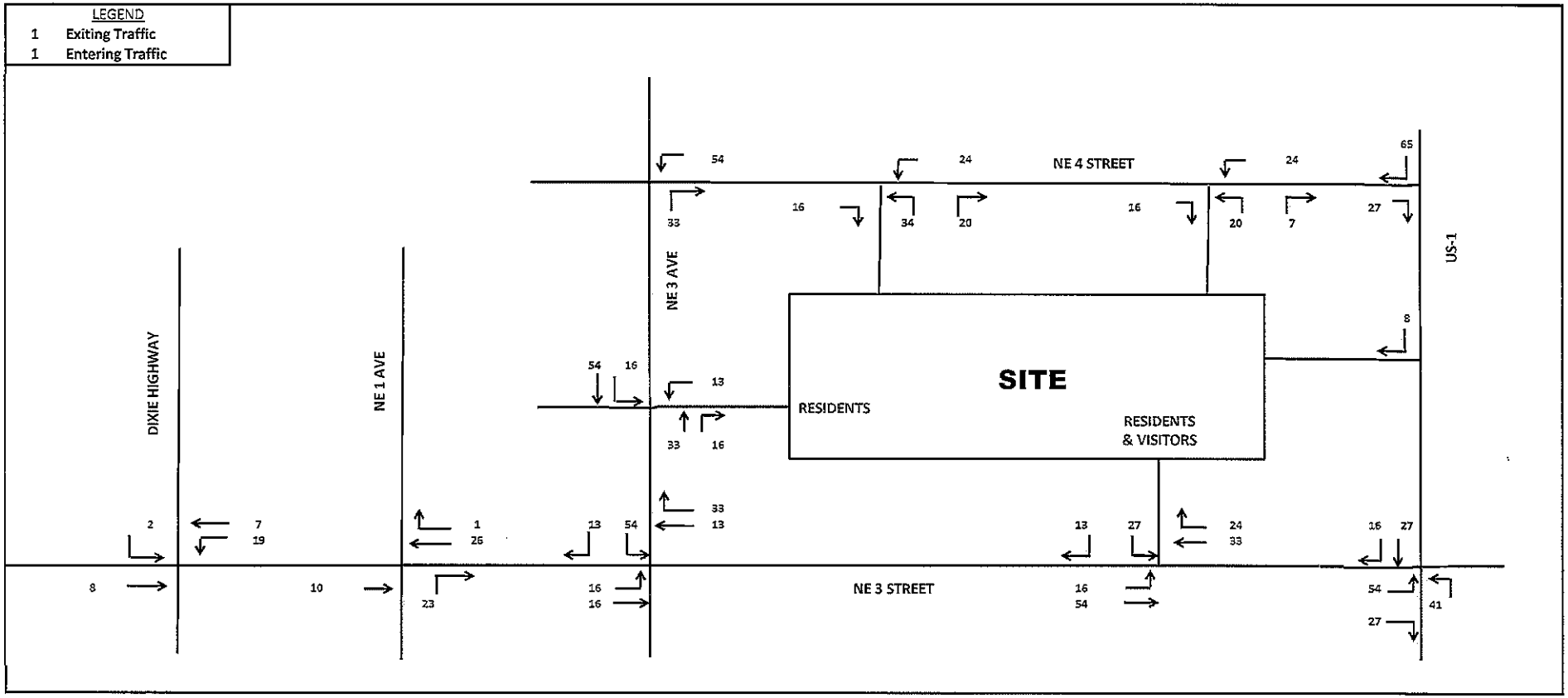


Figure 8: PM Peak Trip Assignment



Hallandale Oasis

1100 East Hallandale Beach Boulevard
Hallandale Beach, Florida

TRAFFIC STUDY

prepared for:
Szauer Engineering, Inc.

KBP CONSULTING, INC.

August 2014

ITE Land Use #222 – High-Rise Apartment

- Weekday: Ln (T) = 0.83 Ln (X) + 2.50
  where T = number of trips and X = number of dwelling units
- AM Peak: Ln(T) = 0.99 Ln (X) - 1.14 (25% in / 75% out)
- PM Peak: T = 0.32 (X) + 12.30 (61% in / 39% out)

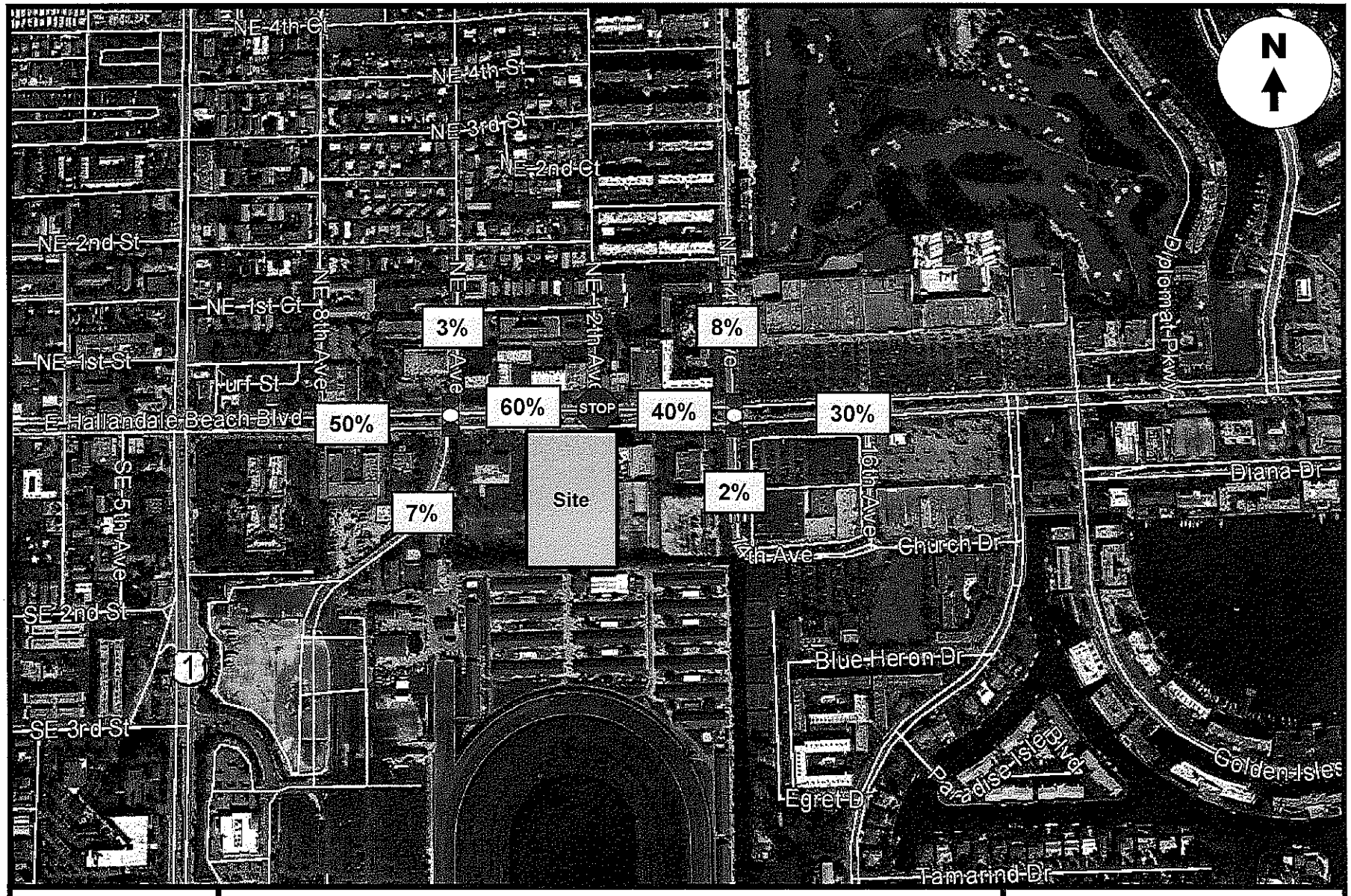
Table 1 below summarizes the vehicle trips associated with the proposed Hallandale Oasis project in the City of Hallandale Beach. (Internalization analyses in accordance with ITE procedures have also been included in this analysis. The details of the internalization are presented in Appendix C.)

Table 1
Trip Generation Summary
Hallandale Oasis - Hallandale Beach, Florida

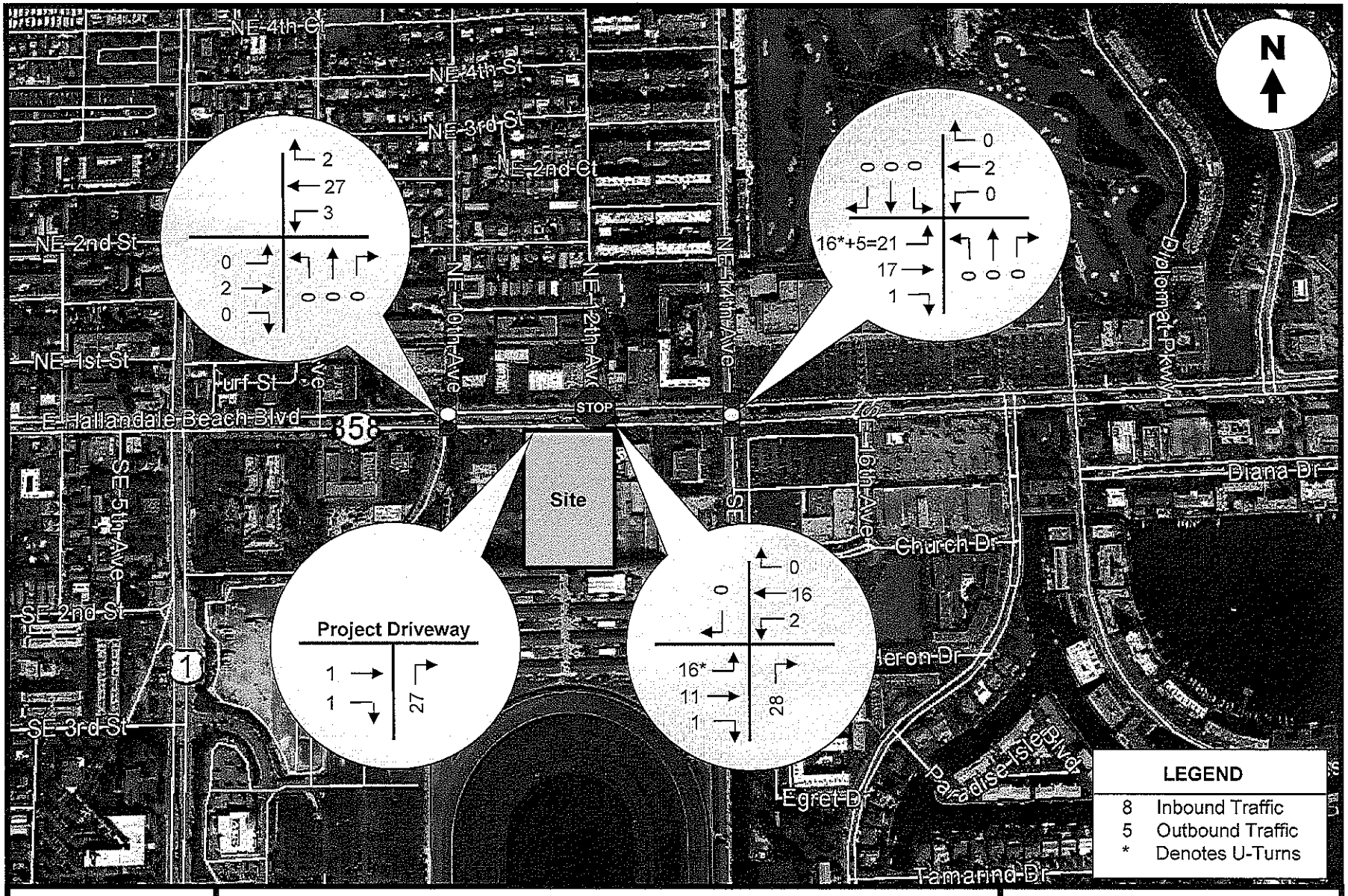
Land Use	Size	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
Existing Development								
Office	44,395 SF	708	88	12	100	22	106	128
Fitness Center	6,250 SF	206	5	4	9	14	10	24
Total		**914**	**93**	**16**	**109**	**36**	**116**	**152**
Proposed Development								
Office	39,060 SF	643	79	11	90	21	101	122
Retail	8,615 SF	406	0	0	0	18	24	42
Restaurant	18,015 SF	1,620	8	7	15	90	45	135
Fitness Center	8,500 SF	280	6	6	12	18	14	32
Residential	250 DU	1,191	19	57	76	56	36	92
Sub-Total		4,140	112	81	193	203	220	423
Deductions								
Internalization (13%)		-538	-15	-10	-25	-24	-27	-51
Total		**3,602**	**97**	**71**	**168**	**179**	**193**	**372**
Difference (Proposed - Existing)		**2,688**	**4**	**55**	**59**	**143**	**77**	**220**

Source: KBP Consulting, Inc., August 2014.
Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition).

As indicated in Table 1 above, the net new external vehicle trips anticipated to be generated by the proposed Hallandale Oasis project consists of approximately 2,688 vehicle trips during a typical weekday, 59 vehicle trips during the weekday AM peak hour (4 inbound and 55 outbound), and 220 vehicle trips during the weekday PM peak hour (143 inbound and 77 outbound).



KBP CONSULTING, INC.	**Trip Distribution**	**FIGURE 5** Hallandale Oasis Hallandale Beach, Florida

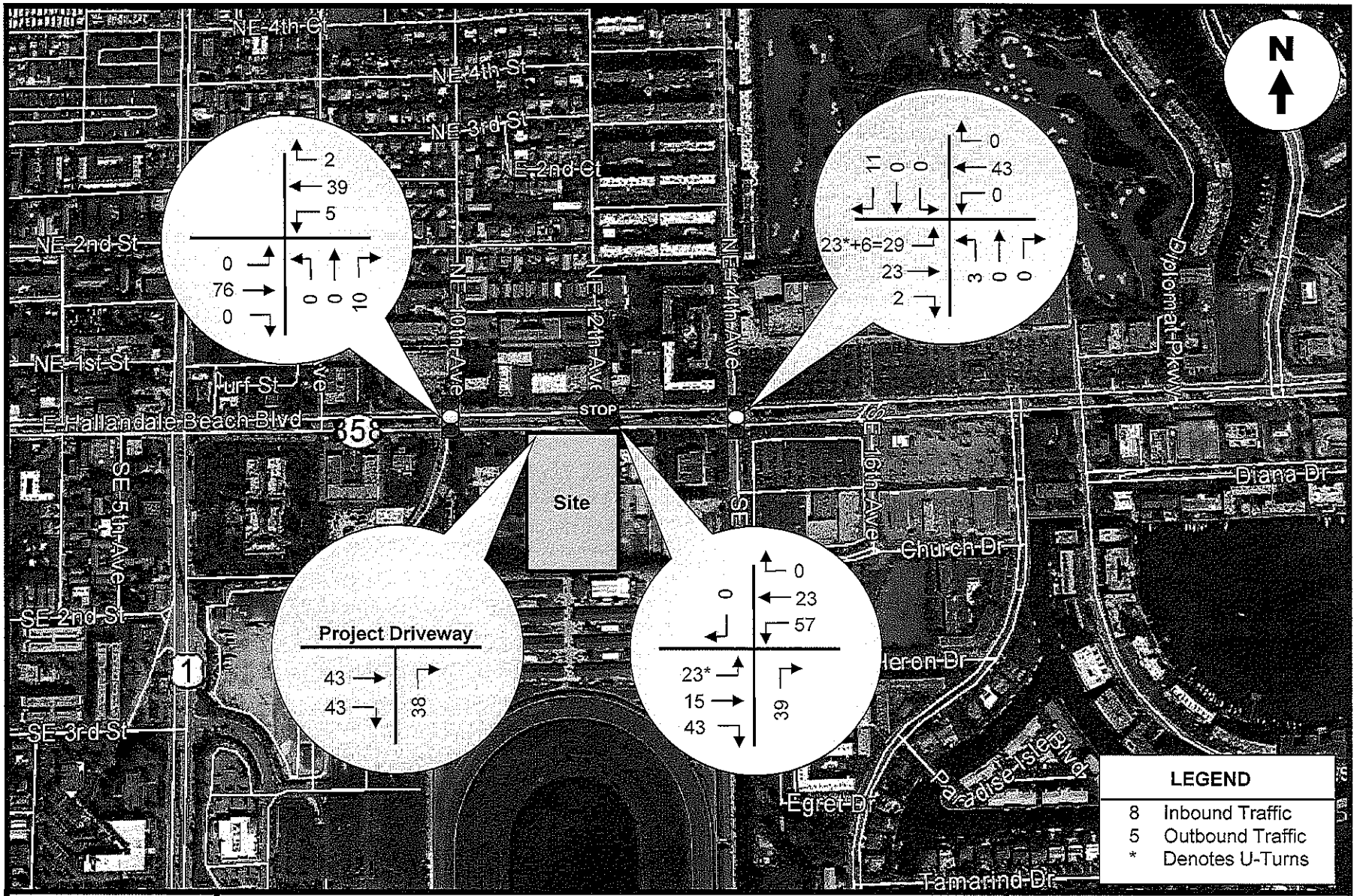


LEGEND	
8	Inbound Traffic
5	Outbound Traffic
*	Denotes U-Turns

KBP
CONSULTING, INC.

New Project Traffic Assignment
AM Peak Hour

FIGURE 6
Hallandale Oasis
Hallandale Beach, Florida



KBP
CONSULTING, INC.

New Project Traffic Assignment
PM Peak Hour

FIGURE 7
Hallandale Oasis
Hallandale Beach, Florida

Traffic Impact Statement (Revised)

For Submittal to the Florida Department of Transportation (FDOT)

CVS Pharmacy, Hallandale Beach

Northwest Quadrant of E. Hallandale Beach Blvd. & Three Islands Blvd.
City of Hallandale Beach, Florida

Prepared for:

2651 McCormick Drive
Clearwater, FL 33759

August 2012
October 2012 (Revised)

Engineers
Planners
Landscape Architects
Surveyors
Construction Management
Design/Build

Certificate of Authorization No. 00003215

5601 Mariner Street
Suite 240
Tampa, FL 33609
Tel: (813) 288-0233
Fax: (813) 288-0433
Contact: C. John Melendez III

RAGHU K. VETURI
LICENSE
No. 68918
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

RAGHU K. VETURI, P.E.
68918
P.E. Number
2/20/13
Date

DAILY TRIP GENERATION

Land Use	ITE Land use Code	Size (s.f.)	Rate	Directional Distribution		Gross Trips			Pass-By		Net-New Trips		
				Enter	Exit	Enter	Exit	Total	Rate	Trips	Enter	Exit	Total
Pharmacy/Drugstore with Drive-Through Window	881	13,124	88.16	50%	50%	579	579	1,157	49%	567	295	295	590

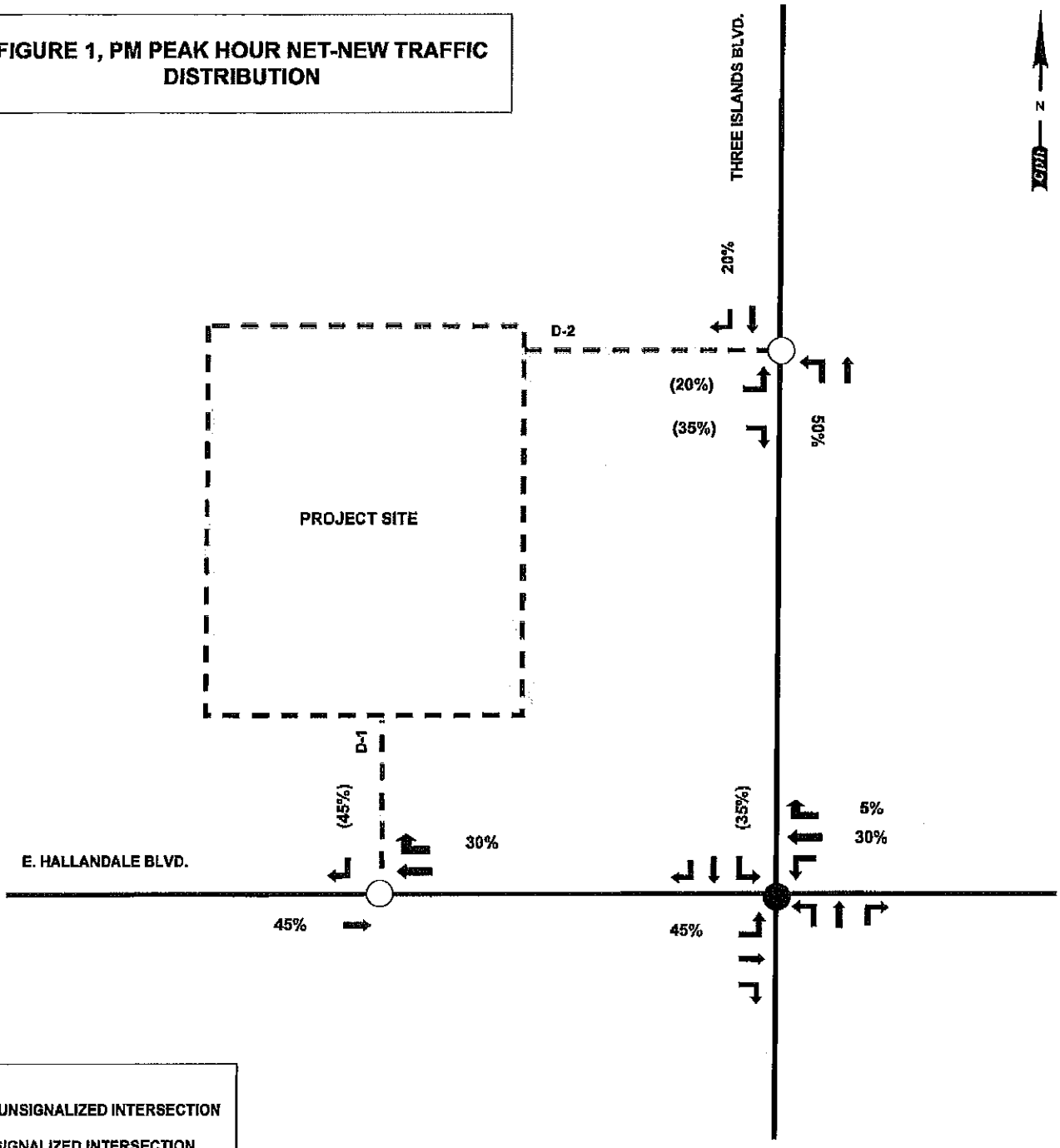
AM PEAK HOUR TRIP GENERATION

Land Use	ITE Land use Code	Size (s.f.)	Rate	Directional Distribution		Gross Trips			Pass-By		Net-New Trips		
				Enter	Exit	Enter	Exit	Total	Rate	Trips	Enter	Exit	Total
Pharmacy/Drugstore with Drive-Through Window	881	13,124	2.66	50%	50%	17	17	35	49%	17	9	9	18

PM PEAK HOUR TRIP GENERATION

Land Use	ITE Land use Code	Size (s.f.)	Rate	Directional Distribution		Gross Trips			Pass-By		Net-New Trips		
				Enter	Exit	Enter	Exit	Total	Rate	Trips	Enter	Exit	Total
Pharmacy/Drugstore with Drive-Through Window	881	13,124	10.35	50%	50%	68	68	136	49%	67	35	35	70

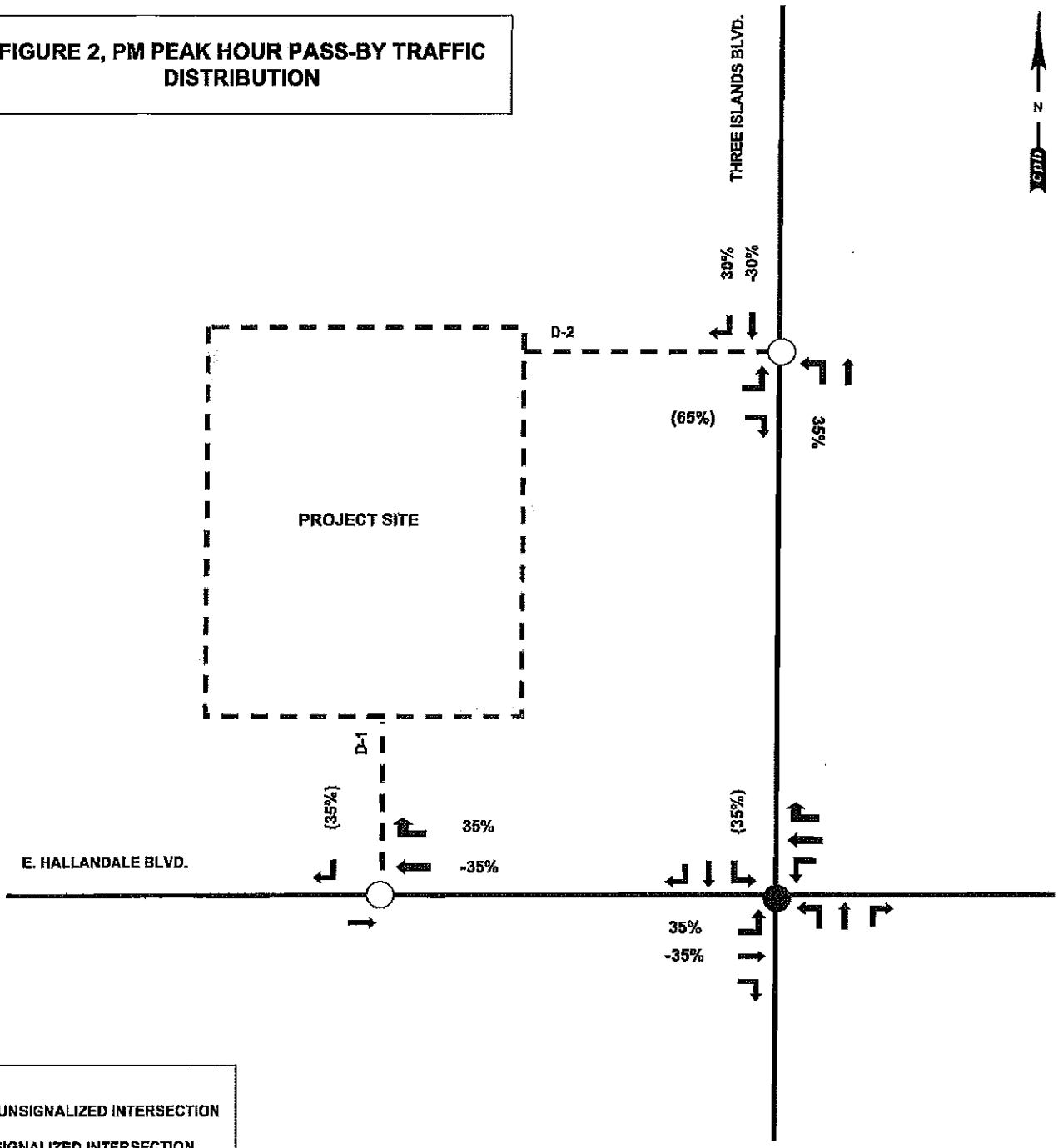
FIGURE 1, PM PEAK HOUR NET-NEW TRAFFIC DISTRIBUTION



LEGEND

- ○ UNSIGNALIZED INTERSECTION
- ● SIGNALIZED INTERSECTION
- XX% ENTERING DISTRIBUTION
- (XX%) EXITING DISTRIBUTION

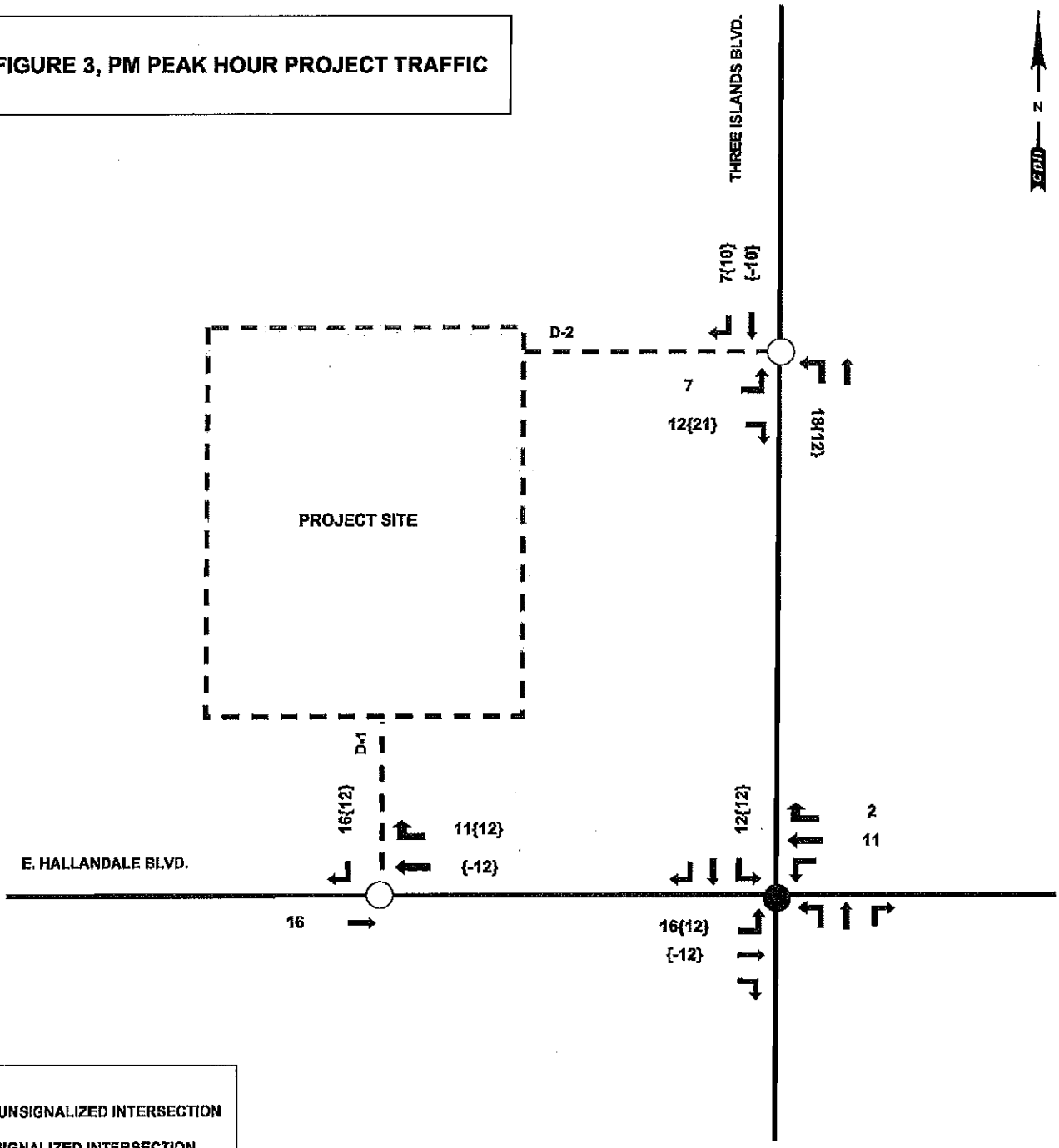
FIGURE 2, PM PEAK HOUR PASS-BY TRAFFIC DISTRIBUTION



LEGEND

- ○ UNSIGNALIZED INTERSECTION
- ● SIGNALIZED INTERSECTION
- XX% ENTERING DISTRIBUTION
- (XX%) EXITING DISTRIBUTION

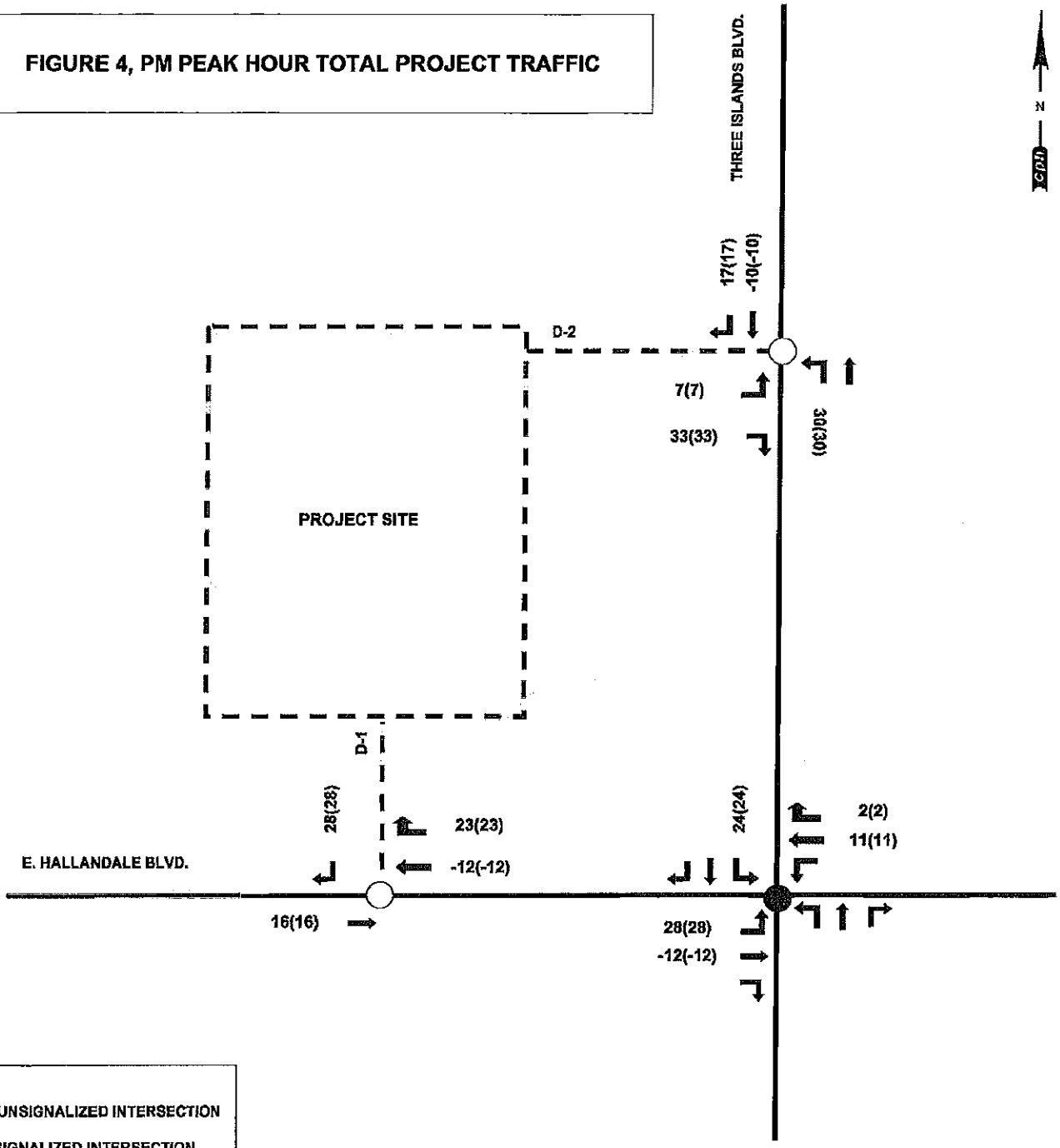
FIGURE 3, PM PEAK HOUR PROJECT TRAFFIC



LEGEND

- ○ UNSIGNALIZED INTERSECTION
- ● SIGNALIZED INTERSECTION
- XX NET-NEW PROJECT TRAFFIC
- (XX) PASS-BY PROJECT TRAFFIC

FIGURE 4, PM PEAK HOUR TOTAL PROJECT TRAFFIC



LEGEND

- ○ UNSIGNALIZED INTERSECTION
- ● SIGNALIZED INTERSECTION
- XX PM PEAK TOTAL TRAFFIC
- (XX) PROJECT TRAFFIC

EXHIBIT 8

Beachwalk
2600 Hallandale Beach Blvd.

Traffic Impact Report

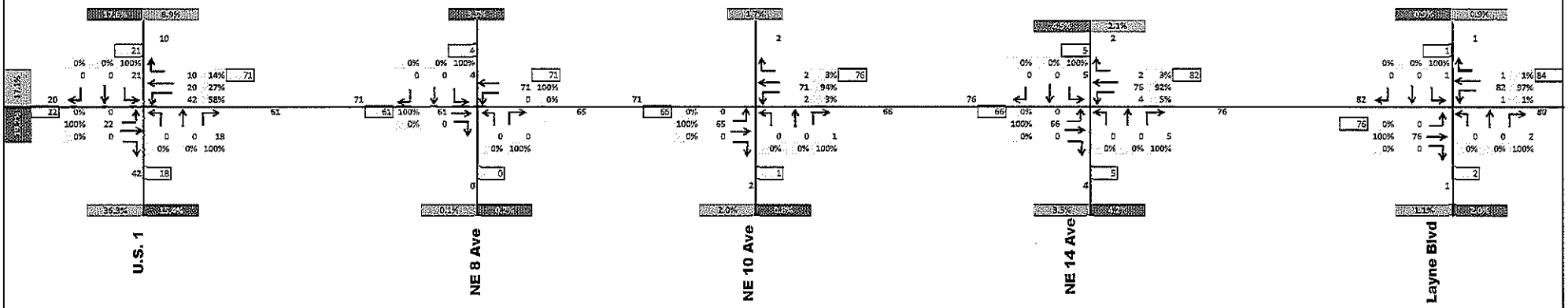
Prepared by:

Prepared For:

PRH-2600 HALLANDALE BEACH LLC

August 2011

Beachwalk Development - Trip Distribution AM (1 of 2)



Beachwalk Development

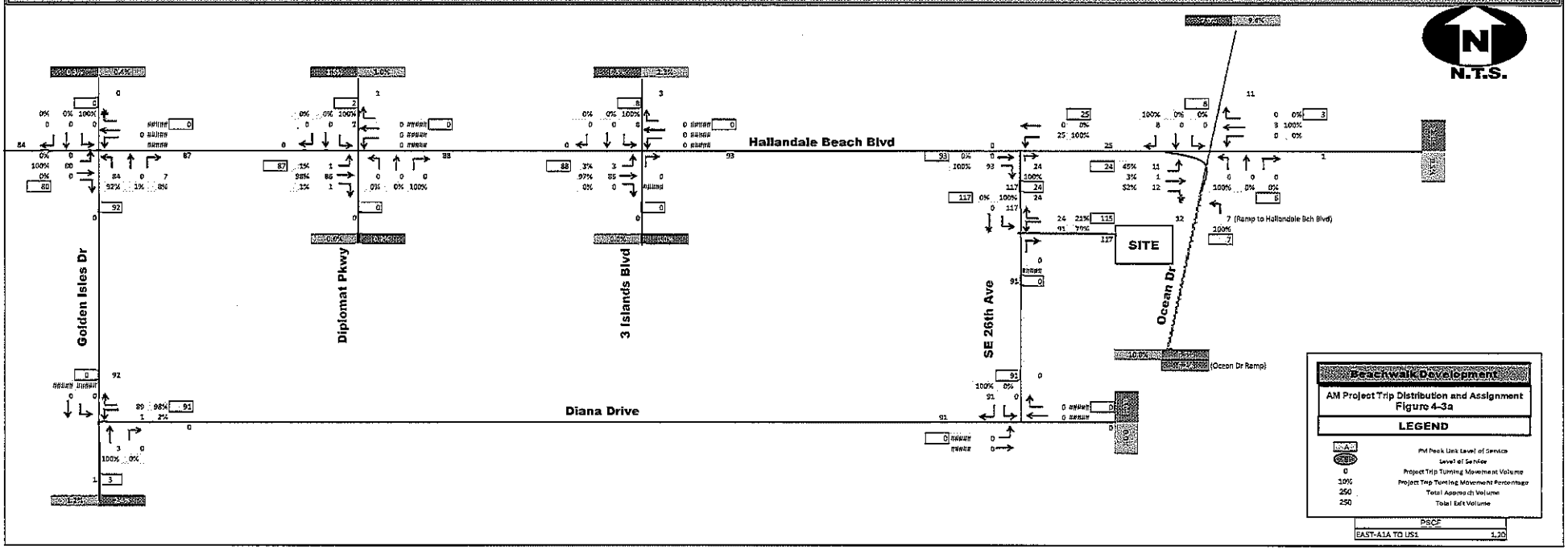
AM Project Trip Distribution and Assignment
Figure 4-3a

LEGEND

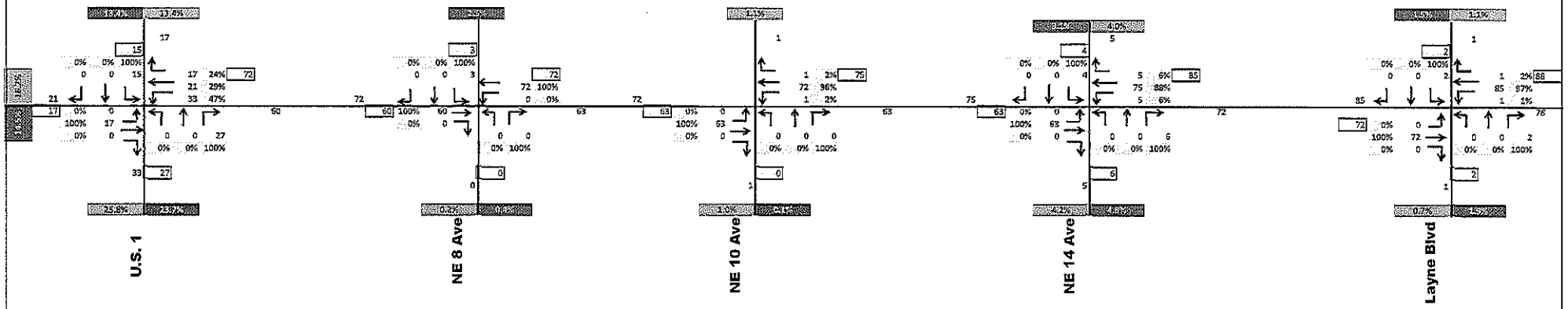
A	PM Peak Link Level of Service
	Level of Service
0	Project Trip Turning Movement Volume
10%	Project Trip Turning Movement Percentage
250	Total Approach Volume
250	Total Exit Volume

PSCE
EAST-A1A TO US1 1.20

Beachwalk Development - Trip Distribution AM (2 of 2)



Beachwalk Development - Trip Distribution PM (1 of 2)



Beachwalk Development

PM Project Trip Distribution and Assignment
Figure 4-3b

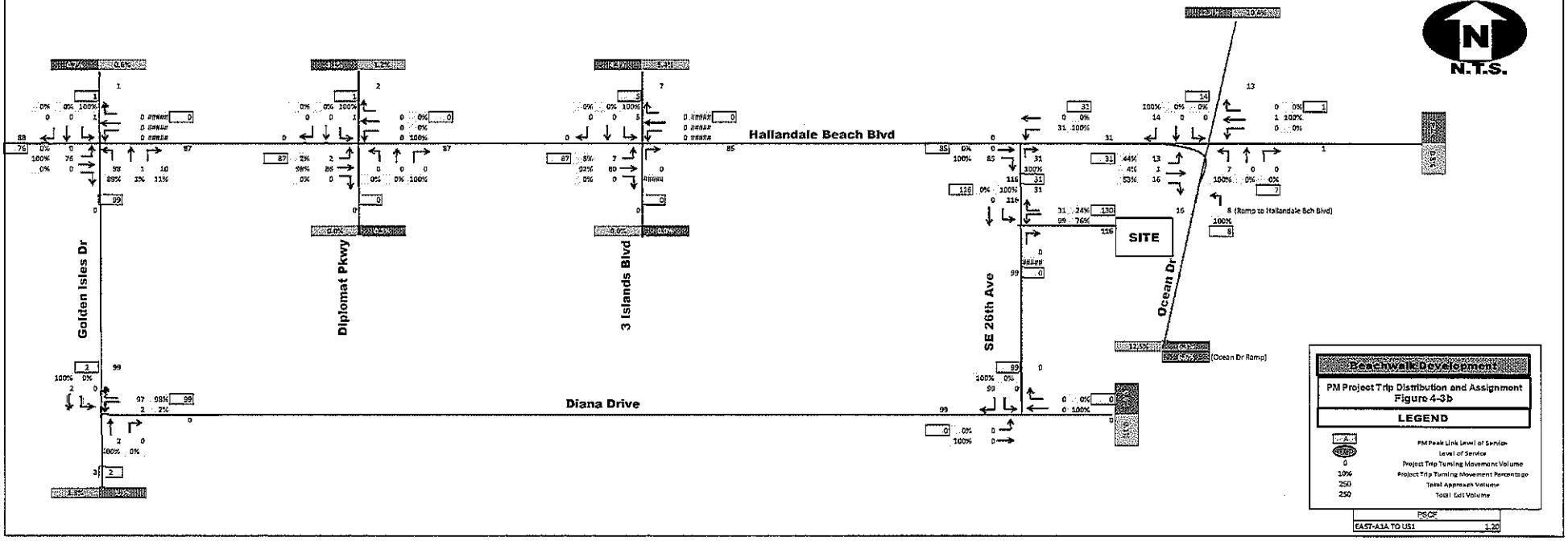
LEGEND

XXXX	PM Peak Link Level of Service
	Level of Service
0	Project Trip Turning Movement Volume
10%	Project Trip Turning Movement Percentage
250	Total Approach Volume
250	Total Exit Volume

PSCF

EAST-A1A TO US1 1.20

Beachwalk Development - Trip Distribution PM (2 of 2)



Traffic Impact Analysis for Submittal to the City of Hallandale Beach

Gulfstream Point
Hallandale Beach, Florida

Kimley-Horn and Associates, Inc.

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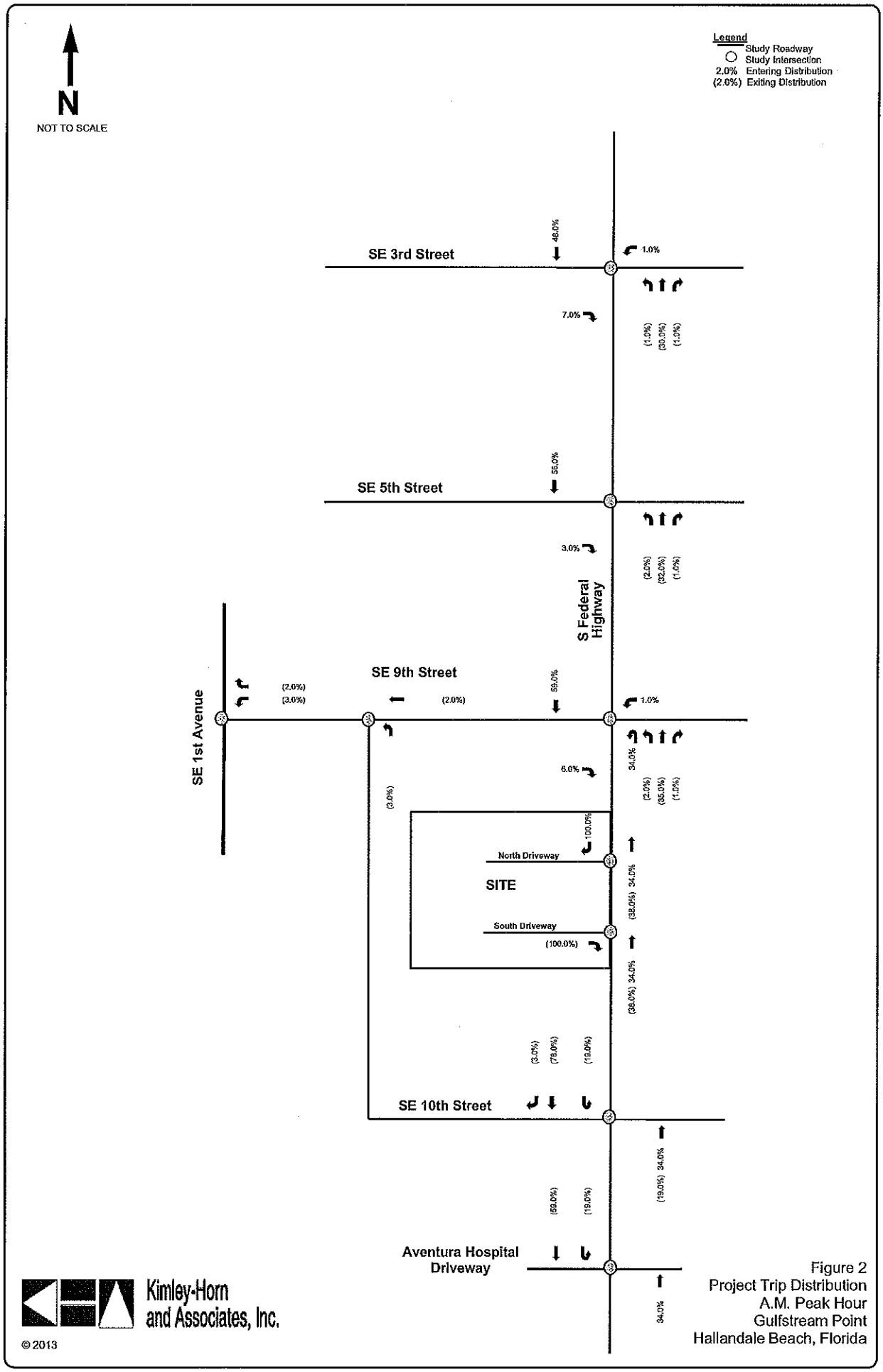
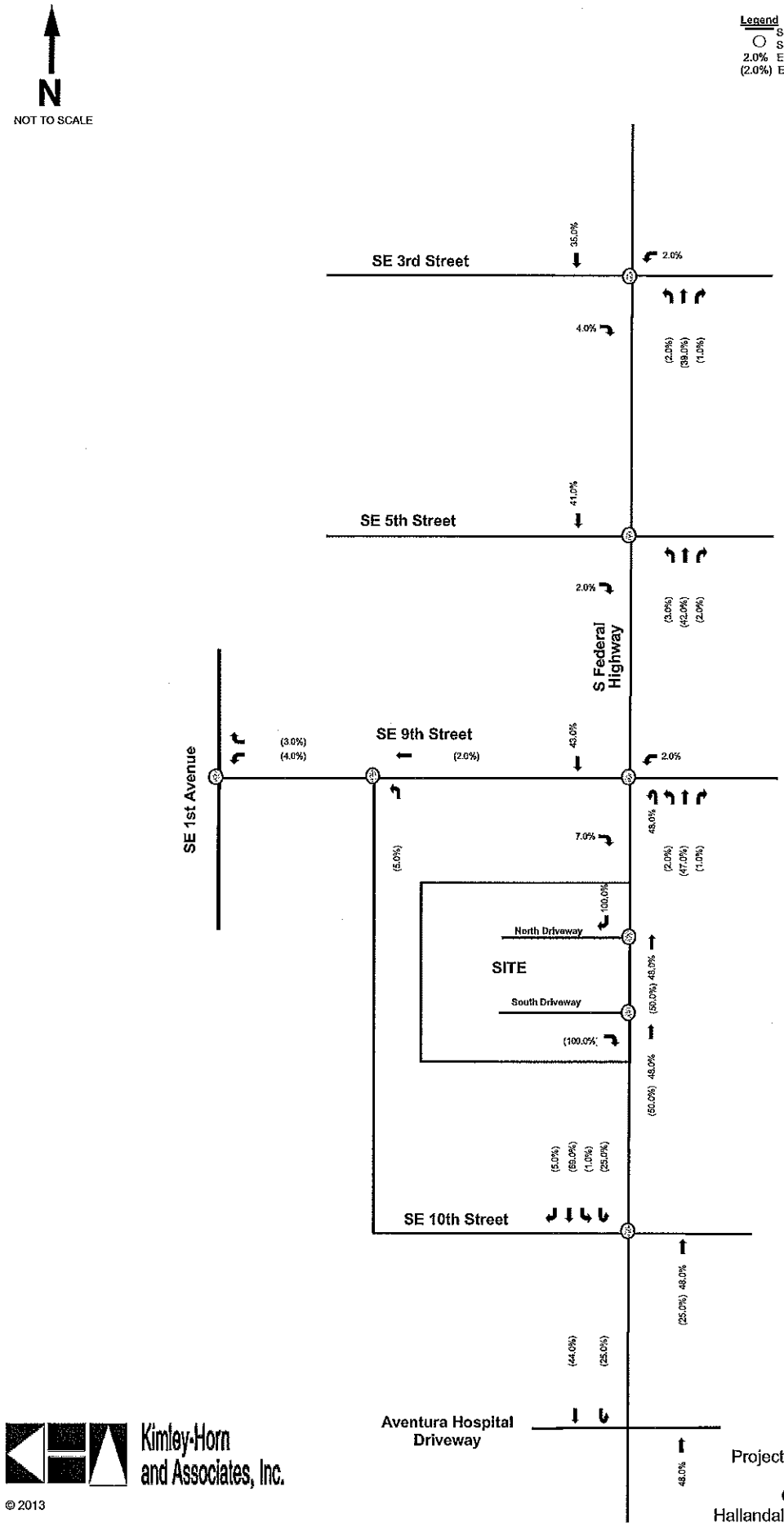
September 2013
043188001



Kimley-Horn and Associates, Inc.

© 2013

Figure 2
Project Trip Distribution
A.M. Peak Hour
Gulfstream Point
Hallandale Beach, Florida



Kimley-Horn and Associates, Inc.

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Figure 3
Project Trip Distribution
P.M. Peak Hour
Gulfstream Point
Hallandale Beach, Florida

TRIP GENERATION

DAILY TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	High-Rise Apartment	9	222	297	DU	50%	50%	687	687	1,374	3.4%	46	664	664	1,328	0.0%	0	664	664	1,328
2	High-Turnover (Sit-Down) Restaurant	9	932	3.7	ksf	50%	50%	235	235	470	10.0%	48	211	211	422	43.0%	182	120	120	240
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
							Total:	922	922	1,844	5.1%	94	875	875	1,750	10.4%	182	784	784	1,568

LUC	RATE/EQUATION
222	LN(Y) = 0.83*LN(X)+2.5
932	Y=127.15(X)

AM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	High-Rise Apartment	9	222	297	DU	25%	75%	23	68	90	3.4%	3	21	66	87	0.0%	0	21	66	87
2	High-Turnover (Sit-Down) Restaurant	9	932	3.7	ksf	55%	45%	22	18	40	10.0%	4	20	16	36	43.0%	16	12	8	20
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
							Total:	45	86	130	5.4%	7	41	82	123	13.0%	16	33	74	107

LUC	RATE/EQUATION
222	LN(Y) = 0.98*LN(X)+-1.14
932	Y=10.81(X)

PM PEAK HOUR TRIP GENERATION

	ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		DRIVEWAY VOLUMES			INTERNAL CAPTURE		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW EXTERNAL TRIPS		
	Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent In	Percent Out	In	Out	Total	Percent	IC Trips	In	Out	Total	Percent	PB Trips	In	Out	Total
1	High-Rise Apartment	9	222	297	DU	61%	39%	65	42	107	3.6%	4	63	40	103	0.0%	0	63	40	103
2	High-Turnover (Sit-Down) Restaurant	9	932	3.7	ksf	60%	40%	22	14	36	10.4%	4	20	12	32	43.0%	14	13	5	18
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
							Total:	87	56	143	5.6%	8	83	52	135	10.4%	14	76	45	121

LUC	RATE/EQUATION
222	Y=0.32*(X)+12.3
932	Y=9.85(X)

APPENDIX C

EXISTING INTERSECTION CAPACITY ANALYSIS WORKSHEETS

BROWARD COUNTY TRAFFIC ENGINEERING

ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	3084	**Initial Operation Date**	UNKNOWN
Controller Type	2070 LN	**System Number**	3084
Modification Number	20	**Modification Date**	07/23/2014
Drawing/Project No	86010	**FPL Grid Number**	87670291609
Intersection	FEDERAL HWY. (US 1/SR 5) and HALLANDALE BEACH BLVD.		
Municipality	HALLANDALE BEACH		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2	3	4	5	6	7	8
Direction	SBL	NB	WBL	EB	NBL	SB	EBL	WB
Initial Green(MIN)	5	6	5	7	5	6	5	7
Vehicle Ext.(GAP)	1.5	2.5	1.5	2.5	1.5	2.5	1.5	2.5
Maximum Green I	20	40	20	40	20	40	20	40
Maximum Green II								
Yellow Clearance	5.0	5.0	4.5	4.5	5.0	5.0	4.5	4.5
All Red Clearance	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0
Phase Recall	OFF	OFF	OFF	MIN	OFF	OFF	OFF	MIN
Detector Delay								
Walk		7+A		7+A		7+A		7+A
Pedestrian Clearance		32		33		32		33
Permissive	DUAL		DUAL		DUAL		NO	
Flash Operation	RED	RED	RED	RED	RED	RED	RED	RED
Green Return								

Attachment

Channel/Drop /

IP Address

NOTES:

1. IP: 192.168.000.001, MASK: 255.255.255.000, GWAY: 192.168.000.001, PORT: 5049
2. DUAL ENTRY HARDWIRED NORTH/SOUTH.
3. AUDIBLE PEDESTRIAN SIGNALS: E/W BEEP, N/S TONE.
4. PHOTO ENFORCEMENT, CITY OF HALLANDALE.
5. MOD. 20 UPDATES YELLOW CLEARANCE VALUES PER FDOT STANDARDS.

Submitted By _____ **Approved By** _____

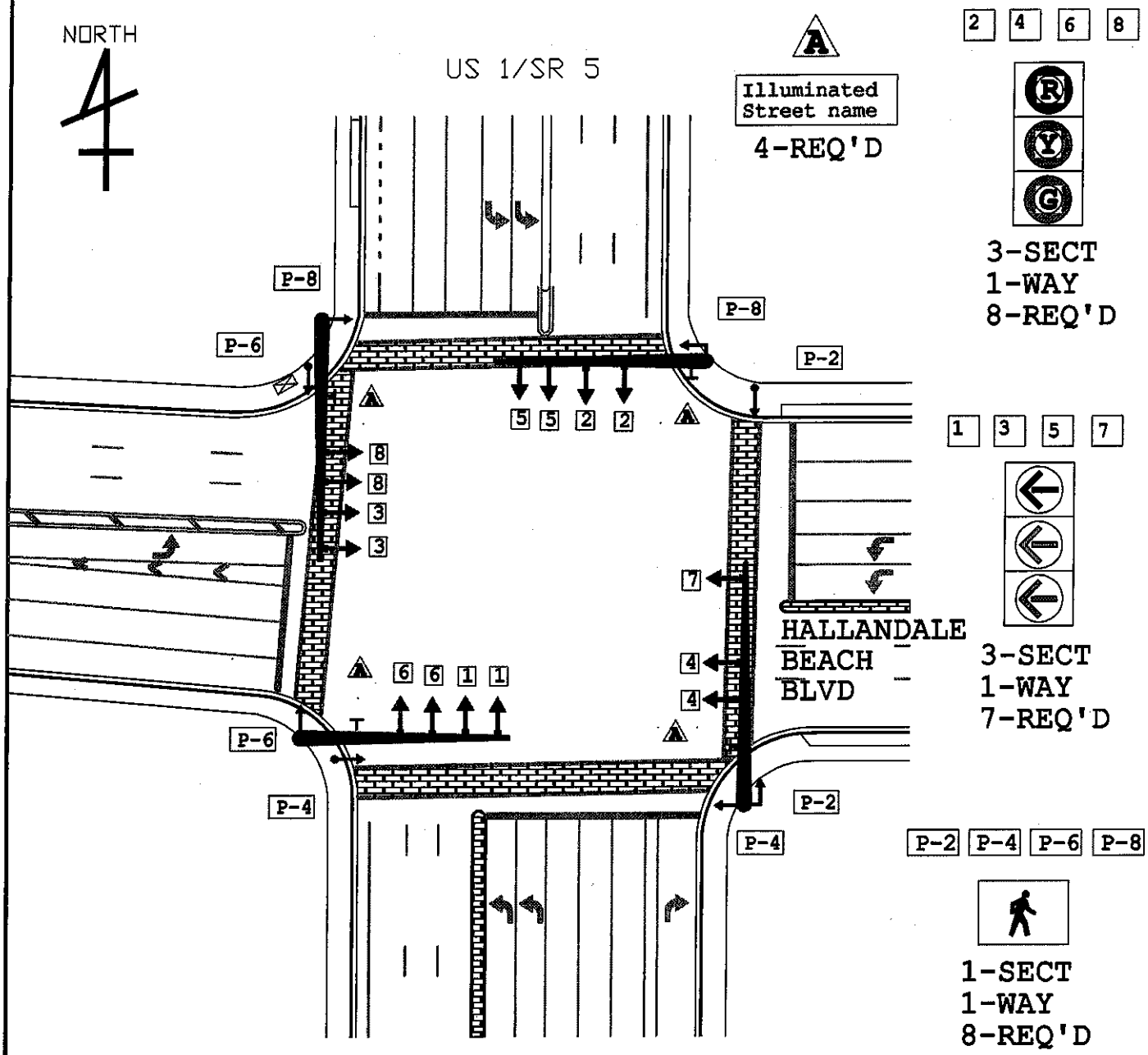
TRAFFIC ENGINEERING DIVISION
SIGNALIZED INTERSECTION

LOCATION **US 1 & HALLANDALE BEACH BLVD**

ORDER NO **FDOT** ISSUE DATE ---- REV NO. **3** COMPL DATE **1/21/04**

DWG. NO. **05-01-04-01** FILE NO. **C-84** CITY **HALLANDALE** SCALE: 1" = 50'

DWN BY: LARRY



1. REBUILT UNDER FDOT PROJ NO 86010-3519
2. VIDEO DETECTION

Broward County | Timing Sheet | 12/12/2014 10:41:26 AM

Station : 3084 - Hallandale Beach Blvd & US 1 (Standard File)

Phase	1 (SL)	2 (NT)	3 (WL)	4 (ET)	5 (NL)	6 (ST)	7 (EL)	8 (WT)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		32		33		32		33								
Min Green	5	6	5	7	5	6	5	7								
Passage	1.5	2.5	1.5	2.5	1.5	2.5	1.5	2.5								
Max1	20	40	20	40	20	40	20	40								
Max2																
Yellow	5	5	4.5	4.5	5	5	4.5	4.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	2	3	2	2	2	3	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Entry		ON				ON										
Auto Exit				ON				ON								
Non Act1																
Non Act2																
Lock Call	ON		ON		ON		ON		ON	ON	ON	ON	ON	ON	ON	ON
Min Recall				ON				ON								
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON				ON										
Sim Gap Enable		ON		ON		ON		ON	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk				ON				ON								
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash						
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180	180	180
Track R1						
Track R2						
Track R3						
Track R4						
Dwell Ped1						
Exit R1	3	1	2	4	2	4
Exit R2	7	5	6	8	6	8
Exit R3						
Exit R4						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock in Mins				
Headway in Mins				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

Prepared By	Date Implemented

Reviewed By	Traffic Engineer

Broward County | Timing Sheet | 12/12/2014 10:41:26 AM

Station : 3084 - Hallandale Beach Blvd & US 1 (Standard File)

Coordination

Hour	Minute	Action	Pattern	Cycle	Offset	Split	Sequc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 1											**Easy**															
		100	254																							
6		2	2	160	25	2	1		25		30	50	28	52	30	50	28	52								
9		3	3	160	49	3	1		25		29	48	31	52	29	48	31	52								
15		4	4	160	58	4	1		25		30	50	28	52	30	50	28	52								
20		3	3	160	49	3	1		25		29	48	31	52	29	48	31	52								
Day Plan 2											**Easy**															
		3	3	160	49	3	1		25		29	48	31	52	29	48	31	52								
1		100	254																							
6	30	3	3	160	49	3	1		25		29	48	31	52	29	48	31	52								
Day Plan 3											**Easy**															
		3	3	160	49	3	1		25		29	48	31	52	29	48	31	52								
1		100	254																							
6	30	3	3	160	49	3	1		25		29	48	31	52	29	48	31	52								
23		100	254																							

Broward County | Timing Sheet | 12/12/2014 10:41:26 AM

Station : 3084 - Hallandale Beach Blvd & US 1 (Standard File)

Hour	Minute	Action	Pattern	Cycle	Offset	Split	Sequc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 4											Easy															

Scheduler

	Month											Day of Week						Day of Month									1									2									3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4	1													1	1	1	1	1		1																																2
5	1													1							1																															2
6					1									1																																	1	1	1	1	1	1	1	2
7							1											1				1																														2
8							1							1	1	1	1	1					1																													2
9							1							1										1																													2
10									1					1						1	1	1	1	1	1	1																											2
11											1						1																								1	1	1	1	1	1	1					2
12											1							1																									1	1	1	1	1	1	1				2
13												1		1				1																										1									2
14												1		1	1	1	1	1																											1								2
15												1		1																																1							2
16												1		1				1																																		1	2
17																																																					1
18																																																					1
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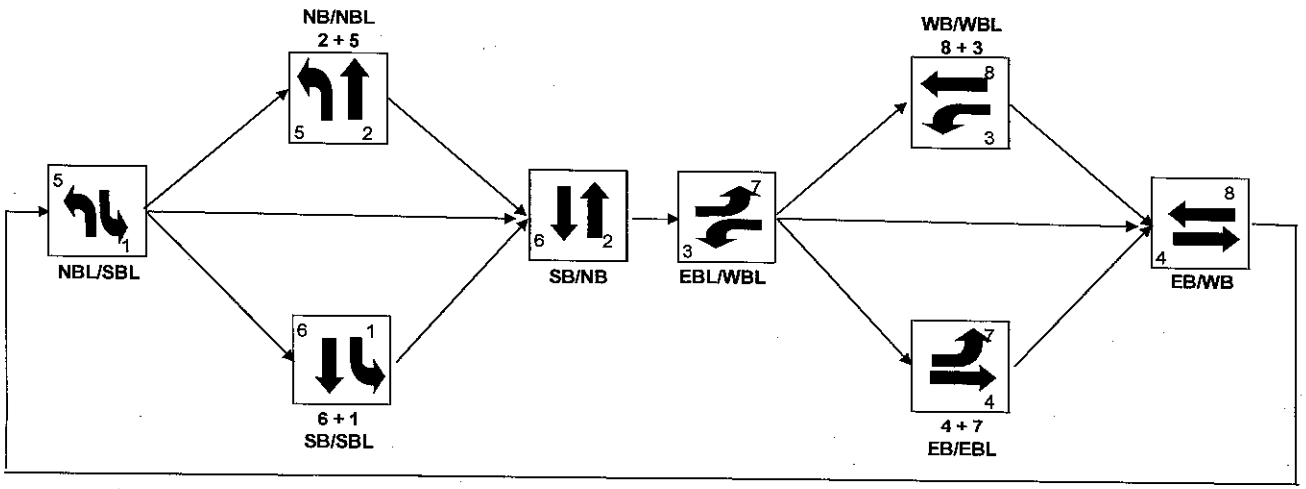
28																																																					1
29																																																					1
30																																																					1
31																																																					1
32																																																					1

User Comments:

Sequence of Operation for (C-084) Federal Hwy (US 1/SR 5) and Hallandale Beach Blvd
Hallandale Beach



BROWARD COUNTY TRAFFIC ENGINEERING

ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	3282	**Initial Operation Date**	5/79
Controller Type	2070	**System Number**	3282
Modification Number	13	**Modification Date**	12/19/2012
Drawing/Project No	228169-1-52-01	**FPL Grid Number**	87670431702
Intersection	HALLANDALE BEACH BLVD. and NE 8 AVENUE		
Municipality	HALLANDALE BEACH		

Controller Phase	1	2	3	4	5	6	7	8
Face Number		2	3,8	4,7	5	6		
Direction		WB	SB	NB	WBL	EB		
Initial Green(MIN)		10	6	6	4	10		
Vehicle Ext.(GAP)		3.0	2.0	2.0	1.5	3.0		
Maximum Green I		50	18	20	12	50		
Maximum Green II								
Yellow Clearance		4.0	4.0	4.0	4.0	4.0		
All Red Clearance		2.0	2.0	2.0	2.0	2.0		
Phase Recall		MIN	OFF	OFF	OFF	MIN		
Detector Delay								
Walk		7		7		7		
Pedestrian Clearance		17		30		17		
Permissive					5-SECT			
Flash Operation		YELLOW	RED	RED	RED	YELLOW		
Green Return								

Attachment

Channel/Drop /

IP Address

NOTES:

1. IP: 192.168.000.010, MASK: 255.255.255.000, GWAY: 192.168.000.001, PORT: 5015
2. ANTI-BACKDOWN WB: PHASE 2+6 ON ---> OMIT PHASE 5.
3. MOD. 13 DEPLOYS SIGNAL ONTO ATMS.NOW.

Submitted By _____ **Approved By** _____

TRAFFIC ENGINEERING DIVISION

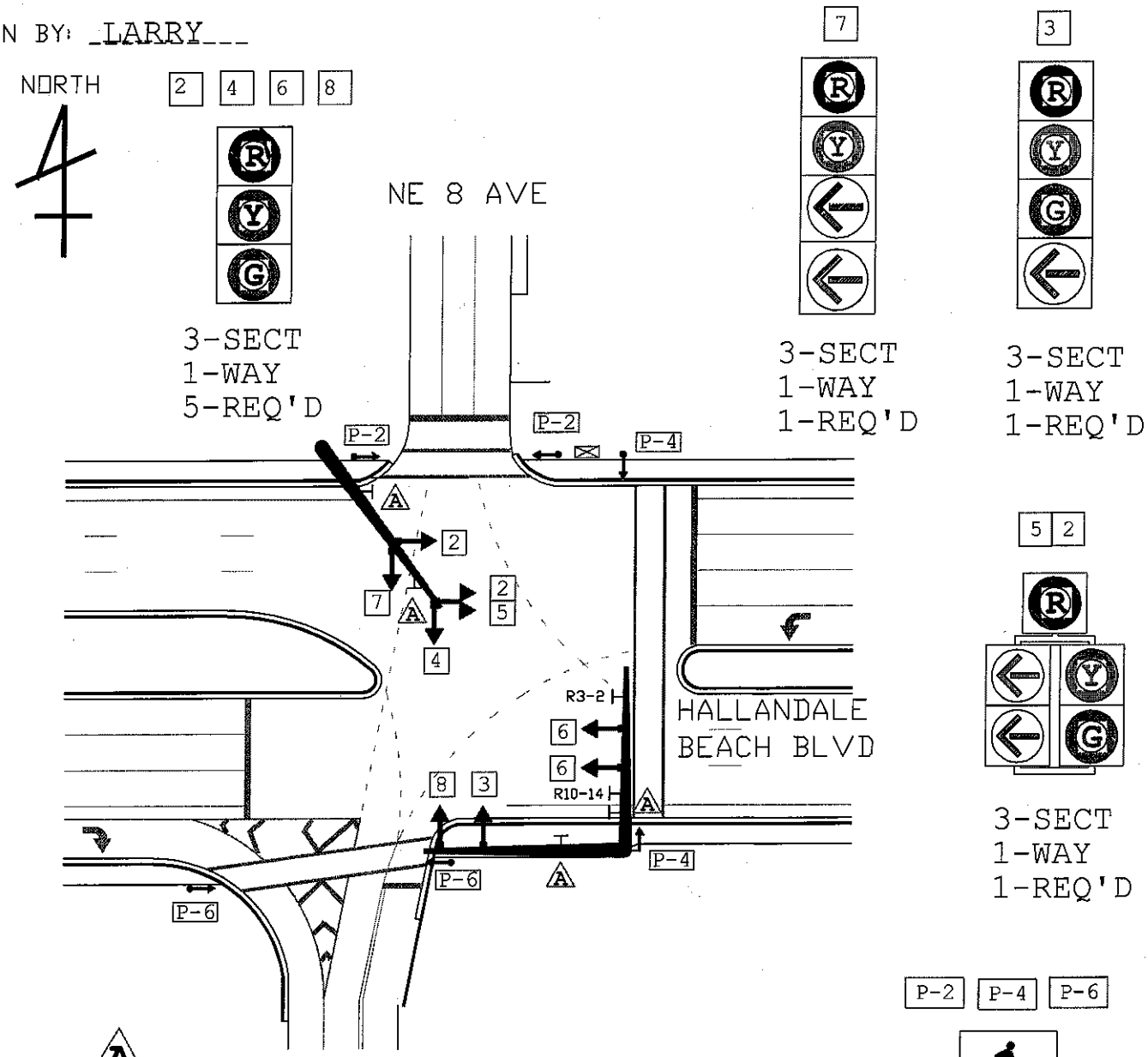
SIGNALIZED INTERSECTION

LOCATION **HALLANDALE BEACH BLVD & NE 8 AVENUE**

ORDER NO **FDOT** ISSUE DATE --- REV NO. **2** COMPLETION DATE **3/20/07**

DWG. NO. **09-12-06-01** FILE NO. **3282** CITY **HALLANDALE BEACH** SCALE: 1" = 50'

DWN BY: LARRY



P-2 P-4 P-6

1-SECT
1-WAY
6-REQ'D

Illuminated Street name

4-REQ'D

1. VIDEO DETECTION
2. REBUILT UNDER FDOT PROJ NO 2281691

Broward County | Timing Sheet | 12/12/2014 10:41:43 AM

Station : 3282 - Hallandale Beach Blvd & NE 8 Ave (Standard File)

Phase	1	2 (WT)	3 (ST)	4 (NT)	5 (WL)	6 (ET)	7	8	9	10	11	12	13	14	15	16
Walk		7		7		7										
Ped Clearance		17		30		17										
Min Green		10	6	6	4	10										
Passage		3	2	2	1.5	3										
Max1		50	18	20	12	50										
Max2																
Yellow	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red		2	2	2	2	2			1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable		ON	ON	ON	ON	ON										
Auto Entry				ON												
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash	ON					ON
Override Higher	ON					ON
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green		6	6	6	6	
Min Walk						
Ped Clear						
Track Green				1		
Min Dwell		8	8	8	8	
Max Presence		180	180	180	180	
Track R1				9		
Track R2						
Track R3						
Track R4						
Dwell Ped1						
Exit R1		3	4	2	2	
Exit R2				6	5	
Exit R3						
Exit R4						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock in Mins				
Headway in Mins				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

Prepared By	Date Implemented
Reviewed By	Traffic Engineer

Broward County | Timing Sheet | 12/12/2014 10:41:43 AM

Station : 3282 - Hallandale Beach Blvd & NE 8 Ave (Standard File)

Coordination

Hour	Minute	Action	Pattern	Cycle	Offset	Split	Sequc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 1											**Easy**															
		100	254																							
6		2	2	160	40	2	1	10	50		18	76	41	25	18	76		66								
9		3	3	160	71	3	1	10	50		20	72	42	26	20	72		68								
15		4	4	160	100	4	1	10	50		18	76	41	25	18	76		66								
20		3	3	160	71	3	1	10	50		20	72	42	26	20	72		68								
22		100	254																							
Day Plan 2											**Easy**															
		3	3	160	71	3	1	10	50		20	72	42	26	20	72		68								
1		100	254																							
6	30	3	3	160	71	3	1	10	50		20	72	42	26	20	72		68								
Day Plan 3											**Easy**															
		3	3	160	71	3	1	10	50		20	72	42	26	20	72		68								
1		100	254																							
6	30	3	3	160	71	3	1	10	50		20	72	42	26	20	72		68								
23		100	254																							

Broward County | Timing Sheet | 12/12/2014 10:41:43 AM

Station : 3282 - Hallandale Beach Blvd & NE 8 Ave (Standard File)

Hour	Minute	Action	Pattern	Cycle	Offset	Split	Sequc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 4											Easy															

Scheduler

	Month											Day of Week							Day of Month									1									2									3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4	1													1	1	1	1	1		1																																2
5	1													1							1																															2
6					1									1																																	1	1	1	1	1	1	1	2
7							1											1				1																														2
8							1							1	1	1	1	1					1																													2
9							1							1										1																													2
10									1					1						1	1	1	1	1	1	1																											2
11											1						1																								1	1	1	1	1	1	1					2
12											1							1																									1	1	1	1	1	1	1				2
13												1		1				1																										1									2
14												1		1	1	1	1	1																											1								2
15												1		1																																1							2
16												1		1				1																																		1	2
17																																																					1
18																																																					1
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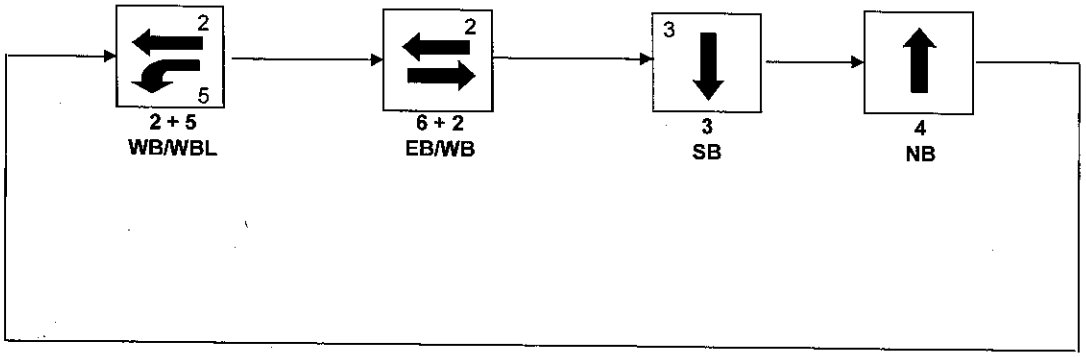
28																																																					1
29																																																					1
30																																																					1
31																																																					1
32																																																					1

User Comments:

Sequence of Operation for (3282) Hallandale Beach Blvd and NE 8 Avenue
Hallandale Beach Blvd



BROWARD COUNTY TRAFFIC ENGINEERING

ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	3283	**Initial Operation Date**	5/79
Controller Type	2070	**System Number**	3283
Modification Number	16	**Modification Date**	12/19/2012
Drawing/Project No	228169-1-52-01	**FPL Grid Number**	87670561703
Intersection	HALLANDALE BEACH BLVD. and NE 10 AVENUE		
Municipality	HALLANDALE BEACH		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2		4	5	6		
Direction	EBL	WB		NB	WBL	EB		
Initial Green(MIN)	5	10		6	5	10		
Vehicle Ext.(GAP)	2.0	3.0		2.0	2.0	3.0		
Maximum Green I	18	50		25	18	50		
Maximum Green II								
Yellow Clearance	4.0	4.0		4.0	4.0	4.0		
All Red Clearance	2.0	2.0		2.0	2.0	2.0		
Phase Recall	OFF	MIN		OFF	OFF	MIN		
Detector Delay								
Walk		7		5		7		
Pedestrian Clearance		21		33		21		
Permissive	NO				DUAL			
Flash Operation	RED	YELLOW		RED	RED	YELLOW		
Green Return								

Attachment

Channel/Drop /

IP Address

NOTES:

1. IP: 192.168.000.010, MASK: 255.255.255.000, GWAY: 192.168.000.001, PORT: 5016
2. MOD. 16 DEPLOYS SIGNAL ONTO ATMS.NOW.

Submitted By _____ **Approved By** _____

TRAFFIC ENGINEERING DIVISION

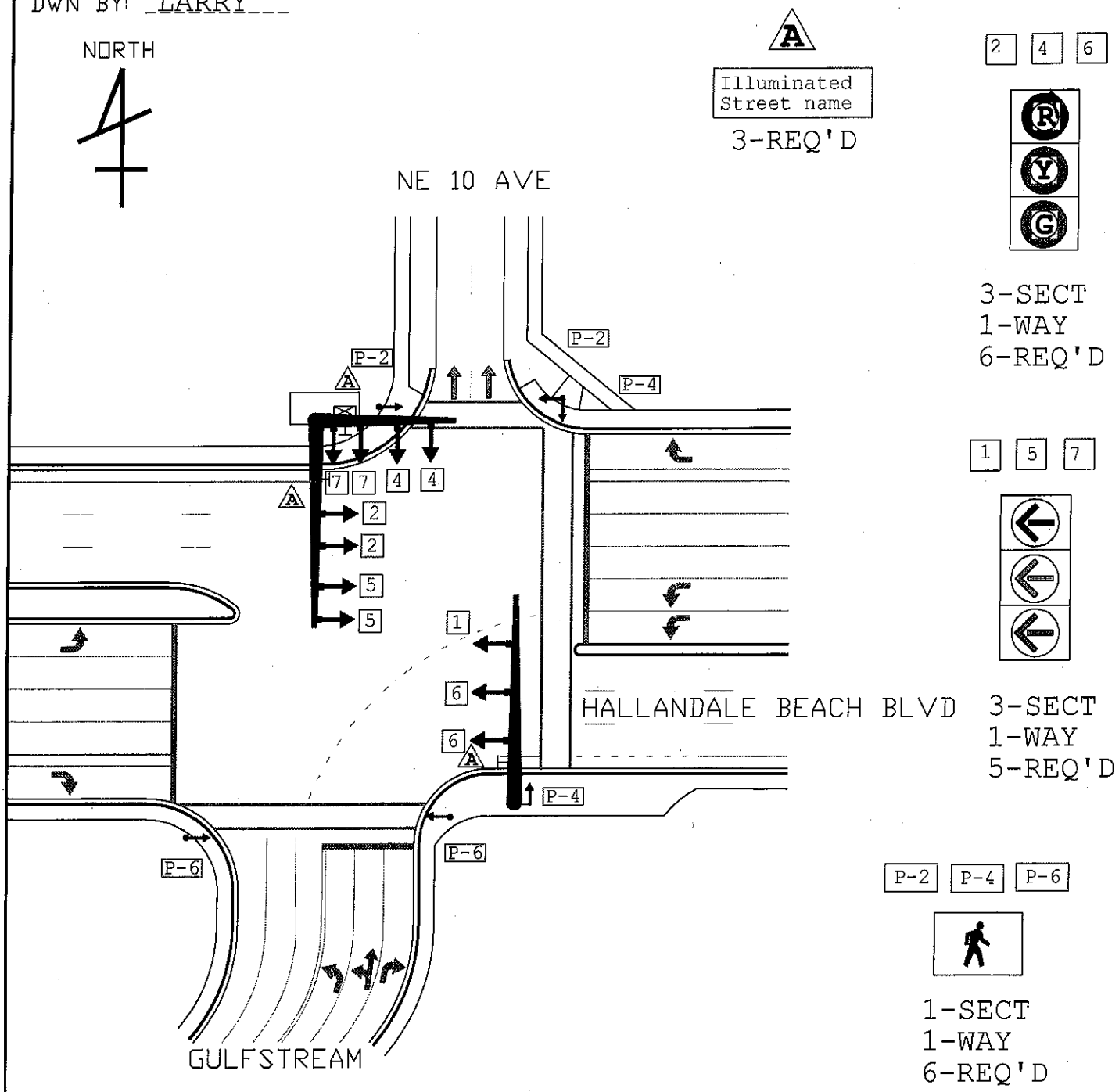
SIGNALIZED INTERSECTION

LOCATION **HALLANDALE BEACH BLVD & NE 10 AVENUE**

ORDER NO **FDOT** ISSUE DATE --- REV NO. **3** COMPLETION DATE **3/20/07**

DWG. NO. **09-12-04-01** FILE NO. **3283** CITY **HALLANDALE BEACH** SCALE: 1" = 50'

DWN BY: LARRY



1. VIDEO DETECTION
2. REBUILT UNDER FDOT PROJ NO 2281691

Broward County | Timing Sheet | 12/12/2014 10:41:58 AM

Station : 3283 - Hallandale Beach Blvd & NE 10 Ave (Standard File)

Phase	1 (EL)	2 (WT)	3	4 (NT)	5 (WL)	6 (ET)	7	8	9	10	11	12	13	14	15	16
Walk		7		5		7										
Ped Clearance		21		33		21										
Min Green	5	10		6	5	10										
Passage	2	3		2	2	3										
Max1	18	50		25	18	50										
Max2																
Yellow	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	2	2		2	2	2			1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON		ON	ON	ON										
Auto Entry				ON												
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call	ON				ON				ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash	ON		ON			
Override Higher	ON		ON			
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green		6		6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell		6		6	6	6
Max Presence		180		180	180	180
Track R1						
Track R2						
Track R3						
Track R4						
Dwell Ped1						
Exit R1		4		2	1	2
Exit R2				6	5	6
Exit R3						
Exit R4						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock in Mins				
Headway in Mins				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

Prepared By	Date Implemented
Reviewed By	Traffic Engineer

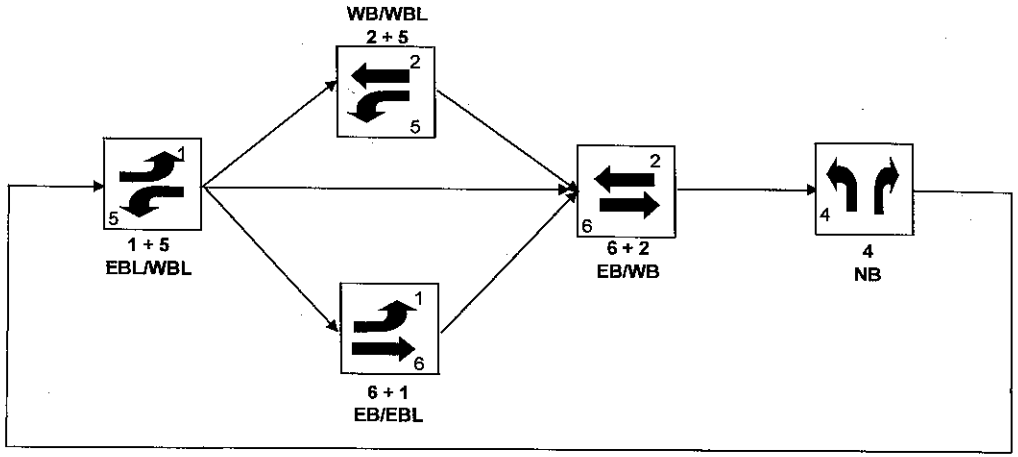
Broward County | Timing Sheet | 12/12/2014 10:41:58 AM

Station : 3283 - Hallandale Beach Blvd & NE 10 Ave (Standard File)

Coordination

Hour	Minute	Action	Pattern	Cycle	Offset	Split	Sequc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 1											**Easy**															
		100	254																							
6		2	2	160	44	2	1	10	50		30	84		46	22	92		46								
9		3	3	160	75	3	1	10	50		22	92		46	40	74		46								
15		4	4	160	98	4	1	10	50		36	78		46	22	92		46								
20		3	3	160	75	3	1	10	50		22	92		46	40	74		46								
22		100	254																							
Day Plan 2											**Easy**															
		3	3	160	75	3	1	10	50		22	92		46	40	74		46								
1		100	254																							
6	30	3	3	160	75	3	1	10	50		22	92		46	40	74		46								
Day Plan 3											**Easy**															
		3	3	160	75	3	1	10	50		22	92		46	40	74		46								
1		100	254																							
6	30	3	3	160	75	3	1	10	50		22	92		46	40	74		46								
23		100	254																							

Sequence of Operation for (3283) Hallandale Beach Blvd. and NE 10 Ave
Hallandale Beach



BROWARD COUNTY TRAFFIC ENGINEERING

ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	3223	**Initial Operation Date**	UNKNOWN
Controller Type	2070 LN	**System Number**	3223
Modification Number	10	**Modification Date**	12/19/2012
Drawing/Project No	228034-1-52-01	**FPL Grid Number**	87670294306
Intersection	FEDERAL HWY. (US 1/SR 5) and NE 3 STREET (HALLANDALE)		
Municipality	HALLANDALE BEACH		

Controller Phase	1	2	3	4	5	6	7	8
Face Number		2		4		6		8
Direction		NB		EB		SB		WB
Initial Green(MIN)		10		6		10		6
Vehicle Ext.(GAP)		3.0		2.0		3.0		2.0
Maximum Green I		50		20		50		20
Maximum Green II								
Yellow Clearance		4.0		4.0		4.0		4.0
All Red Clearance		1.0		2.0		1.0		2.0
Phase Recall		MIN		OFF		MIN		OFF
Detector Delay				10RT				10RT
Walk		7		5		7		5
Pedestrian Clearance		11		20		11		20
Permissive								
Flash Operation		YELLOW		RED		YELLOW		RED
Green Return								

Attachment

Channel/Drop / **IP Address**

NOTES:

1. IP: 192.168.000.010, MASK: 255.255.255.000, GWAY: 192.168.000.001, PORT: 5022
2. DUAL ENTRY HARDWIRED EAST/WEST.
3. MOD. 10 DEPLOYS SIGNAL ONTO ATMS.NOW.

Submitted By _____ **Approved By** _____

TRAFFIC ENGINEERING DIVISION
SIGNALIZED INTERSECTION

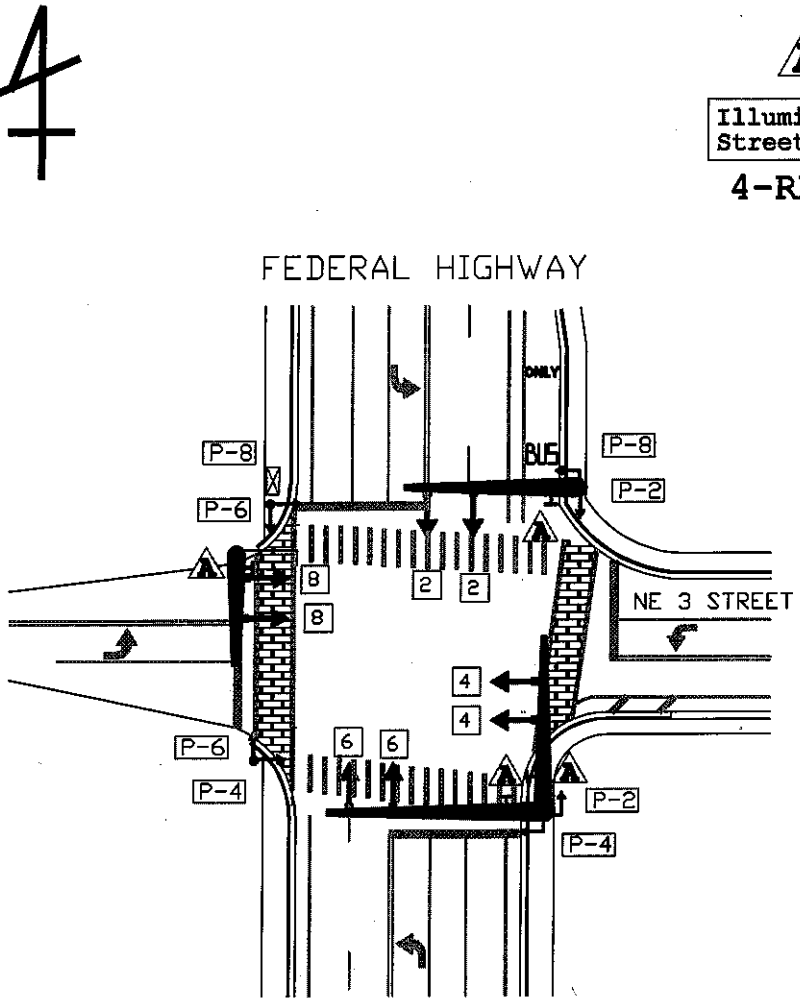
LOCATION FEDERAL HWY (US 1) & NE 3 STREET

ORDER NO FDOT ISSUE DATE --- REVISION NO. 2 COMPLETION DATE 8/14/04

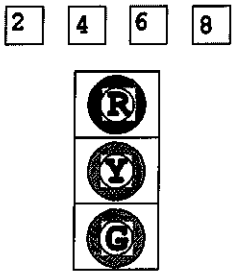
DWG. NO. 04-09-01-01 FILE NO. C-223 CITY Hallandale SCALE: 1" = 50'

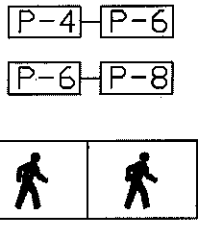
DWN BY: LARRY

NORTH

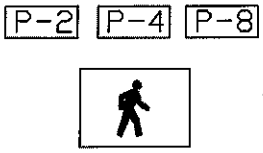


4-REQ'D





1-SECT
2-WAY
2-REQ'D



1-SECT
1-WAY
4-REQ'D

1. VIDEO DETECTION
2. REBUILT UNDER FDOT PROJ NO 228034-1-52-01

Broward County | Timing Sheet | 12/12/2014 10:42:10 AM

Station : 3223 - US 1 & NE 3 St (Standard File)

Phase	1	2 (NT)	3	4 (ET)	5	6 (ST)	7	8 (WT)	9	10	11	12	13	14	15	16
Walk		7		5		7		5								
Ped Clearance		11		20		11		20								
Min Green		10		6		10		6								
Passage		3		2		3		2								
Max1		50		20		50		20								
Max2																
Yellow	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red		1		2		1		2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable		ON		ON		ON		ON								
Auto Entry				ON				ON								
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall		ON				ON										
Ped Recall																
Soft Recall																
Dual Entry				ON				ON								
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash			ON			
Override Higher			ON			
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green	6	6		6		6
Min Walk						6
Ped Clear						
Track Green						
Min Dwell	8	8		6		15
Max Presence	180	180		180	180	180
Track R1						
Track R2						
Track R3						
Track R4						
Dwell Ped1						
Exit R1	4	2		2	1	2
Exit R2	8	6		6	6	6
Exit R3						
Exit R4						

Preempt LP

Channel	1	2	3	4
Min				
Max				
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt				
No Skip				
Priority P1				
Priority P2				
Priority P3				
Priority P4				
Lock in Mins				
Headway in Mins				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				

Prepared By	Date Implemented
Reviewed By	Traffic Engineer

Broward County | Timing Sheet | 12/12/2014 10:42:10 AM

Station : 3223 - US 1 & NE 3 St (Standard File)

Coordination

Hour	Minute	Action	Pattern	Cycle	Offset	Split	Sequc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 1											**Easy**															
		100	254																							
6		2	2	160	134	2	1	10	50			125		35		125		35								
9		3	3	160	153	3	1	10	50			120		40		120		40								
15		4	4	160	5	4	1	10	50			125		35		125		35								
20		3	3	160	153	3	1	10	50			120		40		120		40								
Day Plan 2											**Easy**															
		3	3	160	153	3	1	10	50			120		40		120		40								
1		100	254																							
6	30	3	3	160	153	3	1	10	50			120		40		120		40								
Day Plan 3											**Easy**															
		3	3	160	153	3	1	10	50			120		40		120		40								
1		100	254																							
6	30	3	3	160	153	3	1	10	50			120		40		120		40								
23		100	254																							

Broward County | Timing Sheet | 12/12/2014 10:42:10 AM

Station : 3223 - US 1 & NE 3 St (Standard File)

Hour	Minute	Action	Pattern	Cycle	Offset	Split	Sequc	Short	Long	Dwell	Split 1	Split 2	Split 3	Split 4	Split 5	Split 6	Split 7	Split 8	Split 9	Split 10	Split 11	Split 12	Split 13	Split 14	Split 15	Split 16
Day Plan 4											Easy															

Scheduler

	Month											Day of Week							Day of Month									1									2									3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1	1	1	1	1	1	1	1	1	1	1	1	1		1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4	1													1	1	1	1	1		1																																2
5	1													1							1																																2
6					1									1																																		1	1	1	1	1	1	1	2
7							1											1				1																														2
8							1							1	1	1	1	1					1																														2
9							1							1										1																													2
10									1					1						1	1	1	1	1	1	1																											2
11											1						1																									1	1	1	1	1	1	1				2
12											1							1																										1	1	1	1	1	1	1			2
13												1		1				1																											1								2
14												1		1	1	1	1	1																												1							2
15												1		1																																		1						2
16												1		1				1																																		1		2
17																																																					1
18																																																					1
19																																																					1
20																																																					1
21																																																					1
22																																																					1
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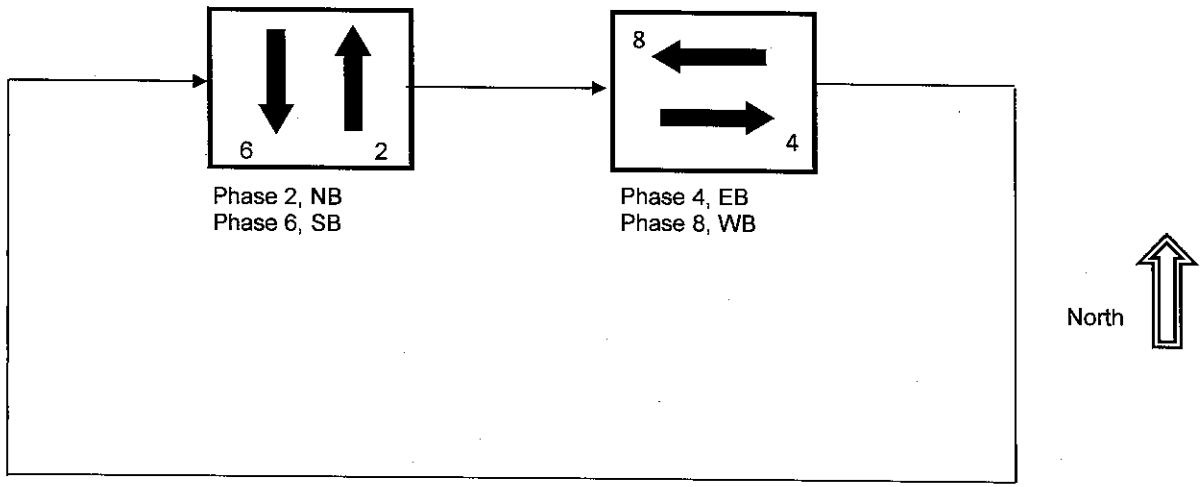
26																																																					1
27																																																					1
28																																																					1
29																																																					1
30																																																					1
31																																																					1
32																																																					1

User Comments:

Sequence of Operation

Federal Hwy (US 1/SR 5) and NE 3 Street

Intersection Number (3223) Hallandale Beach



Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Volume (vph)	2	89	1017	369	515	1057	132	29	248	673	386	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%				0%		
Storage Length (ft)		430		0	350		0		485		400	
Storage Lanes		1		0	2		0		2		1	
Taper Length (ft)		25			25				25			
Lane Util. Factor	0.91	1.00	0.91	0.91	0.97	0.91	0.91	0.91	0.97	0.91	1.00	0.91
Ped Bike Factor												
Frt			0.960			0.983					0.850	
Flt Protected		0.950			0.950				0.950			
Satd. Flow (prot)	0	1719	4742	0	3433	4999	0	0	3367	4988	1553	0
Flt Permitted		0.950			0.950				0.950			
Satd. Flow (perm)	0	1719	4742	0	3433	4999	0	0	3367	4988	1553	0
Right Turn on Red				Yes			Yes				Yes	
Satd. Flow (RTOR)			57			14					281	
Link Speed (mph)			35			35				45		
Link Distance (ft)			1000			685				1000		
Travel Time (s)			19.5			13.3				15.2		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.85	0.85	0.85	0.89	0.89	0.89	0.89	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	2%	2%	2%	4%	4%	4%	4%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%				0%		
Adj. Flow (vph)	2	95	1082	393	606	1244	155	33	279	756	434	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	97	1475	0	606	1399	0	0	312	756	434	0
Turn Type	Prot	Prot	NA		Prot	NA		Prot	Prot	NA	Perm	Prot
Protected Phases	7	7	4		3	8		5	5	2		1
Permitted Phases											2	
Detector Phase	7	7	4		3	8		5	5	2	2	1
Switch Phase												
Minimum Initial (s)	5.0	5.0	7.0		5.0	7.0		5.0	5.0	6.0	6.0	5.0
Minimum Split (s)	11.5	11.5	46.5		11.5	46.5		12.0	12.0	47.0	47.0	12.0
Total Split (s)	28.0	28.0	52.0		28.0	52.0		30.0	30.0	50.0	50.0	30.0
Total Split (%)	17.5%	17.5%	32.5%		17.5%	32.5%		18.8%	18.8%	31.3%	31.3%	18.8%
Yellow Time (s)	4.5	4.5	4.5		4.5	4.5		5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0		2.0	2.0	3.0	3.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0	0.0	0.0	
Total Lost Time (s)		6.5	6.5		6.5	6.5			7.0	8.0	8.0	
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min		Min	Min		None	None	C-Min	C-Min	None
Act Effct Green (s)		12.9	45.5		21.8	54.3			18.5	46.2	46.2	
Actuated g/C Ratio		0.08	0.28		0.14	0.34			0.12	0.29	0.29	

Lane Group	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	276	1124	45
Ideal Flow (vphpl)	1900	1900	1900
Lane Width (ft)	12	12	12
Grade (%)		0%	
Storage Length (ft)	380		110
Storage Lanes	2		1
Taper Length (ft)	25		
Lane Util. Factor	0.97	0.91	0.91
Ped Bike Factor			
Frt		0.994	
Flt Protected	0.950		
Satd. Flow (prot)	3400	5006	0
Flt Permitted	0.950		
Satd. Flow (perm)	3400	5006	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		4	
Link Speed (mph)		35	
Link Distance (ft)		780	
Travel Time (s)		15.2	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Peak Hour Factor	0.92	0.92	0.92
Growth Factor	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%
Bus Blockages (#/hr)	0	0	0
Parking (#/hr)			
Mid-Block Traffic (%)		0%	
Adj. Flow (vph)	300	1222	49
Shared Lane Traffic (%)			
Lane Group Flow (vph)	316	1271	0
Turn Type	Prot	NA	
Protected Phases	1	6	
Permitted Phases			
Detector Phase	1	6	
Switch Phase			
Minimum Initial (s)	5.0	6.0	
Minimum Split (s)	12.0	47.0	
Total Split (s)	30.0	50.0	
Total Split (%)	18.8%	31.3%	
Yellow Time (s)	5.0	5.0	
All-Red Time (s)	2.0	3.0	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	7.0	8.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	None	C-Min	
Act Effct Green (s)	18.6	46.2	
Actuated g/C Ratio	0.12	0.29	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
v/c Ratio		0.70	1.06		1.30	0.82			0.80	0.53	0.67	
Control Delay		96.5	94.1		205.8	55.2			84.3	49.8	23.0	
Queue Delay		0.0	0.6		0.0	0.0			0.0	0.0	0.2	
Total Delay		96.5	94.7		205.8	55.2			84.3	49.8	23.3	
LOS		F	F		F	E			F	D	C	
Approach Delay			94.8			100.7				49.3		
Approach LOS			F			F				D		
Queue Length 50th (ft)		101	~603		~429	312			166	244	143	
Queue Length 95th (ft)		163	#702		#513	577			213	297	278	
Internal Link Dist (ft)			920			605				920		
Turn Bay Length (ft)		430			350				485		400	
Base Capacity (vph)		230	1389		467	1707			484	1438	647	
Starvation Cap Reductn		0	0		0	0			0	0	0	
Spillback Cap Reductn		0	2		0	0			0	0	20	
Storage Cap Reductn		0	0		0	0			0	0	0	
Reduced v/c Ratio		0.42	1.06		1.30	0.82			0.64	0.53	0.69	

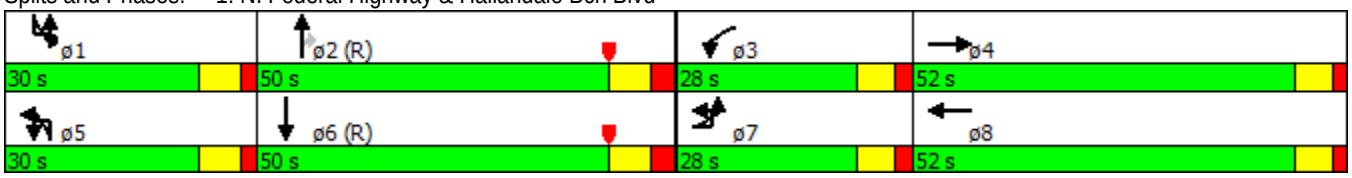
Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 25 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.30
Intersection Signal Delay: 78.7 Intersection LOS: E
Intersection Capacity Utilization 96.5% ICU Level of Service F
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: N. Federal Highway & Hallandale Bch Blvd



Lane Group	SBL	SBT	SBR
v/c Ratio	0.80	0.88	
Control Delay	86.6	56.7	
Queue Delay	1.1	0.0	
Total Delay	87.8	56.7	
LOS	F	E	
Approach Delay		62.9	
Approach LOS		E	
Queue Length 50th (ft)	152	471	
Queue Length 95th (ft)	226	#574	
Internal Link Dist (ft)		700	
Turn Bay Length (ft)	380		
Base Capacity (vph)	488	1448	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	50	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.72	0.88	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	0	1624	55	12	49	1530	0	35	0	35	153	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	0		105		120		0	0		0	100	
Storage Lanes	0		1		1		0	0		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850						0.932			
Flt Protected					0.950				0.976		0.950	0.966
Satd. Flow (prot)	0	4988	1553	0	1770	5085	0	0	1728	0	1698	1726
Flt Permitted					0.088				0.976		0.950	0.966
Satd. Flow (perm)	0	4988	1553	0	164	5085	0	0	1728	0	1698	1726
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			102						102			
Link Speed (mph)		35				35			25			25
Link Distance (ft)		685				635			500			500
Travel Time (s)		13.3				12.4			13.6			13.6
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.93	0.93	0.93	0.93	0.57	0.57	0.57	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	0%	0%	0%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Adj. Flow (vph)	0	1785	60	13	53	1645	0	61	0	61	165	28
Shared Lane Traffic (%)											42%	
Lane Group Flow (vph)	0	1785	60	0	66	1645	0	0	122	0	96	97
Turn Type		NA	Perm	pm+pt	pm+pt	NA		Split	NA		Split	NA
Protected Phases		6		5	5	2		4	4		3	3
Permitted Phases			6	2	2							
Detector Phase		6	6	5	5	2		4	4		3	3
Switch Phase												
Minimum Initial (s)		10.0	10.0	4.0	4.0	10.0		6.0	6.0		6.0	6.0
Minimum Split (s)		30.0	30.0	10.0	10.0	30.0		25.0	25.0		22.0	22.0
Total Split (s)		76.0	76.0	18.0	18.0	94.0		25.0	25.0		41.0	41.0
Total Split (%)		47.5%	47.5%	11.3%	11.3%	58.8%		15.6%	15.6%		25.6%	25.6%
Yellow Time (s)		4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)		2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0		0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0			6.0		6.0	6.0
Lead/Lag		Lag	Lag	Lead	Lead			Lag	Lag		Lead	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes
Recall Mode		C-Min	C-Min	None	None	C-Min		None	None		None	None
Act Effct Green (s)		107.7	107.7		119.6	119.6			8.1		14.3	14.3
Actuated g/C Ratio		0.67	0.67		0.75	0.75			0.05		0.09	0.09

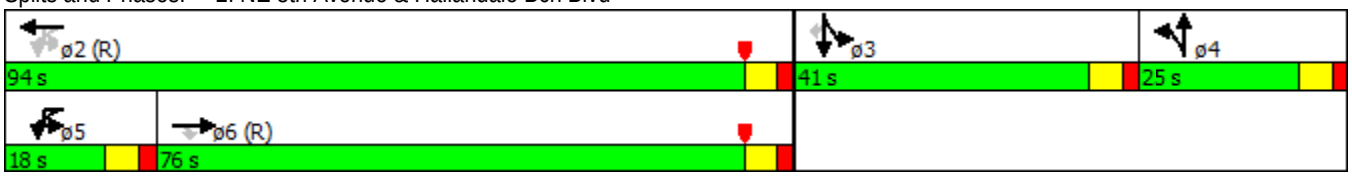
Lane Group	SBR
Lane Configurations	
Volume (vph)	183
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1599
Flt Permitted	
Satd. Flow (perm)	1599
Right Turn on Red	Yes
Satd. Flow (RTOR)	121
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.93
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	197
Shared Lane Traffic (%)	
Lane Group Flow (vph)	197
Turn Type	Perm
Protected Phases	
Permitted Phases	3
Detector Phase	3
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	22.0
Total Split (s)	41.0
Total Split (%)	25.6%
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	14.3
Actuated g/C Ratio	0.09

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
v/c Ratio		0.53	0.06		0.36	0.43			0.66		0.63	0.63
Control Delay		9.1	1.8		8.1	5.6			35.8		87.4	86.9
Queue Delay		0.6	0.0		0.0	0.1			0.0		0.0	0.0
Total Delay		9.7	1.8		8.1	5.6			35.8		87.4	86.9
LOS		A	A		A	A			D		F	F
Approach Delay		9.4				5.7			35.8			67.3
Approach LOS		A				A			D			E
Queue Length 50th (ft)		47	0		4	124			21		104	105
Queue Length 95th (ft)		m601	m10		22	390			17		164	166
Internal Link Dist (ft)		605				555			420			420
Turn Bay Length (ft)			105		120						100	
Base Capacity (vph)		3357	1078		242	3800			295		371	377
Starvation Cap Reductn		1048	0		0	509			0		0	0
Spillback Cap Reductn		0	0		0	0			0		0	0
Storage Cap Reductn		0	0		0	0			0		0	0
Reduced v/c Ratio		0.77	0.06		0.27	0.50			0.41		0.26	0.26

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 40 (25%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 14.2 Intersection LOS: B
Intersection Capacity Utilization 60.9% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: NE 8th Avenue & Hallandale Bch Blvd



Lane Group	SBR
v/c Ratio	0.78
Control Delay	47.9
Queue Delay	0.0
Total Delay	47.9
LOS	D
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	79
Queue Length 95th (ft)	165
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	444
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.44

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	36	29	1643	71	28	70	1574	55	3	44	18	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%				0%	
Storage Length (ft)		130		50		400		85		0		400
Storage Lanes		1		1		2		1		1		1
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	0.97	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor												
Frt				0.850				0.850				0.850
Flt Protected		0.950				0.950				0.950	0.978	
Satd. Flow (prot)	0	1719	4940	1538	0	3400	5036	1568	0	1573	1620	1482
Flt Permitted		0.950				0.950				0.950	0.978	
Satd. Flow (perm)	0	1719	4940	1538	0	3400	5036	1568	0	1573	1620	1482
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				61				102				102
Link Speed (mph)			35				35				20	
Link Distance (ft)			635				1000				500	
Travel Time (s)			12.4				19.5				17.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.95	0.95	0.95	0.95	0.74	0.74	0.74	0.74
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	3%	3%	3%	3%	9%	9%	9%	9%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%				0%	
Adj. Flow (vph)	40	32	1805	78	29	74	1657	58	4	59	24	97
Shared Lane Traffic (%)										34%		
Lane Group Flow (vph)	0	72	1805	78	0	103	1657	58	0	43	44	97
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Split	Split	NA	Perm
Protected Phases	1	1	6		5	5	2		4	4	4	
Permitted Phases				6				2				4
Detector Phase	1	1	6	6	5	5	2	2	4	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	10.0	10.0	5.0	5.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	11.0	11.0	34.0	34.0	11.0	11.0	34.0	34.0	44.0	44.0	44.0	44.0
Total Split (s)	30.0	30.0	92.0	92.0	22.0	22.0	84.0	84.0	46.0	46.0	46.0	46.0
Total Split (%)	18.8%	18.8%	57.5%	57.5%	13.8%	13.8%	52.5%	52.5%	28.8%	28.8%	28.8%	28.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0		6.0	6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Min	C-Min	None	None	C-Min	C-Min	None	None	None	None
Act Effct Green (s)		11.1	123.7	123.7		9.2	121.8	121.8		9.1	9.1	9.1
Actuated g/C Ratio		0.07	0.77	0.77		0.06	0.76	0.76		0.06	0.06	0.06

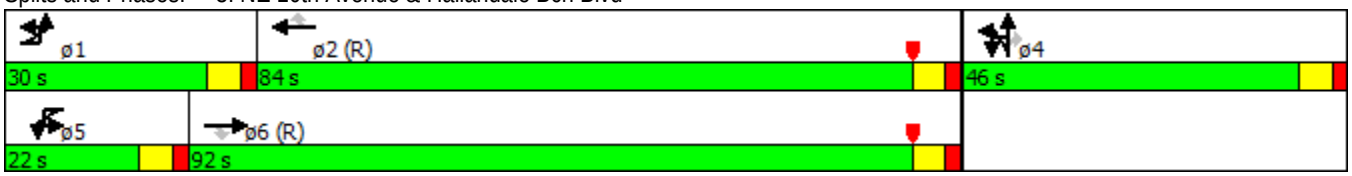
Lane Group	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	0	0	0
Ideal Flow (vphpl)	1900	1900	1900
Lane Width (ft)	12	12	12
Grade (%)		0%	
Storage Length (ft)	0		0
Storage Lanes	0		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt			
Flt Protected			
Satd. Flow (prot)	0	0	0
Flt Permitted			
Satd. Flow (perm)	0	0	0
Right Turn on Red			Yes
Satd. Flow (RTOR)			
Link Speed (mph)		25	
Link Distance (ft)		500	
Travel Time (s)		13.6	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Peak Hour Factor	0.92	0.92	0.92
Growth Factor	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%
Bus Blockages (#/hr)	0	0	0
Parking (#/hr)			
Mid-Block Traffic (%)		0%	
Adj. Flow (vph)	0	0	0
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	0	0
Turn Type			
Protected Phases			
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)			
Minimum Split (s)			
Total Split (s)			
Total Split (%)			
Yellow Time (s)			
All-Red Time (s)			
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode			
Act Effct Green (s)			
Actuated g/C Ratio			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
v/c Ratio		0.61	0.47	0.06		0.53	0.43	0.05		0.49	0.48	0.54
Control Delay		87.3	3.3	0.3		82.5	7.6	0.1		90.4	89.6	22.1
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Delay		87.3	3.3	0.3		82.5	7.6	0.1		90.4	89.6	22.1
LOS		F	A	A		F	A	A		F	F	C
Approach Delay			6.3				11.7				54.2	
Approach LOS			A				B				D	
Queue Length 50th (ft)		79	99	1		55	200	0		47	48	0
Queue Length 95th (ft)		134	122	2		87	285	1		75	76	27
Internal Link Dist (ft)			555				920				420	
Turn Bay Length (ft)		130		50		400		85				400
Base Capacity (vph)		257	3819	1202		340	3834	1218		393	405	447
Starvation Cap Reductn		0	264	0		0	0	0		0	0	0
Spillback Cap Reductn		0	0	0		0	0	0		0	0	0
Storage Cap Reductn		0	0	0		0	0	0		0	0	0
Reduced v/c Ratio		0.28	0.51	0.06		0.30	0.43	0.05		0.11	0.11	0.22

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 44 (28%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 11.0 Intersection LOS: B
Intersection Capacity Utilization 55.9% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 3: NE 10th Avenue & Hallandale Bch Blvd



Lane Group	SBL	SBT	SBR
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)		420	
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	73	75	90	48	49	6	6	46	828	10	43	1319
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	30		0	60		0		150		0	150	
Storage Lanes	1		0	1		0		1		0	1	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor												
Frt		0.918			0.984				0.998			0.996
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1752	1693	0	1770	1833	0	0	1752	3498	0	1752	3491
Flt Permitted	0.715			0.267				0.138			0.290	
Satd. Flow (perm)	1319	1693	0	497	1833	0	0	255	3498	0	535	3491
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		33			3				2			5
Link Speed (mph)		25			25				35			35
Link Distance (ft)		1000			1000				555			1000
Travel Time (s)		27.3			27.3				10.8			19.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.79	0.79	0.79	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Adj. Flow (vph)	92	95	114	56	58	7	7	51	920	11	49	1499
Shared Lane Traffic (%)												
Lane Group Flow (vph)	92	209	0	56	65	0	0	58	931	0	49	1541
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA		Perm	NA
Protected Phases		4			8				2			6
Permitted Phases	4			8			2	2			6	
Detector Phase	4	4		8	8		2	2	2		6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		10.0	10.0	10.0		10.0	10.0
Minimum Split (s)	33.0	33.0		31.0	31.0		23.0	23.0	23.0		23.0	23.0
Total Split (s)	35.0	35.0		35.0	35.0		125.0	125.0	125.0		125.0	125.0
Total Split (%)	21.9%	21.9%		21.9%	21.9%		78.1%	78.1%	78.1%		78.1%	78.1%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0			5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Min	C-Min	C-Min		C-Min	C-Min
Act Effct Green (s)	21.3	21.3		21.3	21.3			127.7	127.7		127.7	127.7
Actuated g/C Ratio	0.13	0.13		0.13	0.13			0.80	0.80		0.80	0.80

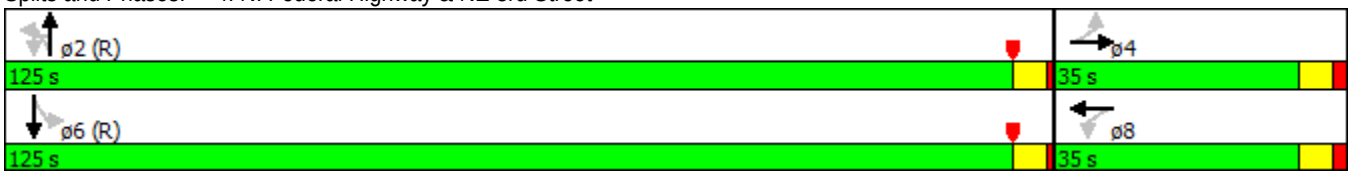
Lane Group	SBR
Lanes, Configurations	
Volume (vph)	37
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.88
Growth Factor	100%
Heavy Vehicles (%)	3%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	42
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.53	0.83		0.85	0.26			0.29	0.33		0.11	0.55
Control Delay	74.1	81.2		141.5	60.0			8.7	4.7		5.2	7.3
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	74.1	81.2		141.5	60.0			8.7	4.7		5.2	7.3
LOS	E	F		F	E			A	A		A	A
Approach Delay		79.0			97.7				4.9			7.2
Approach LOS		E			F				A			A
Queue Length 50th (ft)	91	184		58	59			8	78		10	264
Queue Length 95th (ft)	127	223		#111	97			m34	73		27	383
Internal Link Dist (ft)		920			920				475			920
Turn Bay Length (ft)	30			60				150			150	
Base Capacity (vph)	240	334		90	335			203	2795		427	2790
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.38	0.63		0.62	0.19			0.29	0.33		0.11	0.55

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 134 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.85
Intersection Signal Delay: 17.3 Intersection LOS: B
Intersection Capacity Utilization 71.8% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: N. Federal Highway & NE 3rd Street



Lane Group	SBR
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	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	5	146	918	267	1	483	1202	193	5	469	1161	523
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%				0%	
Storage Length (ft)		430		0		350		0		485		400
Storage Lanes		1		0		2		0		2		1
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	0.97	0.91	0.91	0.91	0.97	0.91	1.00
Ped Bike Factor												
Frt			0.966				0.979					0.850
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1770	4912	0	0	3400	4930	0	0	3433	5085	1583
Flt Permitted		0.950				0.184				0.950		
Satd. Flow (perm)	0	1770	4912	0	0	658	4930	0	0	3433	5085	1583
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)			46				19					279
Link Speed (mph)			35				35				45	
Link Distance (ft)			1000				685				1000	
Travel Time (s)			19.5				13.3				15.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.97	0.97	0.97	0.97	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	3%	3%	3%	3%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%				0%	
Adj. Flow (vph)	5	159	998	290	1	498	1239	199	5	510	1262	568
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	164	1288	0	0	499	1438	0	0	515	1262	568
Turn Type	Prot	Prot	NA		custom	Prot	NA		Prot	Prot	NA	Perm
Protected Phases	7	7	4			3	8		5	5	2	
Permitted Phases					3							2
Detector Phase	7	7	4		3	3	8		5	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	5.0	7.0		5.0	5.0	7.0		5.0	5.0	6.0	6.0
Minimum Split (s)	11.5	11.5	46.5		11.5	11.5	46.5		12.0	12.0	47.0	47.0
Total Split (s)	28.0	28.0	52.0		28.0	28.0	52.0		30.0	30.0	50.0	50.0
Total Split (%)	17.5%	17.5%	32.5%		17.5%	17.5%	32.5%		18.8%	18.8%	31.3%	31.3%
Yellow Time (s)	4.5	4.5	4.5		4.5	4.5	4.5		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		2.0	2.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	0.0
Total Lost Time (s)		6.5	6.5			6.5	6.5			7.0	8.0	8.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min		Min	Min	Min		None	None	C-Min	C-Min
Act Effct Green (s)		17.9	45.5			21.7	49.3			23.0	46.0	46.0
Actuated g/C Ratio		0.11	0.28			0.14	0.31			0.14	0.29	0.29

Lane Group	SBU	SBL	SBT	SBR
Lane Configurations				
Volume (vph)	22	299	943	116
Ideal Flow (vphpl)	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12
Grade (%)			0%	
Storage Length (ft)		380		110
Storage Lanes		2		1
Taper Length (ft)		25		
Lane Util. Factor	0.91	0.97	0.91	0.91
Ped Bike Factor				
Frt			0.984	
Flt Protected		0.950		
Satd. Flow (prot)	0	3467	5053	0
Flt Permitted		0.950		
Satd. Flow (perm)	0	3467	5053	0
Right Turn on Red				Yes
Satd. Flow (RTOR)			13	
Link Speed (mph)			35	
Link Distance (ft)			780	
Travel Time (s)			15.2	
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0
Parking (#/hr)				
Mid-Block Traffic (%)			0%	
Adj. Flow (vph)	22	305	962	118
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	327	1080	0
Turn Type	Prot	Prot	NA	
Protected Phases	1	1	6	
Permitted Phases				
Detector Phase	1	1	6	
Switch Phase				
Minimum Initial (s)	5.0	5.0	6.0	
Minimum Split (s)	12.0	12.0	47.0	
Total Split (s)	30.0	30.0	50.0	
Total Split (%)	18.8%	18.8%	31.3%	
Yellow Time (s)	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0	3.0	
Lost Time Adjust (s)		0.0	0.0	
Total Lost Time (s)		7.0	8.0	
Lead/Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	None	None	C-Min	
Act Effct Green (s)		18.7	41.8	
Actuated g/C Ratio		0.12	0.26	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
v/c Ratio		0.83	0.90			5.61	0.94			1.04	0.86	0.87
Control Delay		100.8	62.6			2105.1	64.5			116.9	61.2	42.0
Queue Delay		0.0	0.0			0.0	0.0			0.0	0.0	7.0
Total Delay		100.8	62.6			2105.1	64.5			116.9	61.2	49.0
LOS		F	E			F	E			F	E	D
Approach Delay			66.9				590.2				70.5	
Approach LOS			E				F				E	
Queue Length 50th (ft)		170	463			~482	499			~299	460	320
Queue Length 95th (ft)		#253	527			#584	#688			#420	#569	#571
Internal Link Dist (ft)			920				605				920	
Turn Bay Length (ft)		430				350				485		400
Base Capacity (vph)		237	1429			89	1533			493	1462	654
Starvation Cap Reductn		0	0			0	0			0	0	0
Spillback Cap Reductn		0	1			0	0			0	0	59
Storage Cap Reductn		0	0			0	0			0	0	0
Reduced v/c Ratio		0.69	0.90			5.61	0.94			1.04	0.86	0.95

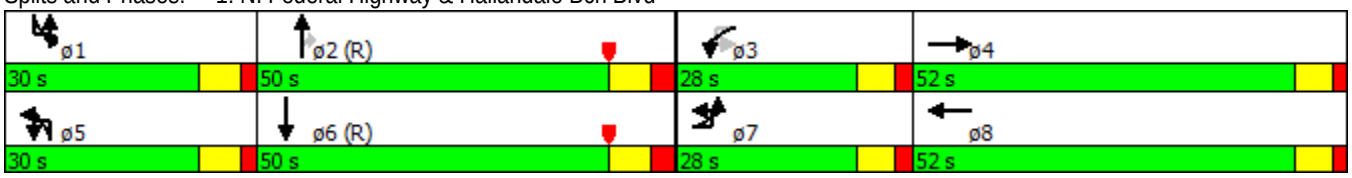
Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 58 (36%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 5.61
Intersection Signal Delay: 209.2 Intersection LOS: F
Intersection Capacity Utilization 102.4% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: N. Federal Highway & Hallandale Bch Blvd



Lane Group	SBU	SBL	SBT	SBR
v/c Ratio		0.81	0.81	
Control Delay		85.3	55.9	
Queue Delay		0.0	0.0	
Total Delay		85.3	55.9	
LOS		F	E	
Approach Delay			62.7	
Approach LOS			E	
Queue Length 50th (ft)		159	393	
Queue Length 95th (ft)		235	434	
Internal Link Dist (ft)			700	
Turn Bay Length (ft)		380		
Base Capacity (vph)		498	1336	
Starvation Cap Reductn		0	0	
Spillback Cap Reductn		0	0	
Storage Cap Reductn		0	0	
Reduced v/c Ratio		0.66	0.81	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	0	1714	27	28	24	1840	0	18	0	55	130	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	0		105		120		0	0		0	100	
Storage Lanes	0		1		1		0	0		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850						0.898			
Flt Protected					0.950				0.988		0.950	0.961
Satd. Flow (prot)	0	5085	1583	0	1752	5036	0	0	1686	0	1715	1735
Flt Permitted					0.083				0.988		0.950	0.961
Satd. Flow (perm)	0	5085	1583	0	153	5036	0	0	1686	0	1715	1735
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			102						102			
Link Speed (mph)		35				35			25			25
Link Distance (ft)		685				635			500			500
Travel Time (s)		13.3				12.4			13.6			13.6
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.96	0.96	0.96	0.96	0.85	0.85	0.85	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Adj. Flow (vph)	0	1863	29	29	25	1917	0	21	0	65	149	16
Shared Lane Traffic (%)											45%	
Lane Group Flow (vph)	0	1863	29	0	54	1917	0	0	86	0	82	83
Turn Type		NA	Perm	pm+pt	pm+pt	NA		Split	NA		Split	NA
Protected Phases		6		5	5	2		4	4		3	3
Permitted Phases			6	2	2							
Detector Phase		6	6	5	5	2		4	4		3	3
Switch Phase												
Minimum Initial (s)		10.0	10.0	4.0	4.0	10.0		6.0	6.0		6.0	6.0
Minimum Split (s)		30.0	30.0	10.0	10.0	30.0		25.0	25.0		22.0	22.0
Total Split (s)		76.0	76.0	18.0	18.0	94.0		25.0	25.0		41.0	41.0
Total Split (%)		47.5%	47.5%	11.3%	11.3%	58.8%		15.6%	15.6%		25.6%	25.6%
Yellow Time (s)		4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)		2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0		0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0			6.0		6.0	6.0
Lead/Lag		Lag	Lag	Lead	Lead			Lag	Lag		Lead	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes
Recall Mode		C-Min	C-Min	None	None	C-Min		None	None		None	None
Act Effct Green (s)		114.2	114.2		123.4	123.4			6.5		12.1	12.1
Actuated g/C Ratio		0.71	0.71		0.77	0.77			0.04		0.08	0.08

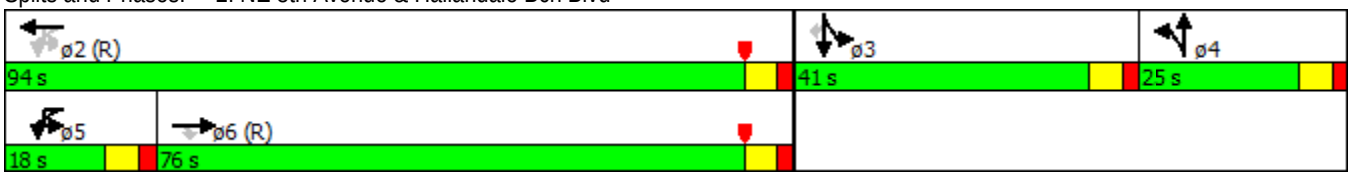
Lane Group	SBR
Lane Configurations	
Volume (vph)	141
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	Yes
Satd. Flow (RTOR)	162
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.87
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	162
Shared Lane Traffic (%)	
Lane Group Flow (vph)	162
Turn Type	Perm
Protected Phases	
Permitted Phases	3
Detector Phase	3
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	22.0
Total Split (s)	41.0
Total Split (%)	25.6%
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	12.1
Actuated g/C Ratio	0.08

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
v/c Ratio		0.51	0.03		0.32	0.49			0.52		0.64	0.64
Control Delay		15.7	1.0		14.2	4.4			19.2		92.4	92.4
Queue Delay		1.2	0.0		0.2	0.1			0.1		0.0	0.0
Total Delay		16.9	1.0		14.4	4.5			19.3		92.4	92.4
LOS		B	A		B	A			B		F	F
Approach Delay		16.7				4.7			19.3			55.8
Approach LOS		B				A			B			E
Queue Length 50th (ft)		449	0		8	138			0		89	90
Queue Length 95th (ft)		663	m0		m12	99			33		144	145
Internal Link Dist (ft)		605				555			420			420
Turn Bay Length (ft)			105		120						100	
Base Capacity (vph)		3630	1159		238	3885			290		375	379
Starvation Cap Reductn		1445	0		0	391			0		0	0
Spillback Cap Reductn		712	0		21	0			13		0	0
Storage Cap Reductn		0	0		0	0			0		0	0
Reduced v/c Ratio		0.85	0.03		0.25	0.55			0.31		0.22	0.22

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 100 (63%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 14.2 Intersection LOS: B
Intersection Capacity Utilization 64.3% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: NE 8th Avenue & Hallandale Bch Blvd



Lane Group	SBR
v/c Ratio	0.60
Control Delay	18.5
Queue Delay	0.0
Total Delay	18.5
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	64
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	479
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.34

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	35	59	1731	58	30	152	1742	109	109	176	374	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		130		50		400		85	0		400	0
Storage Lanes		1		1		2		1	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	0.97	0.91	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor												
Frt				0.850				0.850			0.850	
Flt Protected		0.950				0.950			0.950	0.997		
Satd. Flow (prot)	0	1770	5085	1583	0	3433	5085	1583	1665	1747	1568	0
Flt Permitted		0.950				0.950			0.950	0.997		
Satd. Flow (perm)	0	1770	5085	1583	0	3433	5085	1583	1665	1747	1568	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				61				102			129	
Link Speed (mph)			35				35			20		
Link Distance (ft)			635				1000			500		
Travel Time (s)			12.4				19.5			17.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.96	0.96	0.96	0.96	0.78	0.78	0.78	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Adj. Flow (vph)	39	66	1923	64	31	158	1815	114	140	226	479	0
Shared Lane Traffic (%)									10%			
Lane Group Flow (vph)	0	105	1923	64	0	189	1815	114	126	240	479	0
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Split	NA	Perm	
Protected Phases	1	1	6		5	5	2		4	4		
Permitted Phases				6				2			4	
Detector Phase	1	1	6	6	5	5	2	2	4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	10.0	10.0	5.0	5.0	10.0	10.0	6.0	6.0	6.0	
Minimum Split (s)	11.0	11.0	34.0	34.0	11.0	11.0	34.0	34.0	44.0	44.0	44.0	
Total Split (s)	36.0	36.0	92.0	92.0	22.0	22.0	78.0	78.0	46.0	46.0	46.0	
Total Split (%)	22.5%	22.5%	57.5%	57.5%	13.8%	13.8%	48.8%	48.8%	28.8%	28.8%	28.8%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Min	C-Min	None	None	C-Min	C-Min	None	None	None	
Act Effct Green (s)		13.9	86.1	86.1		13.0	85.1	85.1	43.0	43.0	43.0	
Actuated g/C Ratio		0.09	0.54	0.54		0.08	0.53	0.53	0.27	0.27	0.27	

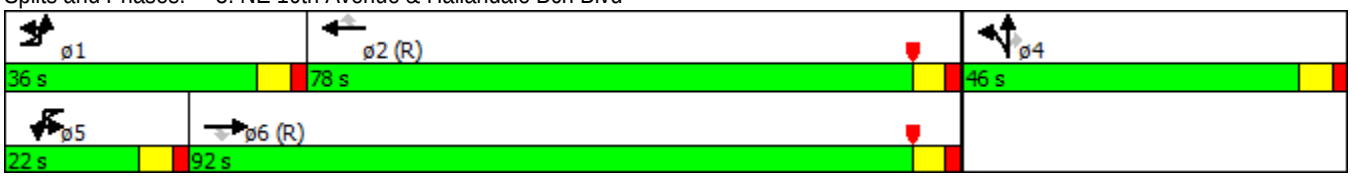
Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	500	
Travel Time (s)	13.6	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.92	0.92
Growth Factor	100%	100%
Heavy Vehicles (%)	2%	2%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Recall Mode		
Act Effct Green (s)		
Actuated g/C Ratio		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
v/c Ratio		0.69	0.70	0.07		0.68	0.67	0.13	0.28	0.51	0.93	
Control Delay		107.3	24.1	2.2		83.9	29.2	4.6	48.8	54.5	66.5	
Queue Delay		0.0	0.1	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		107.3	24.1	2.2		83.9	29.2	4.6	48.8	54.5	66.5	
LOS		F	C	A		F	C	A	D	D	E	
Approach Delay			27.6				32.7			60.5		
Approach LOS			C				C			E		
Queue Length 50th (ft)		95	701	16		101	522	6	106	217	367	
Queue Length 95th (ft)		184	437	2		142	566	39	154	280	#462	
Internal Link Dist (ft)			555				920			420		
Turn Bay Length (ft)		130		50		400		85			400	
Base Capacity (vph)		331	2784	894		343	2705	890	447	469	515	
Starvation Cap Reductn		0	78	0		0	0	0	0	0	0	
Spillback Cap Reductn		0	0	0		0	0	0	0	0	0	
Storage Cap Reductn		0	0	0		0	0	0	0	0	0	
Reduced v/c Ratio		0.32	0.71	0.07		0.55	0.67	0.13	0.28	0.51	0.93	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 98 (61%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 35.3 Intersection LOS: D
Intersection Capacity Utilization 76.8% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 3: NE 10th Avenue & Hallandale Bch Blvd



Lane Group	SBT	SBR
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)	420	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	86	81	73	41	98	19	5	85	1449	12	41	1160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	30		0	60		0		150		0	150	
Storage Lanes	1		0	1		0		1		0	1	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor												
Frt		0.929			0.975				0.999			0.996
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1805	1765	0	1787	1834	0	0	1770	3536	0	1787	3560
Flt Permitted	0.504			0.306				0.186			0.146	
Satd. Flow (perm)	958	1765	0	576	1834	0	0	346	3536	0	275	3560
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		25			5				1			5
Link Speed (mph)		25			25				35			35
Link Distance (ft)		1000			1000				555			1000
Travel Time (s)		27.3			27.3				10.8			19.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.88	0.88	0.88	0.97	0.97	0.97	0.97	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	2%	2%	2%	2%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Adj. Flow (vph)	108	101	91	47	111	22	5	88	1494	12	45	1275
Shared Lane Traffic (%)												
Lane Group Flow (vph)	108	192	0	47	133	0	0	93	1506	0	45	1313
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA		Perm	NA
Protected Phases		4			8				2			6
Permitted Phases	4			8			2	2			6	
Detector Phase	4	4		8	8		2	2	2		6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		10.0	10.0	10.0		10.0	10.0
Minimum Split (s)	33.0	33.0		31.0	31.0		23.0	23.0	23.0		23.0	23.0
Total Split (s)	35.0	35.0		35.0	35.0		125.0	125.0	125.0		125.0	125.0
Total Split (%)	21.9%	21.9%		21.9%	21.9%		78.1%	78.1%	78.1%		78.1%	78.1%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0			5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Min	C-Min	C-Min		C-Min	C-Min
Act Effct Green (s)	20.5	20.5		20.5	20.5			128.5	128.5		128.5	128.5
Actuated g/C Ratio	0.13	0.13		0.13	0.13			0.80	0.80		0.80	0.80

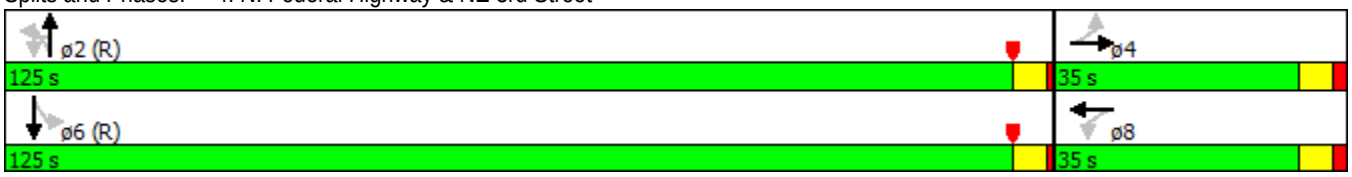
Lane Group	SBR
Lane Configurations	
Volume (vph)	35
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.91
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	38
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.89	0.78		0.64	0.56			0.33	0.53		0.20	0.46
Control Delay	122.7	78.6		101.0	70.7			5.3	9.3		7.4	6.0
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	122.7	78.6		101.0	70.7			5.3	9.3		7.4	6.0
LOS	F	E		F	E			A	A		A	A
Approach Delay		94.4			78.6				9.1			6.0
Approach LOS		F			E				A			A
Queue Length 50th (ft)	113	173		48	128			10	193		9	191
Queue Length 95th (ft)	155	214		90	185			m11	m193		30	302
Internal Link Dist (ft)		920			920				475			920
Turn Bay Length (ft)	30			60				150			150	
Base Capacity (vph)	174	341		104	337			278	2842		221	2862
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.62	0.56		0.45	0.39			0.33	0.53		0.20	0.46

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 5 (3%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 19.0 Intersection LOS: B
Intersection Capacity Utilization 80.8% ICU Level of Service D
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: N. Federal Highway & NE 3rd Street



Lane Group	SBR
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	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

APPENDIX D

BACKGROUND INTERSECTION CAPACITY ANALYSIS WORKSHEETS

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Volume (vph)	2	97	1062	384	579	1113	158	30	263	699	420	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%				0%		
Storage Length (ft)		430		0	350		0		485		400	
Storage Lanes		1		0	2		0		2		1	
Taper Length (ft)		25			25				25			
Lane Util. Factor	0.91	1.00	0.91	0.91	0.97	0.91	0.91	0.91	0.97	0.91	1.00	0.91
Ped Bike Factor												
Frt			0.960			0.981					0.850	
Flt Protected		0.950			0.950				0.950			
Satd. Flow (prot)	0	1719	4742	0	3433	4989	0	0	3367	4988	1553	0
Flt Permitted		0.950			0.950				0.950			
Satd. Flow (perm)	0	1719	4742	0	3433	4989	0	0	3367	4988	1553	0
Right Turn on Red				Yes			Yes				Yes	
Satd. Flow (RTOR)			57			16					274	
Link Speed (mph)			35			35				45		
Link Distance (ft)			1000			685				1000		
Travel Time (s)			19.5			13.3				15.2		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.85	0.85	0.85	0.89	0.89	0.89	0.89	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	2%	2%	2%	4%	4%	4%	4%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%				0%		
Adj. Flow (vph)	2	103	1130	409	681	1309	186	34	296	785	472	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	105	1539	0	681	1495	0	0	330	785	472	0
Turn Type	Prot	Prot	NA		Prot	NA		Prot	Prot	NA	Perm	Prot
Protected Phases	7	7	4		3	8		5	5	2		1
Permitted Phases											2	
Detector Phase	7	7	4		3	8		5	5	2	2	1
Switch Phase												
Minimum Initial (s)	5.0	5.0	7.0		5.0	7.0		5.0	5.0	6.0	6.0	5.0
Minimum Split (s)	11.5	11.5	46.5		11.5	46.5		12.0	12.0	47.0	47.0	12.0
Total Split (s)	28.0	28.0	52.0		28.0	52.0		30.0	30.0	50.0	50.0	30.0
Total Split (%)	17.5%	17.5%	32.5%		17.5%	32.5%		18.8%	18.8%	31.3%	31.3%	18.8%
Yellow Time (s)	4.5	4.5	4.5		4.5	4.5		5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0		2.0	2.0	3.0	3.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0	0.0	0.0	
Total Lost Time (s)		6.5	6.5		6.5	6.5			7.0	8.0	8.0	
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min		Min	Min		None	None	C-Min	C-Min	None
Act Effct Green (s)		13.7	45.5		21.5	53.3			19.2	45.0	45.0	
Actuated g/C Ratio		0.09	0.28		0.13	0.33			0.12	0.28	0.28	

Lane Group	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	314	1171	66
Ideal Flow (vphpl)	1900	1900	1900
Lane Width (ft)	12	12	12
Grade (%)		0%	
Storage Length (ft)	380		110
Storage Lanes	2		1
Taper Length (ft)	25		
Lane Util. Factor	0.97	0.91	0.91
Ped Bike Factor			
Frt		0.992	
Flt Protected	0.950		
Satd. Flow (prot)	3400	4996	0
Flt Permitted	0.950		
Satd. Flow (perm)	3400	4996	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		5	
Link Speed (mph)		35	
Link Distance (ft)		780	
Travel Time (s)		15.2	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Peak Hour Factor	0.92	0.92	0.92
Growth Factor	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%
Bus Blockages (#/hr)	0	0	0
Parking (#/hr)			
Mid-Block Traffic (%)		0%	
Adj. Flow (vph)	341	1273	72
Shared Lane Traffic (%)			
Lane Group Flow (vph)	357	1345	0
Turn Type	Prot	NA	
Protected Phases	1	6	
Permitted Phases			
Detector Phase	1	6	
Switch Phase			
Minimum Initial (s)	5.0	6.0	
Minimum Split (s)	12.0	47.0	
Total Split (s)	30.0	50.0	
Total Split (%)	18.8%	31.3%	
Yellow Time (s)	5.0	5.0	
All-Red Time (s)	2.0	3.0	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	7.0	8.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	None	C-Min	
Act Effct Green (s)	20.0	45.8	
Actuated g/C Ratio	0.12	0.29	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
v/c Ratio		0.72	1.11		1.48	0.89			0.82	0.56	0.75	
Control Delay		96.4	109.2		273.6	62.3			85.1	51.4	29.8	
Queue Delay		0.0	0.0		0.0	0.0			0.0	0.0	0.6	
Total Delay		96.4	109.3		273.6	62.3			85.1	51.4	30.4	
LOS		F	F		F	E			F	D	C	
Approach Delay			108.4			128.4				52.1		
Approach LOS			F			F				D		
Queue Length 50th (ft)		109	~655		~508	352			176	259	200	
Queue Length 95th (ft)		173	#753		#590	#628			225	310	348	
Internal Link Dist (ft)			920			605				920		
Turn Bay Length (ft)		430			350				485		400	
Base Capacity (vph)		230	1389		461	1673			484	1401	633	
Starvation Cap Reductn		0	0		0	0			0	0	0	
Spillback Cap Reductn		0	2		0	0			0	0	28	
Storage Cap Reductn		0	0		0	0			0	0	0	
Reduced v/c Ratio		0.46	1.11		1.48	0.89			0.68	0.56	0.78	

Intersection Summary

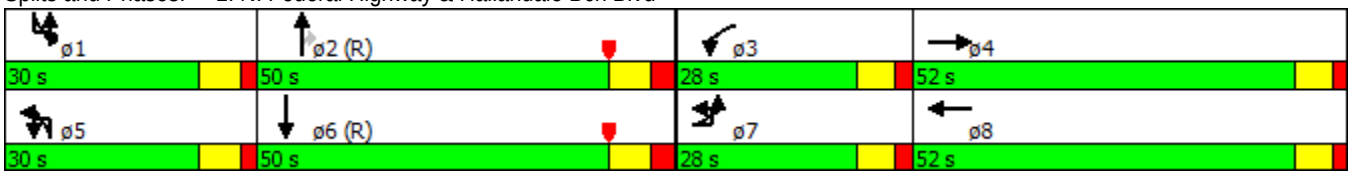
Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 25 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.48
Intersection Signal Delay: 92.6 Intersection LOS: F
Intersection Capacity Utilization 101.4% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: N. Federal Highway & Hallandale Bch Blvd



Lane Group	SBL	SBT	SBR
v/c Ratio	0.84	0.94	
Control Delay	85.9	63.7	
Queue Delay	3.8	0.0	
Total Delay	89.7	63.7	
LOS	F	E	
Approach Delay		69.1	
Approach LOS		E	
Queue Length 50th (ft)	186	512	
Queue Length 95th (ft)	m246	#650	
Internal Link Dist (ft)		700	
Turn Bay Length (ft)	380		
Base Capacity (vph)	488	1434	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	69	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.85	0.94	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	0	1740	56	12	50	1672	0	36	0	36	160	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	0		105		120		0	0		0	100	
Storage Lanes	0		1		1		0	0		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850						0.932			
Flt Protected					0.950				0.976		0.950	0.966
Satd. Flow (prot)	0	4988	1553	0	1770	5085	0	0	1728	0	1698	1726
Flt Permitted					0.073				0.976		0.950	0.966
Satd. Flow (perm)	0	4988	1553	0	136	5085	0	0	1728	0	1698	1726
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			102						102			
Link Speed (mph)		35				35			25			25
Link Distance (ft)		685				635			500			500
Travel Time (s)		13.3				12.4			13.6			13.6
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.93	0.93	0.93	0.93	0.57	0.57	0.57	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	0%	0%	0%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Adj. Flow (vph)	0	1912	62	13	54	1798	0	63	0	63	172	29
Shared Lane Traffic (%)											42%	
Lane Group Flow (vph)	0	1912	62	0	67	1798	0	0	126	0	100	101
Turn Type		NA	Perm	pm+pt	pm+pt	NA		Split	NA		Split	NA
Protected Phases		6		5	5	2		4	4		3	3
Permitted Phases			6	2	2							
Detector Phase		6	6	5	5	2		4	4		3	3
Switch Phase												
Minimum Initial (s)		10.0	10.0	4.0	4.0	10.0		6.0	6.0		6.0	6.0
Minimum Split (s)		30.0	30.0	10.0	10.0	30.0		25.0	25.0		22.0	22.0
Total Split (s)		76.0	76.0	18.0	18.0	94.0		25.0	25.0		41.0	41.0
Total Split (%)		47.5%	47.5%	11.3%	11.3%	58.8%		15.6%	15.6%		25.6%	25.6%
Yellow Time (s)		4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)		2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0		0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0			6.0		6.0	6.0
Lead/Lag		Lag	Lag	Lead	Lead			Lag	Lag		Lead	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes
Recall Mode		C-Min	C-Min	None	None	C-Min		None	None		None	None
Act Effct Green (s)		106.7	106.7		118.7	118.7			8.3		15.0	15.0
Actuated g/C Ratio		0.67	0.67		0.74	0.74			0.05		0.09	0.09

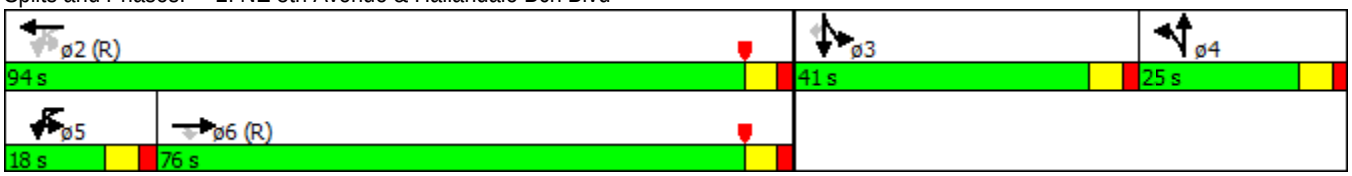
Lane Group	SBR
Lane Configurations	
Volume (vph)	187
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1599
Flt Permitted	
Satd. Flow (perm)	1599
Right Turn on Red	Yes
Satd. Flow (RTOR)	114
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.93
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	201
Shared Lane Traffic (%)	
Lane Group Flow (vph)	201
Turn Type	Perm
Protected Phases	
Permitted Phases	3
Detector Phase	3
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	22.0
Total Split (s)	41.0
Total Split (%)	25.6%
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	15.0
Actuated g/C Ratio	0.09

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
v/c Ratio		0.57	0.06		0.42	0.48			0.68		0.63	0.63
Control Delay		11.4	2.2		14.5	5.6			37.3		86.0	85.5
Queue Delay		0.9	0.0		0.0	0.0			0.0		0.0	0.0
Total Delay		12.3	2.2		14.5	5.6			37.3		86.0	85.5
LOS		B	A		B	A			D		F	F
Approach Delay		12.0				6.0			37.3			68.8
Approach LOS		B				A			D			E
Queue Length 50th (ft)		80	1		4	299			25		108	109
Queue Length 95th (ft)		m624	m9		21	180			20		168	169
Internal Link Dist (ft)		605				555			420			420
Turn Bay Length (ft)			105		120						100	
Base Capacity (vph)		3326	1069		223	3771			295		371	377
Starvation Cap Reductn		1004	0		0	312			0		0	0
Spillback Cap Reductn		0	0		0	0			0		0	0
Storage Cap Reductn		0	0		0	0			0		0	0
Reduced v/c Ratio		0.82	0.06		0.30	0.52			0.43		0.27	0.27

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 40 (25%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 15.4 Intersection LOS: B
Intersection Capacity Utilization 63.9% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: NE 8th Avenue & Hallandale Bch Blvd



Lane Group	SBR
v/c Ratio	0.79
Control Delay	51.9
Queue Delay	0.0
Total Delay	51.9
LOS	D
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	92
Queue Length 95th (ft)	177
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	438
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.46

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	37	30	1763	72	29	76	1717	60	3	45	18	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%				0%	
Storage Length (ft)		130		50		400		85		0		400
Storage Lanes		1		1		2		1		1		1
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	0.97	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor												
Frt				0.850				0.850				0.850
Flt Protected		0.950				0.950				0.950	0.977	
Satd. Flow (prot)	0	1719	4940	1538	0	3400	5036	1568	0	1573	1618	1482
Flt Permitted		0.950				0.950				0.950	0.977	
Satd. Flow (perm)	0	1719	4940	1538	0	3400	5036	1568	0	1573	1618	1482
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				61				102				102
Link Speed (mph)			35				35				20	
Link Distance (ft)			635				1000				500	
Travel Time (s)			12.4				19.5				17.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.95	0.95	0.95	0.95	0.74	0.74	0.74	0.74
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	3%	3%	3%	3%	9%	9%	9%	9%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%				0%	
Adj. Flow (vph)	41	33	1937	79	31	80	1807	63	4	61	24	100
Shared Lane Traffic (%)										35%		
Lane Group Flow (vph)	0	74	1937	79	0	111	1807	63	0	44	45	100
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Split	Split	NA	Perm
Protected Phases	1	1	6		5	5	2		4	4	4	
Permitted Phases				6				2				4
Detector Phase	1	1	6	6	5	5	2	2	4	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	10.0	10.0	5.0	5.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	11.0	11.0	34.0	34.0	11.0	11.0	34.0	34.0	44.0	44.0	44.0	44.0
Total Split (s)	30.0	30.0	92.0	92.0	22.0	22.0	84.0	84.0	46.0	46.0	46.0	46.0
Total Split (%)	18.8%	18.8%	57.5%	57.5%	13.8%	13.8%	52.5%	52.5%	28.8%	28.8%	28.8%	28.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0		6.0	6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Min	C-Min	None	None	C-Min	C-Min	None	None	None	None
Act Effct Green (s)		11.3	123.3	123.3		9.6	121.6	121.6		9.1	9.1	9.1
Actuated g/C Ratio		0.07	0.77	0.77		0.06	0.76	0.76		0.06	0.06	0.06

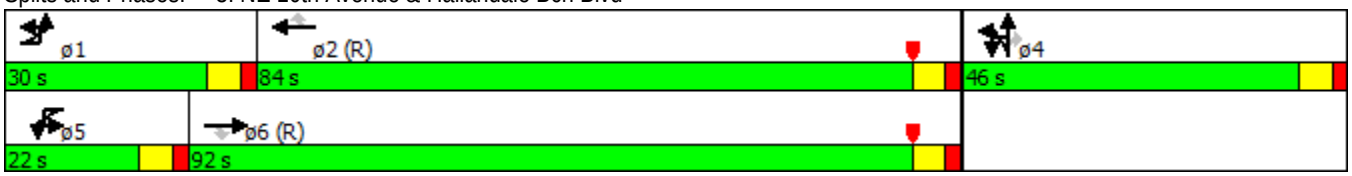
Lane Group	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	0	0	0
Ideal Flow (vphpl)	1900	1900	1900
Lane Width (ft)	12	12	12
Grade (%)		0%	
Storage Length (ft)	0		0
Storage Lanes	0		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt			
Flt Protected			
Satd. Flow (prot)	0	0	0
Flt Permitted			
Satd. Flow (perm)	0	0	0
Right Turn on Red			Yes
Satd. Flow (RTOR)			
Link Speed (mph)		25	
Link Distance (ft)		500	
Travel Time (s)		13.6	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Peak Hour Factor	0.92	0.92	0.92
Growth Factor	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%
Bus Blockages (#/hr)	0	0	0
Parking (#/hr)			
Mid-Block Traffic (%)		0%	
Adj. Flow (vph)	0	0	0
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	0	0
Turn Type			
Protected Phases			
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)			
Minimum Split (s)			
Total Split (s)			
Total Split (%)			
Yellow Time (s)			
All-Red Time (s)			
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode			
Act Effct Green (s)			
Actuated g/C Ratio			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
v/c Ratio		0.62	0.51	0.07		0.54	0.47	0.05		0.49	0.49	0.56
Control Delay		86.6	3.6	0.3		82.7	8.2	0.3		90.7	89.9	23.3
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Delay		86.6	3.6	0.3		82.7	8.2	0.3		90.7	89.9	23.3
LOS		F	A	A		F	A	A		F	F	C
Approach Delay			6.4				12.1				54.8	
Approach LOS			A				B				D	
Queue Length 50th (ft)		81	110	0		59	231	0		48	49	0
Queue Length 95th (ft)		135	120	3		92	326	3		76	77	30
Internal Link Dist (ft)			555				920				420	
Turn Bay Length (ft)		130		50		400		85				400
Base Capacity (vph)		257	3805	1198		340	3826	1215		393	404	447
Starvation Cap Reductn		0	188	0		0	0	0		0	0	0
Spillback Cap Reductn		0	0	0		0	0	0		0	0	0
Storage Cap Reductn		0	0	0		0	0	0		0	0	0
Reduced v/c Ratio		0.29	0.54	0.07		0.33	0.47	0.05		0.11	0.11	0.22

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 44 (28%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 11.2 Intersection LOS: B
Intersection Capacity Utilization 58.2% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 3: NE 10th Avenue & Hallandale Bch Blvd



Lane Group	SBL	SBT	SBR
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)		420	
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	123	77	117	49	50	6	6	64	869	10	44	1397
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	30		0	60		0		150		0	150	
Storage Lanes	1		0	1		0		1		0	1	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor												
Frt		0.909			0.984				0.998			0.995
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1752	1677	0	1770	1833	0	0	1752	3498	0	1752	3487
Flt Permitted	0.714			0.202				0.119			0.273	
Satd. Flow (perm)	1317	1677	0	376	1833	0	0	220	3498	0	504	3487
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		42			3				2			6
Link Speed (mph)		25			25				35			35
Link Distance (ft)		1000			1000				555			1000
Travel Time (s)		27.3			27.3				10.8			19.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.79	0.79	0.79	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Adj. Flow (vph)	156	97	148	58	59	7	7	71	966	11	50	1588
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	245	0	58	66	0	0	78	977	0	50	1639
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA		Perm	NA
Protected Phases		4			8				2			6
Permitted Phases	4			8			2	2			6	
Detector Phase	4	4		8	8		2	2	2		6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		10.0	10.0	10.0		10.0	10.0
Minimum Split (s)	33.0	33.0		31.0	31.0		23.0	23.0	23.0		23.0	23.0
Total Split (s)	35.0	35.0		35.0	35.0		125.0	125.0	125.0		125.0	125.0
Total Split (%)	21.9%	21.9%		21.9%	21.9%		78.1%	78.1%	78.1%		78.1%	78.1%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0			5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Min	C-Min	C-Min		C-Min	C-Min
Act Effct Green (s)	23.3	23.3		23.3	23.3			125.7	125.7		125.7	125.7
Actuated g/C Ratio	0.15	0.15		0.15	0.15			0.79	0.79		0.79	0.79

Lane Group	SBR
Lane Configurations	
Volume (vph)	45
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.88
Growth Factor	100%
Heavy Vehicles (%)	3%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	51
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.82	0.88		1.07	0.25			0.45	0.36		0.13	0.60
Control Delay	96.0	84.2		203.2	58.2			18.9	5.2		5.8	8.5
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	96.0	84.2		203.2	58.2			18.9	5.2		5.8	8.5
LOS	F	F		F	E			B	A		A	A
Approach Delay		88.8			126.0				6.2			8.5
Approach LOS		F			F				A			A
Queue Length 50th (ft)	160	212		~64	59			25	78		11	328
Queue Length 95th (ft)	205	258		#141	99			m79	m449		27	420
Internal Link Dist (ft)		920			920				475			920
Turn Bay Length (ft)	30			60				150			150	
Base Capacity (vph)	238	338		68	334			172	2748		396	2740
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.66	0.72		0.85	0.20			0.45	0.36		0.13	0.60

Intersection Summary

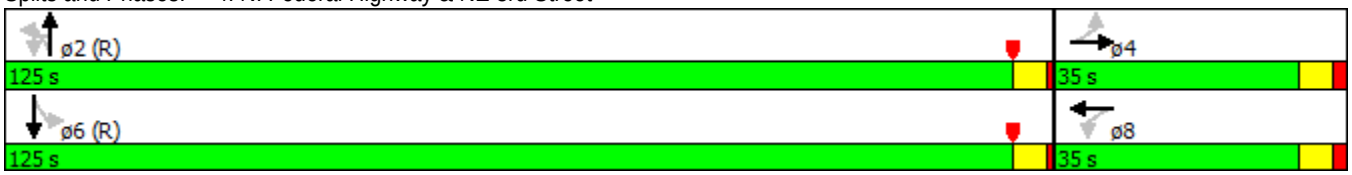
Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 134 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.07
Intersection Signal Delay: 22.0 Intersection LOS: C
Intersection Capacity Utilization 82.9% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: N. Federal Highway & NE 3rd Street



Lane Group	SBR
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	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	5	164	1000	285	1	547	1274	239	5	486	1204	589
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%				0%	
Storage Length (ft)		430		0		350		0		485		400
Storage Lanes		1		0		2		0		2		1
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	0.97	0.91	0.91	0.91	0.97	0.91	1.00
Ped Bike Factor												
Frt			0.967				0.976					0.850
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1770	4917	0	0	3400	4915	0	0	3433	5085	1583
Flt Permitted		0.950				0.186				0.950		
Satd. Flow (perm)	0	1770	4917	0	0	666	4915	0	0	3433	5085	1583
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)			45				24					271
Link Speed (mph)			35				35				45	
Link Distance (ft)			1000				685				1000	
Travel Time (s)			19.5				13.3				15.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.97	0.97	0.97	0.97	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	3%	3%	3%	3%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%				0%	
Adj. Flow (vph)	5	178	1087	310	1	564	1313	246	5	528	1309	640
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	183	1397	0	0	565	1559	0	0	533	1309	640
Turn Type	Prot	Prot	NA		custom	Prot	NA		Prot	Prot	NA	Perm
Protected Phases	7	7	4			3	8		5	5	2	
Permitted Phases					3							2
Detector Phase	7	7	4		3	3	8		5	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	5.0	7.0		5.0	5.0	7.0		5.0	5.0	6.0	6.0
Minimum Split (s)	11.5	11.5	46.5		11.5	11.5	46.5		12.0	12.0	47.0	47.0
Total Split (s)	28.0	28.0	52.0		28.0	28.0	52.0		30.0	30.0	50.0	50.0
Total Split (%)	17.5%	17.5%	32.5%		17.5%	17.5%	32.5%		18.8%	18.8%	31.3%	31.3%
Yellow Time (s)	4.5	4.5	4.5		4.5	4.5	4.5		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		2.0	2.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	0.0
Total Lost Time (s)		6.5	6.5			6.5	6.5			7.0	8.0	8.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min		Min	Min	Min		None	None	C-Min	C-Min
Act Effct Green (s)		19.1	45.5			21.5	47.9			23.0	44.4	44.4
Actuated g/C Ratio		0.12	0.28			0.13	0.30			0.14	0.28	0.28

Lane Group	SBU	SBL	SBT	SBR
Lane Configurations				
Volume (vph)	22	353	991	140
Ideal Flow (vphpl)	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12
Grade (%)			0%	
Storage Length (ft)		380		110
Storage Lanes		2		1
Taper Length (ft)		25		
Lane Util. Factor	0.91	0.97	0.91	0.91
Ped Bike Factor				
Frt			0.981	
Flt Protected		0.950		
Satd. Flow (prot)	0	3467	5038	0
Flt Permitted		0.950		
Satd. Flow (perm)	0	3467	5038	0
Right Turn on Red				Yes
Satd. Flow (RTOR)			16	
Link Speed (mph)			35	
Link Distance (ft)			780	
Travel Time (s)			15.2	
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0
Parking (#/hr)				
Mid-Block Traffic (%)			0%	
Adj. Flow (vph)	22	360	1011	143
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	382	1154	0
Turn Type	Prot	Prot	NA	
Protected Phases	1	1	6	
Permitted Phases				
Detector Phase	1	1	6	
Switch Phase				
Minimum Initial (s)	5.0	5.0	6.0	
Minimum Split (s)	12.0	12.0	47.0	
Total Split (s)	30.0	30.0	50.0	
Total Split (%)	18.8%	18.8%	31.3%	
Yellow Time (s)	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0	3.0	
Lost Time Adjust (s)		0.0	0.0	
Total Lost Time (s)		7.0	8.0	
Lead/Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	None	None	C-Min	
Act Effct Green (s)		20.6	42.0	
Actuated g/C Ratio		0.13	0.26	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
v/c Ratio		0.87	0.98			6.35	1.05			1.08	0.93	1.01
Control Delay		103.4	73.3			2436.4	86.7			126.2	68.0	70.2
Queue Delay		0.0	0.3			0.0	0.0			0.0	0.0	32.6
Total Delay		103.4	73.6			2436.4	86.7			126.2	68.0	102.7
LOS		F	E			F	F			F	E	F
Approach Delay			77.0				711.7				89.4	
Approach LOS			E				F				F	
Queue Length 50th (ft)		189	520			~548	~678			~319	495	~488
Queue Length 95th (ft)		#306	#626			#661	#783			#441	#606	#747
Internal Link Dist (ft)			920				605				920	
Turn Bay Length (ft)		430				350				485		400
Base Capacity (vph)		237	1430			89	1486			493	1411	635
Starvation Cap Reductn		0	0			0	0			0	0	0
Spillback Cap Reductn		0	3			0	0			0	0	90
Storage Cap Reductn		0	0			0	0			0	0	0
Reduced v/c Ratio		0.77	0.98			6.35	1.05			1.08	0.93	1.17

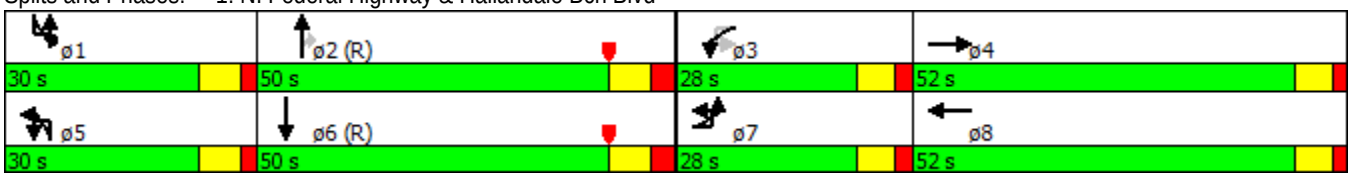
Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 58 (36%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 6.35
Intersection Signal Delay: 254.1 Intersection LOS: F
Intersection Capacity Utilization 111.8% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: N. Federal Highway & Hallandale Bch Blvd



Lane Group	SBU	SBL	SBT	SBR
v/c Ratio		0.86	0.87	
Control Delay		87.0	62.9	
Queue Delay		3.5	0.0	
Total Delay		90.5	62.9	
LOS		F	E	
Approach Delay			69.7	
Approach LOS			E	
Queue Length 50th (ft)		213	324	
Queue Length 95th (ft)		265	495	
Internal Link Dist (ft)			700	
Turn Bay Length (ft)		380		
Base Capacity (vph)		498	1334	
Starvation Cap Reductn		0	0	
Spillback Cap Reductn		56	0	
Storage Cap Reductn		0	0	
Reduced v/c Ratio		0.86	0.87	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	0	1915	28	29	24	2022	0	18	0	56	136	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	0		105		120		0	0		0	100	
Storage Lanes	0		1		1		0	0		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850						0.898			
Flt Protected					0.950				0.988		0.950	0.961
Satd. Flow (prot)	0	5085	1583	0	1752	5036	0	0	1686	0	1715	1735
Flt Permitted					0.061				0.988		0.950	0.961
Satd. Flow (perm)	0	5085	1583	0	113	5036	0	0	1686	0	1715	1735
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			102						102			
Link Speed (mph)		35				35			25			25
Link Distance (ft)		685				635			500			500
Travel Time (s)		13.3				12.4			13.6			13.6
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.96	0.96	0.96	0.96	0.85	0.85	0.85	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Adj. Flow (vph)	0	2082	30	30	25	2106	0	21	0	66	156	16
Shared Lane Traffic (%)											45%	
Lane Group Flow (vph)	0	2082	30	0	55	2106	0	0	87	0	86	86
Turn Type		NA	Perm	pm+pt	pm+pt	NA		Split	NA		Split	NA
Protected Phases		6		5	5	2		4	4		3	3
Permitted Phases			6	2	2							
Detector Phase		6	6	5	5	2		4	4		3	3
Switch Phase												
Minimum Initial (s)		10.0	10.0	4.0	4.0	10.0		6.0	6.0		6.0	6.0
Minimum Split (s)		30.0	30.0	10.0	10.0	30.0		25.0	25.0		22.0	22.0
Total Split (s)		76.0	76.0	18.0	18.0	94.0		25.0	25.0		41.0	41.0
Total Split (%)		47.5%	47.5%	11.3%	11.3%	58.8%		15.6%	15.6%		25.6%	25.6%
Yellow Time (s)		4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)		2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0		0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0			6.0		6.0	6.0
Lead/Lag		Lag	Lag	Lead	Lead			Lag	Lag		Lead	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes
Recall Mode		C-Min	C-Min	None	None	C-Min		None	None		None	None
Act Effct Green (s)		113.8	113.8		123.0	123.0			6.5		12.4	12.4
Actuated g/C Ratio		0.71	0.71		0.77	0.77			0.04		0.08	0.08

Lane Group	SBR
Lane Configurations	
Volume (vph)	144
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	Yes
Satd. Flow (RTOR)	166
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.87
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	166
Shared Lane Traffic (%)	
Lane Group Flow (vph)	166
Turn Type	Perm
Protected Phases	
Permitted Phases	3
Detector Phase	3
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	22.0
Total Split (s)	41.0
Total Split (%)	25.6%
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	12.4
Actuated g/C Ratio	0.08

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
v/c Ratio		0.58	0.03		0.39	0.54			0.52		0.65	0.64
Control Delay		21.6	1.0		24.7	4.0			19.8		92.7	91.8
Queue Delay		6.1	0.0		0.1	0.0			0.1		0.0	0.0
Total Delay		27.7	1.0		24.8	4.0			19.8		92.7	91.8
LOS		C	A		C	A			B		F	F
Approach Delay		27.3				4.6			19.8			55.8
Approach LOS		C				A			B			E
Queue Length 50th (ft)		643	0		8	114			0		93	93
Queue Length 95th (ft)		m738	m0		m27	105			35		148	148
Internal Link Dist (ft)		605				555			420			420
Turn Bay Length (ft)			105		120						100	
Base Capacity (vph)		3616	1155		209	3872			290		375	379
Starvation Cap Reductn		1481	0		0	111			0		0	0
Spillback Cap Reductn		439	0		9	0			8		0	0
Storage Cap Reductn		0	0		0	0			0		0	0
Reduced v/c Ratio		0.98	0.03		0.28	0.56			0.31		0.23	0.23

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 100 (63%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 18.8 Intersection LOS: B
Intersection Capacity Utilization 68.0% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: NE 8th Avenue & Hallandale Bch Blvd

Lane Group	SBR
v/c Ratio	0.60
Control Delay	18.0
Queue Delay	0.0
Total Delay	18.0
LOS	B
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	0
Queue Length 95th (ft)	65
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	482
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.34

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	36	60	1936	59	31	161	1922	114	111	180	392	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		130		50		400		85	0		400	0
Storage Lanes		1		1		2		1	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	0.97	0.91	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor												
Frt				0.850				0.850			0.850	
Flt Protected		0.950				0.950			0.950	0.997		
Satd. Flow (prot)	0	1770	5085	1583	0	3433	5085	1583	1665	1747	1568	0
Flt Permitted		0.950				0.950			0.950	0.997		
Satd. Flow (perm)	0	1770	5085	1583	0	3433	5085	1583	1665	1747	1568	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				61				102			124	
Link Speed (mph)			35				35			20		
Link Distance (ft)			635				1000			500		
Travel Time (s)			12.4				19.5			17.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.96	0.96	0.96	0.96	0.78	0.78	0.78	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Adj. Flow (vph)	40	67	2151	66	32	168	2002	119	142	231	503	0
Shared Lane Traffic (%)									10%			
Lane Group Flow (vph)	0	107	2151	66	0	200	2002	119	128	245	503	0
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Split	NA	Perm	
Protected Phases	1	1	6		5	5	2		4	4		
Permitted Phases				6				2			4	
Detector Phase	1	1	6	6	5	5	2	2	4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	10.0	10.0	5.0	5.0	10.0	10.0	6.0	6.0	6.0	
Minimum Split (s)	11.0	11.0	34.0	34.0	11.0	11.0	34.0	34.0	44.0	44.0	44.0	
Total Split (s)	36.0	36.0	92.0	92.0	22.0	22.0	78.0	78.0	46.0	46.0	46.0	
Total Split (%)	22.5%	22.5%	57.5%	57.5%	13.8%	13.8%	48.8%	48.8%	28.8%	28.8%	28.8%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Min	C-Min	None	None	C-Min	C-Min	None	None	None	
Act Effct Green (s)		14.1	85.2	85.2		13.4	84.5	84.5	43.4	43.4	43.4	
Actuated g/C Ratio		0.09	0.53	0.53		0.08	0.53	0.53	0.27	0.27	0.27	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	500	
Travel Time (s)	13.6	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.92	0.92
Growth Factor	100%	100%
Heavy Vehicles (%)	2%	2%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Recall Mode		
Act Effct Green (s)		
Actuated g/C Ratio		

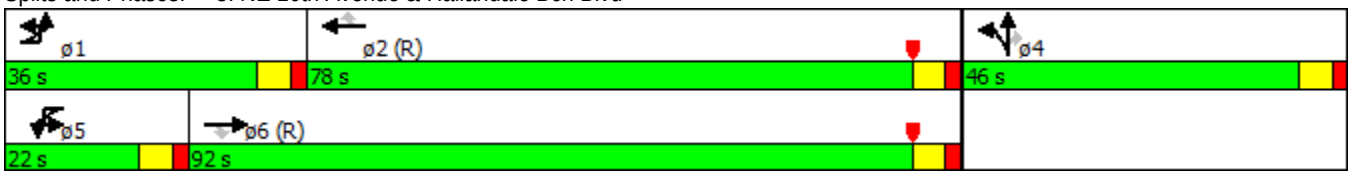
Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
v/c Ratio		0.69	0.79	0.08		0.70	0.75	0.13	0.28	0.52	0.97	
Control Delay		115.5	23.8	0.8		84.4	31.6	4.9	49.6	55.2	76.9	
Queue Delay		0.0	0.1	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		115.5	23.9	0.8		84.4	31.6	4.9	49.6	55.2	76.9	
LOS		F	C	A		F	C	A	D	E	E	
Approach Delay			27.4				34.8			66.8		
Approach LOS			C				C			E		
Queue Length 50th (ft)		106	778	5		106	555	8	115	237	~462	
Queue Length 95th (ft)		186	429	m2		150	662	43	155	285	#519	
Internal Link Dist (ft)			555				920			420		
Turn Bay Length (ft)		130		50		400		85			400	
Base Capacity (vph)		331	2756	885		343	2685	884	451	473	516	
Starvation Cap Reductn		0	77	0		0	0	0	0	0	0	
Spillback Cap Reductn		0	0	0		0	0	0	0	0	0	
Storage Cap Reductn		0	0	0		0	0	0	0	0	0	
Reduced v/c Ratio		0.32	0.80	0.07		0.58	0.75	0.13	0.28	0.52	0.97	

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 98 (61%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 36.8 Intersection LOS: D
Intersection Capacity Utilization 82.2% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: NE 10th Avenue & Hallandale Bch Blvd



Lane Group	SBT	SBR
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)	420	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	142	83	101	42	100	19	5	128	1514	12	42	1255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	30		0	60		0		150		0	150	
Storage Lanes	1		0	1		0		1		0	1	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor												
Frt		0.918			0.976				0.999			0.994
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1805	1744	0	1787	1836	0	0	1770	3536	0	1787	3553
Flt Permitted	0.565			0.343				0.147			0.121	
Satd. Flow (perm)	1074	1744	0	645	1836	0	0	274	3536	0	228	3553
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		33			5				1			7
Link Speed (mph)		25			25				35			35
Link Distance (ft)		1000			1000				555			1000
Travel Time (s)		27.3			27.3				10.8			19.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.88	0.88	0.88	0.97	0.97	0.97	0.97	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	2%	2%	2%	2%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Adj. Flow (vph)	178	104	126	48	114	22	5	132	1561	12	46	1379
Shared Lane Traffic (%)												
Lane Group Flow (vph)	178	230	0	48	136	0	0	137	1573	0	46	1436
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA		Perm	NA
Protected Phases		4			8				2			6
Permitted Phases	4			8			2	2			6	
Detector Phase	4	4		8	8		2	2	2		6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		10.0	10.0	10.0		10.0	10.0
Minimum Split (s)	33.0	33.0		31.0	31.0		23.0	23.0	23.0		23.0	23.0
Total Split (s)	35.0	35.0		35.0	35.0		125.0	125.0	125.0		125.0	125.0
Total Split (%)	21.9%	21.9%		21.9%	21.9%		78.1%	78.1%	78.1%		78.1%	78.1%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0			5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Min	C-Min	C-Min		C-Min	C-Min
Act Effct Green (s)	29.6	29.6		29.6	29.6			119.4	119.4		119.4	119.4
Actuated g/C Ratio	0.18	0.18		0.18	0.18			0.75	0.75		0.75	0.75

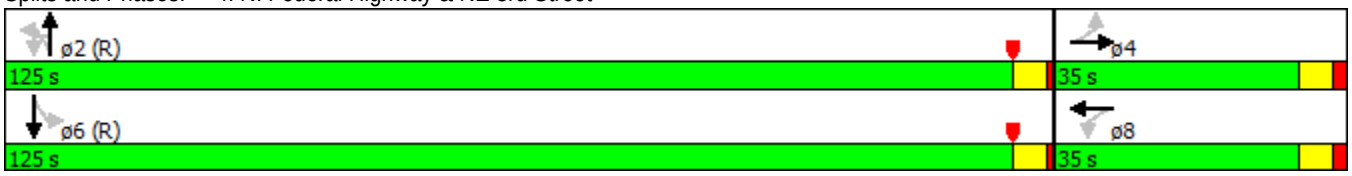
Lane Group	SBR
Lane Configurations	
Volume (vph)	52
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.91
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	57
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.90	0.66		0.40	0.40			0.67	0.60		0.27	0.54
Control Delay	104.5	61.3		68.5	58.8			22.8	9.3		11.4	9.6
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	104.5	61.3		68.5	58.8			22.8	9.3		11.4	9.6
LOS	F	E		E	E			C	A		B	A
Approach Delay		80.1			61.3				10.4			9.7
Approach LOS		F			E				B			A
Queue Length 50th (ft)	177	186		43	117			41	166		16	348
Queue Length 95th (ft)	#279	251		91	190			m68	m774		35	343
Internal Link Dist (ft)		920			920				475			920
Turn Bay Length (ft)	30			60				150			150	
Base Capacity (vph)	205	360		123	354			207	2674		172	2688
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.87	0.64		0.39	0.38			0.66	0.59		0.27	0.53

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 5 (3%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 20.1 Intersection LOS: C
Intersection Capacity Utilization 84.5% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: N. Federal Highway & NE 3rd Street



Lane Group	SBR
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	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

APPENDIX E

TOTAL INTERSECTION CAPACITY ANALYSIS WORKSHEETS

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Volume (vph)	2	118	1062	384	580	1115	170	30	263	714	420	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%				0%		
Storage Length (ft)		430		0	350		0		485		400	
Storage Lanes		1		0	2		0		2		1	
Taper Length (ft)		25			25				25			
Lane Util. Factor	0.91	1.00	0.91	0.91	0.97	0.91	0.91	0.91	0.97	0.91	1.00	0.91
Ped Bike Factor												
Frt			0.960			0.980					0.850	
Flt Protected		0.950			0.950				0.950			
Satd. Flow (prot)	0	1719	4742	0	3433	4984	0	0	3367	4988	1553	0
Flt Permitted		0.950			0.950				0.950			
Satd. Flow (perm)	0	1719	4742	0	3433	4984	0	0	3367	4988	1553	0
Right Turn on Red				Yes			Yes				Yes	
Satd. Flow (RTOR)			57			18					274	
Link Speed (mph)			35			35				45		
Link Distance (ft)			1000			685				1000		
Travel Time (s)			19.5			13.3				15.2		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.85	0.85	0.85	0.89	0.89	0.89	0.89	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	2%	2%	2%	4%	4%	4%	4%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%				0%		
Adj. Flow (vph)	2	126	1130	409	682	1312	200	34	296	802	472	23
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	128	1539	0	682	1512	0	0	330	802	472	0
Turn Type	Prot	Prot	NA		Prot	NA		Prot	Prot	NA	Perm	Prot
Protected Phases	7	7	4		3	8		5	5	2		1
Permitted Phases											2	
Detector Phase	7	7	4		3	8		5	5	2	2	1
Switch Phase												
Minimum Initial (s)	5.0	5.0	7.0		5.0	7.0		5.0	5.0	6.0	6.0	5.0
Minimum Split (s)	11.5	11.5	46.5		11.5	46.5		12.0	12.0	47.0	47.0	12.0
Total Split (s)	28.0	28.0	52.0		28.0	52.0		30.0	30.0	50.0	50.0	30.0
Total Split (%)	17.5%	17.5%	32.5%		17.5%	32.5%		18.8%	18.8%	31.3%	31.3%	18.8%
Yellow Time (s)	4.5	4.5	4.5		4.5	4.5		5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0		2.0	2.0	3.0	3.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0	0.0	0.0	
Total Lost Time (s)		6.5	6.5		6.5	6.5			7.0	8.0	8.0	
Lead/Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min		Min	Min		None	None	C-Min	C-Min	None
Act Effct Green (s)		15.7	45.5		21.5	51.3			19.2	44.7	44.7	
Actuated g/C Ratio		0.10	0.28		0.13	0.32			0.12	0.28	0.28	

Lane Group	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	314	1172	67
Ideal Flow (vphpl)	1900	1900	1900
Lane Width (ft)	12	12	12
Grade (%)		0%	
Storage Length (ft)	380		110
Storage Lanes	2		1
Taper Length (ft)	25		
Lane Util. Factor	0.97	0.91	0.91
Ped Bike Factor			
Frt		0.992	
Flt Protected	0.950		
Satd. Flow (prot)	3400	4996	0
Flt Permitted	0.950		
Satd. Flow (perm)	3400	4996	0
Right Turn on Red			Yes
Satd. Flow (RTOR)		5	
Link Speed (mph)		35	
Link Distance (ft)		780	
Travel Time (s)		15.2	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Peak Hour Factor	0.92	0.92	0.92
Growth Factor	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%
Bus Blockages (#/hr)	0	0	0
Parking (#/hr)			
Mid-Block Traffic (%)		0%	
Adj. Flow (vph)	341	1274	73
Shared Lane Traffic (%)			
Lane Group Flow (vph)	364	1347	0
Turn Type	Prot	NA	
Protected Phases	1	6	
Permitted Phases			
Detector Phase	1	6	
Switch Phase			
Minimum Initial (s)	5.0	6.0	
Minimum Split (s)	12.0	47.0	
Total Split (s)	30.0	50.0	
Total Split (%)	18.8%	31.3%	
Yellow Time (s)	5.0	5.0	
All-Red Time (s)	2.0	3.0	
Lost Time Adjust (s)	0.0	0.0	
Total Lost Time (s)	7.0	8.0	
Lead/Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	
Recall Mode	None	C-Min	
Act Effct Green (s)	20.3	45.8	
Actuated g/C Ratio	0.13	0.29	

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
v/c Ratio		0.77	1.11		1.48	0.94			0.82	0.58	0.75	
Control Delay		97.3	109.2		274.2	67.3			85.1	51.9	30.0	
Queue Delay		0.0	0.0		0.0	0.0			0.0	0.0	0.7	
Total Delay		97.3	109.3		274.2	67.3			85.1	51.9	30.7	
LOS		F	F		F	E			F	D	C	
Approach Delay			108.3			131.6				52.5		
Approach LOS			F			F				D		
Queue Length 50th (ft)		133	~655		~510	361			176	267	201	
Queue Length 95th (ft)		201	#753		#593	#667			225	317	348	
Internal Link Dist (ft)			920			605				920		
Turn Bay Length (ft)		430			350				485		400	
Base Capacity (vph)		230	1389		461	1611			484	1394	631	
Starvation Cap Reductn		0	0		0	0			0	0	0	
Spillback Cap Reductn		0	2		0	0			0	0	30	
Storage Cap Reductn		0	0		0	0			0	0	0	
Reduced v/c Ratio		0.56	1.11		1.48	0.94			0.68	0.58	0.79	

Intersection Summary

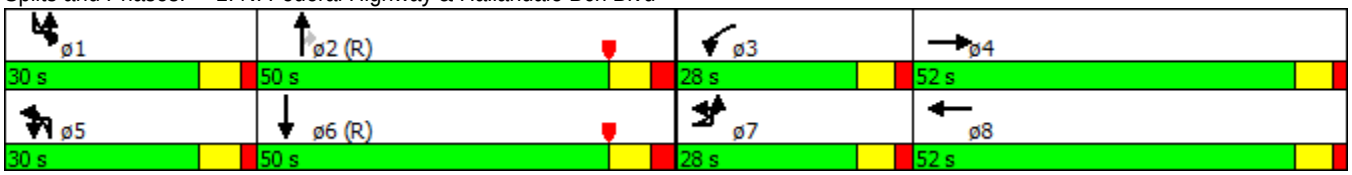
Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 25 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.48
Intersection Signal Delay: 93.7 Intersection LOS: F
Intersection Capacity Utilization 101.5% ICU Level of Service G
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: N. Federal Highway & Hallandale Bch Blvd



Lane Group	SBL	SBT	SBR
v/c Ratio	0.85	0.94	
Control Delay	86.3	63.8	
Queue Delay	4.3	0.0	
Total Delay	90.6	63.8	
LOS	F	E	
Approach Delay		69.5	
Approach LOS		E	
Queue Length 50th (ft)	189	512	
Queue Length 95th (ft)	m252	#651	
Internal Link Dist (ft)		700	
Turn Bay Length (ft)	380		
Base Capacity (vph)	488	1434	
Starvation Cap Reductn	0	0	
Spillback Cap Reductn	68	0	
Storage Cap Reductn	0	0	
Reduced v/c Ratio	0.87	0.94	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	0	1740	56	12	50	1684	0	36	0	36	162	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	0		105		120		0	0		0	100	
Storage Lanes	0		1		1		0	0		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850						0.932			
Flt Protected					0.950				0.976		0.950	0.965
Satd. Flow (prot)	0	4988	1553	0	1770	5085	0	0	1728	0	1698	1725
Flt Permitted					0.073				0.976		0.950	0.965
Satd. Flow (perm)	0	4988	1553	0	136	5085	0	0	1728	0	1698	1725
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			102						102			
Link Speed (mph)		35				35			25			25
Link Distance (ft)		685				635			500			500
Travel Time (s)		13.3				12.4			13.6			13.6
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.93	0.93	0.93	0.93	0.57	0.57	0.57	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	0%	0%	0%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Adj. Flow (vph)	0	1912	62	13	54	1811	0	63	0	63	174	29
Shared Lane Traffic (%)											42%	
Lane Group Flow (vph)	0	1912	62	0	67	1811	0	0	126	0	101	102
Turn Type		NA	Perm	pm+pt	pm+pt	NA		Split	NA		Split	NA
Protected Phases		6		5	5	2		4	4		3	3
Permitted Phases			6	2	2							
Detector Phase		6	6	5	5	2		4	4		3	3
Switch Phase												
Minimum Initial (s)		10.0	10.0	4.0	4.0	10.0		6.0	6.0		6.0	6.0
Minimum Split (s)		30.0	30.0	10.0	10.0	30.0		25.0	25.0		22.0	22.0
Total Split (s)		76.0	76.0	18.0	18.0	94.0		25.0	25.0		41.0	41.0
Total Split (%)		47.5%	47.5%	11.3%	11.3%	58.8%		15.6%	15.6%		25.6%	25.6%
Yellow Time (s)		4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)		2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0		0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0			6.0		6.0	6.0
Lead/Lag		Lag	Lag	Lead	Lead			Lag	Lag		Lead	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes
Recall Mode		C-Min	C-Min	None	None	C-Min		None	None		None	None
Act Effct Green (s)		106.4	106.4		118.4	118.4			8.3		15.3	15.3
Actuated g/C Ratio		0.66	0.66		0.74	0.74			0.05		0.10	0.10

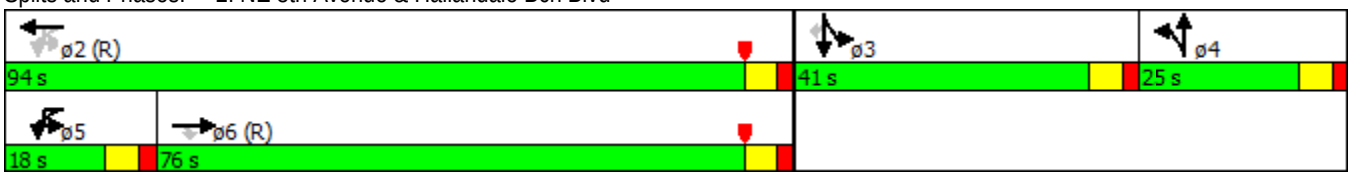
Lane Group	SBR
Lane Configurations	
Volume (vph)	190
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1599
Flt Permitted	
Satd. Flow (perm)	1599
Right Turn on Red	Yes
Satd. Flow (RTOR)	114
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.93
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	204
Shared Lane Traffic (%)	
Lane Group Flow (vph)	204
Turn Type	Perm
Protected Phases	
Permitted Phases	3
Detector Phase	3
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	22.0
Total Split (s)	41.0
Total Split (%)	25.6%
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	15.3
Actuated g/C Ratio	0.10

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
v/c Ratio		0.58	0.06		0.42	0.48			0.68		0.62	0.62
Control Delay		11.7	2.3		14.4	5.5			37.3		85.0	84.5
Queue Delay		0.9	0.0		0.0	0.0			0.0		0.0	0.0
Total Delay		12.5	2.3		14.4	5.6			37.3		85.0	84.5
LOS		B	A		B	A			D		F	F
Approach Delay		12.2				5.9			37.3			68.6
Approach LOS		B				A			D			E
Queue Length 50th (ft)		106	1		4	239			25		109	110
Queue Length 95th (ft)		m624	m8		21	221			20		168	170
Internal Link Dist (ft)		605				555			420			420
Turn Bay Length (ft)			105		120						100	
Base Capacity (vph)		3317	1066		223	3762			295		371	377
Starvation Cap Reductn		1001	0		0	281			0		0	0
Spillback Cap Reductn		0	0		0	0			0		0	0
Storage Cap Reductn		0	0		0	0			0		0	0
Reduced v/c Ratio		0.83	0.06		0.30	0.52			0.43		0.27	0.27

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 40 (25%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 15.5 Intersection LOS: B
Intersection Capacity Utilization 64.3% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: NE 8th Avenue & Hallandale Bch Blvd



Lane Group	SBR
v/c Ratio	0.80
Control Delay	52.6
Queue Delay	0.0
Total Delay	52.6
LOS	D
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	95
Queue Length 95th (ft)	180
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	438
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.47

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	37	30	1765	72	29	76	1729	60	3	45	18	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%				0%	
Storage Length (ft)		130		50		400		85		0		400
Storage Lanes		1		1		2		1		1		1
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	0.97	0.91	1.00	1.00	0.95	0.95	1.00
Ped Bike Factor												
Frt				0.850				0.850				0.850
Flt Protected		0.950				0.950				0.950	0.977	
Satd. Flow (prot)	0	1719	4940	1538	0	3400	5036	1568	0	1573	1618	1482
Flt Permitted		0.950				0.950				0.950	0.977	
Satd. Flow (perm)	0	1719	4940	1538	0	3400	5036	1568	0	1573	1618	1482
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)				61				102				102
Link Speed (mph)			35				35				20	
Link Distance (ft)			635				1000				500	
Travel Time (s)			12.4				19.5				17.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.95	0.95	0.95	0.95	0.74	0.74	0.74	0.74
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	3%	3%	3%	3%	9%	9%	9%	9%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%				0%	
Adj. Flow (vph)	41	33	1940	79	31	80	1820	63	4	61	24	100
Shared Lane Traffic (%)										35%		
Lane Group Flow (vph)	0	74	1940	79	0	111	1820	63	0	44	45	100
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Split	Split	NA	Perm
Protected Phases	1	1	6		5	5	2		4	4	4	
Permitted Phases				6				2				4
Detector Phase	1	1	6	6	5	5	2	2	4	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	5.0	10.0	10.0	5.0	5.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	11.0	11.0	34.0	34.0	11.0	11.0	34.0	34.0	44.0	44.0	44.0	44.0
Total Split (s)	30.0	30.0	92.0	92.0	22.0	22.0	84.0	84.0	46.0	46.0	46.0	46.0
Total Split (%)	18.8%	18.8%	57.5%	57.5%	13.8%	13.8%	52.5%	52.5%	28.8%	28.8%	28.8%	28.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.0	6.0	6.0		6.0	6.0	6.0		6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Min	C-Min	None	None	C-Min	C-Min	None	None	None	None
Act Effct Green (s)		11.3	123.3	123.3		9.6	121.6	121.6		9.1	9.1	9.1
Actuated g/C Ratio		0.07	0.77	0.77		0.06	0.76	0.76		0.06	0.06	0.06

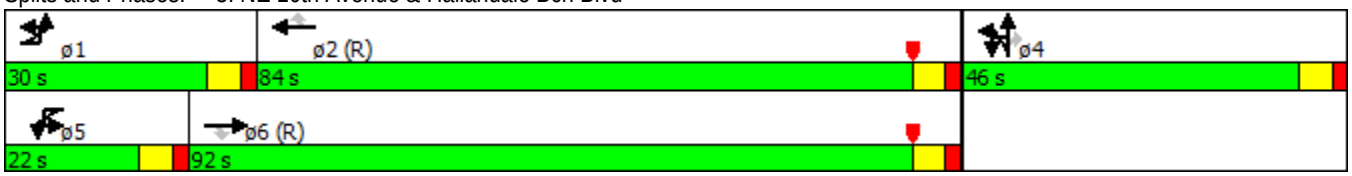
Lane Group	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	0	0	0
Ideal Flow (vphpl)	1900	1900	1900
Lane Width (ft)	12	12	12
Grade (%)		0%	
Storage Length (ft)	0		0
Storage Lanes	0		0
Taper Length (ft)	25		
Lane Util. Factor	1.00	1.00	1.00
Ped Bike Factor			
Frt			
Flt Protected			
Satd. Flow (prot)	0	0	0
Flt Permitted			
Satd. Flow (perm)	0	0	0
Right Turn on Red			Yes
Satd. Flow (RTOR)			
Link Speed (mph)		25	
Link Distance (ft)		500	
Travel Time (s)		13.6	
Confl. Peds. (#/hr)			
Confl. Bikes (#/hr)			
Peak Hour Factor	0.92	0.92	0.92
Growth Factor	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%
Bus Blockages (#/hr)	0	0	0
Parking (#/hr)			
Mid-Block Traffic (%)		0%	
Adj. Flow (vph)	0	0	0
Shared Lane Traffic (%)			
Lane Group Flow (vph)	0	0	0
Turn Type			
Protected Phases			
Permitted Phases			
Detector Phase			
Switch Phase			
Minimum Initial (s)			
Minimum Split (s)			
Total Split (s)			
Total Split (%)			
Yellow Time (s)			
All-Red Time (s)			
Lost Time Adjust (s)			
Total Lost Time (s)			
Lead/Lag			
Lead-Lag Optimize?			
Recall Mode			
Act Effct Green (s)			
Actuated g/C Ratio			

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
v/c Ratio		0.62	0.51	0.07		0.54	0.48	0.05		0.49	0.49	0.56
Control Delay		87.0	3.6	0.3		82.7	8.2	0.3		90.7	89.9	23.3
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0
Total Delay		87.0	3.6	0.3		82.7	8.2	0.3		90.7	89.9	23.3
LOS		F	A	A		F	A	A		F	F	C
Approach Delay			6.4				12.1				54.8	
Approach LOS			A				B				D	
Queue Length 50th (ft)		81	118	1		59	233	0		48	49	0
Queue Length 95th (ft)		135	121	3		92	329	3		76	77	30
Internal Link Dist (ft)			555				920				420	
Turn Bay Length (ft)		130		50		400		85				400
Base Capacity (vph)		257	3805	1198		340	3826	1215		393	404	447
Starvation Cap Reductn		0	187	0		0	0	0		0	0	0
Spillback Cap Reductn		0	0	0		0	0	0		0	0	0
Storage Cap Reductn		0	0	0		0	0	0		0	0	0
Reduced v/c Ratio		0.29	0.54	0.07		0.33	0.48	0.05		0.11	0.11	0.22

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 44 (28%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 11.2 Intersection LOS: B
Intersection Capacity Utilization 58.3% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 3: NE 10th Avenue & Hallandale Bch Blvd



Lane Group	SBL	SBT	SBR
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)		420	
Turn Bay Length (ft)			
Base Capacity (vph)			
Starvation Cap Reductn			
Spillback Cap Reductn			
Storage Cap Reductn			
Reduced v/c Ratio			

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	123	77	117	49	50	6	6	64	870	10	50	1403
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	30		0	60		0		150		0	150	
Storage Lanes	1		0	1		0		1		0	1	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor												
Frt		0.909			0.984				0.998			0.995
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1752	1677	0	1770	1833	0	0	1752	3498	0	1752	3487
Flt Permitted	0.714			0.202				0.118			0.273	
Satd. Flow (perm)	1317	1677	0	376	1833	0	0	218	3498	0	504	3487
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		42			3				2			6
Link Speed (mph)		25			25				35			35
Link Distance (ft)		1000			1000				555			1000
Travel Time (s)		27.3			27.3				10.8			19.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.79	0.79	0.79	0.85	0.85	0.85	0.90	0.90	0.90	0.90	0.88	0.88
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Adj. Flow (vph)	156	97	148	58	59	7	7	71	967	11	57	1594
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	245	0	58	66	0	0	78	978	0	57	1645
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA		Perm	NA
Protected Phases		4			8				2			6
Permitted Phases	4			8			2	2			6	
Detector Phase	4	4		8	8		2	2	2		6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		10.0	10.0	10.0		10.0	10.0
Minimum Split (s)	33.0	33.0		31.0	31.0		23.0	23.0	23.0		23.0	23.0
Total Split (s)	35.0	35.0		35.0	35.0		125.0	125.0	125.0		125.0	125.0
Total Split (%)	21.9%	21.9%		21.9%	21.9%		78.1%	78.1%	78.1%		78.1%	78.1%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0			5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Min	C-Min	C-Min		C-Min	C-Min
Act Effct Green (s)	23.3	23.3		23.3	23.3			125.7	125.7		125.7	125.7
Actuated g/C Ratio	0.15	0.15		0.15	0.15			0.79	0.79		0.79	0.79

Lane Group	SBR
Lane Configurations	
Volume (vph)	45
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.88
Growth Factor	100%
Heavy Vehicles (%)	3%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	51
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.82	0.88		1.07	0.25			0.46	0.36		0.14	0.60
Control Delay	96.0	84.2		203.2	58.2			18.2	4.9		5.9	8.6
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	96.0	84.2		203.2	58.2			18.2	4.9		5.9	8.6
LOS	F	F		F	E			B	A		A	A
Approach Delay		88.8			126.0				5.8			8.5
Approach LOS		F			F				A			A
Queue Length 50th (ft)	160	212		~64	59			22	67		13	331
Queue Length 95th (ft)	205	258		#141	99			m76	m431		30	423
Internal Link Dist (ft)		920			920				475			920
Turn Bay Length (ft)	30			60				150			150	
Base Capacity (vph)	238	338		68	334			171	2748		396	2740
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.66	0.72		0.85	0.20			0.46	0.36		0.14	0.60

Intersection Summary

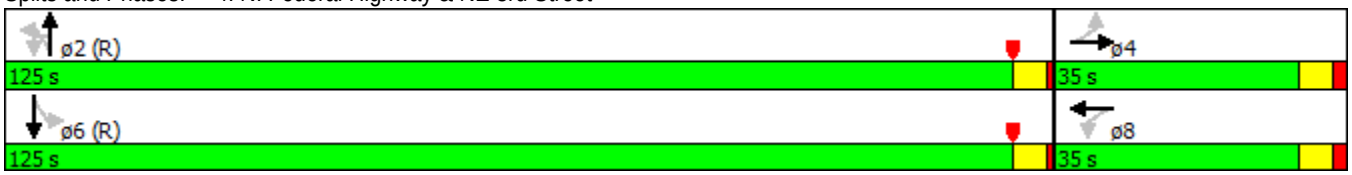
Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 134 (84%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.07
Intersection Signal Delay: 21.9 Intersection LOS: C
Intersection Capacity Utilization 83.1% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: N. Federal Highway & NE 3rd Street



Lane Group	SBR
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	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
Lane Configurations												
Volume (vph)	5	170	1000	285	1	560	1297	243	5	486	1209	589
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%				0%	
Storage Length (ft)		430		0		350		0		485		400
Storage Lanes		1		0		2		0		2		1
Taper Length (ft)		25				25				25		
Lane Util. Factor	0.91	1.00	0.91	0.91	0.91	0.97	0.91	0.91	0.91	0.97	0.91	1.00
Ped Bike Factor												
Frt			0.967				0.976					0.850
Flt Protected		0.950				0.950				0.950		
Satd. Flow (prot)	0	1770	4917	0	0	3400	4915	0	0	3433	5085	1583
Flt Permitted		0.950				0.186				0.950		
Satd. Flow (perm)	0	1770	4917	0	0	666	4915	0	0	3433	5085	1583
Right Turn on Red				Yes				Yes				Yes
Satd. Flow (RTOR)			45				24					271
Link Speed (mph)			35				35				45	
Link Distance (ft)			1000				685				1000	
Travel Time (s)			19.5				13.3				15.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.97	0.97	0.97	0.97	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	3%	3%	3%	3%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%				0%	
Adj. Flow (vph)	5	185	1087	310	1	577	1337	251	5	528	1314	640
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	190	1397	0	0	578	1588	0	0	533	1314	640
Turn Type	Prot	Prot	NA		custom	Prot	NA		Prot	Prot	NA	Perm
Protected Phases	7	7	4			3	8		5	5	2	
Permitted Phases					3							2
Detector Phase	7	7	4		3	3	8		5	5	2	2
Switch Phase												
Minimum Initial (s)	5.0	5.0	7.0		5.0	5.0	7.0		5.0	5.0	6.0	6.0
Minimum Split (s)	11.5	11.5	46.5		11.5	11.5	46.5		12.0	12.0	47.0	47.0
Total Split (s)	28.0	28.0	52.0		28.0	28.0	52.0		30.0	30.0	50.0	50.0
Total Split (%)	17.5%	17.5%	32.5%		17.5%	17.5%	32.5%		18.8%	18.8%	31.3%	31.3%
Yellow Time (s)	4.5	4.5	4.5		4.5	4.5	4.5		5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0		2.0	2.0	2.0		2.0	2.0	3.0	3.0
Lost Time Adjust (s)		0.0	0.0			0.0	0.0			0.0	0.0	0.0
Total Lost Time (s)		6.5	6.5			6.5	6.5			7.0	8.0	8.0
Lead/Lag	Lead	Lead	Lag		Lead	Lead	Lag		Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	Yes
Recall Mode	Min	Min	Min		Min	Min	Min		None	None	C-Min	C-Min
Act Effct Green (s)		19.5	45.5			21.5	47.5			23.0	44.4	44.4
Actuated g/C Ratio		0.12	0.28			0.13	0.30			0.14	0.28	0.28

Lane Group	SBU	SBL	SBT	SBR
Lane Configurations				
Volume (vph)	24	353	1000	149
Ideal Flow (vphpl)	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12
Grade (%)			0%	
Storage Length (ft)		380		110
Storage Lanes		2		1
Taper Length (ft)		25		
Lane Util. Factor	0.91	0.97	0.91	0.91
Ped Bike Factor				
Frt			0.981	
Flt Protected		0.950		
Satd. Flow (prot)	0	3467	5038	0
Flt Permitted		0.950		
Satd. Flow (perm)	0	3467	5038	0
Right Turn on Red				Yes
Satd. Flow (RTOR)			17	
Link Speed (mph)			35	
Link Distance (ft)			780	
Travel Time (s)			15.2	
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor	0.98	0.98	0.98	0.98
Growth Factor	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0
Parking (#/hr)				
Mid-Block Traffic (%)			0%	
Adj. Flow (vph)	24	360	1020	152
Shared Lane Traffic (%)				
Lane Group Flow (vph)	0	384	1172	0
Turn Type	Prot	Prot	NA	
Protected Phases	1	1	6	
Permitted Phases				
Detector Phase	1	1	6	
Switch Phase				
Minimum Initial (s)	5.0	5.0	6.0	
Minimum Split (s)	12.0	12.0	47.0	
Total Split (s)	30.0	30.0	50.0	
Total Split (%)	18.8%	18.8%	31.3%	
Yellow Time (s)	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0	3.0	
Lost Time Adjust (s)		0.0	0.0	
Total Lost Time (s)		7.0	8.0	
Lead/Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	
Recall Mode	None	None	C-Min	
Act Effct Green (s)		20.6	42.0	
Actuated g/C Ratio		0.13	0.26	

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR
v/c Ratio		0.88	0.98			6.49	1.08			1.08	0.93	1.01
Control Delay		105.3	73.3			2501.7	95.5			126.2	68.6	70.3
Queue Delay		0.0	0.4			0.0	0.0			0.0	0.0	32.4
Total Delay		105.3	73.7			2501.7	95.5			126.2	68.6	102.7
LOS		F	E			F	F			F	E	F
Approach Delay			77.5				737.6				89.7	
Approach LOS			E				F				F	
Queue Length 50th (ft)		196	520			~563	~709			~319	498	~489
Queue Length 95th (ft)		#323	#626			#677	#806			#441	#610	#747
Internal Link Dist (ft)			920				605				920	
Turn Bay Length (ft)		430				350				485		400
Base Capacity (vph)		237	1430			89	1475			493	1409	634
Starvation Cap Reductn		0	0			0	0			0	0	0
Spillback Cap Reductn		0	4			0	0			0	0	107
Storage Cap Reductn		0	0			0	0			0	0	0
Reduced v/c Ratio		0.80	0.98			6.49	1.08			1.08	0.93	1.21

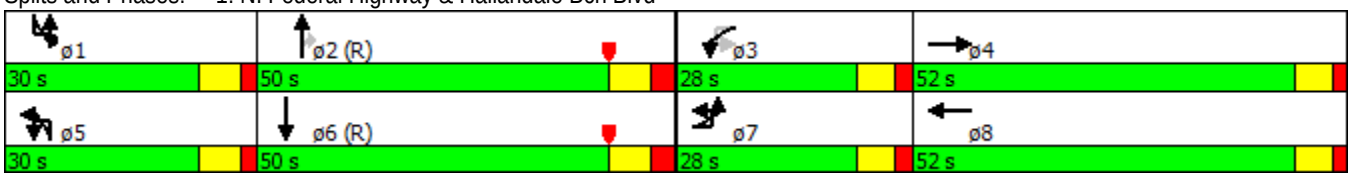
Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 58 (36%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 6.49
Intersection Signal Delay: 263.4 Intersection LOS: F
Intersection Capacity Utilization 112.2% ICU Level of Service H
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: N. Federal Highway & Hallandale Bch Blvd



Lane Group	SBU	SBL	SBT	SBR
v/c Ratio		0.86	0.88	
Control Delay		87.2	63.6	
Queue Delay		3.7	0.0	
Total Delay		90.9	63.6	
LOS		F	E	
Approach Delay			70.4	
Approach LOS			E	
Queue Length 50th (ft)		215	334	
Queue Length 95th (ft)		265	504	
Internal Link Dist (ft)			700	
Turn Bay Length (ft)		380		
Base Capacity (vph)		498	1335	
Starvation Cap Reductn		0	0	
Spillback Cap Reductn		56	0	
Storage Cap Reductn		0	0	
Reduced v/c Ratio		0.87	0.88	

Intersection Summary

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	0	1915	28	29	24	2026	0	18	0	56	154	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	0		105		120		0	0		0	100	
Storage Lanes	0		1		1		0	0		0	1	
Taper Length (ft)	25				25			25			25	
Lane Util. Factor	1.00	0.91	1.00	0.91	1.00	0.91	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor												
Frt			0.850						0.898			
Flt Protected					0.950				0.988		0.950	0.960
Satd. Flow (prot)	0	5085	1583	0	1752	5036	0	0	1686	0	1715	1733
Flt Permitted					0.060				0.988		0.950	0.960
Satd. Flow (perm)	0	5085	1583	0	111	5036	0	0	1686	0	1715	1733
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			102						102			
Link Speed (mph)		35				35			25			25
Link Distance (ft)		685				635			500			500
Travel Time (s)		13.3				12.4			13.6			13.6
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.96	0.96	0.96	0.96	0.85	0.85	0.85	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Adj. Flow (vph)	0	2082	30	30	25	2110	0	21	0	66	177	16
Shared Lane Traffic (%)											46%	
Lane Group Flow (vph)	0	2082	30	0	55	2110	0	0	87	0	96	97
Turn Type		NA	Perm	pm+pt	pm+pt	NA		Split	NA		Split	NA
Protected Phases		6		5	5	2		4	4		3	3
Permitted Phases			6	2	2							
Detector Phase		6	6	5	5	2		4	4		3	3
Switch Phase												
Minimum Initial (s)		10.0	10.0	4.0	4.0	10.0		6.0	6.0		6.0	6.0
Minimum Split (s)		30.0	30.0	10.0	10.0	30.0		25.0	25.0		22.0	22.0
Total Split (s)		76.0	76.0	18.0	18.0	94.0		25.0	25.0		41.0	41.0
Total Split (%)		47.5%	47.5%	11.3%	11.3%	58.8%		15.6%	15.6%		25.6%	25.6%
Yellow Time (s)		4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
All-Red Time (s)		2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0
Lost Time Adjust (s)		0.0	0.0		0.0	0.0			0.0		0.0	0.0
Total Lost Time (s)		6.0	6.0		6.0	6.0			6.0		6.0	6.0
Lead/Lag		Lag	Lag	Lead	Lead			Lag	Lag		Lead	Lead
Lead-Lag Optimize?		Yes	Yes	Yes	Yes			Yes	Yes		Yes	Yes
Recall Mode		C-Min	C-Min	None	None	C-Min		None	None		None	None
Act Effct Green (s)		112.6	112.6		121.9	121.9			6.5		13.6	13.6
Actuated g/C Ratio		0.70	0.70		0.76	0.76			0.04		0.08	0.08

Lane Group	SBR
Lane Configurations	
Volume (vph)	180
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	100
Storage Lanes	1
Taper Length (ft)	
Lane Util. Factor	1.00
Ped Bike Factor	
Frt	0.850
Flt Protected	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	Yes
Satd. Flow (RTOR)	168
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.87
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	207
Shared Lane Traffic (%)	
Lane Group Flow (vph)	207
Turn Type	Perm
Protected Phases	
Permitted Phases	3
Detector Phase	3
Switch Phase	
Minimum Initial (s)	6.0
Minimum Split (s)	22.0
Total Split (s)	41.0
Total Split (%)	25.6%
Yellow Time (s)	4.0
All-Red Time (s)	2.0
Lost Time Adjust (s)	0.0
Total Lost Time (s)	6.0
Lead/Lag	Lead
Lead-Lag Optimize?	Yes
Recall Mode	None
Act Effct Green (s)	13.6
Actuated g/C Ratio	0.08

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
v/c Ratio		0.58	0.03		0.40	0.55			0.52		0.66	0.66
Control Delay		22.7	1.0		26.1	4.2			19.8		91.4	91.0
Queue Delay		6.6	0.0		0.1	0.0			0.1		0.0	0.0
Total Delay		29.4	1.0		26.2	4.2			19.8		91.4	91.0
LOS		C	A		C	A			B		F	F
Approach Delay		28.9				4.7			19.8			59.5
Approach LOS		C				A			B			E
Queue Length 50th (ft)		651	0		8	112			0		104	105
Queue Length 95th (ft)		m754	m0		m28	106			35		161	162
Internal Link Dist (ft)		605				555			420			420
Turn Bay Length (ft)			105		120						100	
Base Capacity (vph)		3578	1144		207	3836			290		375	379
Starvation Cap Reductn		1451	0		0	80			0		0	0
Spillback Cap Reductn		404	0		8	0			7		0	0
Storage Cap Reductn		0	0		0	0			0		0	0
Reduced v/c Ratio		0.98	0.03		0.28	0.56			0.31		0.26	0.26

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 100 (63%), Referenced to phase 2:WBTL and 6:EBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 20.3 Intersection LOS: C
Intersection Capacity Utilization 70.3% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: NE 8th Avenue & Hallandale Bch Blvd

Lane Group	SBR
v/c Ratio	0.71
Control Delay	29.9
Queue Delay	0.0
Total Delay	29.9
LOS	C
Approach Delay	
Approach LOS	
Queue Length 50th (ft)	39
Queue Length 95th (ft)	115
Internal Link Dist (ft)	
Turn Bay Length (ft)	100
Base Capacity (vph)	484
Starvation Cap Reductn	0
Spillback Cap Reductn	0
Storage Cap Reductn	0
Reduced v/c Ratio	0.43

Intersection Summary

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	36	60	1954	59	31	161	1926	114	111	180	392	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		130		50		400		85	0		400	0
Storage Lanes		1		1		2		1	1		1	0
Taper Length (ft)		25				25			25			25
Lane Util. Factor	0.91	1.00	0.91	1.00	0.91	0.97	0.91	1.00	0.95	0.95	1.00	1.00
Ped Bike Factor												
Frt				0.850				0.850			0.850	
Flt Protected		0.950				0.950			0.950	0.997		
Satd. Flow (prot)	0	1770	5085	1583	0	3433	5085	1583	1665	1747	1568	0
Flt Permitted		0.950				0.950			0.950	0.997		
Satd. Flow (perm)	0	1770	5085	1583	0	3433	5085	1583	1665	1747	1568	0
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				61				102			124	
Link Speed (mph)			35				35			20		
Link Distance (ft)			635				1000			500		
Travel Time (s)			12.4				19.5			17.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.96	0.96	0.96	0.96	0.78	0.78	0.78	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Adj. Flow (vph)	40	67	2171	66	32	168	2006	119	142	231	503	0
Shared Lane Traffic (%)									10%			
Lane Group Flow (vph)	0	107	2171	66	0	200	2006	119	128	245	503	0
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Perm	Split	NA	Perm	
Protected Phases	1	1	6		5	5	2		4	4		
Permitted Phases				6				2			4	
Detector Phase	1	1	6	6	5	5	2	2	4	4	4	
Switch Phase												
Minimum Initial (s)	5.0	5.0	10.0	10.0	5.0	5.0	10.0	10.0	6.0	6.0	6.0	
Minimum Split (s)	11.0	11.0	34.0	34.0	11.0	11.0	34.0	34.0	44.0	44.0	44.0	
Total Split (s)	36.0	36.0	92.0	92.0	22.0	22.0	78.0	78.0	46.0	46.0	46.0	
Total Split (%)	22.5%	22.5%	57.5%	57.5%	13.8%	13.8%	48.8%	48.8%	28.8%	28.8%	28.8%	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	None	C-Min	C-Min	None	None	C-Min	C-Min	None	None	None	
Act Effct Green (s)		14.1	85.2	85.2		13.4	84.5	84.5	43.4	43.4	43.4	
Actuated g/C Ratio		0.09	0.53	0.53		0.08	0.53	0.53	0.27	0.27	0.27	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	0	0
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Lane Util. Factor	1.00	1.00
Ped Bike Factor		
Frt		
Flt Protected		
Satd. Flow (prot)	0	0
Flt Permitted		
Satd. Flow (perm)	0	0
Right Turn on Red		Yes
Satd. Flow (RTOR)		
Link Speed (mph)	25	
Link Distance (ft)	500	
Travel Time (s)	13.6	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.92	0.92
Growth Factor	100%	100%
Heavy Vehicles (%)	2%	2%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Adj. Flow (vph)	0	0
Shared Lane Traffic (%)		
Lane Group Flow (vph)	0	0
Turn Type		
Protected Phases		
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)		
Minimum Split (s)		
Total Split (s)		
Total Split (%)		
Yellow Time (s)		
All-Red Time (s)		
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag		
Lead-Lag Optimize?		
Recall Mode		
Act Effct Green (s)		
Actuated g/C Ratio		

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
v/c Ratio		0.69	0.80	0.08		0.70	0.75	0.13	0.28	0.52	0.98	
Control Delay		115.6	23.7	0.8		84.4	31.6	4.9	49.6	55.3	77.0	
Queue Delay		0.0	0.1	0.0		0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay		115.6	23.8	0.8		84.4	31.6	4.9	49.6	55.3	77.0	
LOS		F	C	A		F	C	A	D	E	E	
Approach Delay			27.3				34.8			66.9		
Approach LOS			C				C			E		
Queue Length 50th (ft)		108	790	4		106	557	8	115	237	~462	
Queue Length 95th (ft)		186	306	m2		150	664	43	155	285	#519	
Internal Link Dist (ft)			555				920			420		
Turn Bay Length (ft)		130		50		400		85			400	
Base Capacity (vph)		331	2756	886		343	2686	884	451	473	515	
Starvation Cap Reductn		0	77	0		0	0	0	0	0	0	
Spillback Cap Reductn		0	0	0		0	0	0	0	0	0	
Storage Cap Reductn		0	0	0		0	0	0	0	0	0	
Reduced v/c Ratio		0.32	0.81	0.07		0.58	0.75	0.13	0.28	0.52	0.98	

Intersection Summary

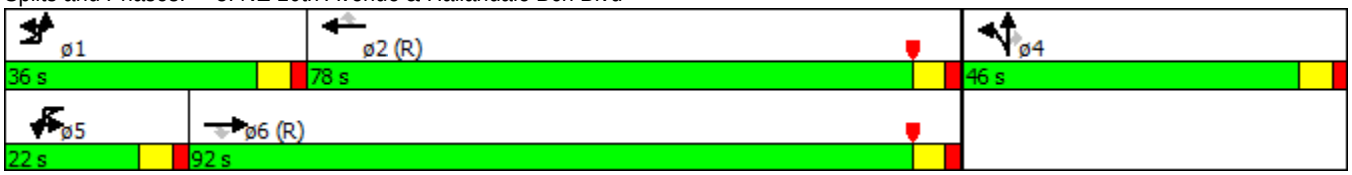
Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 98 (61%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.98
Intersection Signal Delay: 36.7 Intersection LOS: D
Intersection Capacity Utilization 82.5% ICU Level of Service E
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: NE 10th Avenue & Hallandale Bch Blvd



Lane Group	SBT	SBR
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)	420	
Turn Bay Length (ft)		
Base Capacity (vph)		
Starvation Cap Reductn		
Spillback Cap Reductn		
Storage Cap Reductn		
Reduced v/c Ratio		

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	142	83	101	42	100	19	5	128	1532	12	44	1257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%				0%			0%
Storage Length (ft)	30		0	60		0		150		0	150	
Storage Lanes	1		0	1		0		1		0	1	
Taper Length (ft)	25			25				25			25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	0.95	0.95	1.00	0.95
Ped Bike Factor												
Frt		0.918			0.976				0.999			0.994
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1805	1744	0	1787	1836	0	0	1770	3536	0	1787	3553
Flt Permitted	0.565			0.343				0.147			0.118	
Satd. Flow (perm)	1074	1744	0	645	1836	0	0	274	3536	0	222	3553
Right Turn on Red			Yes			Yes				Yes		
Satd. Flow (RTOR)		33			5				1			7
Link Speed (mph)		25			25				35			35
Link Distance (ft)		1000			1000				555			1000
Travel Time (s)		27.3			27.3				10.8			19.5
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.80	0.80	0.80	0.88	0.88	0.88	0.97	0.97	0.97	0.97	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	0%	0%	1%	1%	1%	2%	2%	2%	2%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%				0%			0%
Adj. Flow (vph)	178	104	126	48	114	22	5	132	1579	12	48	1381
Shared Lane Traffic (%)												
Lane Group Flow (vph)	178	230	0	48	136	0	0	137	1591	0	48	1438
Turn Type	Perm	NA		Perm	NA		Perm	Perm	NA		Perm	NA
Protected Phases		4			8				2			6
Permitted Phases	4			8			2	2			6	
Detector Phase	4	4		8	8		2	2	2		6	6
Switch Phase												
Minimum Initial (s)	6.0	6.0		6.0	6.0		10.0	10.0	10.0		10.0	10.0
Minimum Split (s)	33.0	33.0		31.0	31.0		23.0	23.0	23.0		23.0	23.0
Total Split (s)	35.0	35.0		35.0	35.0		125.0	125.0	125.0		125.0	125.0
Total Split (%)	21.9%	21.9%		21.9%	21.9%		78.1%	78.1%	78.1%		78.1%	78.1%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		1.0	1.0	1.0		1.0	1.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0		6.0	6.0			5.0	5.0		5.0	5.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	None	None		None	None		C-Min	C-Min	C-Min		C-Min	C-Min
Act Effct Green (s)	29.6	29.6		29.6	29.6			119.4	119.4		119.4	119.4
Actuated g/C Ratio	0.18	0.18		0.18	0.18			0.75	0.75		0.75	0.75

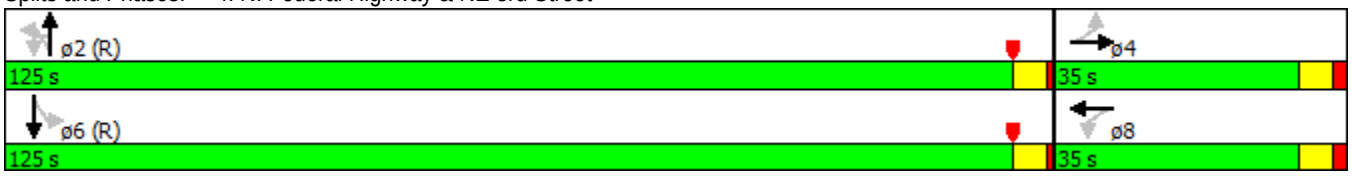
Lane Group	SBR
Lane Configurations	
Volume (vph)	52
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Lane Util. Factor	0.95
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.91
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Adj. Flow (vph)	57
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	
Minimum Split (s)	
Total Split (s)	
Total Split (%)	
Yellow Time (s)	
All-Red Time (s)	
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	
Lead-Lag Optimize?	
Recall Mode	
Act Effct Green (s)	
Actuated g/C Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
v/c Ratio	0.90	0.66		0.40	0.40			0.67	0.60		0.29	0.54
Control Delay	104.5	61.3		68.5	58.8			22.2	9.3		12.1	9.6
Queue Delay	0.0	0.0		0.0	0.0			0.0	0.0		0.0	0.0
Total Delay	104.5	61.3		68.5	58.8			22.2	9.3		12.1	9.6
LOS	F	E		E	E			C	A		B	A
Approach Delay		80.1			61.3				10.4			9.7
Approach LOS		F			E				B			A
Queue Length 50th (ft)	177	186		43	117			39	165		17	349
Queue Length 95th (ft)	#279	251		91	190			m66	m775		37	344
Internal Link Dist (ft)		920			920				475			920
Turn Bay Length (ft)	30			60				150			150	
Base Capacity (vph)	205	360		123	354			207	2674		167	2688
Starvation Cap Reductn	0	0		0	0			0	0		0	0
Spillback Cap Reductn	0	0		0	0			0	0		0	0
Storage Cap Reductn	0	0		0	0			0	0		0	0
Reduced v/c Ratio	0.87	0.64		0.39	0.38			0.66	0.59		0.29	0.53

Intersection Summary

Area Type: Other
Cycle Length: 160
Actuated Cycle Length: 160
Offset: 5 (3%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 20.1 Intersection LOS: C
Intersection Capacity Utilization 84.9% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 4: N. Federal Highway & NE 3rd Street



Lane Group	SBR
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	
Storage Cap Reductn	
Reduced v/c Ratio	

Intersection Summary