BH 164

North Miami Beach, Florida

prepared for:

BH Group

traffic study

TRAFTECH ENGINEERING, INC.

July 2022

TRAFTECH
ENGINEERING, INC.

July 28, 2022

Mr. Paul Murphy
BH Group
Miami, Florida

Re: **BH 164 - Traffic Study**

Dear Mr. Murphy:

Traf Tech Engineering, Inc. is pleased to provide you with the results of the traffic evaluation associated with the proposed high-rise residential and commercial development planned to be located at 2261 NE 164th Street in the City of North Miami Beach in Miami-Dade County, Florida. Figure 1 shows the location of the project site.

Project Description and Access

The project will consist of 400 dwelling units (High Rise), 1,825 square feet of retail use, and four parking spaces for public use (High Rise). Access to the site is planned via one access driveway off of NE 164th Street. Appendix A contains the site plan associated with the proposed development. Please note that will not be valet parking provided for any of the proposed land uses. For purposes of this traffic evaluation, the project is anticipated to be built and occupied in the year 2026. The following tasks were undertaken as part of this evaluation:

- Documented the existing lane geometry of the study area. Seven (7) intersections and the project driveway were identified as the locations that will be impacted the most by the proposed project. These intersections include NE 22nd Avenue at NE 167th Street, NE 164th Street, and NE 163rd Street. Biscayne Boulevard at NE 163rd Street and at NE 172nd Street. Dixie Highway at NE 172nd Street and NE 23rd Avenue at NE 163rd Street. Figure 2 illustrates the existing lane geometry of the study intersections.

- Collected intersection turning movement counts during the critical peak periods (7:00 AM to 9:00 AM) and (4:00 PM to 6:00 PM) at the following locations:

    1. NE 167th Street & NE 22nd Avenue (Signalized)
    2. NE 22nd Avenue & NE 164th Street (signalized)
    3. NE 22nd Avenue & SR 826/NE 163rd Street (signalized)

4. SR 826/NE 163rd Street & NE 23rd Avenue (stop control)
5. Biscayne Blvd & SR 826/NE 163rd Street (signalized)
6. Biscayne Boulevard and NE 172nd Street (signalized)
7. Dixie Highway and NE 172nd Street (signalized)

The above traffic counts were recorded on Tuesday, June 28 ,2022. Figure 3 documents the existing traffic counts. The traffic counts were collected during the peak season based on FDOT peak season adjustment factors. The traffic counts are included in Appendix B as well as the signal timing plans for the signalized intersections. The peak season adjustment factors and historical traffic counts are provided in Appendix C.

- A trip generation analysis was performed using the trip generation equations published in the Institute of Transportation Engineer's (ITE) Trip Generation manual (11th Edition). The trip generation analysis was undertaken for daily, AM peak hour, and PM peak hour conditions. Table 1 summarizes the trip generation analyses.

TABLE 1
Trip Generation Summary
BH 164

Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
High Rise Units (LUC 222)	400 units	1,881	107	36	71	127	71	56
Retail (LUC 822)	1,825 sq.ft.	307	9	5	4	23	12	11
Public Spaces (5 stalls) *	5 spaces	70	10	5	5	10	5	5
External Trips		**2,258**	**126**	**46**	**80**	**160**	**88**	**72**

Source: ITE Trip Generation Manual (11th Edition)

ITE Land Use Code 22 - Multifamily Housing High Rise (Not Close to Rail Transit)
Daily Trips: T = 3.76 (X) + 377.04 where X = number of units
AM Peak: T = 0.22 (X) + 18.85 (34% inbound and 66% outbound), X = number of units
PM Peak: T = 0.26 (X) + 23.12 (56% inbound and 44% outbound), X = number of units

ITE Land Use Code 822 - Strip Plaza (<40k)
Daily Trips: T = 42.20 (X) +229.68 where X = 1,000 sf
AM Peak: Ln (T) = 0.66 Ln (X) +1.84 (60% inbound and 40% outbound), X = 1,000 sf
PM Peak: T = 0.15 (X) (47% inbound and 53% outbound), X = 1,000 sf

*** Public Spaces**
Daily Trips: T = 7 times PM Peak (based on LUC 411 daily to PM Peak Ratio)
AM Peak: T = assumed to have 5 inbound trips and 5 outbound trips (conservative assumption)
PM Peak: T = assumed to have 5 inbound trips and 5 outbound trips (conservative assumption)

As indicated in Table 1, the proposed development is projected to generate approximately 2,258 daily trips, approximately 126 AM peak hour trips (46 inbound and 80 outbound) and approximately 160 trips during the typical afternoon peak period (88 inbound and 72 outbound).

The project's peak-hour trips documented in Table 1 were distributed and assigned to the access driveways based on Miami-Dade County's Cardinal Distribution information for the study area. Table 2 summarizes the County's cardinal distribution data for Traffic Analysis Zone 97, which is applicable to the project site from the latest SERPM data published by Miami-Dade County.

TABLE 2
Project Trip Distribution
TAZ # 97

Year	Movement							
	NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW
2015	21.20%	3.80%	1.70%	6.00%	19.20%	16.10%	17.10%	14.90%
2045	21.80%	3.00%	1.60%	6.30%	23.40%	15.40%	14.90%	13.70%
2026*	21.42%	3.51%	1.66%	6.11%	20.74%	15.84%	16.29%	14.46%

*Note: * Interpolated Values*
Source: Miami-Dade County (2045 SERPM)

o Using the trip distribution documented in Table 2, the following traffic assignment was assumed for the proposed development:

- 5% to and from the west via NE 172nd Street
- 5% to and from the west via NE 167th Street
- 5% to and from the west via NE 164th Street
- 16% to and from the west via NE 163rd Street
- 5% to and from the east via NE 163rd Street
- 14% to and from the north via Dixie Highway
- 21% to and from the north via Biscayne Boulevard
- 4% to and from the south via NE 22 Avenue
- 25% to and from the south via Biscayne Boulevard

Figure 4 documents the project traffic assignment based on the above traffic percentages.

o Figure 5 presents the future traffic volumes for the study area. Figure 5 includes background traffic only (without the proposed project) and Figure 6 includes the additional traffic anticipated to be generated by the proposed development. The background traffic includes traffic growth based on historical traffic data within the study area (refer to Appendix D). As indicated in the growth analysis presented in Appendix D, growth has not occurred over the past ten (10) years (2011 -2021) and to assess traffic impacts with a conservative approach, a 1.0% growth rate, compounded

annually was applied for the future traffic projections to account for future increases in traffic volumes. Please note that 2020 traffic volumes were not induced in the analysis since traffic did not present regular traffic patterns due to the Covid-19 pandemic. In addition, traffic associated with committed developments (17450 Biscayne Boulevard) were also included. The future traffic volumes are presented in Appendix E in tabular format.

- To determine the impacts created to the impacted intersections, capacity/level of service analyses were undertaken using the SYNCHRO software. The results of the capacity/level of service analyses are presented in Table 3. As summarized in Table 3, all intersections are expected to operate adequately in the year 2026 with the proposed project in place, except for the intersection of Biscayne Boulevard and NE 163rd Street. However, it should be noted that the intersection is currently failing (LOS E), and it is expected to fail without the project in place. Also, the increase in delay due to the proposed project is minimal (less than 2 seconds). Therefore, the project's traffic impacts are considered minimal/de-minimus. The project driveway is also expected to operate adequately. The SYNCHRO outputs are contained in Appendix F.

Need for Right-Turn Lanes

The proposed development proposes to have one access driveway. The need for turning lanes is summarized in Table 4. As indicated in the table, dedicating eastbound left-turn or westbound right-turn lanes are not warranted.

Table 4
BH 164
Need for Turning Lanes

Location	Jurisdiction	RT Volume Requirement (vph)	RT Volume (vph)*	RT Lane Required	LT Volume Requirement (vph)(1)	LT Volume (vph)	LT Lane Required
NE 164th Street & Driveway	North Miami	80 vph	22/40	No	30/150 vph or 50/100	24/48	No

* Volumes extracted from Figure 4
(1) AASHTO Green Book (7th Edition)

Porte-Cochere Drop-Off

As depicted in the site plan contained in Appendix A, a one-way counterclockwise circulation aisle with a porte-cochere is proposed on the south side of the residential building for drop-off purposes. One-way signs and DO NOT ENTER signs should be placed to enforce the desired clockwise operation. Additionally, pavement arrows should be placed at the entrance and exit of the subject circular drive aisle to further emphasize the desired traffic flow.

TABLE 3
Level of Service Analyses
17450 Biscayne Boulevard

Intersection	Time Period	EASTBOUND		WESTBOUND		NORTHBOUND		SOUTHBOUND		Intersection	
		Approach		Approach		Approach		Approach			
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
101: NE 167th Street & NE 22nd Avenue	AM	D/D/D	38.1/38.0/38.0	D/D/D	36.7/37.0/37.4	B/B/B	13.5/13.9/14.2	B/B/B	12.5/12.9/13.1	C/C/C	22.9/23.2/23.4
	PM	D/D/D	38.2/38.2/38.1	D/D/S	37.2/36.8/36.5	B/B/B	17.5/18.2/19.0	B/B/B	16.6/17.3/17.9	C/C/C	25.8/26.0/26.4
102: NE 22nd Avenue & NE 164th Street	AM	C/C/C	31.7/31.5/28.6	C/C/C	27.4/27.2/30.0	A/A/A	3.6/3.7/4.4	A/A/A	7.3/7.6/8.5	B/B/B	11/11.1/12.3
	PM	E/E/E	77.0/76.7/76.5	E/E/E	71/70.6/70.6	A/A/A	0.6/0.6/0.6	A/A/A	5.8/6.0/6.0	B/B/B	13.6/13.7/13.6
103: NE 22nd Avenue & SR 826/NE 163rd Street	AM	C/C/C	20.2/21.5/23.5	A/A/A	2.9/3.3/3.7	F/F/F	84.1/85.8/85.9	E/F/E	79.8/81.5/74.6	C/C/C	30.5/31.5/31.8
	PM	C/C/C	23.6/25.1/26.9	A/A/A	4/4.7/5.3	F/F/F	94.2/97.3/97.7	F/F/F	93.9/95.9/89.6	C/C/C	32.9/34.3/34.8
104: SR 826/NE 163rd Street & NE 23rd Avenue	AM							B/B/B	10.4/10.5/10.7		
	PM							B/B/B	11.9/12.2/12.5		
105: Biscayne Blvd & SR 826/NE 163rd Street	AM	D/D/D	49.4/48.9/48.6	E/E/E	62.6/62.5/62.7	D/D/D	50.3/52.2/52.7	E/F/F	75.1/81.5/81.9	E/E/E	60.7/63.2/63.3
	PM	D/D/D	49.2/49.3/48.9	F/F/F	85/94.5/95.1	E/F/F	74.4/82.7/87.9	E/E/E	60.4/62.0/62.4	E/E/E	68.4/73.7/75.5
106: Dixie Highway & NE 172 Street	AM	C/C/C	22.8/22.4/22.4	C/B/B	20.2/19.8/19.8	A/A/A	8.5/9.2/9.5	A/A/A	7.9/8.5/8.6	B/B/B	15.3/15.4/15.4
	PM	B/B/B	19.3/19.0/19.0	C/C/C	22.3/22.4/22.4	B/B/B	10.7/11.6/11.9	A/A/A	8.8/9.4/9.5	B/B/B	15.4/15.8/15.9
107: NE 172 Street & Biscayne Boulevard	AM	E/E/E	68.4/68.5/68.5	F/F/F	99.6/98.2/98.2	C/C/C	29.8/32.7/32.8	C/D/D	34.8/37.3/37.5	D/D/D	39.5/41.7/41.9
	PM	E/E/E	69.9/68.1/67.9	F/F/F	81.9/82.1/82.3	C/C/C	28.1/30.7/30.9	C/D/D	34.9/38.6/39.0	D/D/D	36.3/39.0/39.3
202: NE 164th Street & Driveway	AM							A	8.40		
	PM							A	8.40		

SOURCE: SYNCHRO. LEGEND: Existing/Background/Future

Proposed Roundabout

A proposed roundabout is planned for the intersection of NE164th Street and NE 23rd Avenue. The movements at the roundabout will primarily include northbound left-turns and eastbound right-turns. These movements do not conflict with each other and therefore, no delay is expected since they will operate as free-flowing movements. The north leg of the roundabout is for fire access only (for the exclusive use of emergency vehicles).

Multimodal Transportation Amenities

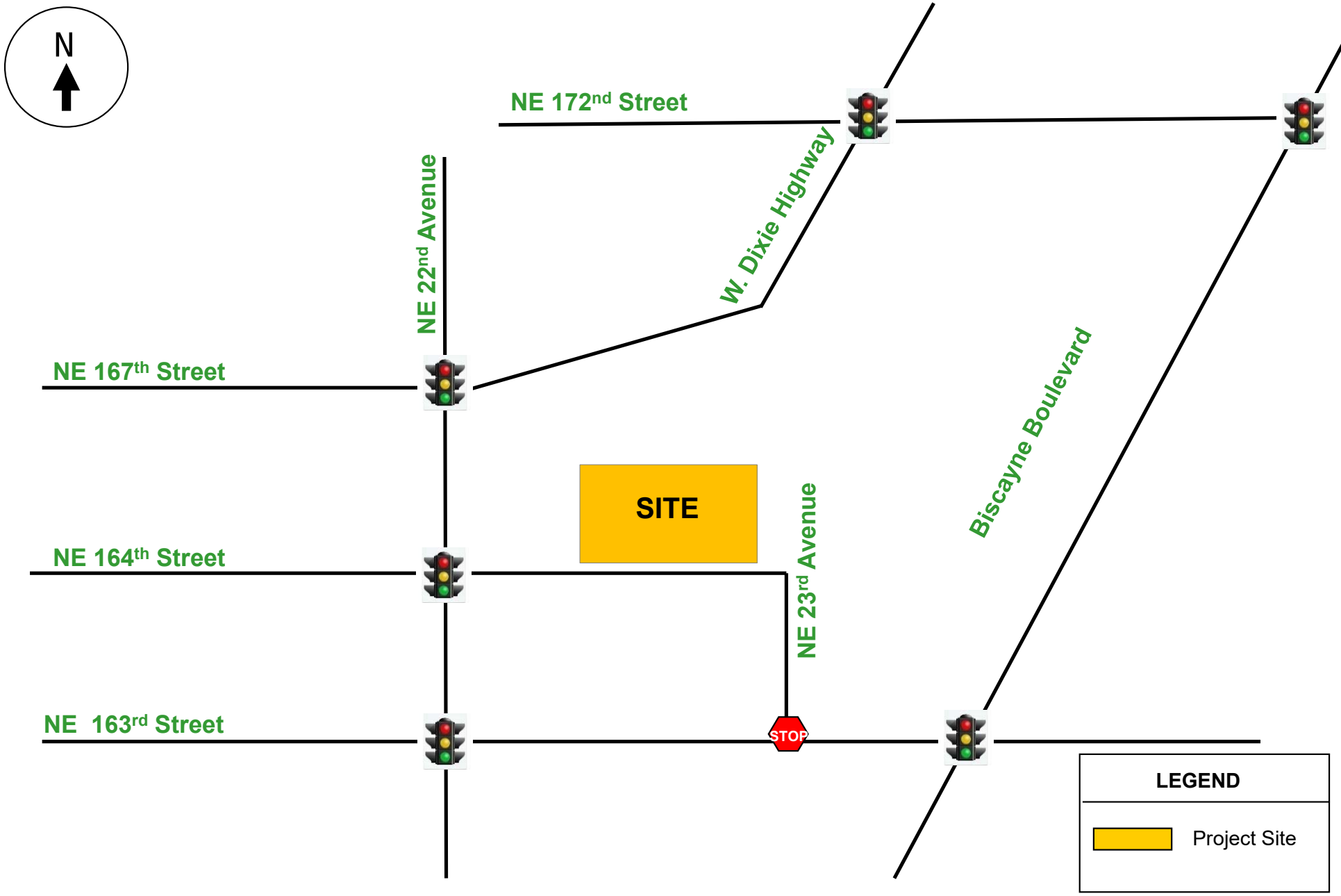
In the immediate vicinity of the BH 164 site, there are several multimodal facilities such as safe pedestrian features (sidewalks and crosswalks at nearby signalized intersections), bicycle lanes and public transportation. Pedestrian Sidewalks and Signalized Crosswalks Sidewalks are provided on both sides along NE 163rd Street, NE 172nd Street, and Biscayne Boulevard.

Miami-Dade Transit (MDT) and the City of North Miami Beach provide bus service to and from the project area via three (3) routes: - Route 105/Route E operates along SR 826/NE 163rd Street within the vicinity of the project. This route serves the Golden Glades Park & Ride Lot, Aventura Mall, and the Gulfstream Park. This route operates with 30-minute headways during the A.M. and P.M. peak hours and provides connecting service to additional MDT bus routes. - North Miami Beach's free trolley NMB-Line Route A operates along SR 826/NE 163rd Street within the vicinity of the project. The route originates at the Intracoastal Mall and offers connections to other routes serving City Hall, Fulford Elementary, Florida International University, and Nova University. This route operates with 60-minute headways during the A.M. and P.M.

Sincerely,

TRAF TECH ENGINEERING, INC.

Joaquin E. Vargas, P.E.
Senior Transportation Engineer



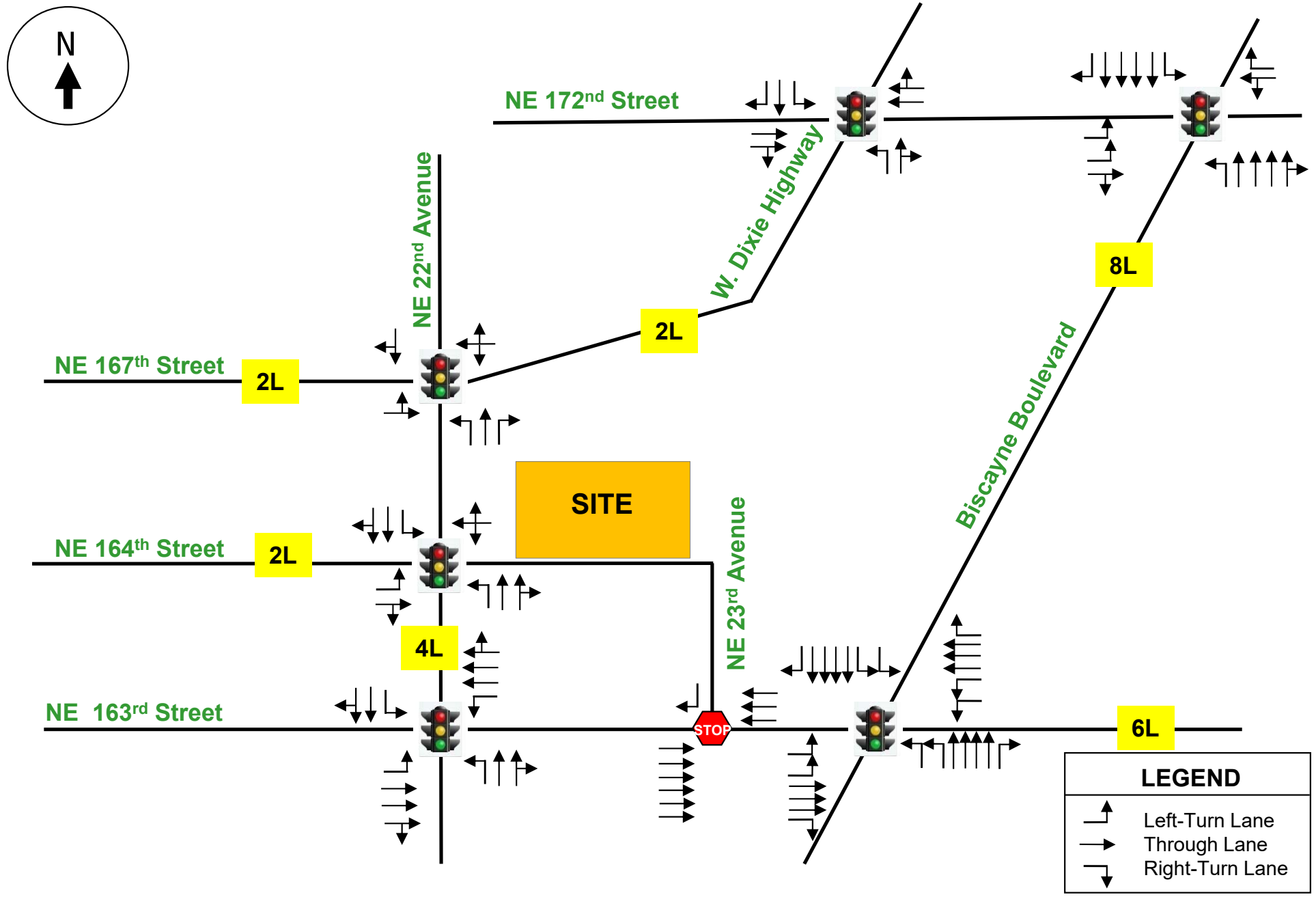
TRAFTECH ENGINEERING, INC.

LOCATION MAP

FIGURE 1

BH 164

North Miami Beach, Florida



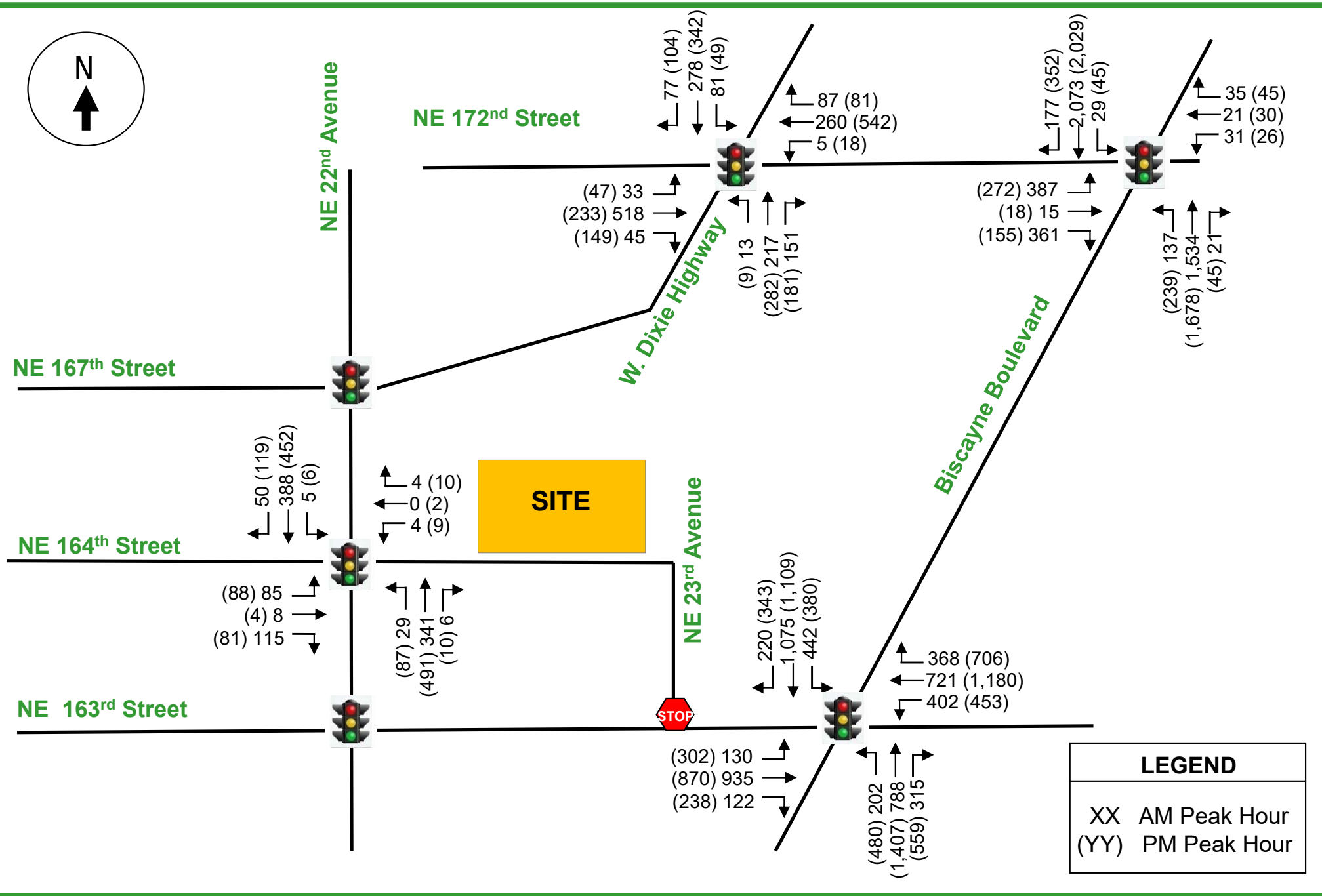
TRAFTECH ENGINEERING, INC.

EXISTING LANE GEOMETRY

FIGURE 2

BH 164

North Miami Beach, Florida



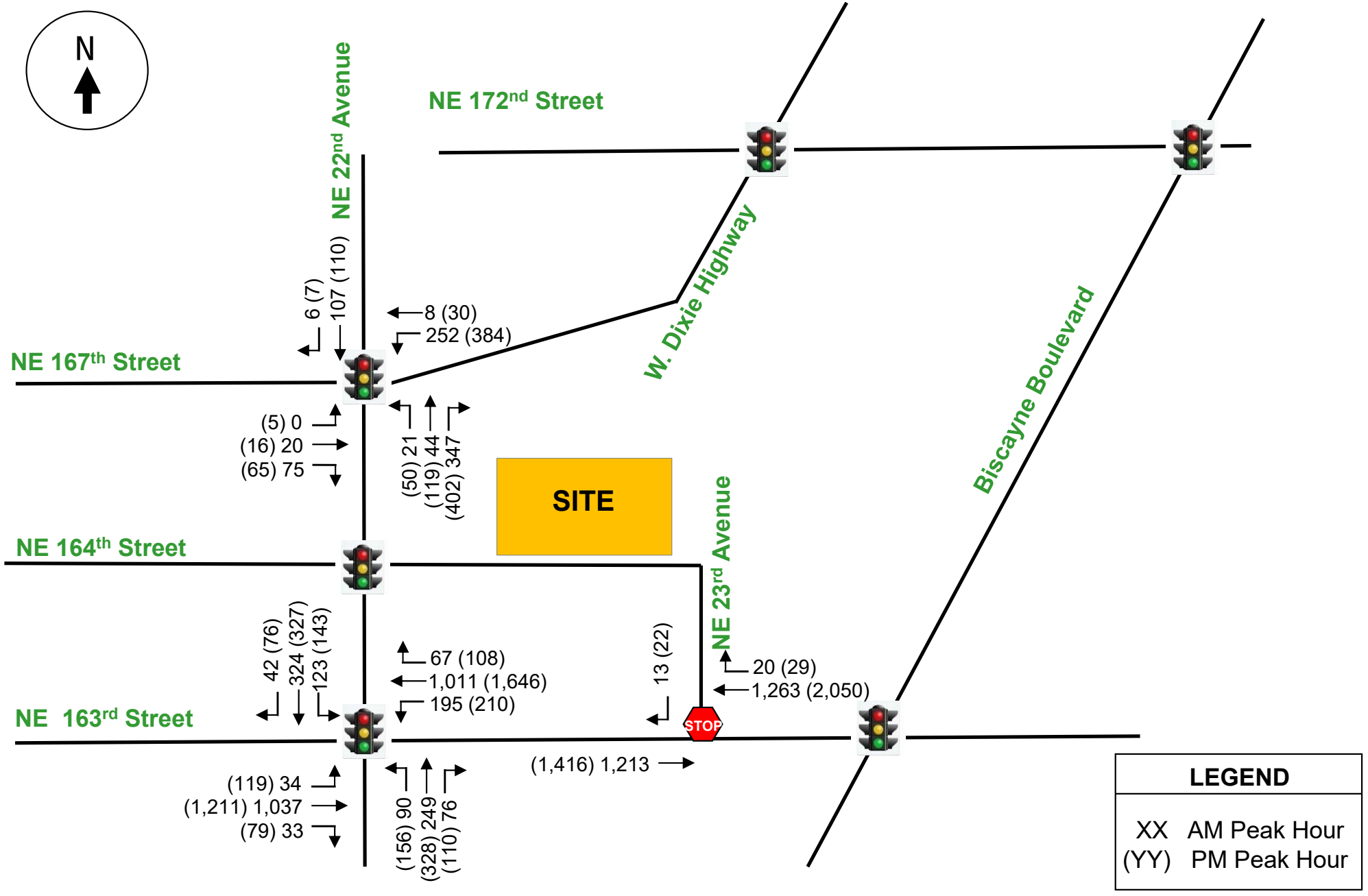
TRAFTECH ENGINEERING, INC.

TRAFFIC COUNTS
(Year 2022 Peak Season)

FIGURE 3A

BH 164

North Miami Beach, Florida



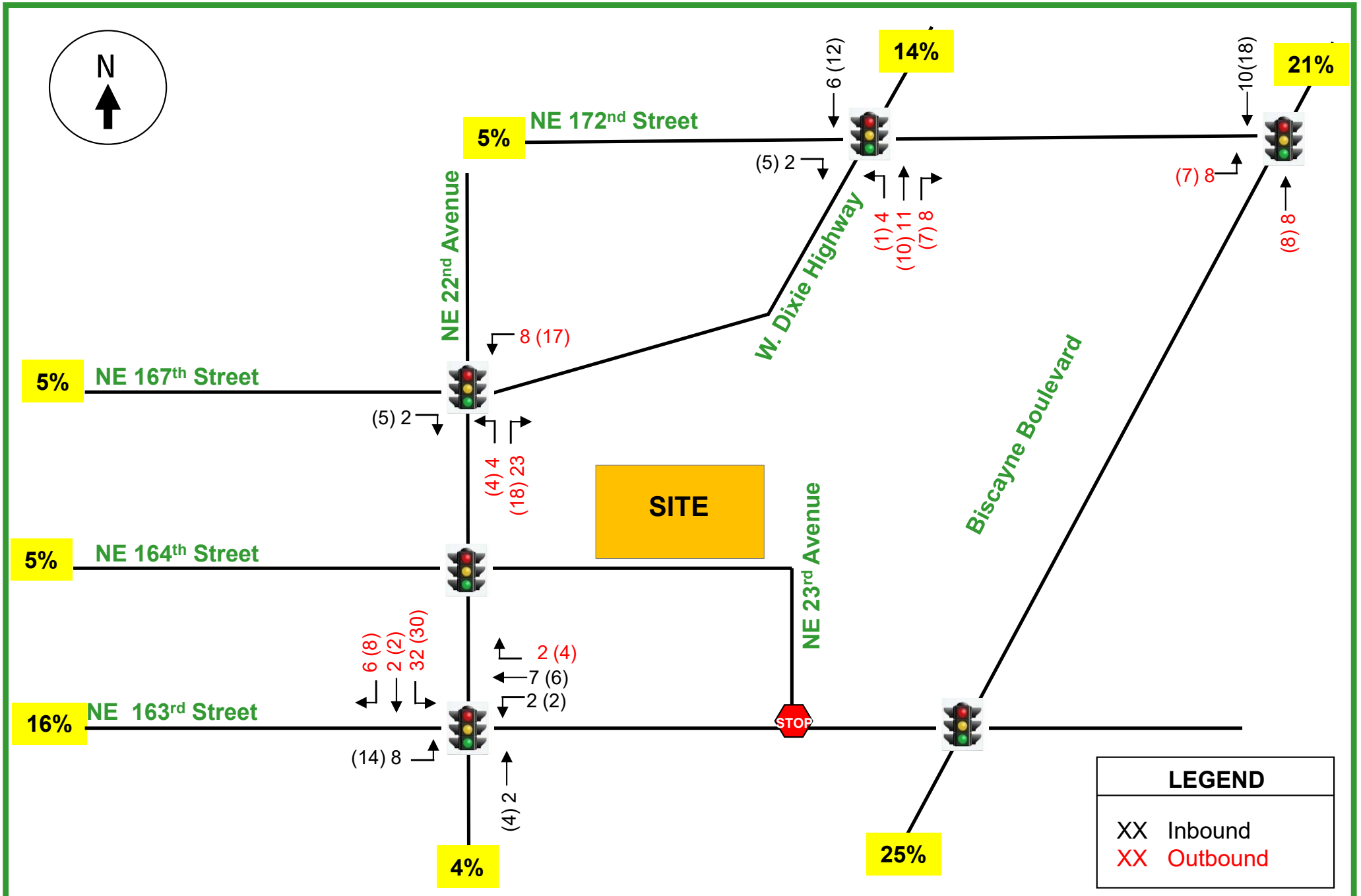
TRAFTECH ENGINEERING, INC.

TRAFFIC COUNTS
(Year 2022 Peak Season)

FIGURE 3B

BH 164

North Miami Beach, Florida



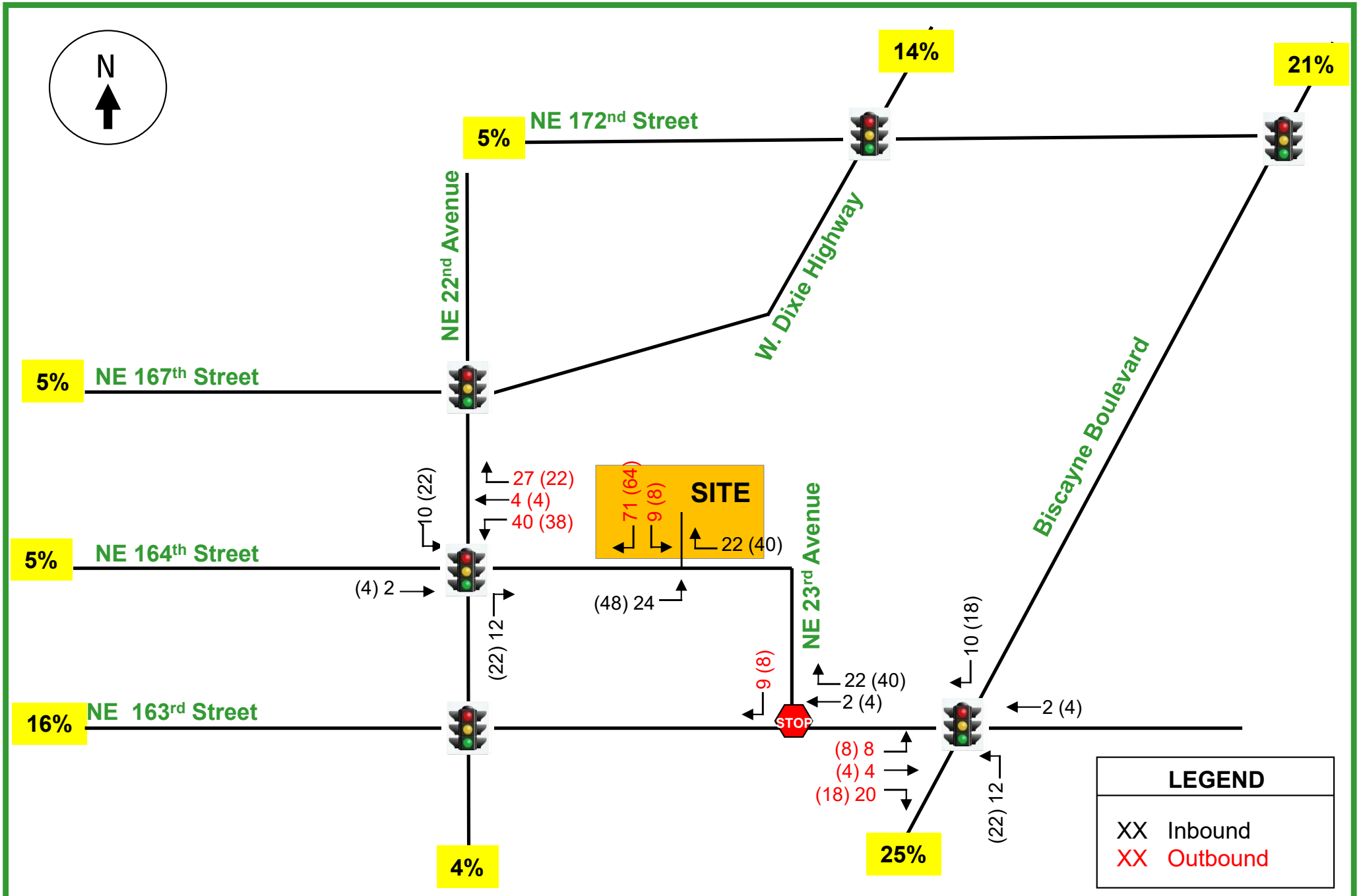
TRAFTECH ENGINEERING, INC.

PROJECT TRIP DISTRIBUTION
(Net New Trips)

FIGURE 4A

BH 164

North Miami Beach, Florida



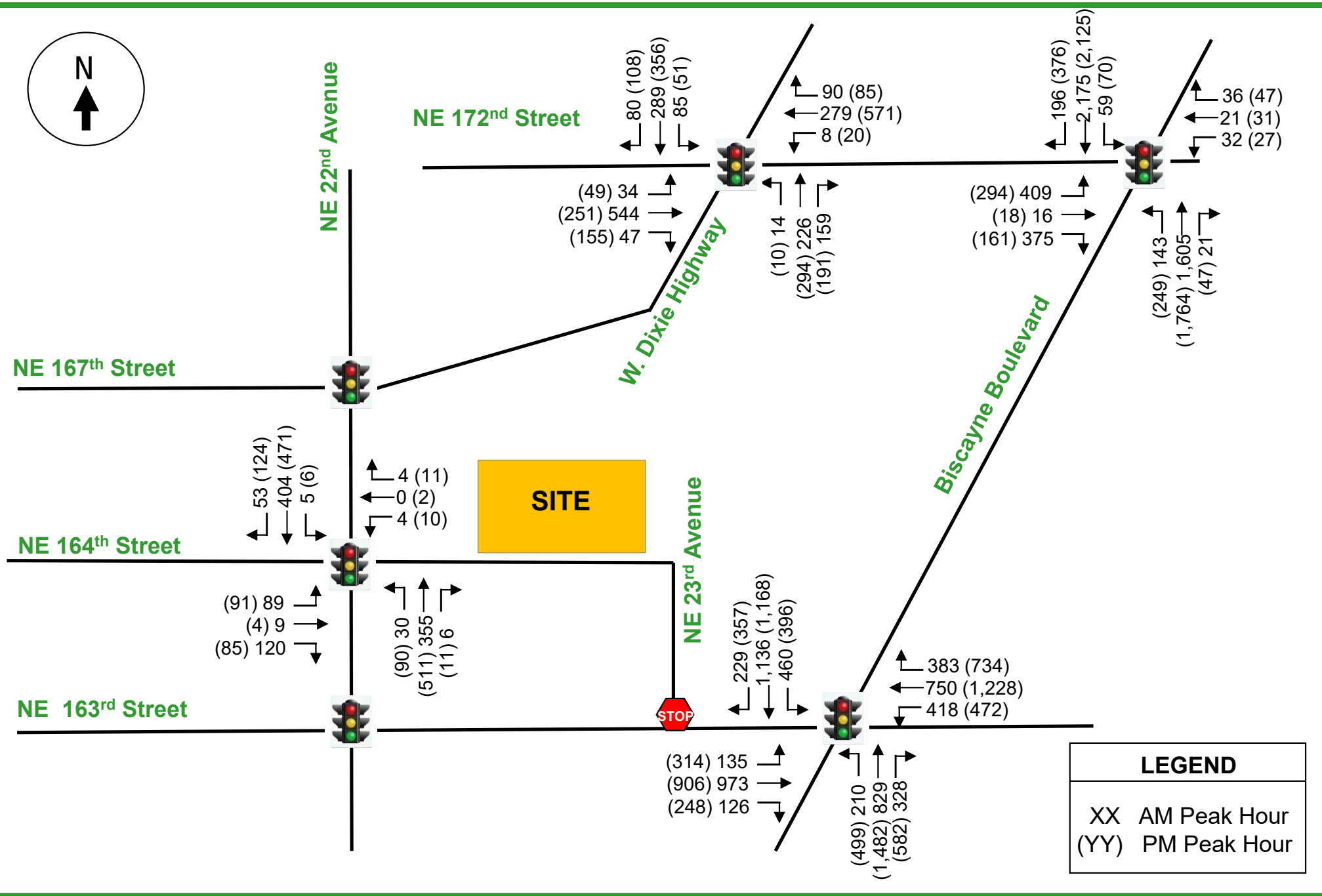
TRAFTECH ENGINEERING, INC.

PROJECT TRIP DISTRIBUTION
(Net New Trips)

FIGURE 4B

BH 164

North Miami Beach, Florida



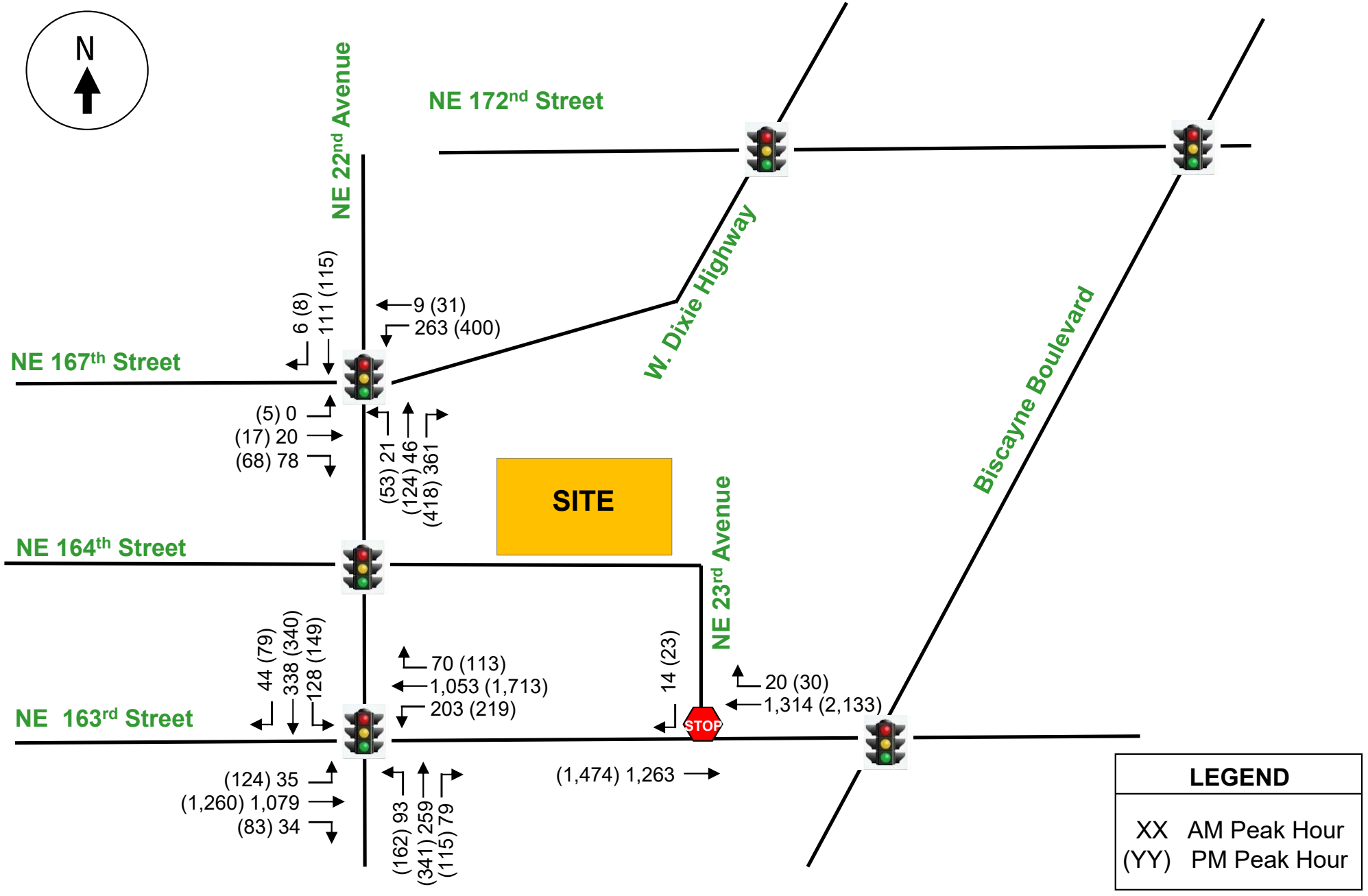
TRAFTECH ENGINEERING, INC.

BACKGROUND TRAFFIC VOLUMES without Project Trips
(Year 2026 Peak Season)

FIGURE 5A

BH 164

North Miami Beach, Florida



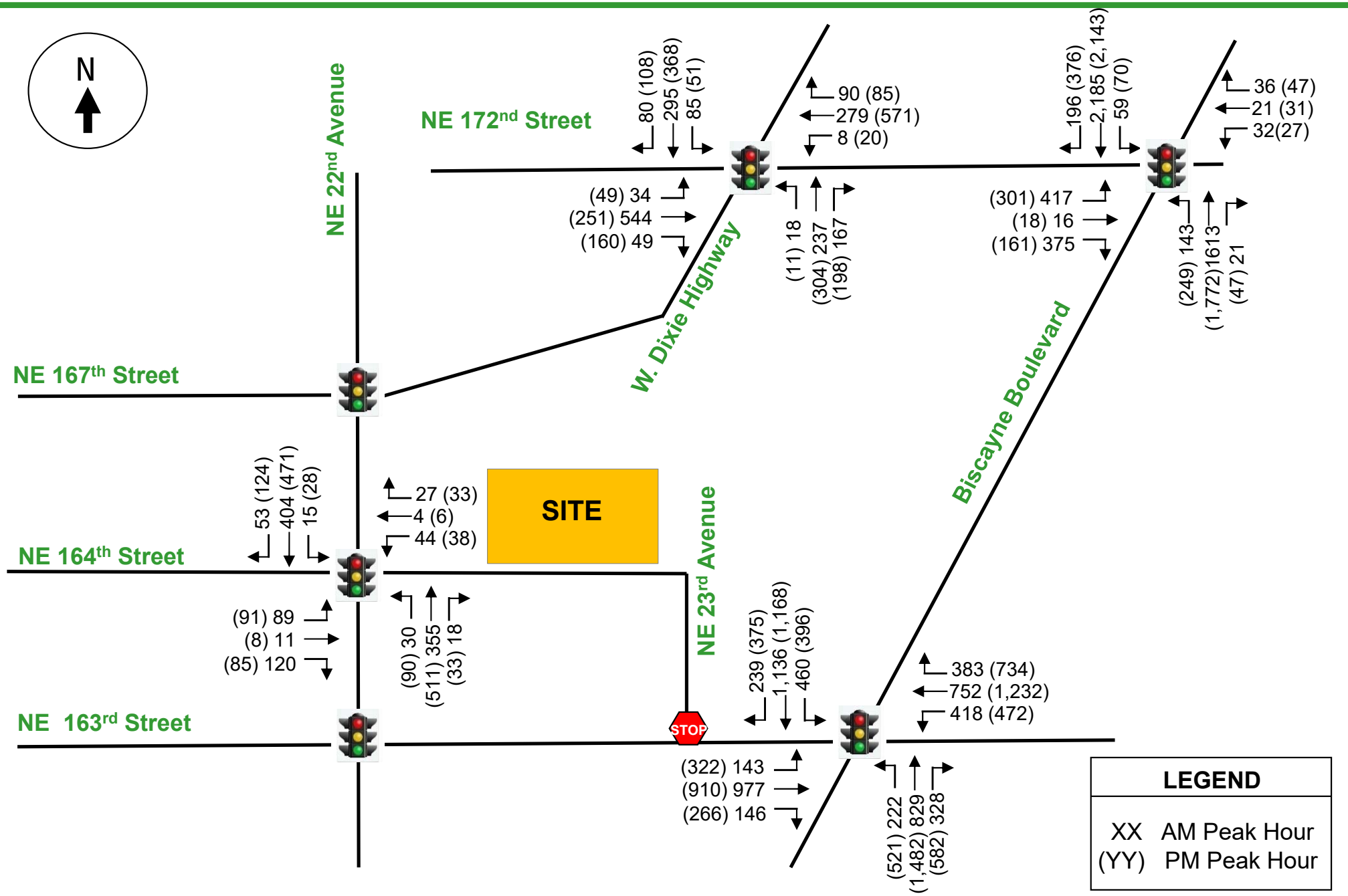
TRAFTECH ENGINEERING, INC.

BACKGROUND TRAFFIC VOLUMES without Project Trips
(Year 2026 Peak Season)

FIGURE 5B

BH 164

North Miami Beach, Florida



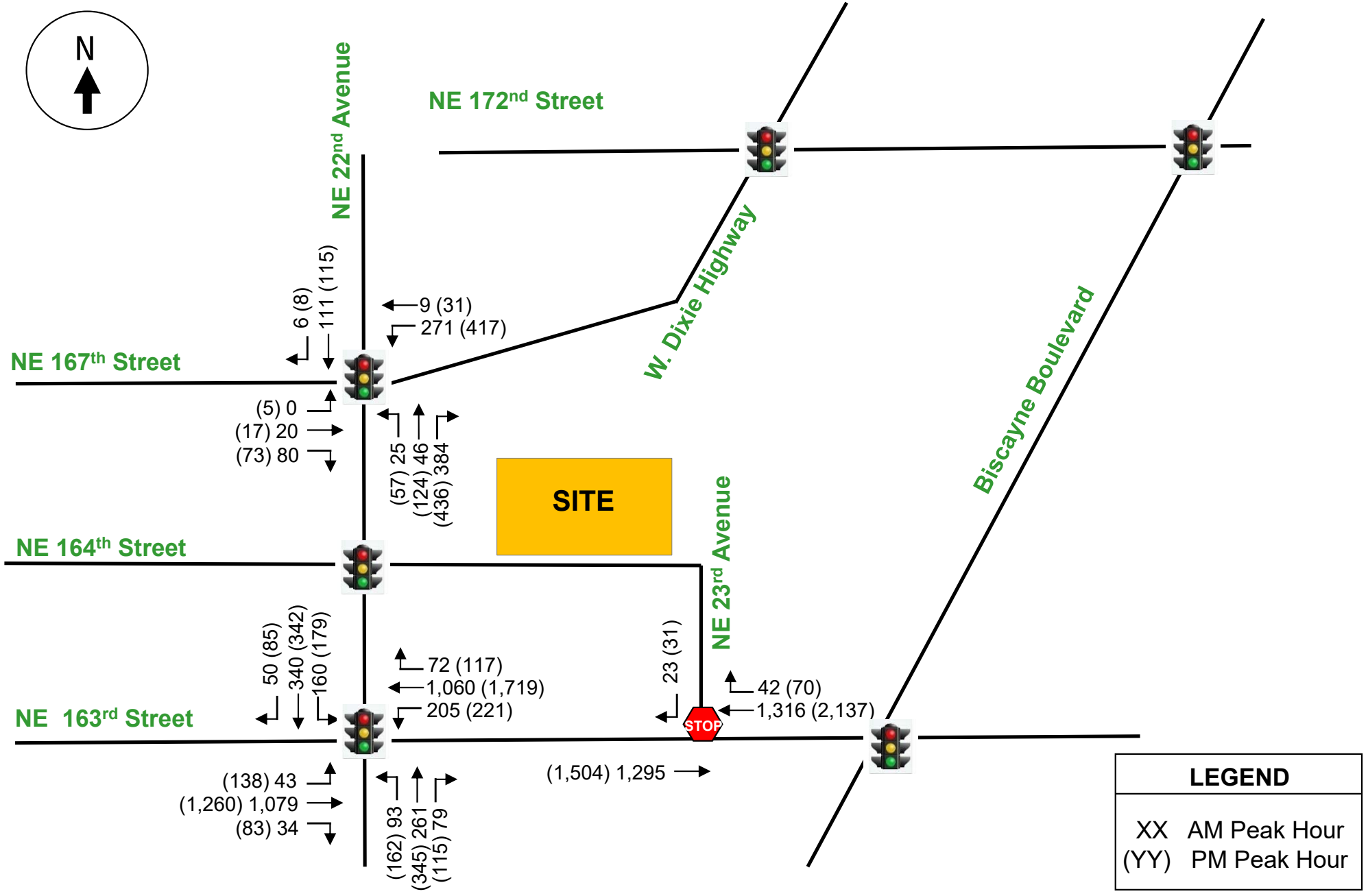
TRAFTECH ENGINEERING, INC.

TOTAL TRAFFIC VOLUMES with Project Trips (Year 2026 Peak Season)

FIGURE 6A

BH 164

North Miami Beach, Florida



TRAFTECH ENGINEERING, INC.

TOTAL TRAFFIC VOLUMES with Project Trips (Year 2026 Peak Season)

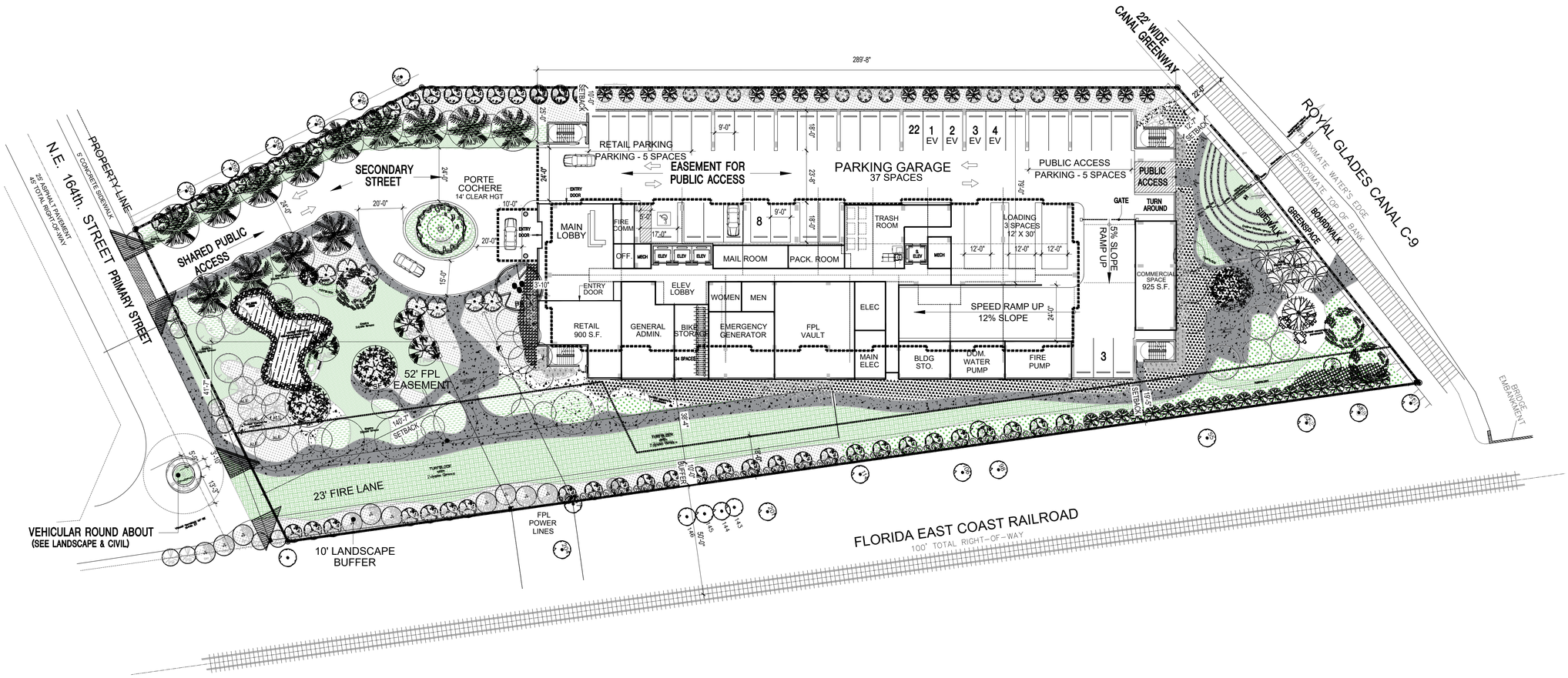
FIGURE 6B

BH 164

North Miami Beach, Florida

APPENDIX A

Site Plan
BH 164



1ST LEVEL PLAN

SCALE: 1"=25'-0"

COHEN • FREEDMAN • ENCINOSA & ASSOC.
Architects, PA
8085 N.W. 155th Street Miami Lakes, Florida 33016 305·826·3999

TRAD REVIEW

BH 164

2261 NE 164TH STREET, NORTH MIAMI BEACH, FL

1ST LEVEL PLAN

revisions:

drawn by: LF/SP/JG/KM/AB

date: 7/8/2022

sheet no: A2.0

project: 3903

APPENDIX B

Traffic Counts and Signal Timing

Traf Tech Engineering Inc.

File Name : 1-NE 22nd Ave & NE 167th St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 1

Groups Printed- Peds & Bikes

	NE 22nd Ave From North				NE 167th Street From East				NE 22nd Ave From South				NE 167th Street From West				
Start Time	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	Int. Total
07:00 AM	0	0	0	2	1	0	0	0	0	0	0	0	1	0	0	5	9
07:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	5
07:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3
07:45 AM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	2
Total	1	0	0	4	1	0	0	0	0	0	0	0	4	0	0	9	19
08:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	3
08:15 AM	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	3	6
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	3
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	0	0	2	1	0	0	0	0	0	0	0	3	0	0	8	14
*** BREAK ***																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	4	7
04:30 PM	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	6	9
04:45 PM	0	0	0	1	0	0	0	1	0	0	0	0	2	0	0	5	9
Total	0	0	0	3	0	0	0	1	0	0	0	0	7	0	0	16	27
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
05:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	7	9
05:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2	4
05:45 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	4	6
Total	0	0	0	4	0	0	0	0	0	0	0	0	2	0	0	17	23
Grand Total	1	0	0	13	2	0	0	1	0	0	0	0	16	0	0	50	83
Apprch %	7.1	0	0	92.9	66.7	0	0	33.3	0	0	0	0	24.2	0	0	75.8	
Total %	1.2	0	0	15.7	2.4	0	0	1.2	0	0	0	0	19.3	0	0	60.2	

Traf Tech Engineering Inc.

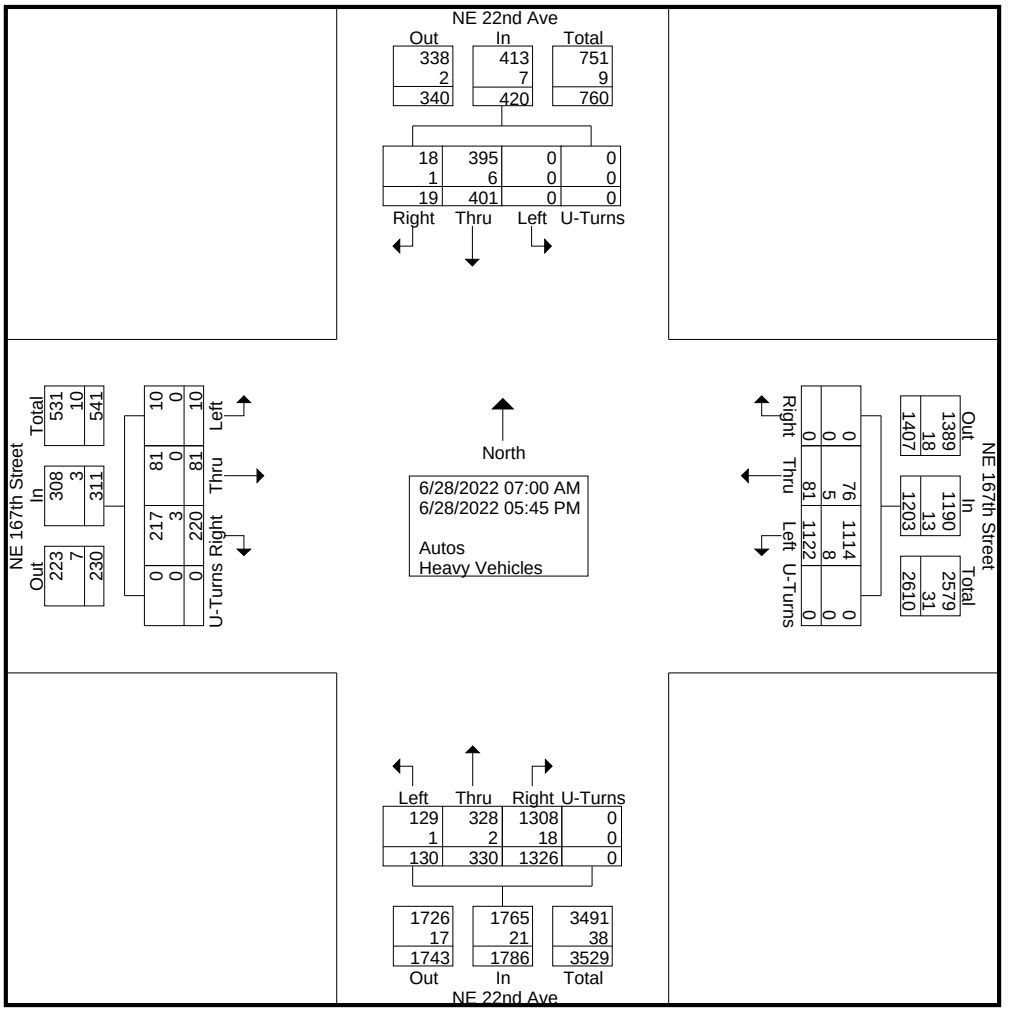
File Name : 1-NE 22nd Ave & NE 167th St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 1

Groups Printed- Autos - Heavy Vehicles

	NE 22nd Ave From North					NE 167th Street From East					NE 22nd Ave From South					NE 167th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00 AM	2	19	0	0	21	0	2	28	0	30	45	8	4	0	57	9	5	0	0	14	122
07:15 AM	0	23	0	0	23	0	2	46	0	48	43	19	3	0	65	8	5	0	0	13	149
07:30 AM	1	25	0	0	26	0	4	37	0	41	65	17	5	0	87	6	7	1	0	14	168
07:45 AM	1	27	0	0	28	0	2	51	0	53	81	15	5	0	101	15	5	0	0	20	202
Total	4	94	0	0	98	0	10	162	0	172	234	59	17	0	310	38	22	1	0	61	641
08:00 AM	1	35	0	0	36	0	0	41	0	41	85	11	6	0	102	14	5	0	0	19	198
08:15 AM	1	18	0	0	19	0	2	56	0	58	76	7	5	0	88	24	4	0	0	28	193
08:30 AM	3	25	0	0	28	0	3	72	0	75	81	10	5	0	96	19	3	0	0	22	221
08:45 AM	1	26	0	0	27	0	3	76	0	79	95	15	4	0	114	16	7	0	0	23	243
Total	6	104	0	0	110	0	8	245	0	253	337	43	20	0	400	73	19	0	0	92	855
*** BREAK ***																					
04:00 PM	0	20	0	0	20	0	5	86	0	91	90	29	9	0	128	13	4	1	0	18	257
04:15 PM	1	22	0	0	23	0	10	90	0	100	92	27	19	0	138	2	6	3	0	11	272
04:30 PM	0	20	0	0	20	0	7	86	0	93	89	32	8	0	129	15	5	0	0	20	262
04:45 PM	1	34	0	0	35	0	12	80	0	92	94	24	8	0	126	16	9	0	0	25	278
Total	2	96	0	0	98	0	34	342	0	376	365	112	44	0	521	46	24	4	0	74	1069
05:00 PM	2	28	0	0	30	0	6	94	0	100	116	30	14	0	160	17	3	1	0	21	311
05:15 PM	2	21	0	0	23	0	9	95	0	104	97	32	7	0	136	13	5	0	0	18	281
05:30 PM	2	26	0	0	28	0	5	87	0	92	88	32	13	0	133	17	2	2	0	21	274
05:45 PM	1	32	0	0	33	0	9	97	0	106	89	22	15	0	126	16	6	2	0	24	289
Total	7	107	0	0	114	0	29	373	0	402	390	116	49	0	555	63	16	5	0	84	1155
Grand Total	19	401	0	0	420	0	81	1122	0	1203	1326	330	130	0	1786	220	81	10	0	311	3720
Apprch %	4.5	95.5	0	0		0	6.7	93.3	0		74.2	18.5	7.3	0		70.7	26	3.2	0		
Total %	0.5	10.8	0	0	11.3	0	2.2	30.2	0	32.3	35.6	8.9	3.5	0	48	5.9	2.2	0.3	0	8.4	
Autos	18	395	0	0	413	0	76	1114			1308										
% Autos	94.7	98.5	0	0	98.3	0	93.8	99.3	0	98.9	98.6	99.4	99.2	0	98.8	98.6	100	100	0	99	98.8
Heavy Vehicles																					
% Heavy Vehicles	5.3	1.5	0	0	1.7	0	6.2	0.7	0	1.1	1.4	0.6	0.8	0	1.2	1.4	0	0	0	1	1.2

Traf Tech Engineering Inc.

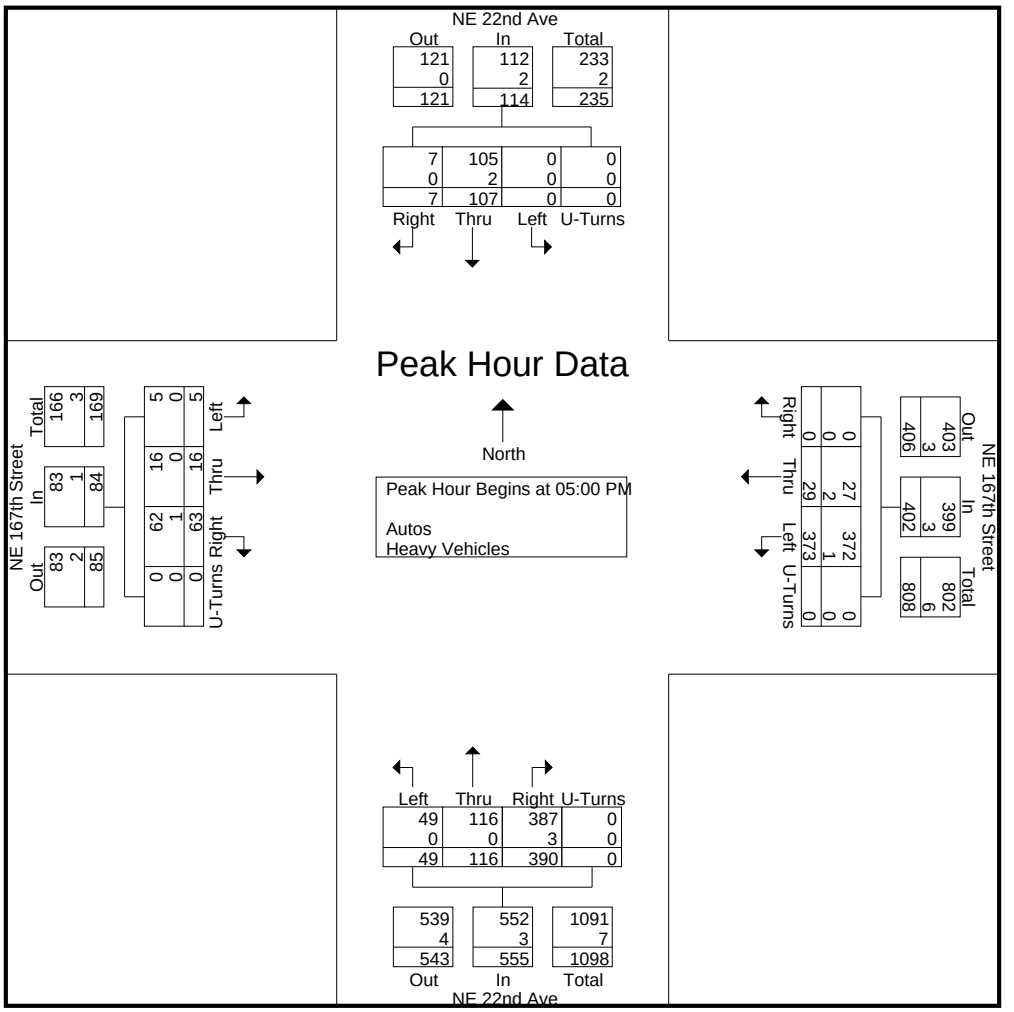
File Name : 1-NE 22nd Ave & NE 167th St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 2



Traf Tech Engineering Inc.

File Name : 1-NE 22nd Ave & NE 167th St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 3

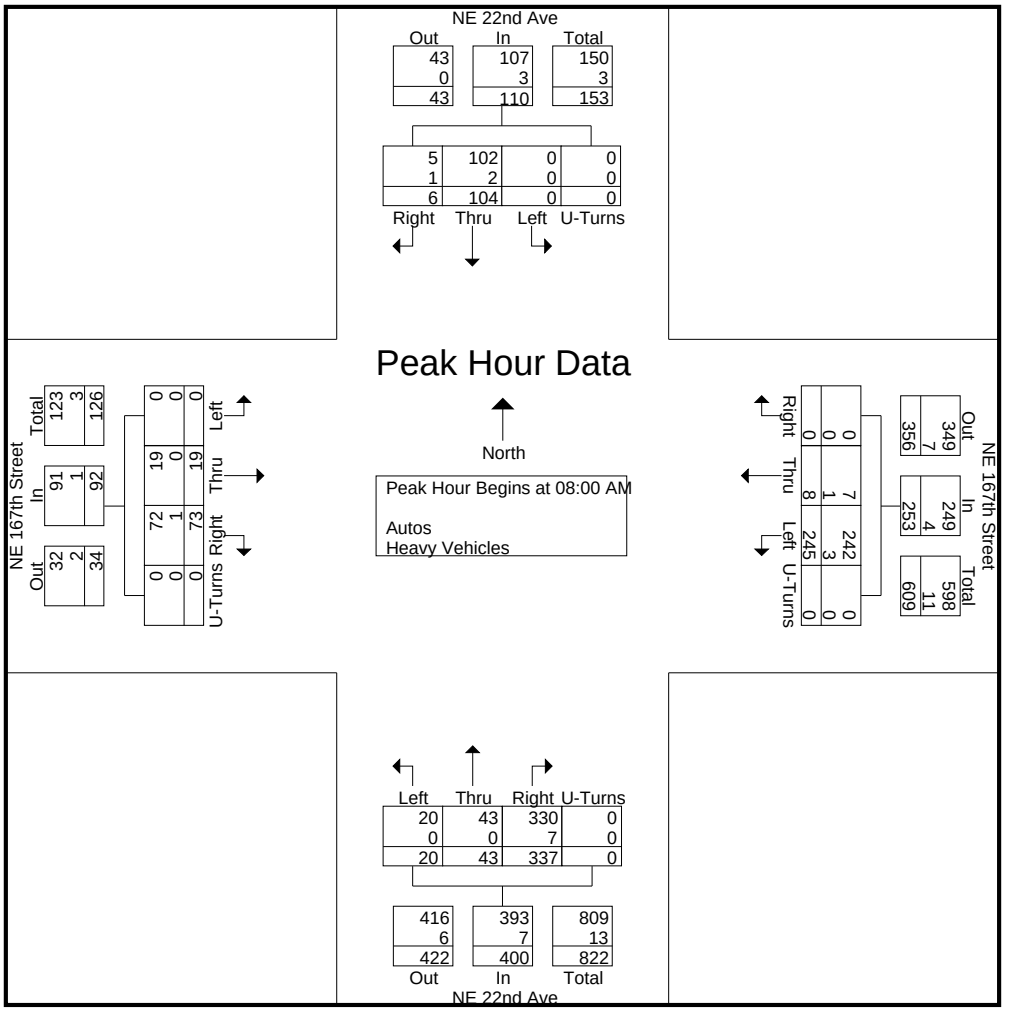
	NE 22nd Ave From North					NE 167th Street From East					NE 22nd Ave From South					NE 167th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	**2**	28	0	0	30	0	6	94	0	100	**116**	30	14	0	**160**	**17**	3	1	0	21	**311**
05:15 PM	2	21	0	0	23	0	**9**	95	0	104	97	**32**	7	0	136	13	5	0	0	18	281
05:30 PM	2	26	0	0	28	0	5	87	0	92	88	32	13	0	133	17	2	**2**	0	21	274
05:45 PM	1	**32**	0	0	**33**	0	9	**97**	0	**106**	89	22	**15**	0	126	16	**6**	2	0	**24**	289
Total Volume	7	107	0	0	114	0	29	373	0	402	390	116	49	0	555	63	16	5	0	84	1155
% App. Total	6.1	93.9	0	0		0	7.2	92.8	0		70.3	20.9	8.8	0		75	19	6	0		
PHF	.875	.836	.000	.000	.864	.000	.806	.961	.000	.948	.841	.906	.817	.000	.867	.926	.667	.625	.000	.875	.928
Autos	7	105	0	0	112	0	27	372	0	399	387	116	49	0	552	62	16	5	0	83	1146
% Autos	100	98.1	0	0	98.2	0	93.1	99.7	0	99.3	99.2	100	100	0	99.5	98.4	100	100	0	98.8	99.2
Heavy Vehicles																					
% Heavy Vehicles	0	1.9	0	0	1.8	0	6.9	0.3	0	0.7	0.8	0	0	0	0.5	1.6	0	0	0	1.2	0.8



Traf Tech Engineering Inc.

File Name : 1-NE 22nd Ave & NE 167th St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 4

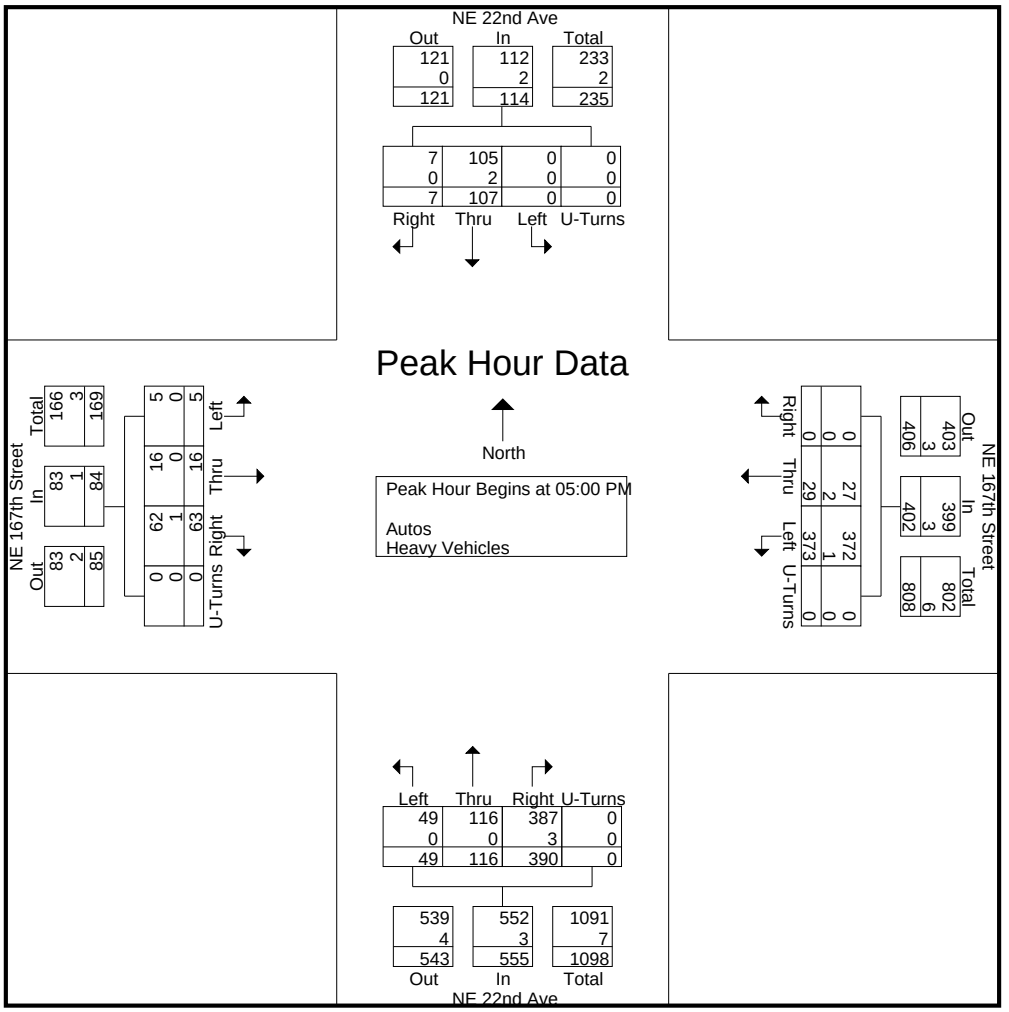
	NE 22nd Ave From North					NE 167th Street From East					NE 22nd Ave From South					NE 167th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	1	**35**	0	0	**36**	0	0	41	0	41	85	11	**6**	0	102	14	5	0	0	19	198
08:15 AM	1	18	0	0	19	0	2	56	0	58	76	7	5	0	88	**24**	4	0	0	**28**	193
08:30 AM	**3**	25	0	0	28	0	**3**	72	0	75	81	10	5	0	96	19	3	0	0	22	221
08:45 AM	1	26	0	0	27	0	3	**76**	0	**79**	**95**	**15**	4	0	**114**	16	**7**	0	0	23	**243**
Total Volume	6	104	0	0	110	0	8	245	0	253	337	43	20	0	400	73	19	0	0	92	855
% App. Total	5.5	94.5	0	0		0	3.2	96.8	0		84.2	10.8	5	0		79.3	20.7	0	0		
PHF	.500	.743	.000	.000	.764	.000	.667	.806	.000	.801	.887	.717	.833	.000	.877	.760	.679	.000	.000	.821	.880
Autos	5	102	0	0	107	0	7	242	0	249	330	43	20	0	393	72	19	0	0	91	840
% Autos	83.3	98.1	0	0	97.3	0	87.5	98.8	0	98.4	97.9	100	100	0	98.3	98.6	100	0	0	98.9	98.2
Heavy Vehicles																					
% Heavy Vehicles	16.7	1.9	0	0	2.7	0	12.5	1.2	0	1.6	2.1	0	0	0	1.8	1.4	0	0	0	1.1	1.8



Traf Tech Engineering Inc.

File Name : 1-NE 22nd Ave & NE 167th St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 5

	NE 22nd Ave From North					NE 167th Street From East					NE 22nd Ave From South					NE 167th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	**2**	28	0	0	30	0	6	94	0	100	**116**	30	14	0	**160**	**17**	3	1	0	21	**311**
05:15 PM	2	21	0	0	23	0	**9**	95	0	104	97	**32**	7	0	136	13	5	0	0	18	281
05:30 PM	2	26	0	0	28	0	5	87	0	92	88	32	13	0	133	17	2	**2**	0	21	274
05:45 PM	1	**32**	0	0	**33**	0	9	**97**	0	**106**	89	22	**15**	0	126	16	**6**	2	0	**24**	289
Total Volume	7	107	0	0	114	0	29	373	0	402	390	116	49	0	555	63	16	5	0	84	1155
% App. Total	6.1	93.9	0	0		0	7.2	92.8	0		70.3	20.9	8.8	0		75	19	6	0		
PHF	.875	.836	.000	.000	.864	.000	.806	.961	.000	.948	.841	.906	.817	.000	.867	.926	.667	.625	.000	.875	.928
Autos	7	105	0	0	112	0	27	372	0	399	387	116	49	0	552	62	16	5	0	83	1146
% Autos	100	98.1	0	0	98.2	0	93.1	99.7	0	99.3	99.2	100	100	0	99.5	98.4	100	100	0	98.8	99.2
Heavy Vehicles																					
% Heavy Vehicles	0	1.9	0	0	1.8	0	6.9	0.3	0	0.7	0.8	0	0	0	0.5	1.6	0	0	0	1.2	0.8



Traf Tech Engineering Inc.

File Name : 2-NE 22nd Ave & NE 164th St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 1

Groups Printed- Peds & Bikes

	NE 22nd Ave From North				NE 164th Street From East				NE 22nd Ave From South				NE 164th Street From West				
Start Time	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	4
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
07:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	4
Total	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	6	11
*** BREAK ***																	
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
08:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	3
Total	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	3	6
*** BREAK ***																	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	4	7
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	7	8
04:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	4	5
Total	0	0	0	0	0	0	0	0	2	0	0	2	4	0	0	15	23
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	6
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	10	13
Grand Total	0	0	0	0	0	0	0	0	6	0	0	5	8	0	0	34	53
Apprch %	0	0	0	0	0	0	0	0	54.5	0	0	45.5	19	0	0	81	
Total %	0	0	0	0	0	0	0	0	11.3	0	0	9.4	15.1	0	0	64.2	

Traf Tech Engineering Inc.

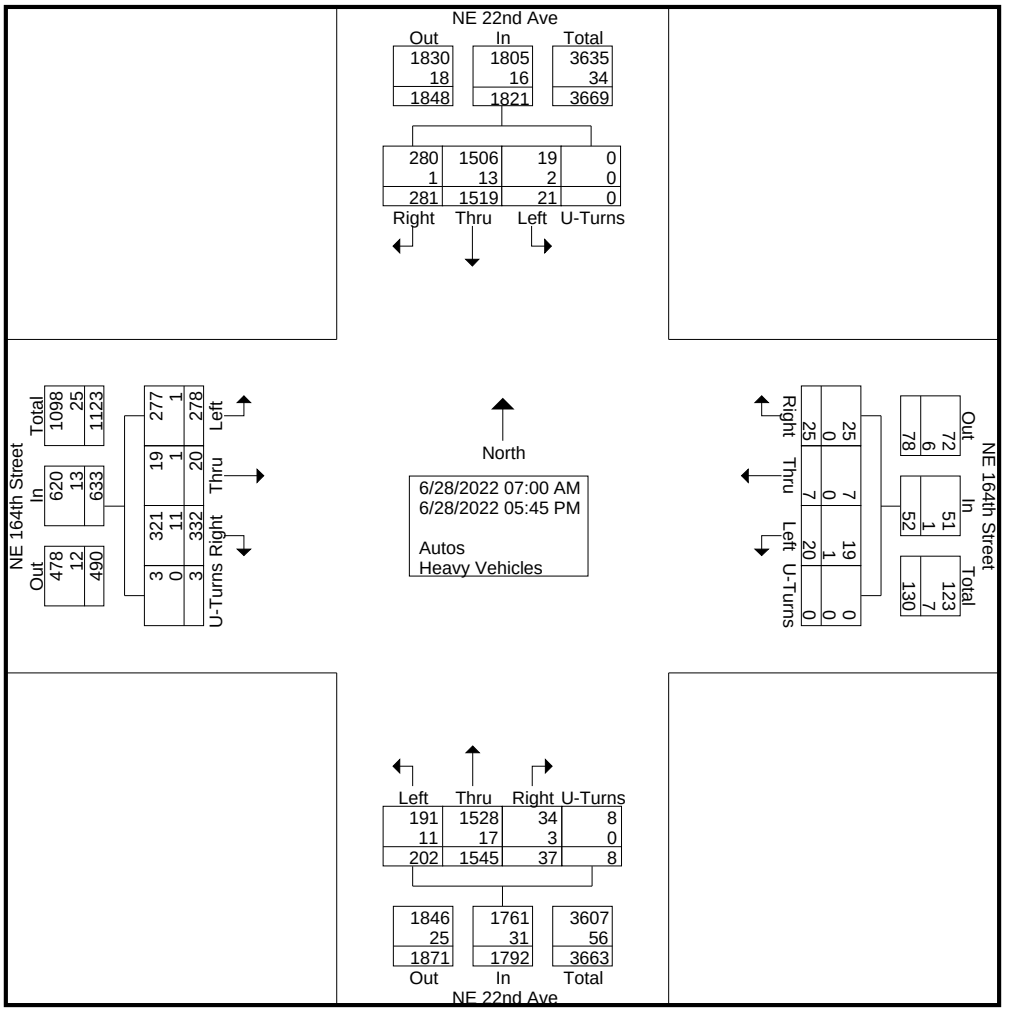
File Name : 2-NE 22nd Ave & NE 164th St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 1

Groups Printed- Autos - Heavy Vehicles

	NE 22nd Ave From North					NE 164th Street From East					NE 22nd Ave From South					NE 164th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00 AM	5	54	0	0	59	1	0	0	0	1	2	60	4	0	66	13	0	5	0	18	144
07:15 AM	8	72	1	0	81	0	1	0	0	1	4	53	6	0	63	15	0	5	0	20	165
07:30 AM	7	70	1	0	78	0	1	0	0	1	1	71	9	0	81	12	1	16	0	29	189
07:45 AM	9	82	2	0	93	1	0	0	0	1	0	82	8	0	90	20	0	15	0	35	219
Total	29	278	4	0	311	2	2	0	0	4	7	266	27	0	300	60	1	41	0	102	717
08:00 AM	12	88	0	0	100	1	0	0	0	1	0	96	8	0	104	33	0	8	0	41	246
08:15 AM	7	93	0	0	100	0	0	2	0	2	1	71	3	2	77	26	1	17	2	46	225
08:30 AM	14	94	1	0	109	2	0	1	0	3	1	68	8	1	78	26	2	25	0	53	243
08:45 AM	16	102	4	0	122	1	0	1	0	2	4	96	6	0	106	27	5	31	0	63	293
Total	49	377	5	0	431	4	0	4	0	8	6	331	25	3	365	112	8	81	2	203	1007
*** BREAK ***																					
04:00 PM	25	100	0	0	125	1	0	1	0	2	3	137	19	0	159	17	2	16	0	35	321
04:15 PM	21	107	3	0	131	3	2	2	0	7	4	111	19	2	136	23	1	17	0	41	315
04:30 PM	13	106	3	0	122	2	0	1	0	3	2	119	17	0	138	24	4	19	0	47	310
04:45 PM	28	112	0	0	140	3	1	3	0	7	5	104	13	1	123	17	0	19	1	37	307
Total	87	425	6	0	518	9	3	7	0	19	14	471	68	3	556	81	7	71	1	160	1253
05:00 PM	29	115	1	0	145	4	0	0	0	4	1	141	16	0	158	19	1	26	0	46	353
05:15 PM	26	108	3	0	137	4	0	2	0	6	5	109	20	0	134	16	1	23	0	40	317
05:30 PM	30	95	0	0	125	0	1	4	0	5	2	113	16	1	132	18	1	20	0	39	301
05:45 PM	31	121	2	0	154	2	1	3	0	6	2	114	30	1	147	26	1	16	0	43	350
Total	116	439	6	0	561	10	2	9	0	21	10	477	82	2	571	79	4	85	0	168	1321
Grand Total	281	1519	21	0	1821	25	7	20	0	52	37	1545	202	8	1792	332	20	278	3	633	4298
Apprch %	15.4	83.4	1.2	0		48.1	13.5	38.5	0		2.1	86.2	11.3	0.4		52.4	3.2	43.9	0.5		
Total %	6.5	35.3	0.5	0	42.4	0.6	0.2	0.5	0	1.2	0.9	35.9	4.7	0.2	41.7	7.7	0.5	6.5	0.1	14.7	
Autos	280	1506										1528									
% Autos	99.6	99.1	90.5	0	99.1	100	100	95	0	98.1	91.9	98.9	94.6	100	98.3	96.7	95	99.6	100	97.9	98.6
Heavy Vehicles																					
% Heavy Vehicles	0.4	0.9	9.5	0	0.9	0	0	5	0	1.9	8.1	1.1	5.4	0	1.7	3.3	5	0.4	0	2.1	1.4

Traf Tech Engineering Inc.

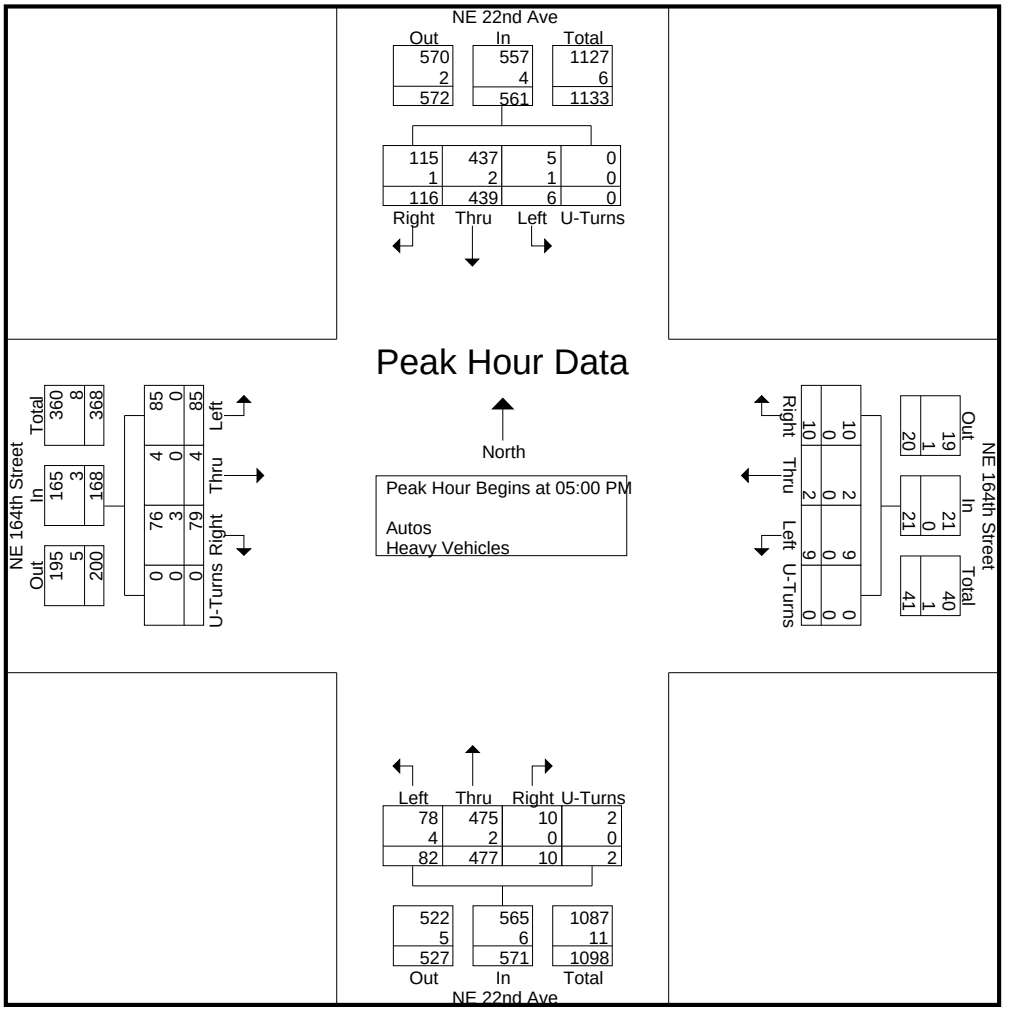
File Name : 2-NE 22nd Ave & NE 164th St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 2



Traf Tech Engineering Inc.

File Name : 2-NE 22nd Ave & NE 164th St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 3

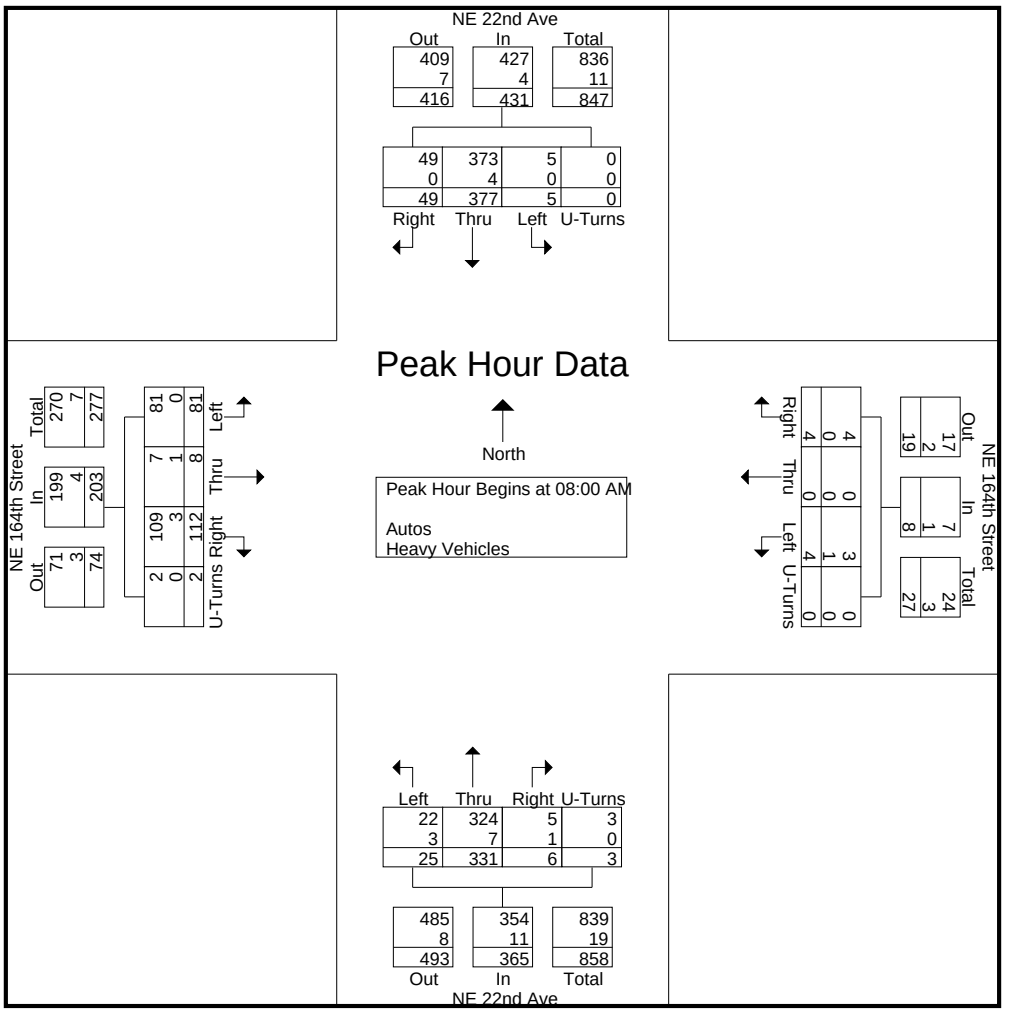
	NE 22nd Ave From North					NE 164th Street From East					NE 22nd Ave From South					NE 164th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	29	115	1	0	145	**4**	0	0	0	4	1	**141**	16	0	**158**	19	**1**	**26**	0	**46**	**353**
05:15 PM	26	108	**3**	0	137	4	0	2	0	**6**	**5**	109	20	0	134	16	1	23	0	40	317
05:30 PM	30	95	0	0	125	0	**1**	**4**	0	5	2	113	16	**1**	132	18	1	20	0	39	301
05:45 PM	**31**	**121**	2	0	**154**	2	1	3	0	6	2	114	**30**	1	147	**26**	1	16	0	43	350
Total Volume	116	439	6	0	561	10	2	9	0	21	10	477	82	2	571	79	4	85	0	168	1321
% App. Total	20.7	78.3	1.1	0		47.6	9.5	42.9	0		1.8	83.5	14.4	0.4		47	2.4	50.6	0		
PHF	.935	.907	.500	.000	.911	.625	.500	.563	.000	.875	.500	.846	.683	.500	.903	.760	1.00	.817	.000	.913	.936
Autos	115	437	5	0	557	10	2	9	0	21	10	475	78	2	565	76	4	85	0	165	1308
% Autos	99.1	99.5	83.3	0	99.3	100	100	100	0	100	100	99.6	95.1	100	98.9	96.2	100	100	0	98.2	99.0
Heavy Vehicles																					
% Heavy Vehicles	0.9	0.5	16.7	0	0.7	0	0	0	0	0	0	0.4	4.9	0	1.1	3.8	0	0	0	1.8	1.0



Traf Tech Engineering Inc.

File Name : 2-NE 22nd Ave & NE 164th St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 4

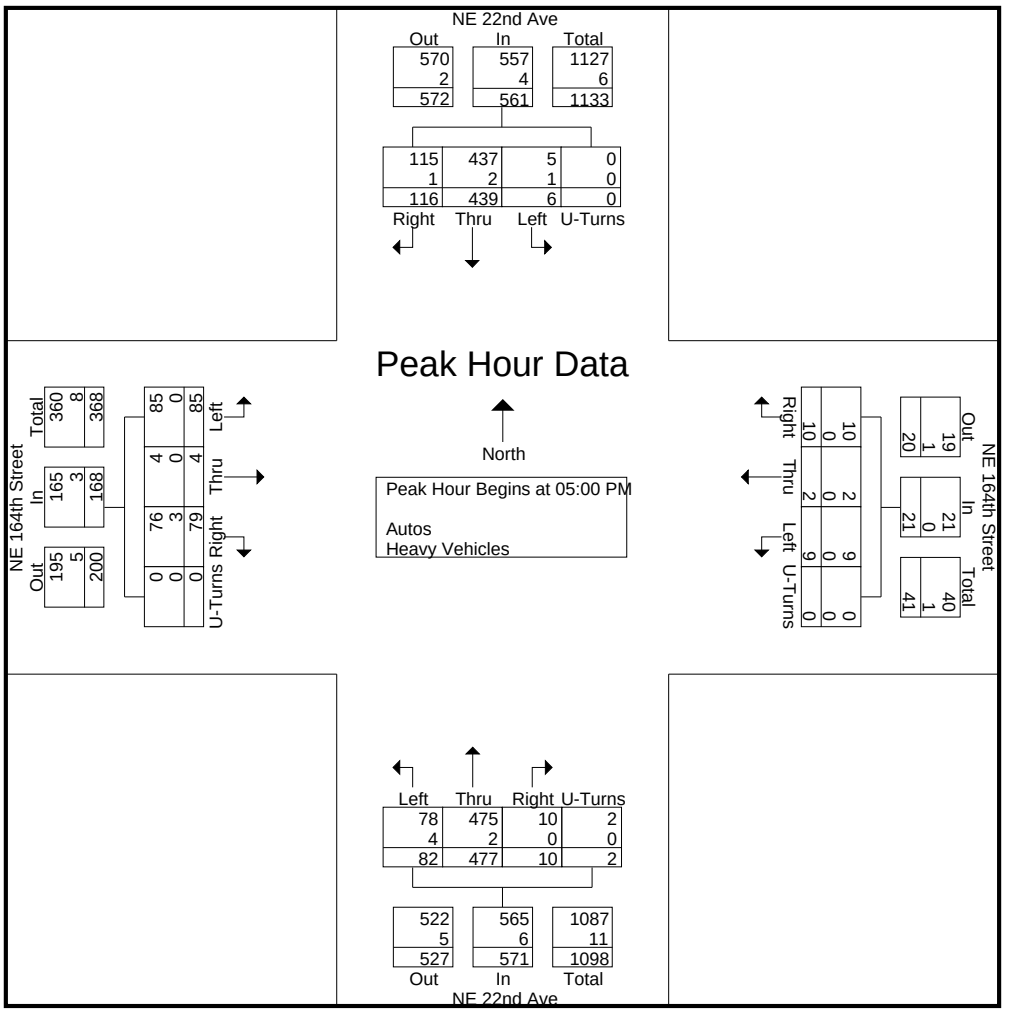
	NE 22nd Ave From North					NE 164th Street From East					NE 22nd Ave From South					NE 164th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	12	88	0	0	100	1	0	0	0	1	0	**96**	**8**	0	104	**33**	0	8	0	41	246
08:15 AM	7	93	0	0	100	0	0	**2**	0	2	1	71	3	**2**	77	26	1	17	**2**	46	225
08:30 AM	14	94	1	0	109	**2**	0	1	0	**3**	1	68	8	1	78	26	2	25	0	53	243
08:45 AM	**16**	**102**	**4**	0	**122**	1	0	1	0	2	**4**	96	6	0	**106**	27	**5**	**31**	0	**63**	**293**
Total Volume	49	377	5	0	431	4	0	4	0	8	6	331	25	3	365	112	8	81	2	203	1007
% App. Total	11.4	87.5	1.2	0		50	0	50	0		1.6	90.7	6.8	0.8		55.2	3.9	39.9	1		
PHF	.766	.924	.313	.000	.883	.500	.000	.500	.000	.667	.375	.862	.781	.375	.861	.848	.400	.653	.250	.806	.859
Autos	49	373	5	0	427	4	0	3	0	7	5	324	22	3	354	109	7	81	2	199	987
% Autos	100	98.9	100	0	99.1	100	0	75.0	0	87.5	83.3	97.9	88.0	100	97.0	97.3	87.5	100	100	98.0	98.0
Heavy Vehicles																					
% Heavy Vehicles	0	1.1	0	0	0.9	0	0	25.0	0	12.5	16.7	2.1	12.0	0	3.0	2.7	12.5	0	0	2.0	2.0



Traf Tech Engineering Inc.

File Name : 2-NE 22nd Ave & NE 164th St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 5

	NE 22nd Ave From North					NE 164th Street From East					NE 22nd Ave From South					NE 164th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	29	115	1	0	145	**4**	0	0	0	4	1	**141**	16	0	**158**	19	**1**	**26**	0	**46**	**353**
05:15 PM	26	108	**3**	0	137	4	0	2	0	**6**	**5**	109	20	0	134	16	1	23	0	40	317
05:30 PM	30	95	0	0	125	0	**1**	**4**	0	5	2	113	16	**1**	132	18	1	20	0	39	301
05:45 PM	**31**	**121**	2	0	**154**	2	1	3	0	6	2	114	**30**	1	147	**26**	1	16	0	43	350
Total Volume	116	439	6	0	561	10	2	9	0	21	10	477	82	2	571	79	4	85	0	168	1321
% App. Total	20.7	78.3	1.1	0		47.6	9.5	42.9	0		1.8	83.5	14.4	0.4		47	2.4	50.6	0		
PHF	.935	.907	.500	.000	.911	.625	.500	.563	.000	.875	.500	.846	.683	.500	.903	.760	1.00	.817	.000	.913	.936
Autos	115	437	5	0	557	10	2	9	0	21	10	475	78	2	565	76	4	85	0	165	1308
% Autos	99.1	99.5	83.3	0	99.3	100	100	100	0	100	100	99.6	95.1	100	98.9	96.2	100	100	0	98.2	99.0
Heavy Vehicles																					
% Heavy Vehicles	0.9	0.5	16.7	0	0.7	0	0	0	0	0	0	0.4	4.9	0	1.1	3.8	0	0	0	1.8	1.0



Traf Tech Engineering Inc.

File Name : 3-NE 22nd Ave & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 1

Groups Printed- Peds & Bikes

	NE 22nd Ave From North				NE 163rd Street From East				NE 22nd Ave From South				NE 163rd Street From West				
Start Time	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	Int. Total
07:00 AM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	3
07:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	4
07:45 AM	0	0	0	0	1	0	0	3	1	0	0	1	0	0	0	0	6
Total	1	0	0	0	2	0	0	8	1	0	0	1	0	0	0	1	14
08:00 AM	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	3
08:15 AM	1	0	0	0	1	0	0	2	0	0	0	0	1	0	0	0	5
08:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3
Total	1	0	0	0	1	0	0	5	1	0	0	2	2	0	0	1	13
*** BREAK ***																	
04:00 PM	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	5
04:15 PM	0	0	0	0	0	0	0	4	0	0	0	0	2	0	0	0	6
04:30 PM	0	0	0	0	0	0	0	4	0	0	0	2	0	0	0	1	7
04:45 PM	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
Total	0	0	0	0	0	0	0	16	0	0	0	2	2	0	0	1	21
*** BREAK ***																	
05:15 PM	0	0	0	0	1	0	0	0	2	0	0	1	0	0	0	0	4
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
*** BREAK ***																	
Total	0	0	0	0	1	0	0	0	2	0	0	2	1	0	0	0	6
Grand Total	2	0	0	0	4	0	0	29	4	0	0	7	5	0	0	3	54
Apprch %	100	0	0	0	12.1	0	0	87.9	36.4	0	0	63.6	62.5	0	0	37.5	
Total %	3.7	0	0	0	7.4	0	0	53.7	7.4	0	0	13	9.3	0	0	5.6	

Traf Tech Engineering Inc.

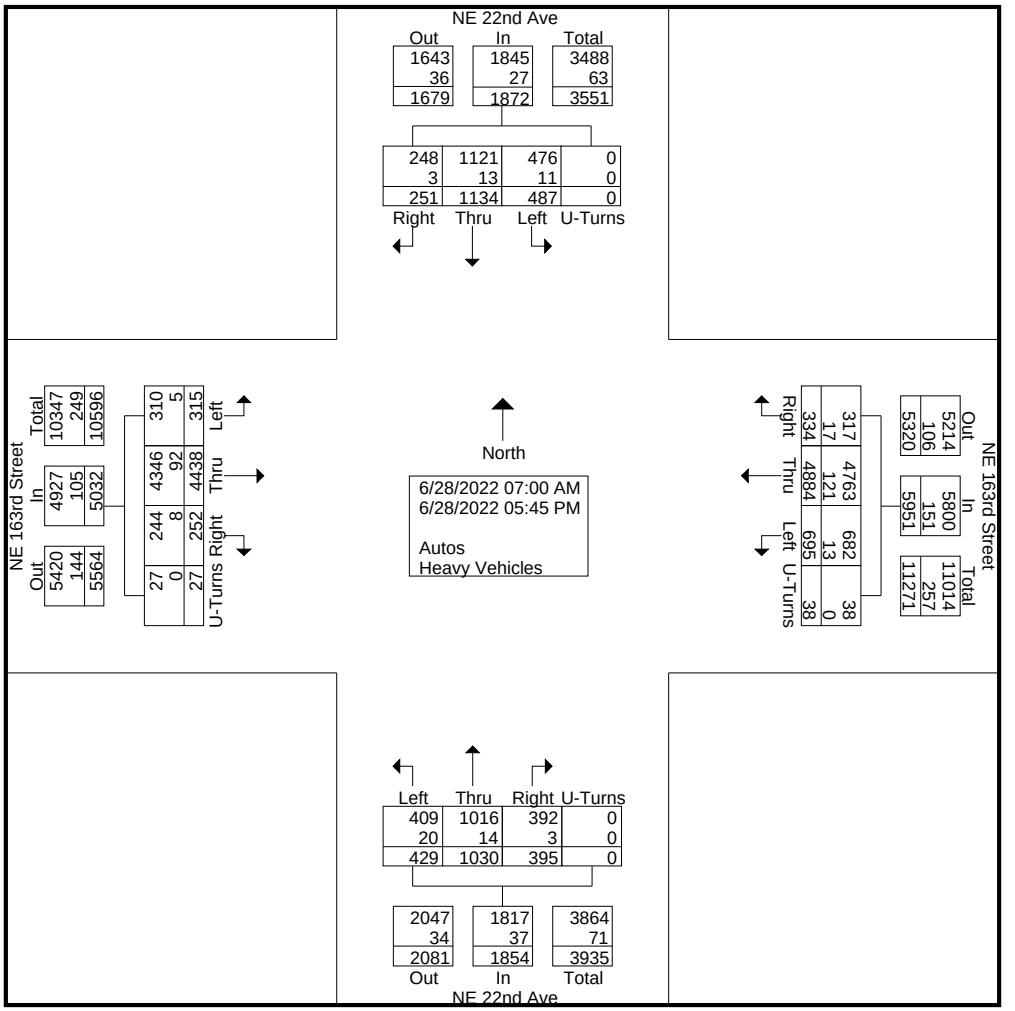
File Name : 3-NE 22nd Ave & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 1

Groups Printed- Autos - Heavy Vehicles

	NE 22nd Ave From North					NE 163rd Street From East					NE 22nd Ave From South					NE 163rd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00 AM	13	44	22	0	79	9	184	35	1	229	14	46	14	0	74	16	242	14	0	272	654
07:15 AM	7	61	19	0	87	11	196	34	0	241	19	30	12	0	61	17	280	17	0	314	703
07:30 AM	12	48	23	0	83	16	186	33	1	236	21	44	13	0	78	19	282	26	0	327	724
07:45 AM	14	54	21	0	89	15	270	43	2	330	13	45	8	0	66	11	299	19	2	331	816
Total	46	207	85	0	338	51	836	145	4	1036	67	165	47	0	279	63	1103	76	2	1244	2897
08:00 AM	9	79	33	0	121	17	219	34	2	272	21	68	17	0	106	9	226	12	0	247	746
08:15 AM	8	72	24	0	104	15	253	48	0	316	13	47	21	0	81	7	254	2	0	263	764
08:30 AM	14	88	30	0	132	11	212	51	0	274	14	50	30	0	94	9	235	10	1	255	755
08:45 AM	10	76	32	0	118	22	298	54	0	374	26	77	19	0	122	7	292	5	3	307	921
Total	41	315	119	0	475	65	982	187	2	1236	74	242	87	0	403	32	1007	29	4	1072	3186
*** BREAK ***																					
04:00 PM	26	70	35	0	131	24	298	52	3	377	35	99	37	0	171	19	249	28	1	297	976
04:15 PM	13	75	35	0	123	25	454	56	5	540	26	71	31	0	128	31	320	24	2	377	1168
04:30 PM	17	77	48	0	142	33	410	51	0	494	30	74	39	0	143	16	272	26	2	316	1095
04:45 PM	20	74	27	0	121	20	373	42	2	437	27	66	36	0	129	13	286	28	3	330	1017
Total	76	296	145	0	517	102	1535	201	10	1848	118	310	143	0	571	79	1127	106	8	1320	4256
05:00 PM	24	91	29	0	144	27	361	43	5	436	24	107	45	0	176	17	298	28	3	346	1102
05:15 PM	17	68	37	0	122	22	443	37	6	508	38	71	39	0	148	19	321	20	3	363	1141
05:30 PM	25	76	30	0	131	36	317	43	9	405	39	64	44	0	147	14	245	26	6	291	974
05:45 PM	22	81	42	0	145	31	410	39	2	482	35	71	24	0	130	28	337	30	1	396	1153
Total	88	316	138	0	542	116	1531	162	22	1831	136	313	152	0	601	78	1201	104	13	1396	4370
Grand Total	251	1134	487	0	1872	334	4884	695	38	5951	395	1030	429	0	1854	252	4438	315	27	5032	14709
Apprch %	13.4	60.6	26	0		5.6	82.1	11.7	0.6		21.3	55.6	23.1	0		5	88.2	6.3	0.5		
Total %	1.7	7.7	3.3	0	12.7	2.3	33.2	4.7	0.3	40.5	2.7	7	2.9	0	12.6	1.7	30.2	2.1	0.2	34.2	
Autos	248	1121					4763					1016					4346				14389
% Autos	98.8	98.9	97.7	0	98.6	94.9	97.5	98.1	100	97.5	99.2	98.6	95.3	0	98	96.8	97.9	98.4	100	97.9	97.8
Heavy Vehicles																					
% Heavy Vehicles	1.2	1.1	2.3	0	1.4	5.1	2.5	1.9	0	2.5	0.8	1.4	4.7	0	2	3.2	2.1	1.6	0	2.1	2.2

Traf Tech Engineering Inc.

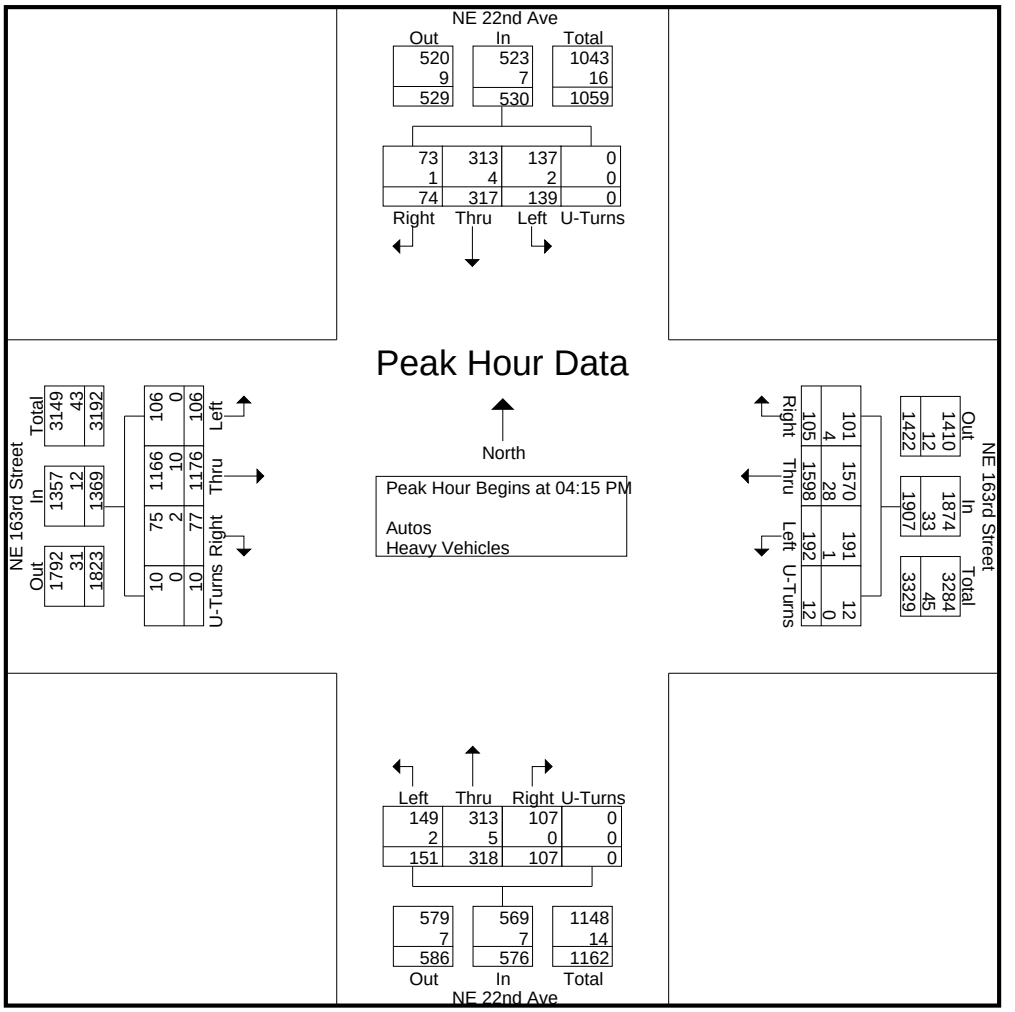
File Name : 3-NE 22nd Ave & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 2



Traf Tech Engineering Inc.

File Name : 3-NE 22nd Ave & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 3

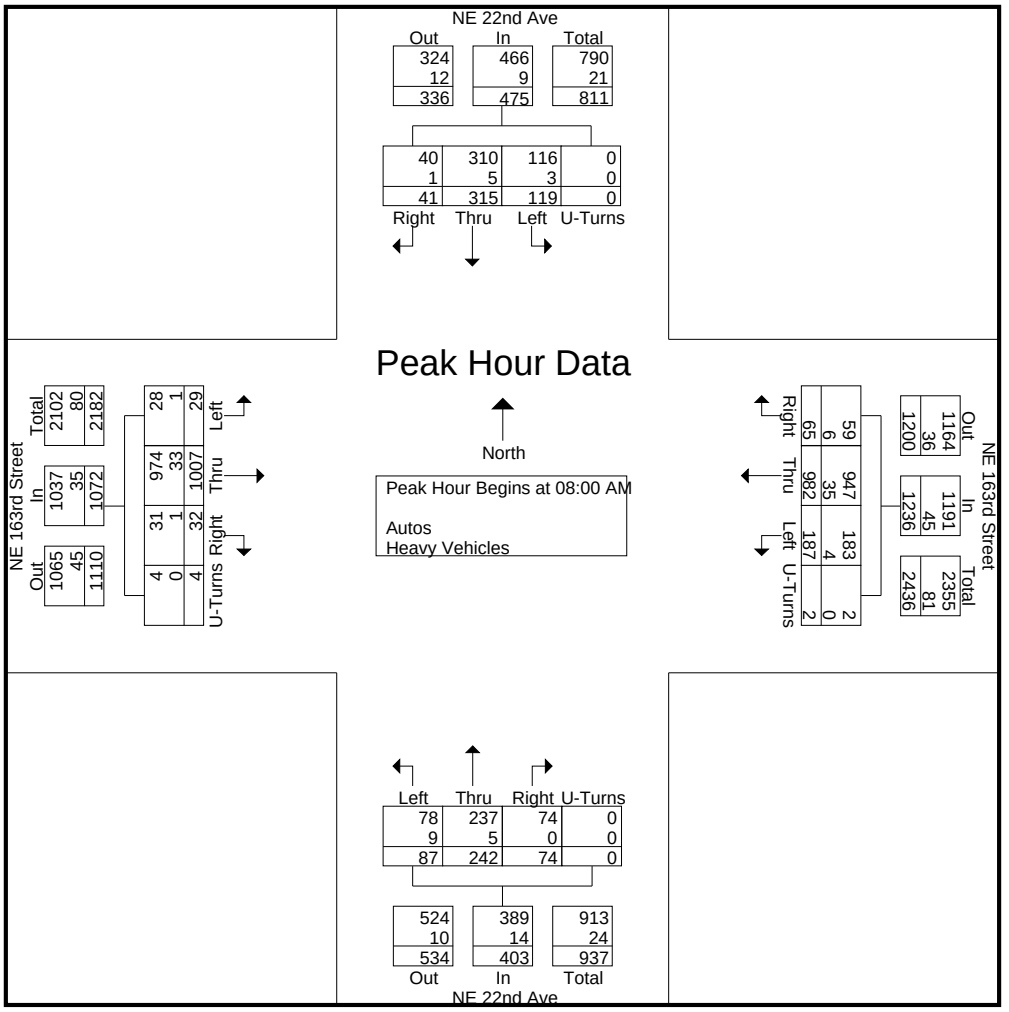
	NE 22nd Ave From North					NE 163rd Street From East					NE 22nd Ave From South					NE 163rd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	13	75	35	0	123	25	**454**	**56**	**5**	**540**	26	71	31	0	128	**31**	**320**	24	2	**377**	**1168**
04:30 PM	17	77	**48**	0	142	**33**	410	51	0	494	**30**	74	39	0	143	16	272	26	2	316	1095
04:45 PM	20	74	27	0	121	20	373	42	2	437	27	66	36	0	129	13	286	**28**	**3**	330	1017
05:00 PM	**24**	**91**	29	0	**144**	27	361	43	5	436	24	**107**	**45**	0	**176**	17	298	28	3	346	1102
Total Volume	74	317	139	0	530	105	1598	192	12	1907	107	318	151	0	576	77	1176	106	10	1369	4382
% App. Total	14	59.8	26.2	0		5.5	83.8	10.1	0.6		18.6	55.2	26.2	0		5.6	85.9	7.7	0.7		
PHF	.771	.871	.724	.000	.920	.795	.880	.857	.600	.883	.892	.743	.839	.000	.818	.621	.919	.946	.833	.908	.938
Autos	73	313	137	0	523	101	1570										1166				
% Autos	98.6	98.7	98.6	0	98.7	96.2	98.2	99.5	100	98.3	100	98.4	98.7	0	98.8	97.4	99.1	100	100	99.1	98.7
Heavy Vehicles																					
% Heavy Vehicles	1.4	1.3	1.4	0	1.3	3.8	1.8	0.5	0	1.7	0	1.6	1.3	0	1.2	2.6	0.9	0	0	0.9	1.3



Traf Tech Engineering Inc.

File Name : 3-NE 22nd Ave & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 4

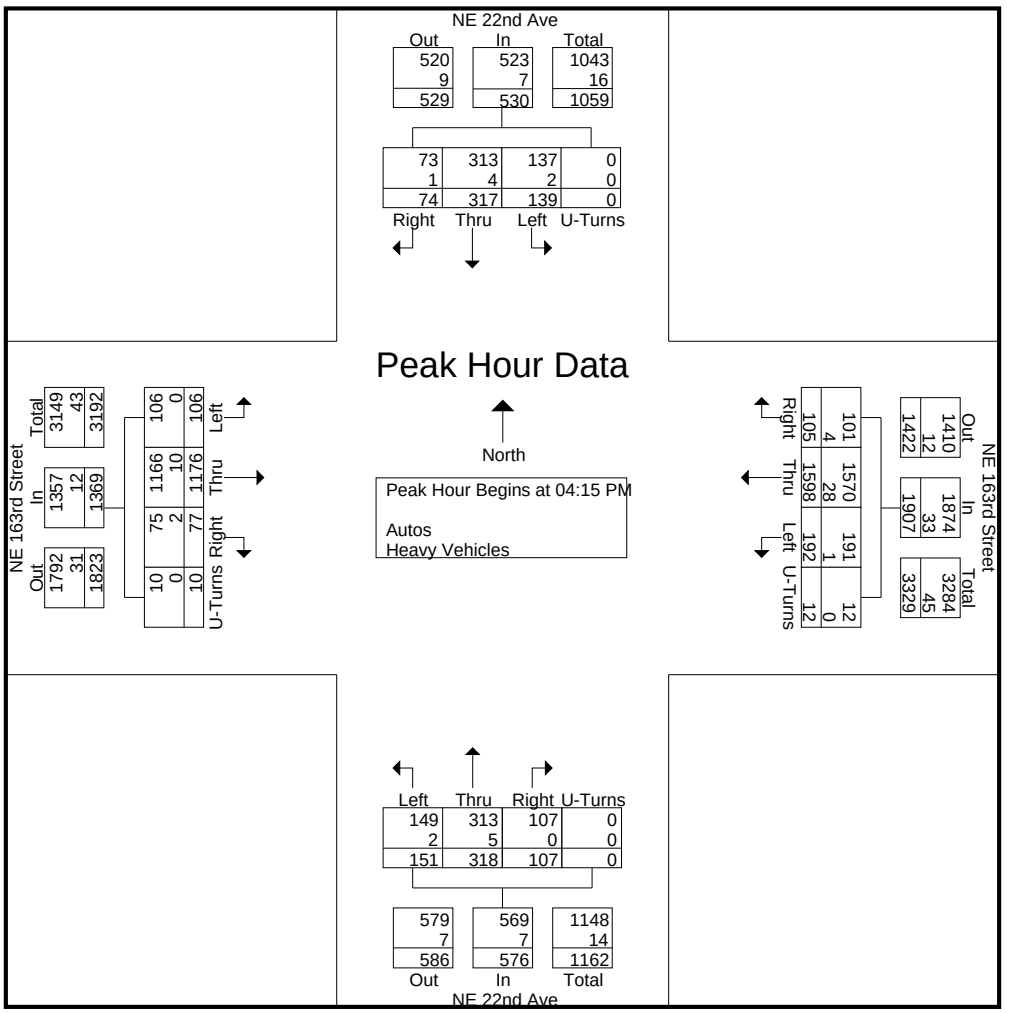
	NE 22nd Ave From North					NE 163rd Street From East					NE 22nd Ave From South					NE 163rd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	9	79	**33**	0	121	17	219	34	**2**	272	21	68	17	0	106	**9**	226	**12**	0	247	746
08:15 AM	8	72	24	0	104	15	253	48	0	316	13	47	21	0	81	7	254	2	0	263	764
08:30 AM	**14**	**88**	30	0	**132**	11	212	51	0	274	14	50	**30**	0	94	9	235	10	1	255	755
08:45 AM	10	76	32	0	118	**22**	**298**	**54**	0	**374**	**26**	**77**	19	0	**122**	7	**292**	5	**3**	**307**	**921**
Total Volume	41	315	119	0	475	65	982	187	2	1236	74	242	87	0	403	32	1007	29	4	1072	3186
% App. Total	8.6	66.3	25.1	0		5.3	79.4	15.1	0.2		18.4	60	21.6	0		3	93.9	2.7	0.4		
PHF	.732	.895	.902	.000	.900	.739	.824	.866	.250	.826	.712	.786	.725	.000	.826	.889	.862	.604	.333	.873	.865
Autos	40	310	116	0	466	59	947	183	2	1191	74	237	78	0	389	31	974	28	4	1037	3083
% Autos	97.6	98.4	97.5	0	98.1	90.8	96.4	97.9	100	96.4	100	97.9	89.7	0	96.5	96.9	96.7	96.6	100	96.7	96.8
Heavy Vehicles																					
% Heavy Vehicles	2.4	1.6	2.5	0	1.9	9.2	3.6	2.1	0	3.6	0	2.1	10.3	0	3.5	3.1	3.3	3.4	0	3.3	3.2



Traf Tech Engineering Inc.

File Name : 3-NE 22nd Ave & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 5

Start Time	NE 22nd Ave From North					NE 163rd Street From East					NE 22nd Ave From South					NE 163rd Street From West					
	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	13	75	35	0	123	25	**454**	**56**	**5**	**540**	26	71	31	0	128	**31**	**320**	24	2	**377**	**1168**
04:30 PM	17	77	**48**	0	142	**33**	410	51	0	494	**30**	74	39	0	143	16	272	26	2	316	1095
04:45 PM	20	74	27	0	121	20	373	42	2	437	27	66	36	0	129	13	286	**28**	**3**	330	1017
05:00 PM	**24**	**91**	29	0	**144**	27	361	43	5	436	24	**107**	**45**	0	**176**	17	298	28	3	346	1102
Total Volume	74	317	139	0	530	105	1598	192	12	1907	107	318	151	0	576	77	1176	106	10	1369	4382
% App. Total	14	59.8	26.2	0		5.5	83.8	10.1	0.6		18.6	55.2	26.2	0		5.6	85.9	7.7	0.7		
PHF	.771	.871	.724	.000	.920	.795	.880	.857	.600	.883	.892	.743	.839	.000	.818	.621	.919	.946	.833	.908	.938
Autos	73	313	137	0	523	101	1570										1166				
% Autos	98.6	98.7	98.6	0	98.7	96.2	98.2	99.5	100	98.3	100	98.4	98.7	0	98.8	97.4	99.1	100	100	99.1	98.7
Heavy Vehicles																					
% Heavy Vehicles	1.4	1.3	1.4	0	1.3	3.8	1.8	0.5	0	1.7	0	1.6	1.3	0	1.2	2.6	0.9	0	0	0.9	1.3



Traf Tech Engineering Inc.

File Name : 4-NE 23rd Ave & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 1

Groups Printed- Peds & Bikes

	NE 23rd Ave From North				NE 163rd Street From East				NE 23rd Ave From South				NE 163rd Street From West				
Start Time	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	Int. Total
*** BREAK ***																	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total %																	

Traf Tech Engineering Inc.

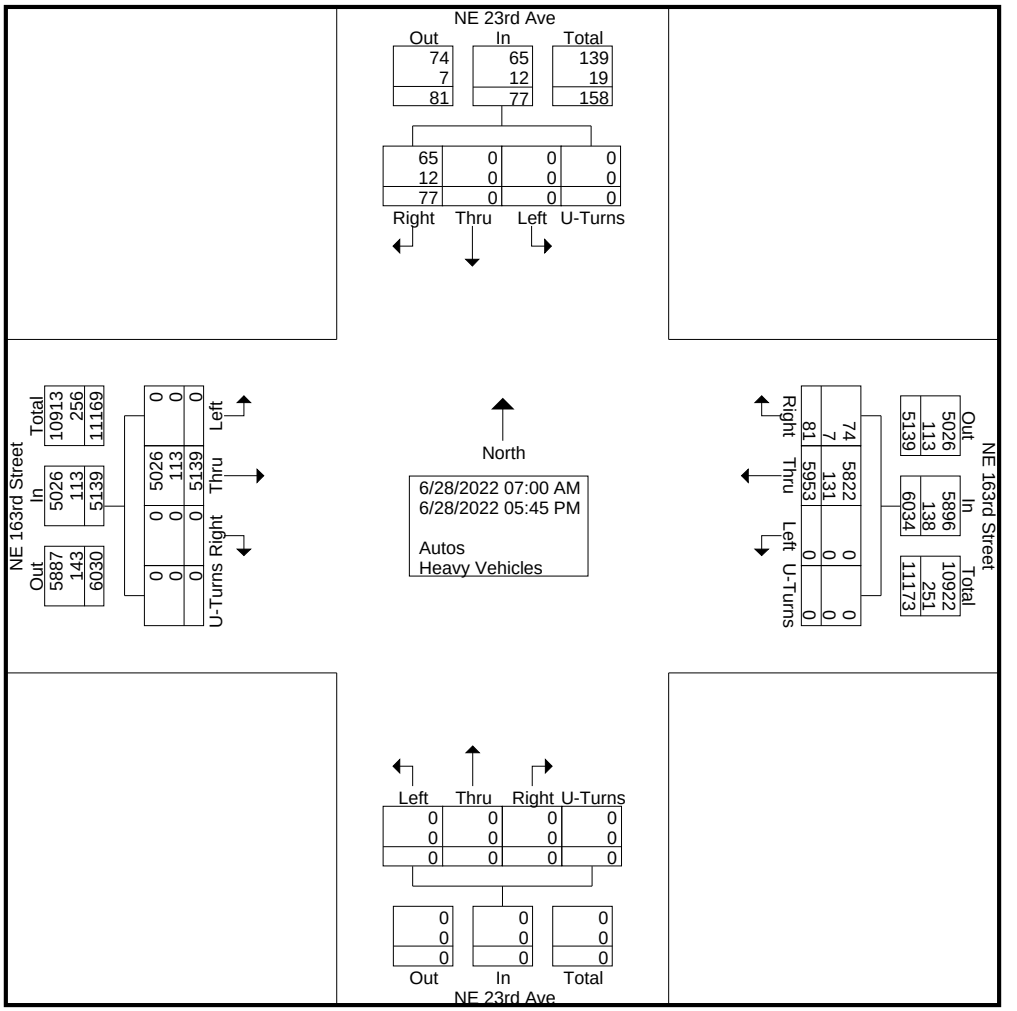
File Name : 4-NE 23rd Ave & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 1

Groups Printed- Autos - Heavy Vehicles

	NE 23rd Ave From North					NE 163rd Street From East					NE 23rd Ave From South					NE 163rd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00 AM	1	0	0	0	1	3	233	0	0	236	0	0	0	0	0	0	264	0	0	264	501
07:15 AM	2	0	0	0	2	0	231	0	0	231	0	0	0	0	0	0	314	0	0	314	547
07:30 AM	2	0	0	0	2	2	242	0	0	244	0	0	0	0	0	0	306	0	0	306	552
07:45 AM	8	0	0	0	8	4	324	0	0	328	0	0	0	0	0	0	327	0	0	327	663
Total	13	0	0	0	13	9	1030	0	0	1039	0	0	0	0	0	0	1211	0	0	1211	2263
08:00 AM	3	0	0	0	3	5	262	0	0	267	0	0	0	0	0	0	253	0	0	253	523
08:15 AM	4	0	0	0	4	5	346	0	0	351	0	0	0	0	0	0	298	0	0	298	653
08:30 AM	2	0	0	0	2	4	243	0	0	247	0	0	0	0	0	0	266	0	0	266	515
08:45 AM	4	0	0	0	4	5	375	0	0	380	0	0	0	0	0	0	361	0	0	361	745
Total	13	0	0	0	13	19	1226	0	0	1245	0	0	0	0	0	0	1178	0	0	1178	2436
*** BREAK ***																					
04:00 PM	5	0	0	0	5	3	419	0	0	422	0	0	0	0	0	0	297	0	0	297	724
04:15 PM	9	0	0	0	9	8	513	0	0	521	0	0	0	0	0	0	372	0	0	372	902
04:30 PM	3	0	0	0	3	6	513	0	0	519	0	0	0	0	0	0	329	0	0	329	851
04:45 PM	6	0	0	0	6	6	431	0	0	437	0	0	0	0	0	0	344	0	0	344	787
Total	23	0	0	0	23	23	1876	0	0	1899	0	0	0	0	0	0	1342	0	0	1342	3264
05:00 PM	3	0	0	0	3	8	533	0	0	541	0	0	0	0	0	0	330	0	0	330	874
05:15 PM	8	0	0	0	8	7	476	0	0	483	0	0	0	0	0	0	400	0	0	400	891
05:30 PM	5	0	0	0	5	5	329	0	0	334	0	0	0	0	0	0	280	0	0	280	619
05:45 PM	12	0	0	0	12	10	483	0	0	493	0	0	0	0	0	0	398	0	0	398	903
Total	28	0	0	0	28	30	1821	0	0	1851	0	0	0	0	0	0	1408	0	0	1408	3287
Grand Total	77	0	0	0	77	81	5953	0	0	6034	0	0	0	0	0	0	5139	0	0	5139	11250
Apprch %	100	0	0	0		1.3	98.7	0	0		0	0	0	0		0	100	0	0		
Total %	0.7	0	0	0	0.7	0.7	52.9	0	0	53.6	0	0	0	0	0	0	45.7	0	0	45.7	
Autos	65	0	0	0	65	74	5822										5026				10987
% Autos	84.4	0	0	0	84.4	91.4	97.8	0	0	97.7	0	0	0	0	0	0	97.8	0	0	97.8	97.7
Heavy Vehicles																					
% Heavy Vehicles	15.6	0	0	0	15.6	8.6	2.2	0	0	2.3	0	0	0	0	0	0	2.2	0	0	2.2	2.3

Traf Tech Engineering Inc.

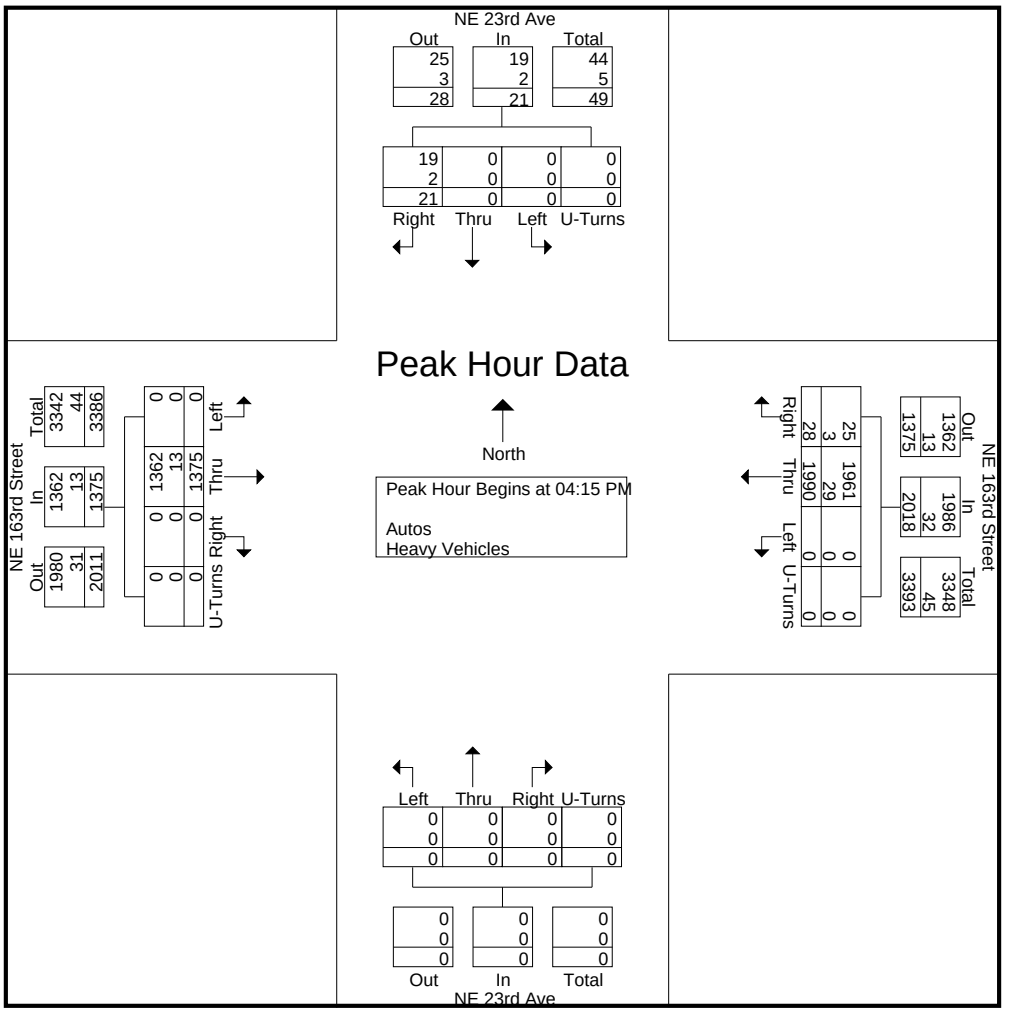
File Name : 4-NE 23rd Ave & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 2



Traf Tech Engineering Inc.

File Name : 4-NE 23rd Ave & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 3

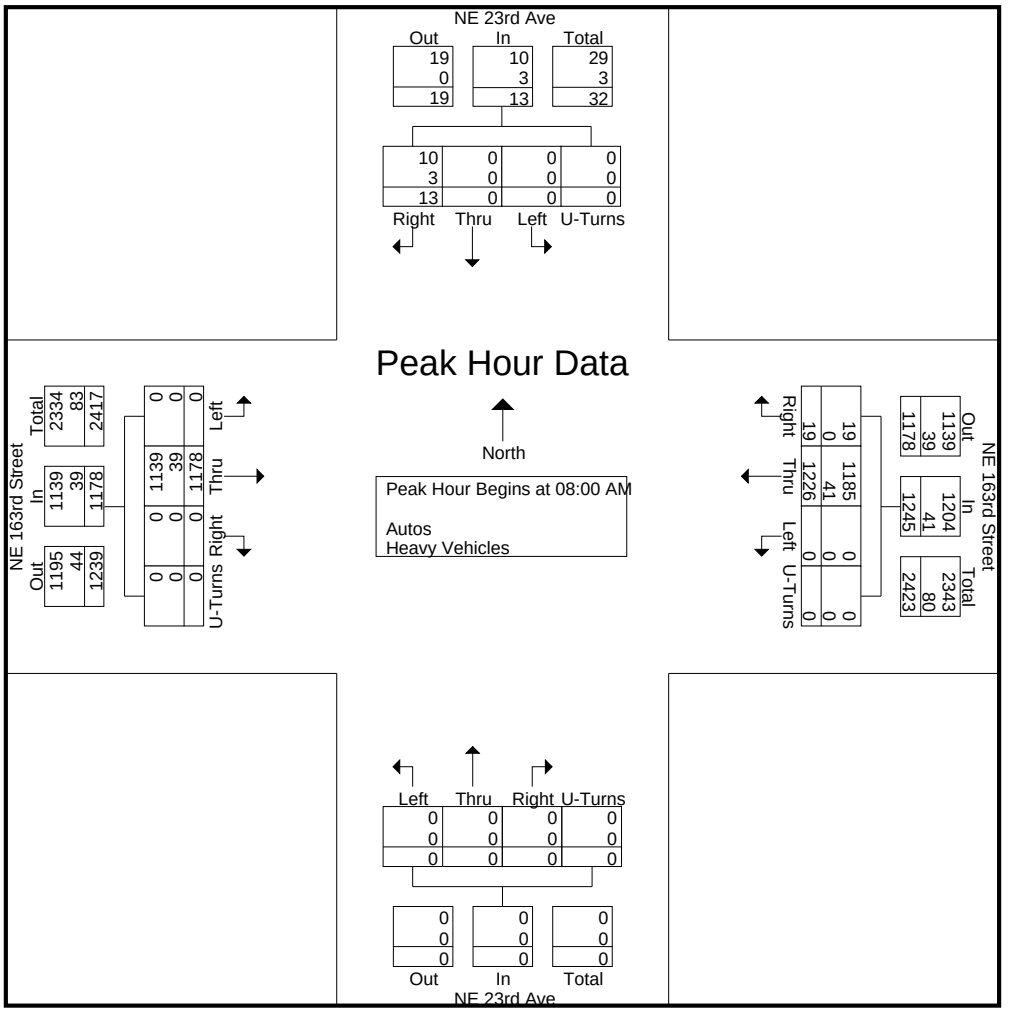
	NE 23rd Ave From North					NE 163rd Street From East					NE 23rd Ave From South					NE 163rd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	**9**	0	0	0	**9**	**8**	513	0	0	521	0	0	0	0	0	0	**372**	0	0	**372**	**902**
04:30 PM	3	0	0	0	3	6	513	0	0	519	0	0	0	0	0	0	329	0	0	329	851
04:45 PM	6	0	0	0	6	6	431	0	0	437	0	0	0	0	0	0	344	0	0	344	787
05:00 PM	3	0	0	0	3	8	**533**	0	0	**541**	0	0	0	0	0	0	330	0	0	330	874
Total Volume	21	0	0	0	21	28	1990	0	0	2018	0	0	0	0	0	0	1375	0	0	1375	3414
% App. Total	100	0	0	0		1.4	98.6	0	0		0	0	0	0		0	100	0	0		
PHF	.583	.000	.000	.000	.583	.875	.933	.000	.000	.933	.000	.000	.000	.000	.000	.000	.924	.000	.000	.924	.946
Autos	19	0	0	0	19	25	1961										1362				
% Autos	90.5	0	0	0	90.5	89.3	98.5	0	0	98.4	0	0	0	0	0	0	99.1	0	0	99.1	98.6
Heavy Vehicles																					
% Heavy Vehicles	9.5	0	0	0	9.5	10.7	1.5	0	0	1.6	0	0	0	0	0	0	0.9	0	0	0.9	1.4



Traf Tech Engineering Inc.

File Name : 4-NE 23rd Ave & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 4

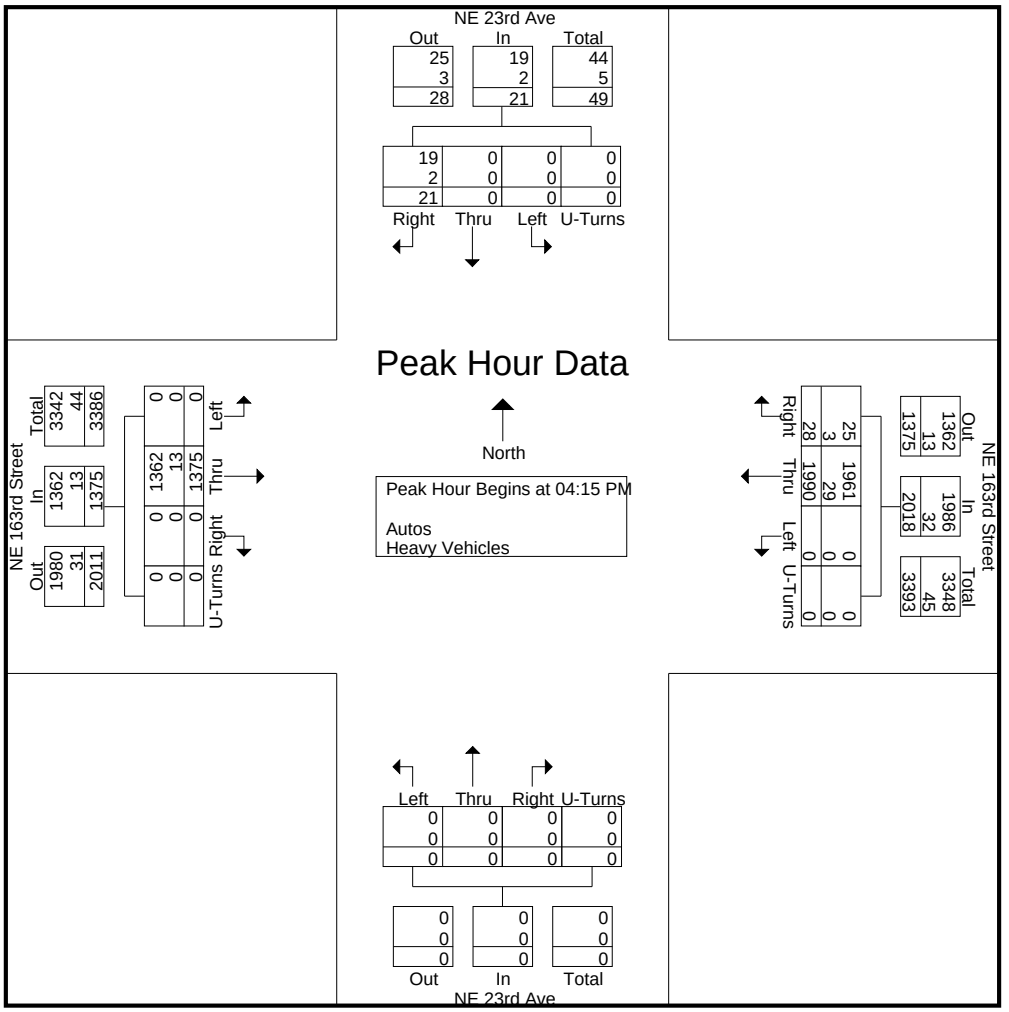
Start Time	NE 23rd Ave From North					NE 163rd Street From East					NE 23rd Ave From South					NE 163rd Street From West					
	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	3	0	0	0	3	**5**	262	0	0	267	0	0	0	0	0	0	253	0	0	253	523
08:15 AM	**4**	0	0	0	**4**	5	346	0	0	351	0	0	0	0	0	0	298	0	0	298	653
08:30 AM	2	0	0	0	2	4	243	0	0	247	0	0	0	0	0	0	266	0	0	266	515
08:45 AM	4	0	0	0	4	5	**375**	0	0	**380**	0	0	0	0	0	0	**361**	0	0	**361**	**745**
Total Volume	13	0	0	0	13	19	1226	0	0	1245	0	0	0	0	0	0	1178	0	0	1178	2436
% App. Total	100	0	0	0		1.5	98.5	0	0		0	0	0	0		0	100	0	0		
PHF	.813	.000	.000	.000	.813	.950	.817	.000	.000	.819	.000	.000	.000	.000	.000	.000	.816	.000	.000	.816	.817
Autos	10	0	0	0	10	19	1185										1139				
% Autos	76.9	0	0	0	76.9	100	96.7	0	0	96.7	0	0	0	0	0	0	96.7	0	0	96.7	96.6
Heavy Vehicles																					
% Heavy Vehicles	23.1	0	0	0	23.1	0	3.3	0	0	3.3	0	0	0	0	0	0	3.3	0	0	3.3	3.4



Traf Tech Engineering Inc.

File Name : 4-NE 23rd Ave & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 5

Start Time	NE 23rd Ave From North					NE 163rd Street From East					NE 23rd Ave From South					NE 163rd Street From West					
	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	**9**	0	0	0	**9**	**8**	513	0	0	521	0	0	0	0	0	0	**372**	0	0	**372**	**902**
04:30 PM	3	0	0	0	3	6	513	0	0	519	0	0	0	0	0	0	329	0	0	329	851
04:45 PM	6	0	0	0	6	6	431	0	0	437	0	0	0	0	0	0	344	0	0	344	787
05:00 PM	3	0	0	0	3	8	**533**	0	0	**541**	0	0	0	0	0	0	330	0	0	330	874
Total Volume	21	0	0	0	21	28	1990	0	0	2018	0	0	0	0	0	0	1375	0	0	1375	3414
% App. Total	100	0	0	0		1.4	98.6	0	0		0	0	0	0		0	100	0	0		
PHF	.583	.000	.000	.000	.583	.875	.933	.000	.000	.933	.000	.000	.000	.000	.000	.000	.924	.000	.000	.924	.946
Autos	19	0	0	0	19	25	1961										1362				
% Autos	90.5	0	0	0	90.5	89.3	98.5	0	0	98.4	0	0	0	0	0	0	99.1	0	0	99.1	98.6
Heavy Vehicles																					
% Heavy Vehicles	9.5	0	0	0	9.5	10.7	1.5	0	0	1.6	0	0	0	0	0	0	0.9	0	0	0.9	1.4



Traf Tech Engineering Inc.

File Name : 5-Biscayne Blvd & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 1

Groups Printed- Peds & Bikes

	Biscayne Blvd From North				NE 163rd Street From East				Biscayne Blvd From South				NE 163rd Street From West				
Start Time	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
*** BREAK ***																	
07:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3
08:00 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
08:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
*** BREAK ***																	
08:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4
*** BREAK ***																	
04:00 PM	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	4
04:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	0	0	3	0	0	0	0	0	0	0	3	0	0	0	0	6
04:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
Total	2	0	0	4	2	0	0	1	0	0	0	3	1	0	0	0	13
05:00 PM	1	0	0	1	4	0	0	2	0	0	0	0	0	0	0	0	8
*** BREAK ***																	
05:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
Total	1	0	0	1	4	0	0	6	0	0	0	0	0	0	0	0	12
Grand Total	7	0	0	5	7	0	0	7	0	0	0	3	1	0	0	2	32
Apprch %	58.3	0	0	41.7	50	0	0	50	0	0	0	100	33.3	0	0	66.7	
Total %	21.9	0	0	15.6	21.9	0	0	21.9	0	0	0	9.4	3.1	0	0	6.2	

Traf Tech Engineering Inc.

File Name : 5-Biscayne Blvd & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
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Groups Printed- Autos - Heavy Vehicles

	Biscayne Blvd From North					NE 163rd Street From East					Biscayne Blvd From South					NE 163rd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00 AM	37	179	52	0	268	30	133	44	1	208	51	99	39	1	190	59	154	35	0	248	914
07:15 AM	38	169	60	0	267	41	150	72	0	263	44	115	35	0	194	69	204	35	0	308	1032
07:30 AM	50	217	81	0	348	66	130	56	0	252	42	202	55	0	299	53	190	43	0	286	1185
07:45 AM	45	194	68	0	307	69	209	99	0	377	76	222	56	0	354	47	220	54	0	321	1359
Total	170	759	261	0	1190	206	622	271	1	1100	213	638	185	1	1037	228	768	167	0	1163	4490
08:00 AM	34	285	84	0	403	58	161	83	0	302	52	190	42	0	284	30	169	26	0	225	1214
08:15 AM	47	226	99	0	372	105	190	103	0	398	69	177	60	0	306	38	233	34	0	305	1381
08:30 AM	70	272	110	0	452	86	109	82	0	277	97	206	41	1	345	19	199	34	0	252	1326
08:45 AM	63	261	136	0	460	108	240	121	1	470	88	192	51	1	332	31	307	32	0	370	1632
Total	214	1044	429	0	1687	357	700	389	1	1447	306	765	194	2	1267	118	908	126	0	1152	5553
*** BREAK ***																					
04:00 PM	95	231	106	1	433	148	210	78	0	436	148	311	99	0	558	49	166	58	0	273	1700
04:15 PM	64	226	94	0	384	153	312	137	2	604	111	257	102	3	473	66	228	67	0	361	1822
04:30 PM	103	295	83	0	481	151	253	78	1	483	137	307	132	0	576	70	179	58	0	307	1847
04:45 PM	80	237	62	0	379	153	263	110	0	526	115	310	70	0	495	55	221	72	1	349	1749
Total	342	989	345	1	1677	605	1038	403	3	2049	511	1185	403	3	2102	240	794	255	1	1290	7118
05:00 PM	94	275	130	2	501	207	322	109	1	639	167	447	166	3	783	41	201	67	0	309	2232
05:15 PM	56	270	92	0	418	174	308	141	0	623	124	302	93	2	521	65	244	95	0	404	1966
05:30 PM	61	247	88	0	396	156	184	107	0	447	155	346	96	2	599	37	139	70	0	246	1688
05:45 PM	64	235	142	0	441	163	298	117	0	578	103	263	106	0	472	48	265	69	0	382	1873
Total	275	1027	452	2	1756	700	1112	474	1	2287	549	1358	461	7	2375	191	849	301	0	1341	7759
Grand Total	1001	3819	1487	3	6310	1868	3472	1537	6	6883	1579	3946	1243	13	6781	777	3319	849	1	4946	24920
Apprch %	15.9	60.5	23.6	0		27.1	50.4	22.3	0.1		23.3	58.2	18.3	0.2		15.7	67.1	17.2	0		
Total %	4	15.3	6	0	25.3	7.5	13.9	6.2	0	27.6	6.3	15.8	5	0.1	27.2	3.1	13.3	3.4	0	19.8	
Autos	991	3759	1474			1854	3402	1528			1566	3905	1206				3243				24539
% Autos	99	98.4	99.1	100	98.7	99.3	98	99.4	100	98.6	99.2	99	97	100	98.7	96.5	97.7	98.7	100	97.7	98.5
Heavy Vehicles																					
% Heavy Vehicles	1	1.6	0.9	0	1.3	0.7	2	0.6	0	1.4	0.8	1	3	0	1.3	3.5	2.3	1.3	0	2.3	1.5

Traf Tech Engineering Inc.

File Name : 5-Biscayne Blvd & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
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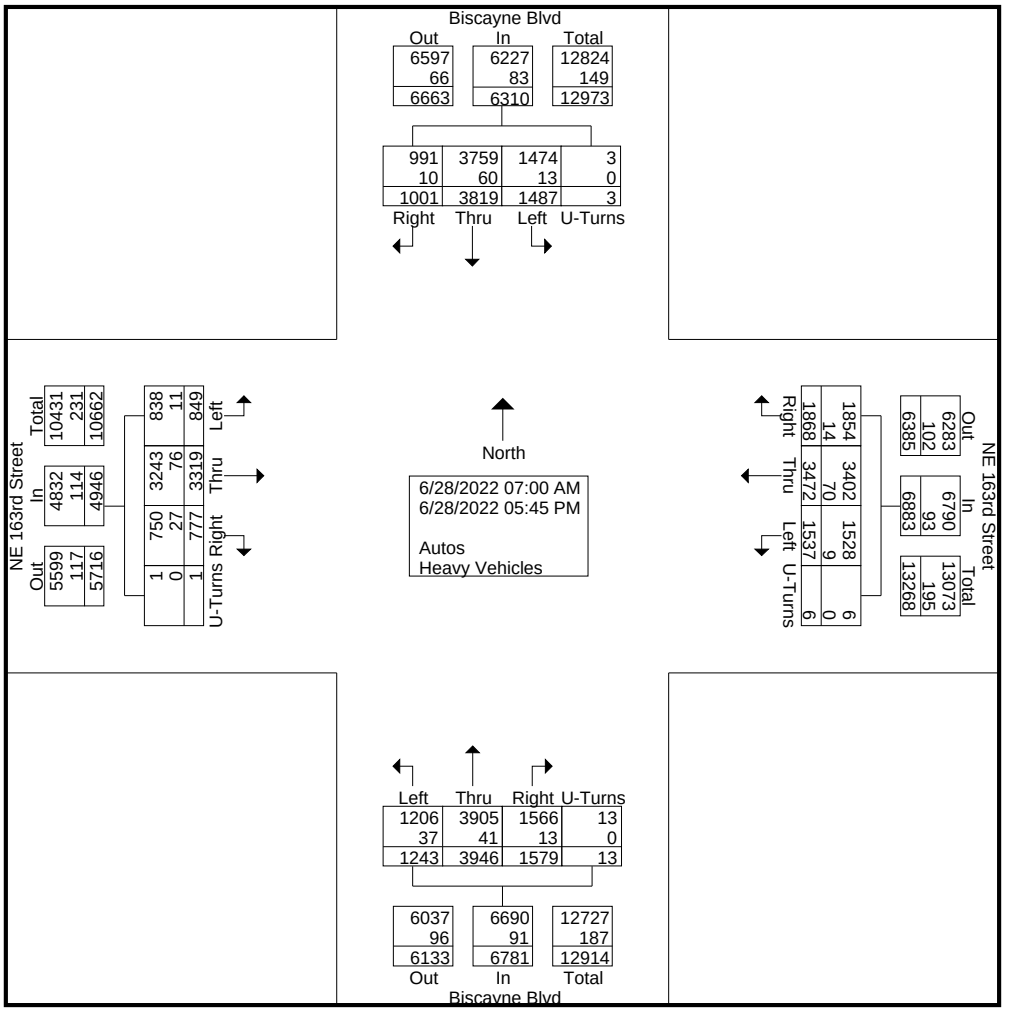
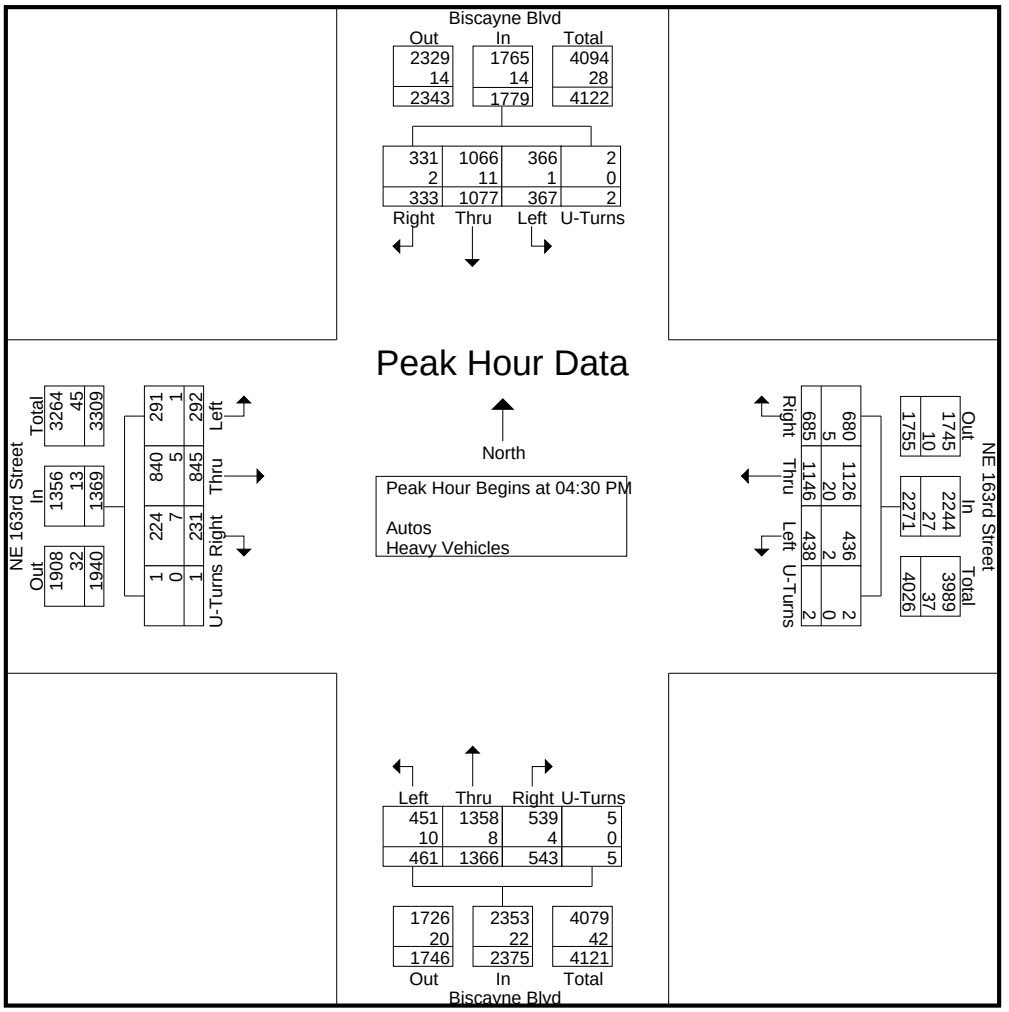


Traf Tech Engineering Inc.

File Name : 5-Biscayne Blvd & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 3

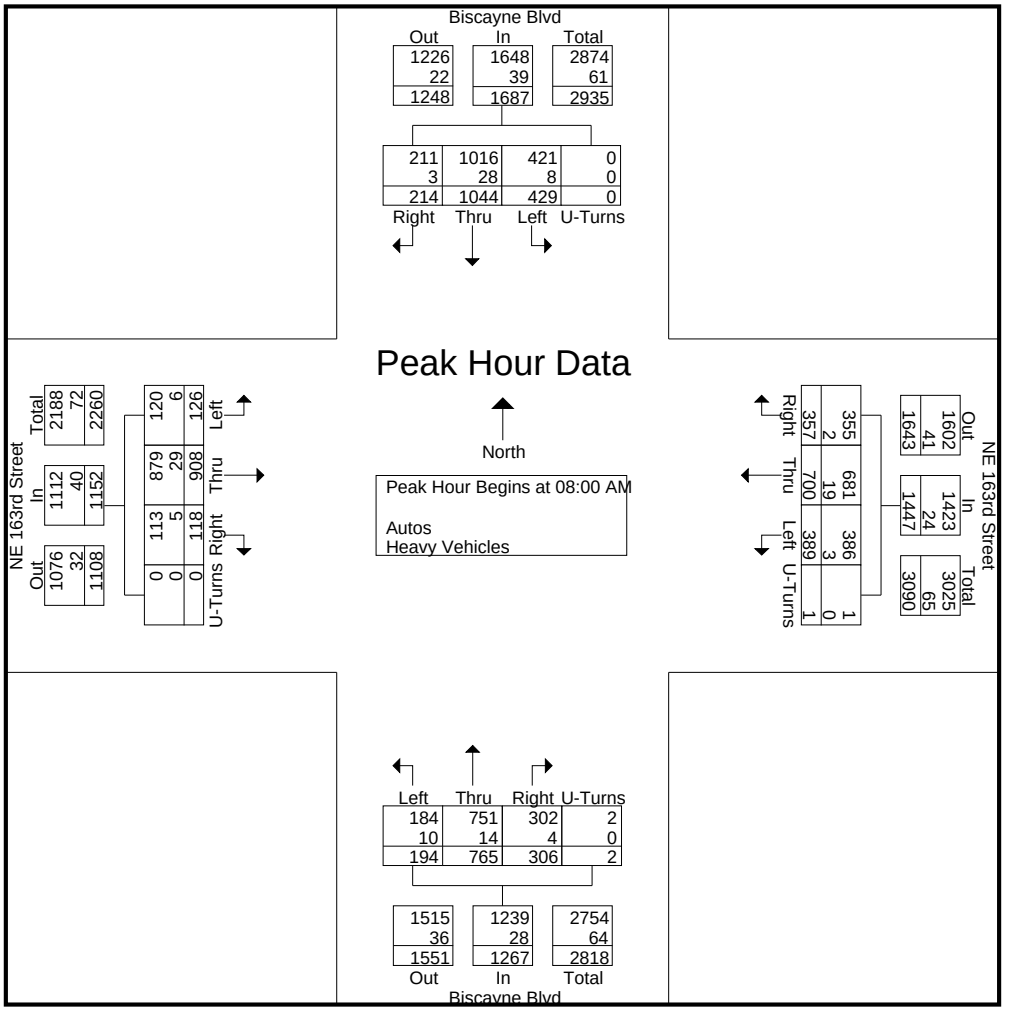
	Biscayne Blvd From North					NE 163rd Street From East					Biscayne Blvd From South					NE 163rd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**103**	**295**	83	0	481	151	253	78	**1**	483	137	307	132	0	576	**70**	179	58	0	307	1847
04:45 PM	80	237	62	0	379	153	263	110	0	526	115	310	70	0	495	55	221	72	**1**	349	1749
05:00 PM	94	275	**130**	**2**	**501**	**207**	**322**	109	1	**639**	**167**	**447**	**166**	**3**	**783**	41	201	67	0	309	**2232**
05:15 PM	56	270	92	0	418	174	308	**141**	0	623	124	302	93	2	521	65	**244**	**95**	0	**404**	1966
Total Volume	333	1077	367	2	1779	685	1146	438	2	2271	543	1366	461	5	2375	231	845	292	1	1369	7794
% App. Total	18.7	60.5	20.6	0.1		30.2	50.5	19.3	0.1		22.9	57.5	19.4	0.2		16.9	61.7	21.3	0.1		
PHF	.808	.913	.706	.250	.888	.827	.890	.777	.500	.888	.813	.764	.694	.417	.758	.825	.866	.768	.250	.847	.873
Autos	331	1066					1126					1358									
% Autos	99.4	99.0	99.7	100	99.2	99.3	98.3	99.5	100	98.8	99.3	99.4	97.8	100	99.1	97.0	99.4	99.7	100	99.1	99.0
Heavy Vehicles																					
% Heavy Vehicles	0.6	1.0	0.3	0	0.8	0.7	1.7	0.5	0	1.2	0.7	0.6	2.2	0	0.9	3.0	0.6	0.3	0	0.9	1.0



Traf Tech Engineering Inc.

File Name : 5-Biscayne Blvd & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 4

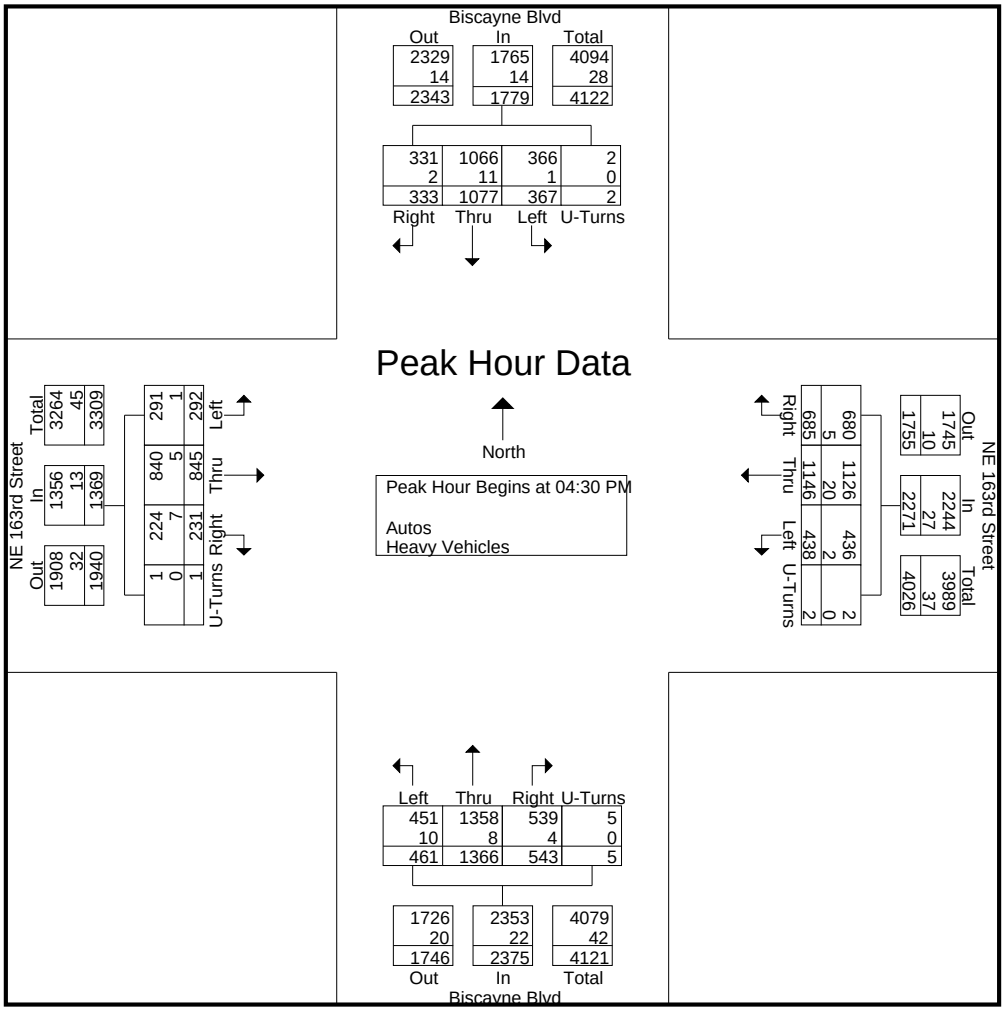
	Biscayne Blvd From North					NE 163rd Street From East					Biscayne Blvd From South					NE 163rd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	34	**285**	84	0	403	58	161	83	0	302	52	190	42	0	284	30	169	26	0	225	1214
08:15 AM	47	226	99	0	372	105	190	103	0	398	69	177	**60**	0	306	**38**	233	**34**	0	305	1381
08:30 AM	**70**	272	110	0	452	86	109	82	0	277	**97**	**206**	41	**1**	**345**	19	199	34	0	252	1326
08:45 AM	63	261	**136**	0	**460**	**108**	**240**	**121**	**1**	**470**	88	192	51	1	332	31	**307**	32	0	**370**	**1632**
Total Volume	214	1044	429	0	1687	357	700	389	1	1447	306	765	194	2	1267	118	908	126	0	1152	5553
% App. Total	12.7	61.9	25.4	0		24.7	48.4	26.9	0.1		24.2	60.4	15.3	0.2		10.2	78.8	10.9	0		
PHF	.764	.916	.789	.000	.917	.826	.729	.804	.250	.770	.789	.928	.808	.500	.918	.776	.739	.926	.000	.778	.851
Autos	211	1016																			
% Autos	98.6	97.3	98.1	0	97.7	99.4	97.3	99.2	100	98.3	98.7	98.2	94.8	100	97.8	95.8	96.8	95.2	0	96.5	97.6
Heavy Vehicles																					
% Heavy Vehicles	1.4	2.7	1.9	0	2.3	0.6	2.7	0.8	0	1.7	1.3	1.8	5.2	0	2.2	4.2	3.2	4.8	0	3.5	2.4



Traf Tech Engineering Inc.

File Name : 5-Biscayne Blvd & NE 163rd St
Site Code : 00000000
Start Date : 6/28/2022
Page No : 5

	Biscayne Blvd From North					NE 163rd Street From East					Biscayne Blvd From South					NE 163rd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	**103**	**295**	83	0	481	151	253	78	**1**	483	137	307	132	0	576	**70**	179	58	0	307	1847
04:45 PM	80	237	62	0	379	153	263	110	0	526	115	310	70	0	495	55	221	72	**1**	349	1749
05:00 PM	94	275	**130**	**2**	**501**	**207**	**322**	109	1	**639**	**167**	**447**	**166**	**3**	**783**	41	201	67	0	309	**2232**
05:15 PM	56	270	92	0	418	174	308	**141**	0	623	124	302	93	2	521	65	**244**	**95**	0	**404**	1966
Total Volume	333	1077	367	2	1779	685	1146	438	2	2271	543	1366	461	5	2375	231	845	292	1	1369	7794
% App. Total	18.7	60.5	20.6	0.1		30.2	50.5	19.3	0.1		22.9	57.5	19.4	0.2		16.9	61.7	21.3	0.1		
PHF	.808	.913	.706	.250	.888	.827	.890	.777	.500	.888	.813	.764	.694	.417	.758	.825	.866	.768	.250	.847	.873
Autos	331	1066					1126					1358									
% Autos	99.4	99.0	99.7	100	99.2	99.3	98.3	99.5	100	98.8	99.3	99.4	97.8	100	99.1	97.0	99.4	99.7	100	99.1	99.0
Heavy Vehicles																					
% Heavy Vehicles	0.6	1.0	0.3	0	0.8	0.7	1.7	0.5	0	1.2	0.7	0.6	2.2	0	0.9	3.0	0.6	0.3	0	0.9	1.0



Traf Tech Engineering Inc.

File Name : 3-NE 172nd St & Dixie Hwy
Site Code : 00000000
Start Date : 5/19/2022
Page No : 1

Groups Printed- Peds & Bikes

	Dixie Hwy From North				NE 172nd Street From East				Dixie Hwy From South				NE 172nd Street From West				
Start Time	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	Int. Total
07:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	3
07:15	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
07:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
07:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	7	1	0	0	0	0	0	0	0	0	0	0	1	10
*** BREAK ***																	
08:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
*** BREAK ***																	
16:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
*** BREAK ***																	
16:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
*** BREAK ***																	
Grand Total	1	0	0	10	1	0	0	0	0	0	0	0	0	0	0	1	13
Apprch %	9.1	0	0	90.9	100	0	0	0	0	0	0	0	0	0	0	100	
Total %	7.7	0	0	76.9	7.7	0	0	0	0	0	0	0	0	0	0	7.7	

Traf Tech Engineering Inc.

File Name : 3-NE 172nd St & Dixie Hwy
Site Code : 00000000
Start Date : 5/19/2022
Page No : 1

Groups Printed- Autos - Heavy Vehicles

	Dixie Hwy From North					NE 172nd Street From East					Dixie Hwy From South					NE 172nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00	24	25	8	0	57	14	30	1	0	45	22	28	2	0	52	20	63	10	1	94	248
07:15	11	33	8	0	52	5	34	0	0	39	20	41	0	0	61	9	33	5	0	47	199
07:30	16	43	14	0	73	20	35	0	0	55	40	56	4	0	100	13	76	15	1	105	333
07:45	19	50	12	0	81	37	60	0	0	97	37	60	3	0	100	17	85	6	1	109	387
Total	70	151	42	0	263	76	159	1	0	236	119	185	9	0	313	59	257	36	3	355	1167
08:00	20	71	12	0	103	18	70	0	0	88	27	47	4	0	78	20	115	13	2	150	419
08:15	21	70	16	0	107	28	57	0	0	85	32	57	2	0	91	10	159	8	0	177	460
08:30	16	62	25	0	103	26	70	1	0	97	45	49	3	0	97	8	110	3	0	121	418
08:45	18	67	26	0	111	12	55	4	0	71	43	58	4	0	105	6	119	5	1	131	418
Total	75	270	79	0	424	84	252	5	0	341	147	211	13	0	371	44	503	29	3	579	1715
*** BREAK ***																					
16:00	30	72	8	1	111	28	98	3	0	129	42	47	5	0	94	24	52	11	0	87	421
16:15	33	94	20	1	148	31	122	3	0	156	34	57	6	0	97	41	59	13	0	113	514
16:30	26	77	16	1	120	19	119	2	0	140	35	67	4	0	106	31	72	4	0	107	473
16:45	39	71	13	0	123	11	146	4	0	161	35	58	5	0	98	31	42	8	0	81	463
Total	128	314	57	3	502	89	485	12	0	586	146	229	20	0	395	127	225	36	0	388	1871
17:00	31	77	8	0	116	19	145	2	0	166	44	67	3	0	114	48	70	8	2	128	524
17:15	22	73	15	0	110	20	144	2	0	166	38	74	0	0	112	34	46	7	1	88	476
17:30	22	99	10	0	131	24	125	9	0	158	39	68	3	0	110	36	60	11	1	108	507
17:45	26	83	14	1	124	16	112	4	0	132	55	65	3	0	123	27	50	14	2	93	472
Total	101	332	47	1	481	79	526	17	0	622	176	274	9	0	459	145	226	40	6	417	1979
Grand Total	374	1067	225	4	1670	328	1422	35	0	1785	588	899	51	0	1538	375	1211	141	12	1739	6732
Apprch %	22.4	63.9	13.5	0.2		18.4	79.7	2	0		38.2	58.5	3.3	0		21.6	69.6	8.1	0.7		
Total %	5.6	15.8	3.3	0.1	24.8	4.9	21.1	0.5	0	26.5	8.7	13.4	0.8	0	22.8	5.6	18	2.1	0.2	25.8	
Autos	370	1055					1400										1185				
% Autos	98.9	98.9	99.6	100	99	97.6	98.5	100	0	98.3	98.5	99.6	98	0	99.1	99.2	97.9	100	91.7	98.3	98.6
Heavy Vehicles																					
% Heavy Vehicles	1.1	1.1	0.4	0	1	2.4	1.5	0	0	1.7	1.5	0.4	2	0	0.9	0.8	2.1	0	8.3	1.7	1.4

Traf Tech Engineering Inc.

File Name : 3-NE 172nd St & Dixie Hwy
Site Code : 00000000
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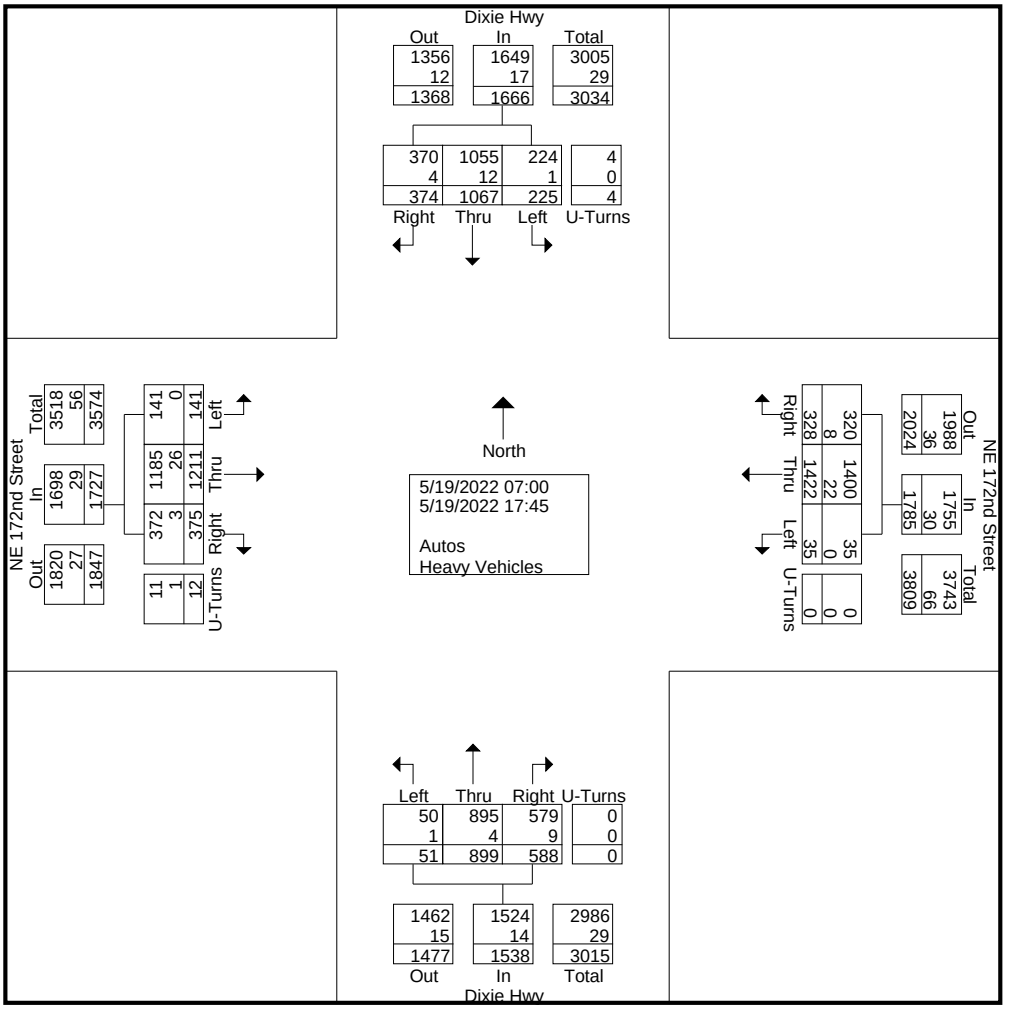
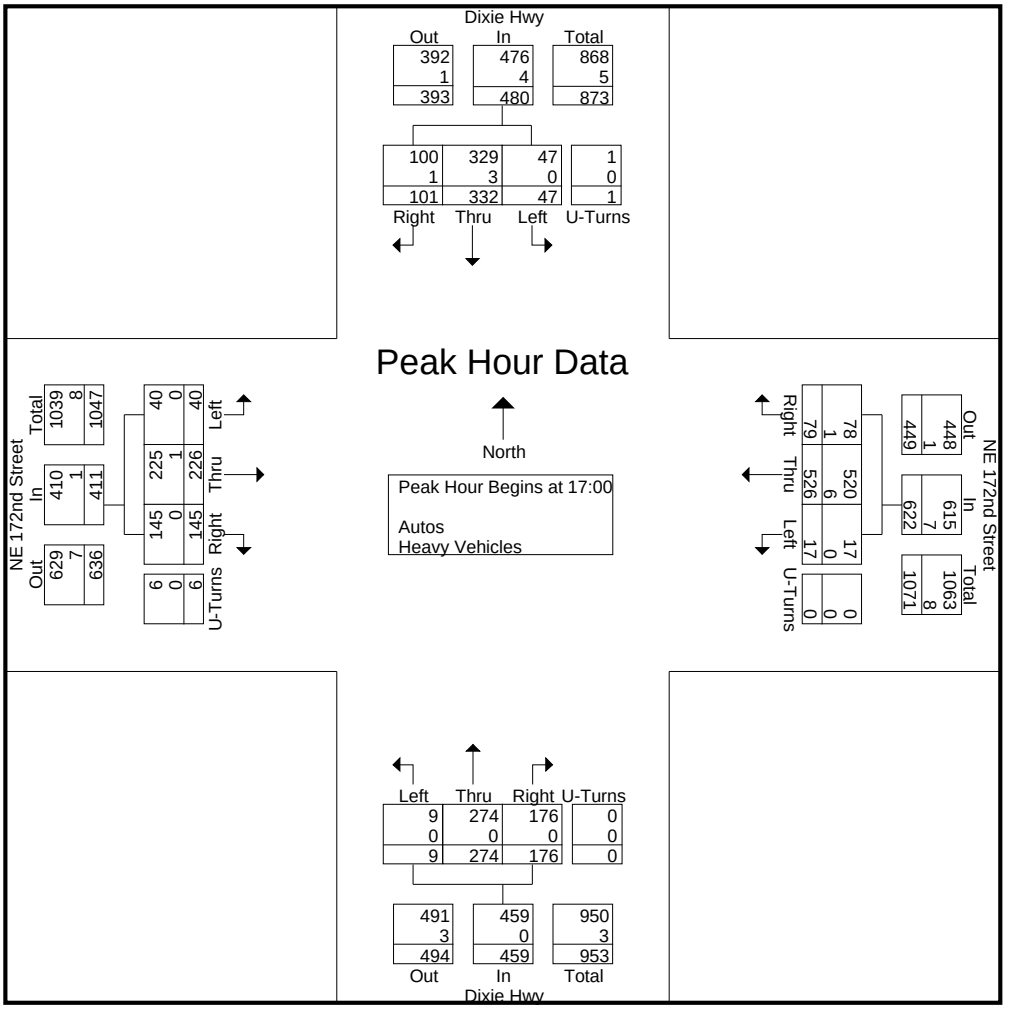


Traf Tech Engineering Inc.

File Name : 3-NE 172nd St & Dixie Hwy
Site Code : 00000000
Start Date : 5/19/2022
Page No : 3

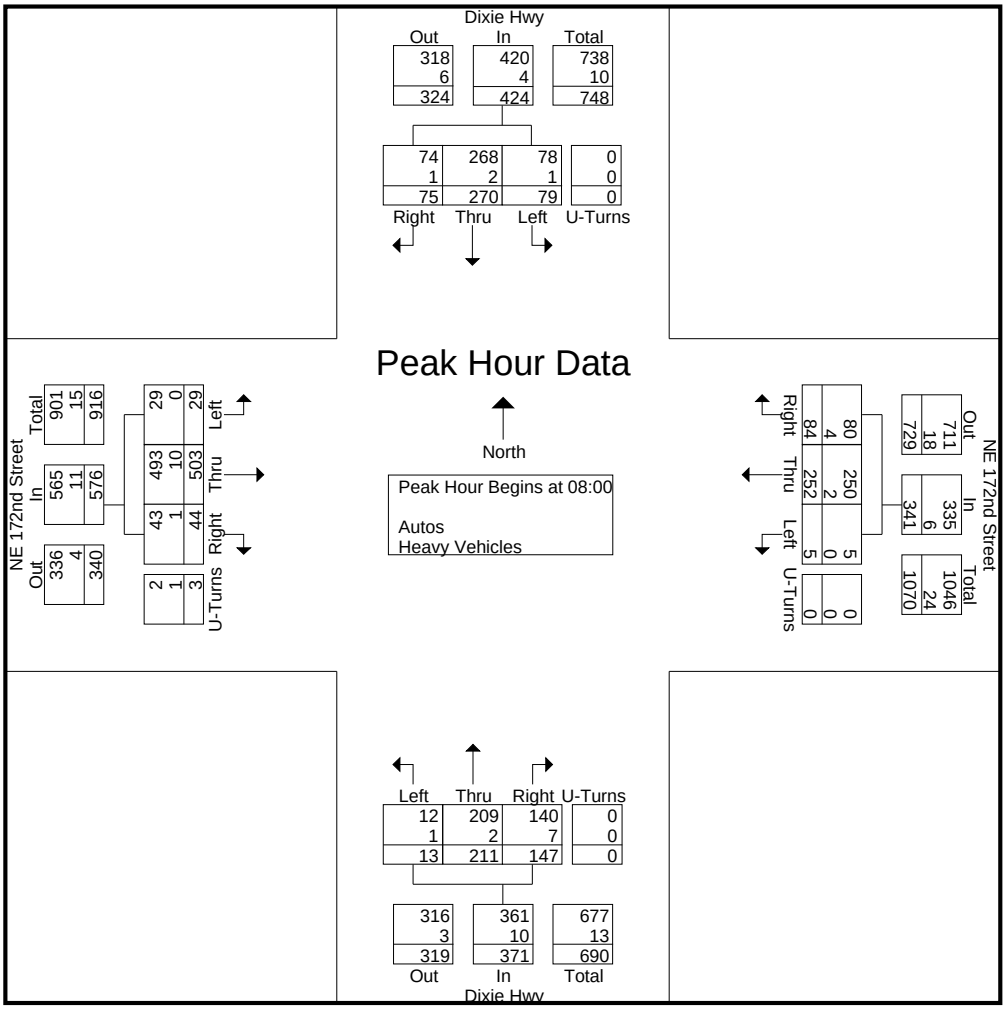
	Dixie Hwy From North					NE 172nd Street From East					Dixie Hwy From South					NE 172nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	31	77	8	0	116	19	145	2	0	166	44	67	3	0	114	48	70	8	2	128	524
17:15	22	73	15	0	110	20	144	2	0	166	38	74	0	0	112	34	46	7	1	88	476
17:30	22	99	10	0	131	24	125	9	0	158	39	68	3	0	110	36	60	11	1	108	507
17:45	26	83	14	1	124	16	112	4	0	132	55	65	3	0	123	27	50	14	2	93	472
Total Volume	101	332	47	1	481	79	526	17	0	622	176	274	9	0	459	145	226	40	6	417	1979
% App. Total	21	69	9.8	0.2		12.7	84.6	2.7	0		38.3	59.7	2	0		34.8	54.2	9.6	1.4		
PHF	.815	.838	.783	.250	.918	.823	.907	.472	.000	.937	.800	.926	.750	.000	.933	.755	.807	.714	.750	.814	.944
Autos	100	329	47	1	477	78	520	17	0	615	176	274	9	0	459	145	225	40	6	416	1967
% Autos	99.0	99.1	100	100	99.2	98.7	98.9	100	0	98.9	100	100	100	0	100	100	99.6	100	100	99.8	99.4
Heavy Vehicles																					
% Heavy Vehicles	1.0	0.9	0	0	0.8	1.3	1.1	0	0	1.1	0	0	0	0	0	0	0.4	0	0	0.2	0.6



Traf Tech Engineering Inc.

File Name : 3-NE 172nd St & Dixie Hwy
Site Code : 00000000
Start Date : 5/19/2022
Page No : 4

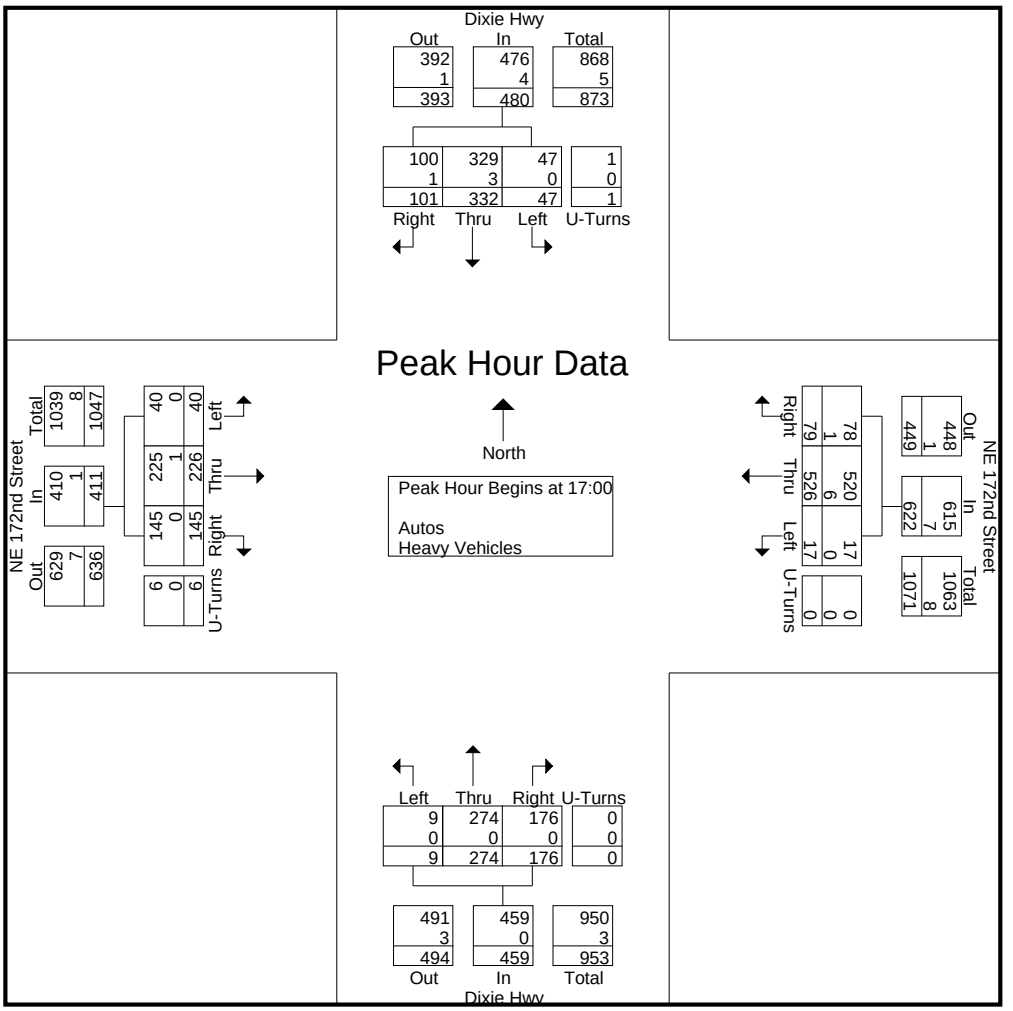
	Dixie Hwy From North					NE 172nd Street From East					Dixie Hwy From South					NE 172nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	20	71	12	0	103	18	70	0	0	88	27	47	4	0	78	20	115	13	2	150	419
08:15	21	70	16	0	107	28	57	0	0	85	32	57	2	0	91	10	159	8	0	177	460
08:30	16	62	25	0	103	26	70	1	0	97	45	49	3	0	97	8	110	3	0	121	418
08:45	18	67	26	0	111	12	55	4	0	71	43	58	4	0	105	6	119	5	1	131	418
Total Volume	75	270	79	0	424	84	252	5	0	341	147	211	13	0	371	44	503	29	3	579	1715
% App. Total	17.7	63.7	18.6	0		24.6	73.9	1.5	0		39.6	56.9	3.5	0		7.6	86.9	5	0.5		
PHF	.893	.951	.760	.000	.955	.750	.900	.313	.000	.879	.817	.909	.813	.000	.883	.550	.791	.558	.375	.818	.932
Autos	74	268	78	0	420	80	250	5	0	335	140	209	12	0	361	43	493	29	2	567	1683
% Autos	98.7	99.3	98.7	0	99.1	95.2	99.2	100	0	98.2	95.2	99.1	92.3	0	97.3	97.7	98.0	100	66.7	97.9	98.1
Heavy Vehicles																					
% Heavy Vehicles	1.3	0.7	1.3	0	0.9	4.8	0.8	0	0	1.8	4.8	0.9	7.7	0	2.7	2.3	2.0	0	33.3	2.1	1.9



Traf Tech Engineering Inc.

File Name : 3-NE 172nd St & Dixie Hwy
Site Code : 00000000
Start Date : 5/19/2022
Page No : 5

	Dixie Hwy From North					NE 172nd Street From East					Dixie Hwy From South					NE 172nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	31	77	8	0	116	19	145	2	0	166	44	67	3	0	114	48	70	8	2	128	524
17:15	22	73	15	0	110	20	144	2	0	166	38	74	0	0	112	34	46	7	1	88	476
17:30	22	99	10	0	131	24	125	9	0	158	39	68	3	0	110	36	60	11	1	108	507
17:45	26	83	14	1	124	16	112	4	0	132	55	65	3	0	123	27	50	14	2	93	472
Total Volume	101	332	47	1	481	79	526	17	0	622	176	274	9	0	459	145	226	40	6	417	1979
% App. Total	21	69	9.8	0.2		12.7	84.6	2.7	0		38.3	59.7	2	0		34.8	54.2	9.6	1.4		
PHF	.815	.838	.783	.250	.918	.823	.907	.472	.000	.937	.800	.926	.750	.000	.933	.755	.807	.714	.750	.814	.944
Autos	100	329	47	1	477	78	520	17	0	615	176	274	9	0	459	145	225	40	6	416	1967
% Autos	99.0	99.1	100	100	99.2	98.7	98.9	100	0	98.9	100	100	100	0	100	100	99.6	100	100	99.8	99.4
Heavy Vehicles																					
% Heavy Vehicles	1.0	0.9	0	0	0.8	1.3	1.1	0	0	1.1	0	0	0	0	0	0	0.4	0	0	0.2	0.6



Traf Tech Engineering Inc.

File Name : 4-NE 172nd St & Biscayne Blvd
Site Code : 00000000
Start Date : 5/19/2022

Groups Printed- Peds & Bikes

	Biscayne Blvd From North				NE 172nd Street From East				Biscayne Blvd From South				NE 172nd Street From West				
Start Time	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	Int. Total
*** BREAK ***																	
07:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
07:30	0	0	0	2	0	0	0	0	1	0	0	0	1	0	0	0	4
07:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Total	0	0	0	2	0	0	0	0	1	0	0	1	2	0	0	0	6
*** BREAK ***																	
08:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
08:30	1	0	0	1	1	0	0	0	0	0	0	3	2	0	0	1	9
08:45	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
Total	1	0	0	1	1	0	0	0	0	0	0	5	3	0	0	1	12
*** BREAK ***																	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
16:15	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4
16:30	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	3
16:45	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3
Total	0	0	0	0	1	0	0	0	0	0	0	6	5	0	0	0	12
17:00	0	0	0	1	0	0	0	0	2	0	0	1	2	0	0	1	7
17:15	0	0	0	0	1	0	0	0	1	0	0	2	1	0	0	0	5
17:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
17:45	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	3
Total	0	0	0	2	1	0	0	0	4	0	0	5	3	0	0	1	16
Grand Total	1	0	0	5	3	0	0	0	5	0	0	17	13	0	0	2	46
Apprch %	16.7	0	0	83.3	100	0	0	0	22.7	0	0	77.3	86.7	0	0	13.3	
Total %	2.2	0	0	10.9	6.5	0	0	0	10.9	0	0	37	28.3	0	0	4.3	

Traf Tech Engineering Inc.

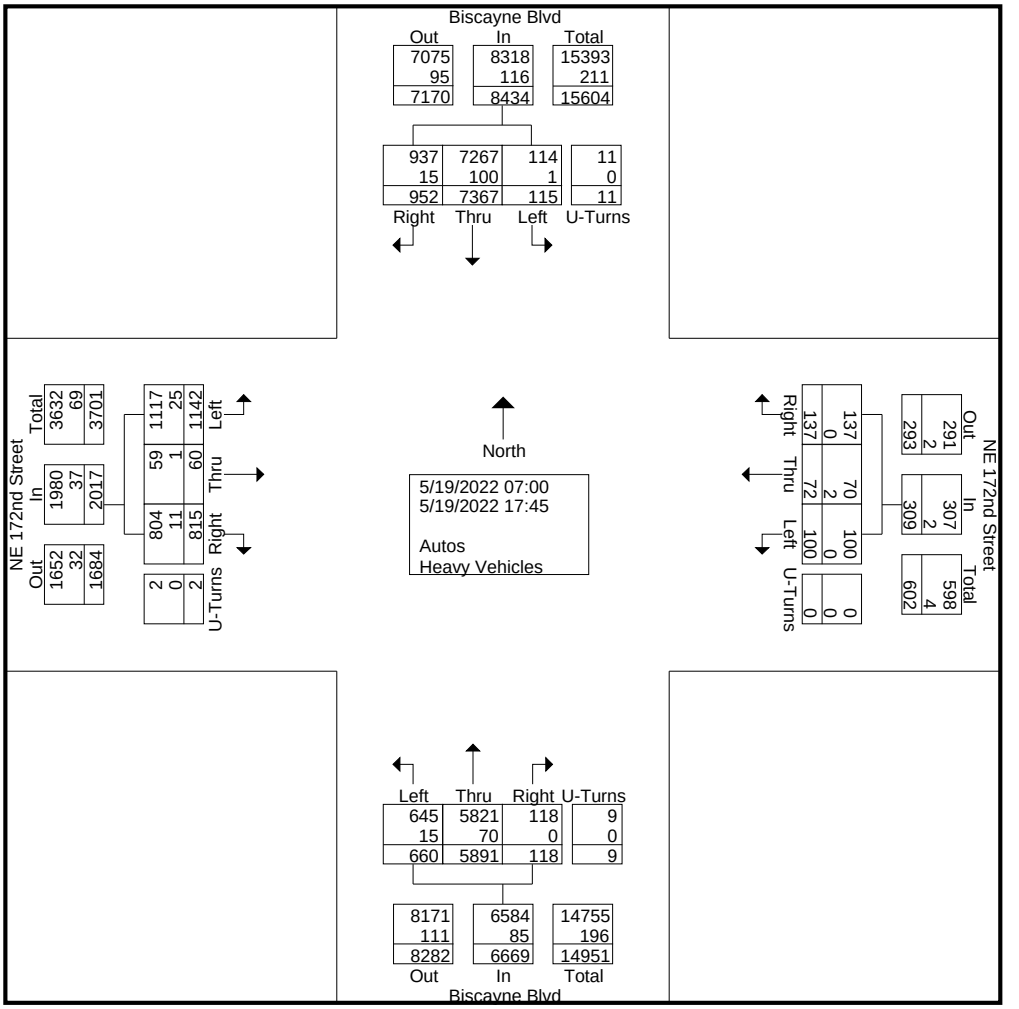
File Name : 4-NE 172nd St & Biscayne Blvd
Site Code : 00000000
Start Date : 5/19/2022
Page No : 1

Groups Printed- Autos - Heavy Vehicles

	Biscayne Blvd From North					NE 172nd Street From East					Biscayne Blvd From South					NE 172nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00	21	376	3	0	400	6	0	5	0	11	3	242	13	0	258	42	7	32	0	81	750
07:15	22	309	3	0	334	7	1	4	0	12	2	255	15	1	273	37	2	34	0	73	692
07:30	24	342	2	0	368	4	3	6	0	13	3	330	29	0	362	32	0	50	0	82	825
07:45	45	445	6	0	496	13	5	9	0	27	11	311	41	1	364	61	7	96	0	164	1051
Total	112	1472	14	0	1598	30	9	24	0	63	19	1138	98	2	1257	172	16	212	0	400	3318
08:00	49	511	6	1	567	10	4	5	0	19	2	335	28	0	365	81	5	79	0	165	1116
08:15	43	546	2	0	591	6	4	11	0	21	7	376	33	1	417	89	4	93	0	186	1215
08:30	40	508	6	0	554	7	7	8	0	22	5	362	40	0	407	95	2	99	0	196	1179
08:45	40	448	12	1	501	11	5	6	0	22	6	416	29	2	453	85	4	105	0	194	1170
Total	172	2013	26	2	2213	34	20	30	0	84	20	1489	130	3	1642	350	15	376	0	741	4680
*** BREAK ***																					
16:00	78	424	10	1	513	9	2	5	0	16	10	410	47	0	467	32	3	74	0	109	1105
16:15	84	496	4	0	584	9	3	7	0	19	4	434	55	0	493	36	4	74	0	114	1210
16:30	84	485	11	0	580	16	10	8	0	34	11	391	54	0	456	41	3	77	0	121	1191
16:45	78	444	11	2	535	8	7	4	0	19	20	435	58	1	514	30	4	56	1	91	1159
Total	324	1849	36	3	2212	42	22	24	0	88	45	1670	214	1	1930	139	14	281	1	435	4665
17:00	95	509	7	1	612	12	6	4	0	22	9	380	68	0	457	41	4	89	1	135	1226
17:15	85	532	9	3	629	8	6	9	0	23	4	423	50	1	478	38	6	40	0	84	1214
17:30	88	484	13	0	585	3	5	4	0	12	9	371	57	1	438	36	5	68	0	109	1144
17:45	76	508	10	2	596	8	4	5	0	17	12	420	43	1	476	39	0	76	0	115	1204
Total	344	2033	39	6	2422	31	21	22	0	74	34	1594	218	3	1849	154	15	273	1	443	4788
Grand Total	952	7367	115	11	8445	137	72	100	0	309	118	5891	660	9	6678	815	60	1142	2	2019	17451
Apprch %	11.3	87.2	1.4	0.1		44.3	23.3	32.4	0		1.8	88.2	9.9	0.1		40.4	3	56.6	0.1		
Total %	5.5	42.2	0.7	0.1	48.4	0.8	0.4	0.6	0	1.8	0.7	33.8	3.8	0.1	38.3	4.7	0.3	6.5	0	11.6	
Autos	937	7267										5821						1117			17211
% Autos	98.4	98.6	99.1	100	98.6	100	97.2	100	0	99.4	100	98.8	97.7	100	98.7	98.7	98.3	97.8	100	98.2	98.6
Heavy Vehicles																					
% Heavy Vehicles	1.6	1.4	0.9	0	1.4	0	2.8	0	0	0.6	0	1.2	2.3	0	1.3	1.3	1.7	2.2	0	1.8	1.4

Traf Tech Engineering Inc.

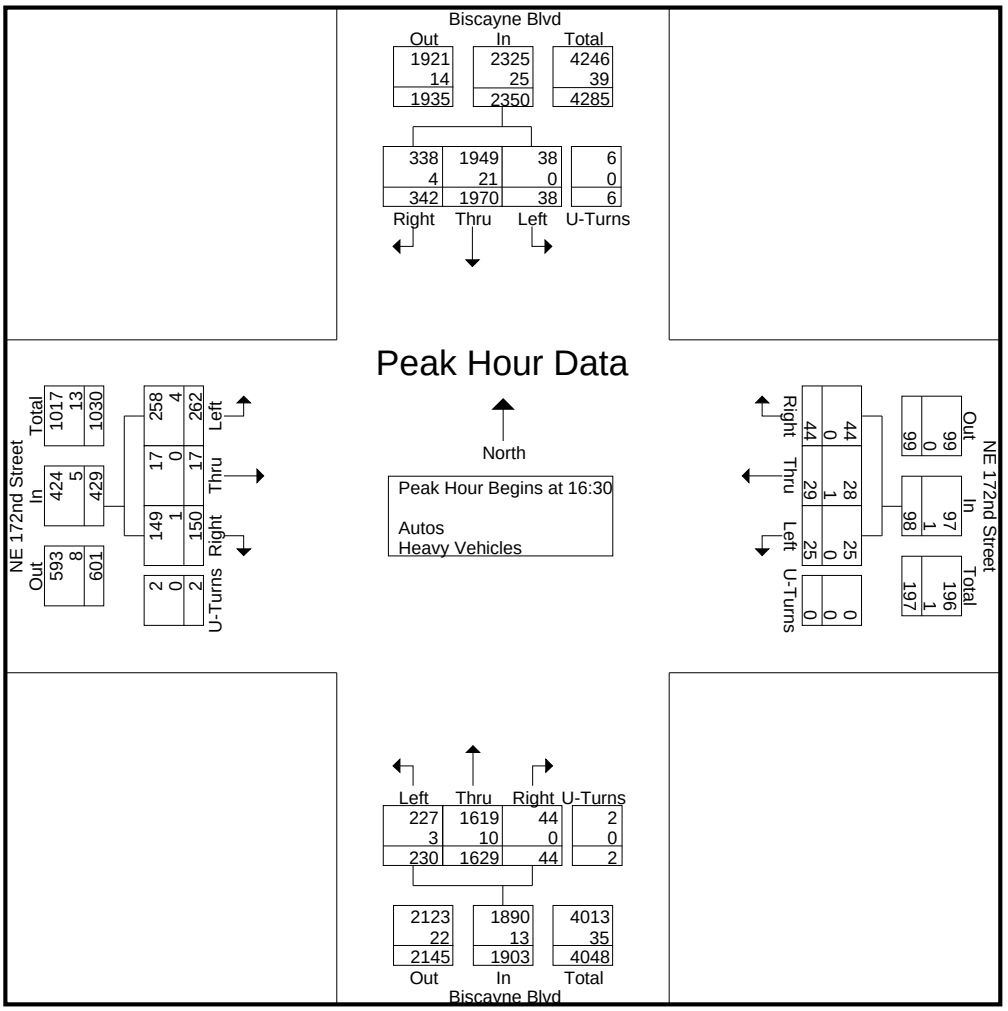
File Name : 4-NE 172nd St & Biscayne Blvd
Site Code : 00000000
Start Date : 5/19/2022
Page No : 2



Traf Tech Engineering Inc.

File Name : 4-NE 172nd St & Biscayne Blvd
Site Code : 00000000
Start Date : 5/19/2022
Page No : 3

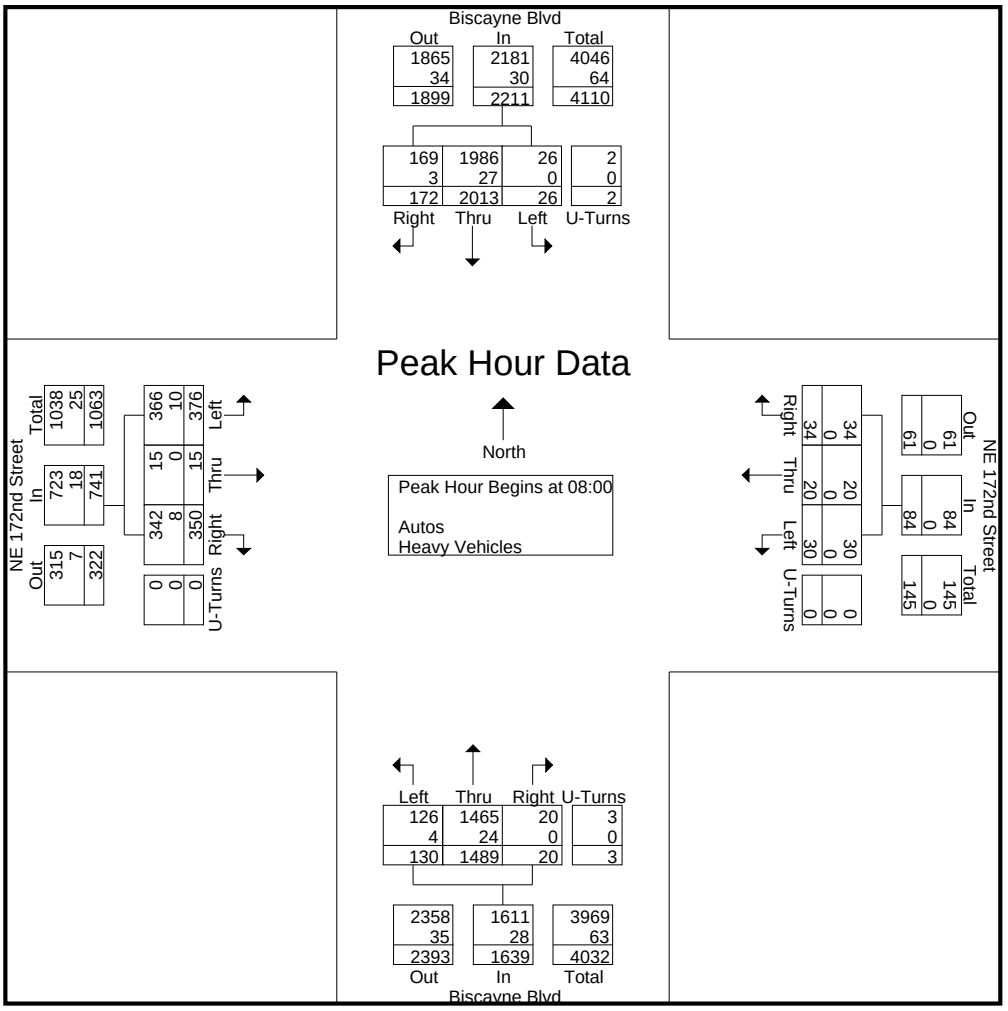
	Biscayne Blvd From North					NE 172nd Street From East					Biscayne Blvd From South					NE 172nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:30																					
16:30	84	485	11	0	580	16	10	8	0	34	11	391	54	0	456	41	3	77	0	121	1191
16:45	78	444	11	2	535	8	7	4	0	19	20	435	58	1	514	30	4	56	1	91	1159
17:00	95	509	7	1	612	12	6	4	0	22	9	380	68	0	457	41	4	89	1	135	1226
17:15	85	532	9	3	629	8	6	9	0	23	4	423	50	1	478	38	6	40	0	84	1214
Total Volume	342	1970	38	6	2356	44	29	25	0	98	44	1629	230	2	1905	150	17	262	2	431	4790
% App. Total	14.5	83.6	1.6	0.3		44.9	29.6	25.5	0		2.3	85.5	12.1	0.1		34.8	3.9	60.8	0.5		
PHF	.900	.926	.864	.500	.936	.688	.725	.694	.000	.721	.550	.936	.846	.500	.927	.915	.708	.736	.500	.798	.977
Autos	338	1949										1619									
% Autos	98.8	98.9	100	100	98.9	100	96.6	100	0	99.0	100	99.4	98.7	100	99.3	99.3	100	98.5	100	98.8	99.1
Heavy Vehicles																					
% Heavy Vehicles	1.2	1.1	0	0	1.1	0	3.4	0	0	1.0	0	0.6	1.3	0	0.7	0.7	0	1.5	0	1.2	0.9



Traf Tech Engineering Inc.

File Name : 4-NE 172nd St & Biscayne Blvd
Site Code : 00000000
Start Date : 5/19/2022
Page No : 4

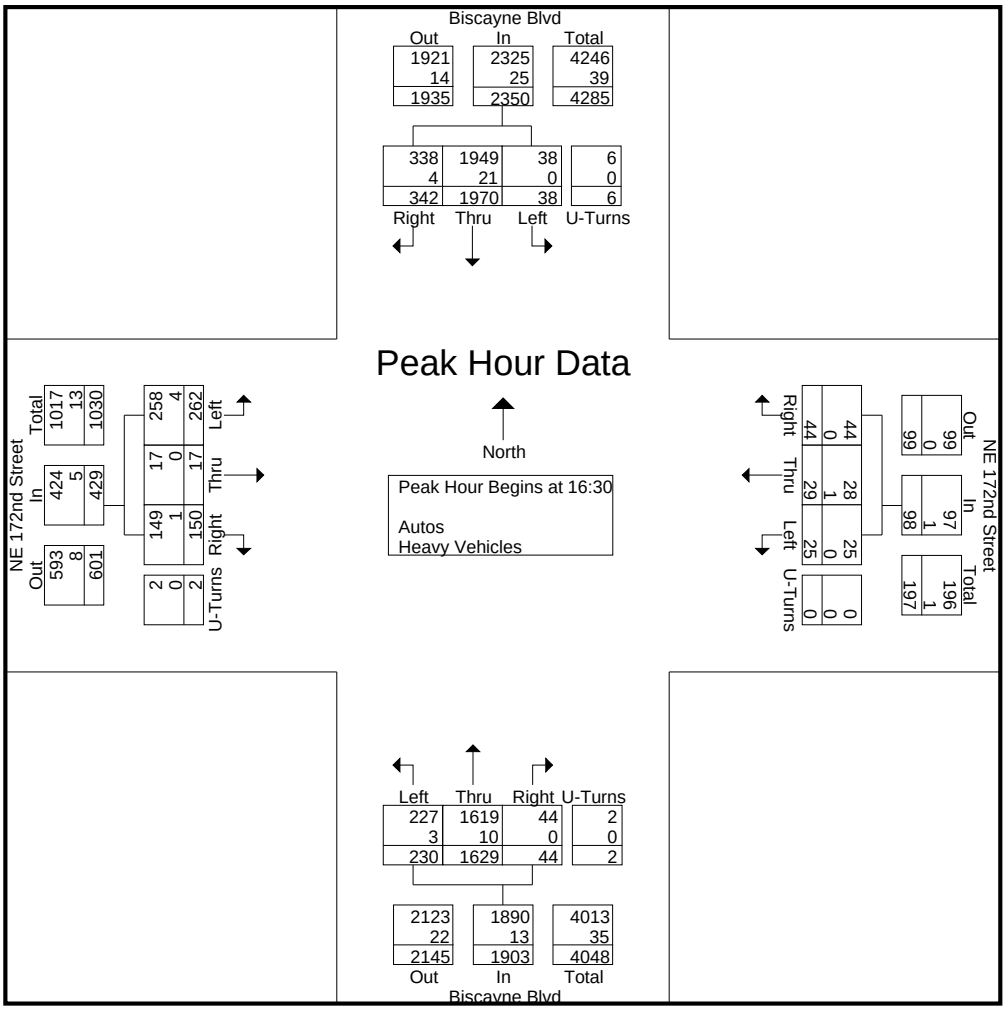
	Biscayne Blvd From North					NE 172nd Street From East					Biscayne Blvd From South					NE 172nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	49	511	6	1	567	10	4	5	0	19	2	335	28	0	365	81	5	79	0	165	1116
08:15	43	546	2	0	591	6	4	11	0	21	7	376	33	1	417	89	4	93	0	186	1215
08:30	40	508	6	0	554	7	7	8	0	22	5	362	40	0	407	95	2	99	0	196	1179
08:45	40	448	12	1	501	11	5	6	0	22	6	416	29	2	453	85	4	105	0	194	1170
Total Volume	172	2013	26	2	2213	34	20	30	0	84	20	1489	130	3	1642	350	15	376	0	741	4680
% App. Total	7.8	91	1.2	0.1		40.5	23.8	35.7	0		1.2	90.7	7.9	0.2		47.2	2	50.7	0		
PHF	.878	.922	.542	.500	.936	.773	.714	.682	.000	.955	.714	.895	.813	.375	.906	.921	.750	.895	.000	.945	.963
Autos	169	1986										1465									
% Autos	98.3	98.7	100	100	98.6	100	100	100	0	100	100	98.4	96.9	100	98.3	97.7	100	97.3	0	97.6	98.4
Heavy Vehicles																					
% Heavy Vehicles	1.7	1.3	0	0	1.4	0	0	0	0	0	0	1.6	3.1	0	1.7	2.3	0	2.7	0	2.4	1.6



Traf Tech Engineering Inc.

File Name : 4-NE 172nd St & Biscayne Blvd
Site Code : 00000000
Start Date : 5/19/2022
Page No : 5

	Biscayne Blvd From North					NE 172nd Street From East					Biscayne Blvd From South					NE 172nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:30																					
16:30	84	485	11	0	580	16	10	8	0	34	11	391	54	0	456	41	3	77	0	121	1191
16:45	78	444	11	2	535	8	7	4	0	19	20	435	58	1	514	30	4	56	1	91	1159
17:00	95	509	7	1	612	12	6	4	0	22	9	380	68	0	457	41	4	89	1	135	1226
17:15	85	532	9	3	629	8	6	9	0	23	4	423	50	1	478	38	6	40	0	84	1214
Total Volume	342	1970	38	6	2356	44	29	25	0	98	44	1629	230	2	1905	150	17	262	2	431	4790
% App. Total	14.5	83.6	1.6	0.3		44.9	29.6	25.5	0		2.3	85.5	12.1	0.1		34.8	3.9	60.8	0.5		
PHF	.900	.926	.864	.500	.936	.688	.725	.694	.000	.721	.550	.936	.846	.500	.927	.915	.708	.736	.500	.798	.977
Autos	338	1949										1619									
% Autos	98.8	98.9	100	100	98.9	100	96.6	100	0	99.0	100	99.4	98.7	100	99.3	99.3	100	98.5	100	98.8	99.1
Heavy Vehicles																					
% Heavy Vehicles	1.2	1.1	0	0	1.1	0	3.4	0	0	1.0	0	0.6	1.3	0	0.7	0.7	0	1.5	0	1.2	0.9



TOD Schedule Report
for 2010: SR- 826&US 1

Print Date: 10/4/2021

Print Time: 1:49 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2010	SR- 826&US 1	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
NBL	SBT	EBL	WBT	SBL	NBT	WBL	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk Phase Bank 1 2 3	Don't Walk 1 2 3	Min Initial 1 2 3	Veh Ext 1 2 3	Max Limit 1 2 3	Max 2 1 2 3	Yellow	Red
1 NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	3 - 3 - 3	24 - 24 - 24	27 - 27 - 27	4.8	2
2 SBT	4 - 4 - 4	38 - 38 - 38	7 - 7 - 7	1 - 1 - 1	50 - 50 - 50	50 - 50 - 50	4.8	2.4
3 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	3 - 3 - 3	25 - 25 - 25	34 - 34 - 34	4.8	2
4 WBT	4 - 4 - 4	47 - 47 - 47	7 - 7 - 7	2.5 - 2.5 - 2.5	55 - 55 - 55	55 - 55 - 55	4.8	2.9
5 SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	3 - 3 - 3	24 - 24 - 24	27 - 27 - 27	4.8	2
6 NBT	4 - 4 - 4	38 - 38 - 38	7 - 7 - 7	1 - 1 - 1	50 - 50 - 50	50 - 50 - 50	4.8	2.4
7 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	3 - 3 - 3	25 - 25 - 25	34 - 34 - 34	4.8	2
8 EBT	4 - 4 - 4	47 - 47 - 47	7 - 7 - 7	2.5 - 2.5 - 2.5	55 - 55 - 55	55 - 55 - 55	4.8	2.9

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345678
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

TOD Schedule Report

for 2010: SR- 826&US 1

Print Date: 10/4/2021

Print Time: 1:49 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 NBL	2 SBT	3 EBL	4 WBT	5 SBL	6 NBT	7 WBL	8 EBT	Ring Offset	Offset
	1	140	13	57	14	27	13	57	14	27	0	56
	2	125	15	32	17	32	15	32	17	32	0	107
	3	170	25	43	26	47	25	43	26	47	0	77
	4	170	22	44	26	49	22	44	26	49	0	77
	5	130	14	32	17	38	14	32	17	38	0	18
	6	150	19	48	19	35	19	48	19	35	0	60
	7	150	19	48	19	35	19	48	19	35	0	60
	8	105	10	32	13	21	10	32	13	21	0	60
	9	150	24	33	25	39	24	33	25	39	0	71
	10	125	16	32	17	31	16	32	17	31	0	107
	11	170	25	43	26	47	25	43	26	47	0	77
	12	115	12	32	14	28	12	32	14	28	0	79
	13	130	14	32	20	35	14	32	20	35	0	54
	14	130	14	32	17	38	14	32	17	38	0	62
	15	150	15	45	22	39	15	45	22	39	0	81
	16	115	10	34	12	30	10	34	12	30	0	56
	22	145	14	53	14	35	14	53	14	35	0	60
	23	140	14	48	14	35	14	48	14	35	0	60
	25	120	13	33	12	32	14	32	19	26	0	52
	26	135	23	32	17	33	22	33	23	28	0	5
	27	160	23	42	17	48	27	38	28	38	0	34
	28	100	13	31	12	14	12	32	13	14	0	83

Local TOD Schedule

Time	Plan	DOW
0000	23	M T W Th F
0000	23	Su S
0100	22	Su S
0100	22	M T W Th F
0500	7	M T W Th F
0530	4	M T W Th F
0600	1	Su S
1000	11	Su S
1000	3	M T W Th F
1500	11	M T W Th F
2100	6	M T W Th F
2100	6	Su S
2300	23	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 2019: SR- 826&W Dixie Hwy

Print Date: 10/4/2021

Print Time: 1:49 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2019	SR- 826&W Dixie Hwy	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
EBL	WBT	SBL	NBT	WBL	EBT	NBL	SBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 - 2 - 3)	Don't Walk (1 - 2 - 3)	Min Initial (1 - 2 - 3)	Veh Ext (1 - 2 - 3)	Max Limit (1 - 2 - 3)	Max 2 (1 - 2 - 3)	Yellow	Red
1 EBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	12 - 12 - 12	25 - 25 - 25	4	2
2 WBT	7 - 7 - 7	19 - 19 - 19	7 - 7 - 7	1 - 1 - 1	45 - 45 - 45	0 - 0 - 0	4	2
3 SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	12 - 12 - 12	23 - 23 - 23	4.4	2
4 NBT	4 - 4 - 4	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	25 - 25 - 25	40 - 40 - 40	4.4	2
5 WBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	3 - 3 - 3	12 - 12 - 12	30 - 30 - 30	4	2
6 EBT	7 - 7 - 7	19 - 19 - 19	7 - 7 - 7	1 - 1 - 1	45 - 45 - 45	0 - 0 - 0	4	2
7 NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	12 - 12 - 12	26 - 26 - 26	4.4	2
8 SBT	4 - 4 - 4	20 - 20 - 20	7 - 7 - 7	2.5 - 2.5 - 2.5	25 - 25 - 25	40 - 40 - 40	4.4	2

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345678
External Permit 0	--------
External Permit 1	-2-4-6-8
External Permit 2	12345678

TOD Schedule Report

for 2019: SR- 826&W Dixie Hwy

Print Date: 10/4/2021

Print Time: 1:49 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 EBL	2 WBT	3 SBL	4 NBT	5 WBL	6 EBT	7 NBL	8 SBT	Ring Offset	Offset
	1	140	12	66	12	26	12	66	12	26	0	12
	2	125	12	51	16	22	12	51	16	22	0	64
	3	170	18	84	18	26	18	84	18	26	0	27
	4	170	18	84	18	26	18	84	18	26	0	27
	5	130	12	56	16	22	12	56	16	22	0	88
	6	150	15	75	10	26	15	75	10	26	0	19
	7	150	15	75	10	26	15	75	10	26	0	19
	8	105	13	45	6	17	13	45	6	17	0	19
	9	150	0	144	0	0	0	144	0	0	0	0
	10	125	14	51	14	22	14	51	14	22	0	64
	11	170	18	84	18	26	18	84	18	26	0	27
	12	115	12	45	12	22	12	45	12	22	0	25
	13	130	12	56	16	22	12	56	16	22	0	127
	14	130	12	56	16	22	12	56	16	22	0	5
	15	150	13	66	18	29	13	66	18	29	0	28
	16	115	12	45	12	22	12	45	12	22	0	12
	22	145	14	71	10	26	14	71	10	26	0	19
	23	140	14	66	10	26	14	66	10	26	0	19
	25	120	8	52	10	26	14	46	10	26	0	8
	26	135	14	59	14	24	19	54	14	24	0	98
	27	160	19	69	14	34	24	64	19	29	0	137
	28	100	14	31	12	19	14	31	12	19	0	37

Local TOD Schedule

Time	Plan	DOW
0000	23	Su M T W Th F S
0100	22	Su M T W Th F S
0500	7	M T W Th F
0530	4	M T W Th F
0600	1	Su S
1000	3	M T W Th F
1000	11	Su S
1500	11	M T W Th F
2100	6	M T W Th F
2100	6	Su S
2300	23	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 2023: W Dixie Hwy&NE 172 St

Print Date: 10/4/2021

Print Time: 1:50 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
2023	W Dixie Hwy&NE 172 St	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	SBT	-	WBT	-	NBT	-	EBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk Phase Bank 1	Walk Phase Bank 2	Walk Phase Bank 3	Don't Walk Phase Bank 1	Don't Walk Phase Bank 2	Don't Walk Phase Bank 3	Min Initial Phase Bank 1	Min Initial Phase Bank 2	Min Initial Phase Bank 3	Veh Ext Phase Bank 1	Veh Ext Phase Bank 2	Veh Ext Phase Bank 3	Max Limit Phase Bank 1	Max Limit Phase Bank 2	Max Limit Phase Bank 3	Max 2 Phase Bank 1	Max 2 Phase Bank 2	Max 2 Phase Bank 3	Yellow	Red
1 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 SBT	7	7	7	21	21	21	7	7	7	1	1	1	32	32	32	0	0	0	4	2
3 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 WBT	1	1	1	17	17	17	7	7	7	2.5	2.5	2.5	28	55	28	34	34	34	4	2
5 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 NBT	7	7	7	21	21	21	7	7	7	1	1	1	32	32	32	0	0	0	4	2
7 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 EBT	1	1	1	17	17	17	7	7	7	2.5	2.5	2.5	28	55	28	34	34	34	4	2

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-2-4-6-8
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	1	2	3	4	5	6	7	8	Ring Offset	Offset
			-	SBT	-	WBT	-	NBT	-	EBT		

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S

TOD Schedule Report

for 2023: W Dixie Hwy&NE 172 St

Print Date: 10/4/2021

Print Time: 1:50 PM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-------1	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	-------1	SuM T W ThF S

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report
for 3638: US 1&NE 172 St

Print Date: 10/4/2021

Print Time: 5:03 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
3638	US 1&NE 172 St	DOW-2	TOD	N/A	0	0	N/A	0	Max 0

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
NBL	SBT	EBT	WBT	SBL	NBT	-	-
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 1

Phase	Walk Phase Bank 1 2 3	Don't Walk 1 2 3	Min Initial 1 2 3	Veh Ext 1 2 3	Max Limit 1 2 3	Max 2 1 2 3	Yellow	Red
1 NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	20 - 15 - 15	37 - 30 - 30	4.8	2
2 SBT	7 - 7 - 7	16 - 16 - 16	7 - 7 - 7	1 - 1 - 1	50 - 40 - 40	0 - 0 - 0	4.8	2.3
3 EBT	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	5 - 2 - 2	28 - 15 - 15	47 - 25 - 25	4	3.5
4 WBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	2.5 - 2.5 - 2.5	20 - 16 - 16	50 - 30 - 30	4	3.5
5 SBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	10 - 5 - 5	10 - 5 - 5	4.8	2
6 NBT	7 - 7 - 7	16 - 16 - 16	7 - 7 - 7	1 - 1 - 1	50 - 40 - 40	0 - 0 - 0	4.8	2.3
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 -	7 - 7 - 7	27 - 27 - 27	7 - 7 - 7	2.5 - 2.5 - 2.5	20 - 16 - 16	50 - 30 - 30	4	3.5

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12345678
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

TOD Schedule Report

for 3638: US 1&NE 172 St

Print Date: 10/4/2021

Print Time: 5:03 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 NBL	2 SBT	3 EBT	4 WBT	5 SBL	6 NBT	7 -	8 -	Ring Offset	Offset
	1	125	17	50	21	8	10	57	0	36	0	0
	2	150	21	58	31	11	10	69	0	49	0	0
	3	180	21	88	31	11	10	99	0	49	0	0
	4	90	13	21	16	11	8	27	0	34	0	0
	5	180	21	83	36	11	10	94	0	54	0	0
	6	180	21	73	46	11	10	84	0	64	0	0
	7	180	21	73	46	11	10	84	0	64	0	0
	8	180	21	73	46	11	10	84	0	64	0	0
	9	180	21	88	31	11	10	99	0	49	0	0
	11	180	22	87	30	11	10	99	0	49	0	0
	12	180	21	73	46	11	10	84	0	64	0	86

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0600	1	Su M T W Th F S
0715	7	M T W Th F
0800	5	Su S
0845	12	M T W Th F
1200	6	Su S
1345	8	M T W Th F
1430	6	W
1530	6	M T Th F
2100	2	M T W Th F
2245	Free	M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S

*** Settings**

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

No Calendar Defined/Enabled

TOD Schedule Report

for 3647: W Dixie Hwy&NE 164 St

Print Date: 10/4/2021

Print Time: 5:04 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
3647	W Dixie Hwy&NE 164 St	DOW-2	TOD	[03] AM PEAK	170	106	N/A	1	Max 2

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
NBL	SBT	-	WBT	-	NBT	-	EBT
9	118	0	25	0	133	0	25

Active Phase Bank: Phase Bank 1

Phase	Walk (Phase Bank 1 2 3)	Don't Walk (1 2 3)	Min Initial (1 2 3)	Veh Ext (1 2 3)	Max Limit (1 2 3)	Max 2 (1 2 3)	Yellow	Red
1 NBL	0 - 0 - 0	0 - 0 - 0	5 - 5 - 5	2 - 2 - 2	6 - 8 - 6	21 - 10 - 21	3.7	2
2 SBT	5 - 5 - 5	19 - 19 - 19	5 - 5 - 5	1 - 1 - 1	30 - 34 - 30	0 - 40 - 0	4	2
3 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
4 WBT	4 - 4 - 4	19 - 19 - 19	7 - 7 - 7	2.5 - 2.5 - 2.5	16 - 18 - 16	45 - 33 - 45	4	2
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 NBT	5 - 5 - 5	19 - 19 - 19	5 - 5 - 5	1 - 1 - 1	30 - 34 - 30	0 - 40 - 0	4	2
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 EBT	4 - 4 - 4	19 - 19 - 19	7 - 7 - 7	2.5 - 2.5 - 2.5	16 - 18 - 16	45 - 33 - 45	4	2

Last In Service Date: unknown

Permitted Phases

	12345678
Default	12-4-6-8
External Permit 0	--------
External Permit 1	-2-4-6-8
External Permit 2	12-4-6-8

TOD Schedule Report

for 3647: W Dixie Hwy&NE 164 St

Print Date: 10/4/2021

Print Time: 5:04 PM

Current TOD Schedule	Plan	Cycle	Green Time 1 NBL	2 SBT	3 -	4 WBT	5 -	6 NBT	7 -	8 EBT	Ring Offset	Offset
	1	140	14	78	0	30	0	98	0	30	0	77
	2	125	13	59	0	35	0	78	0	35	0	16
	3	170	9	118	0	25	0	133	0	25	0	106
	5	130	17	60	0	35	0	83	0	35	0	43
	6	105	6	62	0	19	0	74	0	19	0	103
	10	125	13	59	0	35	0	78	0	35	0	16
	12	115	14	53	0	30	0	73	0	30	0	100
	13	130	17	60	0	35	0	83	0	35	0	82
	14	130	17	60	0	35	0	83	0	35	0	90
	15	150	19	70	0	43	0	95	0	43	0	123
	16	115	14	53	0	30	0	73	0	30	0	77
	25	120	14	64	0	24	0	84	0	24	0	64
	26	135	14	79	0	24	0	99	0	24	0	57
	27	80	9	39	0	14	0	54	0	14	0	44
	28	100	14	44	0	24	0	64	0	24	0	88

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S
0100	Flash	Su M T W Th F S
0500	Free	M T W Th F
0600	1	Su S
1000	3	M T W Th F
1000	3	Su S
2100	6	M T W Th F
2100	16	Su
2100	Free	S
2300	Free	Su M T W Th F

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0500	TOD OUTPUTS	--------	M T W ThF
0530	TOD OUTPUTS	-------1	M T W ThF
0700	TOD OUTPUTS	--------	M T W ThF
2300	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0500	TOD OUTPUTS	--------	M T W ThF
0530	TOD OUTPUTS	-------1	M T W ThF
0600	TOD OUTPUTS	--------	Su S
0700	TOD OUTPUTS	--------	M T W ThF
2100	TOD OUTPUTS	------2-	S
2300	TOD OUTPUTS	--------	SuM T W ThF S

* Settings

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

No Calendar Defined/Enabled

TOD Schedule Report

for 4756: W Dixie Hwy&NE 22 Av&NE 167 St

Print Date: 10/4/2021

Print Time: 7:08 PM

Asset	Intersection	TOD Schedule	Op Mode	Plan #	Cycle	Offset	TOD Setting	Active PhaseBank	Active Maximum
4756	W Dixie Hwy&NE 22 Av&NE 167 St	DOW-2	TOD	Free	0	0	N/A	2	Max 2

Splits

PH 1	PH 2	PH 3	PH 4	PH 5	PH 6	PH 7	PH 8
-	SWT	EBT	SBT	-	-	-	NBT
0	0	0	0	0	0	0	0

Active Phase Bank: Phase Bank 2

Phase	Walk	Don't Walk	Min Initial	Veh Ext	Max Limit	Max 2	Yellow	Red
	Phase Bank 1 2 3	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3		
1 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
2 SWT	0 - 0 - 0	0 - 0 - 0	16 - 16 - 16	1 - 1 - 1	22 - 26 - 30	0 - 40 - 0	4	2
3 EBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 3 - 3	10 - 10 - 20	30 - 14 - 0	4	2
4 SBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 3 - 3	12 - 12 - 20	35 - 14 - 0	4	2
5 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
6 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
7 -	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0 - 0 - 0	0	0
8 NBT	0 - 0 - 0	0 - 0 - 0	7 - 7 - 7	3 - 3 - 3	12 - 12 - 20	35 - 14 - 0	4	2

Last In Service Date: unknown

Permitted Phases

	12345678
Default	-234---8
External Permit 0	--------
External Permit 1	--------
External Permit 2	--------

Current TOD Schedule	Plan	Cycle	Green Time 1 -	2 SWT	3 EBT	4 SBT	5 -	6 -	7 -	8 NBT	Ring Offset	Offset
	2	125	0	69	19	19	0	0	0	19	0	24
	5	130	0	64	24	24	0	0	0	24	0	45
	14	130	0	64	24	24	0	0	0	24	0	87
	15	150	0	74	29	29	0	0	0	29	0	125
	25	120	0	64	19	19	0	0	0	19	0	62
	26	135	0	74	19	24	0	0	0	24	0	31
	27	80	0	39	9	14	0	0	0	14	0	21
	28	100	0	44	19	19	0	0	0	19	0	70

Local TOD Schedule

Time	Plan	DOW
0000	Free	Su M T W Th F S

TOD Schedule Report

for 4756: W Dixie Hwy&NE 22 Av&NE 167 St

Print Date: 10/4/2021

Print Time: 7:08 PM

Current Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0500	TOD OUTPUTS	-------1	M T W ThF
0530	TOD OUTPUTS	------2-	M T W ThF
2100	TOD OUTPUTS	-------1	M T W ThF
2300	TOD OUTPUTS	--------	SuM T W ThF S

Local Time of Day Function

Time	Function	Settings *	Day of Week
0000	TOD OUTPUTS	--------	SuM T W ThF S
0500	TOD OUTPUTS	-------1	M T W ThF
0530	TOD OUTPUTS	------2-	M T W ThF
0600	TOD OUTPUTS	-----3--	Su S
1000	TOD OUTPUTS	------2-	Su S
2100	TOD OUTPUTS	-----3--	Su S
2100	TOD OUTPUTS	-------1	M T W ThF
2300	TOD OUTPUTS	--------	SuM T W ThF S

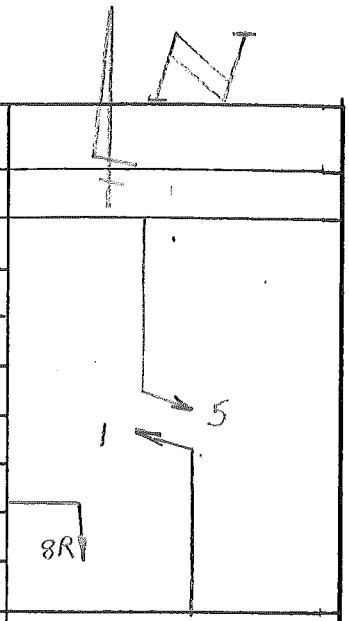
* Settings

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

No Calendar Defined/Enabled

SIGNAL OPERATING PLAN

PHASE	INT	1	2	2R	3	4	5	6	6R	7	8	8R	P2	P4	P6	P8
		SIGNAL HEAD NUMBER														
Φ 1+5	R/W	←R	R	R	R	R	←R	R	R	R	R	→R	DW	DW	DW	DW
NBLT-SBLT	TO 1+6	←R	R	R	R	R	←R	R	R	R	R	→R	DW	DW	DW	DW
	TO 2+5	←R	R	R	R	R	←R	R	R	R	R	→R	DW	DW	DW	DW
	TO 2+6	←R	R	R	R	R	←R	R	R	R	R	→R	DW	DW	DW	DW
	TO TRACK CL	←R	R	R	R	R	←R	R	R	R	R	→R	DW	DW	DW	DW
ACTUATED	CLEAR															
	CLEAR															
	CLEAR															
Φ 1+6	R/W	←G	R	R	R	R	R	G	G	R	R	→R	DW	DW	DW	DW
NBLT	TO 2+6	←G	R	R	R	R	R	G	G	R	R	→R	DW	DW	DW	DW
	TO TRACK CL	←Y	R	R	R	R	R	Y	Y	R	R	→R	DW	DW	DW	DW
ACTUATED	CLEAR															
	CLEAR															
	CLEAR															
Φ 2+5	R/W	R	G	G	R	R	←G	R	R	R	R	R	DW	DW	DW	DW
SBLT	TO 2+6	R	G	G	R	R	←G	R	R	R	R	R	DW	DW	DW	DW
	TO TRACK CL	R	Y	Y	R	R	←Y	R	R	R	R	R	DW	DW	DW	DW
ACTUATED	CLEAR															
	CLEAR															
	CLEAR															
Φ 2+6	R/W	R	G	G	R	R	R	G	G	R	R	R	W	DW	W	DW
N-S	Ped CL	R	G	G	R	R	R	G	G	R	R	R	F DW	DW	F DW	DW
	TO 3+7	R	Y	Y	R	R	R	Y	Y	R	R	R	DW	DW	DW	DW
	TO 3+8	R	Y	Y	R	R	R	Y	Y	R	R	R	DW	DW	DW	DW
	TO 4+7	R	Y	Y	R	R	R	Y	Y	R	R	R	DW	DW	DW	DW
RECALL	TO 4+8	R	Y	Y	R	R	R	Y	Y	R	R	R	DW	DW	DW	DW
	CLEAR TRACK CL	R	Y	Y	R	R	R	Y	Y	R	R	R	DW	DW	DW	DW



Drawn	Date
F. Prats	5/8/97
Check	**Date**
E Fru	5/8/97
Division Engineer	**Date**

METROPOLITAN DADE COUNTY
DEPARTMENT OF PUBLIC WORKS

ASSET NO: 32010

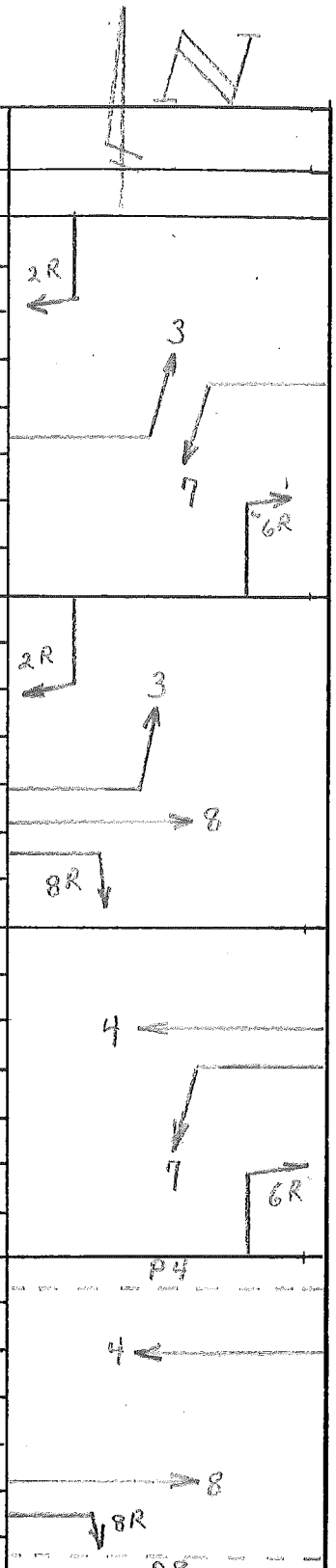
SR 826 & US 1

sheet 1 of 3

Placed in Service		Phasing Number
Date: 10/20/98	By: CONTRACTOR	10

SIGNAL OPERATING PLAN

PHASE	INT	1	2	2R	3	4	5	6	6R	7	8	8R	P2	P4	P6	P8
		SIGNAL HEAD NUMBER														
φ 3+7	R/W	R	R	←R	↓R	R	R	R	←R	↓R	R	R	DW	DW	DW	DW
EBLT-WBLT	TO 3+8	R	R	←R	↓R	R	R	R	←R	↓R	R	R	DW	DW	DW	DW
	TO 4+7	R	R	←R	↓R	R	R	R	←R	↓R	R	R	DW	DW	DW	DW
	TO 4+8	R	R	←R	↓R	R	R	R	←R	↓R	R	R	DW	DW	DW	DW
	TO TRACK CL	R	R	←R	↓R	R	R	R	←R	↓R	R	R	DW	DW	DW	DW
	CLEAR															
	CLEAR															
Actuated	CLEAR															
φ 3+8	R/W	R	R	←R	↓G	R	R	R	R	R	G	G	DW	DW	DW	DW
EBLT	TO 4+8	R	R	←R	↓G	R	R	R	R	R	G	G	DW	DW	DW	DW
	TO TRACK CL	R	R	←R	↓G	R	R	R	R	R	G	G	DW	DW	DW	DW
	CLEAR															
	CLEAR															
Actuated	CLEAR															
φ 4+7	R/W	R	R	R	R	G	R	R	→R	↓G	R	R	DW	DW	DW	DW
WBLT	TO 4+8	R	R	R	R	G	R	R	→R	↓G	R	R	DW	DW	DW	DW
	TO TRACK CL	R	R	R	R	Y	R	R	→R	↓Y	R	R	DW	DW	DW	DW
	CLEAR															
	CLEAR															
Actuated	CLEAR															
φ 4+8	R/W	R	R	R	R	G	R	R	R	R	G	G	DW	W	DW	W
E-W	PED CL	R	R	R	R	G	R	R	R	R	G	G	DW	F DW	DW	F DW
	TO 1+5	R	R	R	R	Y	R	R	R	R	Y	Y	DW	DW	DW	DW
	TO 1+6	R	R	R	R	Y	R	R	R	R	Y	Y	DW	DW	DW	DW
	TO 2+5	R	R	R	R	Y	R	R	R	R	Y	Y	DW	DW	DW	DW
	TO 2+6	R	R	R	R	Y	R	R	R	R	Y	Y	DW	DW	DW	DW
Actuated	CLEAR TO TRACK CL	R	R	R	R	Y	R	R	R	R	G	G	DW	DW	DW	DW



Drawn	Date
F. PRATS	5/8/97
Check	**Date**
E Lee	5/8/97
Division Engineer	**Date**

METROPOLITAN DADE COUNTY
DEPARTMENT OF PUBLIC WORKS

ASSET NO: 32010

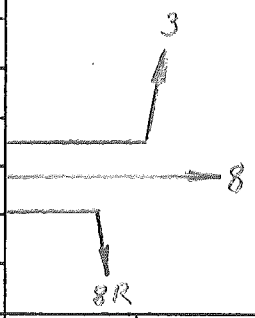
SR 826 & US1

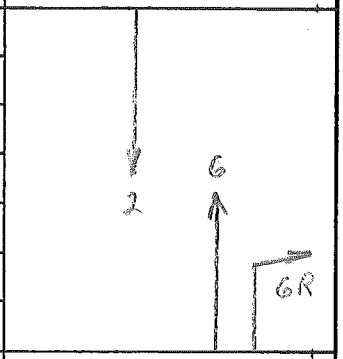
sheet 2 of 3

Placed in Service		Phasing Number
Date: 10/20/98	By: CONTRACTOR	10

SIGNAL OPERATING PLAN

PHASE	INT	SIGNAL HEAD NUMBER 1	2	2R	3	4	5	6	6R	7	8	8R	P2	P4	P6	P8
TRACK CLEARANCE	R/W	R	R	R	←G	R	R	R	R	R	G	G	DW	DW	DW	DW
	TRAIN PASSAGE	R	R	R	←Y	R	R	R	R	R	Y	Y	DW	DW	DW	DW
R.R.	TO CLEAR															
TRAIN PASSAGE	R/W	R	G	R	R	R	R	G	G	R	R	R	DW	DW	DW	DW
R.R.	3+8	R	Y	R	R	R	R	Y	Y	R	R	R	DW	DW	DW	DW
	TO CLEAR	MAY CYCLE TO Φ 2+5 OR Φ7 DURING TRAIN PASSAGE														
	R/W															
	TO CLEAR															
	R/W															
	TO CLEAR															
FLASHING OP		R	Y	R	R	R	R	Y	R	R	R					



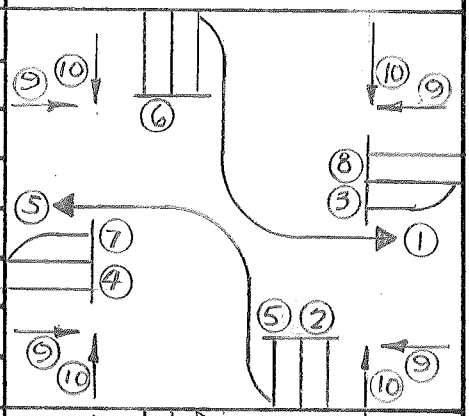


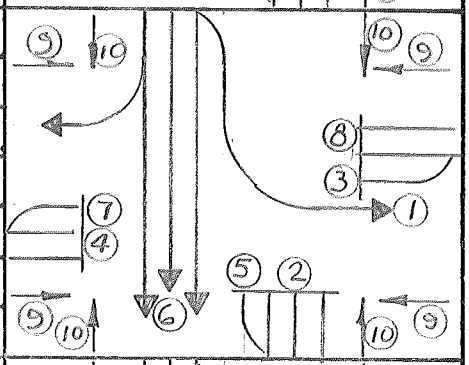
Drawn: F. PRATS	Date: 5/8/97	METROPOLITAN DADE COUNTY DEPARTMENT OF PUBLIC WORKS
Check: E Lu	Date: 5/8/97	ASSET NO: 32010
Division Engineer	Date	SR 826 & LIS 1 SHEET 3 OF 3

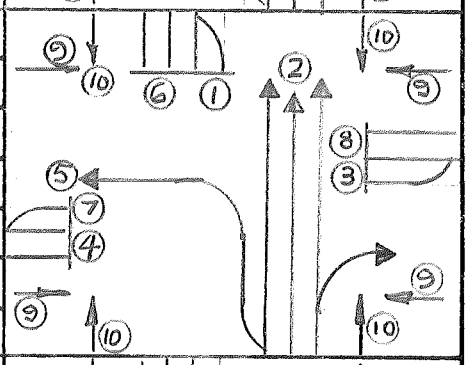
Placed in Service		Phasing Number
Date: 10/20/98	By: CONTRACTOR	10

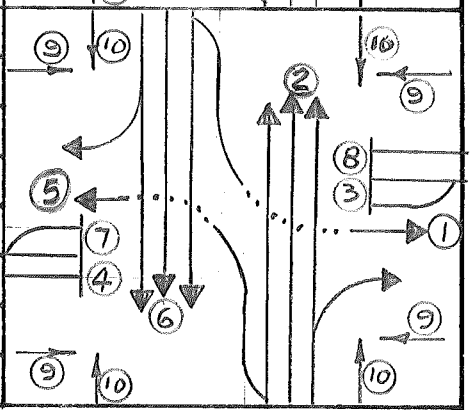
SIGNAL OPERATING PLAN

PHASE	INT	SIGNAL HEAD NUMBER 1	2	3	4	5	6	7	8	9	10	11	12
φ(1+5) SR 826 EBLT/WBLT	R/W	←	R	R	R	←	R	R	R	DW	DW		
	PED. CL.												
	CLEAR TO 1+6	←	R	R	R	Y	R	R	R	DW	DW		
	CLEAR TO 2+5	Y	R	R	R	←	R	R	R	DW	DW		
	CLEAR TO 2+6	Y	R	R	R	Y	R	R	R	DW	DW		
φ(1+6) SR 826 EBND. LEAD	R/W	←	R	R	R	R	G	R	R	DW	DW		
	PED. CL.												
	CLEAR TO 2+6	Y	R	R	R	R	G	R	R	DW	DW		
φ(2+5) SR 826 WBND. LEAD	R/W	R	G	R	R	←	R	R	R	DW	DW		
	PED. CL.												
	CLEAR TO 2+6	R	G	R	G	Y	R	R	R	DW	DW		
φ(2+6) SR 826 EAST/WEST	R/W	G	G	R	R	G	G	R	R	DW	FW		
	PED. CL.	G	G	R	R	R	R	R	R	DW	DW		
	CLEAR TO 3+7	Y	Y	R	R	Y	Y	R	R	DW	DW		
	CLEAR TO 4+7	Y	Y	R	R	Y	Y	R	R	DW	DW		
	CLEAR TO 3+8	Y	Y	R	R	Y	Y	R	R	DW	DW		
	CLEAR TO 4+8	Y	Y	R	R	Y	Y	R	R	DW	DW		









Drawn R. CUZA — Date 9/16/80

Check C.L. ROQUE — Date 9/18/80

Division Engineer — Date

METROPOLITAN DADE COUNTY
DEPARTMENT OF TRAFFIC AND TRANSPORTATION

ASSET NO. 32019

SR 826 & WEST DIXIE HWY

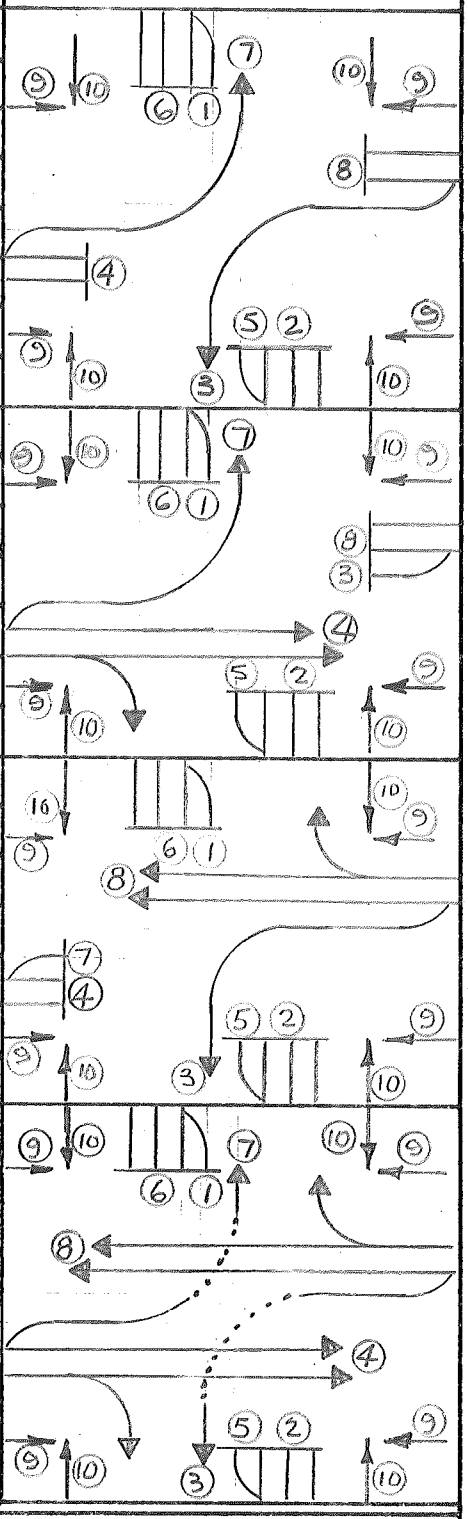
SHEET 1 OF 2

Placed In Service		Timing Number	Phasing Number
Date: 9/24/80	By: ASTOR WHITE	—	4

SIGNAL OPERATING PLAN

PHASE	INT	SIGNAL HEAD NUMBER 1	2	3	4	5	6	7	8	9	10	11	12
Φ (3+7) WEST DIXIE HWY NBLT/SBLT	R/W	R	R	←	R	R	R	←	R	DW	DW		
	4+7	R	R	Y	R	R	R	←	R	DW	DW		
CLEAR TO	3+8	R	R	←	R	R	R	Y	R	DW	DW		
	4+8	R	R	Y	R	R	R	Y	R	DW	DW		
	1+5	R	R	Y	R	R	R	Y	R	DW	DW		
	1+6	R	R	Y	R	R	R	Y	R	DW	DW		
	2+5	R	R	Y	R	R	R	Y	R	DW	DW		
	2+6	R	R	Y	R	R	R	Y	R	DW	DW		
Φ (4+7) WEST DIXIE HWY NBND. LEAD	R/W	R	R	R	G	R	R	←	R	DW	DW		
	PED. CL.												
CLEAR TO	4+8	R	R	R	G	R	R	Y	R	DW	DW		
	1+5	R	R	R	Y	R	R	Y	R	DW	DW		
	1+6	R	R	R	Y	R	R	Y	R	DW	DW		
	2+5	R	R	R	Y	R	R	Y	R	DW	DW		
	2+6	R	R	R	Y	R	R	Y	R	DW	DW		
Φ (3+8) WEST DIXIE HWY SBND. LEAD	R/W	R	R	←	R	R	R	R	G	DW	DW		
	PED. CL.												
CLEAR TO	4+8	R	R	Y	R	R	R	R	G	DW	DW		
	1+5	R	R	Y	R	R	R	R	Y	DW	DW		
	1+6	R	R	Y	R	R	R	R	Y	DW	DW		
	2+5	R	R	Y	R	R	R	R	Y	DW	DW		
	2+6	R	R	Y	R	R	R	R	Y	DW	DW		
Φ (4+8) WEST DIXIE HWY NBLT/SBLT	R/W	R	R	G	G	R	R	G	G	FW	DW		
	PED. CL	R	R	G	G	R	R	G	G	F DW	DW		
CLEAR TO	1+5	R	R	Y	Y	R	R	Y	Y	DW	DW		
	1+6	R	R	Y	Y	R	R	Y	Y	DW	DW		
	2+5	R	R	Y	Y	R	R	Y	Y	DW	DW		
	2+6	R	R	Y	Y	R	R	Y	Y	DW	DW		

5-SEC. HEADS FOR LT'S INSTALLED BETWEEN 8/27/92 & 7/25/94 A.P.



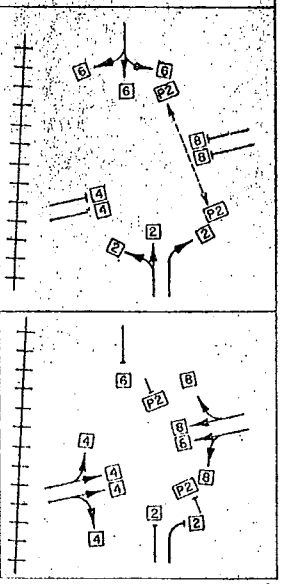
Drawn R. CUZA	Date 9/16/80	METROPOLITAN DADE COUNTY DEPARTMENT OF TRAFFIC AND TRANSPORTATION
Check C. L. ROQUE	Date 9/18/80	ASSET NO. 32019
Division Engineer	Date	SR 826 & WEST DIXIE HWY

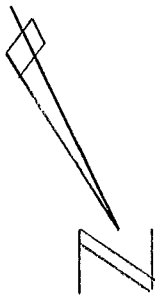
SHEET 2 OF 2

Placed In Service	Timing Number	Phasing Number
Date: 9/24/80 By: ASTOR WHITE	—	4

TRAFFIC SIGNAL INTERVAL DIAGRAMS

	SIGNAL HEAD NUMBER												PEDESTRIAN HEAD NUMBER					
INT	1	2	3	4	5	6	7	8	9	10	11	12	P2*					
R/W		G		R		G		R					EW					
PED CL		G		R		G		R					EW					
Ø2		Y		R		Y		R					DW					
TO CLEAR																		
R/W		R		G		R		R					DW					
Ø1		R		Y		R		Y					DW					
TO CLEAR																		





ASSET #32023

Drawn	Date
SPERRY	6/25/79
Check	Date
Division Engineer	Date

METROPOLITAN DADE COUNTY
DEPARTMENT OF TRAFFIC AND TRANSPORTATION

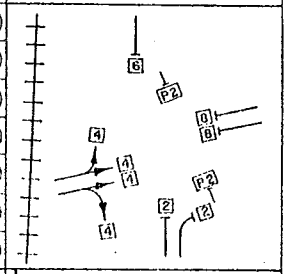
WEST DIXIE HWY & NE 172 ST

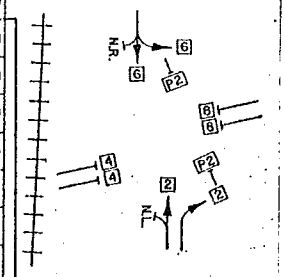
SHEET 1 OF 2

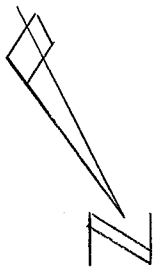
Placed in Service		Timing Number	Phasing Number
Date: 6/25/79	By: SPERRY	———	4

TRAFFIC SIGNAL INTERVAL DIAGRAMS

	SIGNAL HEAD NUMBER												PEDESTRIAN HEAD NUMBER					
INT	1	2	3	4	5	6	7	8	9	10	11	12	P2					
BEGIN RAILROAD PRE-EMPTION																		
CLEAR FROM Ø1		Y_{NL}		R		Y_{NR}		R					DW					
CLEAR FROM Ø2		R_{NL}		G		R_{NR}		Y					DW					
TRACK CLEAR		R_{NL}		G		R_{NR}		R					DW					
TO MESSAGE		R_{NL}		Y		R_{NR}		R					DW					
TRAIN PASSAGE		G_{NL}		R		G_{NR}		R					DW					
CLEAR TO Ø2		Y_{NL}		R		Y_{NR}		R					DW					
R/W CLEAR TO																		







ASSET # 32023

Drawn	Date
SPERRY	6/25/79
Check	Date
Division Engineer	Date

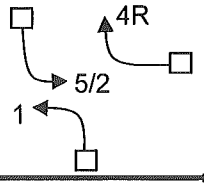
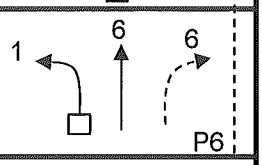
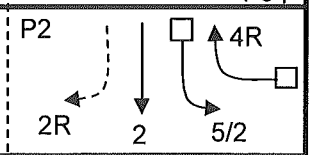
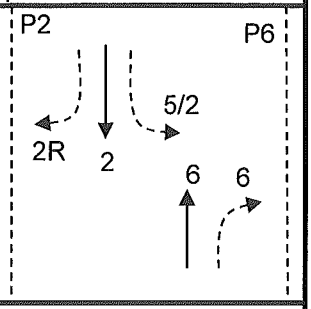
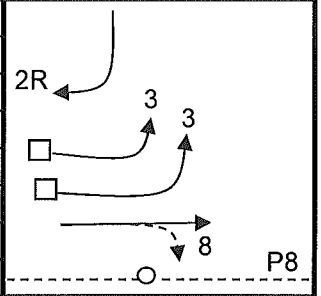
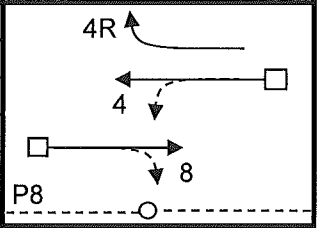
METROPOLITAN DADE COUNTY
DEPARTMENT OF TRAFFIC AND TRANSPORTATION

WEST DIXIE HWY & NE 172 ST

SHEET 2 OF 2

Placed in Service	Timing Number	Phasing Number
Date: 6/25/79 By: SPERRY		4

SIGNAL OPERATING PLAN

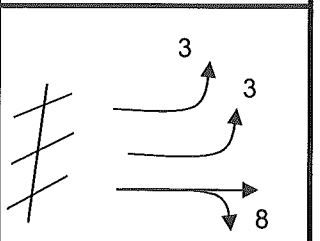
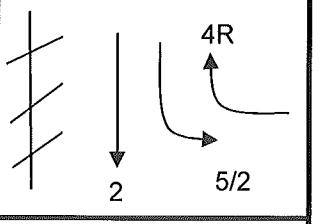
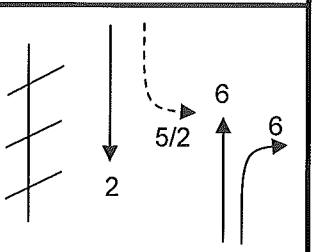
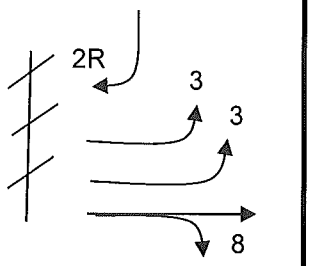
	Direction		NB			SB			EB			WB		Ped Heads			
Timing Phases	Head No.		1	6		5/2	2	2R	3	8		4	4R	P6	P2	P8	Movements/Display/Actuation
(1+5)	Dwell		<G	R		R/<G	R	R	<R	R		R	R/G>	DW	DW	DW	
NBLT + SBLT	Clear to	(1+6)	<G	R		R/<Y	R	R	<R	R		R	R/Y>	DW	DW	DW	
US-1		(2+5)	<Y	R		R/<G	R	R	<R	R		R	R/G>	DW	DW	DW	
(Actuated)		(2+6)	<Y	R		R/<Y	R	R	<R	R		R	R/Y>	DW	DW	DW	
		P.E.	<Y	R		R/<Y	R	R	<R	R		R	R/Y>	DW	DW	DW	
(1+6)	Dwell		<G	G		R	R	R	<R	R		R	R	W/F	DW	DW	
NBLT + NBT	Clear to	(2+6)	<Y	G		R	R	R	<R	R		R	R	DW	DW	DW	
US-1		P.E.	<Y	Y		R	R	R	<R	R		R	R	DW	DW	DW	
(Actuated)																	
(2+5)	Dwell		<R	R		<G/G	G	G	<R	R		R	R/G>	DW	W/F	DW	
SBT + SBLT	Clear to	(2+6)	<R	R		<Y/G	G	G	<R	R		R	R/Y>	DW	DW	DW	
US-1		P.E.	<R	R		Y/<Y	Y	Y	<R	R		R	R/Y>	DW	DW	DW	
(Actuated)																	
	Dwell		<R	G		G	G	G	<R	R		R	R	W/F	W/F	DW	
	Clear to	(3+8)	<R	Y		Y	Y	Y	<R	R		R	R	DW	DW	DW	
(2+6)		(4+8)	<R	Y		Y	Y	Y	<R	R		R	R	DW	DW	DW	
SBT + NBT		(1+5)	<R	Y		Y	Y	Y	<R	R		R	R	DW	DW	DW	
US-1		(1+6)	<R	Y		Y	Y	Y	<R	R		R	R	DW	DW	DW	
(Recall)		P.E.	<R	Y		Y	Y	Y	<R	R		R	R	DW	DW	DW	
	Dwell		<R	R		R	R	R/G>	<G	G		R	R	DW	DW	W/F	
	Clear to	(4+8)	<R	R		R	R	R/Y>	<Y	G		R	R	DW	DW	DW	
(3+8)		(1+5)	<R	R		R	R	R/Y>	<Y	Y		R	R	DW	DW	DW	
EBLT + EBT		(1+6)	<R	R		R	R	R/Y>	<Y	Y		R	R	DW	DW	DW	
NE 172 ST		(2+5)	<R	R		R	R	R/Y>	<Y	Y		R	R	DW	DW	DW	
(Actuated)		(2+6)	<R	R		R	R	R/Y>	<Y	Y		R	R	DW	DW	DW	
		P.E.	<R	R		R	R	R/Y>	<G	G		R	R	DW	DW	DW	
	Dwell		<R	R		R	R	R	<R	G		G	G	DW	DW	W/F	
(4+8)	Clear to	(1+5)	<R	R		R	R	R	<R	Y		Y	Y	DW	DW	DW	
WBT + EBT		(1+6)	<R	R		R	R	R	<R	Y		Y	Y	DW	DW	DW	
NE 172 ST		(2+5)	<R	R		R	R	R	<R	Y		Y	Y	DW	DW	DW	
(Actuated)		(2+6)	<R	R		R	R	R	<R	Y		Y	Y	DW	DW	DW	
		P.E.	<R	R		R	R	R	<R	G		Y	Y	DW	DW	DW	
	Dwell																
	Clear																
	Dwell																
	Clear																
Flashing Operation			F<R	FY		FR	FY	FY	F<R	FR		FR	FR				Page 1 of 2

Miami-Dade County Public Works Department

Drawn	Date	US-1 & NE 172 ST		
Erick Zapata	5/19/2015			
Checked	Date	Placed in Service	Phasing No.	Asset Number
H. Hernandez	5/19/2015	Date 8/14/15 By Contractor	6	3638

SIGNAL OPERATING PLAN

N

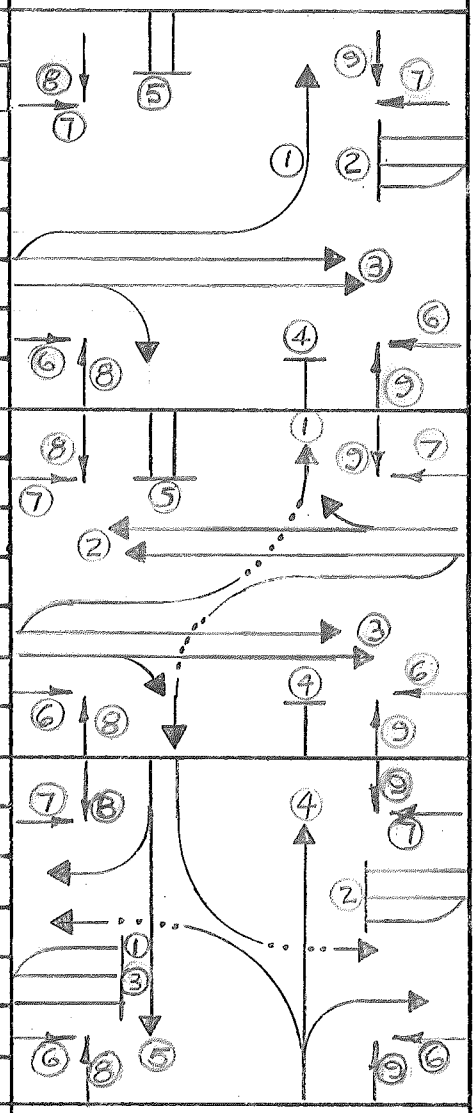
Timing Phases	Direction	NB			SB			EB			WB			Ped Heads				Movements/Display/Actuation
	Head No.	1	6		5/2	2	2R	3	8			4	4R	P6	P2	P8		
RR CLEAR	Dwell	<R	R		R	R	R	<G	G			R	R	DW	DW	DW		
	clear to DWELL 1	<R	R		R	R	R	<Y	Y			R	R	DW	DW	DW		
	clear to DWELL 2	<R	R		R	R	R	<Y	Y			R	R	DW	DW	DW		
	clear to RECOV	<R	R		R	R	R	<G	G			R	R	DW	DW	DW		
RR DWELL 1	Dwell	<R	R		<G/G	G	R	<R	R			R	R/G>	DW	DW	DW		
	clear to DWELL 2	<R	R		<Y/G	G	R	<R	R			R	R/Y>	DW	DW	DW		
	clear to RECOV	<R	R		<Y/Y	Y	R	<R	R			R	R/Y>	DW	DW	DW		
RR DWELL 2	Dwell	<R	G		G	G	R	<R	R			R	R	DW	DW	DW		
	clear to RECOV	<R	Y		Y	Y	R	<R	R			R	R	DW	DW	DW		
RR RECOV	Dwell	<R	R		R	R	R/G>	<G	G			R	R	DW	DW	DW		
	clear to (1+5)	<R	R		R	R	R/Y>	<Y	Y			R	R	DW	DW	DW		
	clear to (1+6)	<R	R		R	R	R/Y>	<Y	Y			R	R	DW	DW	DW		
	clear to (2+5)	<R	R		R	R	R/Y>	<Y	Y			R	R	DW	DW	DW		
	clear to (2+6)	<R	R		R	R	R/Y>	<Y	Y			R	R	DW	DW	DW		
	clear to (4+8)	<R	R		R	R	R/Y>	<Y	G			R	R	DW	DW	DW		
	Dwell																	
	clear to																	
	Dwell																	
	clear to																	
Flashing Operation		F<R	FY		FR	FY	FY	F<R	FR			FR	FR					Page 2 of 2

Miami-Dade County Public Works Department

Drawn	Date	US-1 & NE 172 ST		
Erick Zapata	5/19/2015			
Checked	Date	Placed in Service	Phasing No.	Asset Number
H. HERNANDEZ	5/19/2015	Date 8/14/15 By Contractor	6	3638

SIGNAL OPERATING PLAN

PHASE	INT	SIGNAL HEAD NUMBER 1	2	3	4	5	6	7	8	9	10	11	12
Ø1 (1+6) NEW D. LEAD WEST DIXIE HWY.	R/W	←	R	G	R	R	DW	DW	DW	DW			
	PED. CL.												
	TO CLEAR 2+6	Y	R	G	R	R	DW	DW	DW	DW			
Ø2 (2+6) NORTH/SOUTH WEST DIXIE HWY.	R/W	G	G	G	R	R	FW	FW	DW	DW			
	PED. CL.	G	G	G	R	R	F DW	F DW	DW	DW			
	TO CLEAR 4+8	Y	Y	Y	R	R	DW	DW	DW	DW			
Ø4 (4+8) NE 164 ST EAST/WEST	R/W	R	R	R	G	G	DW	DW	FW	FW			
	PED. CL.	R	R	R	G	G	DW	DW	F DW	F DW			
	TO CLEAR 1+6	R	R	R	Y	Y	DW	DW	DW	DW			
	TO CLEAR 2+6	R	R	R	Y	Y	DW	DW	DW	DW			
	R/W												
	PED. CL.												
	TO CLEAR												



5 - SECTION NBLT HEAD Added by Contractor
BETWEEN 2/15/93 - 5/20/94 F. PRATS

Drawn	Date
R. CUZA	9/15/80
Check	Date
C. L. ROQUE	9/18/80
Division Engineer	Date

METROPOLITAN DADE COUNTY
DEPARTMENT OF TRAFFIC AND TRANSPORTATION

ASSET NO. 33647

WEST DIXIE HWY & NE 164 ST.

Placed In Service	Timing Number	Phasing Number
Date: 9/23/80 By: ASTOR WHITE	—	4

APPENDIX C

PSCF and Historical Data

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL

CATEGORY: 8700 MIAMI-DADE NORTH

MOCF: 0.98

WEEK	DATES	SF	PSCF
1	01/01/2021 - 01/02/2021	1.01	1.03
2	01/03/2021 - 01/09/2021	1.05	1.07
3	01/10/2021 - 01/16/2021	1.08	1.10
4	01/17/2021 - 01/23/2021	1.07	1.09
5	01/24/2021 - 01/30/2021	1.07	1.09
6	01/31/2021 - 02/06/2021	1.06	1.08
7	02/07/2021 - 02/13/2021	1.05	1.07
8	02/14/2021 - 02/20/2021	1.05	1.07
9	02/21/2021 - 02/27/2021	1.04	1.06
10	02/28/2021 - 03/06/2021	1.03	1.05
11	03/07/2021 - 03/13/2021	1.02	1.04
12	03/14/2021 - 03/20/2021	1.02	1.04
13	03/21/2021 - 03/27/2021	1.01	1.03
14	03/28/2021 - 04/03/2021	0.99	1.01
15	04/04/2021 - 04/10/2021	0.98	1.00
16	04/11/2021 - 04/17/2021	0.97	0.99
17	04/18/2021 - 04/24/2021	0.97	0.99
18	04/25/2021 - 05/01/2021	0.97	0.99
19	05/02/2021 - 05/08/2021	0.98	1.00
20	05/09/2021 - 05/15/2021	0.98	1.00
21	05/16/2021 - 05/22/2021	0.98	1.00
22	05/23/2021 - 05/29/2021	0.99	1.01
23	05/30/2021 - 06/05/2021	1.00	1.02
24	06/06/2021 - 06/12/2021	1.01	1.03
25	06/13/2021 - 06/19/2021	1.02	1.04
26	06/20/2021 - 06/26/2021	1.01	1.03
27	06/27/2021 - 07/03/2021	1.01	1.03
28	07/04/2021 - 07/10/2021	1.00	1.02
29	07/11/2021 - 07/17/2021	0.99	1.01
30	07/18/2021 - 07/24/2021	0.99	1.01
31	07/25/2021 - 07/31/2021	0.99	1.01
32	08/01/2021 - 08/07/2021	0.99	1.01
33	08/08/2021 - 08/14/2021	0.99	1.01
34	08/15/2021 - 08/21/2021	0.99	1.01
35	08/22/2021 - 08/28/2021	0.99	1.01
*36	08/29/2021 - 09/04/2021	0.99	1.01
*37	09/05/2021 - 09/11/2021	0.99	1.01
*38	09/12/2021 - 09/18/2021	0.99	1.01
*39	09/19/2021 - 09/25/2021	0.98	1.00
*40	09/26/2021 - 10/02/2021	0.98	1.00
*41	10/03/2021 - 10/09/2021	0.97	0.99
*42	10/10/2021 - 10/16/2021	0.96	0.98
*43	10/17/2021 - 10/23/2021	0.96	0.98
*44	10/24/2021 - 10/30/2021	0.97	0.99
*45	10/31/2021 - 11/06/2021	0.97	0.99
*46	11/07/2021 - 11/13/2021	0.98	1.00
*47	11/14/2021 - 11/20/2021	0.99	1.01
*48	11/21/2021 - 11/27/2021	0.99	1.01
49	11/28/2021 - 12/04/2021	1.00	1.02
50	12/05/2021 - 12/11/2021	1.01	1.03
51	12/12/2021 - 12/18/2021	1.01	1.03
52	12/19/2021 - 12/25/2021	1.05	1.07
53	12/26/2021 - 12/31/2021	1.08	1.10

* PEAK SEASON

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2021 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 5219 - SR 5/US-1, 1250' S NE 163 ST/SUNNY ISLES CSWY

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2021	57000 C	N 28500	S 28500	9.00	54.30	2.40
2020	49500 C	N 24500	S 25000	9.00	54.20	2.50
2019	61000 C	N 30000	S 31000	9.00	54.60	2.20
2018	59500 C	N 29500	S 30000	9.00	54.30	2.40
2017	63500 C	N 31500	S 32000	9.00	55.00	2.30
2016	63500 C	N 31000	S 32500	9.00	54.50	2.00
2015	60000 C	N 29500	S 30500	9.00	54.70	2.00
2014	55000 C	N 25500	S 29500	9.00	54.50	4.90
2013	54000 C	N 25000	S 29000	9.00	52.40	3.50
2012	64000 C	N 31000	S 33000	9.00	55.70	4.80
2011	61500 C	N 30500	S 31000	9.00	55.10	3.90
2010	60000 C	N 30000	S 30000	8.98	54.08	3.90
2009	60500 C	N 29500	S 31000	8.99	53.24	3.40
2008	55000 C	N 27000	S 28000	9.09	55.75	4.70
2007	60500 C	N 29000	S 31500	8.01	54.34	5.90
2006	58000 C	N 29000	S 29000	7.97	54.22	4.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = 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
2021 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 5225 - SR 826/NE 163 ST, 100' E OF NE 20 AVE

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2021	48500 C	E 24500	W 24000	9.00	54.30	3.00
2020	43500 C	E 23000	W 20500	9.00	54.20	3.10
2019	51000 C	E 27500	W 23500	9.00	54.60	3.90
2018	49500 C	E 26500	W 23000	9.00	54.30	4.20
2017	58000 C	E 29000	W 29000	9.00	55.00	9.40
2016	49000 C	E 26500	W 22500	9.00	54.50	5.30
2015	56000 C	E 29500	W 26500	9.00	54.70	4.50
2014	50000 C	E 27000	W 23000	9.00	54.50	3.70
2013	50000 C	E 27500	W 22500	9.00	52.40	3.30
2012	54000 C	E 29500	W 24500	9.00	55.70	2.80
2011	55000 C	E 27500	W 27500	9.00	55.10	2.80
2010	52500 C	E 26500	W 26000	8.98	54.08	2.80
2009	58000 C	E 29500	W 28500	8.99	53.24	4.10
2008	53500 C	E 27500	W 26000	9.09	55.75	4.20
2007	54000 C	E 27500	W 26500	8.01	54.34	3.20
2006	51000 C	E 25500	W 25500	7.97	54.22	5.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = 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

APPENDIX D

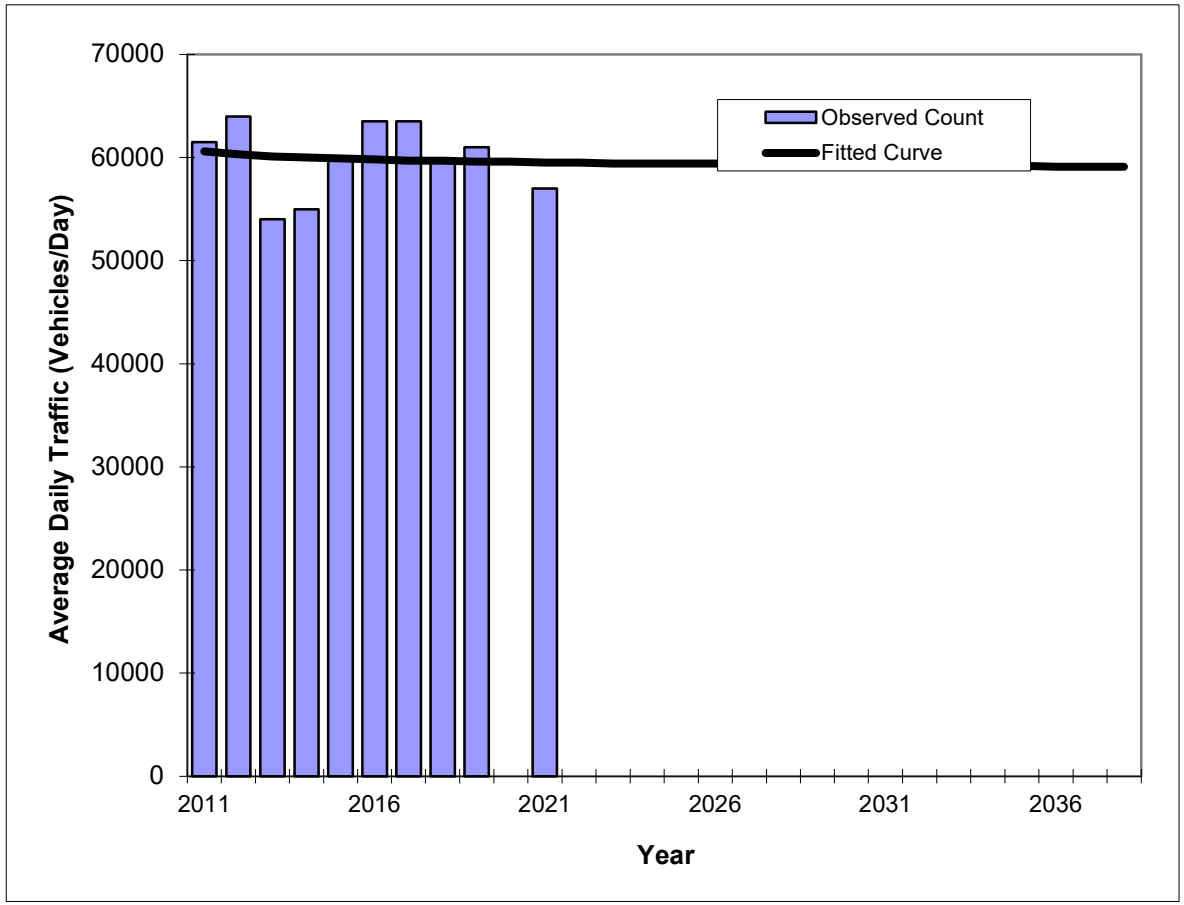
Growth Rate Analysis and Committed Development Information

Traffic Trends - V03.a

SR 5/US-1 -- 1250' S NE 163 ST/SUNNY ISLES CSWY

FIN#	1234
Location	1

County:	Miami-Dade (87)
Station #:	5219
Highway:	SR 5/US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2011	61500	60600
2012	64000	60300
2013	54000	60100
2014	55000	60000
2015	60000	59900
2016	63500	59800
2017	63500	59700
2018	59500	59700
2019	61000	59600
2020	N/A	N/A
2021	57000	59500
2023 Opening Year Trend		
2023	N/A	59400
2024 Mid-Year Trend		
2024	N/A	59400
2026 Design Year Trend		
2026	N/A	59400
TRANPLAN Forecasts/Trends		

Trend R-squared:	0.17%
Compounded Annual Historic Growth Rate:	-0.18%
Compounded Growth Rate (2021 to Design Year):	-0.03%
Printed:	12-Jul-22

Exponential Growth Option

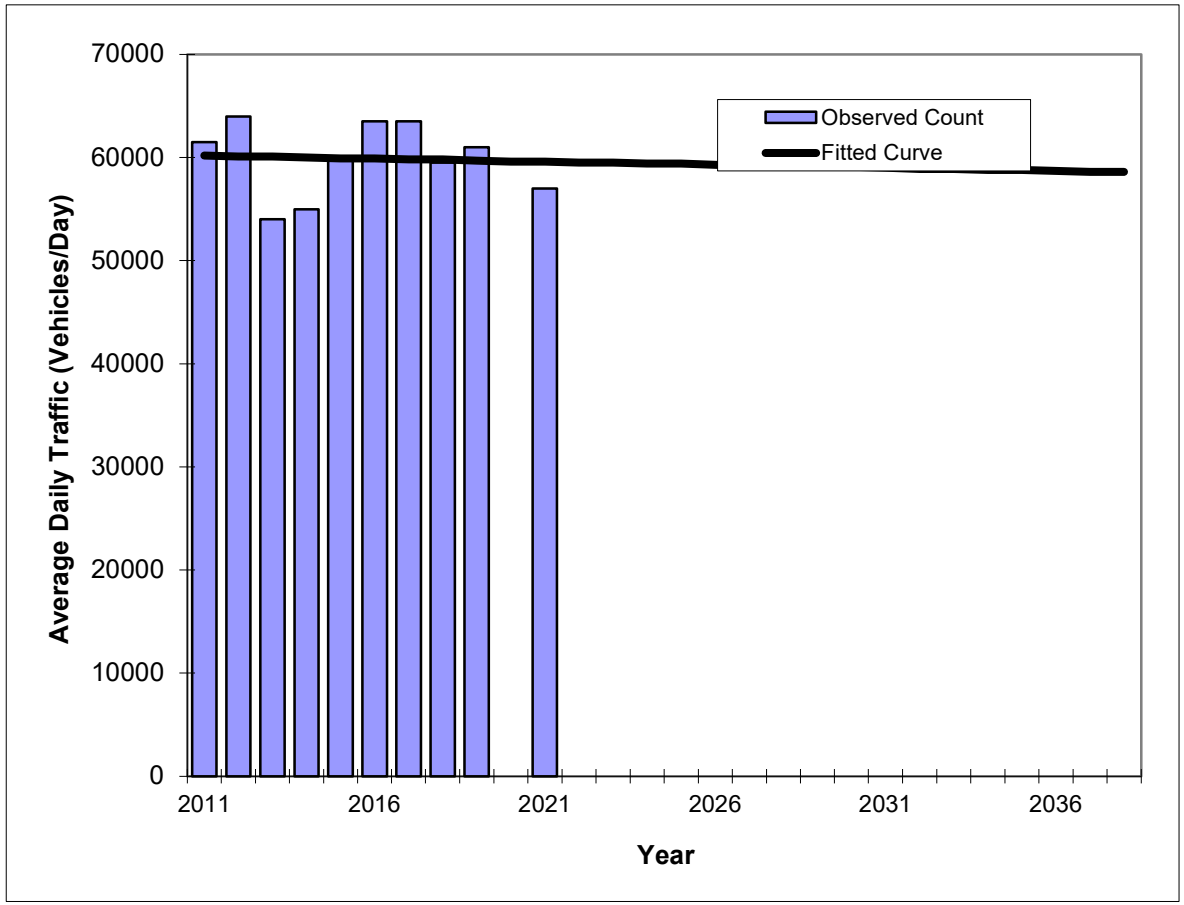
***Axle-Adjusted**

Traffic Trends - V03.a

SR 5/US-1 -- 1250' S NE 163 ST/SUNNY ISLES CSWY

FIN#	1234
Location	1

County:	Miami-Dade (87)
Station #:	5219
Highway:	SR 5/US-1



Year	Traffic (ADT/AADT) Count*	Trend**
2011	61500	60200
2012	64000	60100
2013	54000	60100
2014	55000	60000
2015	60000	59900
2016	63500	59900
2017	63500	59800
2018	59500	59800
2019	61000	59700
2020	N/A	N/A
2021	57000	59600
2023 Opening Year Trend		
2023	N/A	59500
2024 Mid-Year Trend		
2024	N/A	59400
2026 Design Year Trend		
2026	N/A	59300
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	-58
Trend R-squared:	0.28%
Trend Annual Historic Growth Rate:	-0.10%
Trend Growth Rate (2021 to Design Year):	-0.10%
Printed:	12-Jul-22

Straight Line Growth Option

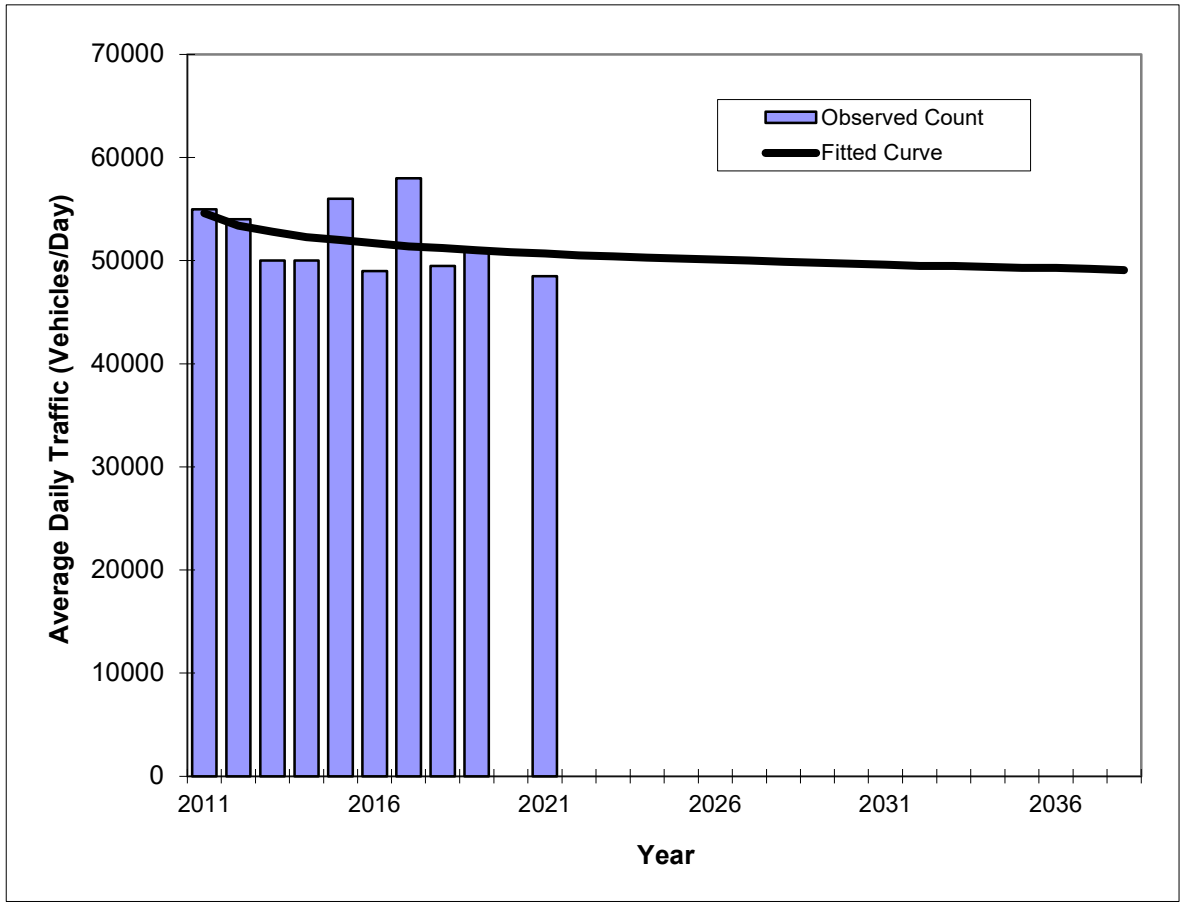
***Axle-Adjusted**

Traffic Trends - V03.a

SR 826/NE 163 ST -- 100' E OF NE 20 AVE

FIN#	1234
Location	2

County:	Miami-Dade (87)
Station #:	5225
Highway:	SR 826/NE 163 ST



Year	Traffic (ADT/AADT) Count*	Trend**
2011	55000	54600
2012	54000	53400
2013	50000	52800
2014	50000	52300
2015	56000	52000
2016	49000	51700
2017	58000	51400
2018	49500	51200
2019	51000	51000
2020	N/A	N/A
2021	48500	50700
2023 Opening Year Trend		
2023	N/A	50400
2024 Mid-Year Trend		
2024	N/A	50300
2026 Design Year Trend		
2026	N/A	50100
TRANPLAN Forecasts/Trends		

Trend R-squared:	13.13%
Compounded Annual Historic Growth Rate:	-0.74%
Compounded Growth Rate (2021 to Design Year):	-0.24%
Printed:	12-Jul-22

Decaying Exponential Growth Option

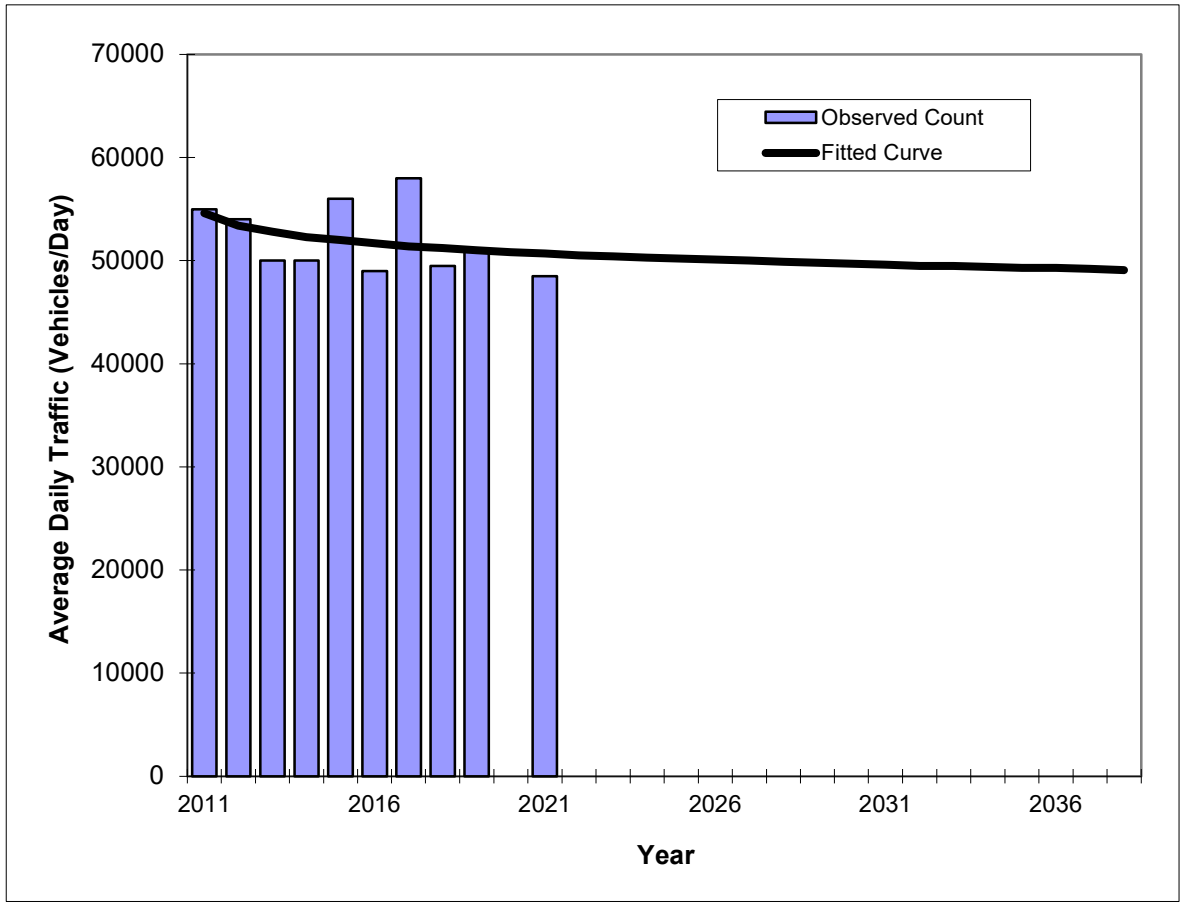
***Axle-Adjusted**

Traffic Trends - V03.a

SR 826/NE 163 ST -- 100' E OF NE 20 AVE

FIN#	1234
Location	2

County:	Miami-Dade (87)
Station #:	5225
Highway:	SR 826/NE 163 ST



Year	Traffic (ADT/AADT) Count*	Trend**
2011	55000	54600
2012	54000	53400
2013	50000	52800
2014	50000	52300
2015	56000	52000
2016	49000	51700
2017	58000	51400
2018	49500	51200
2019	51000	51000
2020	N/A	N/A
2021	48500	50700
2023 Opening Year Trend		
2023	N/A	50400
2024 Mid-Year Trend		
2024	N/A	50300
2026 Design Year Trend		
2026	N/A	50100
TRANPLAN Forecasts/Trends		

Trend R-squared:	14.84%
Compounded Annual Historic Growth Rate:	-0.74%
Compounded Growth Rate (2021 to Design Year):	-0.24%
Printed:	12-Jul-22

Exponential Growth Option

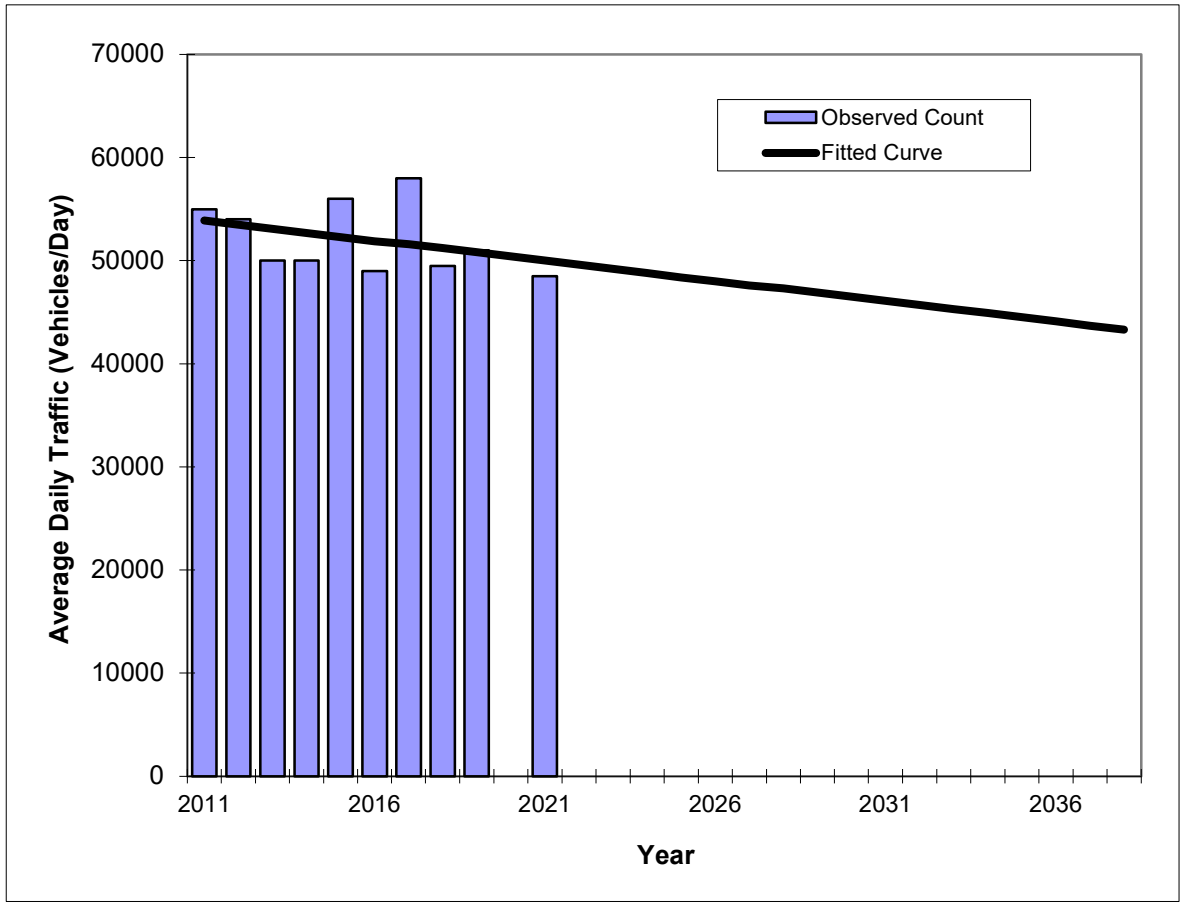
***Axle-Adjusted**

Traffic Trends - V03.a

SR 826/NE 163 ST -- 100' E OF NE 20 AVE

FIN#	1234
Location	2

County:	Miami-Dade (87)
Station #:	5225
Highway:	SR 826/NE 163 ST



Year	Traffic (ADT/AADT) Count*	Trend**
2011	55000	53900
2012	54000	53500
2013	50000	53100
2014	50000	52700
2015	56000	52300
2016	49000	51900
2017	58000	51600
2018	49500	51200
2019	51000	50800
2020	N/A	N/A
2021	48500	50000
2023 Opening Year Trend		
2023	N/A	49200
2024 Mid-Year Trend		
2024	N/A	48800
2026 Design Year Trend		
2026	N/A	48000
TRANPLAN Forecasts/Trends		

**** Annual Trend Increase:**	-391
Trend R-squared:	13.91%
Trend Annual Historic Growth Rate:	-0.72%
Trend Growth Rate (2021 to Design Year):	-0.80%
Printed:	12-Jul-22

Straight Line Growth Option

***Axle-Adjusted**

Growth Rate Trend Analysis Calcualtions

Description	5219			5225		
Option	**Linear**	**Exponential**	**Decaying Exponential**	**Linear**	**Exponential**	**Decaying Exponential**
Trend Growth Rate 10 years	-0.10	-0.18	-0.18	-0.72	-0.74	-0.74
Adjusted Growth Rate 10-years (2)	0.50	0.50	0.50	0.50	0.50	0.50
Trend R-squared 10 years	0.28	0.70	0.84	13.91	14.84	13.13
Growth Rate with highest R-squared (10-year)		**0.50**			**0.50**	
Average Growth Rate (10-year)	0.50					
Growth Rate Used	**1.00**					

Notes:

1: Refer to Trend Analysis Chart

2: If the resulting growth rate is negative, a 0.5 growth rate was used

What Is R-squared?

R-squared is a statistical measure of how close the data are to the fitted regression line. It is also known as the coefficient of determination, or the coefficient of multiple determination for multiple regression.

The definition of R-squared is fairly straight-forward; it is the percentage of the response variable variation that is explained by a linear model. Or:

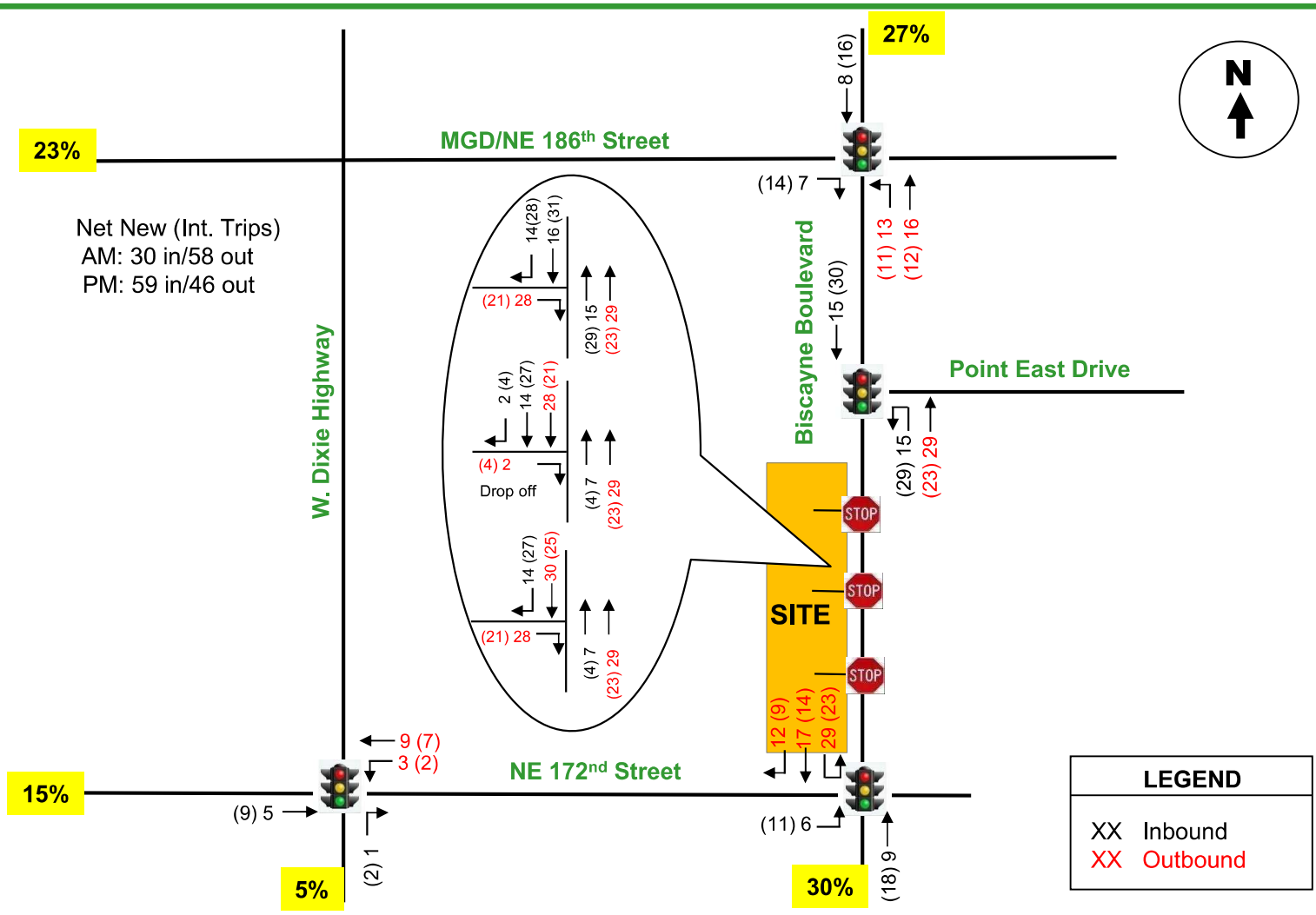
R-squared = Explained variation / Total variation

R-squared is always between 0 and 100%:

0% indicates that the model explains none of the variability of the response data around its mean.

100% indicates that the model explains all the variability of the response data around its mean.

In general, the higher the R-squared, the better the model fits your data. However, there are important conditions for this guideline that I'll talk about both in this post and my next post.



TRAFTECH ENGINEERING, INC.

PROJECT TRIP DISTRIBUTION
(Net New Trips)

FIGURE 4
17450 Biscayne Boulevard
North Miami Beach, Florida

APPENDIX E

Future Turning Movement Volumes

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Dixie Highway and NE 22 Avenue/NE 167 Street
AM Peak Hour

Description	NE 22 Avenue Northbound			NE 22 Avenue Southbound			NE 167 Street Eastbound			Dixie Highway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (6/28/2022)	20	43	337		104	6		19	73	245	8	
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	21	44	347	0	107	6	0	20	75	252	8	0
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments: 17450 Biscayne Blvd												
2026 Background Traffic	21	46	361	0	111	6	0	20	78	263	9	0
BH 164	4		23						2	8		
2026 Total Traffic	**25**	**46**	**384**	**0**	**111**	**6**	**0**	**20**	**80**	**271**	**9**	**0**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Dixie Highway and NE 22 Avenue/NE 167 Street
PM Peak Hour

Description	NE 22 Avenue Northbound			NE 22 Avenue Southbound			NE 167 Street Eastbound			Dixie Highway Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (6/28/2022)	49	116	390		107	7	5	16	63	373	29	0
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	50	119	402	0	110	7	5	16	65	384	30	0
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments: 17450 Biscayne Blvd												
2026 Background Traffic	53	124	418	0	115	8	5	17	68	400	31	0
BH 164	4		18						5	17		
2026 Total Traffic	**57**	**124**	**436**	**0**	**115**	**8**	**5**	**17**	**73**	**417**	**31**	**0**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

NE 22 Avenue and NE 164 Street
AM Peak Hour

Description	NE 22 Avenue Northbound			NE 22 Avenue Southbound			NE 164 Street Eastbound			NE 164 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (6/28/2022)	28	331	6	5	377	49	83	8	112	4		4
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	29	341	6	5	388	50	85	8	115	4	0	4
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments: 17450 Biscayne Blvd												
2026 Background Traffic	30	355	6	5	404	53	89	9	120	4	0	4
BH 164			12	10				2		40	4	27
2026 Total Traffic	**30**	**355**	**18**	**15**	**404**	**53**	**89**	**11**	**120**	**44**	**4**	**31**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

NE 22 Avenue and NE 164 Street
PM Peak Hour

Description	NE 22 Avenue Northbound			NE 22 Avenue Southbound			NE 164 Street Eastbound			NE 164 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (6/28/2022)	84	477	10	6	439	116	85	4	79	9	2	10
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	87	491	10	6	452	119	88	4	81	9	2	10
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments: 17450 Biscayne Blvd												
2026 Background Traffic	90	511	11	6	471	124	91	4	85	10	2	11
BH 164			22	22				4		38	4	22
2026 Total Traffic	**90**	**511**	**33**	**28**	**471**	**124**	**91**	**8**	**85**	**48**	**6**	**33**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

NE 22 Avenue and NE 163 Street
AM Peak Hour

Description	NE 22 Avenue Northbound			NE 22 Avenue Southbound			NE 163 Street Eastbound			NE 163 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (6/28/2022)	87	242	74	119	315	41	33	1,007	32	189	982	65
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	90	249	76	123	324	42	34	1,037	33	195	1,011	67
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments: 17450 Biscayne Blvd												
2026 Background Traffic	93	259	79	128	338	44	35	1,079	34	203	1,053	70
BH 164		2		32	2	6	8			2	7	2
2026 Total Traffic	**93**	**261**	**79**	**160**	**340**	**50**	**43**	**1,079**	**34**	**205**	**1,060**	**72**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

NE 22 Avenue and NE 163 Street
PM Peak Hour

Description	NE 22 Avenue Northbound			NE 22 Avenue Southbound			NE 163 Street Eastbound			NE 163 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (6/28/2022)	151	318	107	139	317	74	116	1,176	77	204	1,598	105
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	156	328	110	143	327	76	119	1,211	79	210	1,646	108
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments: 17450 Biscayne Blvd												
2026 Background Traffic	162	341	115	149	340	79	124	1,260	83	219	1,713	113
BH 164		4		30	2	6	14			2	6	4
2026 Total Traffic	**162**	**345**	**115**	**179**	**342**	**85**	**138**	**1,260**	**83**	**221**	**1,719**	**117**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

NE 23 Avenue and NE 163 Street
AM Peak Hour

Description	NE 23 Avenue Northbound			NE 23 Avenue Southbound			NE 163 Street Eastbound			NE 163 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (6/28/2022)						13		1,178			1,226	19
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	0	0	0	0	0	13	0	1,213	0	0	1,263	20
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments: 17450 Biscayne Blvd												
2026 Background Traffic	0	0	0	0	0	14	0	1,263	0	0	1,314	20
BH 164						9		32			2	22
2026 Total Traffic	**0**	**0**	**0**	**0**	**0**	**23**	**0**	**1,295**	**0**	**0**	**1,316**	**42**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

NE 23 Avenue and NE 163 Street
PM Peak Hour

Description	NE 23 Avenue Northbound			NE 23 Avenue Southbound			NE 163 Street Eastbound			NE 163 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (6/28/2022)						21		1,375			1,990	28
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	0	0	0	0	0	22	0	1,416	0	0	2,050	29
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments: 17450 Biscayne Blvd												
2026 Background Traffic	0	0	0	0	0	23	0	1,474	0	0	2,133	30
BH 164						8		30			4	40
2026 Total Traffic	**0**	**0**	**0**	**0**	**0**	**31**	**0**	**1,504**	**0**	**0**	**2,137**	**70**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Biscayne Boulevard and NE 163 Street
AM Peak Hour

Description	Biscayne Boulevard Northbound			Biscayne Boulevard Southbound			NE 163 Street Eastbound			NE 163 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (6/28/2022)	196	765	306	429	1,044	214	126	908	118	390	700	357
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	202	788	315	442	1,075	220	130	935	122	402	721	368
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
17450 Biscayne Blvd		9			17							
2026 Background Traffic	210	829	328	460	1,136	229	135	973	126	418	750	383
BH 164	12					10	8	4	20		2	
2026 Total Traffic	**222**	**829**	**328**	**460**	**1,136**	**239**	**143**	**977**	**146**	**418**	**752**	**383**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Biscayne Boulevard and NE 163 Street
PM Peak Hour

Description	Biscayne Boulevard Northbound			Biscayne Boulevard Southbound			NE 163 Street Eastbound			NE 163 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (6/28/2022)	466	1,366	543	369	1,077	333	293	845	231	440	1,146	685
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	480	1,407	559	380	1,109	343	302	870	238	453	1,180	706
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
17450 Biscayne Blvd		18			14							
2026 Background Traffic	499	1,482	582	396	1,168	357	314	906	248	472	1,228	734
BH 164	22					18	8	4	18		4	
2026 Total Traffic	**521**	**1,482**	**582**	**396**	**1,168**	**375**	**322**	**910**	**266**	**472**	**1,232**	**734**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Dixie Highway and NE 172 Street
AM Peak Hour

Description	Dixie Highway Northbound			Dixie Highway Southbound			NE 172 Street Eastbound			NE 172 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (5/19/2022)	13	211	147	79	270	75	32	503	44	5	252	84
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	13	217	151	81	278	77	33	518	45	5	260	87
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
17450 Biscayne Blvd			1					5		3	9	
2026 Background Traffic	14	226	159	85	289	80	34	544	47	8	279	90
BH 164	4	11	8		6				2			
2026 Total Traffic	**18**	**237**	**167**	**85**	**295**	**80**	**34**	**544**	**49**	**8**	**279**	**90**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Dixie Highway and NE 172 Street
PM Peak Hour

Description	Dixie Highway Northbound			Dixie Highway Southbound			NE 172 Street Eastbound			NE 172 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (5/19/2022)	9	274	176	48	332	101	46	226	145	17	526	79
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	9	282	181	49	342	104	47	233	149	18	542	81
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
17450 Biscayne Blvd			2					9		2	7	
2026 Background Traffic	10	294	191	51	356	108	49	251	155	20	571	85
BH 164	1	10	7		12				5			
2026 Total Traffic	**11**	**304**	**198**	**51**	**368**	**108**	**49**	**251**	**160**	**20**	**571**	**85**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Biscayne Boulevard and NE 172 Street
AM Peak Hour

Description	Biscayne Blvd Northbound			Biscayne Blvd Southbound			NE 172 Street Eastbound			NE 172 Street Westbound		
	Left	Through	Right	L/U-Turn	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (5/19/2022)	133	1,489	20	28	2,013	172	376	15	350	30	20	34
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	137	1,534	21	29	2,073	177	387	15	361	31	21	35
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
17450 Biscayne Blvd		9		29	17	12	6					
2026 Background Traffic	143	1,605	21	59	2,175	196	409	16	375	32	21	36
BH 164		8			10		8					
2026 Total Traffic	**143**	**1,613**	**21**	**59**	**2,185**	**196**	**417**	**16**	**375**	**32**	**21**	**36**

TRAFTECH ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

Biscayne Boulevard and NE 172 Street
PM Peak Hour

Description	Biscayne Blvd Northbound			Biscayne Blvd Southbound			NE 172 Street Eastbound			NE 172 Street Westbound		
	Left	Through	Right	L/U-Turn	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (5/19/2022)	232	1,629	44	44	1,970	342	264	17	150	25	29	44
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2022 Peak Season Traffic	239	1,678	45	45	2,029	352	272	18	155	26	30	45
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
17450 Biscayne Blvd		18		23	14	9	11					
2026 Background Traffic	249	1,764	47	70	2,125	376	294	18	161	27	31	47
BH 164		8			18		7					
2026 Total Traffic	**249**	**1,772**	**47**	**70**	**2,143**	**376**	**301**	**18**	**161**	**27**	**31**	**47**

TRAFTECH ENGINEERING, INC.

APPENDIX F

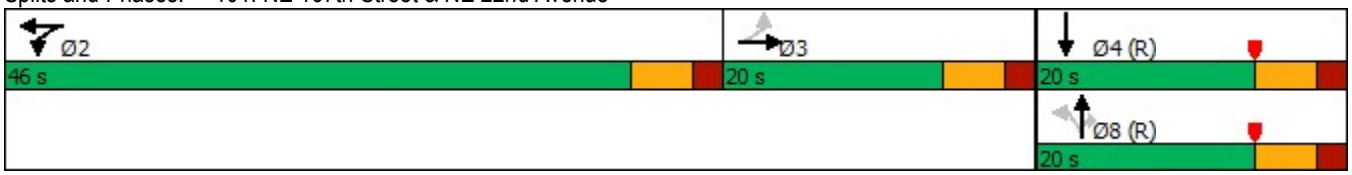
SYNCHRO Analyses

Timings
101: NE 167th Street & NE 22nd Avenue

Lane Group	EBT	WBT	NBL	NBT	NBR	SBT
Lane Configurations						
Traffic Volume (vph)	20	8	21	44	347	107
Future Volume (vph)	20	8	21	44	347	107
Turn Type	NA	NA	Perm	NA	Perm	NA
Protected Phases	3	2		8		4
Permitted Phases			8		8	
Detector Phase	3	2	8	8	8	4
Switch Phase						
Minimum Initial (s)	7.0	16.0	7.0	7.0	7.0	7.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	20.0	46.0	20.0	20.0	20.0	20.0
Total Split (%)	23.3%	53.5%	23.3%	23.3%	23.3%	23.3%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	8.1	19.5	43.0	43.0	43.0	43.0
Actuated g/C Ratio	0.09	0.23	0.50	0.50	0.50	0.50
v/c Ratio	0.46	0.73	0.04	0.05	0.41	0.14
Control Delay	18.9	41.8	15.5	15.1	3.5	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.9	41.8	15.5	15.1	3.5	14.8
LOS	B	D	B	B	A	B
Approach Delay	18.9	41.8		5.3		14.8
Approach LOS	B	D		A		B

Intersection Summary	
Cycle Length: 86	
Actuated Cycle Length: 86	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 18.8	Intersection LOS: B
Intersection Capacity Utilization 38.9%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 101: NE 167th Street & NE 22nd Avenue



Queues
101: NE 167th Street & NE 22nd Avenue

Lane Group	EBT	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	108	295	24	50	394	129
v/c Ratio	0.46	0.73	0.04	0.05	0.41	0.14
Control Delay	18.9	41.8	15.5	15.1	3.5	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.9	41.8	15.5	15.1	3.5	14.8
Queue Length 50th (ft)	12	153	6	13	0	35
Queue Length 95th (ft)	55	207	24	40	52	84
Internal Link Dist (ft)	300	275		820		386
Turn Bay Length (ft)			60		500	
Base Capacity (vph)	342	826	614	931	971	924
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.36	0.04	0.05	0.41	0.14

Intersection Summary

HCM Signalized Intersection Capacity Analysis
101: NE 167th Street & NE 22nd Avenue

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	20	75	252	8	0	21	44	347	0	107	6
Future Volume (vph)	0	20	75	252	8	0	21	44	347	0	107	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0	6.0		6.0	
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00		1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00	0.98		1.00	
Flpb, ped/bikes		1.00			1.00		0.99	1.00	1.00		1.00	
Frt		0.89			1.00		1.00	1.00	0.85		0.99	
Flt Protected		1.00			0.95		0.95	1.00	1.00		1.00	
Satd. Flow (prot)		1665			1777		1757	1863	1550		1846	
Flt Permitted		1.00			0.95		0.67	1.00	1.00		1.00	
Satd. Flow (perm)		1665			1777		1248	1863	1550		1846	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	23	85	286	9	0	24	50	394	0	122	7
RTOR Reduction (vph)	0	78	0	0	0	0	0	0	202	0	2	0
Lane Group Flow (vph)	0	30	0	0	295	0	24	50	192	0	127	0
Confl. Peds. (#/hr)	2					2	8					8
Confl. Bikes (#/hr)									1			3
Turn Type		NA		Split	NA		Perm	NA	Perm		NA	
Protected Phases		3		2	2			8			4	
Permitted Phases	3						8		8			
Actuated Green, G (s)		6.7			19.5		41.8	41.8	41.8		41.8	
Effective Green, g (s)		6.7			19.5		41.8	41.8	41.8		41.8	
Actuated g/C Ratio		0.08			0.23		0.49	0.49	0.49		0.49	
Clearance Time (s)		6.0			6.0		6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0			1.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		129			402		606	905	753		897	
v/s Ratio Prot		c0.02			c0.17			0.03			0.07	
v/s Ratio Perm							0.02		c0.12			
v/c Ratio		0.23			0.73		0.04	0.06	0.25		0.14	
Uniform Delay, d1		37.2			30.8		11.6	11.7	13.0		12.2	
Progression Factor		1.00			1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2		0.9			5.9		0.1	0.1	0.8		0.3	
Delay (s)		38.1			36.7		11.7	11.8	13.8		12.5	
Level of Service		D			D		B	B	B		B	
Approach Delay (s)		38.1			36.7			13.5			12.5	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	38.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

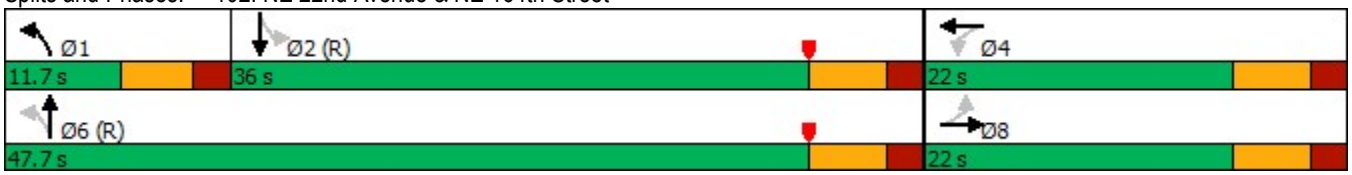
HCM 6th Edition methodology does not support current ring-barrier structure.

Timings
102: NE 22nd Avenue & NE 164th Street

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	85	8	4	0	29	341	5	388
Future Volume (vph)	85	8	4	0	29	341	5	388
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		8		4	1	6		2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	1	6	2	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.0	29.0	29.0	29.0	10.7	30.0	30.0	30.0
Total Split (s)	22.0	22.0	22.0	22.0	11.7	47.7	36.0	36.0
Total Split (%)	31.6%	31.6%	31.6%	31.6%	16.8%	68.4%	51.6%	51.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	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
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	5.7	6.0	6.0	6.0
Lead/Lag					Lead		Lag	Lag
Lead-Lag Optimize?					Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	10.1	10.1		10.1	47.9	47.6	43.1	43.1
Actuated g/C Ratio	0.14	0.14		0.14	0.69	0.68	0.62	0.62
v/c Ratio	0.49	0.26		0.03	0.06	0.17	0.01	0.24
Control Delay	35.1	7.2		0.2	4.5	4.5	9.2	7.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	35.1	7.2		0.2	4.5	4.5	9.2	7.6
LOS	D	A		A	A	A	A	A
Approach Delay		18.6		0.2		4.5		7.6
Approach LOS		B		A		A		A

Intersection Summary	
Cycle Length: 69.7	
Actuated Cycle Length: 69.7	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.49	
Intersection Signal Delay: 8.6	Intersection LOS: A
Intersection Capacity Utilization 42.8%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 102: NE 22nd Avenue & NE 164th Street

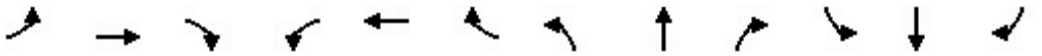


Queues
102: NE 22nd Avenue & NE 164th Street

Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	99	143	10	34	404	6	509
v/c Ratio	0.49	0.26	0.03	0.06	0.17	0.01	0.24
Control Delay	35.1	7.2	0.2	4.5	4.5	9.2	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.1	7.2	0.2	4.5	4.5	9.2	7.6
Queue Length 50th (ft)	40	1	0	4	25	1	32
Queue Length 95th (ft)	74	20	0	13	47	7	91
Internal Link Dist (ft)		146	182		320		820
Turn Bay Length (ft)	80			100		100	
Base Capacity (vph)	321	792	430	606	2411	592	2156
Starvation Cap Reductn	0	0	0	0	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	0.31	0.18	0.02	0.06	0.17	0.01	0.24

Intersection Summary

HCM 6th Signalized Intersection Summary
102: NE 22nd Avenue & NE 164th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	8	115	4	0	4	29	341	6	5	388	50
Future Volume (veh/h)	85	8	115	4	0	4	29	341	6	5	388	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	99	9	134	5	0	5	34	397	7	6	451	58
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	214	188	103	23	49	631	2530	45	683	1876	240
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.03	0.71	0.71	0.59	0.59	0.59
Sat Flow, veh/h	1407	1777	1559	218	192	410	1781	3572	63	980	3168	405
Grp Volume(v), veh/h	99	9	134	10	0	0	34	197	207	6	252	257
Grp Sat Flow(s),veh/h/ln	1407	1777	1559	820	0	0	1781	1777	1858	980	1777	1796
Q Serve(g_s), s	0.0	0.3	5.8	0.0	0.0	0.0	0.5	2.6	2.6	0.2	4.7	4.8
Cycle Q Clear(g_c), s	4.7	0.3	5.8	5.8	0.0	0.0	0.5	2.6	2.6	0.2	4.7	4.8
Prop In Lane	1.00		1.00	0.50		0.50	1.00		0.03	1.00		0.23
Lane Grp Cap(c), veh/h	270	214	188	176	0	0	631	1258	1316	683	1052	1064
V/C Ratio(X)	0.37	0.04	0.71	0.06	0.00	0.00	0.05	0.16	0.16	0.01	0.24	0.24
Avail Cap(c_a), veh/h	423	406	356	326	0	0	722	1258	1316	683	1052	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	0.57	0.57	0.57	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	27.2	29.6	27.3	0.0	0.0	4.6	3.4	3.4	5.9	6.8	6.8
Incr Delay (d2), s/veh	0.6	0.1	3.7	0.1	0.0	0.0	0.0	0.2	0.1	0.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.1	2.3	0.1	0.0	0.0	0.1	0.7	0.7	0.0	1.6	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	27.3	33.4	27.4	0.0	0.0	4.6	3.5	3.5	5.9	7.3	7.3
LnGrp LOS	C	C	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		242			10			438			515	
Approach Delay, s/veh		31.7			27.4			3.6			7.3	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	8.1	47.5		14.4		55.6		14.4				
Change Period (Y+Rc), s	* 5.7	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	* 6	30.0		16.0		41.7		16.0				
Max Q Clear Time (g_c+I1), s	2.5	6.8		7.8		4.6		7.8				
Green Ext Time (p_c), s	0.0	1.1		0.0		0.8		0.5				

Intersection Summary		
HCM 6th Ctrl Delay		11.0
HCM 6th LOS		B

Notes

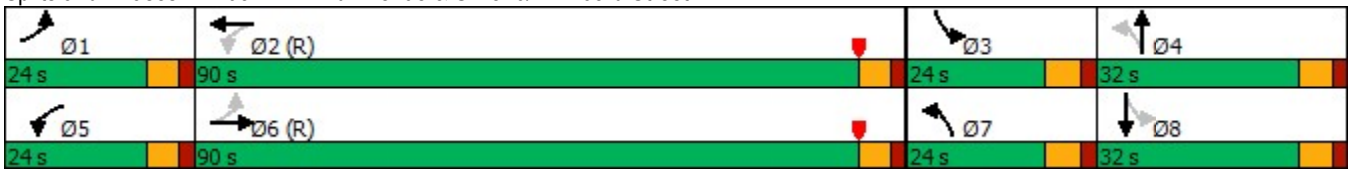
User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

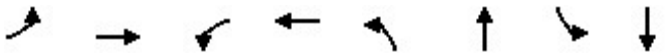
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	34	1037	195	1011	90	249	123	324
Future Volume (vph)	34	1037	195	1011	90	249	123	324
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases	6		2		4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	7.0	5.0	7.0
Minimum Split (s)	11.0	32.0	11.0	32.0	11.4	30.4	11.4	32.0
Total Split (s)	24.0	90.0	24.0	90.0	24.0	32.0	24.0	32.0
Total Split (%)	14.1%	52.9%	14.1%	52.9%	14.1%	18.8%	14.1%	18.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	100.6	94.7	114.4	104.7	34.2	22.0	39.4	24.6
Actuated g/C Ratio	0.59	0.56	0.67	0.62	0.20	0.13	0.23	0.14
v/c Ratio	0.15	0.44	0.70	0.40	0.55	0.82	0.66	0.83
Control Delay	12.7	23.7	23.7	18.1	60.6	82.7	65.5	83.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Total Delay	12.7	23.7	23.7	18.1	60.6	82.7	65.5	84.4
LOS	B	C	C	B	E	F	E	F
Approach Delay		23.3		18.9		77.9		79.6
Approach LOS		C		B		E		E

Intersection Summary	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 27 (16%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 36.9	Intersection LOS: D
Intersection Capacity Utilization 71.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 103: NE 22nd Avenue & SR 826/NE 163rd Street



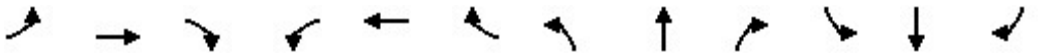
Queues
103: NE 22nd Avenue & SR 826/NE 163rd Street



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	39	1230	224	1239	103	373	141	420
v/c Ratio	0.15	0.44	0.70	0.40	0.55	0.82	0.66	0.83
Control Delay	12.7	23.7	23.7	18.1	60.6	82.7	65.5	83.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
Total Delay	12.7	23.7	23.7	18.1	60.6	82.7	65.5	84.4
Queue Length 50th (ft)	14	290	90	258	91	204	127	237
Queue Length 95th (ft)	30	354	136	309	137	251	180	289
Internal Link Dist (ft)		510		391		445		320
Turn Bay Length (ft)	290		265		150		150	
Base Capacity (vph)	389	2817	358	3105	241	528	240	543
Starvation Cap Reductn	0	0	0	0	0	0	0	19
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	0.10	0.44	0.63	0.40	0.43	0.71	0.59	0.80

Intersection Summary

HCM 6th Signalized Intersection Summary
103: NE 22nd Avenue & SR 826/NE 163rd Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1037	33	195	1011	67	90	249	76	123	324	42
Future Volume (veh/h)	34	1037	33	195	1011	67	90	249	76	123	324	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	39	1192	38	224	1162	77	103	286	87	141	372	48
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	347	2944	94	366	3039	201	182	342	102	206	462	59
Arrive On Green	0.02	0.58	0.58	0.13	1.00	1.00	0.06	0.13	0.13	0.08	0.15	0.15
Sat Flow, veh/h	1781	5081	162	1781	4887	324	1781	2682	797	1781	3158	404
Grp Volume(v), veh/h	39	799	431	224	809	430	103	187	186	141	208	212
Grp Sat Flow(s),veh/h/ln	1781	1702	1839	1781	1702	1807	1781	1777	1702	1781	1777	1785
Q Serve(g_s), s	1.5	21.9	21.9	9.1	0.0	0.0	8.5	17.5	18.2	11.6	19.2	19.6
Cycle Q Clear(g_c), s	1.5	21.9	21.9	9.1	0.0	0.0	8.5	17.5	18.2	11.6	19.2	19.6
Prop In Lane	1.00		0.09	1.00		0.18	1.00		0.47	1.00		0.23
Lane Grp Cap(c), veh/h	347	1972	1065	366	2117	1123	182	226	217	206	260	261
V/C Ratio(X)	0.11	0.40	0.41	0.61	0.38	0.38	0.57	0.83	0.86	0.69	0.80	0.81
Avail Cap(c_a), veh/h	491	1972	1065	435	2117	1123	257	268	256	247	268	269
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	13.6	19.6	19.6	13.5	0.0	0.0	60.2	72.3	72.6	59.1	70.2	70.3
Incr Delay (d2), s/veh	0.1	0.6	1.1	1.8	0.5	1.0	1.0	15.7	20.2	3.8	14.7	15.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	9.0	9.9	3.3	0.2	0.3	3.9	9.0	9.2	5.5	9.9	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	20.3	20.8	15.4	0.5	1.0	61.3	88.0	92.8	62.9	84.8	86.2
LnGrp LOS	B	C	C	B	A	A	E	F	F	E	F	F
Approach Vol, veh/h		1269			1463			476			561	
Approach Delay, s/veh		20.2			2.9			84.1			79.8	
Approach LOS		C			A			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	111.7	20.0	28.1	17.4	104.5	16.8	31.3
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green Setting (Gmax), s	18.0	84.0	17.6	25.6	18.0	84.0	17.6	25.6
Max Q Clear Time (g_c+I1), s	3.5	2.0	13.6	20.2	11.1	23.9	10.5	21.6
Green Ext Time (p_c), s	0.0	3.6	0.1	0.9	0.4	3.5	0.1	0.8

Intersection Summary	
HCM 6th Ctrl Delay	30.5
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑			↱
Traffic Vol, veh/h	0	1213	1263	20	0	13
Future Vol, veh/h	0	1213	1263	20	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1479	1540	24	0	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	782
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	0	-	-	-	0	685
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	685
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.4
HCM LOS			B

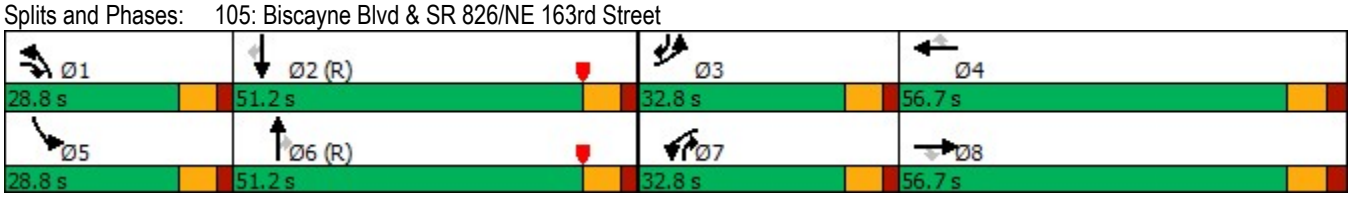
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	685
HCM Lane V/C Ratio	-	-	-	0.023
HCM Control Delay (s)	-	-	-	10.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Timings
105: Biscayne Blvd & SR 826/NE 163rd Street

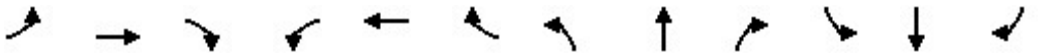
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	935	122	402	721	368	202	788	315	442	1075	220
Future Volume (vph)	130	935	122	402	721	368	202	788	315	442	1075	220
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6	7	5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	7	5	2	3
Switch Phase												
Minimum Initial (s)	5.0	7.0	5.0	5.0	7.0	7.0	5.0	7.0	5.0	5.0	7.0	5.0
Minimum Split (s)	11.8	56.7	11.8	11.8	56.7	56.7	11.8	49.2	11.8	11.8	49.2	11.8
Total Split (s)	32.8	56.7	28.8	32.8	56.7	56.7	28.8	51.2	32.8	28.8	51.2	32.8
Total Split (%)	19.4%	33.5%	17.0%	19.4%	33.5%	33.5%	17.0%	30.2%	19.4%	17.0%	30.2%	19.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.9	2.0	2.0	2.9	2.9	2.0	2.4	2.0	2.0	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	7.7	6.8	6.8	7.7	7.7	6.8	7.2	6.8	6.8	7.2	6.8
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	12.9	44.2	68.9	25.5	56.8	56.8	17.0	44.0	69.9	27.3	54.3	74.4
Actuated g/C Ratio	0.08	0.26	0.41	0.15	0.34	0.34	0.10	0.26	0.41	0.16	0.32	0.44
v/c Ratio	0.59	0.83	0.21	0.92	0.50	0.57	0.69	0.56	0.54	0.94	0.62	0.35
Control Delay	84.6	64.9	15.5	94.0	45.9	12.0	84.2	55.8	28.9	94.5	51.5	24.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.6	64.9	15.5	94.0	45.9	12.0	84.2	55.8	28.9	94.5	51.5	24.5
LOS	F	E	B	F	D	B	F	E	C	F	D	C
Approach Delay		62.0			50.5			53.7			59.0	
Approach LOS		E			D			D			E	

Intersection Summary	
Cycle Length: 169.5	
Actuated Cycle Length: 169.5	
Offset: 77 (45%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 56.2	Intersection LOS: E
Intersection Capacity Utilization 77.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 105: Biscayne Blvd & SR 826/NE 163rd Street



Queues
105: Biscayne Blvd & SR 826/NE 163rd Street

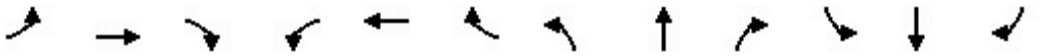


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	153	1100	144	473	848	433	238	927	371	520	1265	259
v/c Ratio	0.59	0.83	0.21	0.92	0.50	0.57	0.69	0.56	0.54	0.94	0.62	0.35
Control Delay	84.6	64.9	15.5	94.0	45.9	12.0	84.2	55.8	28.9	94.5	51.5	24.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.6	64.9	15.5	94.0	45.9	12.0	84.2	55.8	28.9	94.5	51.5	24.5
Queue Length 50th (ft)	86	424	50	270	273	65	134	261	229	300	350	135
Queue Length 95th (ft)	117	432	84	#330	295	143	168	280	298	#434	393	204
Internal Link Dist (ft)		400			949			1251			874	
Turn Bay Length (ft)	250		240	360		480	420		420	430		405
Base Capacity (vph)	526	1470	730	526	1705	755	445	1663	695	552	2052	852
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.75	0.20	0.90	0.50	0.57	0.53	0.56	0.53	0.94	0.62	0.30

Intersection Summary

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

HCM 6th Signalized Intersection Summary
105: Biscayne Blvd & SR 826/NE 163rd Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	935	122	402	721	368	202	788	315	442	1075	220
Future Volume (veh/h)	130	935	122	402	721	368	202	788	315	442	1075	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	153	1100	144	473	848	0	238	927	371	520	1265	259
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	1237	515	512	1701		285	2011	724	447	2312	660
Arrive On Green	0.11	0.48	0.48	0.15	0.33	0.00	0.08	0.31	0.31	0.13	0.36	0.36
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	6434	1565	3456	6434	1585
Grp Volume(v), veh/h	153	1100	144	473	848	0	238	927	371	520	1265	259
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1609	1565	1728	1609	1585
Q Serve(g_s), s	7.3	33.2	8.7	23.0	22.6	0.0	11.5	19.7	28.5	22.0	26.7	19.4
Cycle Q Clear(g_c), s	7.3	33.2	8.7	23.0	22.6	0.0	11.5	19.7	28.5	22.0	26.7	19.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	1237	515	512	1701		285	2011	724	447	2312	660
V/C Ratio(X)	0.77	0.89	0.28	0.92	0.50		0.83	0.46	0.51	1.16	0.55	0.39
Avail Cap(c_a), veh/h	529	1472	588	529	1701		447	2011	724	447	2312	660
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.2	41.8	28.4	71.5	45.3	0.0	76.8	46.9	32.4	74.0	43.4	34.6
Incr Delay (d2), s/veh	6.4	6.0	0.2	21.8	0.2	0.0	7.7	0.8	2.6	95.3	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	12.7	3.1	11.8	9.7	0.0	5.5	8.1	11.5	15.7	10.9	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.6	47.8	28.6	93.2	45.5	0.0	84.5	47.7	35.0	169.3	44.4	36.3
LnGrp LOS	F	D	C	F	D		F	D	C	F	D	D
Approach Vol, veh/h		1397			1321			1536			2044	
Approach Delay, s/veh		49.4			62.6			50.3			75.1	
Approach LOS		D			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.8	68.3	16.5	64.3	28.8	60.3	32.0	48.9
Change Period (Y+Rc), s	6.8	* 7.2	6.8	* 7.7	6.8	* 7.2	6.8	* 7.7
Max Green Setting (Gmax), s	22.0	* 44	26.0	* 49	22.0	* 44	26.0	* 49
Max Q Clear Time (g_c+I1), s	13.5	28.7	9.3	24.6	24.0	30.5	25.0	35.2
Green Ext Time (p_c), s	0.5	3.8	0.4	5.3	0.0	2.6	0.2	6.0

Intersection Summary	
HCM 6th Ctrl Delay	60.7
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

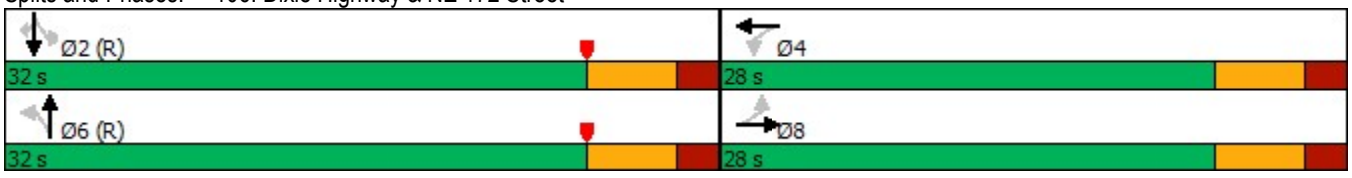
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Timings
106: Dixie Highway & NE 172 Street

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	33	518	5	260	13	217	81	278	77
Future Volume (vph)	33	518	5	260	13	217	81	278	77
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		8		4		6		2	
Permitted Phases	8		4		6		2		2
Detector Phase	8	8	4	4	6	6	2	2	2
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0	32.0
Total Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0	32.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	53.3%	53.3%	53.3%	53.3%	53.3%
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									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		17.3		17.3	30.7	30.7	30.7	30.7	30.7
Actuated g/C Ratio		0.29		0.29	0.51	0.51	0.51	0.51	0.51
v/c Ratio		0.69		0.39	0.03	0.43	0.19	0.31	0.10
Control Delay		22.1		13.5	9.3	10.0	10.8	10.8	3.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		22.1		13.5	9.3	10.0	10.8	10.8	3.2
LOS		C		B	A	A	B	B	A
Approach Delay		22.1		13.5		10.0		9.4	
Approach LOS		C		B		A		A	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 14.6	Intersection LOS: B
Intersection Capacity Utilization 73.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 106: Dixie Highway & NE 172 Street

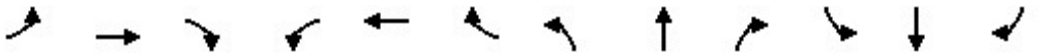


Queues
106: Dixie Highway & NE 172 Street

Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	640	379	14	395	87	299	83
v/c Ratio	0.69	0.39	0.03	0.43	0.19	0.31	0.10
Control Delay	22.1	13.5	9.3	10.0	10.8	10.8	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.1	13.5	9.3	10.0	10.8	10.8	3.2
Queue Length 50th (ft)	104	43	2	64	16	58	0
Queue Length 95th (ft)	136	65	12	144	45	121	20
Internal Link Dist (ft)	194	230		175		177	
Turn Bay Length (ft)			135		100		100
Base Capacity (vph)	1176	1227	550	929	466	952	839
Starvation Cap Reductn	0	0	0	0	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	0.54	0.31	0.03	0.43	0.19	0.31	0.10

Intersection Summary

HCM 6th Signalized Intersection Summary
106: Dixie Highway & NE 172 Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	518	45	5	260	87	13	217	151	81	278	77
Future Volume (veh/h)	33	518	45	5	260	87	13	217	151	81	278	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	35	557	0	5	280	94	14	233	162	87	299	83
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	766		64	601	195	603	581	404	553	1057	884
Arrive On Green	0.23	0.23	0.00	0.23	0.23	0.23	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	112	3350	0	12	2561	832	1001	1027	714	989	1870	1564
Grp Volume(v), veh/h	313	279	0	204	0	175	14	0	395	87	299	83
Grp Sat Flow(s),veh/h/ln	1760	1617	0	1855	0	1550	1001	0	1742	989	1870	1564
Q Serve(g_s), s	3.9	9.6	0.0	0.0	0.0	5.8	0.4	0.0	7.7	3.3	5.0	1.5
Cycle Q Clear(g_c), s	9.8	9.6	0.0	5.6	0.0	5.8	5.4	0.0	7.7	10.9	5.0	1.5
Prop In Lane	0.11		0.00	0.02		0.54	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	480	380		497	0	364	603	0	985	553	1057	884
V/C Ratio(X)	0.65	0.73		0.41	0.00	0.48	0.02	0.00	0.40	0.16	0.28	0.09
Avail Cap(c_a), veh/h	705	593		737	0	568	603	0	985	553	1057	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.87	0.00	0.87	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	21.2	0.0	19.7	0.0	19.8	8.1	0.0	7.3	10.4	6.7	6.0
Incr Delay (d2), s/veh	1.1	2.1	0.0	0.4	0.0	0.6	0.1	0.0	1.2	0.6	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	3.5	0.0	2.3	0.0	2.0	0.1	0.0	2.6	0.7	1.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	23.3	0.0	20.1	0.0	20.4	8.2	0.0	8.6	11.0	7.4	6.2
LnGrp LOS	C	C		C	A	C	A	A	A	B	A	A
Approach Vol, veh/h		592			379			409			469	
Approach Delay, s/veh		22.8			20.2			8.5			7.9	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.9		20.1		39.9		20.1				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		26.0		22.0		26.0		22.0				
Max Q Clear Time (g_c+I1), s		12.9		7.8		9.7		11.8				
Green Ext Time (p_c), s		0.7		1.6		0.9		2.2				

Intersection Summary		
HCM 6th Ctrl Delay		15.3
HCM 6th LOS		B

Notes

User approved pedestrian interval to be less than phase max green.

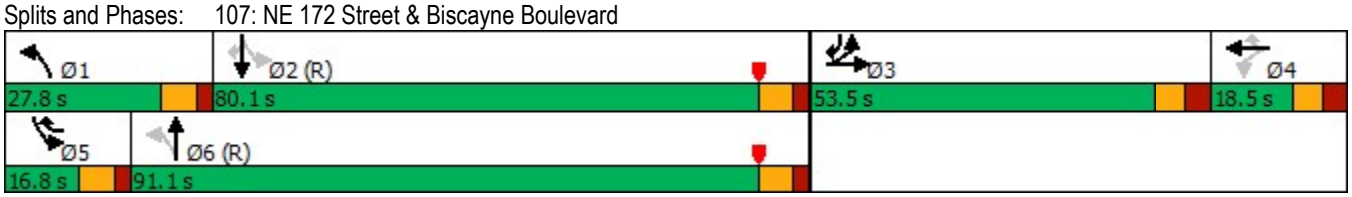
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
107: NE 172 Street & Biscayne Boulevard

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	387	15	31	21	35	137	1534	29	2073	177
Future Volume (vph)	387	15	31	21	35	137	1534	29	2073	177
Turn Type	Split	NA	Perm	NA	pm+ov	pm+pt	NA	pm+pt	NA	pm+ov
Protected Phases	3	3		4	5	1	6	5	2	3
Permitted Phases			4		4	6		2		2
Detector Phase	3	3	4	4	5	1	6	5	2	3
Switch Phase										
Minimum Initial (s)	5.0	5.0	7.0	7.0	5.0	5.0	7.0	5.0	7.0	5.0
Minimum Split (s)	25.5	25.5	18.5	18.5	11.8	11.8	30.1	11.8	30.1	25.5
Total Split (s)	53.5	53.5	18.5	18.5	16.8	27.8	91.1	16.8	80.1	53.5
Total Split (%)	29.7%	29.7%	10.3%	10.3%	9.3%	15.5%	50.6%	9.3%	44.5%	29.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.8	4.8	4.8	4.8	4.8	4.0
All-Red Time (s)	3.5	3.5	3.5	3.5	2.0	2.0	2.3	2.0	2.3	3.5
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)	7.5	7.5		7.5	6.8	6.8	7.1	6.8	7.1	7.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	None
Act Effct Green (s)	37.8	37.8		11.5	18.1	108.8	98.2	93.6	87.4	124.7
Actuated g/C Ratio	0.21	0.21		0.06	0.10	0.60	0.55	0.52	0.49	0.69
v/c Ratio	0.56	0.78		0.75	0.14	0.79	0.46	0.19	0.69	0.16
Control Delay	65.8	39.2		131.7	1.1	73.8	27.0	20.7	39.3	2.5
Queue Delay	3.4	7.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.1	46.2		131.7	1.1	73.8	27.0	20.7	39.3	2.5
LOS	E	D		F	A	E	C	C	D	A
Approach Delay		57.8		79.4			30.8		36.2	
Approach LOS		E		E			C		D	

Intersection Summary	
Cycle Length: 179.9	
Actuated Cycle Length: 179.9	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 38.5	Intersection LOS: D
Intersection Capacity Utilization 84.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 107: NE 172 Street & Biscayne Boulevard

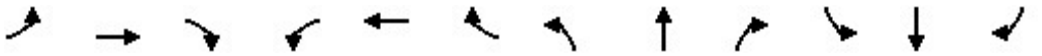


Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	403	392	54	36	143	1620	30	2159	184
v/c Ratio	0.56	0.78	0.75	0.14	0.79	0.46	0.19	0.69	0.16
Control Delay	65.8	39.2	131.7	1.1	73.8	27.0	20.7	39.3	2.5
Queue Delay	3.4	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	69.1	46.2	131.7	1.1	73.8	27.0	20.7	39.3	2.5
Queue Length 50th (ft)	221	203	63	0	119	360	15	597	14
Queue Length 95th (ft)	265	326	#152	0	201	415	33	706	41
Internal Link Dist (ft)		230	539			817		820	
Turn Bay Length (ft)					415		200		180
Base Capacity (vph)	877	564	75	291	244	3489	198	3112	1195
Starvation Cap Reductn	368	128	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	0.79	0.90	0.72	0.12	0.59	0.46	0.15	0.69	0.15

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
107: NE 172 Street & Biscayne Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	387	15	361	31	21	35	137	1534	21	29	2073	177
Future Volume (vph)	387	15	361	31	21	35	137	1534	21	29	2073	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5			7.5	6.8	6.8	7.1		6.8	7.1	7.5
Lane Util. Factor	0.97	1.00			1.00	1.00	1.00	0.86		1.00	0.86	1.00
Frpb, ped/bikes	1.00	0.98			1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			0.99	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.86			1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00			0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1566			1795	1564	1770	6393		1770	6408	1566
Flt Permitted	0.95	1.00			0.61	1.00	0.04	1.00		0.11	1.00	1.00
Satd. Flow (perm)	3433	1566			1133	1564	79	6393		205	6408	1566
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	403	16	376	32	22	36	143	1598	22	30	2159	184
RTOR Reduction (vph)	0	174	0	0	0	33	0	1	0	0	0	43
Lane Group Flow (vph)	403	218	0	0	54	3	143	1619	0	30	2159	141
Confl. Peds. (#/hr)	1		5	5		1	1					1
Confl. Bikes (#/hr)						1			1			3
Turn Type	Split	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3			4	5	1	6		5	2	3
Permitted Phases				4		4	6			2		2
Actuated Green, G (s)	37.8	37.8			11.5	16.4	108.5	96.8		92.3	87.4	125.2
Effective Green, g (s)	37.8	37.8			11.5	16.4	108.5	96.8		92.3	87.4	125.2
Actuated g/C Ratio	0.21	0.21			0.06	0.09	0.60	0.54		0.51	0.49	0.70
Clearance Time (s)	7.5	7.5			7.5	6.8	6.8	7.1		6.8	7.1	7.5
Vehicle Extension (s)	5.0	5.0			2.5	2.0	2.0	1.0		2.0	1.0	5.0
Lane Grp Cap (vph)	721	329			72	142	182	3439		147	3113	1089
v/s Ratio Prot	0.12	c0.14				0.00	c0.06	0.25		0.01	0.34	0.03
v/s Ratio Perm					c0.05	0.00	c0.41			0.10		0.06
v/c Ratio	0.56	0.66			0.75	0.02	0.79	0.47		0.20	0.69	0.13
Uniform Delay, d1	63.6	65.2			82.8	74.5	52.2	25.7		22.2	35.9	9.1
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.6	6.5			33.5	0.0	18.3	0.5		0.3	1.3	0.1
Delay (s)	65.2	71.7			116.3	74.5	70.5	26.2		22.5	37.2	9.3
Level of Service	E	E			F	E	E	C		C	D	A
Approach Delay (s)		68.4			99.6			29.8			34.8	
Approach LOS		E			F			C			C	

Intersection Summary			
HCM 2000 Control Delay	39.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	179.9	Sum of lost time (s)	28.9
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

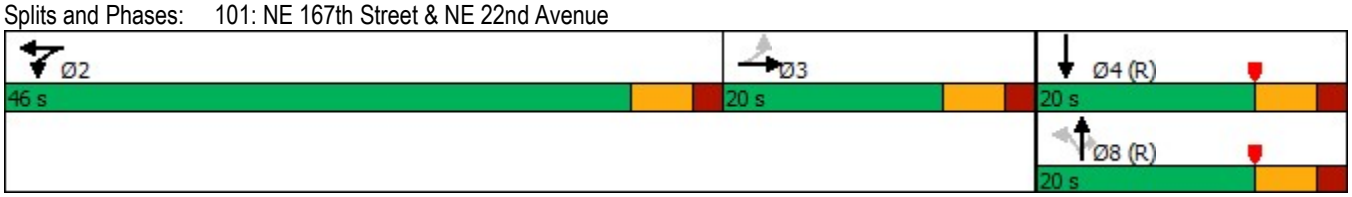
HCM 6th Edition methodology expects strict NEMA phasing.

Timings
101: NE 167th Street & NE 22nd Avenue

Lane Group	EBT	WBT	NBL	NBT	NBR	SBT
Lane Configurations						
Traffic Volume (vph)	20	9	21	46	361	111
Future Volume (vph)	20	9	21	46	361	111
Turn Type	NA	NA	Perm	NA	Perm	NA
Protected Phases	3	2		8		4
Permitted Phases			8		8	
Detector Phase	3	2	8	8	8	4
Switch Phase						
Minimum Initial (s)	7.0	16.0	7.0	7.0	7.0	7.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	20.0	46.0	20.0	20.0	20.0	20.0
Total Split (%)	23.3%	53.5%	23.3%	23.3%	23.3%	23.3%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	8.2	20.0	42.4	42.4	42.4	42.4
Actuated g/C Ratio	0.10	0.23	0.49	0.49	0.49	0.49
v/c Ratio	0.47	0.75	0.04	0.06	0.42	0.15
Control Delay	18.7	41.8	16.1	15.7	3.6	15.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.7	41.8	16.1	15.7	3.6	15.4
LOS	B	D	B	B	A	B
Approach Delay	18.7	41.8		5.5		15.4
Approach LOS	B	D		A		B

Intersection Summary	
Cycle Length: 86	
Actuated Cycle Length: 86	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 19.0	Intersection LOS: B
Intersection Capacity Utilization 39.5%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 101: NE 167th Street & NE 22nd Avenue

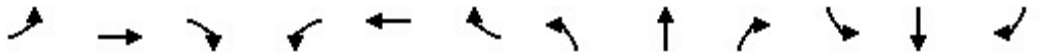


Queues
101: NE 167th Street & NE 22nd Avenue

Lane Group	EBT	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	112	309	24	52	410	133
v/c Ratio	0.47	0.75	0.04	0.06	0.42	0.15
Control Delay	18.7	41.8	16.1	15.7	3.6	15.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.7	41.8	16.1	15.7	3.6	15.4
Queue Length 50th (ft)	12	159	6	14	0	37
Queue Length 95th (ft)	56	213	25	42	54	88
Internal Link Dist (ft)	300	275		820		386
Turn Bay Length (ft)			60		500	
Base Capacity (vph)	345	826	604	918	971	911
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.37	0.04	0.06	0.42	0.15

Intersection Summary

HCM Signalized Intersection Capacity Analysis
101: NE 167th Street & NE 22nd Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	20	78	263	9	0	21	46	361	0	111	6
Future Volume (vph)	0	20	78	263	9	0	21	46	361	0	111	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0	6.0		6.0	
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00		1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00	0.98		1.00	
Flpb, ped/bikes		1.00			1.00		0.99	1.00	1.00		1.00	
Frt		0.89			1.00		1.00	1.00	0.85		0.99	
Flt Protected		1.00			0.95		0.95	1.00	1.00		1.00	
Satd. Flow (prot)		1663			1777		1757	1863	1550		1847	
Flt Permitted		1.00			0.95		0.67	1.00	1.00		1.00	
Satd. Flow (perm)		1663			1777		1243	1863	1550		1847	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	23	89	299	10	0	24	52	410	0	126	7
RTOR Reduction (vph)	0	82	0	0	0	0	0	0	214	0	2	0
Lane Group Flow (vph)	0	30	0	0	309	0	24	52	196	0	131	0
Confl. Peds. (#/hr)	2					2	8					8
Confl. Bikes (#/hr)									1			3
Turn Type		NA		Split	NA		Perm	NA	Perm		NA	
Protected Phases		3		2	2			8			4	
Permitted Phases	3						8		8			
Actuated Green, G (s)		6.8			20.0		41.2	41.2	41.2		41.2	
Effective Green, g (s)		6.8			20.0		41.2	41.2	41.2		41.2	
Actuated g/C Ratio		0.08			0.23		0.48	0.48	0.48		0.48	
Clearance Time (s)		6.0			6.0		6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0			1.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		131			413		595	892	742		884	
v/s Ratio Prot		c0.02			c0.17			0.03			0.07	
v/s Ratio Perm							0.02		c0.13			
v/c Ratio		0.23			0.75		0.04	0.06	0.26		0.15	
Uniform Delay, d1		37.1			30.7		11.9	12.0	13.4		12.6	
Progression Factor		1.00			1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2		0.9			6.4		0.1	0.1	0.9		0.4	
Delay (s)		38.0			37.0		12.0	12.1	14.2		12.9	
Level of Service		D			D		B	B	B		B	
Approach Delay (s)		38.0			37.0			13.9			12.9	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	39.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

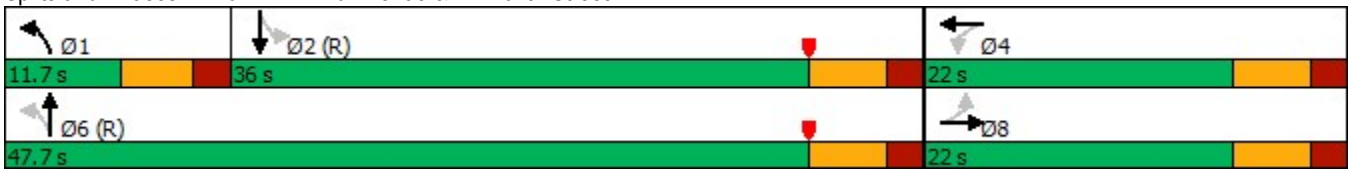
HCM 6th Edition methodology does not support current ring-barrier structure.

Timings
102: NE 22nd Avenue & NE 164th Street

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	89	9	4	0	30	355	5	404
Future Volume (vph)	89	9	4	0	30	355	5	404
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		8		4	1	6		2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	1	6	2	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.0	29.0	29.0	29.0	10.7	30.0	30.0	30.0
Total Split (s)	22.0	22.0	22.0	22.0	11.7	47.7	36.0	36.0
Total Split (%)	31.6%	31.6%	31.6%	31.6%	16.8%	68.4%	51.6%	51.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	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
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	5.7	6.0	6.0	6.0
Lead/Lag					Lead		Lag	Lag
Lead-Lag Optimize?					Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	10.3	10.3		10.3	47.7	47.4	42.9	42.9
Actuated g/C Ratio	0.15	0.15		0.15	0.68	0.68	0.62	0.62
v/c Ratio	0.50	0.27		0.03	0.06	0.17	0.01	0.25
Control Delay	35.2	7.1		0.2	4.6	4.6	9.2	7.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	7.1		0.2	4.6	4.6	9.2	7.7
LOS	D	A		A	A	A	A	A
Approach Delay		18.5		0.2		4.6		7.8
Approach LOS		B		A		A		A

Intersection Summary	
Cycle Length: 69.7	
Actuated Cycle Length: 69.7	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.50	
Intersection Signal Delay: 8.7	Intersection LOS: A
Intersection Capacity Utilization 44.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 102: NE 22nd Avenue & NE 164th Street

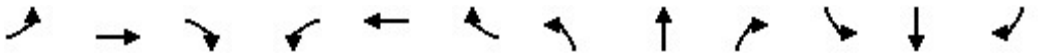


Queues
102: NE 22nd Avenue & NE 164th Street

Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	103	150	10	35	420	6	532
v/c Ratio	0.50	0.27	0.03	0.06	0.17	0.01	0.25
Control Delay	35.2	7.1	0.2	4.6	4.6	9.2	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	7.1	0.2	4.6	4.6	9.2	7.7
Queue Length 50th (ft)	42	2	0	4	27	1	34
Queue Length 95th (ft)	76	21	0	13	50	7	96
Internal Link Dist (ft)		146	182		320		820
Turn Bay Length (ft)	80			100		100	
Base Capacity (vph)	321	797	430	594	2402	580	2147
Starvation Cap Reductn	0	0	0	0	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	0.32	0.19	0.02	0.06	0.17	0.01	0.25

Intersection Summary

HCM 6th Signalized Intersection Summary
102: NE 22nd Avenue & NE 164th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	9	120	4	0	4	30	355	6	5	404	53
Future Volume (veh/h)	89	9	120	4	0	4	30	355	6	5	404	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	10	140	5	0	5	35	413	7	6	470	62
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	273	221	194	104	23	50	614	2517	43	670	1854	243
Arrive On Green	0.12	0.12	0.12	0.12	0.00	0.12	0.04	0.70	0.70	0.59	0.59	0.59
Sat Flow, veh/h	1407	1777	1559	212	187	399	1781	3575	61	966	3157	414
Grp Volume(v), veh/h	103	10	140	10	0	0	35	205	215	6	264	268
Grp Sat Flow(s),veh/h/ln	1407	1777	1559	798	0	0	1781	1777	1858	966	1777	1795
Q Serve(g_s), s	0.0	0.3	6.0	0.0	0.0	0.0	0.5	2.7	2.7	0.2	5.0	5.1
Cycle Q Clear(g_c), s	5.1	0.3	6.0	6.1	0.0	0.0	0.5	2.7	2.7	0.2	5.0	5.1
Prop In Lane	1.00		1.00	0.50		0.50	1.00		0.03	1.00		0.23
Lane Grp Cap(c), veh/h	273	221	194	176	0	0	614	1251	1309	670	1044	1054
V/C Ratio(X)	0.38	0.05	0.72	0.06	0.00	0.00	0.06	0.16	0.16	0.01	0.25	0.25
Avail Cap(c_a), veh/h	420	406	356	321	0	0	704	1251	1309	670	1044	1054
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	0.56	0.56	0.56	0.99	0.99	0.99
Uniform Delay (d), s/veh	29.0	27.0	29.5	27.1	0.0	0.0	4.7	3.5	3.5	6.0	7.0	7.0
Incr Delay (d2), s/veh	0.6	0.1	3.7	0.1	0.0	0.0	0.0	0.2	0.2	0.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.1	2.4	0.1	0.0	0.0	0.1	0.7	0.8	0.0	1.8	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	27.0	33.2	27.2	0.0	0.0	4.7	3.6	3.6	6.0	7.6	7.6
LnGrp LOS	C	C	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		253			10			455			538	
Approach Delay, s/veh		31.5			27.2			3.7			7.6	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	8.2	47.1		14.7		55.3		14.7				
Change Period (Y+Rc), s	* 5.7	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	* 6	30.0		16.0		41.7		16.0				
Max Q Clear Time (g_c+I1), s	2.5	7.1		8.1		4.7		8.0				
Green Ext Time (p_c), s	0.0	1.1		0.0		0.9		0.6				

Intersection Summary		
HCM 6th Ctrl Delay		11.1
HCM 6th LOS		B

Notes

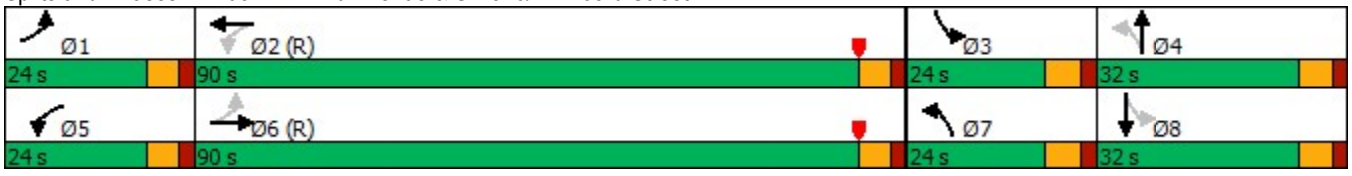
User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

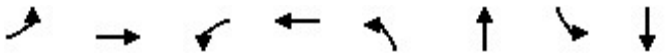
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	35	1079	203	1053	93	259	128	338
Future Volume (vph)	35	1079	203	1053	93	259	128	338
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases	6		2		4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	7.0	5.0	7.0
Minimum Split (s)	11.0	32.0	11.0	32.0	11.4	30.4	11.4	32.0
Total Split (s)	24.0	90.0	24.0	90.0	24.0	32.0	24.0	32.0
Total Split (%)	14.1%	52.9%	14.1%	52.9%	14.1%	18.8%	14.1%	18.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	99.2	93.3	113.5	103.7	35.2	22.7	40.2	25.2
Actuated g/C Ratio	0.58	0.55	0.67	0.61	0.21	0.13	0.24	0.15
v/c Ratio	0.16	0.46	0.75	0.42	0.58	0.83	0.69	0.85
Control Delay	13.2	24.8	29.8	18.8	61.2	83.2	66.5	84.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Total Delay	13.2	24.8	29.8	18.8	61.2	83.2	66.5	85.9
LOS	B	C	C	B	E	F	E	F
Approach Delay		24.4		20.5		78.4		81.1
Approach LOS		C		C		E		F

Intersection Summary	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 27 (16%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 38.2	Intersection LOS: D
Intersection Capacity Utilization 72.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 103: NE 22nd Avenue & SR 826/NE 163rd Street



Queues
103: NE 22nd Avenue & SR 826/NE 163rd Street



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	40	1279	233	1290	107	389	147	440
v/c Ratio	0.16	0.46	0.75	0.42	0.58	0.83	0.69	0.85
Control Delay	13.2	24.8	29.8	18.8	61.2	83.2	66.5	84.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Total Delay	13.2	24.8	29.8	18.8	61.2	83.2	66.5	85.9
Queue Length 50th (ft)	15	313	97	279	94	213	132	248
Queue Length 95th (ft)	31	372	163	326	141	262	187	304
Internal Link Dist (ft)		510		391		445		320
Turn Bay Length (ft)	290		265		150		150	
Base Capacity (vph)	374	2777	343	3076	238	528	239	548
Starvation Cap Reductn	0	0	0	0	0	0	0	27
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	0.11	0.46	0.68	0.42	0.45	0.74	0.62	0.84

Intersection Summary

HCM 6th Signalized Intersection Summary
103: NE 22nd Avenue & SR 826/NE 163rd Street

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	1079	34	203	1053	70	93	259	79	128	338	44
Future Volume (veh/h)	35	1079	34	203	1053	70	93	259	79	128	338	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	40	1240	39	233	1210	80	107	298	91	147	389	51
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	331	2896	91	355	3009	199	183	350	105	209	474	62
Arrive On Green	0.02	0.57	0.57	0.14	1.00	1.00	0.06	0.13	0.13	0.08	0.15	0.15
Sat Flow, veh/h	1781	5083	160	1781	4888	323	1781	2679	800	1781	3151	410
Grp Volume(v), veh/h	40	830	449	233	843	447	107	195	194	147	218	222
Grp Sat Flow(s),veh/h/ln	1781	1702	1839	1781	1702	1807	1781	1777	1702	1781	1777	1784
Q Serve(g_s), s	1.6	23.6	23.6	9.7	0.0	0.0	8.8	18.3	19.0	12.0	20.2	20.5
Cycle Q Clear(g_c), s	1.6	23.6	23.6	9.7	0.0	0.0	8.8	18.3	19.0	12.0	20.2	20.5
Prop In Lane	1.00		0.09	1.00		0.18	1.00		0.47	1.00		0.23
Lane Grp Cap(c), veh/h	331	1940	1048	355	2095	1112	183	232	223	209	267	268
V/C Ratio(X)	0.12	0.43	0.43	0.66	0.40	0.40	0.58	0.84	0.87	0.70	0.82	0.83
Avail Cap(c_a), veh/h	475	1940	1048	417	2095	1112	255	268	256	246	268	269
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	14.3	20.8	20.8	14.6	0.0	0.0	59.7	72.1	72.4	58.5	69.9	70.1
Incr Delay (d2), s/veh	0.1	0.7	1.3	2.9	0.6	1.1	1.1	17.9	22.8	5.0	16.8	18.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	9.8	10.7	3.6	0.2	0.3	4.1	9.5	9.7	5.8	10.5	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	21.5	22.1	17.5	0.6	1.1	60.8	90.1	95.2	63.5	86.7	88.2
LnGrp LOS	B	C	C	B	A	A	E	F	F	E	F	F
Approach Vol, veh/h		1319			1523			496			587	
Approach Delay, s/veh		21.5			3.3			85.8			81.5	
Approach LOS		C			A			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	110.6	20.5	28.6	18.0	102.9	17.2	32.0
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green Setting (Gmax), s	18.0	84.0	17.6	25.6	18.0	84.0	17.6	25.6
Max Q Clear Time (g_c+I1), s	3.6	2.0	14.0	21.0	11.7	25.6	10.8	22.5
Green Ext Time (p_c), s	0.0	3.7	0.1	0.8	0.3	3.7	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	31.5
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑			↱
Traffic Vol, veh/h	0	1263	1314	20	0	14
Future Vol, veh/h	0	1263	1314	20	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1540	1602	24	0	17

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	813
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	0	-	-	-	0	669
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	669
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.5
HCM LOS			B

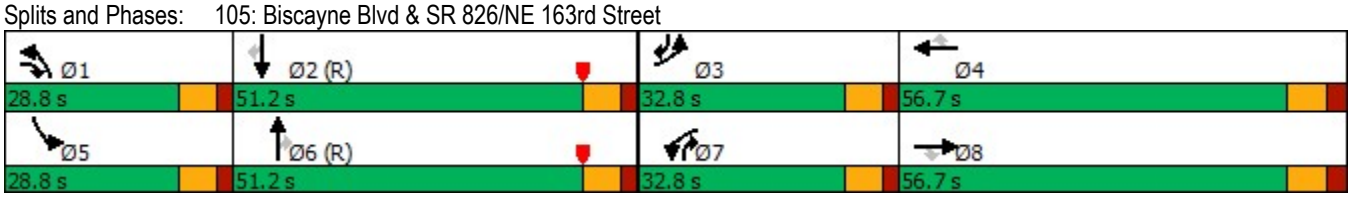
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	669
HCM Lane V/C Ratio	-	-	-	0.026
HCM Control Delay (s)	-	-	-	10.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Timings
105: Biscayne Blvd & SR 826/NE 163rd Street

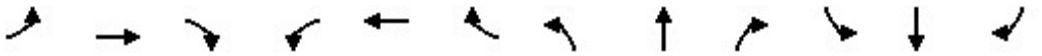
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	973	126	418	750	383	210	829	328	460	1136	229
Future Volume (vph)	135	973	126	418	750	383	210	829	328	460	1136	229
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6	7	5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	7	5	2	3
Switch Phase												
Minimum Initial (s)	5.0	7.0	5.0	5.0	7.0	7.0	5.0	7.0	5.0	5.0	7.0	5.0
Minimum Split (s)	11.8	56.7	11.8	11.8	56.7	56.7	11.8	49.2	11.8	11.8	49.2	11.8
Total Split (s)	32.8	56.7	28.8	32.8	56.7	56.7	28.8	51.2	32.8	28.8	51.2	32.8
Total Split (%)	19.4%	33.5%	17.0%	19.4%	33.5%	33.5%	17.0%	30.2%	19.4%	17.0%	30.2%	19.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.9	2.0	2.0	2.9	2.9	2.0	2.4	2.0	2.0	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	7.7	6.8	6.8	7.7	7.7	6.8	7.2	6.8	6.8	7.2	6.8
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	13.2	45.4	70.6	25.8	58.0	58.0	17.4	44.0	70.2	25.8	52.3	72.7
Actuated g/C Ratio	0.08	0.27	0.42	0.15	0.34	0.34	0.10	0.26	0.41	0.15	0.31	0.43
v/c Ratio	0.60	0.84	0.21	0.94	0.51	0.59	0.70	0.59	0.56	1.04	0.68	0.37
Control Delay	84.6	64.8	15.5	97.6	45.4	13.7	84.1	56.5	29.7	115.6	54.2	25.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.6	64.8	15.5	97.6	45.4	13.7	84.1	56.5	29.7	115.6	54.2	25.8
LOS	F	E	B	F	D	B	F	E	C	F	D	C
Approach Delay		62.0			51.7			54.3			66.1	
Approach LOS		E			D			D			E	

Intersection Summary	
Cycle Length: 169.5	
Actuated Cycle Length: 169.5	
Offset: 77 (45%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 58.8	Intersection LOS: E
Intersection Capacity Utilization 79.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 105: Biscayne Blvd & SR 826/NE 163rd Street



Queues
105: Biscayne Blvd & SR 826/NE 163rd Street



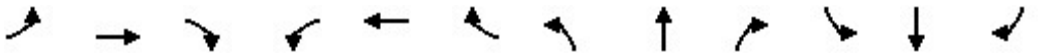
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	159	1145	148	492	882	451	247	975	386	541	1336	269
v/c Ratio	0.60	0.84	0.21	0.94	0.51	0.59	0.70	0.59	0.56	1.04	0.68	0.37
Control Delay	84.6	64.8	15.5	97.6	45.4	13.7	84.1	56.5	29.7	115.6	54.2	25.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.6	64.8	15.5	97.6	45.4	13.7	84.1	56.5	29.7	115.6	54.2	25.8
Queue Length 50th (ft)	89	439	52	282	282	89	139	277	243	~349	384	147
Queue Length 95th (ft)	121	453	87	#353	309	172	173	296	316	#457	420	215
Internal Link Dist (ft)		400			949			1251			874	
Turn Bay Length (ft)	250		240	360		480	420		420	430		405
Base Capacity (vph)	526	1470	741	526	1741	760	445	1663	695	522	1978	835
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.78	0.20	0.94	0.51	0.59	0.56	0.59	0.56	1.04	0.68	0.32

Intersection Summary

~ 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.

HCM 6th Signalized Intersection Summary
105: Biscayne Blvd & SR 826/NE 163rd Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	973	126	418	750	383	210	829	328	460	1136	229
Future Volume (veh/h)	135	973	126	418	750	383	210	829	328	460	1136	229
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	159	1145	148	492	882	0	247	975	386	541	1336	269
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	204	1275	531	527	1753		294	1934	712	447	2219	640
Arrive On Green	0.12	0.50	0.50	0.15	0.34	0.00	0.09	0.30	0.30	0.13	0.34	0.34
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	6434	1565	3456	6434	1585
Grp Volume(v), veh/h	159	1145	148	492	882	0	247	975	386	541	1336	269
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1609	1565	1728	1609	1585
Q Serve(g_s), s	7.6	34.6	8.7	23.9	23.3	0.0	12.0	21.2	30.4	22.0	29.2	20.7
Cycle Q Clear(g_c), s	7.6	34.6	8.7	23.9	23.3	0.0	12.0	21.2	30.4	22.0	29.2	20.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	204	1275	531	527	1753		294	1934	712	447	2219	640
V/C Ratio(X)	0.78	0.90	0.28	0.93	0.50		0.84	0.50	0.54	1.21	0.60	0.42
Avail Cap(c_a), veh/h	529	1472	592	529	1753		447	1934	712	447	2219	640
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.9	40.6	27.0	71.2	44.3	0.0	76.6	49.0	33.7	74.0	46.0	36.4
Incr Delay (d2), s/veh	6.4	6.8	0.2	23.8	0.2	0.0	8.5	0.9	2.9	113.7	1.2	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	13.2	3.0	12.4	10.0	0.0	5.7	8.8	12.3	16.9	12.0	8.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	80.3	47.4	27.2	94.9	44.5	0.0	85.1	49.9	36.7	187.7	47.3	38.4
LnGrp LOS	F	D	C	F	D		F	D	D	F	D	D
Approach Vol, veh/h		1452			1374			1608			2146	
Approach Delay, s/veh		48.9			62.5			52.2			81.5	
Approach LOS		D			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.3	65.8	16.8	66.1	28.8	58.3	32.7	50.2
Change Period (Y+Rc), s	6.8	* 7.2	6.8	* 7.7	6.8	* 7.2	6.8	* 7.7
Max Green Setting (Gmax), s	22.0	* 44	26.0	* 49	22.0	* 44	26.0	* 49
Max Q Clear Time (g_c+I1), s	14.0	31.2	9.6	25.3	24.0	32.4	25.9	36.6
Green Ext Time (p_c), s	0.5	3.8	0.4	5.5	0.0	2.7	0.0	5.9

Intersection Summary	
HCM 6th Ctrl Delay	63.2
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

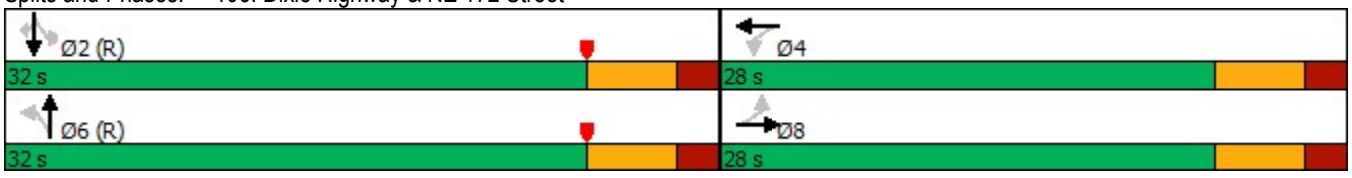
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Timings
106: Dixie Highway & NE 172 Street

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	34	544	8	279	14	226	85	289	80
Future Volume (vph)	34	544	8	279	14	226	85	289	80
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		8		4		6		2	
Permitted Phases	8		4		6		2		2
Detector Phase	8	8	4	4	6	6	2	2	2
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0	32.0
Total Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0	32.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	53.3%	53.3%	53.3%	53.3%	53.3%
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									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		17.8		17.8	30.2	30.2	30.2	30.2	30.2
Actuated g/C Ratio		0.30		0.30	0.50	0.50	0.50	0.50	0.50
v/c Ratio		0.71		0.41	0.03	0.45	0.21	0.33	0.10
Control Delay		22.3		14.0	9.5	10.6	11.4	11.2	3.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		22.3		14.0	9.5	10.6	11.4	11.2	3.2
LOS		C		B	A	B	B	B	A
Approach Delay		22.3		14.0		10.5		9.8	
Approach LOS		C		B		B		A	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 15.0	Intersection LOS: B
Intersection Capacity Utilization 75.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 106: Dixie Highway & NE 172 Street



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	673	406	15	414	91	311	86
v/c Ratio	0.71	0.41	0.03	0.45	0.21	0.33	0.10
Control Delay	22.3	14.0	9.5	10.6	11.4	11.2	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.3	14.0	9.5	10.6	11.4	11.2	3.2
Queue Length 50th (ft)	109	47	3	70	17	62	0
Queue Length 95th (ft)	144	72	12	154	48	126	20
Internal Link Dist (ft)	194	230		175		177	
Turn Bay Length (ft)			135		100		100
Base Capacity (vph)	1172	1212	532	917	441	938	829
Starvation Cap Reductn	0	0	0	0	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	0.57	0.33	0.03	0.45	0.21	0.33	0.10

Intersection Summary

HCM 6th Signalized Intersection Summary
106: Dixie Highway & NE 172 Street

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	544	47	8	279	90	14	226	159	85	289	80
Future Volume (veh/h)	34	544	47	8	279	90	14	226	159	85	289	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	585	0	9	300	97	15	243	171	91	311	86
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	798		68	626	197	579	566	398	523	1035	866
Arrive On Green	0.25	0.25	0.00	0.25	0.25	0.25	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	111	3324	0	24	2541	801	987	1022	719	972	1870	1564
Grp Volume(v), veh/h	328	294	0	218	0	188	15	0	414	91	311	86
Grp Sat Flow(s),veh/h/ln	1733	1617	0	1810	0	1556	987	0	1741	972	1870	1564
Q Serve(g_s), s	4.2	10.0	0.0	0.0	0.0	6.2	0.5	0.0	8.4	3.6	5.3	1.6
Cycle Q Clear(g_c), s	10.5	10.0	0.0	10.1	0.0	6.2	5.8	0.0	8.4	12.0	5.3	1.6
Prop In Lane	0.11		0.00	0.04		0.51	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	494	399		509	0	384	579	0	964	523	1035	866
V/C Ratio(X)	0.66	0.74		0.43	0.00	0.49	0.03	0.00	0.43	0.17	0.30	0.10
Avail Cap(c_a), veh/h	698	593		722	0	571	579	0	964	523	1035	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.87	0.00	0.87	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	20.8	0.0	19.3	0.0	19.4	8.7	0.0	7.8	11.4	7.2	6.3
Incr Delay (d2), s/veh	1.1	2.0	0.0	0.4	0.0	0.6	0.1	0.0	1.4	0.7	0.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	3.7	0.0	2.4	0.0	2.1	0.1	0.0	2.8	0.8	1.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	22.8	0.0	19.6	0.0	20.0	8.8	0.0	9.2	12.1	7.9	6.6
LnGrp LOS	C	C		B	A	C	A	A	A	B	A	A
Approach Vol, veh/h		622			406			429			488	
Approach Delay, s/veh		22.4			19.8			9.2			8.5	
Approach LOS		C			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.2		20.8		39.2		20.8				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		26.0		22.0		26.0		22.0				
Max Q Clear Time (g_c+I1), s		14.0		12.1		10.4		12.5				
Green Ext Time (p_c), s		0.7		1.4		0.9		2.3				

Intersection Summary		
HCM 6th Ctrl Delay	15.4	
HCM 6th LOS	B	

Notes

User approved pedestrian interval to be less than phase max green.

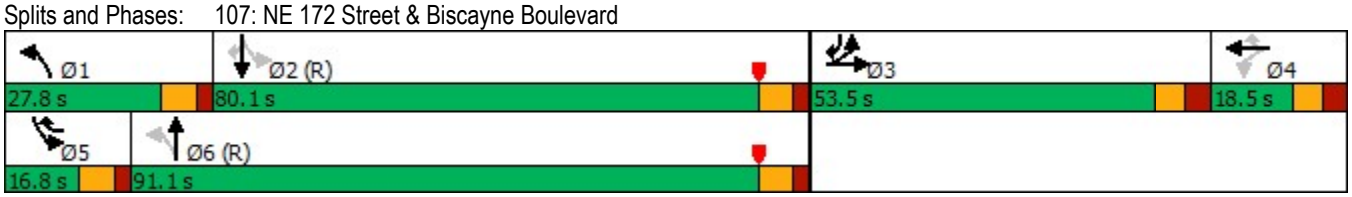
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
107: NE 172 Street & Biscayne Boulevard

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	409	16	32	21	36	143	1605	59	2175	196
Future Volume (vph)	409	16	32	21	36	143	1605	59	2175	196
Turn Type	Split	NA	Perm	NA	pm+ov	pm+pt	NA	pm+pt	NA	pm+ov
Protected Phases	3	3		4	5	1	6	5	2	3
Permitted Phases			4		4	6		2		2
Detector Phase	3	3	4	4	5	1	6	5	2	3
Switch Phase										
Minimum Initial (s)	5.0	5.0	7.0	7.0	5.0	5.0	7.0	5.0	7.0	5.0
Minimum Split (s)	25.5	25.5	18.5	18.5	11.8	11.8	30.1	11.8	30.1	25.5
Total Split (s)	53.5	53.5	18.5	18.5	16.8	27.8	91.1	16.8	80.1	53.5
Total Split (%)	29.7%	29.7%	10.3%	10.3%	9.3%	15.5%	50.6%	9.3%	44.5%	29.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.8	4.8	4.8	4.8	4.8	4.0
All-Red Time (s)	3.5	3.5	3.5	3.5	2.0	2.0	2.3	2.0	2.3	3.5
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)	7.5	7.5		7.5	6.8	6.8	7.1	6.8	7.1	7.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	None
Act Effct Green (s)	39.1	39.1		11.8	19.7	106.3	92.9	92.8	85.3	124.0
Actuated g/C Ratio	0.22	0.22		0.07	0.11	0.59	0.52	0.52	0.47	0.69
v/c Ratio	0.57	0.80		0.75	0.14	0.80	0.51	0.40	0.75	0.18
Control Delay	65.3	41.6		132.0	1.1	75.9	30.3	26.1	42.2	2.8
Queue Delay	7.2	14.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.5	55.6		132.0	1.1	75.9	30.3	26.1	42.2	2.8
LOS	E	E		F	A	E	C	C	D	A
Approach Delay		64.3		78.5			34.0		38.6	
Approach LOS		E		E			C		D	

Intersection Summary	
Cycle Length: 179.9	
Actuated Cycle Length: 179.9	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 41.8	Intersection LOS: D
Intersection Capacity Utilization 86.8%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 107: NE 172 Street & Biscayne Boulevard



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	426	408	55	38	149	1694	61	2266	204
v/c Ratio	0.57	0.80	0.75	0.14	0.80	0.51	0.40	0.75	0.18
Control Delay	65.3	41.6	132.0	1.1	75.9	30.3	26.1	42.2	2.8
Queue Delay	7.2	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.5	55.6	132.0	1.1	75.9	30.3	26.1	42.2	2.8
Queue Length 50th (ft)	230	222	64	0	127	404	32	672	18
Queue Length 95th (ft)	280	355	#159	0	209	450	57	757	47
Internal Link Dist (ft)		230	539			817		820	
Turn Bay Length (ft)					415		200		180
Base Capacity (vph)	877	563	76	294	245	3302	180	3038	1181
Starvation Cap Reductn	398	139	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	0.89	0.96	0.72	0.13	0.61	0.51	0.34	0.75	0.17

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
107: NE 172 Street & Biscayne Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	409	16	375	32	21	36	143	1605	21	59	2175	196
Future Volume (vph)	409	16	375	32	21	36	143	1605	21	59	2175	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5			7.5	6.8	6.8	7.1		6.8	7.1	7.5
Lane Util. Factor	0.97	1.00			1.00	1.00	1.00	0.86		1.00	0.86	1.00
Frpb, ped/bikes	1.00	0.98			1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			0.99	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.86			1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00			0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1566			1794	1567	1770	6394		1770	6408	1567
Flt Permitted	0.95	1.00			0.60	1.00	0.04	1.00		0.09	1.00	1.00
Satd. Flow (perm)	3433	1566			1114	1567	81	6394		174	6408	1567
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	426	17	391	33	22	38	149	1672	22	61	2266	204
RTOR Reduction (vph)	0	171	0	0	0	34	0	1	0	0	0	46
Lane Group Flow (vph)	426	237	0	0	55	4	149	1693	0	61	2266	158
Confl. Peds. (#/hr)	1		5	5		1	1					1
Confl. Bikes (#/hr)						1			1			3
Turn Type	Split	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3			4	5	1	6		5	2	3
Permitted Phases				4		4	6			2		2
Actuated Green, G (s)	39.1	39.1			11.8	19.0	106.9	92.9		92.5	85.3	124.4
Effective Green, g (s)	39.1	39.1			11.8	19.0	106.9	92.9		92.5	85.3	124.4
Actuated g/C Ratio	0.22	0.22			0.07	0.11	0.59	0.52		0.51	0.47	0.69
Clearance Time (s)	7.5	7.5			7.5	6.8	6.8	7.1		6.8	7.1	7.5
Vehicle Extension (s)	5.0	5.0			2.5	2.0	2.0	1.0		2.0	1.0	5.0
Lane Grp Cap (vph)	746	340			73	165	187	3301		153	3038	1083
v/s Ratio Prot	0.12	c0.15				0.00	c0.07	0.26		0.02	0.35	0.03
v/s Ratio Perm					c0.05	0.00	c0.41			0.19		0.07
v/c Ratio	0.57	0.70			0.75	0.02	0.80	0.51		0.40	0.75	0.15
Uniform Delay, d1	62.9	64.9			82.6	72.1	53.6	28.6		23.2	38.5	9.5
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.7	7.7			33.6	0.0	19.3	0.6		0.6	1.7	0.1
Delay (s)	64.6	72.6			116.2	72.2	72.9	29.2		23.9	40.2	9.7
Level of Service	E	E			F	E	E	C		C	D	A
Approach Delay (s)		68.5			98.2			32.7			37.3	
Approach LOS		E			F			C			D	

Intersection Summary			
HCM 2000 Control Delay	41.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	179.9	Sum of lost time (s)	28.9
Intersection Capacity Utilization	86.8%	ICU Level of Service	E
Analysis Period (min)	15		

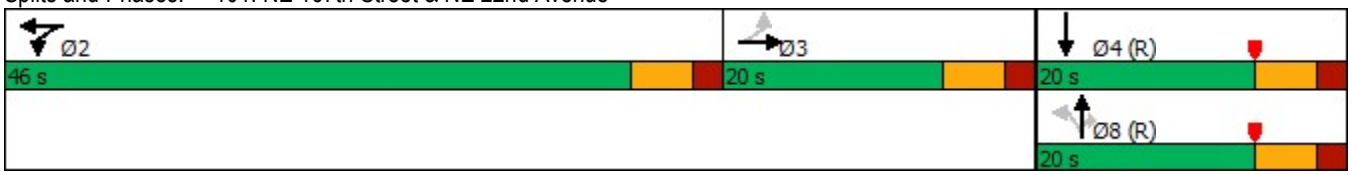
c Critical Lane Group

HCM 6th Edition methodology expects strict NEMA phasing.

Lane Group	EBT	WBT	NBL	NBT	NBR	SBT
Lane Configurations						
Traffic Volume (vph)	20	9	25	46	384	111
Future Volume (vph)	20	9	25	46	384	111
Turn Type	NA	NA	Perm	NA	Perm	NA
Protected Phases	3	2		8		4
Permitted Phases			8		8	
Detector Phase	3	2	8	8	8	4
Switch Phase						
Minimum Initial (s)	7.0	16.0	7.0	7.0	7.0	7.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	20.0	46.0	20.0	20.0	20.0	20.0
Total Split (%)	23.3%	53.5%	23.3%	23.3%	23.3%	23.3%
Yellow Time (s)	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
Lost Time Adjust (s)	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
Lead/Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes				
Recall Mode	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)	8.2	20.3	42.1	42.1	42.1	42.1
Actuated g/C Ratio	0.10	0.24	0.49	0.49	0.49	0.49
v/c Ratio	0.47	0.76	0.05	0.06	0.45	0.15
Control Delay	18.7	42.0	16.4	16.0	3.7	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.7	42.0	16.4	16.0	3.7	15.7
LOS	B	D	B	B	A	B
Approach Delay	18.7	42.0		5.7		15.7
Approach LOS	B	D		A		B

Intersection Summary	
Cycle Length: 86	
Actuated Cycle Length: 86	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 19.0	Intersection LOS: B
Intersection Capacity Utilization 40.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 101: NE 167th Street & NE 22nd Avenue



Queues
101: NE 167th Street & NE 22nd Avenue

Lane Group	EBT	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	114	318	28	52	436	133
v/c Ratio	0.47	0.76	0.05	0.06	0.45	0.15
Control Delay	18.7	42.0	16.4	16.0	3.7	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.7	42.0	16.4	16.0	3.7	15.7
Queue Length 50th (ft)	12	163	8	14	0	37
Queue Length 95th (ft)	56	218	28	43	56	89
Internal Link Dist (ft)	300	275		820		386
Turn Bay Length (ft)			60		500	
Base Capacity (vph)	346	826	599	911	979	903
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.38	0.05	0.06	0.45	0.15

Intersection Summary

HCM Signalized Intersection Capacity Analysis
101: NE 167th Street & NE 22nd Avenue

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	20	80	271	9	0	25	46	384	0	111	6
Future Volume (vph)	0	20	80	271	9	0	25	46	384	0	111	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0	6.0		6.0	
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00		1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00	0.98		1.00	
Flpb, ped/bikes		1.00			1.00		0.99	1.00	1.00		1.00	
Frt		0.89			1.00		1.00	1.00	0.85		0.99	
Flt Protected		1.00			0.95		0.95	1.00	1.00		1.00	
Satd. Flow (prot)		1662			1777		1757	1863	1550		1847	
Flt Permitted		1.00			0.95		0.67	1.00	1.00		1.00	
Satd. Flow (perm)		1662			1777		1243	1863	1550		1847	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	23	91	308	10	0	28	52	436	0	126	7
RTOR Reduction (vph)	0	84	0	0	0	0	0	0	229	0	2	0
Lane Group Flow (vph)	0	30	0	0	318	0	28	52	207	0	131	0
Confl. Peds. (#/hr)	2					2	8					8
Confl. Bikes (#/hr)									1			3
Turn Type		NA		Split	NA		Perm	NA	Perm		NA	
Protected Phases		3		2	2			8			4	
Permitted Phases	3						8		8			
Actuated Green, G (s)		6.8			20.3		40.9	40.9	40.9		40.9	
Effective Green, g (s)		6.8			20.3		40.9	40.9	40.9		40.9	
Actuated g/C Ratio		0.08			0.24		0.48	0.48	0.48		0.48	
Clearance Time (s)		6.0			6.0		6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0			1.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		131			419		591	886	737		878	
v/s Ratio Prot		c0.02			c0.18			0.03			0.07	
v/s Ratio Perm							0.02		c0.13			
v/c Ratio		0.23			0.76		0.05	0.06	0.28		0.15	
Uniform Delay, d1		37.1			30.6		12.1	12.2	13.7		12.7	
Progression Factor		1.00			1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2		0.9			6.9		0.2	0.1	1.0		0.4	
Delay (s)		38.0			37.4		12.2	12.3	14.6		13.1	
Level of Service		D			D		B	B	B		B	
Approach Delay (s)		38.0			37.4			14.2			13.1	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	40.2%	ICU Level of Service	A
Analysis Period (min)	15		

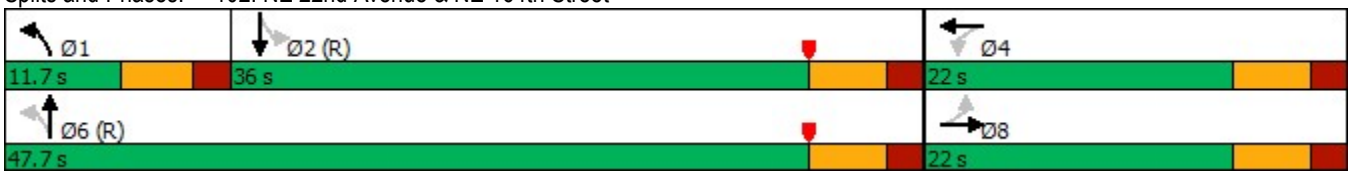
c Critical Lane Group

HCM 6th Edition methodology does not support current ring-barrier structure.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	89	11	44	4	30	355	15	404
Future Volume (vph)	89	11	44	4	30	355	15	404
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		8		4	1	6		2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	1	6	2	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.0	29.0	29.0	29.0	10.7	30.0	30.0	30.0
Total Split (s)	22.0	22.0	22.0	22.0	11.7	47.7	36.0	36.0
Total Split (%)	31.6%	31.6%	31.6%	31.6%	16.8%	68.4%	51.6%	51.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	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
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	5.7	6.0	6.0	6.0
Lead/Lag					Lead		Lag	Lag
Lead-Lag Optimize?					Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	10.5	10.5		10.5	47.5	47.2	42.7	42.7
Actuated g/C Ratio	0.15	0.15		0.15	0.68	0.68	0.61	0.61
v/c Ratio	0.45	0.27		0.40	0.06	0.18	0.03	0.25
Control Delay	32.4	7.2		23.3	4.7	4.6	9.4	7.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	32.4	7.2		23.3	4.7	4.6	9.4	7.9
LOS	C	A		C	A	A	A	A
Approach Delay		17.4		23.3		4.6		7.9
Approach LOS		B		C		A		A

Intersection Summary	
Cycle Length: 69.7	
Actuated Cycle Length: 69.7	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay: 9.6	Intersection LOS: A
Intersection Capacity Utilization 52.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 102: NE 22nd Avenue & NE 164th Street

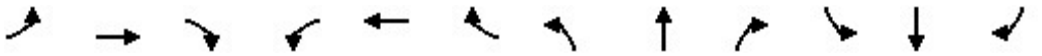


Queues
102: NE 22nd Avenue & NE 164th Street

Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	103	153	87	35	434	17	532
v/c Ratio	0.45	0.27	0.40	0.06	0.18	0.03	0.25
Control Delay	32.4	7.2	23.3	4.7	4.6	9.4	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.4	7.2	23.3	4.7	4.6	9.4	7.9
Queue Length 50th (ft)	41	2	22	4	28	2	35
Queue Length 95th (ft)	74	21	52	14	52	14	98
Internal Link Dist (ft)		146	182		320		820
Turn Bay Length (ft)	80			100		100	
Base Capacity (vph)	350	800	320	591	2383	570	2136
Starvation Cap Reductn	0	0	0	0	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	0.29	0.19	0.27	0.06	0.18	0.03	0.25

Intersection Summary

HCM 6th Signalized Intersection Summary
102: NE 22nd Avenue & NE 164th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	11	120	44	4	27	30	355	18	15	404	53
Future Volume (veh/h)	89	11	120	44	4	27	30	355	18	15	404	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	103	13	140	51	5	31	35	413	21	17	470	62
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	269	236	136	28	46	587	2328	118	637	1769	232
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.04	0.68	0.68	0.56	0.56	0.56
Sat Flow, veh/h	1370	1777	1561	359	184	301	1781	3439	174	954	3157	414
Grp Volume(v), veh/h	103	13	140	87	0	0	35	213	221	17	264	268
Grp Sat Flow(s),veh/h/ln	1370	1777	1561	843	0	0	1781	1777	1836	954	1777	1794
Q Serve(g_s), s	0.0	0.4	5.9	2.5	0.0	0.0	0.5	3.1	3.1	0.6	5.4	5.4
Cycle Q Clear(g_c), s	5.3	0.4	5.9	8.4	0.0	0.0	0.5	3.1	3.1	0.6	5.4	5.4
Prop In Lane	1.00		1.00	0.59		0.36	1.00		0.09	1.00		0.23
Lane Grp Cap(c), veh/h	297	269	236	209	0	0	587	1203	1243	637	996	1006
V/C Ratio(X)	0.35	0.05	0.59	0.42	0.00	0.00	0.06	0.18	0.18	0.03	0.26	0.27
Avail Cap(c_a), veh/h	402	406	357	315	0	0	676	1203	1243	637	996	1006
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	0.56	0.56	0.56	0.99	0.99	0.99
Uniform Delay (d), s/veh	27.5	25.4	27.7	29.0	0.0	0.0	5.4	4.1	4.1	6.9	7.9	8.0
Incr Delay (d2), s/veh	0.5	0.1	1.8	1.0	0.0	0.0	0.0	0.2	0.2	0.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.2	2.2	1.4	0.0	0.0	0.2	0.9	0.9	0.1	1.9	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.0	25.4	29.4	30.0	0.0	0.0	5.5	4.3	4.3	7.0	8.6	8.6
LnGrp LOS	C	C	C	C	A	A	A	A	A	A	A	A
Approach Vol, veh/h		256			87			469			549	
Approach Delay, s/veh		28.6			30.0			4.4			8.5	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	8.2	45.2		16.6		53.4		16.6				
Change Period (Y+Rc), s	* 5.7	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	* 6	30.0		16.0		41.7		16.0				
Max Q Clear Time (g_c+I1), s	2.5	7.4		10.4		5.1		7.9				
Green Ext Time (p_c), s	0.0	1.2		0.1		0.9		0.6				

Intersection Summary		
HCM 6th Ctrl Delay	12.3	
HCM 6th LOS	B	

Notes

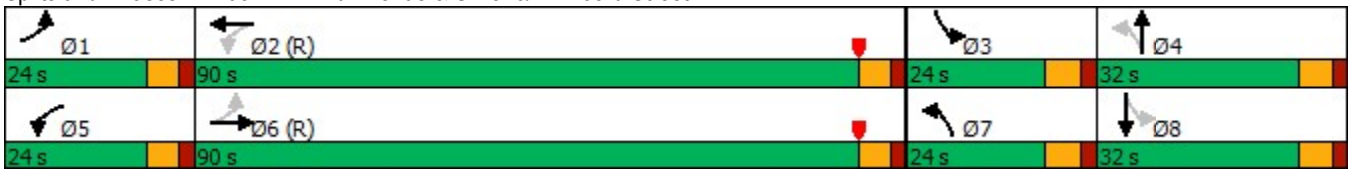
User approved pedestrian interval to be less than phase max green.

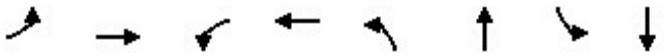
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	43	1079	205	1060	93	261	160	340
Future Volume (vph)	43	1079	205	1060	93	261	160	340
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases	6		2		4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	7.0	5.0	7.0
Minimum Split (s)	11.0	32.0	11.0	32.0	11.4	30.4	11.4	32.0
Total Split (s)	24.0	90.0	24.0	90.0	24.0	32.0	24.0	32.0
Total Split (%)	14.1%	52.9%	14.1%	52.9%	14.1%	18.8%	14.1%	18.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	97.9	91.6	112.1	102.0	35.1	22.6	43.1	26.7
Actuated g/C Ratio	0.58	0.54	0.66	0.60	0.21	0.13	0.25	0.16
v/c Ratio	0.20	0.47	0.77	0.43	0.56	0.83	0.81	0.82
Control Delay	13.9	25.7	31.6	19.7	59.3	83.7	76.4	80.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Total Delay	13.9	25.7	31.6	19.7	59.3	83.7	76.4	83.5
LOS	B	C	C	B	E	F	E	F
Approach Delay		25.3		21.6		78.5		81.4
Approach LOS		C		C		E		F

Intersection Summary	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 27 (16%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 39.4	Intersection LOS: D
Intersection Capacity Utilization 74.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 103: NE 22nd Avenue & SR 826/NE 163rd Street



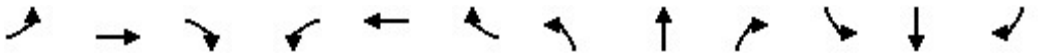


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	49	1279	236	1301	107	391	184	448
v/c Ratio	0.20	0.47	0.77	0.43	0.56	0.83	0.81	0.82
Control Delay	13.9	25.7	31.6	19.7	59.3	83.7	76.4	80.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.2
Total Delay	13.9	25.7	31.6	19.7	59.3	83.7	76.4	83.5
Queue Length 50th (ft)	19	324	102	292	92	214	166	250
Queue Length 95th (ft)	36	372	168	331	141	264	#236	309
Internal Link Dist (ft)		510		391		445		320
Turn Bay Length (ft)	290		265		150		150	
Base Capacity (vph)	365	2726	339	3022	245	528	238	562
Starvation Cap Reductn	0	0	0	0	0	0	0	52
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	0.13	0.47	0.70	0.43	0.44	0.74	0.77	0.88

Intersection Summary

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

HCM 6th Signalized Intersection Summary
103: NE 22nd Avenue & SR 826/NE 163rd Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	1079	34	205	1060	72	93	261	79	160	340	50
Future Volume (veh/h)	43	1079	34	205	1060	72	93	261	79	160	340	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	49	1240	39	236	1218	83	107	300	91	184	391	57
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	322	2793	88	349	2912	198	198	352	105	238	520	75
Arrive On Green	0.03	0.55	0.55	0.15	1.00	1.00	0.06	0.13	0.13	0.10	0.17	0.17
Sat Flow, veh/h	1781	5083	160	1781	4877	332	1781	2683	797	1781	3105	449
Grp Volume(v), veh/h	49	830	449	236	850	451	107	196	195	184	222	226
Grp Sat Flow(s),veh/h/ln	1781	1702	1839	1781	1702	1805	1781	1777	1703	1781	1777	1777
Q Serve(g_s), s	2.0	24.7	24.7	10.3	0.0	0.0	8.8	18.4	19.0	14.9	20.2	20.6
Cycle Q Clear(g_c), s	2.0	24.7	24.7	10.3	0.0	0.0	8.8	18.4	19.0	14.9	20.2	20.6
Prop In Lane	1.00		0.09	1.00		0.18	1.00		0.47	1.00		0.25
Lane Grp Cap(c), veh/h	322	1870	1010	349	2032	1078	198	233	223	238	297	297
V/C Ratio(X)	0.15	0.44	0.44	0.68	0.42	0.42	0.54	0.84	0.87	0.77	0.75	0.76
Avail Cap(c_a), veh/h	464	1870	1010	406	2032	1078	270	268	256	246	297	297
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	15.7	22.8	22.8	16.0	0.0	0.0	59.4	72.1	72.4	56.2	67.4	67.5
Incr Delay (d2), s/veh	0.1	0.8	1.4	3.6	0.6	1.2	0.8	18.2	23.1	12.1	9.4	10.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	10.3	11.3	3.9	0.2	0.4	4.0	9.6	9.8	7.6	10.0	10.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	23.6	24.2	19.6	0.6	1.2	60.2	90.3	95.5	68.2	76.7	77.7
LnGrp LOS	B	C	C	B	A	A	E	F	F	E	E	E
Approach Vol, veh/h		1328			1537			498			632	
Approach Delay, s/veh		23.5			3.7			85.9			74.6	
Approach LOS		C			A			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	107.5	23.3	28.7	18.6	99.4	17.1	34.8
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green Setting (Gmax), s	18.0	84.0	17.6	25.6	18.0	84.0	17.6	25.6
Max Q Clear Time (g_c+I1), s	4.0	2.0	16.9	21.0	12.3	26.7	10.8	22.6
Green Ext Time (p_c), s	0.0	3.8	0.0	0.8	0.3	3.7	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	31.8
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑			↱
Traffic Vol, veh/h	0	1295	1316	42	0	23
Future Vol, veh/h	0	1295	1316	42	0	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1579	1605	51	0	28

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	828
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	0	-	-	-	0	662
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	662
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.7
HCM LOS			B

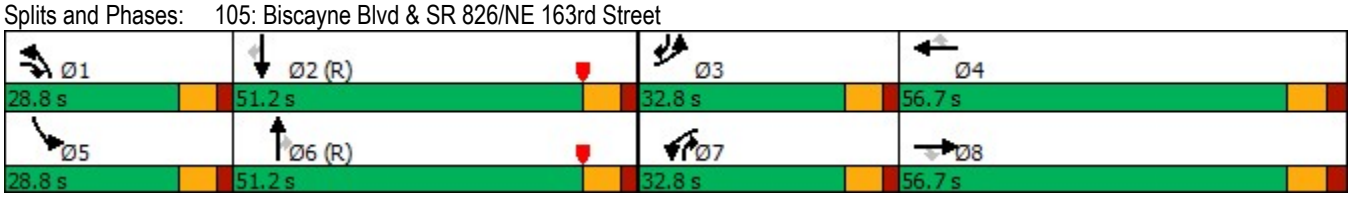
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	662
HCM Lane V/C Ratio	-	-	-	0.042
HCM Control Delay (s)	-	-	-	10.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Timings
105: Biscayne Blvd & SR 826/NE 163rd Street

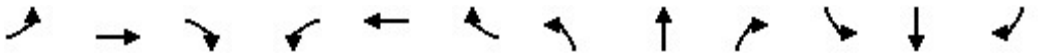
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	143	977	146	418	752	383	222	829	328	460	1136	239
Future Volume (vph)	143	977	146	418	752	383	222	829	328	460	1136	239
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6	7	5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	7	5	2	3
Switch Phase												
Minimum Initial (s)	5.0	7.0	5.0	5.0	7.0	7.0	5.0	7.0	5.0	5.0	7.0	5.0
Minimum Split (s)	11.8	56.7	11.8	11.8	56.7	56.7	11.8	49.2	11.8	11.8	49.2	11.8
Total Split (s)	32.8	56.7	28.8	32.8	56.7	56.7	28.8	51.2	32.8	28.8	51.2	32.8
Total Split (%)	19.4%	33.5%	17.0%	19.4%	33.5%	33.5%	17.0%	30.2%	19.4%	17.0%	30.2%	19.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.9	2.0	2.0	2.9	2.9	2.0	2.4	2.0	2.0	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	7.7	6.8	6.8	7.7	7.7	6.8	7.2	6.8	6.8	7.2	6.8
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	13.6	45.5	71.2	25.8	57.7	57.7	18.0	44.0	70.2	25.7	51.7	72.6
Actuated g/C Ratio	0.08	0.27	0.42	0.15	0.34	0.34	0.11	0.26	0.41	0.15	0.31	0.43
v/c Ratio	0.61	0.84	0.24	0.94	0.51	0.60	0.72	0.59	0.56	1.04	0.68	0.39
Control Delay	84.6	64.9	17.9	97.6	45.8	14.4	84.5	56.5	29.7	116.5	54.8	26.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.6	64.9	17.9	97.6	45.8	14.4	84.5	56.5	29.7	116.5	54.8	26.5
LOS	F	E	B	F	D	B	F	E	C	F	D	C
Approach Delay		61.7			52.0			54.6			66.6	
Approach LOS		E			D			D			E	

Intersection Summary	
Cycle Length: 169.5	
Actuated Cycle Length: 169.5	
Offset: 77 (45%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 59.1	Intersection LOS: E
Intersection Capacity Utilization 79.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 105: Biscayne Blvd & SR 826/NE 163rd Street



Queues
105: Biscayne Blvd & SR 826/NE 163rd Street



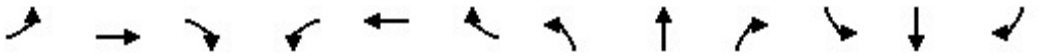
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	168	1149	172	492	885	451	261	975	386	541	1336	281
v/c Ratio	0.61	0.84	0.24	0.94	0.51	0.60	0.72	0.59	0.56	1.04	0.68	0.39
Control Delay	84.6	64.9	17.9	97.6	45.8	14.4	84.5	56.5	29.7	116.5	54.8	26.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.6	64.9	17.9	97.6	45.8	14.4	84.5	56.5	29.7	116.5	54.8	26.5
Queue Length 50th (ft)	94	441	68	282	284	96	146	277	243	~350	386	158
Queue Length 95th (ft)	126	455	106	#353	312	180	182	296	316	#457	420	226
Internal Link Dist (ft)		400			949			1251			874	
Turn Bay Length (ft)	250		240	360		480	420		420	430		405
Base Capacity (vph)	526	1470	741	526	1730	754	445	1663	695	520	1956	830
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.78	0.23	0.94	0.51	0.60	0.59	0.59	0.56	1.04	0.68	0.34

Intersection Summary

~ 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.

HCM 6th Signalized Intersection Summary
105: Biscayne Blvd & SR 826/NE 163rd Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	977	146	418	752	383	222	829	328	460	1136	239
Future Volume (veh/h)	143	977	146	418	752	383	222	829	328	460	1136	239
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	168	1149	172	492	885	0	261	975	386	541	1336	281
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	213	1280	539	527	1744		308	1929	711	447	2187	637
Arrive On Green	0.12	0.50	0.50	0.15	0.34	0.00	0.09	0.30	0.30	0.13	0.34	0.34
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	6434	1565	3456	6434	1585
Grp Volume(v), veh/h	168	1149	172	492	885	0	261	975	386	541	1336	281
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1609	1565	1728	1609	1585
Q Serve(g_s), s	8.0	34.7	10.4	23.9	23.5	0.0	12.6	21.3	30.5	22.0	29.4	21.9
Cycle Q Clear(g_c), s	8.0	34.7	10.4	23.9	23.5	0.0	12.6	21.3	30.5	22.0	29.4	21.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	213	1280	539	527	1744		308	1929	711	447	2187	637
V/C Ratio(X)	0.79	0.90	0.32	0.93	0.51		0.85	0.51	0.54	1.21	0.61	0.44
Avail Cap(c_a), veh/h	529	1472	598	529	1744		447	1929	711	447	2187	637
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.4	40.4	26.9	71.2	44.6	0.0	76.3	49.1	33.8	74.0	46.7	37.0
Incr Delay (d2), s/veh	6.4	6.8	0.3	23.8	0.2	0.0	9.8	1.0	3.0	113.7	1.3	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	13.2	3.5	12.4	10.1	0.0	6.1	8.8	12.3	16.9	12.1	9.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.8	47.2	27.2	94.9	44.8	0.0	86.1	50.1	36.8	187.7	48.0	39.2
LnGrp LOS	E	D	C	F	D		F	D	D	F	D	D
Approach Vol, veh/h		1489			1377			1622			2158	
Approach Delay, s/veh		48.6			62.7			52.7			81.9	
Approach LOS		D			E			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	65.0	17.3	65.8	28.8	58.2	32.7	50.3
Change Period (Y+Rc), s	6.8	* 7.2	6.8	* 7.7	6.8	* 7.2	6.8	* 7.7
Max Green Setting (Gmax), s	22.0	* 44	26.0	* 49	22.0	* 44	26.0	* 49
Max Q Clear Time (g_c+I1), s	14.6	31.4	10.0	25.5	24.0	32.5	25.9	36.7
Green Ext Time (p_c), s	0.5	3.8	0.5	5.6	0.0	2.7	0.0	5.9

Intersection Summary	
HCM 6th Ctrl Delay	63.3
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

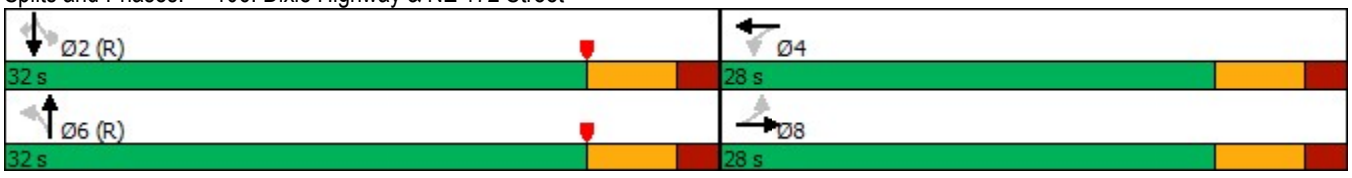
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	34	544	8	279	18	237	85	295	80
Future Volume (vph)	34	544	8	279	18	237	85	295	80
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		8		4		6		2	
Permitted Phases	8		4		6		2		2
Detector Phase	8	8	4	4	6	6	2	2	2
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0	32.0
Total Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0	32.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	53.3%	53.3%	53.3%	53.3%	53.3%
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									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		17.8		17.8	30.2	30.2	30.2	30.2	30.2
Actuated g/C Ratio		0.30		0.30	0.50	0.50	0.50	0.50	0.50
v/c Ratio		0.71		0.41	0.04	0.47	0.22	0.34	0.10
Control Delay		22.3		14.0	9.6	11.0	11.6	11.2	3.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		22.3		14.0	9.6	11.0	11.6	11.2	3.2
LOS		C		B	A	B	B	B	A
Approach Delay		22.3		14.0		10.9		9.9	
Approach LOS		C		B		B		A	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 15.1	Intersection LOS: B
Intersection Capacity Utilization 77.1%	ICU Level of Service D
Analysis Period (min) 15	

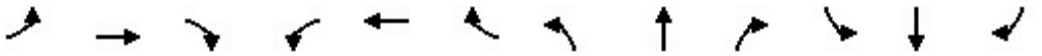
Splits and Phases: 106: Dixie Highway & NE 172 Street



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	675	406	19	435	91	317	86
v/c Ratio	0.71	0.41	0.04	0.47	0.22	0.34	0.10
Control Delay	22.3	14.0	9.6	11.0	11.6	11.2	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.3	14.0	9.6	11.0	11.6	11.2	3.2
Queue Length 50th (ft)	109	47	3	76	17	64	0
Queue Length 95th (ft)	145	72	14	165	49	130	20
Internal Link Dist (ft)	194	230		175		177	
Turn Bay Length (ft)			135		100		100
Base Capacity (vph)	1172	1212	525	916	423	937	828
Starvation Cap Reductn	0	0	0	0	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	0.58	0.33	0.04	0.47	0.22	0.34	0.10

Intersection Summary

HCM 6th Signalized Intersection Summary
106: Dixie Highway & NE 172 Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	544	49	8	279	90	18	237	167	85	295	80
Future Volume (veh/h)	34	544	49	8	279	90	18	237	167	85	295	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	585	0	9	300	97	19	255	180	91	317	86
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	94	798		68	626	197	574	565	399	506	1035	866
Arrive On Green	0.25	0.25	0.00	0.25	0.25	0.25	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	111	3324	0	24	2541	801	982	1020	720	954	1870	1564
Grp Volume(v), veh/h	328	294	0	218	0	188	19	0	435	91	317	86
Grp Sat Flow(s),veh/h/ln	1733	1617	0	1810	0	1556	982	0	1741	954	1870	1564
Q Serve(g_s), s	4.2	10.0	0.0	0.0	0.0	6.2	0.6	0.0	8.9	3.8	5.5	1.6
Cycle Q Clear(g_c), s	10.5	10.0	0.0	10.1	0.0	6.2	6.1	0.0	8.9	12.7	5.5	1.6
Prop In Lane	0.11		0.00	0.04		0.51	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	494	399		509	0	384	574	0	963	506	1035	866
V/C Ratio(X)	0.66	0.74		0.43	0.00	0.49	0.03	0.00	0.45	0.18	0.31	0.10
Avail Cap(c_a), veh/h	698	593		722	0	571	574	0	963	506	1035	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.87	0.00	0.87	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	20.8	0.0	19.3	0.0	19.4	8.8	0.0	8.0	11.8	7.2	6.3
Incr Delay (d2), s/veh	1.1	2.0	0.0	0.4	0.0	0.6	0.1	0.0	1.5	0.8	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	3.7	0.0	2.4	0.0	2.1	0.1	0.0	3.0	0.8	2.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	22.8	0.0	19.6	0.0	20.0	9.0	0.0	9.5	12.5	8.0	6.6
LnGrp LOS	C	C		B	A	C	A	A	A	B	A	A
Approach Vol, veh/h		622			406			454			494	
Approach Delay, s/veh		22.4			19.8			9.5			8.6	
Approach LOS		C			B			A			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		39.2		20.8		39.2		20.8				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		26.0		22.0		26.0		22.0				
Max Q Clear Time (g_c+I1), s		14.7		12.1		10.9		12.5				
Green Ext Time (p_c), s		0.7		1.4		1.0		2.3				

Intersection Summary		
HCM 6th Ctrl Delay	15.4	
HCM 6th LOS	B	

Notes

User approved pedestrian interval to be less than phase max green.

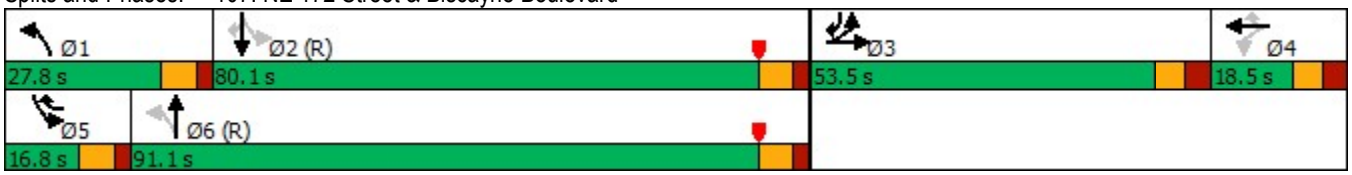
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
107: NE 172 Street & Biscayne Boulevard

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	417	16	32	21	36	143	1613	59	2185	196
Future Volume (vph)	417	16	32	21	36	143	1613	59	2185	196
Turn Type	Split	NA	Perm	NA	pm+ov	pm+pt	NA	pm+pt	NA	pm+ov
Protected Phases	3	3		4	5	1	6	5	2	3
Permitted Phases			4		4	6		2		2
Detector Phase	3	3	4	4	5	1	6	5	2	3
Switch Phase										
Minimum Initial (s)	5.0	5.0	7.0	7.0	5.0	5.0	7.0	5.0	7.0	5.0
Minimum Split (s)	25.5	25.5	18.5	18.5	11.8	11.8	30.1	11.8	30.1	25.5
Total Split (s)	53.5	53.5	18.5	18.5	16.8	27.8	91.1	16.8	80.1	53.5
Total Split (%)	29.7%	29.7%	10.3%	10.3%	9.3%	15.5%	50.6%	9.3%	44.5%	29.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.8	4.8	4.8	4.8	4.8	4.0
All-Red Time (s)	3.5	3.5	3.5	3.5	2.0	2.0	2.3	2.0	2.3	3.5
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)	7.5	7.5		7.5	6.8	6.8	7.1	6.8	7.1	7.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	None
Act Effct Green (s)	39.2	39.2		11.8	19.7	106.1	92.8	92.7	85.2	124.0
Actuated g/C Ratio	0.22	0.22		0.07	0.11	0.59	0.52	0.52	0.47	0.69
v/c Ratio	0.58	0.80		0.75	0.14	0.80	0.52	0.40	0.75	0.18
Control Delay	65.5	41.5		132.0	1.1	75.9	30.5	26.3	42.4	2.8
Queue Delay	8.2	14.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.7	55.5		132.0	1.1	75.9	30.5	26.3	42.4	2.8
LOS	E	E		F	A	E	C	C	D	A
Approach Delay		64.8		78.5			34.1		38.9	
Approach LOS		E		E			C		D	

Intersection Summary	
Cycle Length: 179.9	
Actuated Cycle Length: 179.9	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 42.0	Intersection LOS: D
Intersection Capacity Utilization 86.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 107: NE 172 Street & Biscayne Boulevard



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	434	408	55	38	149	1702	61	2276	204
v/c Ratio	0.58	0.80	0.75	0.14	0.80	0.52	0.40	0.75	0.18
Control Delay	65.5	41.5	132.0	1.1	75.9	30.5	26.3	42.4	2.8
Queue Delay	8.2	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.7	55.5	132.0	1.1	75.9	30.5	26.3	42.4	2.8
Queue Length 50th (ft)	235	222	64	0	127	407	32	676	19
Queue Length 95th (ft)	285	355	#159	0	209	453	57	762	47
Internal Link Dist (ft)		230	539			817		820	
Turn Bay Length (ft)					415		200		180
Base Capacity (vph)	877	563	76	294	245	3297	179	3034	1179
Starvation Cap Reductn	397	139	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	0.90	0.96	0.72	0.13	0.61	0.52	0.34	0.75	0.17

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
107: NE 172 Street & Biscayne Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	417	16	375	32	21	36	143	1613	21	59	2185	196
Future Volume (vph)	417	16	375	32	21	36	143	1613	21	59	2185	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5			7.5	6.8	6.8	7.1		6.8	7.1	7.5
Lane Util. Factor	0.97	1.00			1.00	1.00	1.00	0.86		1.00	0.86	1.00
Frpb, ped/bikes	1.00	0.98			1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			0.99	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.86			1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00			0.97	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1566			1794	1567	1770	6394		1770	6408	1567
Flt Permitted	0.95	1.00			0.60	1.00	0.04	1.00		0.09	1.00	1.00
Satd. Flow (perm)	3433	1566			1114	1567	81	6394		172	6408	1567
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	434	17	391	33	22	38	149	1680	22	61	2276	204
RTOR Reduction (vph)	0	171	0	0	0	34	0	1	0	0	0	46
Lane Group Flow (vph)	434	237	0	0	55	4	149	1701	0	61	2276	158
Confl. Peds. (#/hr)	1		5	5		1	1					1
Confl. Bikes (#/hr)						1			1			3
Turn Type	Split	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3			4	5	1	6		5	2	3
Permitted Phases				4		4	6			2		2
Actuated Green, G (s)	39.2	39.2			11.8	19.0	106.8	92.8		92.4	85.2	124.4
Effective Green, g (s)	39.2	39.2			11.8	19.0	106.8	92.8		92.4	85.2	124.4
Actuated g/C Ratio	0.22	0.22			0.07	0.11	0.59	0.52		0.51	0.47	0.69
Clearance Time (s)	7.5	7.5			7.5	6.8	6.8	7.1		6.8	7.1	7.5
Vehicle Extension (s)	5.0	5.0			2.5	2.0	2.0	1.0		2.0	1.0	5.0
Lane Grp Cap (vph)	748	341			73	165	187	3298		152	3034	1083
v/s Ratio Prot	0.13	c0.15				0.00	c0.07	0.27		0.02	0.36	0.03
v/s Ratio Perm					c0.05	0.00	c0.41			0.19		0.07
v/c Ratio	0.58	0.69			0.75	0.02	0.80	0.52		0.40	0.75	0.15
Uniform Delay, d1	63.0	64.8			82.6	72.1	53.6	28.7		23.3	38.7	9.5
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.8	7.6			33.6	0.0	19.3	0.6		0.6	1.8	0.1
Delay (s)	64.8	72.4			116.2	72.2	73.0	29.3		24.0	40.4	9.7
Level of Service	E	E			F	E	E	C		C	D	A
Approach Delay (s)		68.5			98.2			32.8			37.5	
Approach LOS		E			F			C			D	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	179.9	Sum of lost time (s)	28.9
Intersection Capacity Utilization	86.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Edition methodology expects strict NEMA phasing.

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	24	20	20	22	9	71
Future Vol, veh/h	24	20	20	22	9	71
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	22	22	24	10	77

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	46	0	-	0	108	34
Stage 1	-	-	-	-	34	-
Stage 2	-	-	-	-	74	-
Critical Hdwy	4.12	-	-	-	5	4
Critical Hdwy Stg 1	-	-	-	-	5	-
Critical Hdwy Stg 2	-	-	-	-	5	-
Follow-up Hdwy	2.218	-	-	-	3	3
Pot Cap-1 Maneuver	1562	-	-	-	1080	1172
Stage 1	-	-	-	-	1161	-
Stage 2	-	-	-	-	1117	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1562	-	-	-	1062	1172
Mov Cap-2 Maneuver	-	-	-	-	1062	-
Stage 1	-	-	-	-	1141	-
Stage 2	-	-	-	-	1117	-

Approach	EB	WB	SB
HCM Control Delay, s	4	0	8.4
HCM LOS			A

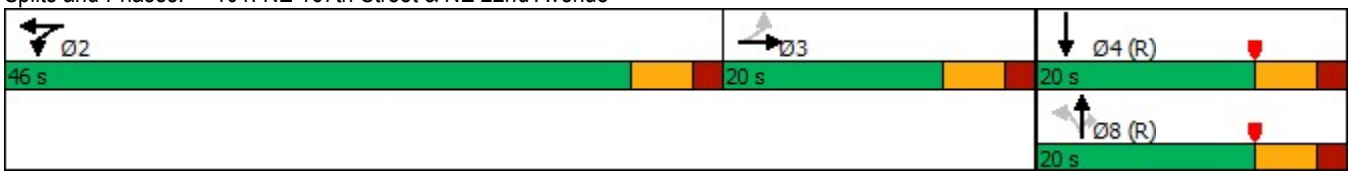
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1562	-	-	-	1159
HCM Lane V/C Ratio	0.017	-	-	-	0.075
HCM Control Delay (s)	7.3	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

Timings
101: NE 167th Street & NE 22nd Avenue

Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBT
Lane Configurations							
Traffic Volume (vph)	5	16	30	50	119	402	110
Future Volume (vph)	5	16	30	50	119	402	110
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA
Protected Phases		3	2		8		4
Permitted Phases	3			8		8	
Detector Phase	3	3	2	8	8	8	4
Switch Phase							
Minimum Initial (s)	7.0	7.0	16.0	7.0	7.0	7.0	7.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	20.0	20.0	46.0	20.0	20.0	20.0	20.0
Total Split (%)	23.3%	23.3%	53.5%	23.3%	23.3%	23.3%	23.3%
Yellow Time (s)	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
Lost Time Adjust (s)		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
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		8.1	26.1	36.4	36.4	36.4	36.4
Actuated g/C Ratio		0.09	0.30	0.42	0.42	0.42	0.42
v/c Ratio		0.44	0.82	0.11	0.16	0.47	0.16
Control Delay		20.4	40.2	21.5	20.6	4.6	20.2
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		20.4	40.2	21.5	20.6	4.6	20.2
LOS		C	D	C	C	A	C
Approach Delay		20.4	40.2		9.4		20.2
Approach LOS		C	D		A		C

Intersection Summary	
Cycle Length: 86	
Actuated Cycle Length: 86	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 22.0	Intersection LOS: C
Intersection Capacity Utilization 49.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 101: NE 167th Street & NE 22nd Avenue



Queues
101: NE 167th Street & NE 22nd Avenue

Lane Group	EBT	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	92	445	54	128	432	126
v/c Ratio	0.44	0.82	0.11	0.16	0.47	0.16
Control Delay	20.4	40.2	21.5	20.6	4.6	20.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.4	40.2	21.5	20.6	4.6	20.2
Queue Length 50th (ft)	11	221	18	43	0	42
Queue Length 95th (ft)	54	285	53	102	72	100
Internal Link Dist (ft)	300	275		820		386
Turn Bay Length (ft)			60		500	
Base Capacity (vph)	314	828	510	789	919	780
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.54	0.11	0.16	0.47	0.16

Intersection Summary

HCM Signalized Intersection Capacity Analysis
101: NE 167th Street & NE 22nd Avenue

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	16	65	384	30	0	50	119	402	0	110	7
Future Volume (vph)	5	16	65	384	30	0	50	119	402	0	110	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0	6.0		6.0	
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00		1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00	1.00		1.00	
Flpb, ped/bikes		1.00			1.00		0.98	1.00	1.00		1.00	
Frt		0.90			1.00		1.00	1.00	0.85		0.99	
Flt Protected		1.00			0.96		0.95	1.00	1.00		1.00	
Satd. Flow (prot)		1666			1780		1739	1863	1583		1842	
Flt Permitted		0.94			0.96		0.68	1.00	1.00		1.00	
Satd. Flow (perm)		1570			1780		1238	1863	1583		1842	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	5	17	70	413	32	0	54	128	432	0	118	8
RTOR Reduction (vph)	0	65	0	0	0	0	0	0	255	0	2	0
Lane Group Flow (vph)	0	27	0	0	445	0	54	128	177	0	124	0
Confl. Peds. (#/hr)	4					4	17					17
Confl. Bikes (#/hr)												2
Turn Type	Perm	NA		Split	NA		Perm	NA	Perm		NA	
Protected Phases		3		2	2			8			4	
Permitted Phases	3						8		8			
Actuated Green, G (s)		6.7			26.1		35.2	35.2	35.2		35.2	
Effective Green, g (s)		6.7			26.1		35.2	35.2	35.2		35.2	
Actuated g/C Ratio		0.08			0.30		0.41	0.41	0.41		0.41	
Clearance Time (s)		6.0			6.0		6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0			1.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		122			540		506	762	647		753	
v/s Ratio Prot					c0.25			0.07			0.07	
v/s Ratio Perm		c0.02					0.04		c0.11			
v/c Ratio		0.23			0.82		0.11	0.17	0.27		0.16	
Uniform Delay, d1		37.2			27.8		15.7	16.1	16.9		16.1	
Progression Factor		1.00			1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2		0.9			9.4		0.4	0.5	1.0		0.5	
Delay (s)		38.2			37.2		16.1	16.6	17.9		16.6	
Level of Service		D			D		B	B	B		B	
Approach Delay (s)		38.2			37.2			17.5			16.6	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

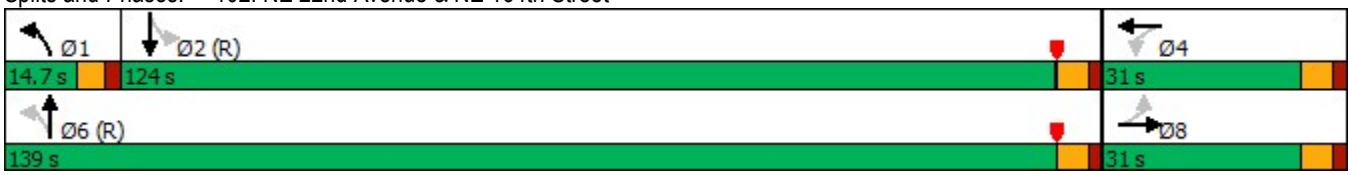
HCM 6th Edition methodology does not support current ring-barrier structure.

Timings
102: NE 22nd Avenue & NE 164th Street

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	88	4	9	2	87	491	6	452
Future Volume (vph)	88	4	9	2	87	491	6	452
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		8		4	1	6		2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	1	6	2	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.0	29.0	29.0	29.0	10.7	30.0	30.0	30.0
Total Split (s)	31.0	31.0	31.0	31.0	14.7	139.0	124.0	124.0
Total Split (%)	18.2%	18.2%	18.2%	18.2%	8.6%	81.8%	72.9%	72.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	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
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	5.7	6.0	6.0	6.0
Lead/Lag					Lead		Lag	Lag
Lead-Lag Optimize?					Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	16.2	16.2		16.2	142.1	141.8	129.9	129.9
Actuated g/C Ratio	0.10	0.10		0.10	0.84	0.83	0.76	0.76
v/c Ratio	0.72	0.13		0.15	0.14	0.18	0.01	0.23
Control Delay	102.0	0.4		44.5	2.1	1.9	6.2	5.9
Queue Delay	0.0	0.0		0.0	0.0	0.4	0.0	0.0
Total Delay	102.0	0.4		44.5	2.1	2.3	6.2	5.9
LOS	F	A		D	A	A	A	A
Approach Delay		52.3		44.5		2.3		5.9
Approach LOS		D		D		A		A

Intersection Summary	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 106 (62%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 10.9	Intersection LOS: B
Intersection Capacity Utilization 50.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 102: NE 22nd Avenue & NE 164th Street



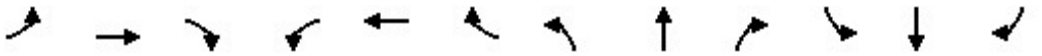
Queues
102: NE 22nd Avenue & NE 164th Street

Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	94	90	23	93	533	6	608
v/c Ratio	0.72	0.13	0.15	0.14	0.18	0.01	0.23
Control Delay	102.0	0.4	44.5	2.1	1.9	6.2	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.4	0.0	0.0
Total Delay	102.0	0.4	44.5	2.1	2.3	6.2	5.9
Queue Length 50th (ft)	104	0	12	8	25	1	83
Queue Length 95th (ft)	165	0	42	m18	m51	7	130
Internal Link Dist (ft)		146	182		320		820
Turn Bay Length (ft)	80			100		100	
Base Capacity (vph)	203	846	228	662	2944	646	2601
Starvation Cap Reductn	0	0	0	0	1853	0	0
Spillback Cap Reductn	0	4	0	0	0	0	63
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.11	0.10	0.14	0.49	0.01	0.24

Intersection Summary

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

HCM 6th Signalized Intersection Summary
102: NE 22nd Avenue & NE 164th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	4	81	9	2	10	87	491	10	6	452	119
Future Volume (veh/h)	88	4	81	9	2	10	87	491	10	6	452	119
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	4	86	10	2	11	93	522	11	6	481	127
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	172	152	59	19	44	680	2963	62	712	2131	559
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.06	1.00	1.00	0.77	0.77	0.77
Sat Flow, veh/h	1391	1777	1575	292	198	450	1781	3558	75	870	2768	725
Grp Volume(v), veh/h	94	4	86	23	0	0	93	260	273	6	308	300
Grp Sat Flow(s),veh/h/ln	1391	1777	1575	941	0	0	1781	1777	1857	870	1777	1716
Q Serve(g_s), s	4.4	0.3	8.9	0.1	0.0	0.0	1.8	0.0	0.0	0.3	8.2	8.3
Cycle Q Clear(g_c), s	13.4	0.3	8.9	9.0	0.0	0.0	1.8	0.0	0.0	0.3	8.2	8.3
Prop In Lane	1.00		1.00	0.43		0.48	1.00		0.04	1.00		0.42
Lane Grp Cap(c), veh/h	160	172	152	121	0	0	680	1480	1546	712	1368	1322
V/C Ratio(X)	0.59	0.02	0.56	0.19	0.00	0.00	0.14	0.18	0.18	0.01	0.22	0.23
Avail Cap(c_a), veh/h	230	261	232	195	0	0	722	1480	1546	712	1368	1322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	0.37	0.37	0.37	0.99	0.99	0.99
Uniform Delay (d), s/veh	75.8	69.5	73.4	70.4	0.0	0.0	3.5	0.0	0.0	4.5	5.4	5.4
Incr Delay (d2), s/veh	2.6	0.0	2.4	0.6	0.0	0.0	0.0	0.1	0.1	0.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.2	3.7	0.9	0.0	0.0	0.6	0.0	0.0	0.1	3.1	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.4	69.5	75.8	71.0	0.0	0.0	3.5	0.1	0.1	4.5	5.8	5.8
LnGrp LOS	E	E	E	E	A	A	A	A	A	A	A	A
Approach Vol, veh/h		184			23			626			614	
Approach Delay, s/veh		77.0			71.0			0.6			5.8	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.6	136.9		22.4		147.6		22.4				
Change Period (Y+Rc), s	* 5.7	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	* 9	118.0		25.0		133.0		25.0				
Max Q Clear Time (g_c+I1), s	3.8	10.3		11.0		2.0		15.4				
Green Ext Time (p_c), s	0.0	1.4		0.0		1.1		0.4				

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

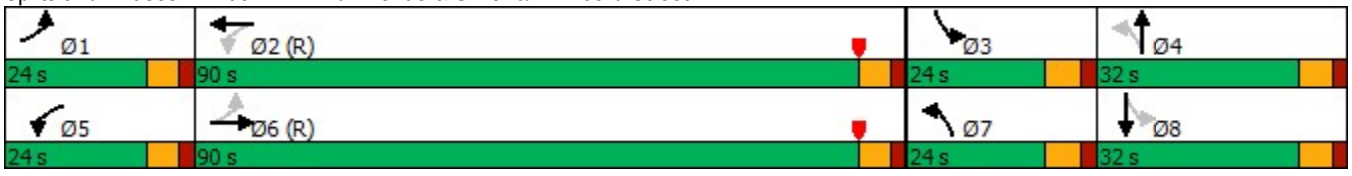
Notes

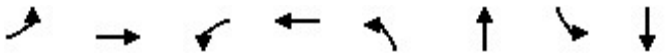
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	119	1211	210	1646	156	328	143	327
Future Volume (vph)	119	1211	210	1646	156	328	143	327
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases	6		2		4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	7.0	5.0	7.0
Minimum Split (s)	11.0	32.0	11.0	32.0	11.4	30.4	11.4	32.0
Total Split (s)	24.0	90.0	24.0	90.0	24.0	32.0	24.0	32.0
Total Split (%)	14.1%	52.9%	14.1%	52.9%	14.1%	18.8%	14.1%	18.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	99.6	90.4	110.2	95.9	40.8	25.1	39.6	24.5
Actuated g/C Ratio	0.59	0.53	0.65	0.56	0.24	0.15	0.23	0.14
v/c Ratio	0.78	0.51	0.78	0.66	0.76	0.90	0.75	0.85
Control Delay	58.9	27.1	37.0	27.6	71.5	88.0	66.6	80.0
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.6
Total Delay	58.9	27.1	37.0	27.9	71.5	88.0	66.6	80.6
LOS	E	C	D	C	E	F	E	F
Approach Delay		29.8		28.9		83.6		76.9
Approach LOS		C		C		F		E

Intersection Summary	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 27 (16%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 42.2	Intersection LOS: D
Intersection Capacity Utilization 82.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 103: NE 22nd Avenue & SR 826/NE 163rd Street



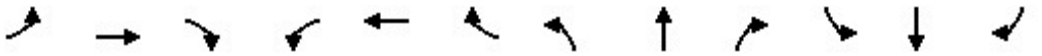


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	127	1372	223	1866	166	466	152	429
v/c Ratio	0.78	0.51	0.78	0.66	0.76	0.90	0.75	0.85
Control Delay	58.9	27.1	37.0	27.6	71.5	88.0	66.6	80.0
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.6
Total Delay	58.9	27.1	37.0	27.9	71.5	88.0	66.6	80.6
Queue Length 50th (ft)	64	365	99	534	146	255	132	238
Queue Length 95th (ft)	#150	427	191	608	219	#353	203	306
Internal Link Dist (ft)		510		391		445		320
Turn Bay Length (ft)	290		265		150		150	
Base Capacity (vph)	254	2681	316	2846	238	536	229	531
Starvation Cap Reductn	0	0	0	345	0	0	0	12
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	0.50	0.51	0.71	0.75	0.70	0.87	0.66	0.83

Intersection Summary

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

HCM 6th Signalized Intersection Summary
103: NE 22nd Avenue & SR 826/NE 163rd Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	1211	79	210	1646	108	156	328	110	143	327	76
Future Volume (veh/h)	119	1211	79	210	1646	108	156	328	110	143	327	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	127	1288	84	223	1751	115	166	349	117	152	348	81
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	2698	176	324	2835	186	221	384	127	205	402	92
Arrive On Green	0.04	0.55	0.55	0.14	1.00	1.00	0.09	0.15	0.15	0.03	0.05	0.05
Sat Flow, veh/h	1781	4893	319	1781	4895	321	1781	2612	860	1781	2858	656
Grp Volume(v), veh/h	127	896	476	223	1217	649	166	235	231	152	215	214
Grp Sat Flow(s),veh/h/ln	1781	1702	1808	1781	1702	1812	1781	1777	1695	1781	1777	1737
Q Serve(g_s), s	5.3	27.2	27.3	9.8	0.0	0.0	13.4	22.1	22.8	12.3	20.4	20.9
Cycle Q Clear(g_c), s	5.3	27.2	27.3	9.8	0.0	0.0	13.4	22.1	22.8	12.3	20.4	20.9
Prop In Lane	1.00		0.18	1.00		0.18	1.00		0.51	1.00		0.38
Lane Grp Cap(c), veh/h	255	1877	997	324	1972	1050	221	262	250	205	250	244
V/C Ratio(X)	0.50	0.48	0.48	0.69	0.62	0.62	0.75	0.90	0.92	0.74	0.86	0.88
Avail Cap(c_a), veh/h	366	1877	997	386	1972	1050	244	268	255	239	268	262
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	15.0	23.2	23.2	17.0	0.0	0.0	56.9	71.3	71.5	61.0	79.4	79.6
Incr Delay (d2), s/veh	0.6	0.9	1.6	4.0	1.5	2.7	9.3	29.8	35.8	7.7	21.5	25.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	11.4	12.3	3.8	0.4	0.8	6.7	12.3	12.5	6.4	11.3	11.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	24.1	24.9	21.1	1.5	2.7	66.2	101.1	107.3	68.7	100.9	104.7
LnGrp LOS	B	C	C	C	A	A	E	F	F	E	F	F
Approach Vol, veh/h		1499			2089			632			581	
Approach Delay, s/veh		23.6			4.0			94.2			93.9	
Approach LOS		C			A			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	104.5	20.7	31.4	18.1	99.7	21.9	30.3
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green Setting (Gmax), s	18.0	84.0	17.6	25.6	18.0	84.0	17.6	25.6
Max Q Clear Time (g_c+I1), s	7.3	2.0	14.3	24.8	11.8	29.3	15.4	22.9
Green Ext Time (p_c), s	0.1	6.6	0.1	0.2	0.3	4.1	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	32.9
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑			↱
Traffic Vol, veh/h	0	1416	2050	29	0	22
Future Vol, veh/h	0	1416	2050	29	0	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1491	2158	31	0	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1095
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	0	-	-	-	0	542
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	542
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.9
HCM LOS			B

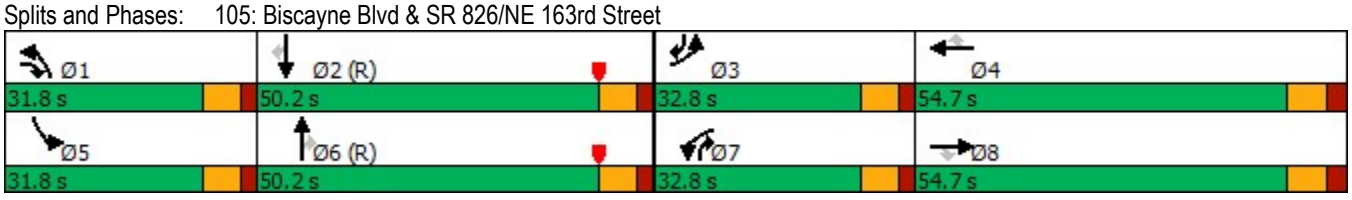
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	542
HCM Lane V/C Ratio	-	-	-	0.043
HCM Control Delay (s)	-	-	-	11.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

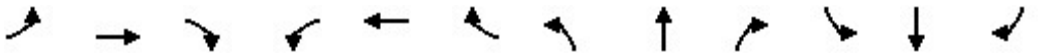
Timings
105: Biscayne Blvd & SR 826/NE 163rd Street

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	302	870	238	453	1180	706	480	1407	559	380	1109	343
Future Volume (vph)	302	870	238	453	1180	706	480	1407	559	380	1109	343
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6	7	5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	7	5	2	3
Switch Phase												
Minimum Initial (s)	5.0	7.0	5.0	5.0	7.0	7.0	5.0	7.0	5.0	5.0	7.0	5.0
Minimum Split (s)	11.8	54.7	11.8	11.8	54.7	54.7	11.8	49.2	11.8	11.8	49.2	11.8
Total Split (s)	32.8	54.7	31.8	32.8	54.7	54.7	31.8	50.2	32.8	31.8	50.2	32.8
Total Split (%)	19.4%	32.3%	18.8%	19.4%	32.3%	32.3%	18.8%	29.6%	19.4%	18.8%	29.6%	19.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.9	2.0	2.0	2.9	2.9	2.0	2.4	2.0	2.0	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	7.7	6.8	6.8	7.7	7.7	6.8	7.2	6.8	6.8	7.2	6.8
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	22.4	47.0	72.9	26.0	50.6	50.6	25.0	43.7	70.1	24.3	43.0	65.8
Actuated g/C Ratio	0.13	0.28	0.43	0.15	0.30	0.30	0.15	0.26	0.41	0.14	0.25	0.39
v/c Ratio	0.77	0.71	0.38	0.99	0.89	1.20	1.09	0.98	0.93	0.89	0.78	0.60
Control Delay	82.5	58.4	22.5	107.1	65.3	132.9	131.5	79.2	58.9	91.7	63.0	32.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.5	58.4	22.5	107.1	65.3	132.9	131.5	79.2	58.9	91.7	63.0	32.9
LOS	F	E	C	F	E	F	F	E	E	F	E	C
Approach Delay		57.5			93.8			84.8			63.4	
Approach LOS		E			F			F			E	

Intersection Summary	
Cycle Length: 169.5	
Actuated Cycle Length: 169.5	
Offset: 77 (45%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay: 77.7	Intersection LOS: E
Intersection Capacity Utilization 105.8%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 105: Biscayne Blvd & SR 826/NE 163rd Street





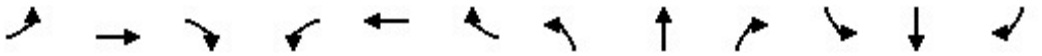
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	347	1000	274	521	1356	811	552	1617	643	437	1275	394
v/c Ratio	0.77	0.71	0.38	0.99	0.89	1.20	1.09	0.98	0.93	0.89	0.78	0.60
Control Delay	82.5	58.4	22.5	107.1	65.3	132.9	131.5	79.2	58.9	91.7	63.0	32.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.5	58.4	22.5	107.1	65.3	132.9	131.5	79.2	58.9	91.7	63.0	32.9
Queue Length 50th (ft)	193	368	139	302	534	~842	~354	526	576	247	387	262
Queue Length 95th (ft)	238	405	202	#403	#592	#1051	#452	#574	#814	#313	414	341
Internal Link Dist (ft)		400			949			1251			874	
Turn Bay Length (ft)	250		240	360		480	420		420	430		405
Base Capacity (vph)	526	1410	714	526	1519	678	506	1653	691	506	1625	686
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.71	0.38	0.99	0.89	1.20	1.09	0.98	0.93	0.86	0.78	0.57

Intersection Summary

~ 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.

HCM 6th Signalized Intersection Summary
105: Biscayne Blvd & SR 826/NE 163rd Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	302	870	238	453	1180	706	480	1407	559	380	1109	343
Future Volume (veh/h)	302	870	238	453	1180	706	480	1407	559	380	1109	343
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	347	1000	274	521	1356	0	552	1617	643	437	1275	394
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	392	1207	606	529	1409		508	1960	717	478	1905	642
Arrive On Green	0.23	0.47	0.47	0.15	0.28	0.00	0.15	0.30	0.30	0.14	0.30	0.30
Sat Flow, veh/h	3456	5106	1577	3456	5106	1585	3456	6434	1558	3456	6434	1562
Grp Volume(v), veh/h	347	1000	274	521	1356	0	552	1617	643	437	1275	394
Grp Sat Flow(s),veh/h/ln	1728	1702	1577	1728	1702	1585	1728	1609	1558	1728	1609	1562
Q Serve(g_s), s	16.5	28.9	19.3	25.6	44.5	0.0	25.0	39.7	51.8	21.2	29.6	33.9
Cycle Q Clear(g_c), s	16.5	28.9	19.3	25.6	44.5	0.0	25.0	39.7	51.8	21.2	29.6	33.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	392	1207	606	529	1409		508	1960	717	478	1905	642
V/C Ratio(X)	0.89	0.83	0.45	0.99	0.96		1.09	0.82	0.90	0.91	0.67	0.61
Avail Cap(c_a), veh/h	529	1412	669	529	1412		508	1960	717	508	1905	642
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.7	41.8	26.4	71.8	60.7	0.0	72.5	54.9	42.6	72.2	52.5	39.7
Incr Delay (d2), s/veh	13.1	3.5	0.4	35.4	15.8	0.0	65.3	4.1	16.2	20.4	1.9	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	10.9	6.1	14.0	21.3	0.0	15.7	16.7	28.1	10.8	12.3	13.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.8	45.4	26.8	107.2	76.5	0.0	137.8	59.0	58.7	92.6	54.4	44.0
LnGrp LOS	E	D	C	F	E		F	E	E	F	D	D
Approach Vol, veh/h		1621			1877			2812			2106	
Approach Delay, s/veh		49.2			85.0			74.4			60.4	
Approach LOS		D			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.8	57.5	26.1	54.6	30.3	59.0	32.8	47.9
Change Period (Y+Rc), s	6.8	* 7.2	6.8	* 7.7	6.8	* 7.2	6.8	* 7.7
Max Green Setting (Gmax), s	25.0	* 43	26.0	* 47	25.0	* 43	26.0	* 47
Max Q Clear Time (g_c+I1), s	27.0	35.9	18.5	46.5	23.2	53.8	27.6	30.9
Green Ext Time (p_c), s	0.0	2.8	0.8	0.4	0.3	0.0	0.0	6.3

Intersection Summary	
HCM 6th Ctrl Delay	68.4
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

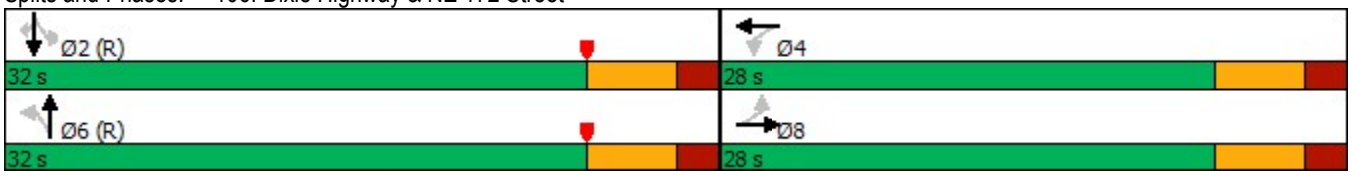
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	47	233	18	542	9	282	49	342	104
Future Volume (vph)	47	233	18	542	9	282	49	342	104
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		8		4		6		2	
Permitted Phases	8		4		6		2		2
Detector Phase	8	8	4	4	6	6	2	2	2
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0	32.0
Total Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0	32.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	53.3%	53.3%	53.3%	53.3%	53.3%
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									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		17.6		17.6	30.4	30.4	30.4	30.4	30.4
Actuated g/C Ratio		0.29		0.29	0.51	0.51	0.51	0.51	0.51
v/c Ratio		0.53		0.70	0.02	0.53	0.14	0.39	0.13
Control Delay		13.0		21.8	9.3	12.1	10.7	11.6	3.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		13.0		21.8	9.3	12.1	10.7	11.6	3.0
LOS		B		C	A	B	B	B	A
Approach Delay		13.0		21.8		12.1		9.7	
Approach LOS		B		C		B		A	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 14.8	Intersection LOS: B
Intersection Capacity Utilization 82.4%	ICU Level of Service E
Analysis Period (min) 15	

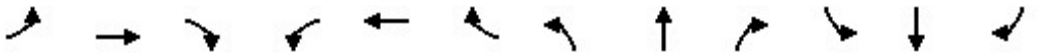
Splits and Phases: 106: Dixie Highway & NE 172 Street



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	457	682	10	493	52	364	111
v/c Ratio	0.53	0.70	0.02	0.53	0.14	0.39	0.13
Control Delay	13.0	21.8	9.3	12.1	10.7	11.6	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.0	21.8	9.3	12.1	10.7	11.6	3.0
Queue Length 50th (ft)	44	108	2	94	9	75	0
Queue Length 95th (ft)	73	143	9	199	31	150	23
Internal Link Dist (ft)	194	230		175		177	
Turn Bay Length (ft)			135		100		100
Base Capacity (vph)	1033	1205	488	922	378	944	857
Starvation Cap Reductn	0	0	0	0	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	0.44	0.57	0.02	0.53	0.14	0.39	0.13

Intersection Summary

HCM 6th Signalized Intersection Summary
106: Dixie Highway & NE 172 Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	233	149	18	542	81	9	282	181	49	342	104
Future Volume (veh/h)	47	233	149	18	542	81	9	282	181	49	342	104
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	50	248	0	19	577	86	10	300	193	52	364	111
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	573		74	764	112	519	578	372	450	1017	862
Arrive On Green	0.26	0.26	0.00	0.26	0.26	0.26	0.54	0.54	0.54	0.54	0.54	0.54
Sat Flow, veh/h	132	2322	0	43	2985	438	919	1063	684	904	1870	1585
Grp Volume(v), veh/h	134	164	0	363	0	319	10	0	493	52	364	111
Grp Sat Flow(s),veh/h/ln	752	1617	0	1843	0	1623	919	0	1747	904	1870	1585
Q Serve(g_s), s	1.2	5.0	0.0	2.4	0.0	10.9	0.4	0.0	10.8	2.3	6.6	2.1
Cycle Q Clear(g_c), s	12.1	5.0	0.0	10.9	0.0	10.9	7.0	0.0	10.8	13.1	6.6	2.1
Prop In Lane	0.37		0.00	0.05		0.27	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	275	414		535	0	416	519	0	950	450	1017	862
V/C Ratio(X)	0.49	0.40		0.68	0.00	0.77	0.02	0.00	0.52	0.12	0.36	0.13
Avail Cap(c_a), veh/h	410	593		735	0	595	519	0	950	450	1017	862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.83	0.00	0.83	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	18.5	0.0	20.6	0.0	20.7	9.7	0.0	8.7	12.8	7.7	6.7
Incr Delay (d2), s/veh	1.0	0.5	0.0	0.9	0.0	2.5	0.1	0.0	2.0	0.5	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.8	0.0	4.4	0.0	4.1	0.1	0.0	3.8	0.5	2.4	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	18.9	0.0	21.6	0.0	23.2	9.8	0.0	10.7	13.4	8.7	7.0
LnGrp LOS	B	B		C	A	C	A	A	B	B	A	A
Approach Vol, veh/h		298			682			503			527	
Approach Delay, s/veh		19.3			22.3			10.7			8.8	
Approach LOS		B			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		38.6		21.4		38.6		21.4				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		26.0		22.0		26.0		22.0				
Max Q Clear Time (g_c+I1), s		15.1		12.9		12.8		14.1				
Green Ext Time (p_c), s		0.8		2.5		1.1		0.9				

Intersection Summary		
HCM 6th Ctrl Delay	15.4	
HCM 6th LOS	B	

Notes

User approved pedestrian interval to be less than phase max green.

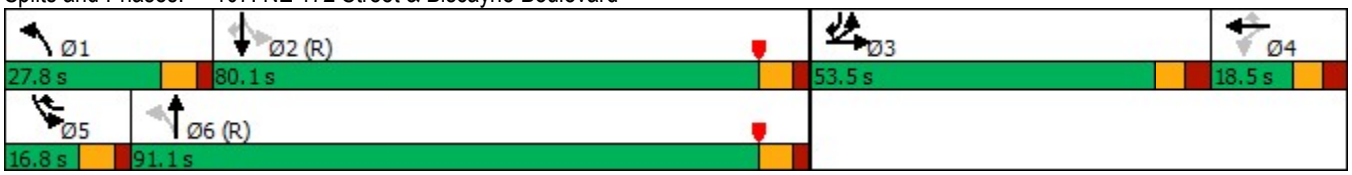
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
107: NE 172 Street & Biscayne Boulevard

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	272	18	26	30	45	239	1678	45	2029	352
Future Volume (vph)	272	18	26	30	45	239	1678	45	2029	352
Turn Type	Split	NA	Perm	NA	pm+ov	pm+pt	NA	pm+pt	NA	pm+ov
Protected Phases	3	3		4	5	1	6	5	2	3
Permitted Phases			4		4	6		2		2
Detector Phase	3	3	4	4	5	1	6	5	2	3
Switch Phase										
Minimum Initial (s)	5.0	5.0	7.0	7.0	5.0	5.0	7.0	5.0	7.0	5.0
Minimum Split (s)	25.5	25.5	18.5	18.5	11.8	11.8	30.1	11.8	30.1	25.5
Total Split (s)	53.5	53.5	18.5	18.5	16.8	27.8	91.1	16.8	80.1	53.5
Total Split (%)	29.7%	29.7%	10.3%	10.3%	9.3%	15.5%	50.6%	9.3%	44.5%	29.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.8	4.8	4.8	4.8	4.8	4.0
All-Red Time (s)	3.5	3.5	3.5	3.5	2.0	2.0	2.3	2.0	2.3	3.5
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)	7.5	7.5		7.5	6.8	6.8	7.1	6.8	7.1	7.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	None
Act Effct Green (s)	27.7	27.7		12.6	19.7	117.7	106.6	91.2	84.6	111.9
Actuated g/C Ratio	0.15	0.15		0.07	0.11	0.65	0.59	0.51	0.47	0.62
v/c Ratio	0.53	0.47		0.59	0.17	0.82	0.46	0.29	0.69	0.33
Control Delay	72.7	15.4		103.5	1.4	74.4	22.9	21.0	40.3	3.6
Queue Delay	0.3	0.3		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.0	15.7		103.5	1.4	74.4	22.9	21.0	40.3	3.6
LOS	E	B		F	A	E	C	C	D	A
Approach Delay		50.7		58.3			29.2		34.6	
Approach LOS		D		E			C		C	

Intersection Summary	
Cycle Length: 179.9	
Actuated Cycle Length: 179.9	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 34.4	Intersection LOS: C
Intersection Capacity Utilization 83.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 107: NE 172 Street & Biscayne Boulevard



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	278	176	58	46	244	1758	46	2070	359
v/c Ratio	0.53	0.47	0.59	0.17	0.82	0.46	0.29	0.69	0.33
Control Delay	72.7	15.4	103.5	1.4	74.4	22.9	21.0	40.3	3.6
Queue Delay	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.0	15.7	103.5	1.4	74.4	22.9	21.0	40.3	3.6
Queue Length 50th (ft)	158	19	68	0	227	337	18	563	30
Queue Length 95th (ft)	195	92	121	0	#435	461	45	666	70
Internal Link Dist (ft)		230	539			817		820	
Turn Bay Length (ft)					415		200		180
Base Capacity (vph)	877	521	105	300	298	3783	193	3012	1213
Starvation Cap Reductn	208	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	0.42	0.40	0.55	0.15	0.82	0.46	0.24	0.69	0.30

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
107: NE 172 Street & Biscayne Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	272	18	155	26	30	45	239	1678	45	45	2029	352
Future Volume (vph)	272	18	155	26	30	45	239	1678	45	45	2029	352
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5			7.5	6.8	6.8	7.1		6.8	7.1	7.5
Lane Util. Factor	0.97	1.00			1.00	1.00	1.00	0.86		1.00	0.86	1.00
Frpb, ped/bikes	1.00	0.98			1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			0.99	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.87			1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00			0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1572			1803	1567	1770	6379		1770	6408	1564
Flt Permitted	0.95	1.00			0.77	1.00	0.04	1.00		0.11	1.00	1.00
Satd. Flow (perm)	3433	1572			1413	1567	82	6379		201	6408	1564
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	278	18	158	27	31	46	244	1712	46	46	2070	359
RTOR Reduction (vph)	0	134	0	0	0	41	0	2	0	0	0	108
Lane Group Flow (vph)	278	42	0	0	58	5	244	1756	0	46	2070	251
Confl. Peds. (#/hr)	1		6	6		1	1					1
Confl. Bikes (#/hr)			3						2			5
Turn Type	Split	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3			4	5	1	6		5	2	3
Permitted Phases				4		4	6			2		2
Actuated Green, G (s)	27.7	27.7			12.6	18.0	117.5	105.3		90.0	84.6	112.3
Effective Green, g (s)	27.7	27.7			12.6	18.0	117.5	105.3		90.0	84.6	112.3
Actuated g/C Ratio	0.15	0.15			0.07	0.10	0.65	0.59		0.50	0.47	0.62
Clearance Time (s)	7.5	7.5			7.5	6.8	6.8	7.1		6.8	7.1	7.5
Vehicle Extension (s)	5.0	5.0			2.5	2.0	2.0	1.0		2.0	1.0	5.0
Lane Grp Cap (vph)	528	242			98	156	298	3733		147	3013	976
v/s Ratio Prot	c0.08	0.03				0.00	c0.12	0.28		0.01	0.32	0.04
v/s Ratio Perm					c0.04	0.00	c0.42			0.15		0.12
v/c Ratio	0.53	0.17			0.59	0.03	0.82	0.47		0.31	0.69	0.26
Uniform Delay, d1	70.1	66.2			81.2	73.1	58.2	21.3		23.1	37.3	15.1
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.8	0.7			7.8	0.0	15.1	0.4		0.4	1.3	0.3
Delay (s)	71.9	66.9			88.9	73.1	73.3	21.8		23.5	38.6	15.4
Level of Service	E	E			F	E	E	C		C	D	B
Approach Delay (s)		69.9			81.9			28.1			34.9	
Approach LOS		E			F			C			C	

Intersection Summary			
HCM 2000 Control Delay	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	179.9	Sum of lost time (s)	28.9
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

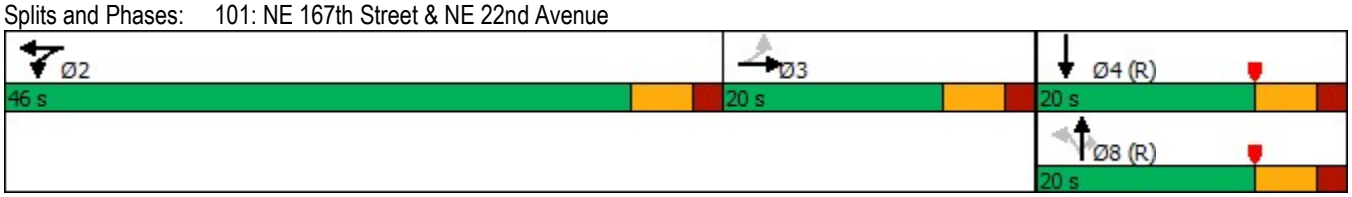
HCM 6th Edition methodology expects strict NEMA phasing.

Timings
101: NE 167th Street & NE 22nd Avenue

Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBT
Lane Configurations							
Traffic Volume (vph)	5	17	31	53	124	418	115
Future Volume (vph)	5	17	31	53	124	418	115
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA
Protected Phases		3	2		8		4
Permitted Phases	3			8		8	
Detector Phase	3	3	2	8	8	8	4
Switch Phase							
Minimum Initial (s)	7.0	7.0	16.0	7.0	7.0	7.0	7.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	20.0	20.0	46.0	20.0	20.0	20.0	20.0
Total Split (%)	23.3%	23.3%	53.5%	23.3%	23.3%	23.3%	23.3%
Yellow Time (s)	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
Lost Time Adjust (s)		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
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		8.1	27.0	35.5	35.5	35.5	35.5
Actuated g/C Ratio		0.09	0.31	0.41	0.41	0.41	0.41
v/c Ratio		0.45	0.83	0.12	0.17	0.49	0.18
Control Delay		20.3	39.7	22.4	21.4	4.8	20.8
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		20.3	39.7	22.4	21.4	4.8	20.8
LOS		C	D	C	C	A	C
Approach Delay		20.3	39.7		9.8		20.8
Approach LOS		C	D		A		C

Intersection Summary	
Cycle Length: 86	
Actuated Cycle Length: 86	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 22.1	Intersection LOS: C
Intersection Capacity Utilization 57.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 101: NE 167th Street & NE 22nd Avenue

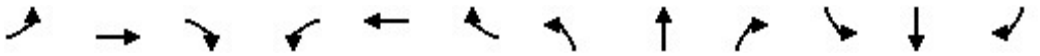


Queues
101: NE 167th Street & NE 22nd Avenue

Lane Group	EBT	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	96	463	57	133	449	133
v/c Ratio	0.45	0.83	0.12	0.17	0.49	0.18
Control Delay	20.3	39.7	22.4	21.4	4.8	20.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.3	39.7	22.4	21.4	4.8	20.8
Queue Length 50th (ft)	12	229	19	46	0	45
Queue Length 95th (ft)	55	294	56	108	76	106
Internal Link Dist (ft)	300	275		820		386
Turn Bay Length (ft)			60		500	
Base Capacity (vph)	316	828	493	768	916	759
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.56	0.12	0.17	0.49	0.18

Intersection Summary

HCM Signalized Intersection Capacity Analysis
101: NE 167th Street & NE 22nd Avenue



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	17	68	400	31	0	53	124	418	0	115	8
Future Volume (vph)	5	17	68	400	31	0	53	124	418	0	115	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0	6.0		6.0	
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00		1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00	1.00		1.00	
Flpb, ped/bikes		1.00			1.00		0.98	1.00	1.00		1.00	
Frt		0.90			1.00		1.00	1.00	0.85		0.99	
Flt Protected		1.00			0.96		0.95	1.00	1.00		1.00	
Satd. Flow (prot)		1666			1780		1738	1863	1583		1840	
Flt Permitted		0.94			0.96		0.67	1.00	1.00		1.00	
Satd. Flow (perm)		1571			1780		1229	1863	1583		1840	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	5	18	73	430	33	0	57	133	449	0	124	9
RTOR Reduction (vph)	0	67	0	0	0	0	0	0	270	0	2	0
Lane Group Flow (vph)	0	29	0	0	463	0	57	133	179	0	131	0
Confl. Peds. (#/hr)	4					4	17					17
Confl. Bikes (#/hr)												2
Turn Type	Perm	NA		Split	NA		Perm	NA	Perm		NA	
Protected Phases		3		2	2			8			4	
Permitted Phases	3						8		8			
Actuated Green, G (s)		6.7			27.0		34.3	34.3	34.3		34.3	
Effective Green, g (s)		6.7			27.0		34.3	34.3	34.3		34.3	
Actuated g/C Ratio		0.08			0.31		0.40	0.40	0.40		0.40	
Clearance Time (s)		6.0			6.0		6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0			1.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		122			558		490	743	631		733	
v/s Ratio Prot					c0.26			0.07			0.07	
v/s Ratio Perm		c0.02					0.05		c0.11			
v/c Ratio		0.24			0.83		0.12	0.18	0.28		0.18	
Uniform Delay, d1		37.2			27.4		16.3	16.7	17.5		16.7	
Progression Factor		1.00			1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2		1.0			9.5		0.5	0.5	1.1		0.5	
Delay (s)		38.2			36.8		16.8	17.3	18.6		17.3	
Level of Service		D			D		B	B	B		B	
Approach Delay (s)		38.2			36.8			18.2			17.3	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	26.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

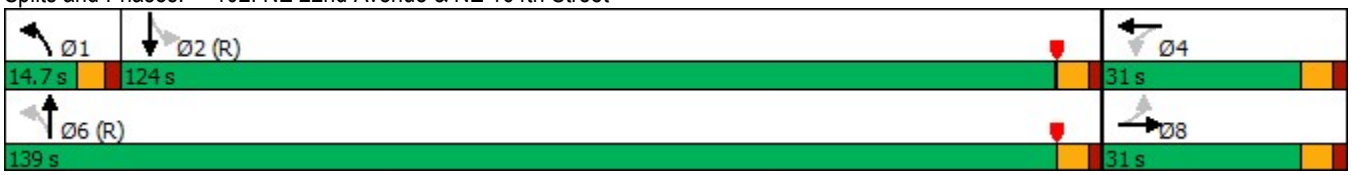
HCM 6th Edition methodology does not support current ring-barrier structure.

Timings
102: NE 22nd Avenue & NE 164th Street

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	91	4	10	2	90	511	6	471
Future Volume (vph)	91	4	10	2	90	511	6	471
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		8		4	1	6		2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	1	6	2	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.0	29.0	29.0	29.0	10.7	30.0	30.0	30.0
Total Split (s)	31.0	31.0	31.0	31.0	14.7	139.0	124.0	124.0
Total Split (%)	18.2%	18.2%	18.2%	18.2%	8.6%	81.8%	72.9%	72.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	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
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	5.7	6.0	6.0	6.0
Lead/Lag					Lead		Lag	Lag
Lead-Lag Optimize?					Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	16.8	16.8		16.8	141.5	141.2	129.3	129.3
Actuated g/C Ratio	0.10	0.10		0.10	0.83	0.83	0.76	0.76
v/c Ratio	0.71	0.13		0.16	0.15	0.19	0.01	0.24
Control Delay	100.7	0.4		43.9	2.2	2.0	6.5	6.2
Queue Delay	0.0	0.0		0.0	0.0	0.5	0.0	0.0
Total Delay	100.7	0.4		43.9	2.2	2.5	6.5	6.2
LOS	F	A		D	A	A	A	A
Approach Delay		51.4		43.9		2.5		6.2
Approach LOS		D		D		A		A

Intersection Summary	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 106 (62%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 10.9	Intersection LOS: B
Intersection Capacity Utilization 50.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 102: NE 22nd Avenue & NE 164th Street



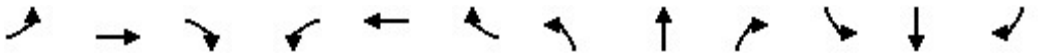
Queues
102: NE 22nd Avenue & NE 164th Street

Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	97	94	25	96	556	6	633
v/c Ratio	0.71	0.13	0.16	0.15	0.19	0.01	0.24
Control Delay	100.7	0.4	43.9	2.2	2.0	6.5	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Total Delay	100.7	0.4	43.9	2.2	2.5	6.5	6.2
Queue Length 50th (ft)	107	0	13	7	22	1	90
Queue Length 95th (ft)	170	0	45	m19	m55	7	139
Internal Link Dist (ft)		146	182		320		820
Turn Bay Length (ft)	80			100		100	
Base Capacity (vph)	202	833	227	644	2932	629	2589
Starvation Cap Reductn	0	0	0	0	1852	0	0
Spillback Cap Reductn	0	6	0	0	0	0	100
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.11	0.11	0.15	0.51	0.01	0.25

Intersection Summary

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

HCM 6th Signalized Intersection Summary
102: NE 22nd Avenue & NE 164th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	4	85	10	2	11	90	511	11	6	471	124
Future Volume (veh/h)	91	4	85	10	2	11	90	511	11	6	471	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	4	90	11	2	12	96	544	12	6	501	132
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	177	157	59	19	44	661	2949	65	695	2123	556
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.06	1.00	1.00	0.77	0.77	0.77
Sat Flow, veh/h	1390	1777	1576	290	185	439	1781	3554	78	851	2768	725
Grp Volume(v), veh/h	97	4	90	25	0	0	96	272	284	6	320	313
Grp Sat Flow(s),veh/h/ln	1390	1777	1576	914	0	0	1781	1777	1856	851	1777	1716
Q Serve(g_s), s	4.6	0.3	9.3	0.1	0.0	0.0	1.9	0.0	0.0	0.3	8.7	8.8
Cycle Q Clear(g_c), s	14.0	0.3	9.3	9.4	0.0	0.0	1.9	0.0	0.0	0.3	8.7	8.8
Prop In Lane	1.00		1.00	0.44		0.48	1.00		0.04	1.00		0.42
Lane Grp Cap(c), veh/h	162	177	157	122	0	0	661	1474	1540	695	1363	1316
V/C Ratio(X)	0.60	0.02	0.57	0.21	0.00	0.00	0.15	0.18	0.18	0.01	0.24	0.24
Avail Cap(c_a), veh/h	228	261	232	190	0	0	704	1474	1540	695	1363	1316
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	0.36	0.36	0.36	0.99	0.99	0.99
Uniform Delay (d), s/veh	75.6	69.0	73.1	70.0	0.0	0.0	3.6	0.0	0.0	4.6	5.6	5.6
Incr Delay (d2), s/veh	2.6	0.0	2.4	0.6	0.0	0.0	0.0	0.1	0.1	0.0	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.2	3.9	1.0	0.0	0.0	0.6	0.0	0.0	0.1	3.3	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.2	69.1	75.5	70.6	0.0	0.0	3.6	0.1	0.1	4.7	6.0	6.1
LnGrp LOS	E	E	E	E	A	A	A	A	A	A	A	A
Approach Vol, veh/h		191			25			652			639	
Approach Delay, s/veh		76.7			70.6			0.6			6.0	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.6	136.4		23.0		147.0		23.0				
Change Period (Y+Rc), s	* 5.7	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	* 9	118.0		25.0		133.0		25.0				
Max Q Clear Time (g_c+I1), s	3.9	10.8		11.4		2.0		16.0				
Green Ext Time (p_c), s	0.0	1.5		0.0		1.2		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			13.7									
HCM 6th LOS			B									

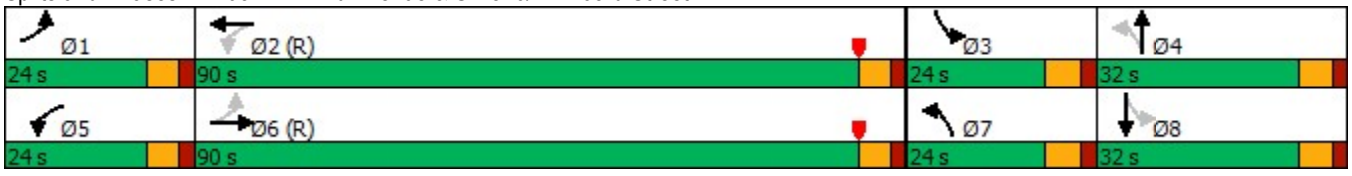
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

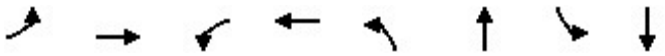
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	124	1260	219	1713	162	341	149	340
Future Volume (vph)	124	1260	219	1713	162	341	149	340
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases	6		2		4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	7.0	5.0	7.0
Minimum Split (s)	11.0	32.0	11.0	32.0	11.4	30.4	11.4	32.0
Total Split (s)	24.0	90.0	24.0	90.0	24.0	32.0	24.0	32.0
Total Split (%)	14.1%	52.9%	14.1%	52.9%	14.1%	18.8%	14.1%	18.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	101.0	88.6	107.3	91.7	41.5	25.6	40.5	25.1
Actuated g/C Ratio	0.59	0.52	0.63	0.54	0.24	0.15	0.24	0.15
v/c Ratio	0.73	0.54	0.83	0.71	0.79	0.92	0.78	0.86
Control Delay	58.7	28.7	47.7	32.0	73.8	90.2	68.9	80.6
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
Total Delay	58.7	28.7	47.7	32.3	73.8	90.2	68.9	81.0
LOS	E	C	D	C	E	F	E	F
Approach Delay		31.2		34.0		85.9		77.8
Approach LOS		C		C		F		E

Intersection Summary	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 27 (16%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 45.3	Intersection LOS: D
Intersection Capacity Utilization 85.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 103: NE 22nd Avenue & SR 826/NE 163rd Street



Queues
103: NE 22nd Avenue & SR 826/NE 163rd Street

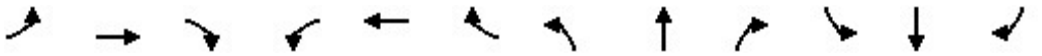


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	132	1428	233	1942	172	485	159	446
v/c Ratio	0.73	0.54	0.83	0.71	0.79	0.92	0.78	0.86
Control Delay	58.7	28.7	47.7	32.0	73.8	90.2	68.9	80.6
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.4
Total Delay	58.7	28.7	47.7	32.3	73.8	90.2	68.9	81.0
Queue Length 50th (ft)	87	400	117	597	151	270	140	250
Queue Length 95th (ft)	160	450	#257	699	#229	#379	#211	#334
Internal Link Dist (ft)		510		391		445		320
Turn Bay Length (ft)	290		265		150		150	
Base Capacity (vph)	238	2626	303	2722	235	539	226	530
Starvation Cap Reductn	0	0	0	261	0	0	0	6
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	0.55	0.54	0.77	0.79	0.73	0.90	0.70	0.85

Intersection Summary

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

HCM 6th Signalized Intersection Summary
103: NE 22nd Avenue & SR 826/NE 163rd Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	1260	83	219	1713	113	162	341	115	149	340	79
Future Volume (veh/h)	124	1260	83	219	1713	113	162	341	115	149	340	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	1340	88	233	1822	120	172	363	122	159	362	84
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	2647	174	314	2794	184	225	393	130	207	413	95
Arrive On Green	0.05	0.54	0.54	0.15	1.00	1.00	0.09	0.15	0.15	0.03	0.05	0.05
Sat Flow, veh/h	1781	4890	321	1781	4895	322	1781	2609	863	1781	2859	655
Grp Volume(v), veh/h	132	933	495	233	1266	676	172	245	240	159	223	223
Grp Sat Flow(s),veh/h/ln	1781	1702	1807	1781	1702	1812	1781	1777	1695	1781	1777	1737
Q Serve(g_s), s	5.6	29.4	29.4	10.4	0.0	0.0	13.8	23.1	23.8	12.8	21.2	21.7
Cycle Q Clear(g_c), s	5.6	29.4	29.4	10.4	0.0	0.0	13.8	23.1	23.8	12.8	21.2	21.7
Prop In Lane	1.00		0.18	1.00		0.18	1.00		0.51	1.00		0.38
Lane Grp Cap(c), veh/h	247	1842	978	314	1943	1034	225	268	255	207	257	251
V/C Ratio(X)	0.54	0.51	0.51	0.74	0.65	0.65	0.77	0.92	0.94	0.77	0.87	0.89
Avail Cap(c_a), veh/h	354	1842	978	369	1943	1034	243	268	255	237	268	262
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	15.7	24.6	24.6	18.8	0.0	0.0	56.3	71.2	71.4	60.5	79.4	79.6
Incr Delay (d2), s/veh	0.7	1.0	1.9	6.6	1.7	3.2	11.0	33.6	39.8	10.1	23.6	27.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	12.3	13.3	4.2	0.5	0.9	7.0	13.1	13.2	6.7	11.9	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.4	25.6	26.5	25.4	1.7	3.2	67.3	104.8	111.2	70.6	103.0	106.9
LnGrp LOS	B	C	C	C	A	A	E	F	F	E	F	F
Approach Vol, veh/h		1560			2175			657			605	
Approach Delay, s/veh		25.1			4.7			97.3			95.9	
Approach LOS		C			A			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	103.0	21.2	32.0	18.8	98.0	22.3	30.9
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green Setting (Gmax), s	18.0	84.0	17.6	25.6	18.0	84.0	17.6	25.6
Max Q Clear Time (g_c+I1), s	7.6	2.0	14.8	25.8	12.4	31.4	15.8	23.7
Green Ext Time (p_c), s	0.1	7.0	0.1	0.0	0.3	4.3	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	34.3
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑			↱
Traffic Vol, veh/h	0	1474	2133	30	0	23
Future Vol, veh/h	0	1474	2133	30	0	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1552	2245	32	0	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1139
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	0	-	-	-	0	524
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	524
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.2
HCM LOS			B

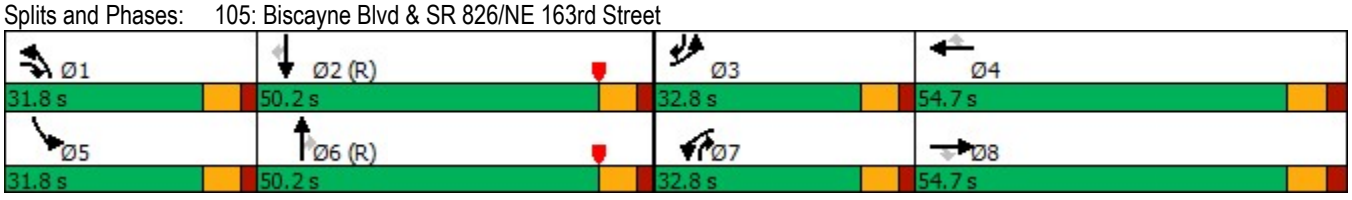
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	524
HCM Lane V/C Ratio	-	-	-	0.046
HCM Control Delay (s)	-	-	-	12.2
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Timings
105: Biscayne Blvd & SR 826/NE 163rd Street

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	314	906	248	472	1228	734	499	1482	582	396	1168	357
Future Volume (vph)	314	906	248	472	1228	734	499	1482	582	396	1168	357
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6	7	5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	7	5	2	3
Switch Phase												
Minimum Initial (s)	5.0	7.0	5.0	5.0	7.0	7.0	5.0	7.0	5.0	5.0	7.0	5.0
Minimum Split (s)	11.8	54.7	11.8	11.8	54.7	54.7	11.8	49.2	11.8	11.8	49.2	11.8
Total Split (s)	32.8	54.7	31.8	32.8	54.7	54.7	31.8	50.2	32.8	31.8	50.2	32.8
Total Split (%)	19.4%	32.3%	18.8%	19.4%	32.3%	32.3%	18.8%	29.6%	19.4%	18.8%	29.6%	19.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.9	2.0	2.0	2.9	2.9	2.0	2.4	2.0	2.0	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	7.7	6.8	6.8	7.7	7.7	6.8	7.2	6.8	6.8	7.2	6.8
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	22.9	47.0	72.9	26.0	50.1	50.1	25.0	43.5	69.9	24.5	43.0	66.3
Actuated g/C Ratio	0.14	0.28	0.43	0.15	0.30	0.30	0.15	0.26	0.41	0.14	0.25	0.39
v/c Ratio	0.78	0.74	0.40	1.03	0.94	1.25	1.13	1.04	0.97	0.92	0.83	0.62
Control Delay	82.9	59.4	23.1	115.7	70.2	156.6	144.4	92.4	67.1	95.0	64.9	33.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.9	59.4	23.1	115.7	70.2	156.6	144.4	92.4	67.1	95.0	64.9	33.7
LOS	F	E	C	F	E	F	F	F	E	F	E	C
Approach Delay		58.3			105.1			96.8			65.3	
Approach LOS		E			F			F			E	

Intersection Summary	
Cycle Length: 169.5	
Actuated Cycle Length: 169.5	
Offset: 77 (45%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 85.3	Intersection LOS: F
Intersection Capacity Utilization 107.9%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 105: Biscayne Blvd & SR 826/NE 163rd Street



Queues
105: Biscayne Blvd & SR 826/NE 163rd Street

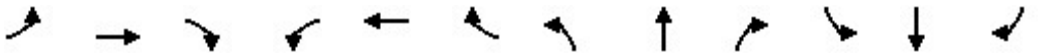
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	361	1041	285	543	1411	844	574	1703	669	455	1343	410
v/c Ratio	0.78	0.74	0.40	1.03	0.94	1.25	1.13	1.04	0.97	0.92	0.83	0.62
Control Delay	82.9	59.4	23.1	115.7	70.2	156.6	144.4	92.4	67.1	95.0	64.9	33.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.9	59.4	23.1	115.7	70.2	156.6	144.4	92.4	67.1	95.0	64.9	33.7
Queue Length 50th (ft)	201	387	148	~331	568	~927	~380	~595	619	259	413	277
Queue Length 95th (ft)	247	425	213	#429	#649	#1131	#479	#629	#898	#336	439	362
Internal Link Dist (ft)		400			949			1251			874	
Turn Bay Length (ft)	250		240	360		480	420		420	430		405
Base Capacity (vph)	526	1410	714	526	1504	673	506	1642	689	506	1625	686
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.74	0.40	1.03	0.94	1.25	1.13	1.04	0.97	0.90	0.83	0.60

Intersection Summary

~ 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.

HCM 6th Signalized Intersection Summary
105: Biscayne Blvd & SR 826/NE 163rd Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	314	906	248	472	1228	734	499	1482	582	396	1168	357
Future Volume (veh/h)	314	906	248	472	1228	734	499	1482	582	396	1168	357
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	361	1041	285	543	1411	0	574	1703	669	455	1343	410
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	405	1229	613	529	1412		508	1903	703	494	1876	641
Arrive On Green	0.23	0.48	0.48	0.15	0.28	0.00	0.15	0.30	0.30	0.14	0.29	0.29
Sat Flow, veh/h	3456	5106	1577	3456	5106	1585	3456	6434	1558	3456	6434	1562
Grp Volume(v), veh/h	361	1041	285	543	1411	0	574	1703	669	455	1343	410
Grp Sat Flow(s),veh/h/ln	1728	1702	1577	1728	1702	1585	1728	1609	1558	1728	1609	1562
Q Serve(g_s), s	17.2	30.3	20.1	26.0	47.0	0.0	25.0	43.1	50.3	22.1	31.8	35.8
Cycle Q Clear(g_c), s	17.2	30.3	20.1	26.0	47.0	0.0	25.0	43.1	50.3	22.1	31.8	35.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	405	1229	613	529	1412		508	1903	703	494	1876	641
V/C Ratio(X)	0.89	0.85	0.47	1.03	1.00		1.13	0.89	0.95	0.92	0.72	0.64
Avail Cap(c_a), veh/h	529	1412	669	529	1412		508	1903	703	508	1876	641
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	41.3	26.0	72.0	61.5	0.0	72.5	57.3	45.2	71.9	53.9	40.3
Incr Delay (d2), s/veh	14.2	4.3	0.4	46.3	23.8	0.0	80.6	7.0	23.9	22.1	2.4	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	11.4	6.3	15.0	23.4	0.0	16.8	18.5	31.7	11.4	13.3	14.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.2	45.6	26.4	118.3	85.3	0.0	153.1	64.3	69.1	94.0	56.3	45.1
LnGrp LOS	E	D	C	F	F		F	E	E	F	E	D
Approach Vol, veh/h		1687			1954			2946			2208	
Approach Delay, s/veh		49.3			94.5			82.7			62.0	
Approach LOS		D			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.8	56.8	26.7	54.7	31.1	57.5	32.8	48.6
Change Period (Y+Rc), s	6.8	* 7.2	6.8	* 7.7	6.8	* 7.2	6.8	* 7.7
Max Green Setting (Gmax), s	25.0	* 43	26.0	* 47	25.0	* 43	26.0	* 47
Max Q Clear Time (g_c+I1), s	27.0	37.8	19.2	49.0	24.1	52.3	28.0	32.3
Green Ext Time (p_c), s	0.0	2.4	0.7	0.0	0.2	0.0	0.0	6.2

Intersection Summary	
HCM 6th Ctrl Delay	73.7
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

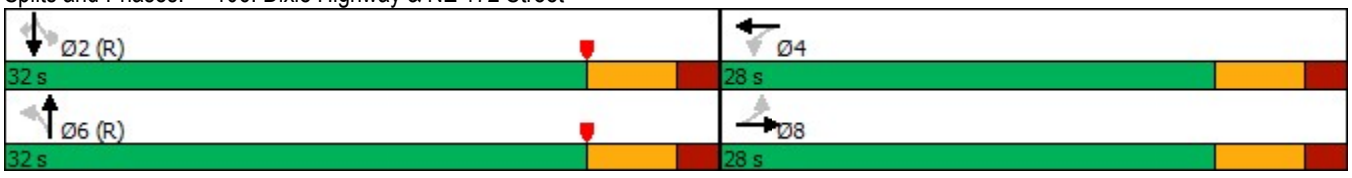
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Timings
106: Dixie Highway & NE 172 Street

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	49	251	20	571	10	294	51	356	108
Future Volume (vph)	49	251	20	571	10	294	51	356	108
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		8		4		6		2	
Permitted Phases	8		4		6		2		2
Detector Phase	8	8	4	4	6	6	2	2	2
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0	32.0
Total Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0	32.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	53.3%	53.3%	53.3%	53.3%	53.3%
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									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		18.3		18.3	29.7	29.7	29.7	29.7	29.7
Actuated g/C Ratio		0.30		0.30	0.50	0.50	0.50	0.50	0.50
v/c Ratio		0.55		0.72	0.02	0.57	0.16	0.41	0.14
Control Delay		13.1		21.7	9.7	13.2	11.3	12.3	3.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		13.1		21.8	9.7	13.2	11.3	12.3	3.0
LOS		B		C	A	B	B	B	A
Approach Delay		13.1		21.8		13.1		10.2	
Approach LOS		B		C		B		B	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 15.1	Intersection LOS: B
Intersection Capacity Utilization 85.4%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 106: Dixie Highway & NE 172 Street



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	484	718	11	516	54	379	115
v/c Ratio	0.55	0.72	0.02	0.57	0.16	0.41	0.14
Control Delay	13.1	21.7	9.7	13.2	11.3	12.3	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.1	21.8	9.7	13.2	11.3	12.3	3.0
Queue Length 50th (ft)	46	112	2	106	10	83	0
Queue Length 95th (ft)	79	152	10	213	32	157	23
Internal Link Dist (ft)	194	230		175		177	
Turn Bay Length (ft)			135		100		100
Base Capacity (vph)	1025	1201	461	903	346	923	842
Starvation Cap Reductn	0	23	0	0	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	0.47	0.61	0.02	0.57	0.16	0.41	0.14

Intersection Summary

HCM 6th Signalized Intersection Summary
106: Dixie Highway & NE 172 Street

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	251	155	20	571	85	10	294	191	51	356	108
Future Volume (veh/h)	49	251	155	20	571	85	10	294	191	51	356	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	267	0	21	607	90	11	313	203	54	379	115
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	595		76	794	116	495	565	367	419	998	846
Arrive On Green	0.27	0.27	0.00	0.27	0.27	0.27	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	124	2318	0	46	2981	435	903	1060	687	885	1870	1585
Grp Volume(v), veh/h	143	176	0	382	0	336	11	0	516	54	379	115
Grp Sat Flow(s),veh/h/ln	740	1617	0	1839	0	1624	903	0	1747	885	1870	1585
Q Serve(g_s), s	1.5	5.4	0.0	2.9	0.0	11.5	0.4	0.0	11.7	2.6	7.1	2.2
Cycle Q Clear(g_c), s	12.9	5.4	0.0	11.4	0.0	11.5	7.5	0.0	11.7	14.3	7.1	2.2
Prop In Lane	0.36		0.00	0.05		0.27	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	279	431		553	0	433	495	0	932	419	998	846
V/C Ratio(X)	0.51	0.41		0.69	0.00	0.78	0.02	0.00	0.55	0.13	0.38	0.14
Avail Cap(c_a), veh/h	400	593		734	0	595	495	0	932	419	998	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.82	0.00	0.82	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	18.1	0.0	20.3	0.0	20.4	10.4	0.0	9.3	14.0	8.2	7.0
Incr Delay (d2), s/veh	1.1	0.5	0.0	1.2	0.0	3.1	0.1	0.0	2.4	0.6	1.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.9	0.0	4.7	0.0	4.3	0.1	0.0	4.2	0.5	2.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	18.6	0.0	21.5	0.0	23.4	10.5	0.0	11.6	14.6	9.3	7.4
LnGrp LOS	B	B		C	A	C	B	A	B	B	A	A
Approach Vol, veh/h		319			718			527			548	
Approach Delay, s/veh		19.0			22.4			11.6			9.4	
Approach LOS		B			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		38.0		22.0		38.0		22.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		26.0		22.0		26.0		22.0				
Max Q Clear Time (g_c+I1), s		16.3		13.5		13.7		14.9				
Green Ext Time (p_c), s		0.8		2.5		1.1		0.9				

Intersection Summary												
HCM 6th Ctrl Delay			15.8									
HCM 6th LOS			B									

Notes

User approved pedestrian interval to be less than phase max green.

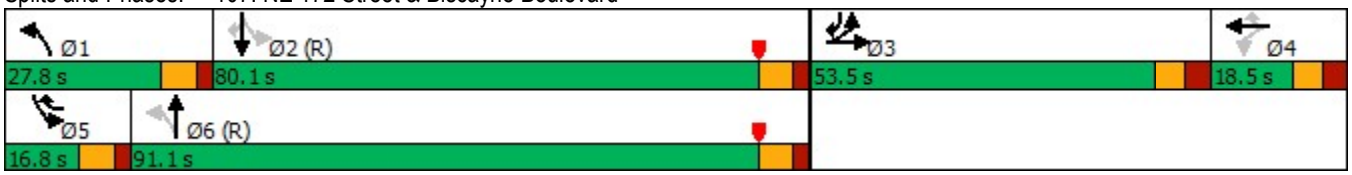
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
107: NE 172 Street & Biscayne Boulevard

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	294	18	27	31	47	249	1764	70	2125	376
Future Volume (vph)	294	18	27	31	47	249	1764	70	2125	376
Turn Type	Split	NA	Perm	NA	pm+ov	pm+pt	NA	pm+pt	NA	pm+ov
Protected Phases	3	3		4	5	1	6	5	2	3
Permitted Phases			4		4	6		2		2
Detector Phase	3	3	4	4	5	1	6	5	2	3
Switch Phase										
Minimum Initial (s)	5.0	5.0	7.0	7.0	5.0	5.0	7.0	5.0	7.0	5.0
Minimum Split (s)	25.5	25.5	18.5	18.5	11.8	11.8	30.1	11.8	30.1	25.5
Total Split (s)	53.5	53.5	18.5	18.5	16.8	27.8	91.1	16.8	80.1	53.5
Total Split (%)	29.7%	29.7%	10.3%	10.3%	9.3%	15.5%	50.6%	9.3%	44.5%	29.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.8	4.8	4.8	4.8	4.8	4.0
All-Red Time (s)	3.5	3.5	3.5	3.5	2.0	2.0	2.3	2.0	2.3	3.5
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)	7.5	7.5		7.5	6.8	6.8	7.1	6.8	7.1	7.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	None
Act Effct Green (s)	30.1	30.1		12.6	20.6	115.4	101.0	88.6	81.0	110.7
Actuated g/C Ratio	0.17	0.17		0.07	0.11	0.64	0.56	0.49	0.45	0.62
v/c Ratio	0.52	0.46		0.61	0.17	0.82	0.52	0.48	0.75	0.36
Control Delay	70.7	14.3		106.1	1.3	73.3	26.4	28.5	44.3	4.2
Queue Delay	0.4	0.4		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.1	14.7		106.1	1.3	73.3	26.4	28.5	44.3	4.2
LOS	E	B		F	A	E	C	C	D	A
Approach Delay		49.8		59.5			32.1		38.0	
Approach LOS		D		E			C		D	

Intersection Summary	
Cycle Length: 179.9	
Actuated Cycle Length: 179.9	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 37.1	Intersection LOS: D
Intersection Capacity Utilization 86.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 107: NE 172 Street & Biscayne Boulevard



Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	300	182	60	48	254	1848	71	2168	384
v/c Ratio	0.52	0.46	0.61	0.17	0.82	0.52	0.48	0.75	0.36
Control Delay	70.7	14.3	106.1	1.3	73.3	26.4	28.5	44.3	4.2
Queue Delay	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.1	14.7	106.1	1.3	73.3	26.4	28.5	44.3	4.2
Queue Length 50th (ft)	170	18	70	0	237	379	30	629	43
Queue Length 95th (ft)	205	90	125	0	#472	507	65	711	83
Internal Link Dist (ft)		230	539			817		820	
Turn Bay Length (ft)					415		200		180
Base Capacity (vph)	877	526	103	300	311	3582	175	2885	1187
Starvation Cap Reductn	245	95	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	0.47	0.42	0.58	0.16	0.82	0.52	0.41	0.75	0.32

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
107: NE 172 Street & Biscayne Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	294	18	161	27	31	47	249	1764	47	70	2125	376
Future Volume (vph)	294	18	161	27	31	47	249	1764	47	70	2125	376
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5			7.5	6.8	6.8	7.1		6.8	7.1	7.5
Lane Util. Factor	0.97	1.00			1.00	1.00	1.00	0.86		1.00	0.86	1.00
Frpb, ped/bikes	1.00	0.98			1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			0.99	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.86			1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00			0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1573			1803	1569	1770	6379		1770	6408	1565
Flt Permitted	0.95	1.00			0.76	1.00	0.05	1.00		0.09	1.00	1.00
Satd. Flow (perm)	3433	1573			1407	1569	85	6379		170	6408	1565
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	300	18	164	28	32	48	254	1800	48	71	2168	384
RTOR Reduction (vph)	0	137	0	0	0	43	0	2	0	0	0	109
Lane Group Flow (vph)	300	45	0	0	60	5	254	1846	0	71	2168	275
Confl. Peds. (#/hr)	1		6	6		1	1					1
Confl. Bikes (#/hr)			3						2			5
Turn Type	Split	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3			4	5	1	6		5	2	3
Permitted Phases				4		4	6			2		2
Actuated Green, G (s)	30.1	30.1			12.6	19.9	115.1	101.0		88.3	81.0	111.1
Effective Green, g (s)	30.1	30.1			12.6	19.9	115.1	101.0		88.3	81.0	111.1
Actuated g/C Ratio	0.17	0.17			0.07	0.11	0.64	0.56		0.49	0.45	0.62
Clearance Time (s)	7.5	7.5			7.5	6.8	6.8	7.1		6.8	7.1	7.5
Vehicle Extension (s)	5.0	5.0			2.5	2.0	2.0	1.0		2.0	1.0	5.0
Lane Grp Cap (vph)	574	263			98	173	310	3581		148	2885	966
v/s Ratio Prot	c0.09	0.03				0.00	c0.12	0.29		0.02	0.34	0.05
v/s Ratio Perm					c0.04	0.00	c0.40			0.21		0.13
v/c Ratio	0.52	0.17			0.61	0.03	0.82	0.52		0.48	0.75	0.28
Uniform Delay, d1	68.3	64.2			81.3	71.4	58.4	24.3		24.5	41.1	16.0
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.6	0.7			9.3	0.0	14.7	0.5		0.9	1.9	0.3
Delay (s)	70.0	64.9			90.6	71.4	73.1	24.9		25.4	42.9	16.3
Level of Service	E	E			F	E	E	C		C	D	B
Approach Delay (s)		68.1			82.1			30.7			38.6	
Approach LOS		E			F			C			D	

Intersection Summary			
HCM 2000 Control Delay	39.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	179.9	Sum of lost time (s)	28.9
Intersection Capacity Utilization	86.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

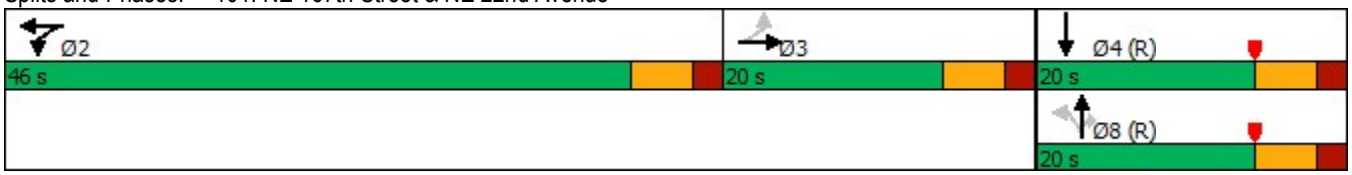
HCM 6th Edition methodology expects strict NEMA phasing.

Timings
101: NE 167th Street & NE 22nd Avenue

Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBT
Lane Configurations							
Traffic Volume (vph)	5	17	31	57	124	436	115
Future Volume (vph)	5	17	31	57	124	436	115
Turn Type	Perm	NA	NA	Perm	NA	Perm	NA
Protected Phases		3	2		8		4
Permitted Phases	3			8		8	
Detector Phase	3	3	2	8	8	8	4
Switch Phase							
Minimum Initial (s)	7.0	7.0	16.0	7.0	7.0	7.0	7.0
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Total Split (s)	20.0	20.0	46.0	20.0	20.0	20.0	20.0
Total Split (%)	23.3%	23.3%	53.5%	23.3%	23.3%	23.3%	23.3%
Yellow Time (s)	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
Lost Time Adjust (s)		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
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	None	None	None	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		8.2	27.9	34.5	34.5	34.5	34.5
Actuated g/C Ratio		0.10	0.32	0.40	0.40	0.40	0.40
v/c Ratio		0.46	0.83	0.13	0.18	0.51	0.18
Control Delay		19.9	39.2	23.2	22.1	5.0	21.6
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		19.9	39.2	23.2	22.1	5.0	21.6
LOS		B	D	C	C	A	C
Approach Delay		19.9	39.2		10.1		21.6
Approach LOS		B	D		B		C

Intersection Summary	
Cycle Length: 86	
Actuated Cycle Length: 86	
Offset: 0 (0%), Referenced to phase 4:SBT and 8:NBTL, Start of Yellow	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 22.1	Intersection LOS: C
Intersection Capacity Utilization 58.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 101: NE 167th Street & NE 22nd Avenue



Queues
101: NE 167th Street & NE 22nd Avenue

Lane Group	EBT	WBT	NBL	NBT	NBR	SBT
Lane Group Flow (vph)	101	481	61	133	469	133
v/c Ratio	0.46	0.83	0.13	0.18	0.51	0.18
Control Delay	19.9	39.2	23.2	22.1	5.0	21.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.9	39.2	23.2	22.1	5.0	21.6
Queue Length 50th (ft)	12	237	21	47	0	46
Queue Length 95th (ft)	56	302	61	109	78	108
Internal Link Dist (ft)	300	275		820		386
Turn Bay Length (ft)			60		500	
Base Capacity (vph)	320	828	480	747	916	739
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.58	0.13	0.18	0.51	0.18

Intersection Summary

HCM Signalized Intersection Capacity Analysis
101: NE 167th Street & NE 22nd Avenue

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	17	73	417	31	0	57	124	436	0	115	8
Future Volume (vph)	5	17	73	417	31	0	57	124	436	0	115	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0			6.0		6.0	6.0	6.0		6.0	
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00		1.00	
Frpb, ped/bikes		1.00			1.00		1.00	1.00	1.00		1.00	
Flpb, ped/bikes		1.00			1.00		0.98	1.00	1.00		1.00	
Frt		0.90			1.00		1.00	1.00	0.85		0.99	
Flt Protected		1.00			0.96		0.95	1.00	1.00		1.00	
Satd. Flow (prot)		1663			1780		1737	1863	1583		1840	
Flt Permitted		0.94			0.96		0.67	1.00	1.00		1.00	
Satd. Flow (perm)		1570			1780		1229	1863	1583		1840	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	5	18	78	448	33	0	61	133	469	0	124	9
RTOR Reduction (vph)	0	72	0	0	0	0	0	0	287	0	2	0
Lane Group Flow (vph)	0	29	0	0	481	0	61	133	182	0	131	0
Confl. Peds. (#/hr)	4					4	17					17
Confl. Bikes (#/hr)												2
Turn Type	Perm	NA		Split	NA		Perm	NA	Perm		NA	
Protected Phases		3		2	2			8			4	
Permitted Phases	3						8		8			
Actuated Green, G (s)		6.8			27.9		33.3	33.3	33.3		33.3	
Effective Green, g (s)		6.8			27.9		33.3	33.3	33.3		33.3	
Actuated g/C Ratio		0.08			0.32		0.39	0.39	0.39		0.39	
Clearance Time (s)		6.0			6.0		6.0	6.0	6.0		6.0	
Vehicle Extension (s)		3.0			1.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		124			577		475	721	612		712	
v/s Ratio Prot					c0.27			0.07			0.07	
v/s Ratio Perm		c0.02					0.05		c0.11			
v/c Ratio		0.24			0.83		0.13	0.18	0.30		0.18	
Uniform Delay, d1		37.2			26.9		17.0	17.4	18.2		17.4	
Progression Factor		1.00			1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2		1.0			9.6		0.6	0.6	1.2		0.6	
Delay (s)		38.1			36.5		17.5	18.0	19.5		17.9	
Level of Service		D			D		B	B	B		B	
Approach Delay (s)		38.1			36.5			19.0			17.9	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	86.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

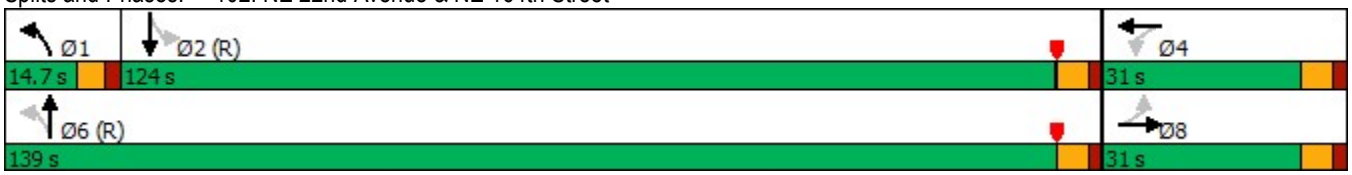
HCM 6th Edition methodology does not support current ring-barrier structure.

Timings
102: NE 22nd Avenue & NE 164th Street

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	91	8	10	2	90	511	28	471
Future Volume (vph)	91	8	10	2	90	511	28	471
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	NA
Protected Phases		8		4	1	6		2
Permitted Phases	8		4		6		2	
Detector Phase	8	8	4	4	1	6	2	2
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	7.0	5.0	5.0	5.0	5.0
Minimum Split (s)	29.0	29.0	29.0	29.0	10.7	30.0	30.0	30.0
Total Split (s)	31.0	31.0	31.0	31.0	14.7	139.0	124.0	124.0
Total Split (%)	18.2%	18.2%	18.2%	18.2%	8.6%	81.8%	72.9%	72.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	3.7	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
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	5.7	6.0	6.0	6.0
Lead/Lag					Lead		Lag	Lag
Lead-Lag Optimize?					Yes		Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	16.8	16.8		16.8	141.5	141.2	129.3	129.3
Actuated g/C Ratio	0.10	0.10		0.10	0.83	0.83	0.76	0.76
v/c Ratio	0.71	0.26		0.16	0.15	0.20	0.05	0.24
Control Delay	100.7	16.3		44.0	2.7	2.4	6.5	6.2
Queue Delay	0.0	0.0		0.0	0.0	0.5	0.0	0.0
Total Delay	100.7	16.3		44.0	2.7	2.9	6.5	6.2
LOS	F	B		D	A	A	A	A
Approach Delay		58.1		44.0		2.9		6.2
Approach LOS		E		D		A		A

Intersection Summary	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 106 (62%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 11.9	Intersection LOS: B
Intersection Capacity Utilization 50.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 102: NE 22nd Avenue & NE 164th Street



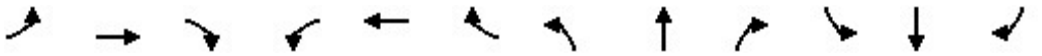
Queues
102: NE 22nd Avenue & NE 164th Street

Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	97	99	25	96	579	30	633
v/c Ratio	0.71	0.26	0.16	0.15	0.20	0.05	0.24
Control Delay	100.7	16.3	44.0	2.7	2.4	6.5	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Total Delay	100.7	16.3	44.0	2.7	2.9	6.5	6.2
Queue Length 50th (ft)	107	4	13	8	28	8	90
Queue Length 95th (ft)	170	35	45	m22	m65	21	139
Internal Link Dist (ft)		146	182		320		820
Turn Bay Length (ft)	80			100		100	
Base Capacity (vph)	202	519	227	644	2916	614	2589
Starvation Cap Reductn	0	0	0	0	1839	0	0
Spillback Cap Reductn	0	1	0	0	0	0	122
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.48	0.19	0.11	0.15	0.54	0.05	0.26

Intersection Summary

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

HCM 6th Signalized Intersection Summary
102: NE 22nd Avenue & NE 164th Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	8	85	10	2	11	90	511	33	28	471	124
Future Volume (veh/h)	91	8	85	10	2	11	90	511	33	28	471	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	97	9	90	11	2	12	96	544	35	30	501	132
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	177	157	59	19	44	661	2812	181	681	2123	556
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.06	1.00	1.00	0.77	0.77	0.77
Sat Flow, veh/h	1390	1777	1576	290	185	438	1781	3389	218	833	2768	725
Grp Volume(v), veh/h	97	9	90	25	0	0	96	285	294	30	320	313
Grp Sat Flow(s),veh/h/ln	1390	1777	1576	914	0	0	1781	1777	1830	833	1777	1716
Q Serve(g_s), s	4.6	0.8	9.3	0.1	0.0	0.0	1.9	0.0	0.0	1.5	8.7	8.8
Cycle Q Clear(g_c), s	14.0	0.8	9.3	9.4	0.0	0.0	1.9	0.0	0.0	1.5	8.7	8.8
Prop In Lane	1.00		1.00	0.44		0.48	1.00		0.12	1.00		0.42
Lane Grp Cap(c), veh/h	162	177	157	122	0	0	661	1474	1518	681	1363	1316
V/C Ratio(X)	0.60	0.05	0.57	0.21	0.00	0.00	0.15	0.19	0.19	0.04	0.24	0.24
Avail Cap(c_a), veh/h	228	261	232	190	0	0	704	1474	1518	681	1363	1316
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	0.00	0.31	0.31	0.31	0.99	0.99	0.99
Uniform Delay (d), s/veh	75.6	69.2	73.0	70.0	0.0	0.0	3.6	0.0	0.0	4.8	5.6	5.6
Incr Delay (d2), s/veh	2.6	0.1	2.4	0.6	0.0	0.0	0.0	0.1	0.1	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.4	3.9	1.0	0.0	0.0	0.6	0.0	0.0	0.3	3.3	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.2	69.3	75.5	70.6	0.0	0.0	3.6	0.1	0.1	4.9	6.0	6.1
LnGrp LOS	E	E	E	E	A	A	A	A	A	A	A	A
Approach Vol, veh/h		196			25			675			663	
Approach Delay, s/veh		76.5			70.6			0.6			6.0	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	10.6	136.4		23.0		147.0		23.0				
Change Period (Y+Rc), s	* 5.7	6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s	* 9	118.0		25.0		133.0		25.0				
Max Q Clear Time (g_c+I1), s	3.9	10.8		11.4		2.0		16.0				
Green Ext Time (p_c), s	0.0	1.5		0.0		1.2		0.4				

Intersection Summary												
HCM 6th Ctrl Delay			13.6									
HCM 6th LOS			B									

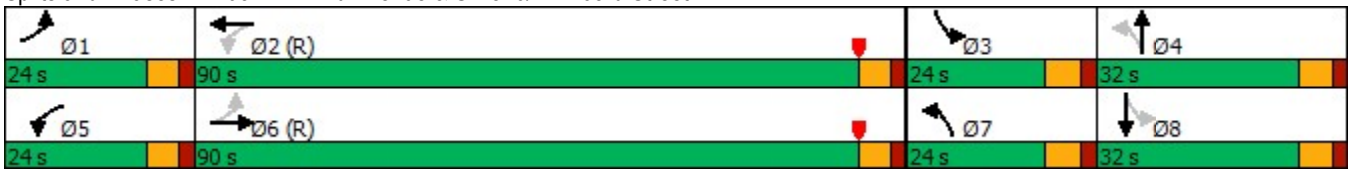
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

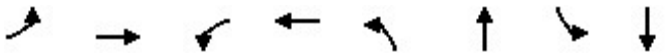
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	138	1260	221	1719	162	345	179	342
Future Volume (vph)	138	1260	221	1719	162	345	179	342
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases	6		2		4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	7.0	5.0	7.0	5.0	7.0	5.0	7.0
Minimum Split (s)	11.0	32.0	11.0	32.0	11.4	30.4	11.4	32.0
Total Split (s)	24.0	90.0	24.0	90.0	24.0	32.0	24.0	32.0
Total Split (%)	14.1%	52.9%	14.1%	52.9%	14.1%	18.8%	14.1%	18.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.4	4.4	4.4	4.4
All-Red Time (s)	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
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.4	6.4	6.4	6.4
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	100.9	87.2	105.4	89.5	41.1	25.2	43.0	26.1
Actuated g/C Ratio	0.59	0.51	0.62	0.53	0.24	0.15	0.25	0.15
v/c Ratio	0.79	0.55	0.85	0.74	0.77	0.94	0.86	0.84
Control Delay	69.9	29.4	50.5	33.8	71.6	94.1	79.8	79.2
Queue Delay	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
Total Delay	69.9	29.4	50.5	34.2	71.6	94.1	79.8	79.5
LOS	E	C	D	C	E	F	E	E
Approach Delay		33.2		35.9		88.3		79.6
Approach LOS		C		D		F		E

Intersection Summary	
Cycle Length: 170	
Actuated Cycle Length: 170	
Offset: 27 (16%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 47.5	Intersection LOS: D
Intersection Capacity Utilization 88.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 103: NE 22nd Avenue & SR 826/NE 163rd Street



Queues
103: NE 22nd Avenue & SR 826/NE 163rd Street



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	147	1428	235	1953	172	489	190	454
v/c Ratio	0.79	0.55	0.85	0.74	0.77	0.94	0.86	0.84
Control Delay	69.9	29.4	50.5	33.8	71.6	94.1	79.8	79.2
Queue Delay	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3
Total Delay	69.9	29.4	50.5	34.2	71.6	94.1	79.8	79.5
Queue Length 50th (ft)	110	402	123	615	151	274	171	257
Queue Length 95th (ft)	189	450	#264	705	#230	#383	#302	#344
Internal Link Dist (ft)		510		391		445		320
Turn Bay Length (ft)	290		265		150		150	
Base Capacity (vph)	233	2587	299	2654	239	530	227	538
Starvation Cap Reductn	0	0	0	241	0	0	0	5
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	0.63	0.55	0.79	0.81	0.72	0.92	0.84	0.85

Intersection Summary

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

HCM 6th Signalized Intersection Summary
103: NE 22nd Avenue & SR 826/NE 163rd Street

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	1260	83	221	1719	117	162	345	115	179	342	85
Future Volume (veh/h)	138	1260	83	221	1719	117	162	345	115	179	342	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	147	1340	88	235	1829	124	172	367	122	190	364	90
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	2566	168	311	2696	182	235	394	129	231	447	109
Arrive On Green	0.05	0.52	0.52	0.16	1.00	1.00	0.09	0.15	0.15	0.03	0.05	0.05
Sat Flow, veh/h	1781	4890	321	1781	4884	330	1781	2617	856	1781	2820	688
Grp Volume(v), veh/h	147	933	495	235	1273	680	172	247	242	190	228	226
Grp Sat Flow(s),veh/h/ln	1781	1702	1807	1781	1702	1810	1781	1777	1696	1781	1777	1731
Q Serve(g_s), s	6.5	30.5	30.5	11.0	0.0	0.0	13.7	23.3	24.0	15.1	21.5	22.0
Cycle Q Clear(g_c), s	6.5	30.5	30.5	11.0	0.0	0.0	13.7	23.3	24.0	15.1	21.5	22.0
Prop In Lane	1.00		0.18	1.00		0.18	1.00		0.50	1.00		0.40
Lane Grp Cap(c), veh/h	251	1786	948	311	1879	999	235	268	255	231	282	274
V/C Ratio(X)	0.59	0.52	0.52	0.76	0.68	0.68	0.73	0.92	0.95	0.82	0.81	0.83
Avail Cap(c_a), veh/h	349	1786	948	360	1879	999	254	268	255	235	282	274
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.98
Uniform Delay (d), s/veh	16.7	26.5	26.5	20.1	0.0	0.0	55.4	71.2	71.5	59.3	78.0	78.2
Incr Delay (d2), s/veh	0.8	1.1	2.1	7.6	2.0	3.7	8.0	35.2	41.5	18.7	15.2	17.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	12.9	13.9	4.5	0.5	1.0	6.8	13.3	13.4	8.5	11.6	11.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.5	27.6	28.5	27.8	2.0	3.7	63.4	106.5	113.0	78.1	93.1	95.8
LnGrp LOS	B	C	C	C	A	A	E	F	F	E	F	F
Approach Vol, veh/h		1575			2188			661			644	
Approach Delay, s/veh		26.9			5.3			97.7			89.6	
Approach LOS		C			A			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.6	99.9	23.5	32.0	19.3	95.2	22.2	33.4
Change Period (Y+Rc), s	6.0	6.0	6.4	6.4	6.0	6.0	6.4	6.4
Max Green Setting (Gmax), s	18.0	84.0	17.6	25.6	18.0	84.0	17.6	25.6
Max Q Clear Time (g_c+I1), s	8.5	2.0	17.1	26.0	13.0	32.5	15.7	24.0
Green Ext Time (p_c), s	0.1	7.1	0.0	0.0	0.3	4.3	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	34.8
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑			↱
Traffic Vol, veh/h	0	1504	2137	70	0	31
Future Vol, veh/h	0	1504	2137	70	0	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1583	2249	74	0	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	1162
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	4
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3
Pot Cap-1 Maneuver	0	-	-	-	0	515
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	515
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

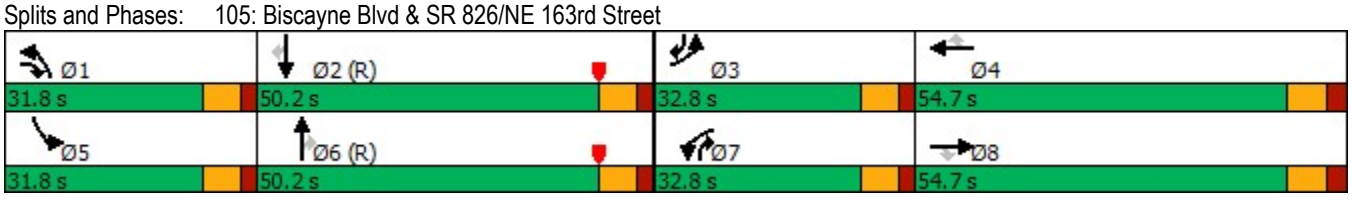
Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.5
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	515
HCM Lane V/C Ratio	-	-	-	0.063
HCM Control Delay (s)	-	-	-	12.5
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.2

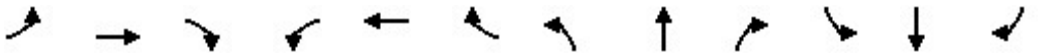
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	322	910	266	472	1232	734	521	1482	582	396	1168	375
Future Volume (vph)	322	910	266	472	1232	734	521	1482	582	396	1168	375
Turn Type	Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	3	8	1	7	4		1	6	7	5	2	3
Permitted Phases			8			4			6			2
Detector Phase	3	8	1	7	4	4	1	6	7	5	2	3
Switch Phase												
Minimum Initial (s)	5.0	7.0	5.0	5.0	7.0	7.0	5.0	7.0	5.0	5.0	7.0	5.0
Minimum Split (s)	11.8	54.7	11.8	11.8	54.7	54.7	11.8	49.2	11.8	11.8	49.2	11.8
Total Split (s)	32.8	54.7	31.8	32.8	54.7	54.7	31.8	50.2	32.8	31.8	50.2	32.8
Total Split (%)	19.4%	32.3%	18.8%	19.4%	32.3%	32.3%	18.8%	29.6%	19.4%	18.8%	29.6%	19.4%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
All-Red Time (s)	2.0	2.9	2.0	2.0	2.9	2.9	2.0	2.4	2.0	2.0	2.4	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	7.7	6.8	6.8	7.7	7.7	6.8	7.2	6.8	6.8	7.2	6.8
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	23.1	47.0	72.9	26.0	49.9	49.9	25.0	43.5	69.9	24.5	43.0	66.5
Actuated g/C Ratio	0.14	0.28	0.43	0.15	0.29	0.29	0.15	0.26	0.41	0.14	0.25	0.39
v/c Ratio	0.79	0.74	0.43	1.03	0.95	1.26	1.18	1.04	0.97	0.92	0.83	0.65
Control Delay	83.6	59.6	24.1	115.7	71.4	158.4	160.5	92.4	67.1	95.0	64.9	35.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.6	59.6	24.1	115.7	71.4	158.4	160.5	92.4	67.1	95.0	64.9	35.1
LOS	F	E	C	F	E	F	F	F	E	F	E	D
Approach Delay		58.4			106.2			100.4			65.3	
Approach LOS		E			F			F			E	

Intersection Summary	
Cycle Length: 169.5	
Actuated Cycle Length: 169.5	
Offset: 77 (45%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.26	
Intersection Signal Delay: 86.6	Intersection LOS: F
Intersection Capacity Utilization 108.2%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 105: Biscayne Blvd & SR 826/NE 163rd Street



Queues
105: Biscayne Blvd & SR 826/NE 163rd Street



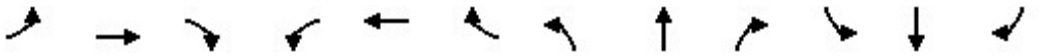
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	370	1046	306	543	1416	844	599	1703	669	455	1343	431
v/c Ratio	0.79	0.74	0.43	1.03	0.95	1.26	1.18	1.04	0.97	0.92	0.83	0.65
Control Delay	83.6	59.6	24.1	115.7	71.4	158.4	160.5	92.4	67.1	95.0	64.9	35.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.6	59.6	24.1	115.7	71.4	158.4	160.5	92.4	67.1	95.0	64.9	35.1
Queue Length 50th (ft)	206	390	166	~331	573	~931	~409	~595	619	259	413	299
Queue Length 95th (ft)	254	427	235	#429	#652	#1133	#509	#629	#898	#336	439	388
Internal Link Dist (ft)		400			949			1251			874	
Turn Bay Length (ft)	250		240	360		480	420		420	430		405
Base Capacity (vph)	526	1410	714	526	1498	671	506	1642	689	506	1625	686
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.74	0.43	1.03	0.95	1.26	1.18	1.04	0.97	0.90	0.83	0.63

Intersection Summary

~ 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.

HCM 6th Signalized Intersection Summary
105: Biscayne Blvd & SR 826/NE 163rd Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	322	910	266	472	1232	734	521	1482	582	396	1168	375
Future Volume (veh/h)	322	910	266	472	1232	734	521	1482	582	396	1168	375
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	370	1046	306	543	1416	0	599	1703	669	455	1343	431
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	414	1242	617	529	1412		508	1887	699	494	1860	641
Arrive On Green	0.24	0.49	0.49	0.15	0.28	0.00	0.15	0.29	0.29	0.14	0.29	0.29
Sat Flow, veh/h	3456	5106	1577	3456	5106	1585	3456	6434	1558	3456	6434	1562
Grp Volume(v), veh/h	370	1046	306	543	1416	0	599	1703	669	455	1343	431
Grp Sat Flow(s),veh/h/ln	1728	1702	1577	1728	1702	1585	1728	1609	1558	1728	1609	1562
Q Serve(g_s), s	17.6	30.3	22.3	26.0	47.0	0.0	25.0	43.2	49.9	22.1	31.9	38.3
Cycle Q Clear(g_c), s	17.6	30.3	22.3	26.0	47.0	0.0	25.0	43.2	49.9	22.1	31.9	38.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	414	1242	617	529	1412		508	1887	699	494	1860	641
V/C Ratio(X)	0.89	0.84	0.50	1.03	1.00		1.18	0.90	0.96	0.92	0.72	0.67
Avail Cap(c_a), veh/h	529	1412	669	529	1412		508	1887	699	508	1860	641
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.6	40.8	26.1	72.0	61.5	0.0	72.5	57.7	45.6	71.9	54.3	41.0
Incr Delay (d2), s/veh	14.9	4.1	0.5	46.3	24.7	0.0	99.3	7.5	24.9	22.1	2.5	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	11.4	7.0	15.0	23.6	0.0	18.1	18.6	32.0	11.4	13.3	15.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.5	44.9	26.5	118.3	86.2	0.0	171.8	65.3	70.5	94.0	56.8	46.6
LnGrp LOS	E	D	C	F	F		F	E	E	F	E	D
Approach Vol, veh/h		1722			1959			2971			2229	
Approach Delay, s/veh		48.9			95.1			87.9			62.4	
Approach LOS		D			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.8	56.3	27.2	54.7	31.1	57.1	32.8	49.1
Change Period (Y+Rc), s	6.8	* 7.2	6.8	* 7.7	6.8	* 7.2	6.8	* 7.7
Max Green Setting (Gmax), s	25.0	* 43	26.0	* 47	25.0	* 43	26.0	* 47
Max Q Clear Time (g_c+I1), s	27.0	40.3	19.6	49.0	24.1	51.9	28.0	32.3
Green Ext Time (p_c), s	0.0	1.5	0.7	0.0	0.2	0.0	0.0	6.3

Intersection Summary	
HCM 6th Ctrl Delay	75.5
HCM 6th LOS	E

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

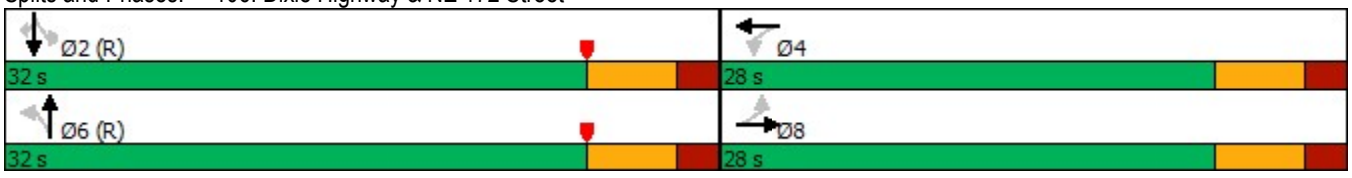
Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Timings
106: Dixie Highway & NE 172 Street

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	49	251	20	571	11	304	51	368	108
Future Volume (vph)	49	251	20	571	11	304	51	368	108
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		8		4		6		2	
Permitted Phases	8		4		6		2		2
Detector Phase	8	8	4	4	6	6	2	2	2
Switch Phase									
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0	32.0
Total Split (s)	28.0	28.0	28.0	28.0	32.0	32.0	32.0	32.0	32.0
Total Split (%)	46.7%	46.7%	46.7%	46.7%	53.3%	53.3%	53.3%	53.3%	53.3%
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									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max	C-Max	C-Max
Act Effct Green (s)		18.3		18.3	29.7	29.7	29.7	29.7	29.7
Actuated g/C Ratio		0.30		0.30	0.50	0.50	0.50	0.50	0.50
v/c Ratio		0.55		0.72	0.03	0.59	0.16	0.42	0.14
Control Delay		13.0		21.7	9.7	13.6	11.5	12.4	3.0
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		13.0		21.8	9.7	13.6	11.5	12.4	3.0
LOS		B		C	A	B	B	B	A
Approach Delay		13.0		21.8		13.5		10.4	
Approach LOS		B		C		B		B	

Intersection Summary	
Cycle Length: 60	
Actuated Cycle Length: 60	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 60	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 15.2	Intersection LOS: B
Intersection Capacity Utilization 86.5%	ICU Level of Service E
Analysis Period (min) 15	

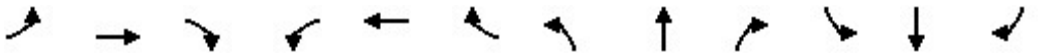
Splits and Phases: 106: Dixie Highway & NE 172 Street



Lane Group	EBT	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	489	718	12	534	54	391	115
v/c Ratio	0.55	0.72	0.03	0.59	0.16	0.42	0.14
Control Delay	13.0	21.7	9.7	13.6	11.5	12.4	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.0	21.8	9.7	13.6	11.5	12.4	3.0
Queue Length 50th (ft)	46	112	2	113	10	86	0
Queue Length 95th (ft)	79	152	10	224	32	164	23
Internal Link Dist (ft)	194	230		175		177	
Turn Bay Length (ft)			135		100		100
Base Capacity (vph)	1029	1201	450	903	331	923	842
Starvation Cap Reductn	0	23	0	0	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	0.48	0.61	0.03	0.59	0.16	0.42	0.14

Intersection Summary

HCM 6th Signalized Intersection Summary
106: Dixie Highway & NE 172 Street



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	49	251	160	20	571	85	11	304	198	51	368	108
Future Volume (veh/h)	49	251	160	20	571	85	11	304	198	51	368	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	52	267	0	21	607	90	12	323	211	54	391	115
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	595		76	794	116	487	564	368	406	998	846
Arrive On Green	0.27	0.27	0.00	0.27	0.27	0.27	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	124	2318	0	46	2981	435	893	1056	690	870	1870	1585
Grp Volume(v), veh/h	143	176	0	382	0	336	12	0	534	54	391	115
Grp Sat Flow(s),veh/h/ln	740	1617	0	1839	0	1624	893	0	1746	870	1870	1585
Q Serve(g_s), s	1.5	5.4	0.0	2.9	0.0	11.5	0.5	0.0	12.3	2.7	7.4	2.2
Cycle Q Clear(g_c), s	12.9	5.4	0.0	11.4	0.0	11.5	7.9	0.0	12.3	15.0	7.4	2.2
Prop In Lane	0.36		0.00	0.05		0.27	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	279	431		553	0	433	487	0	932	406	998	846
V/C Ratio(X)	0.51	0.41		0.69	0.00	0.78	0.02	0.00	0.57	0.13	0.39	0.14
Avail Cap(c_a), veh/h	400	593		734	0	595	487	0	932	406	998	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.82	0.00	0.82	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	18.1	0.0	20.3	0.0	20.4	10.6	0.0	9.4	14.4	8.2	7.0
Incr Delay (d2), s/veh	1.1	0.5	0.0	1.2	0.0	3.1	0.1	0.0	2.6	0.7	1.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.9	0.0	4.7	0.0	4.3	0.1	0.0	4.4	0.6	2.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	18.6	0.0	21.5	0.0	23.4	10.7	0.0	12.0	15.1	9.4	7.4
LnGrp LOS	B	B		C	A	C	B	A	B	B	A	A
Approach Vol, veh/h		319			718			546			560	
Approach Delay, s/veh		19.0			22.4			11.9			9.5	
Approach LOS		B			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		38.0		22.0		38.0		22.0				
Change Period (Y+Rc), s		6.0		6.0		6.0		6.0				
Max Green Setting (Gmax), s		26.0		22.0		26.0		22.0				
Max Q Clear Time (g_c+I1), s		17.0		13.5		14.3		14.9				
Green Ext Time (p_c), s		0.8		2.5		1.2		0.9				

Intersection Summary		
HCM 6th Ctrl Delay	15.9	
HCM 6th LOS	B	

Notes

User approved pedestrian interval to be less than phase max green.

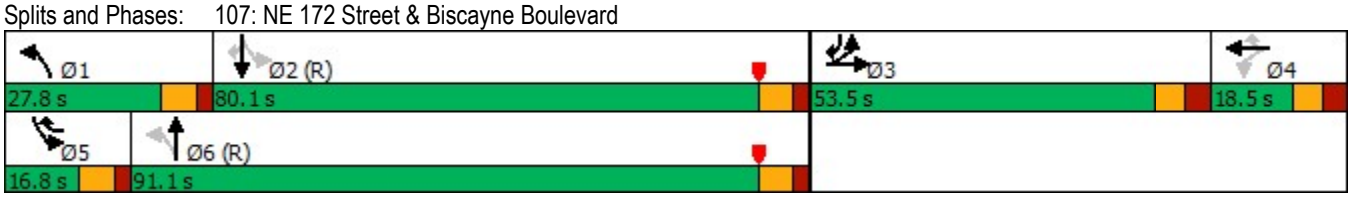
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.

Timings
107: NE 172 Street & Biscayne Boulevard

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	301	18	27	31	47	249	1772	70	2143	376
Future Volume (vph)	301	18	27	31	47	249	1772	70	2143	376
Turn Type	Split	NA	Perm	NA	pm+ov	pm+pt	NA	pm+pt	NA	pm+ov
Protected Phases	3	3		4	5	1	6	5	2	3
Permitted Phases			4		4	6		2		2
Detector Phase	3	3	4	4	5	1	6	5	2	3
Switch Phase										
Minimum Initial (s)	5.0	5.0	7.0	7.0	5.0	5.0	7.0	5.0	7.0	5.0
Minimum Split (s)	25.5	25.5	18.5	18.5	11.8	11.8	30.1	11.8	30.1	25.5
Total Split (s)	53.5	53.5	18.5	18.5	16.8	27.8	91.1	16.8	80.1	53.5
Total Split (%)	29.7%	29.7%	10.3%	10.3%	9.3%	15.5%	50.6%	9.3%	44.5%	29.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.8	4.8	4.8	4.8	4.8	4.0
All-Red Time (s)	3.5	3.5	3.5	3.5	2.0	2.0	2.3	2.0	2.3	3.5
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)	7.5	7.5		7.5	6.8	6.8	7.1	6.8	7.1	7.5
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max	None
Act Effct Green (s)	30.4	30.4		12.5	20.5	115.2	100.7	88.4	80.8	110.8
Actuated g/C Ratio	0.17	0.17		0.07	0.11	0.64	0.56	0.49	0.45	0.62
v/c Ratio	0.53	0.45		0.62	0.17	0.82	0.52	0.48	0.76	0.36
Control Delay	70.6	14.2		106.7	1.3	73.6	26.6	28.8	44.7	4.2
Queue Delay	0.5	0.4		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.1	14.6		106.7	1.3	73.6	26.6	28.8	44.7	4.2
LOS	E	B		F	A	E	C	C	D	A
Approach Delay		50.0		59.9			32.3		38.4	
Approach LOS		D		E			C		D	

Intersection Summary	
Cycle Length: 179.9	
Actuated Cycle Length: 179.9	
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 37.5	Intersection LOS: D
Intersection Capacity Utilization 86.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 107: NE 172 Street & Biscayne Boulevard

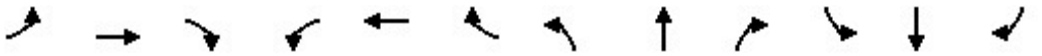


Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	307	182	60	48	254	1856	71	2187	384
v/c Ratio	0.53	0.45	0.62	0.17	0.82	0.52	0.48	0.76	0.36
Control Delay	70.6	14.2	106.7	1.3	73.6	26.6	28.8	44.7	4.2
Queue Delay	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.1	14.6	106.7	1.3	73.6	26.6	28.8	44.7	4.2
Queue Length 50th (ft)	174	18	70	0	237	383	30	640	43
Queue Length 95th (ft)	209	89	125	0	#472	511	65	720	82
Internal Link Dist (ft)		230	539			817		820	
Turn Bay Length (ft)					415		200		180
Base Capacity (vph)	877	526	103	300	310	3573	173	2878	1185
Starvation Cap Reductn	250	98	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	0.49	0.43	0.58	0.16	0.82	0.52	0.41	0.76	0.32

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
107: NE 172 Street & Biscayne Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	301	18	161	27	31	47	249	1772	47	70	2143	376
Future Volume (vph)	301	18	161	27	31	47	249	1772	47	70	2143	376
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	7.5			7.5	6.8	6.8	7.1		6.8	7.1	7.5
Lane Util. Factor	0.97	1.00			1.00	1.00	1.00	0.86		1.00	0.86	1.00
Frpb, ped/bikes	1.00	0.98			1.00	0.99	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00			0.99	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.86			1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00			0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1573			1803	1569	1770	6379		1770	6408	1565
Flt Permitted	0.95	1.00			0.76	1.00	0.05	1.00		0.09	1.00	1.00
Satd. Flow (perm)	3433	1573			1407	1569	85	6379		168	6408	1565
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	307	18	164	28	32	48	254	1808	48	71	2187	384
RTOR Reduction (vph)	0	136	0	0	0	43	0	2	0	0	0	109
Lane Group Flow (vph)	307	46	0	0	60	5	254	1854	0	71	2187	275
Confl. Peds. (#/hr)	1		6	6		1	1					1
Confl. Bikes (#/hr)			3						2			5
Turn Type	Split	NA		Perm	NA	pm+ov	pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3			4	5	1	6		5	2	3
Permitted Phases				4		4	6			2		2
Actuated Green, G (s)	30.4	30.4			12.5	19.8	114.9	100.8		88.1	80.8	111.2
Effective Green, g (s)	30.4	30.4			12.5	19.8	114.9	100.8		88.1	80.8	111.2
Actuated g/C Ratio	0.17	0.17			0.07	0.11	0.64	0.56		0.49	0.45	0.62
Clearance Time (s)	7.5	7.5			7.5	6.8	6.8	7.1		6.8	7.1	7.5
Vehicle Extension (s)	5.0	5.0			2.5	2.0	2.0	1.0		2.0	1.0	5.0
Lane Grp Cap (vph)	580	265			97	172	309	3574		147	2878	967
v/s Ratio Prot	c0.09	0.03				0.00	c0.12	0.29		0.02	0.34	0.05
v/s Ratio Perm					c0.04	0.00	c0.40			0.22		0.13
v/c Ratio	0.53	0.17			0.62	0.03	0.82	0.52		0.48	0.76	0.28
Uniform Delay, d1	68.2	64.0			81.4	71.5	58.4	24.5		24.6	41.4	15.9
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.7	0.7			9.6	0.0	15.3	0.5		0.9	1.9	0.3
Delay (s)	69.9	64.6			91.0	71.5	73.7	25.1		25.5	43.4	16.3
Level of Service	E	E			F	E	E	C		C	D	B
Approach Delay (s)		67.9			82.3			30.9			39.0	
Approach LOS		E			F			C			D	

Intersection Summary			
HCM 2000 Control Delay	39.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	179.9	Sum of lost time (s)	28.9
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Edition methodology expects strict NEMA phasing.

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	48	21	30	40	8	64
Future Vol, veh/h	48	21	30	40	8	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	52	23	33	43	9	70

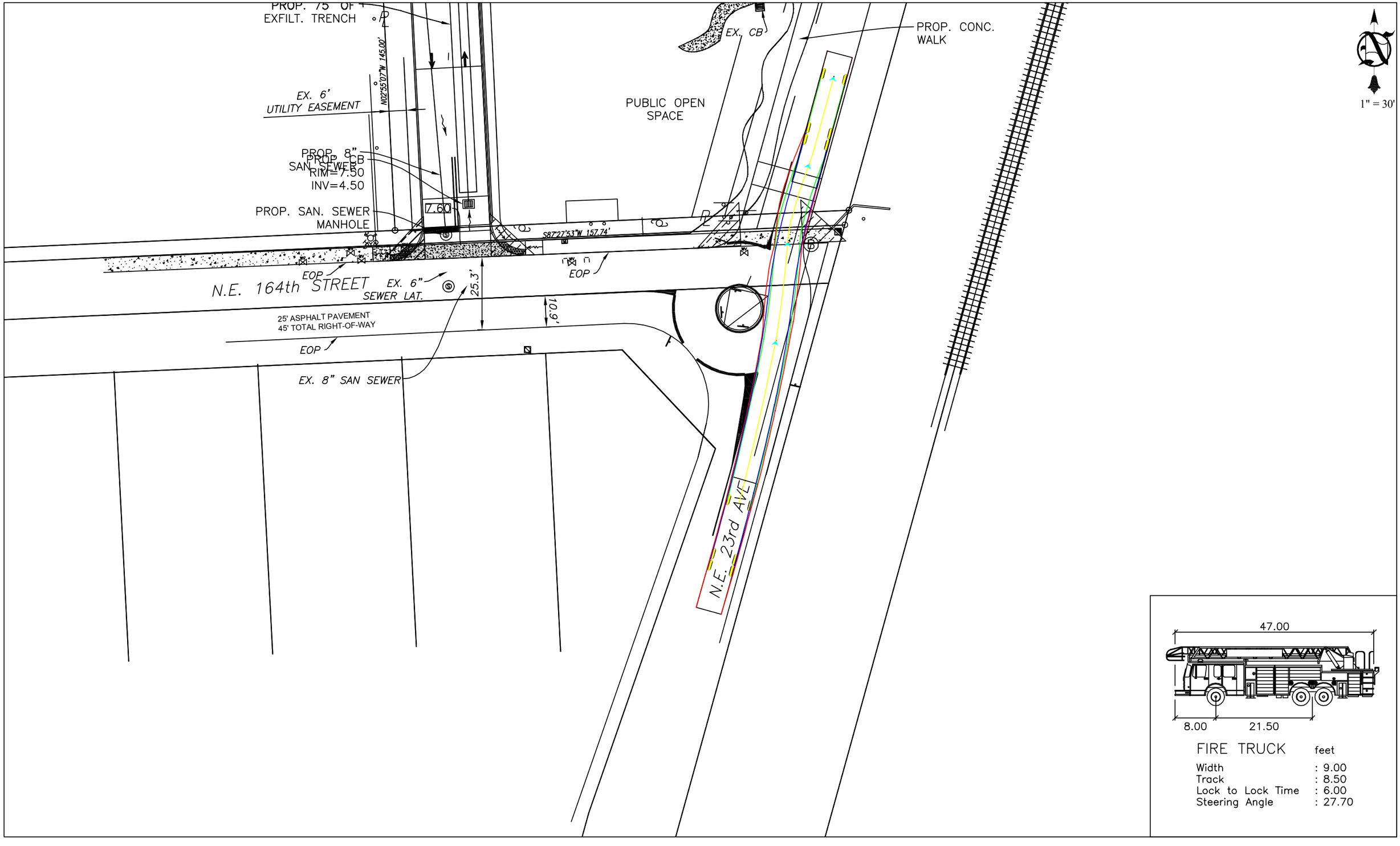
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	76	0	-	0	182	55
Stage 1	-	-	-	-	55	-
Stage 2	-	-	-	-	127	-
Critical Hdwy	4.12	-	-	-	5	4
Critical Hdwy Stg 1	-	-	-	-	5	-
Critical Hdwy Stg 2	-	-	-	-	5	-
Follow-up Hdwy	2.218	-	-	-	3	3
Pot Cap-1 Maneuver	1523	-	-	-	1004	1155
Stage 1	-	-	-	-	1137	-
Stage 2	-	-	-	-	1060	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1523	-	-	-	969	1155
Mov Cap-2 Maneuver	-	-	-	-	969	-
Stage 1	-	-	-	-	1097	-
Stage 2	-	-	-	-	1060	-

Approach	EB	WB	SB
HCM Control Delay, s	5.2	0	8.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1523	-	-	-	1131
HCM Lane V/C Ratio	0.034	-	-	-	0.069
HCM Control Delay (s)	7.4	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2

APPENDIX G

AutoTURN Analyses – Fire Truck



2261 NE 164 Street
August 10, 2022

Vehicle Maneuvering Study
Fire Truck

PROP. 75' OF
EXFILT. TRENCH

EX. 6'
UTILITY EASEMENT

N02°55'07"W 145.00'

PROP. 8"
SAN. SEWER

PROP CB
RIM=7.50
INV=4.50

PROP. SAN. SEWER
MANHOLE

7.60

EX. CB

PROP. CONC.
WALK

PUBLIC OPEN
SPACE

S87°27'53"W 157.74'

EOP

N.E. 164th STREET

EX. 6"
SEWER LAT.

EOP

25' ASPHALT PAVEMENT
45' TOTAL RIGHT-OF-WAY

EOP

EX. 8" SAN SEWER

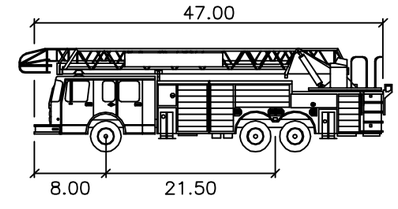
29.3'

10.9'

EOP

N.E. 23rd AVE

1" = 30'



FIRE TRUCK	feet
Width	: 9.00
Track	: 8.50
Lock to Lock Time	: 6.00
Steering Angle	: 27.70

2261 NE 164 Street
August 10, 2022

Vehicle Maneuvering Study
Fire Truck

PROP. 75' OF
EXFILT. TRENCH

EX. 6'
UTILITY EASEMENT

N02°55'07"W 145.00'

PROP. 8"
SAN. SEWER

PROP CB
RIM=7.50
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S87°27'53"W 157.74'

EOP

EOP

N.E. 164th STREET

EX. 6"
SEWER LAT.

25.3'

6.0'

25' ASPHALT PAVEMENT
45' TOTAL RIGHT-OF-WAY

EOP

EX. 8" SAN SEWER

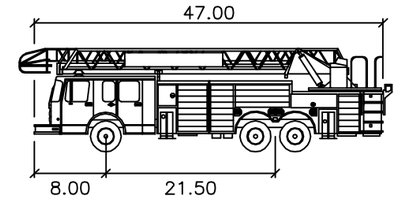
EX. CB

PROP. CONC.
WALK

PUBLIC OPEN
SPACE

N.E. 23rd AVE

1" = 30'



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2261 NE 164 Street
August 10, 2022

Vehicle Maneuvering Study
Fire Truck