



# 2916 -2980 N Andrews Avenue

Wilton Manors, Florida 33311

prepared for:

**Gustavo J. Carbonell, P.A**

traffic study



3/19/2024

Gustavo J. Carbonell  
Gustavo J. Carbonell Architects / Planner P.A.  
1457 NE 4<sup>th</sup> Avenue  
Fort Lauderdale, Florida 33304

March 19, 2024

**Re: 2916 to 2980 N Andrews Avenue - Traffic Study**

Dear Gus:

Traf Tech Engineering, Inc. has prepared this traffic study in connection with a proposed three-stories residential units planned to be located at 2916 - 2980 N Andrews Avenue in the City of Wilton Manors, Broward County, Florida. The site contains several small retail tenants totaling less than 5,000 square feet, including a small restaurant (the restaurant is currently vacant). A copy of the proposed site plan is contained in Attachment A.

This traffic document addresses the following topics:

- Trip Generation and Trip Distribution
- Driveway Volumes
- Level of Service (Links and Intersections)
- Entry Gates and Queuing Analysis
- Multimodal

**Trip Generation Comparison and Trip Distribution**

A trip generation comparison analysis was performed for the site using the trip generation equations published in the Institute of Transportation Engineer's (ITE) *Trip Generation Manual (11<sup>th</sup> Edition)*. The trip generation analyses were undertaken for daily, AM peak hour, and PM peak hour conditions. According to ITE's *Trip Generation Manual (11<sup>th</sup> Edition)*, the trip generation equations used for the analyses are presented below:

Multifamily Low-Rise (ITE Land Use 220) – Proposed Use

*Daily Trips*

$$T = 6.74 (X)$$

Where T = average daily vehicle trip ends and X = number of units

*AM Peak Hour*

$T = 0.40 (X)$  with 24% inbound and 76% outbound

Where T = AM peak hour trip ends and X = number of units

*PM Peak Hour*

$T = 0.51 (X)$  with 63% inbound and 37% outbound

Where T = PM peak hour trip ends and X = number of units

Retail/Office/Restaurant (ITE Land Use 822) – Proposed and Existing Use

*Daily Trips*

$T = 54.45 (X)$

Where T = average daily vehicle trip ends and X = 1,000 sf

*AM Peak Hour*

$T = 2.36 (X)$  with 60% inbound and 40% outbound

Where T = AM peak hour trip ends and X = 1,000 sf

*PM Peak Hour*

$T = 6.59 (X)$  with 50% inbound and 50% outbound

Where T = PM peak hour trip ends and X = 1,000 sf

Using the above-listed trip generation equations from the ITE document, a trip generation comparison analysis was undertaken for the existing and proposed uses at the site. The results of this effort are documented in Tables 1 and 2 below. As shown at the bottom of the tables, the 54-unit residential development (including a 1,900 square feet of commercial/office/restaurant space) is projected to generate approximately 222 new daily trips, approximately 18 new AM peak hour trips (+2 inbound and +16 outbound) and approximately 14 new trips during the typical afternoon peak hour (+11 inbound and +3 outbound), when compared against the existing uses at the site. Trip generation details are included in Attachment B.

TABLE 1 Trip Generation Summary (Existing Uses Occupied during Traffic Counts) 2916 - 2980 N Andrews Avenue								
Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Retail/Office (LUC 822)	3,255 sf	177	8	5	3	21	11	10
<b>Gross/Driveway Trips</b>		<b>177</b>	<b>8</b>	<b>5</b>	<b>3</b>	<b>21</b>	<b>11</b>	<b>10</b>

Source: ITE Trip Generation Manual (11th Edition)

TABLE 2 Trip Generation Summary (Proposed Uses) 2916 - 2980 N Andrews Avenue								
Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Residential Low-Rise (LUC 220)	54 units	364	22	5	17	28	18	10
Retail/Office/Restaurant (LUC 822)	1,900 sf	103	4	2	2	13	7	6
<b>Gross Trips</b>		<b>467</b>	<b>26</b>	<b>7</b>	<b>19</b>	<b>41</b>	<b>25</b>	<b>16</b>
Internal Trips (refer to NCHRP rpt 684)		-68	0	0	0	-6	-3	-3
<b>Driveway Trips</b>		<b>399</b>	<b>26</b>	<b>7</b>	<b>19</b>	<b>35</b>	<b>22</b>	<b>13</b>

Source: ITE Trip Generation Manual (11th Edition)

Difference (External / New Trips)	Daily Trips	AM Peak Hour			PM Peak Hour		
		Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Proposed - Existing	222	18	2	16	14	11	3

**ITE Land Use Code 220 - Multifamily Low-Rise)**

Daily Trips: T = 6.74 (X), X = number of units  
 AM Peak: T = 0.40 (X) (24% inbound and 76% outbound), X = number of units  
 PM Peak: T = 0.51 (X) (63% inbound and 37% outbound), X = number of units

**ITE Land Use Code 822 - Retail (<40k)**

Daily Trips: T = 54.45 (X), X = 1,000 sf  
 AM Peak: T = 2.36 (X) (60% inbound and 40% outbound), X = 1,000 sf  
 PM Peak: T = 6.59 (X) (50% inbound and 50% outbound), X = 1,000 sf

The trip distribution and traffic assignment for the project's peak trips was based on examination of the surrounding roadway network characteristics, review of current traffic volumes, and nearby land uses. The trip distribution assumed for the proposed residential development is summarized below.

- 65% to and from the north via N Andrews Avenue
- 35% to and from the south via N Andrews Avenue

**Roadway Segments Level of Service and Traffic Impacts**

The current daily and PM peak hour traffic conditions along Oakland Park Boulevard (I-95 to Federal Highway), NE 26<sup>th</sup> Street (Dixie Highway to Federal Highway), Andrews Avenue (north and south of Oakland Park Boulevard), Wilton Drive (Sunrise Boulevard to Dixie Highway) and Dixie Highway, north of Oakland Park Boulevard were assessed. The current level of service of these roadway segments is documented in Tables 3 and 4. As indicated in the tables, capacity deficiencies are currently present on Oakland Park Boulevard (I-95 to Andrews Avenue), Andrews Avenue (Oakland Park Boulevard to Prospect Road) and along Wilton Drive.

Tables 5 and 6 document the projected traffic impact created by 2916 to 2980 N Andrews Avenue on the surrounding street system. As illustrated in Tables 5 and 6, The 2916 to 2980 N Andrews Avenue is projected to have a de-minimus (less than one percent of the roadway link's capacity) traffic impact to the surrounding street system.

### **Intersections and Driveway Level of Service**

A total of Five intersections and the project driveways were evaluated. Intersection turning movement counts were recorded at the following intersections:

- Andrews Avenue & Oakland Park Boulevard
- Powerline Road & Oakland Park Boulevard
- Powerline Road & NW 29 Street
- Andrews Avenue & NE 26th Street
- Oakland Park Boulevard & NE 6 Avenue

The above traffic counts were recorded on Tuesday, August 16 ,2022 and Wednesday, September 14, 2022. The traffic counts were collected during the peak season based on FDOT peak season adjustment factors. The traffic counts are included in Attachment C. The signal timing plans for the signalized intersections were obtained from Broward County Traffic Engineering Division and are also included in Attachment C.

For the future conditions analyses, background and total traffic volumes were developed for the anticipated buildout year of 2026. The background traffic includes peak season adjustments and traffic growth based on historical traffic data and growth from the FSUTMS - SERPM model (refer to Attachment D). As indicated in the growth analysis presented in Attachment D, the most conservative growth rate is 1.2%. The future traffic volumes are presented in tabular format in Attachment E.

To determine the impacts created to the study intersections and the project driveways, capacity/level of service analyses were undertaken using the SYNCHRO software. The results of the capacity/level of service analyses are presented in Table 7. As summarized in Table 7, the project's outbound driveway (stop controlled) is projected to operate at level of service "B". The traffic impacts created by this project to the study intersections is de-minimus (less than 5 seconds of additional delay). However, it was requested to review the signal timings to determine if any signal optimization can be performed to

improve LOS/Queue results for the following intersections during the A.M. and P.M. peak hours:

- Andrews Avenue and Oakland Park Boulevard
- Powerline Road and Oakland Park Boulevard
- Oakland Park Boulevard and NE 6th Avenue

The results of the SYNCHRO analyses are contained in Attachment F.

In addition, queues for the southbound left-turn movement at the inbound driveway on Andrews Avenue indicate that the maximum expected queue is 2 feet (PM Peak hour).

### **Entry Gates and Queuing Analysis**

As shown in the site plan included in Attachment A, the access driveways do not have gates to control access to the proposed development. Therefore, queuing analyses were not conducted.

### **Transportation Control Measures**

Travel Control Measures (TCM) establish policies and mechanisms to reduce automobile trips to and from designated facilities and encourage people to use public transportation, use bicycles and walk, use carpool, and find alternatives to the typical workday hours. TCM plans usually use several approaches to address all modes of transportation likely to be used to provide access to a facility such as single occupant driving, carpooling, transit, bicycling and walking. The goal of TCM plans is to increase the use of alternative modes to single occupant driving, i.e., to reduce the number of automobile trips to and from the facility and consequently, minimizing automobile traffic impacts on the street system.

Successful TCM plans not only address all modes of transportation, but also use policies such as inducements for alternative modes, physical enhancements (bike lockers, preferential parking for carpools) and disincentives for automobile use.

Potential measures for each mode are addressed below.

#### Pedestrian Access

Walking not only reduces automobile trips and their contribution to congestion and emissions, but it also provides health benefits to the employees who use this

mode of transportation. It is, however, the mode that is least likely to be used for several reasons. It is unlikely that employees of the retail use will reside within a reasonable walking distance (within  $\frac{1}{4}$  -  $\frac{1}{2}$  mile) of the subject facility. However, numerous professional offices, medical offices, retail, restaurants, and the Somerset Academy Village are in proximity to the 2916 – 2980 N Andrews Avenue project site and therefore, some future customers of site's retail use are expected to be walking trips. Sidewalks exist on both sides of Andrews Avenue and both sides of Oakland Park Boulevard.

### Bicycling

The site of the proposed development offers the potential of using commercial employee-owned bicycles. As shown in the site plan, bike areas are designated for bike racks.

### Mass Transit

There are transit options for the proposed development. Transit includes route 60 traveling north and south along Andrews Avenue and route 72 traveling east and west along Oakland Park. Employers of the future retail use can provide a significant inducement to employees to use public transportation (Broward County Transit, BCT) by having information on the buses serving the area near proposed project site.

### Carpooling

Carpooling is historically the least effective alternative transportation mode, even when implemented on a regional basis. Given the relatively small employee base of retail use within the project, it is unlikely that carpooling will provide a significant amount of trip reduction. However, preferential parking could be made available to employees that carpool.

### **Multimodal**

As shown in the site plan, bicycle racks are provided within the site. Additionally, a bus stop for Broward County Transit (BCT) route 60 is located along Andrews Avenue, approximately 150 feet of the project site.

The two nearest roadways (Oakland Park Boulevard and Andrews Avenue) to the project site do not provide bicycle lanes. The 2916 – 2980 N Andrews Avenue project is not proposing bicycle improvements within the project's study area. However, if the City of Wilton Manors has anticipated bicycle improvements within the study area, the development team is receptive to discussing any possible contributions to such project.

Sidewalks are provided on both sides of Andrews Avenue within the frontage of the project site. Safe pedestrian features (ramps, pedestrian signals with push buttons) are provided at the signalized intersection of Oakland Park Boulevard and Andrews Avenue. Along Oakland Park Boulevard, BCt Route 72 travels in the eastbound and westbound directions. BCt Route 60 travels north and south along Andrews Avenue and as stated previously, a bus stop is provided on the west side of Andrews Avenue, approximately 150 feet away from the site.

**Parking Requirements vs Parking Provided**

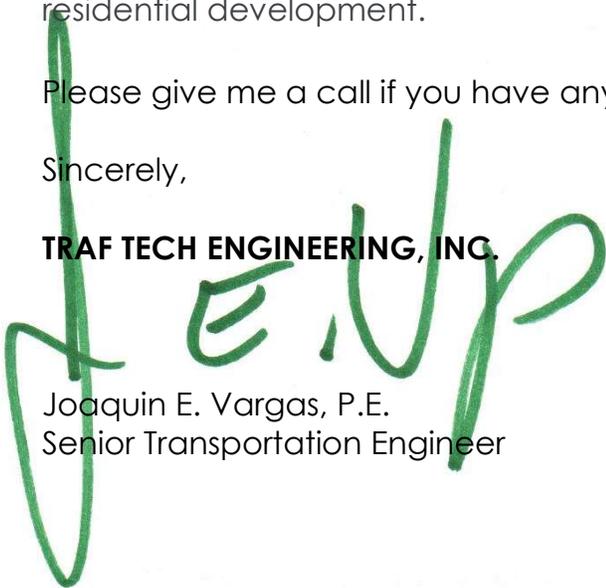
Per City of Wilton Manors Land Development Regulations, the 54 residential units require 1.5 parking spaces per unit, or 81 parking stalls. The 1,900 square feet of commercial space (restaurant/retail/commercial uses) requires 3.0 parking space for every 1,000 square feet, or 5.7 (rounded to 6) parking spaces. Additionally, three (3) handicap parking stalls are required (one for the commercial use and two for the residential use). Therefore, the total number of parking spaces required for the 2916-2980 N Andrews Avenue project is 90 parking spaces (81 + 6 + 3).

As shown in the site plan in Attachment A, 72 parking spaces are provided (a shortfall of 18 parking stalls, or 20% less parking than required by code). A separate parking needs memorandum was prepared by Traf Tech Engineering, Inc, dated March 19, 2024, demonstrating that the proposed 72 parking spaces are sufficient to accommodate the peak parking demands of the subject residential development.

Please give me a call if you have any questions.

Sincerely,

**TRAF TECH ENGINEERING, INC.**



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

TABLE 3 2916 - 2980 N Andrews Avenue Existing Traffic Conditions (Daily Volumes)							
Roadway	From	To	Number of Lanes	Roadway Capacity	Current Daily Volume	Level of Service	
						Adopted	Current
Oakland Park Blvd	I-95	Andrews Ave	6	50,000	65,500	D	F
	Andrews Ave	Dixie Highway	6	50,000	41,500	D	D
Andrews Avenue	Sunrise Blvd	Oakland Park Bl	4	29,160	18,300	D	D
	Oakland Park Bl	Prospect Rd	4	29,160	29,000	D	D

Source: Broward County Metropolitan Planning Organization

TABLE 4 2916 - 2980 N Andrews Avenue Existing Traffic Conditions (PM Peak Hour Volumes)							
Roadway	From	To	Number of Lanes	Roadway Capacity	Current Peak Hour Volume	Level of Service	
						Adopted	Current
Oakland Park Blvd	I-95	Andrews Ave	6	4,500	6,223	D	F
	Andrews Ave	Dixie Highway	6	4,500	3,943	D	D
Andrews Avenue	Sunrise Blvd	Oakland Park Bl	4	2,628	1,739	D	D
	Oakland Park Bl	Prospect Rd	4	2,628	2,755	D	F

Source: Broward County Metropolitan Planning Organization

TABLE 5 2916 - 2980 N Andrews Avenue Project Impacts (Daily Volumes)								
Roadway	From	To	Number of Lanes	Roadway Capacity	Project Traffic = 222		Project Impacts	
					Percent	Trips	% of Cap.	Significant
Oakland Park Blvd	I-95	Andrews Ave	6	50,000	20%	44	0.1%	No
	Andrews Ave	Dixie Highway	6	50,000	10%	22	0.0%	No
Andrews Avenue	Sunrise Blvd	Oakland Park Bl	4	29,160	15%	33	0.1%	No
	Oakland Park Bl	Prospect Rd	4	29,160	15%	33	0.1%	No

Source: Broward County Metropolitan Planning Organization

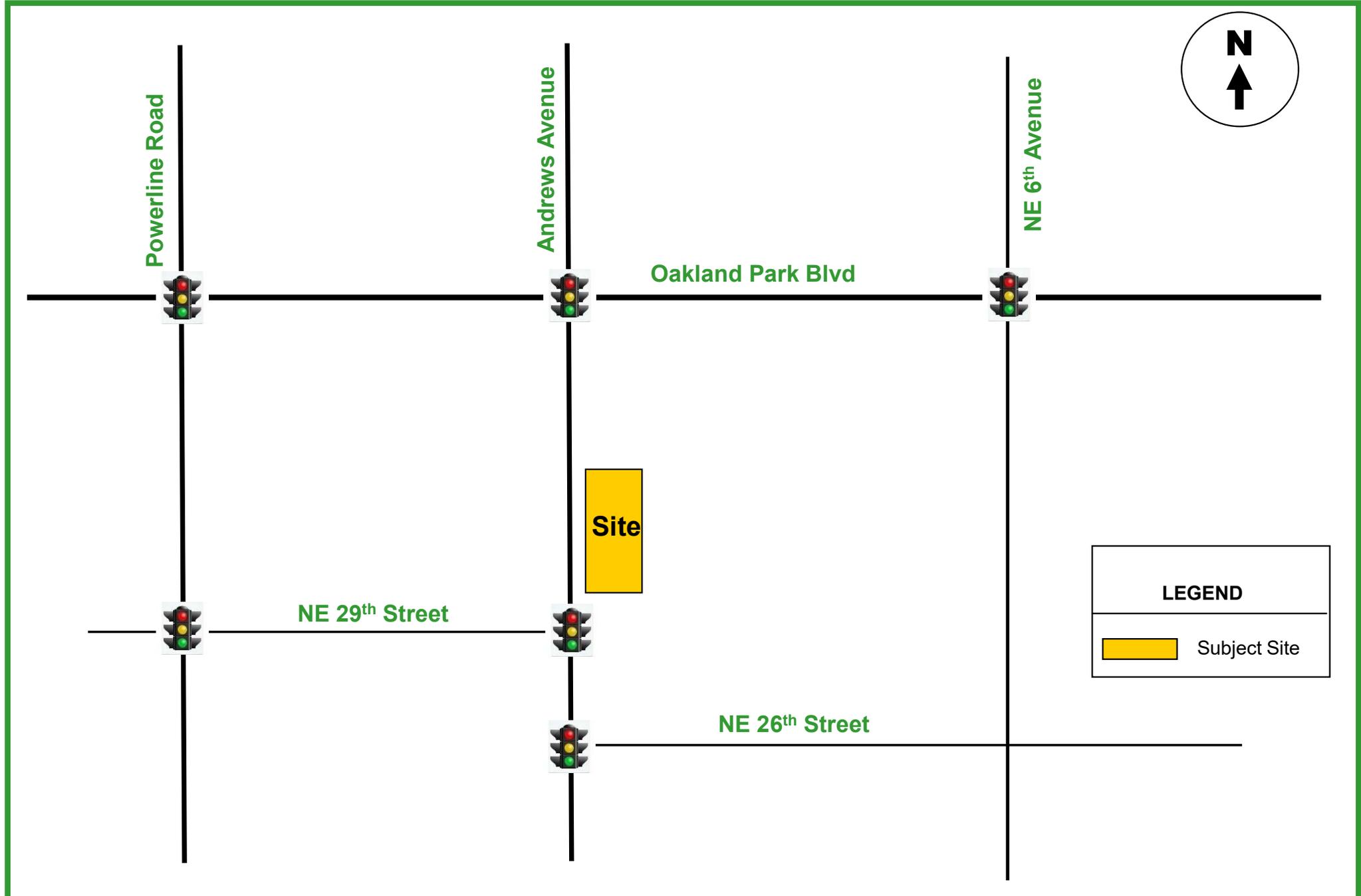
TABLE 6 2916 - 2980 N Andrews Avenue Project Impacts (PM Peak Hour Volumes)								
Roadway	From	To	Number of Lanes	Roadway Capacity	Project Traffic = 14		Project Impacts	
					Percent	Trips	% of Cap.	Significant
Oakland Park Blvd	I-95	Andrews Ave	6	4,500	20%	3	0.1%	No
	Andrews Ave	Dixie Highway	6	4,500	10%	1	0.0%	No
Andrews Avenue	Sunrise Blvd	Oakland Park Bl	4	2,628	15%	2	0.1%	No
	Oakland Park Bl	Prospect Rd	4	2,628	15%	2	0.1%	No

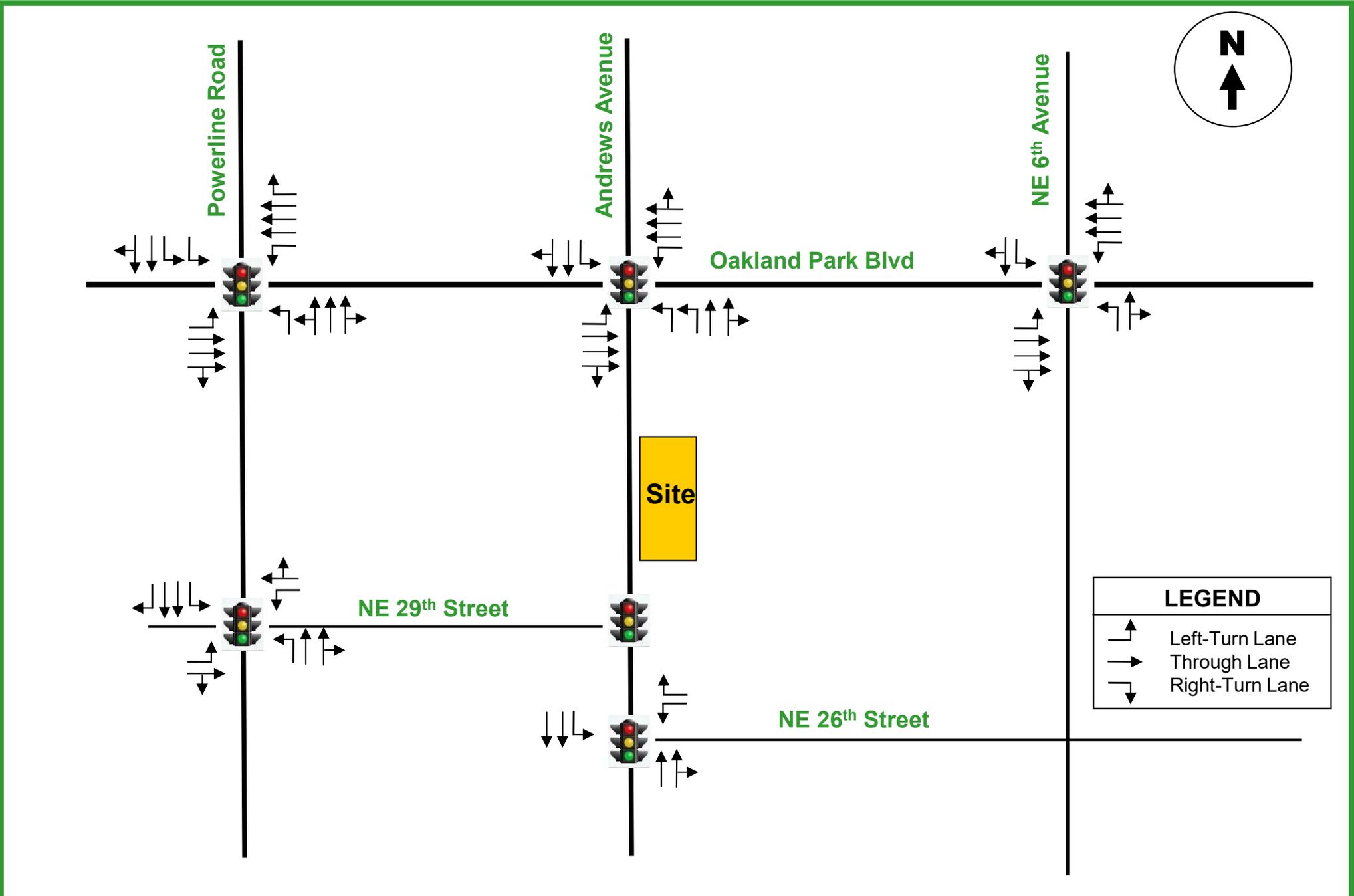
Source: Broward County Metropolitan Planning Organization

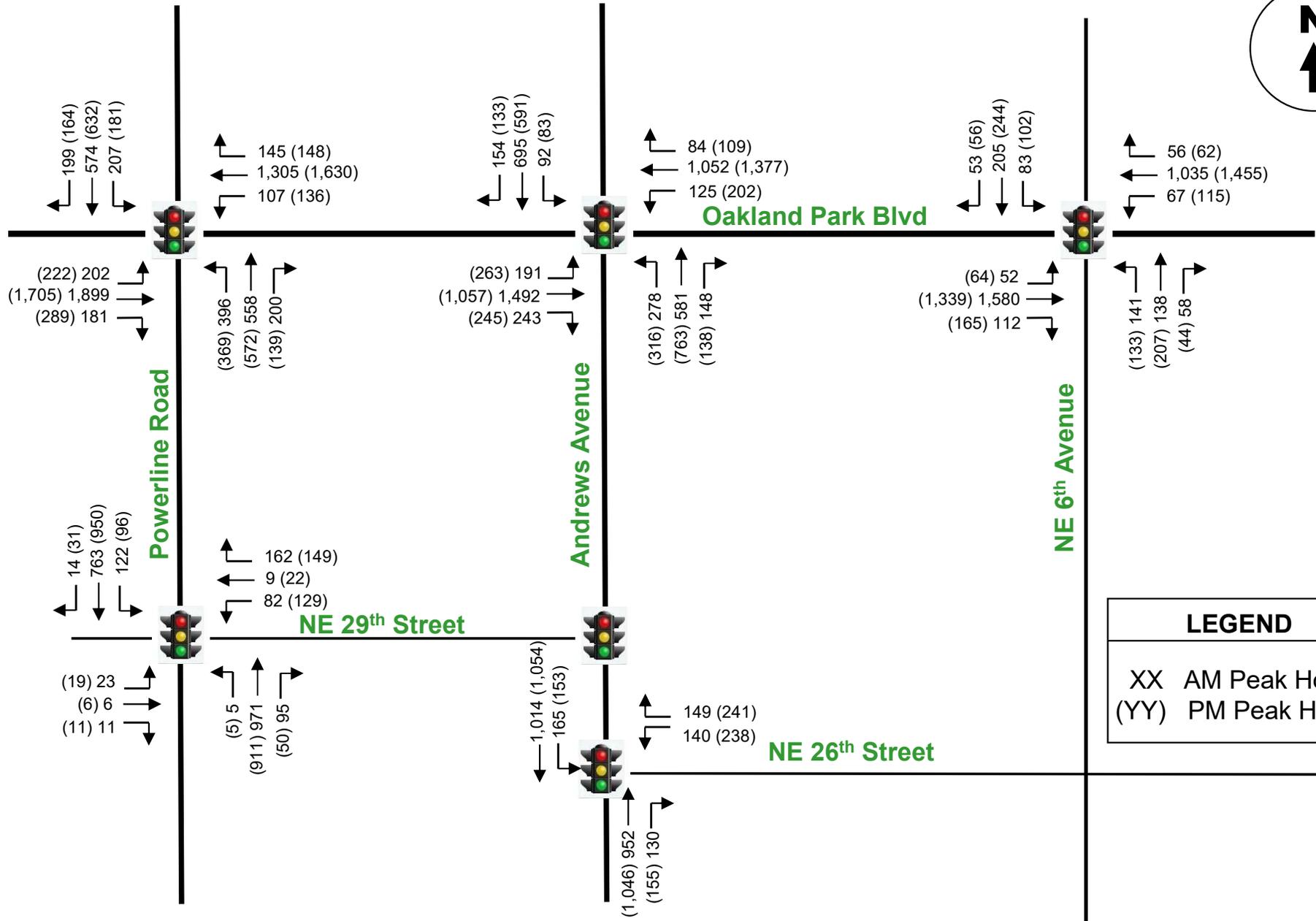
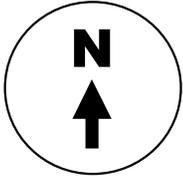
**TABLE 7**  
**Level of Service Analyses**  
**2916 to 2980 N Andrews Avenue**

Intersection	Time Period	EASTBOUND		WESTBOUND		NORTHBOUND		SOUTHBOUND		Intersection		
		Approach		Approach		Approach		Approach		LOS	Delay	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay			
Andrews Avenue & Oakland Park Boulevard	AM	D/D/D	43.3/46.5/46.5	D/D/D	42.3/44.6/44.6	E/E/E	57.1/69.1/72.0	F/F/F	96.4/101.3/101.6	E/E/E	55.5/60.6/61.3	
	PM	D/D/D	48.3/52.4/52.8	D/D/D	51.1/53.9/54.0	F/F/F	103/112.2/112.6	F/F/F	98.4/107.2/108.2	E/E/E	69.5/75.3/75.7	
	Queues	EBL (510)			WBL (340)		NBL(380)		SBL(380)			
		AM		314/323/323	AM	m#218/m#295/m#295	AM	#278/#327/#337	AM	180/#196/#196		
		PM		#518/#543/#543	PM	m#411/m#421/m#428	PM	231/254/255	PM	167/#191/#191		
Powerline Road & Oakland Park Boulevard	AM	E/F/F	71.5/84.4/85.0	D/D/D	49.7/52.6/52.8	F/F/F	377.0/413.0/413.0	F/F/F	376.2/403.8/403.8	F/F/F	174.8/191.3/191.4	
	PM	E/F/F	71.3/84.1/84.5	E/E/E	60.5/64.6/64.6	F/F/F	418.4/455.9/455.9	F/F/F	281.8/301.6/303.1	F/F/F	161.8/176.7/177.0	
Powerline Road & NW 29 Street	AM	C/C/C	33.6/33.4/33.4	C/C/C	32.8/32.5/32.5	B/B/B	10.5/11.8/11.8	A/A/A	2.4/2.7/2.7	B/B/B	10.2/10.9/10.9	
	PM	E/E/E	68.6/68.2/68.2	E/E/E	68.9/69.1/69.1	A/A/A	3.0/3.6/3.6	A/A/A	0.6/0.7/0.7	B/B/B	11.2/11.4/11.4	
Andrews Avenue & NE 26th Street	AM			D/D/D	40.5/40.1/40.1	A/A/A	5.1/5.8/5.8	A/A/A	0.9/1.1/1.0	A/A/A	7.2/7.7/7.7	
	PM			D/D/D	47.9/49.6/49.6	A/B/B	9.5/11.5/11.6	A/A/A	2.4/3.0/3.0	B/B/B	12.9/14.5/14.6	
Oakland Park Boulevard & NE 6 Avenue	AM	B/B/B	15.8/17.4/17.4	C/C/C	23.4/24.9/24.9	E/E/E	68.9/72.2/72.2	E/E/E	78.6/79.5/79.5	C/C/C	29.2/30.9/30.9	
	PM	C/C/C	22.5/25.7/25.6	C/C/C	28.4/31.2/31.3	E/E/E	72.1/74.3/74.3	F/F/F	102.2/109.5/111.0	D/D/D	37.7/41.1/41.2	
N.Driveway & Andrews Avenue (Out)	AM			B	10.30							
	PM			B	10.80							
S.Driveway & Andrews Avenue (In)	AM							SBL	0 ft			
	PM								2 ft			

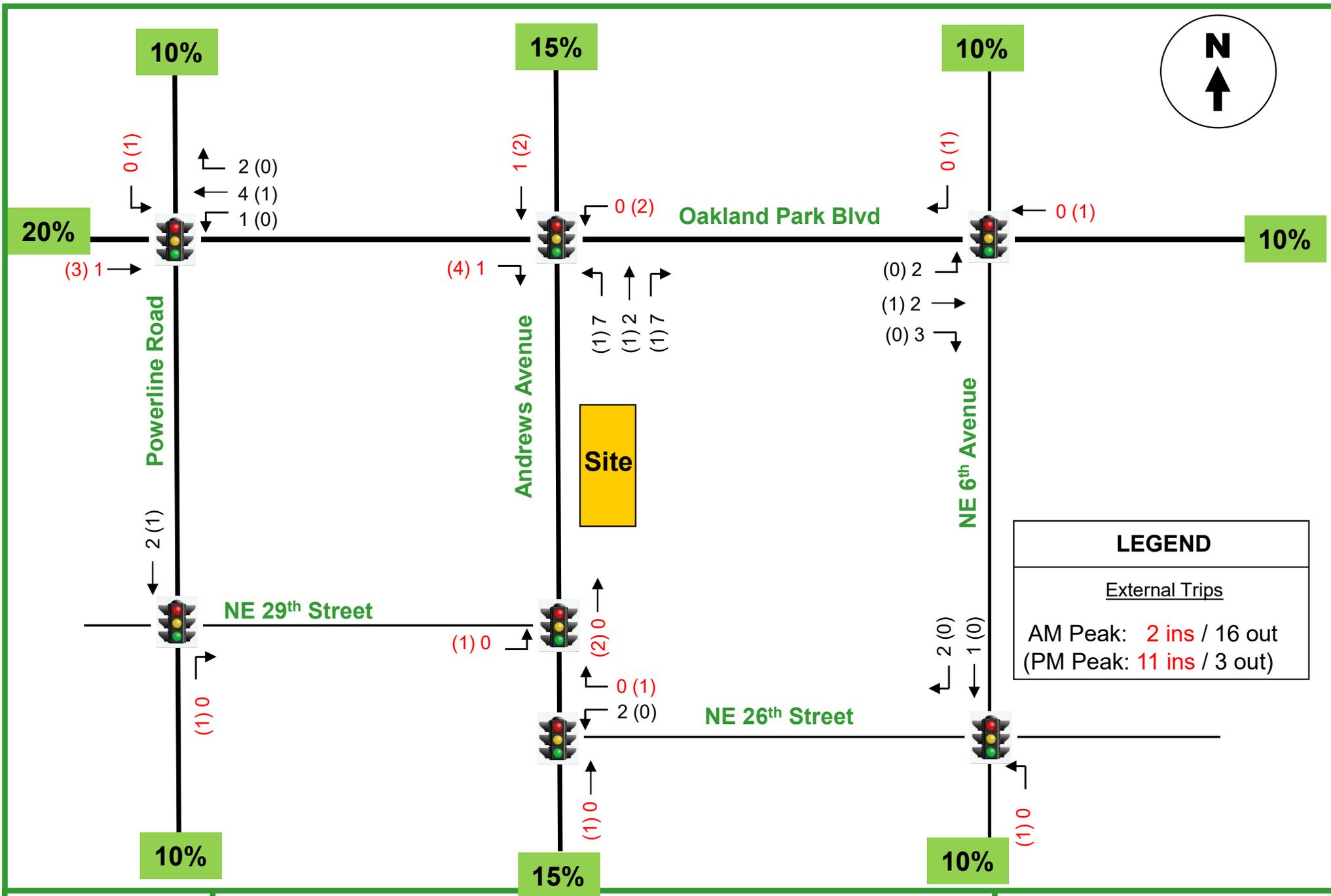
SOURCE: SYNCHRO. LEGEND: Existing/Background/Future

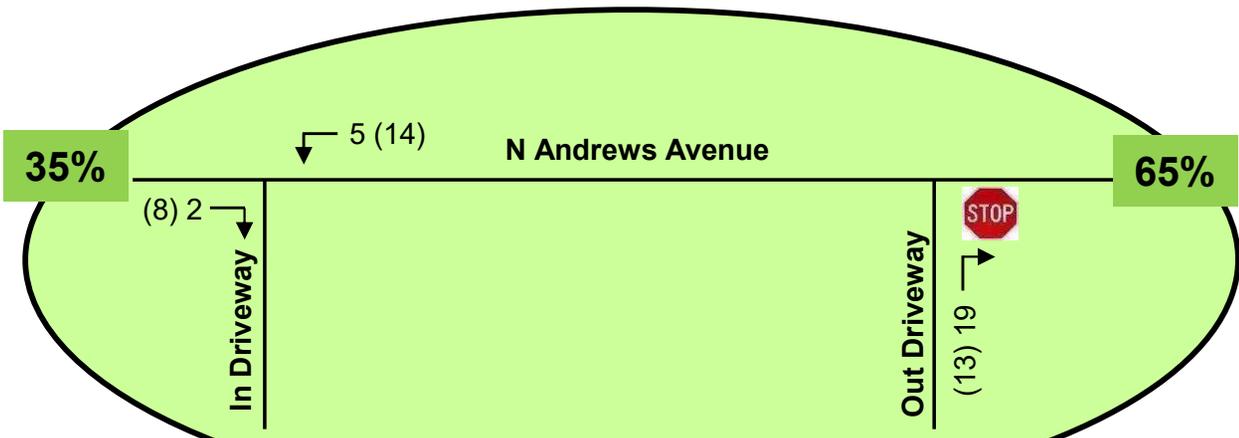
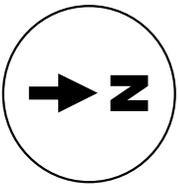




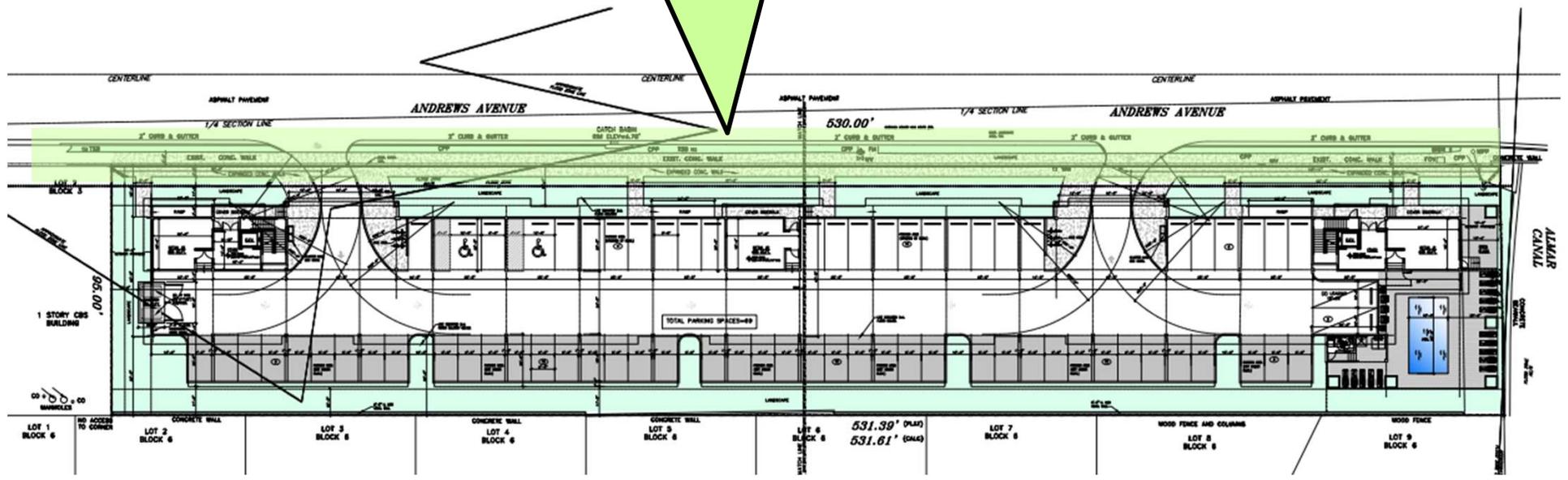


LEGEND	
XX	AM Peak Hour
(YY)	PM Peak Hour



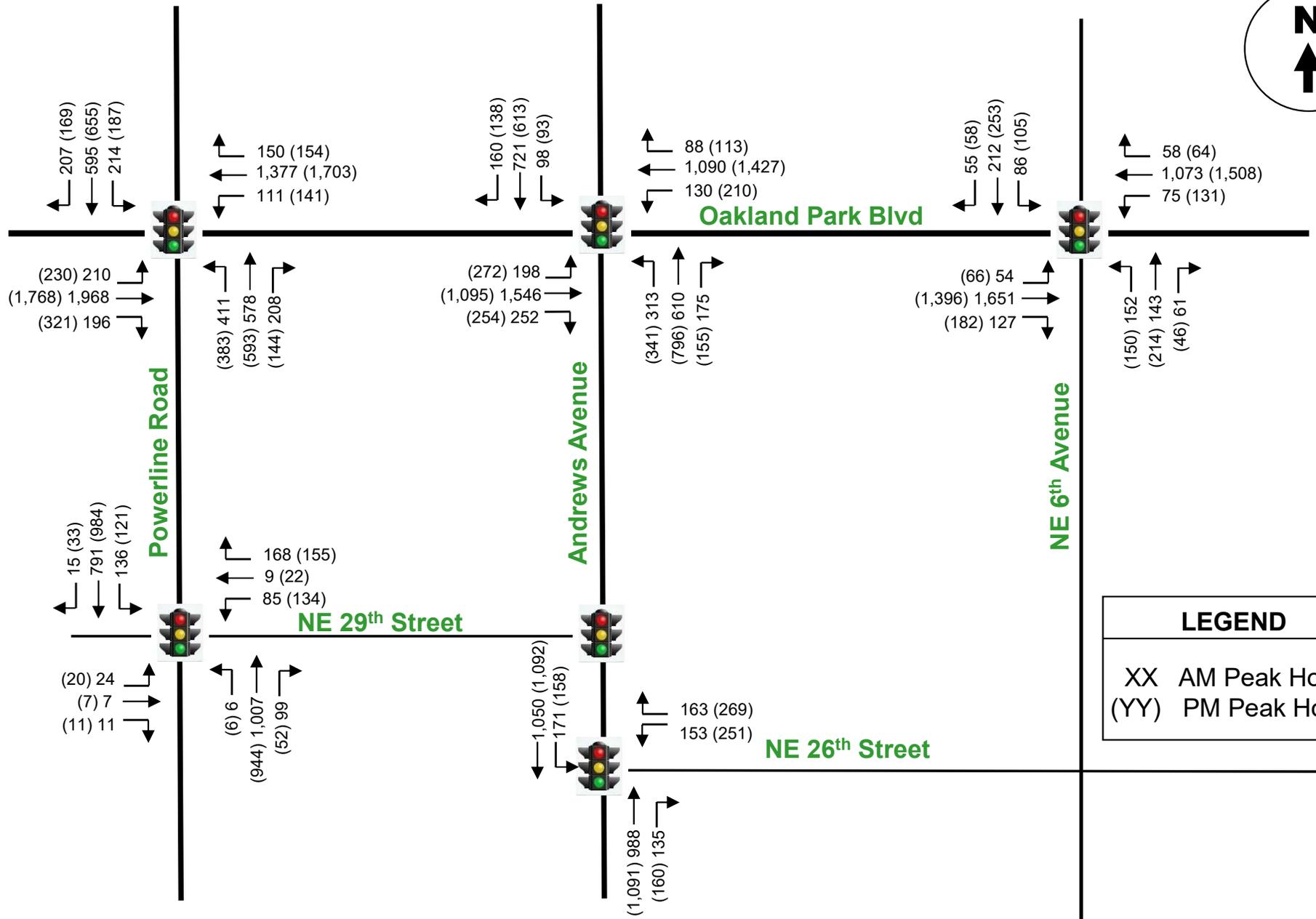
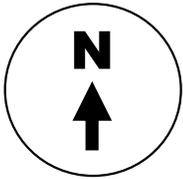


Trip Generation – Driveway Trips  
AM Peak: 7 ins / 19 out  
PM Peak: 22 ins / 13 out



# Driveway Traffic Assignment

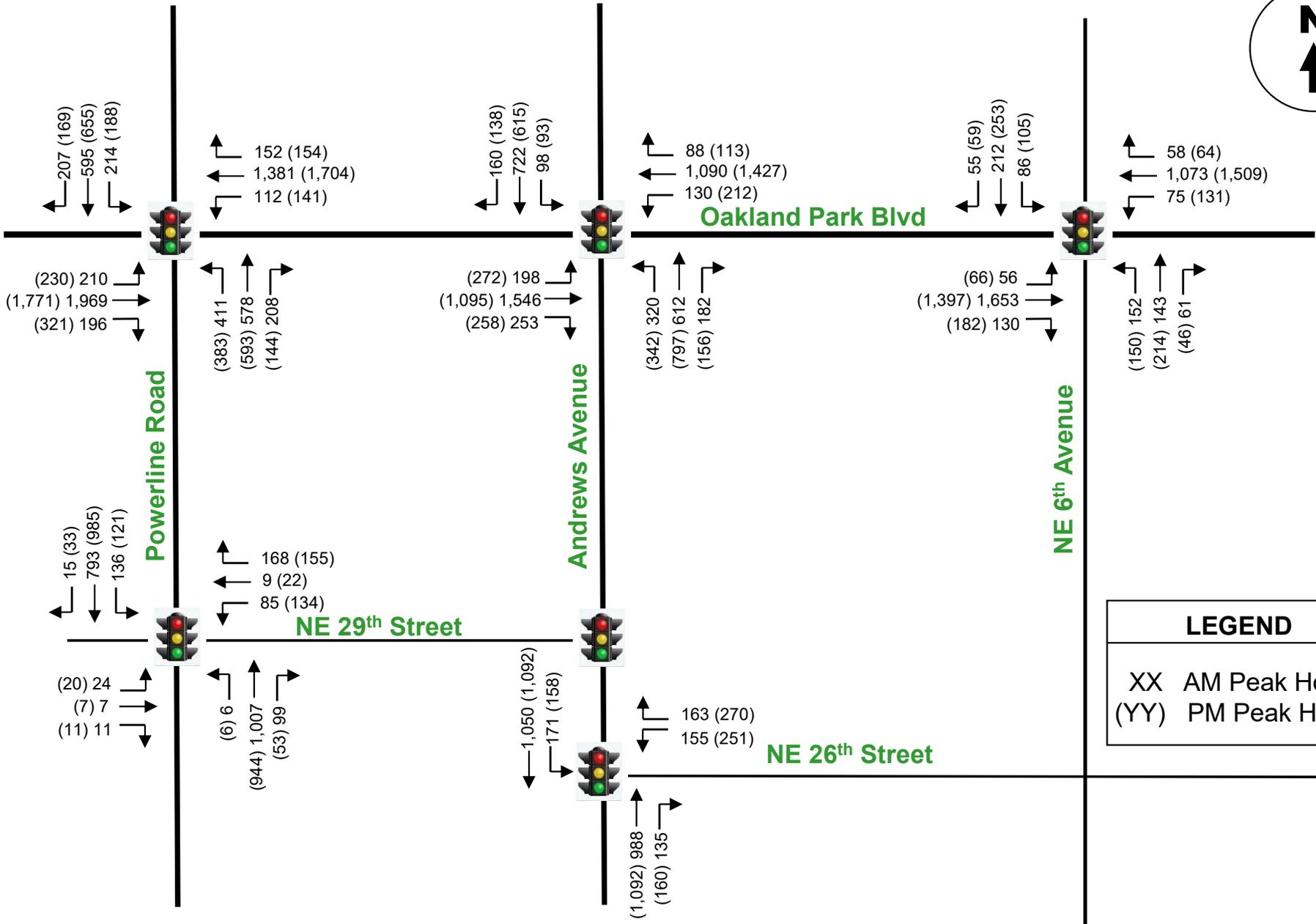
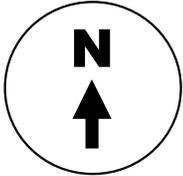
**FIGURE 4B**  
2916 – 2980 N Andrews Avenue  
Oakland Park, Florida



**BACKGROUND TRAFFIC – Year 2026  
 AM & (PM) Peak Hour**

**FIGURE 5**  
 2916 – 2980 N Andrews Avenue  
 Oakland Park, Florida





**TOTAL TRAFFIC VOLUMES  
(Year 2026 Peak Season)**

**FIGURE 6**  
 2916 – 2980 N Andrews Avenue  
 Oakland Park, Florida

# **ATTACHMENT A**

**Site Plan for 2916 – 2980 N Andrews  
Avenue and Maneuverability  
Analyses**

LEGAL DESCRIPTION:  
LOT 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14  
AND 15, BLOCK 3 OF "ALMAR ESTATES  
RESUBDIVISION", ACCORDING TO THE PLAT  
THEREOF, AS RECORDED IN PLAT BOOK 32,  
PAGE 36 PUBLIC RECORDS OF BROWARD  
COUNTY, FLORIDA.

SETBACK TABLE N. ANDREWS AVENUE TOCW ON A PRIMARY STREET		
	REQUIRED	PROVIDED
STREETSCAPE FRONTAGE SETBACK	5 FEET	5 FEET
PEDESTRIAN REALM FRONTAGE	8 FEET	8 FEET
URBAN FORM DESIGN STANDARDS	8 FEET TIER 1	15'-2" TO BUILDING WALL, 11'-2" TO BALCONY
	15 FEET INTERIOR	15'-2" TO BUILDING WALL, 11'-2" TO BALCONY
	15 FEET INTERIOR	15'-2" SOUTH SIDE
	30 FEET REAR	30'-0" TO BUILDING WALL, 27'-0" TO BALCONY

GREEN BUILDING TABLE POINTS	
MINIMUM OF 14 POINTS AS PER SECTION 170-060 OF THE LAND DEVELOPMENT CODE.	
ELECTRIC VEHICLE CHARGING STATIONS ABOVE THE REQUIRED MINIMUM NUMBERS, 2 POINTS PER EACH EXTRA STATION.	4 POINTS
WHITE ROOF.	4 POINTS
COOL PAVEMENT, SOLAR REFLECTIVITY OF 20% HIGHER THAN THE 5-10% OF DARK ASPHALT, PAVEMENT WILL BE LIGHT CONCRETE.	4 POINTS
ENERGY STAR APPLIANCES AND EQUIPMENT.	4 POINTS
TOTAL POINTS = 16 POINTS	

**SITE DATA:**

ZONING: TOCW  
LAND USE: TRANSIT ORIENTED CORRIDOR  
FLOOD ZONE: X // AH/5  
PROPOSED UNITS: FIFTY FOUR (54) RESIDENTIAL, THREE STORY APARTMENTS (1 BED / 1 BATH)  
SEWER PROVIDER: CITY OF WILTON MANORS  
WATER PROVIDER: SANITATION BY COASTAL WASTE & RECYCLING, INC.  
GARBAGE PROVIDER: MAK, 40 FT. / 3 STORY ALLOWED  
BUILDING HEIGHT: 39'-8" (T.O. ROOF DECK)  
MINIMUM UNIT SIZE PROVIDED: 687 SQ.FT.  
GROSS LOT AREA INCLUDING 1/2 OF R.O.W.: 66,967.07 SQ. FT. OR 1.58 ACRES  
NET LOT AREA WITHIN PROPERTY LINES: 50,428.41 SQ. FT. OR 1.16 ACRES  
BUILDINGS FOOTPRINT & COVERED V.U.A.: 27,931.86 SQ. FT. OR 55.40 % OF NET SITE  
EXPANDED CONC. SIDEWALKS: 2,268.09 SQ. FT. OR 4.50 % OF NET SITE  
OPEN PLAZA (NOT UNDER BLDG.): 402.66 SQ. FT. OR 0.80 % OF NET SITE  
OFFICE PATIO (NOT UNDER BLDG.): 300.00 SQ. FT. OR 0.59 % OF NET SITE  
V.U.A. AREA (NOT UNDER BLDG.): 269.91 SQ. FT. OR 0.53 % OF NET SITE  
PARKING AREA (NOT UNDER BLDG.): 6,079.43 SQ. FT. OR 12.05 % OF NET SITE  
POOL AREA (NOT UNDER BLDG.): 435.00 SQ. FT. OR 0.86 % OF NET SITE  
POOL DECK & BBQ AREA (NOT UNDER BLDG.): 1,573.42 SQ. FT. OR 3.12 % OF NET SITE  
POOL TOILET ROOM (NOT UNDER BLDG.): 108.00 SQ. FT. OR 0.21 % OF NET SITE  
POOL EQUIP./TRANS. SLAB (NOT UNDER BLDG.): 74.94 SQ. FT. OR 0.15 % OF NET SITE  
LANDSCAPE AREA (PERVIOUS AREA): 10,987.10 SQ. FT. OR 21.79 % OF NET SITE  
IMPERVIOUS AREA: 50,428.41 - 10,987.10 = 39,441.31 SQ. FT. OR 78.21 % OF NET SITE  
LOT F.A.R (NOT INCLUDING PARKING): (3,372 + 20,352 + 20,352) = 44,076 SQ. FT.  
44,076 SQ. FT. / 50,428.41 SQ. FT. = 0.87  
DENSITY ALLOWED (PER GROSS LOT): 60 UNITS/ACRE = 60 UNITS/1.58 ACRES = 94 UNITS/ACRE  
DENSITY PROVIDED: 54 UNITS

**7 LEGAL DESCRIPTION**

**6 SETBACKS DATA**

**5 GREEN BUILDING TABLE POINTS**

**NOTE:**

BUILDING TO BE PROVIDED WITH AUTOMATIC FIRE SUPPRESSION SYSTEM.

**BUILDING DATA**

OCCUPANCY GROUP:  
TYPE II (RESIDENTIAL)  
AS PER F.B.C. - 7th EDITION (2020)  
TYPE OF CONSTRUCTION:  
TYPE II-B (UNPROTECTED)  
AS PER F.B.C. - 7th EDITION (2020)

BLDG. LIVING AREAS:  
2ND. FL. LIVING AREAS 20,181 SQ. FT.  
3RD. FL. LIVING AREAS 20,181 SQ. FT.  
TOTAL LIVING AREAS = 40,362 SQ. FT.

BLDG. COMMON AREAS:  
1ST. FL. RESTAURANT/RETAIL/COMMERCIAL 536+782+582=1,900 SQ. FT.  
1ST. FL. COVERED SIDEWALK 2,346 SQ. FT.  
1ST. FL. FOYER, ELEV. & STAIR 1,160 SQ. FT.  
1ST. FL. DUMSTER 290 SQ. FT.  
2ND. FL. FOYER, STORAGE, ELEV. & STAIR 1,406 SQ. FT.  
2ND. FL. GYM 360 SQ. FT.  
2ND & 3RD. CORRIDOR 2,430 SQ. FT.  
3RD. FL. FOYER, STORAGE, ELEV. & STAIR 1,406 SQ. FT.  
3RD. FL. GYM 360 SQ. FT.  
2ND & 3RD. CORRIDOR 2,430 SQ. FT.

**PARKING ANALYSIS STATEMENT PER SECTION 135-040**

TOTAL (1) BEDROOM (1) BATH APARTMENTS = 54 UNITS  
(RESTAURANT/COMMERCIAL) TOTAL SQ.FT. = 782+582+536 = 1,900 SQ.FT.  
PARKING SPACES REQUIRED: 1.5 PER UNIT = 54 X 1.5 = 81 SPACES  
3/1,000 RESTAURANT/COMMERCIAL = 3/1,900 = 6 SPACES  
TOTAL PARKING REQUIRED = 87 SPACES  
HANDICAP PARKING REQUIRED: 1 PER RESTAURANT/RETAIL/COMMERCIAL = 1 SPACES  
2% OF MULTIFAMILY = 2% OF 54 = 1.08 = 2 SPACES  
TOTAL HANDICAP PARKING REQUIRED = 3 SPACES  
TOTAL REQUIRED SPACES = 90 SPACES  
PARKING SPACES PROVIDED: 69 STANDARD PARKING SPACES (PLUS 3 H.C.) = 72 SPACES  
PARKING SPACES REQUIRED LESS PARKING SPACES PROVIDED: 90-72 = 18 SPACES  
TOTAL PROVIDED SPACES = 72 SPACES  
LOADING ZONES REQUIRED: 2 LOADING ZONE  
LOADING ZONES PROVIDED: 2 LOADING ZONE  
BIKE RACKS REQUIRED: 10 FOR RESIDENTIAL UNITS & 6 PER NON-RESIDENTIAL = 16 RACKS  
BIKE RACKS PROVIDED: 12 FOR RESIDENTIAL UNITS & 8 PER NON-RESIDENTIAL = 20 RACKS  
ELECTRICAL CHARGING REQUIRED: 5 ELECT. CHARGING  
ELECTRICAL CHARGING PROVIDED: 7 ELECT. CHARGING (4 POINTS PER 2 EXTRA GREEN BUILDING POINTS)

**4 LOCATION MAP**



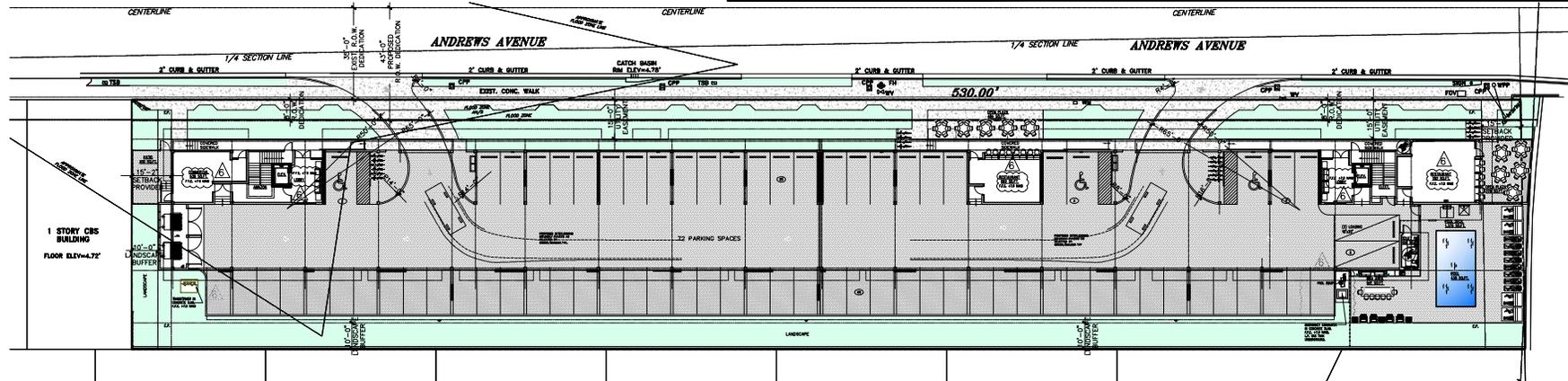
**NOTES:**

- 1-PROVIDED VIDEO SURVEILLANCE SYSTEMS BE INSTALLED THROUGHOUT THE PROPERTY TO INCLUDE COMMON AREAS.
- 2-PROVIDED VIDEO SURVEILLANCE CAMERAS WITH THE CAPABILITY OF CAPTURING VEHICLE DESCRIPTIONS, OCCUPANTS AND LICENSE PLATES, AND PEDESTRIAN ACTIVITIES AT ALL ENTRANCES AND EXITS SHOULD BE INSTALLED.
- 3-THE PROPERTY OWNER JOIN BOSS REAL TIME CRIME CENTER'S PUBLIC PRIVATE PARTNERSHIP THAT LOOKS TO ENHANCE LAW ENFORCEMENT'S REAL TIME CRIME SOLUTIONS.
- 4-ELECTRIC POLES TO BE INSTALLED AT THE EXTREME NE, SE, NW AND SW CORNERS OF THE PROPERTY FOR FUTURE USE BY THE PD FOR PUBLIC SAFETY TECHNOLOGY OR OTHER PUBLIC SAFETY INNOVATIONS/REASONS. THE POLE SHALL BE A MINIMUM 10 FEET ABOVE GROUND.
- 5-PROVIDE A RECORDED INDEMNITY AGREEMENT WITH THE UTILITIES.
- 6-EACH ELECTRICAL VEHICLES CHARGING SPACES NEEDS A SIGN POSTED VEHICLE CHARGING STATION.

**3 BUILDING DATA**

**2 SITE DATA**

**1 PROPOSED SITE PLAN**



REVISION	BY:
02/13/2023	M.J.G.
07/26/2023	M.J.G.
11/01/2023	M.J.G.
12/11/2023	M.J.G.
02/17/2024	M.J.G.
03/18/2024	M.J.G.

GUSTAVO J. CARBONELL, P.A.  
Architect and Planner  
FL. License No. 33394  
(954) 482-0885  
Member American Institute of Architects  
Member Florida Institute of Architects



PROPOSED MULTIFAMILY MIXED USE FOR:  
**2916 INVESTMENTS LLC.**  
2916-2980 N ANDREWS AVENUE  
WILTON MANORS, FL 33311



DRAWN M.J.G.  
CHECKED G.J.C.  
DATE DEC. 2021  
SCALE AS NOTED  
JOB NO. 21-054

**SP-1.0**  
OF 1 SHEETS

**ATTACHMENT B**  
**Trip Generation Details**

2916 Investments -North Andrews TOC - 54 Units

Address/Folio number	Sqf	Use	Occupied/Vacant	Moved out
2916 N Andrews Ave	672.00	Income Tax	Vacant	1\2023
2918 N Andrews Ave	672.00	Hair Salon	Vacant	
2920 N Andrews Ave	672.00	Beauty supply	Vacant	
2932 N Andrews Ave	2,583.00	Vanity Shop	Occupied	
4942 27 17 0250		Land	Vacant	
4942 27 17 0260		Land	Vacant	
4942 27 17 0270		Restaurant	Vacant	4\2021
2980 N Andrews Ave	1,824.00	Restaurant	Vacant	4\2021
4942 27 17 0320		Land		
4942 27 17 0330		Land		
4942 27 17 0340		Land		
4942 27 17 0350		Land		
Source: 2916 Investments	3,255.00	occupied during traffic counts		

NCHRP 8-51 Internal Trip Capture Estimation Tool			
<b>Project Name:</b>	2916-2980 N Andrews Avenue	<b>Organization:</b>	Traf Tech Engineering, Inc.
<b>Project Location:</b>	Wilton Manors	<b>Performed By:</b>	J. Vargas
<b>Scenario Description:</b>	Proposed Uses	<b>Date:</b>	3/19/2024
<b>Analysis Year:</b>	2026	<b>Checked By:</b>	J Vargas
<b>Analysis Period:</b>	AM Street Peak Hour	<b>Date:</b>	3/19/2024

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs <sup>1</sup>	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	822	1,900	sf	4	2	2
Restaurant				0		
Cinema/Entertainment				0		
Residential	220	54	units	22	5	17
Hotel				0		
All Other Land Uses <sup>2</sup>				0		
<b>Total</b>				<b>26</b>	<b>7</b>	<b>19</b>

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses <sup>2</sup>						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	26	7	19
Internal Capture Percentage	0%	0%	0%
External Vehicle-Trips <sup>3</sup>	26	7	19
External Transit-Trips <sup>4</sup>	0	0	0
External Non-Motorized Trips <sup>4</sup>	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	0%	0%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	0%	0%
Hotel	N/A	N/A

<sup>1</sup>Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

<sup>2</sup>Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

<sup>3</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

<sup>4</sup>Person-Trips

\*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

<b>Project Name:</b>	2916-2980 N Andrews Avenue
<b>Analysis Period:</b>	AM Street Peak Hour

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	2	2	1.00	2	2
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	5	5	1.00	17	17
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	1		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	3	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles <sup>1</sup>	Transit <sup>2</sup>	Non-Motorized <sup>2</sup>
Office	0	0	0	0	0	0
Retail	0	2	2	2	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	5	5	5	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses <sup>3</sup>	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles <sup>1</sup>	Transit <sup>2</sup>	Non-Motorized <sup>2</sup>
Office	0	0	0	0	0	0
Retail	0	2	2	2	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	17	17	17	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses <sup>3</sup>	0	0	0	0	0	0

<sup>1</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A  
<sup>2</sup>Person-Trips  
<sup>3</sup>Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator  
\*Indicates computation that has been rounded to the nearest whole number.

**NCHRP 8-51 Internal Trip Capture Estimation Tool**

<b>Project Name:</b>	2916-2980 N Andrews Avenue	<b>Organization:</b>	Traf Tech Engineering, Inc.
<b>Project Location:</b>	Wilton Manors	<b>Performed By:</b>	J. Vargas
<b>Scenario Description:</b>	Proposed Uses	<b>Date:</b>	3/19/2024
<b>Analysis Year:</b>	2026	<b>Checked By:</b>	J Vargas
<b>Analysis Period:</b>	PM Street Peak Hour	<b>Date:</b>	3/19/2024

**Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)**

Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs <sup>1</sup>	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	822	1,900	sf	13	7	6
Restaurant				0		
Cinema/Entertainment				0		
Residential	220	54	units	28	18	10
Hotel				0		
All Other Land Uses <sup>2</sup>				0		
<b>Total</b>				<b>41</b>	<b>25</b>	<b>16</b>

**Table 2-P: Mode Split and Vehicle Occupancy Estimates**

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses <sup>2</sup>						

**Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)**

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

**Table 4-P: Internal Person-Trip Origin-Destination Matrix\***

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	2	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	0	0		0
Hotel	0	0	0	0	0	

**Table 5-P: Computations Summary**

	Total	Entering	Exiting
All Person-Trips	41	25	16
Internal Capture Percentage	15%	12%	19%
External Vehicle-Trips <sup>3</sup>	35	22	13
External Transit-Trips <sup>4</sup>	0	0	0
External Non-Motorized Trips <sup>4</sup>	0	0	0

**Table 6-P: Internal Trip Capture Percentages by Land Use**

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	14%	33%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	11%	10%
Hotel	N/A	N/A

<sup>1</sup>Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

<sup>2</sup>Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

<sup>3</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

<sup>4</sup>Person-Trips

\*Indicates computation that has been rounded to the nearest whole number.

<b>Project Name:</b>	2916-2980 N Andrews Avenue
<b>Analysis Period:</b>	PM Street Peak Hour

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends						
Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	7	7	1.00	6	6
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	18	18	1.00	10	10
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		2	0	2	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	4	2	0		0
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		1	0	0	1	0
Retail	0		0	0	8	0
Restaurant	0	4		0	3	0
Cinema/Entertainment	0	0	0		1	0
Residential	0	1	0	0		0
Hotel	0	0	0	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)						
Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles <sup>1</sup>	Transit <sup>2</sup>	Non-Motorized <sup>2</sup>
Office	0	0	0	0	0	0
Retail	1	6	7	6	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	2	16	18	16	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses <sup>3</sup>	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)						
Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles <sup>1</sup>	Transit <sup>2</sup>	Non-Motorized <sup>2</sup>
Office	0	0	0	0	0	0
Retail	2	4	6	4	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	9	10	9	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses <sup>3</sup>	0	0	0	0	0	0

<sup>1</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P  
<sup>2</sup>Person-Trips  
<sup>3</sup>Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator  
\*Indicates computation that has been rounded to the nearest whole number.

**ATTACHMENT C**  
**Traffic Counts and Signal Timings**

# Traf Tech Engineering Inc.

File Name : 1-Powerline Rd & Oakland Park Blvd

Site Code : 00000000

Start Date : 9/14/2022

Page No : 1

## Groups Printed- Peds & Bikes

Start Time	Powerline Rd From North				Oakland Park Blvd From East				Powerline Rd From South				Oakland Park Blvd From West				Int. Total		
	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds			
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	5
07:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	6
Total	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	9	14
08:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	3
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
08:45	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	4	8
*** BREAK ***																			
16:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	7	9
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
16:30	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	7
*** BREAK ***																			
Total	1	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	11	17
17:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
17:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
17:45	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	3	6
Total	0	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	6	14
Grand Total	1	0	0	4	1	0	0	9	9	0	0	0	2	6	0	0	0	30	53
Apprch %	20	0	0	80	10	0	0	90	100	0	0	0	100	16.7	0	0	0	83.3	
Total %	1.9	0	0	7.5	1.9	0	0	17	17	0	0	0	3.8	11.3	0	0	0	56.6	

# Traf Tech Engineering Inc.

File Name : 1-Powerline Rd & Oakland Park Blvd  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 1

## Groups Printed- Autos - Heavy Vehicles

Start Time	Powerline Rd From North					Oakland Park Blvd From East					Powerline Rd From South					Oakland Park Blvd From West					Int. Total
	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	
07:00	46	92	31	0	169	28	292	10	1	331	16	87	71	2	176	25	368	58	1	452	1128
07:15	50	122	44	2	218	23	320	26	0	369	33	90	94	0	217	41	426	45	1	513	1317
07:30	41	129	52	0	222	17	340	21	2	380	60	128	93	0	281	35	459	43	2	539	1422
07:45	53	134	40	0	227	41	292	28	0	361	54	130	91	0	275	59	428	49	2	538	1401
Total	190	477	167	2	836	109	1244	85	3	1441	163	435	349	2	949	160	1681	195	6	2042	5268
08:00	47	160	57	1	265	32	284	21	1	338	37	119	102	0	258	40	380	49	1	470	1331
08:15	43	107	38	3	191	44	289	22	4	359	34	138	80	0	252	33	487	36	5	561	1363
08:30	47	129	47	0	223	47	314	26	0	387	25	78	67	0	170	45	454	42	1	542	1322
08:45	37	118	60	3	218	44	282	18	2	346	34	111	64	0	209	48	449	51	6	554	1327
Total	174	514	202	7	897	167	1169	87	7	1430	130	446	313	0	889	166	1770	178	13	2127	5343
*** BREAK ***																					
16:00	68	146	40	5	259	27	362	21	1	411	30	93	62	0	185	50	342	41	5	438	1293
16:15	50	123	39	1	213	26	408	25	1	460	40	142	95	0	277	55	323	59	5	442	1392
16:30	66	123	39	2	230	31	317	25	2	375	40	122	65	0	227	61	390	53	3	507	1339
16:45	49	130	33	3	215	37	366	28	0	431	29	134	80	2	245	69	406	49	1	525	1416
Total	233	522	151	11	917	121	1453	99	4	1677	139	491	302	2	934	235	1461	202	14	1912	5440
17:00	34	153	49	2	238	31	412	34	3	480	32	135	88	0	255	64	322	44	6	436	1409
17:15	38	169	37	1	245	46	380	26	2	454	36	137	85	0	258	65	369	49	3	486	1443
17:30	30	132	42	0	204	23	347	32	1	403	31	122	86	0	239	69	478	49	4	600	1446
17:45	46	174	45	0	265	36	402	36	0	474	39	119	69	0	227	61	341	35	7	444	1410
Total	148	628	173	3	952	136	1541	128	6	1811	138	513	328	0	979	259	1510	177	20	1966	5708
Grand Total	745	2141	693	23	3602	533	5407	399	20	6359	570	1885	1292	4	3751	820	6422	752	53	8047	21759
Apprch %	20.7	59.4	19.2	0.6		8.4	85	6.3	0.3		15.2	50.3	34.4	0.1		10.2	79.8	9.3	0.7		
Total %	3.4	9.8	3.2	0.1	16.6	2.4	24.8	1.8	0.1	29.2	2.6	8.7	5.9	0	17.2	3.8	29.5	3.5	0.2	37	
Autos	715	2071				5244					1823	1270				6253					21130
% Autos	96	96.7	97.4	100	96.7	97.2	97	96	95	96.9	97.7	96.7	98.3	100	97.4	98.8	97.4	94.8	98.1	97.3	97.1
Heavy Vehicles																					
% Heavy Vehicles	4	3.3	2.6	0	3.3	2.8	3	4	5	3.1	2.3	3.3	1.7	0	2.6	1.2	2.6	5.2	1.9	2.7	2.9

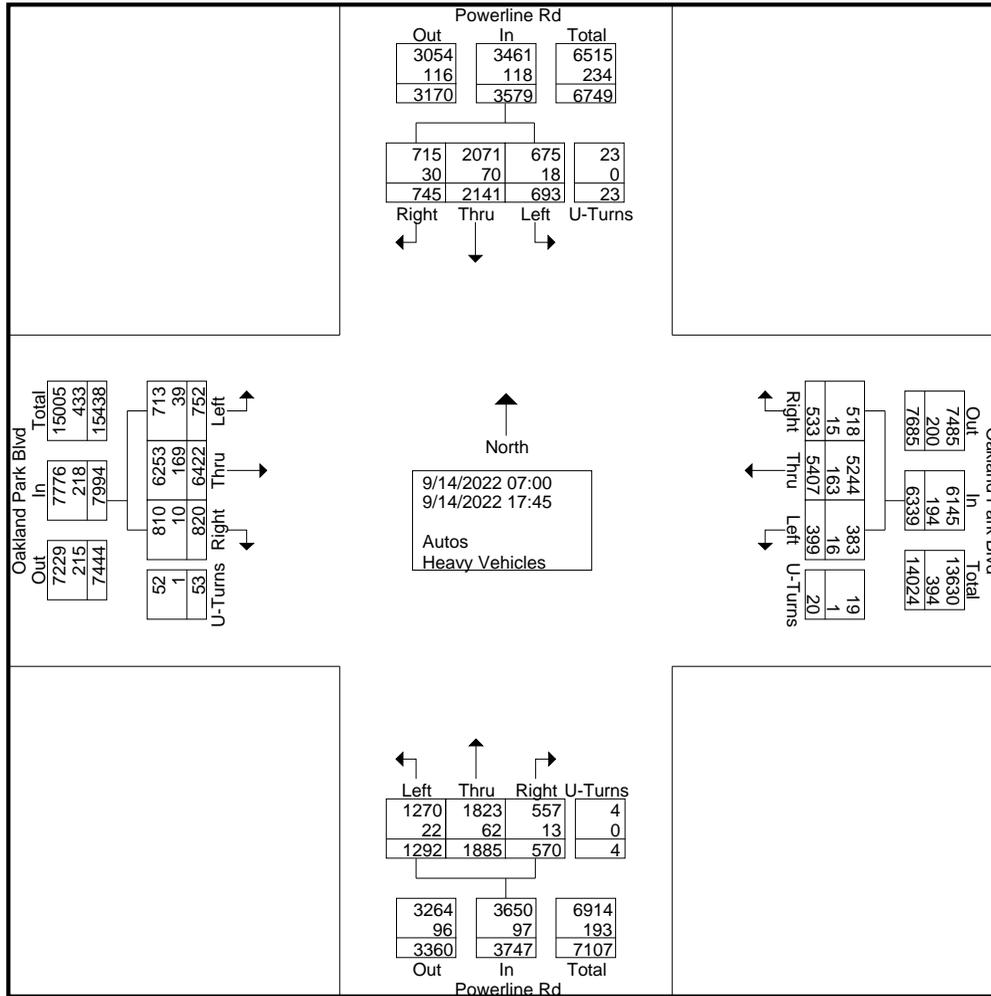
# Traf Tech Engineering Inc.

File Name : 1-Powerline Rd & Oakland Park Blvd

Site Code : 00000000

Start Date : 9/14/2022

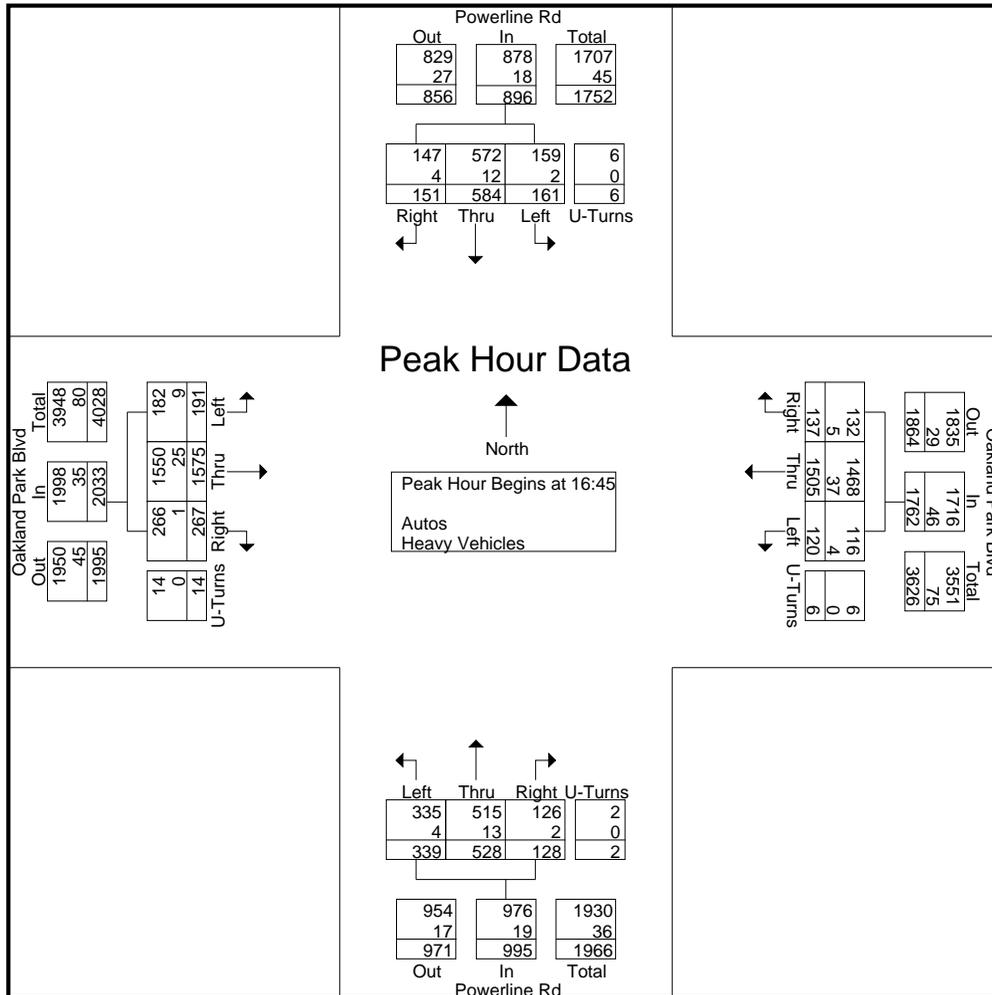
Page No : 2



# Traf Tech Engineering Inc.

File Name : 1-Powerline Rd & Oakland Park Blvd  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 3

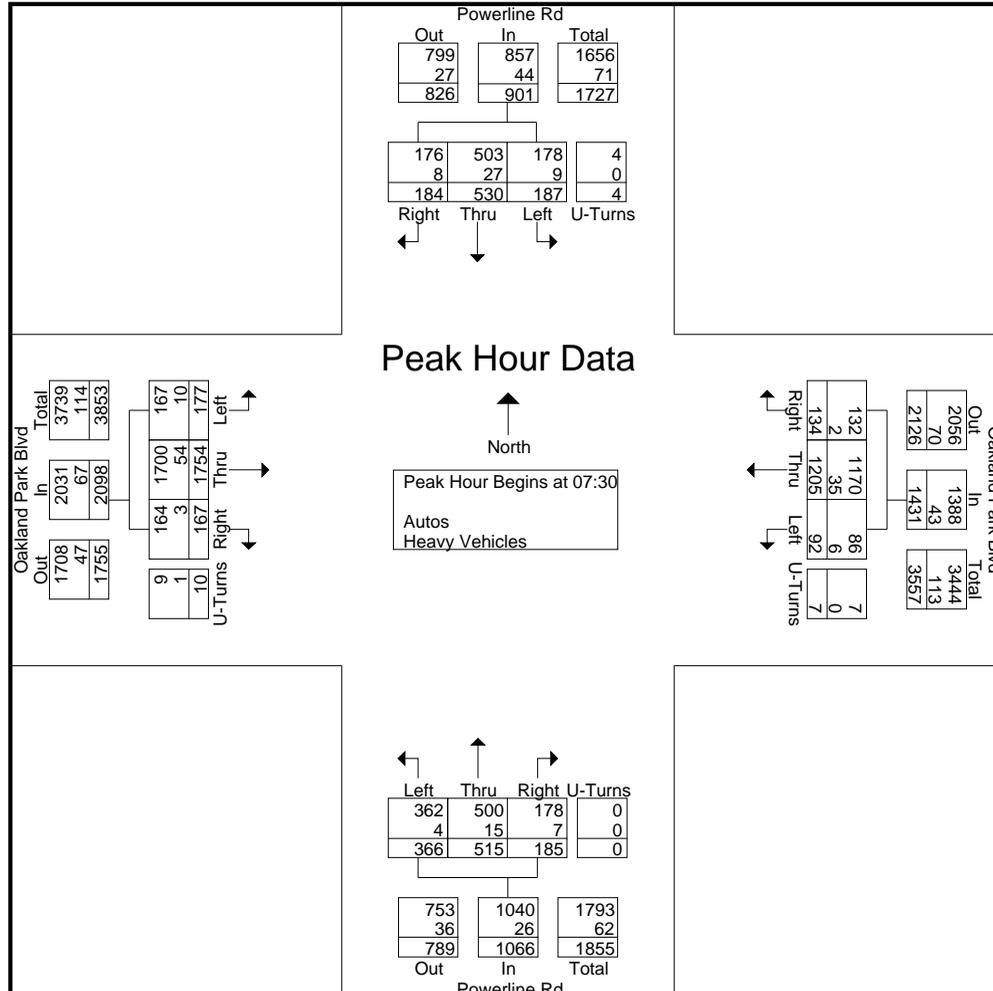
Start Time	Powerline Rd From North					Oakland Park Blvd From East					Powerline Rd From South					Oakland Park Blvd From West					Int. Total
	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	49	130	33	3	215	37	366	28	0	431	29	134	80	2	245	69	406	49	1	525	1416
17:00	34	153	49	2	238	31	412	34	3	480	32	135	88	0	255	64	322	44	6	436	1409
17:15	38	169	37	1	245	46	380	26	2	454	36	137	85	0	258	65	369	49	3	486	1443
17:30	30	132	42	0	204	23	347	32	1	403	31	122	86	0	239	69	478	49	4	600	1446
Total Volume	151	584	161	6	902	137	1505	120	6	1768	128	528	339	2	997	267	1575	191	14	2047	5714
% App. Total	16.7	64.7	17.8	0.7		7.7	85.1	6.8	0.3		12.8	53	34	0.2		13	76.9	9.3	0.7		
PHF	.770	.864	.821	.500	.920	.745	.913	.882	.500	.921	.889	.964	.963	.250	.966	.967	.824	.974	.583	.853	.988
Autos	147	572	159	6	884	132	1468									1550					
% Autos	97.4	97.9	98.8	100	98.0	96.4	97.5	96.7	100	97.4	98.4	97.5	98.8	100	98.1	99.6	98.4	95.3	100	98.3	97.9
Heavy Vehicles																					
% Heavy Vehicles	2.6	2.1	1.2	0	2.0	3.6	2.5	3.3	0	2.6	1.6	2.5	1.2	0	1.9	0.4	1.6	4.7	0	1.7	2.1



# Traf Tech Engineering Inc.

File Name : 1-Powerline Rd & Oakland Park Blvd  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 4

Start Time	Powerline Rd From North					Oakland Park Blvd From East					Powerline Rd From South					Oakland Park Blvd From West					Int. Total
	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	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	41	129	52	0	222	17	340	21	2	380	60	128	93	0	281	35	459	43	2	539	1422
07:45	53	134	40	0	227	41	292	28	0	361	54	130	91	0	275	59	428	49	2	538	1401
08:00	47	160	57	1	265	32	284	21	1	338	37	119	102	0	258	40	380	49	1	470	1331
08:15	43	107	38	3	191	44	289	22	4	359	34	138	80	0	252	33	487	36	5	561	1363
Total Volume	184	530	187	4	905	134	1205	92	7	1438	185	515	366	0	1066	167	1754	177	10	2108	5517
% App. Total	20.3	58.6	20.7	0.4		9.3	83.8	6.4	0.5		17.4	48.3	34.3	0		7.9	83.2	8.4	0.5		
PHF	.868	.828	.820	.333	.854	.761	.886	.821	.438	.946	.771	.933	.897	.000	.948	.708	.900	.903	.500	.939	.970
Autos	176	503	178	4	861	132	1170								1700						
% Autos	95.7	94.9	95.2	100	95.1	98.5	97.1	93.5	100	97.0	96.2	97.1	98.9	0	97.6	98.2	96.9	94.4	90.0	96.8	96.7
Heavy Vehicles																					
% Heavy Vehicles	4.3	5.1	4.8	0	4.9	1.5	2.9	6.5	0	3.0	3.8	2.9	1.1	2.4	1.8	3.1	5.6	10.0	3.2	3.3	



# Traf Tech Engineering Inc.

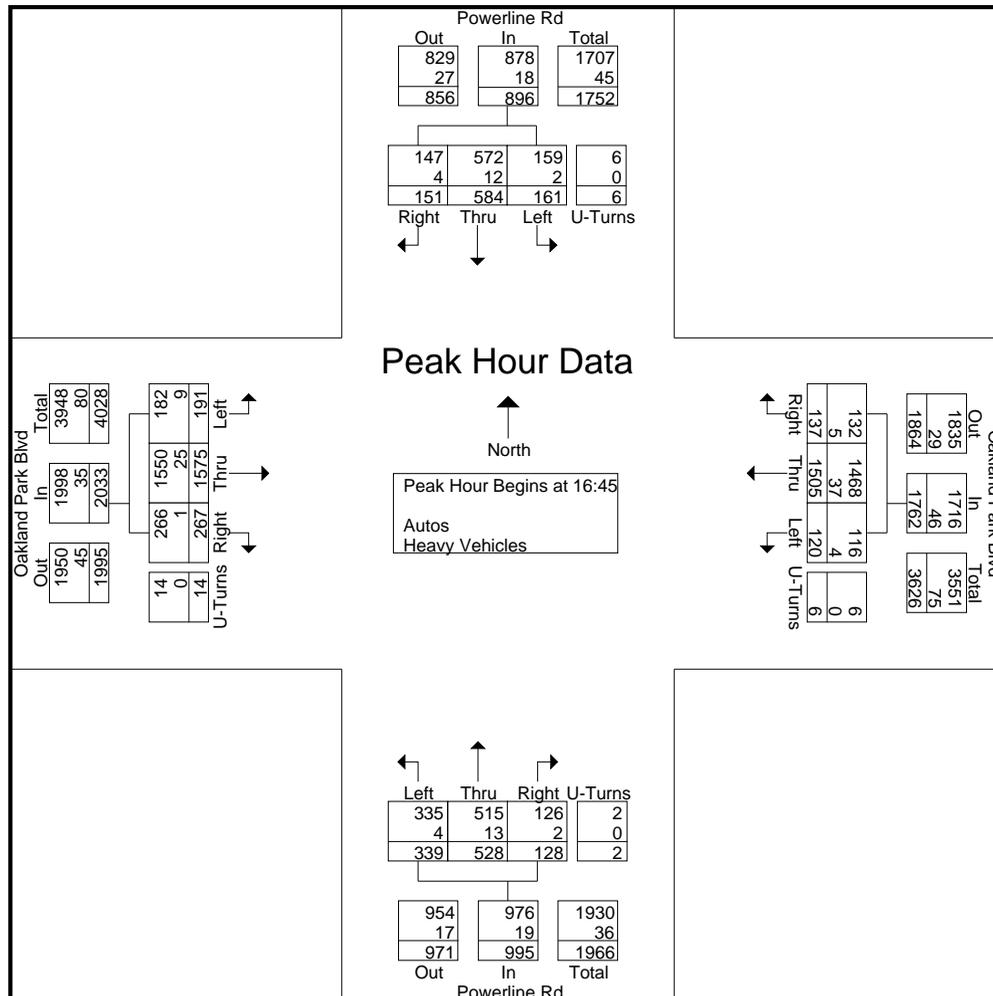
File Name : 1-Powerline Rd & Oakland Park Blvd  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 5

Start Time	Powerline Rd From North					Oakland Park Blvd From East					Powerline Rd From South					Oakland Park Blvd From West					Int. Total
	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	

Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 16:45

16:45	49	130	33	3	215	37	366	28	0	431	29	134	80	2	245	69	406	49	1	525	1416
17:00	34	153	49	2	238	31	412	34	3	480	32	135	88	0	255	64	322	44	6	436	1409
17:15	38	169	37	1	245	46	380	26	2	454	36	137	85	0	258	65	369	49	3	486	1443
17:30	30	132	42	0	204	23	347	32	1	403	31	122	86	0	239	69	478	49	4	600	1446
Total Volume	151	584	161	6	902	137	1505	120	6	1768	128	528	339	2	997	267	1575	191	14	2047	5714
% App. Total	16.7	64.7	17.8	0.7		7.7	85.1	6.8	0.3		12.8	53	34	0.2		13	76.9	9.3	0.7		
PHF	.770	.864	.821	.500	.920	.745	.913	.882	.500	.921	.889	.964	.963	.250	.966	.967	.824	.974	.583	.853	.988
Autos	147	572	159	6	884	132	1468									1550					
% Autos	97.4	97.9	98.8	100	98.0	96.4	97.5	96.7	100	97.4	98.4	97.5	98.8	100	98.1	99.6	98.4	95.3	100	98.3	97.9
Heavy Vehicles																					
% Heavy Vehicles	2.6	2.1	1.2	0	2.0	3.6	2.5	3.3	0	2.6	1.6	2.5	1.2	0	1.9	0.4	1.6	4.7	0	1.7	2.1



# Traf Tech Engineering Inc.

File Name : 2-Powerline Rd & NW 29th St  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 1

## Groups Printed- Peds & Bikes

Start Time	Powerline Rd From North				NW 29th Street From East				Powerline Rd From South				NW 29th Street From West				Int. Total	
	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:15	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
07:30	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	6	0	0	0	1	0	0	0	0	0	0	0	1	8
08:00	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5
08:15	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	3
08:30	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	3
08:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	0	3	0	0	8	0	0	0	0	0	0	0	0	0	12
*** BREAK ***																		
16:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
*** BREAK ***																		
16:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
17:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
17:30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
17:45	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	3
Total	0	0	0	0	3	0	0	0	0	0	0	0	1	0	0	0	2	6
Grand Total	1	0	0	0	12	0	0	13	0	0	0	0	1	0	0	3		30
Apprch %	100	0	0	0	48	0	0	52	0	0	0	0	25	0	0	75		
Total %	3.3	0	0	0	40	0	0	43.3	0	0	0	0	3.3	0	0	10		

# Traf Tech Engineering Inc.

File Name : 2-Powerline Rd & NW 29th St  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 1

## Groups Printed- Autos - Heavy Vehicles

Start Time	Powerline Rd From North					NW 29th Street From East					Powerline Rd From South					NW 29th Street From West					Int. Total
	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	
07:00	1	121	9	0	131	15	0	7	0	22	5	176	1	0	182	3	2	7	0	12	347
07:15	2	171	16	1	190	21	0	14	0	35	7	185	0	0	192	2	3	9	0	14	431
07:30	3	174	19	1	197	37	1	8	0	46	21	244	0	0	265	2	0	6	0	8	516
07:45	2	183	43	1	229	38	4	25	0	67	32	239	2	0	273	2	3	6	0	11	580
Total	8	649	87	3	747	111	5	54	0	170	65	844	3	0	912	9	8	28	0	45	1874
08:00	7	200	36	1	244	54	0	29	0	83	24	201	2	0	227	1	1	6	0	8	562
08:15	1	148	12	0	161	21	3	14	0	38	11	213	1	0	225	5	2	3	0	10	434
08:30	4	178	16	0	198	21	2	16	0	39	16	150	1	0	167	0	2	2	0	4	408
08:45	5	166	23	1	195	13	0	7	0	20	14	196	2	1	213	2	1	12	0	15	443
Total	17	692	87	2	798	109	5	66	0	180	65	760	6	1	832	8	6	23	0	37	1847
*** BREAK ***																					
16:00	4	179	14	1	198	31	4	20	0	55	11	202	2	0	215	6	3	4	0	13	481
16:15	5	212	17	1	235	30	1	32	0	63	11	204	1	1	217	1	1	6	0	8	523
16:30	3	184	16	0	203	25	6	13	0	44	16	230	3	2	251	5	2	6	0	13	511
16:45	7	203	15	1	226	29	2	37	0	68	9	202	1	0	212	2	4	2	0	8	514
Total	19	778	62	3	862	115	13	102	0	230	47	838	7	3	895	14	10	18	0	42	2029
17:00	6	211	16	0	233	45	6	29	0	80	9	214	1	0	224	1	1	5	0	7	544
17:15	7	240	26	1	274	37	4	38	0	79	14	241	1	1	257	3	3	4	0	10	620
17:30	8	196	20	1	225	34	5	31	0	70	17	188	0	0	205	3	2	3	0	8	508
17:45	8	230	24	1	263	22	5	21	0	48	6	198	2	0	206	3	0	6	0	9	526
Total	29	877	86	3	995	138	20	119	0	277	46	841	4	1	892	10	6	18	0	34	2198
Grand Total	73	2996	322	11	3402	473	43	341	0	857	223	3283	20	5	3531	41	30	87	0	158	7948
Apprch %	2.1	88.1	9.5	0.3		55.2	5	39.8	0		6.3	93	0.6	0.1		25.9	19	55.1	0		
Total %	0.9	37.7	4.1	0.1	42.8	6	0.5	4.3	0	10.8	2.8	41.3	0.3	0.1	44.4	0.5	0.4	1.1	0	2	
Autos	67	2905										3191									
% Autos	91.8	97	98.4	90.9	97	99.4	100	97.7	0	98.7	98.7	97.2	100	100	97.3	95.1	100	98.9	0	98.1	97.3
Heavy Vehicles																					
% Heavy Vehicles	8.2	3	1.6	9.1	3	0.6	0	2.3	0	1.3	1.3	2.8	0	0	2.7	4.9	0	1.1	0	1.9	2.7

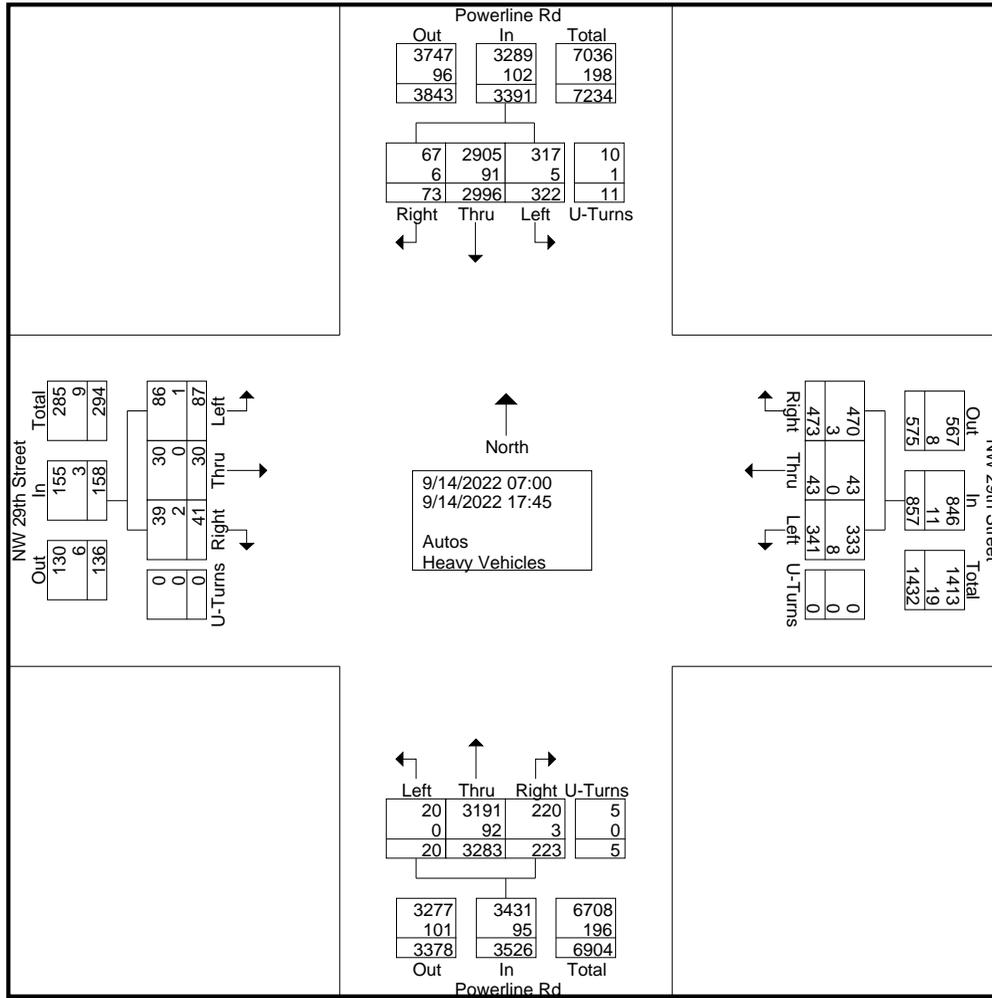
# Traf Tech Engineering Inc.

File Name : 2-Powerline Rd & NW 29th St

Site Code : 00000000

Start Date : 9/14/2022

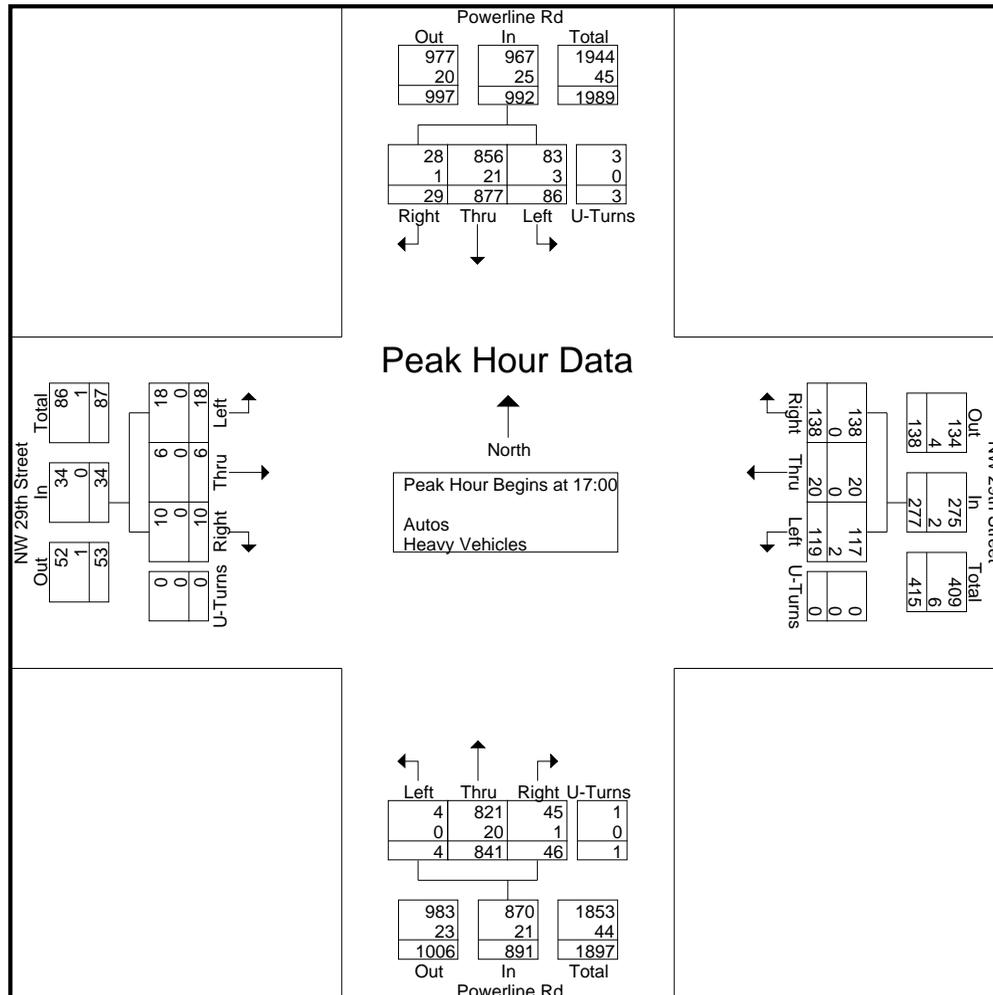
Page No : 2



# Traf Tech Engineering Inc.

File Name : 2-Powerline Rd & NW 29th St  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 3

Start Time	Powerline Rd From North					NW 29th Street From East					Powerline Rd From South					NW 29th Street From West					Int. Total
	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	
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	6	211	16	0	233	45	6	29	0	80	9	214	1	0	224	1	1	5	0	7	544
17:15	7	240	26	1	274	37	4	38	0	79	14	241	1	1	257	3	3	4	0	10	620
17:30	8	196	20	1	225	34	5	31	0	70	17	188	0	0	205	3	2	3	0	8	508
17:45	8	230	24	1	263	22	5	21	0	48	6	198	2	0	206	3	0	6	0	9	526
Total Volume	29	877	86	3	995	138	20	119	0	277	46	841	4	1	892	10	6	18	0	34	2198
% App. Total	2.9	88.1	8.6	0.3		49.8	7.2	43	0		5.2	94.3	0.4	0.1		29.4	17.6	52.9	0		
PHF	.906	.914	.827	.750	.908	.767	.833	.783	.000	.866	.676	.872	.500	.250	.868	.833	.500	.750	.000	.850	.886
Autos	28	856	83	3	970	138	20	117	0	275	45	821	4	1	871	10	6	18	0	34	2150
% Autos	96.6	97.6	96.5	100	97.5	100	100	98.3	0	99.3	97.8	97.6	100	100	97.6	100	100	100	0	100	97.8
Heavy Vehicles																					
% Heavy Vehicles	3.4	2.4	3.5	0	2.5	0	0	1.7	0	0.7	2.2	2.4	0	0	2.4	0	0	0	0	0	2.2



# Traf Tech Engineering Inc.

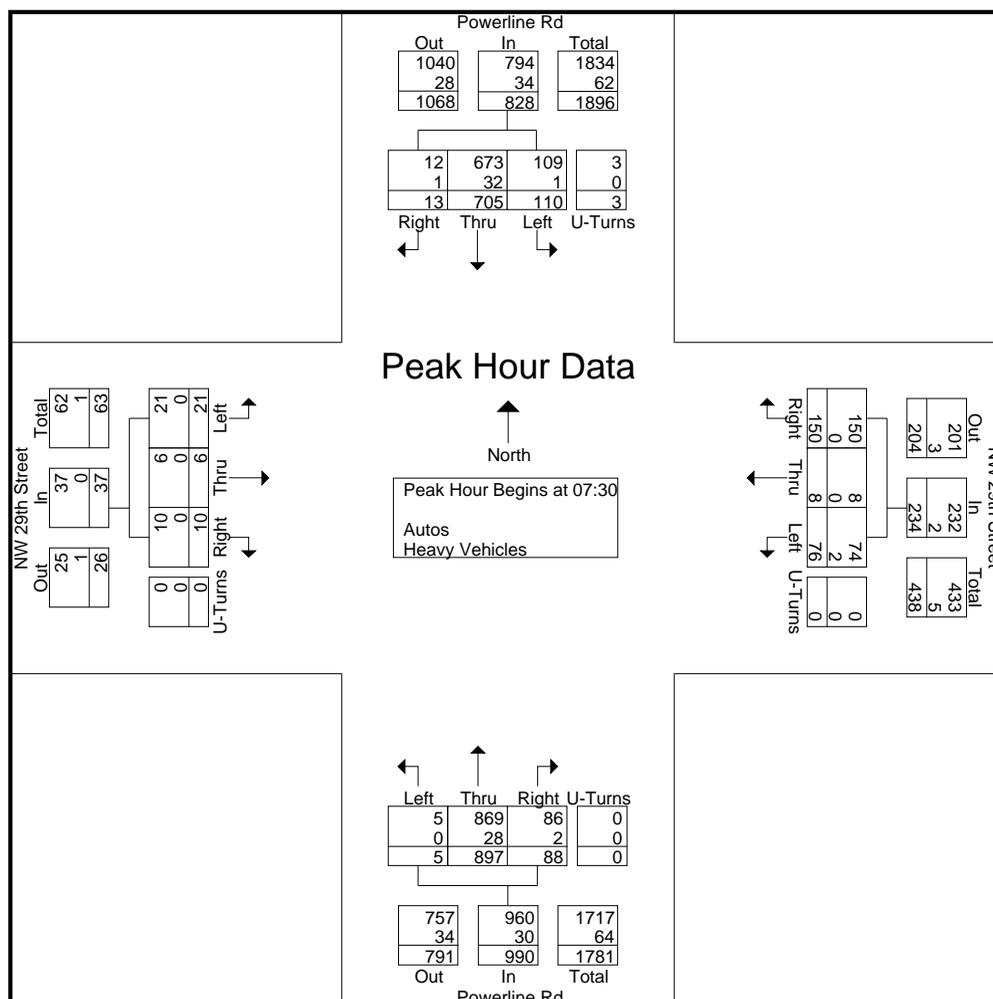
File Name : 2-Powerline Rd & NW 29th St

Site Code : 00000000

Start Date : 9/14/2022

Page No : 4

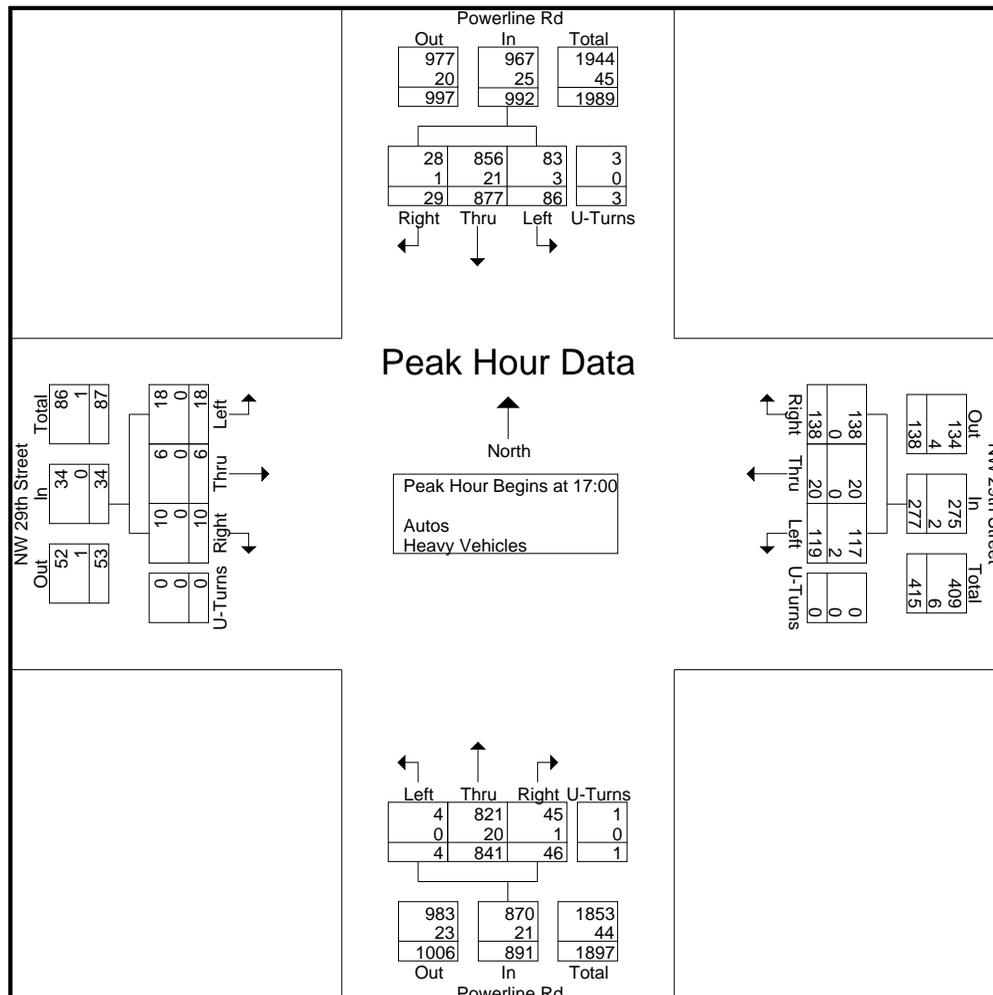
Start Time	Powerline Rd From North					NW 29th Street From East					Powerline Rd From South					NW 29th Street From West					Int. Total
	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	3	174	19	1	197	37	1	8	0	46	21	244	0	0	265	2	0	6	0	8	516
07:45	2	183	43	1	229	38	4	25	0	67	32	239	2	0	273	2	3	6	0	11	580
08:00	7	200	36	1	244	54	0	29	0	83	24	201	2	0	227	1	1	6	0	8	562
08:15	1	148	12	0	161	21	3	14	0	38	11	213	1	0	225	5	2	3	0	10	434
Total Volume	13	705	110	3	831	150	8	76	0	234	88	897	5	0	990	10	6	21	0	37	2092
% App. Total	1.6	84.8	13.2	0.4		64.1	3.4	32.5	0		8.9	90.6	0.5	0		27	16.2	56.8	0		
PHF	.464	.881	.640	.750	.851	.694	.500	.655	.000	.705	.688	.919	.625	.000	.907	.500	.500	.875	.000	.841	.902
Autos	12	673	109	3	797	150	8	74	0	232	86	869	5	0	960	10	6	21	0	37	2026
% Autos	92.3	95.5	99.1	100	95.9	100	100	97.4	0	99.1	97.7	96.9	100	0	97.0	100	100	100	0	100	96.8
Heavy Vehicles																					
% Heavy Vehicles	7.7	4.5	0.9	0	4.1	0	0	2.6	0	0.9	2.3	3.1	0	0	3.0	0	0	0	0	0	3.2



# Traf Tech Engineering Inc.

File Name : 2-Powerline Rd & NW 29th St  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 5

Start Time	Powerline Rd From North					NW 29th Street From East					Powerline Rd From South					NW 29th Street From West					Int. Total
	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	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	6	211	16	0	233	45	6	29	0	80	9	214	1	0	224	1	1	5	0	7	544
17:15	7	240	26	1	274	37	4	38	0	79	14	241	1	1	257	3	3	4	0	10	620
17:30	8	196	20	1	225	34	5	31	0	70	17	188	0	0	205	3	2	3	0	8	508
17:45	8	230	24	1	263	22	5	21	0	48	6	198	2	0	206	3	0	6	0	9	526
Total Volume	29	877	86	3	995	138	20	119	0	277	46	841	4	1	892	10	6	18	0	34	2198
% App. Total	2.9	88.1	8.6	0.3		49.8	7.2	43	0		5.2	94.3	0.4	0.1		29.4	17.6	52.9	0		
PHF	.906	.914	.827	.750	.908	.767	.833	.783	.000	.866	.676	.872	.500	.250	.868	.833	.500	.750	.000	.850	.886
Autos	28	856	83	3	970	138	20	117	0	275	45	821	4	1	871	10	6	18	0	34	2150
% Autos	96.6	97.6	96.5	100	97.5	100	100	98.3	0	99.3	97.8	97.6	100	100	97.6	100	100	100	0	100	97.8
Heavy Vehicles																					
% Heavy Vehicles	3.4	2.4	3.5	0	2.5	0	0	1.7	0	0.7	2.2	2.4	0	0	2.4	0	0	0	0	0	2.2



# Traf Tech Engineering Inc.

File Name : 3-Andrews Ave & NE 26th St

Site Code : 00000000

Start Date : 9/14/2022

Page No : 1

## Groups Printed- Peds & Bikes

Start Time	Andrews Ave From North				NE 26th Street From East				Andrews Ave From South				NE 26th Street From West				Int. Total
	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15	0	0	0	1	2	0	0	3	0	0	0	0	0	0	0	0	6
07:30	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
07:45	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	3
Total	0	0	0	1	6	0	0	4	0	0	0	1	0	0	0	0	12
08:00	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2
08:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
08:30	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	3
08:45	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
Total	0	0	0	1	3	0	0	4	0	0	0	0	0	0	0	0	8
*** BREAK ***																	
16:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
*** BREAK ***																	
16:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	3
*** BREAK ***																	
17:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
*** BREAK ***																	
17:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
17:45	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	3	0	0	0	1	0	0	0	0	0	0	0	0	4
Grand Total	0	0	0	5	11	0	0	10	0	0	0	1	0	0	0	0	27
Apprch %	0	0	0	100	52.4	0	0	47.6	0	0	0	100	0	0	0	0	
Total %	0	0	0	18.5	40.7	0	0	37	0	0	0	3.7	0	0	0	0	

# Traf Tech Engineering Inc.

File Name : 3-Andrews Ave & NE 26th St  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 1

## Groups Printed- Autos - Heavy Vehicles

Start Time	Andrews Ave From North					NE 26th Street From East					Andrews Ave From South					NE 26th Street From West					Int. Total
	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	
07:00	2	178	19	0	199	14	1	7	0	22	12	120	0	0	132	0	0	0	0	0	353
07:15	0	287	21	0	308	22	1	24	0	47	20	159	0	0	179	1	0	0	0	1	535
07:30	0	215	21	0	236	21	0	26	0	47	20	264	0	0	284	0	0	0	0	0	567
07:45	1	232	32	0	265	34	0	28	0	62	35	232	0	0	267	0	0	0	0	0	594
Total	3	912	93	0	1008	91	2	85	0	178	87	775	0	0	862	1	0	0	0	1	2049
08:00	2	223	53	0	278	38	0	36	0	74	35	208	0	0	243	0	0	0	0	0	595
08:15	0	263	46	0	309	45	0	39	0	84	30	175	0	0	205	0	0	0	0	0	598
08:30	0	210	34	0	244	43	1	32	0	76	21	191	0	0	212	1	0	0	0	1	533
08:45	3	221	26	0	250	37	2	27	0	66	29	160	0	0	189	0	0	0	0	0	505
Total	5	917	159	0	1081	163	3	134	0	300	115	734	0	0	849	1	0	0	0	1	2231
*** BREAK ***																					
16:00	2	176	35	0	213	44	0	35	0	79	28	201	0	0	229	1	0	0	0	1	522
16:15	3	194	37	0	234	53	3	39	0	95	39	220	1	0	260	2	0	0	0	2	591
16:30	3	231	29	0	263	48	0	50	0	98	31	203	1	0	235	2	0	0	0	2	598
16:45	0	211	37	0	248	47	0	59	0	106	43	225	0	0	268	0	0	0	0	0	622
Total	8	812	138	0	958	192	3	183	0	378	141	849	2	0	992	5	0	0	0	5	2333
17:00	2	205	35	0	242	62	0	56	0	118	35	247	0	0	282	0	0	0	0	0	642
17:15	1	224	37	0	262	64	0	58	0	122	35	255	1	0	291	0	0	0	0	0	675
17:30	4	258	38	0	300	48	1	42	0	91	45	240	2	0	287	4	1	0	0	5	683
17:45	5	274	31	0	310	49	0	64	0	113	28	220	1	0	249	1	0	0	0	1	673
Total	12	961	141	0	1114	223	1	220	0	444	143	962	4	0	1109	5	1	0	0	6	2673
Grand Total	28	3602	531	0	4161	669	9	622	0	1300	486	3320	6	0	3812	12	1	0	0	13	9286
Apprch %	0.7	86.6	12.8	0		51.5	0.7	47.8	0		12.7	87.1	0.2	0		92.3	7.7	0	0		
Total %	0.3	38.8	5.7	0	44.8	7.2	0.1	6.7	0	14	5.2	35.8	0.1	0	41.1	0.1	0	0	0	0.1	
Autos	28	3526										3259									
% Autos	100	97.9	98.7	0	98	98.1	100	98.9	0	98.5	98.4	98.2	100	0	98.2	100	100	0	0	100	98.1
Heavy Vehicles																					
% Heavy Vehicles	0	2.1	1.3	0	2	1.9	0	1.1	0	1.5	1.6	1.8	0	0	1.8	0	0	0	0	0	1.9

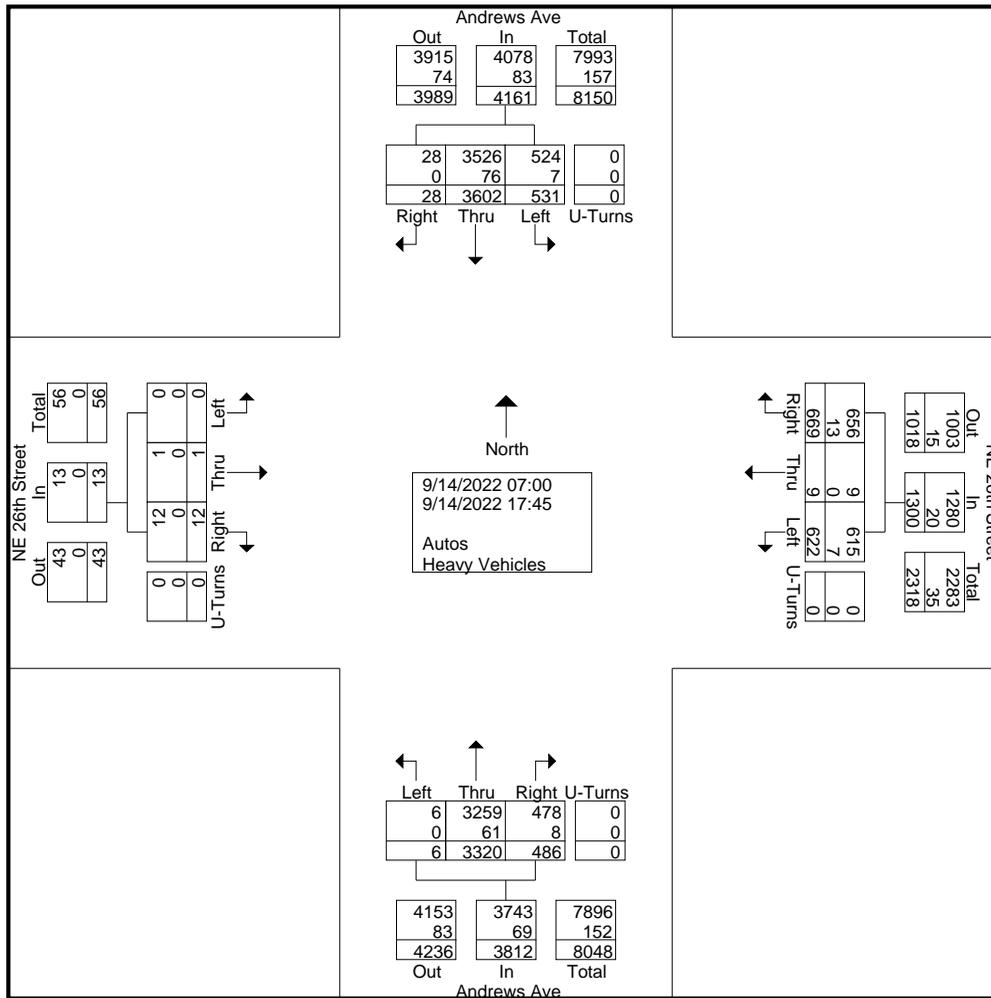
# Traf Tech Engineering Inc.

File Name : 3-Andrews Ave & NE 26th St

Site Code : 00000000

Start Date : 9/14/2022

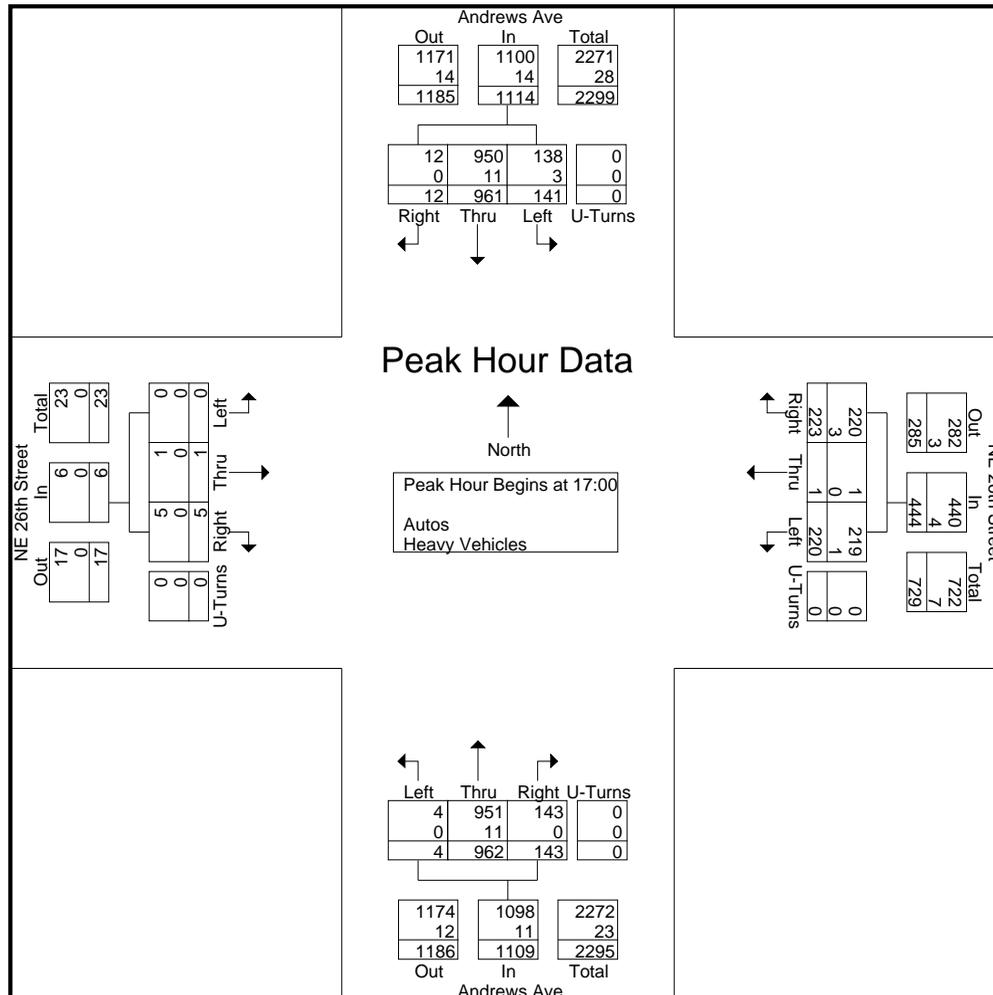
Page No : 2



# Traf Tech Engineering Inc.

File Name : 3-Andrews Ave & NE 26th St  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 3

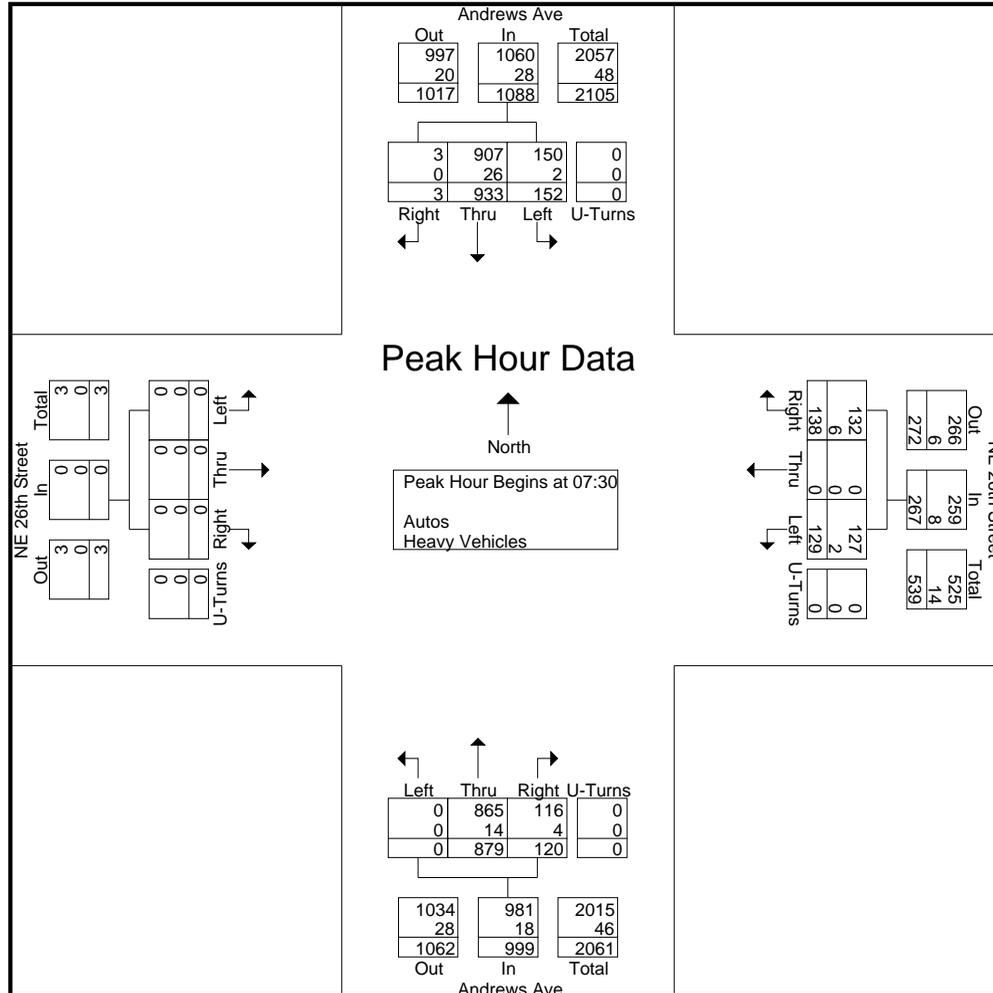
Start Time	Andrews Ave From North					NE 26th Street From East					Andrews Ave From South					NE 26th Street From West					Int. Total
	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	2	205	35	0	242	62	0	56	0	118	35	247	0	0	282	0	0	0	0	0	642
17:15	1	224	37	0	262	64	0	58	0	122	35	255	1	0	291	0	0	0	0	0	675
17:30	4	258	38	0	300	48	1	42	0	91	45	240	2	0	287	4	1	0	0	5	683
17:45	5	274	31	0	310	49	0	64	0	113	28	220	1	0	249	1	0	0	0	1	673
Total Volume	12	961	141	0	1114	223	1	220	0	444	143	962	4	0	1109	5	1	0	0	6	2673
% App. Total	1.1	86.3	12.7	0		50.2	0.2	49.5	0		12.9	86.7	0.4	0		83.3	16.7	0	0		
PHF	.600	.877	.928	.000	.898	.871	.250	.859	.000	.910	.794	.943	.500	.000	.953	.313	.250	.000	.000	.300	.978
Autos	12	950	138	0	1100	220	1	219	0	440	143	951	4	0	1098	5	1	0	0	6	2644
% Autos	100	98.9	97.9	0	98.7	98.7	100	99.5	0	99.1	100	98.9	100	0	99.0	100	100	0	0	100	98.9
Heavy Vehicles																					
% Heavy Vehicles	0	1.1	2.1	0	1.3	1.3	0	0.5	0	0.9	0	1.1	0	0	1.0	0	0	0	0	0	1.1



# Traf Tech Engineering Inc.

File Name : 3-Andrews Ave & NE 26th St  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 4

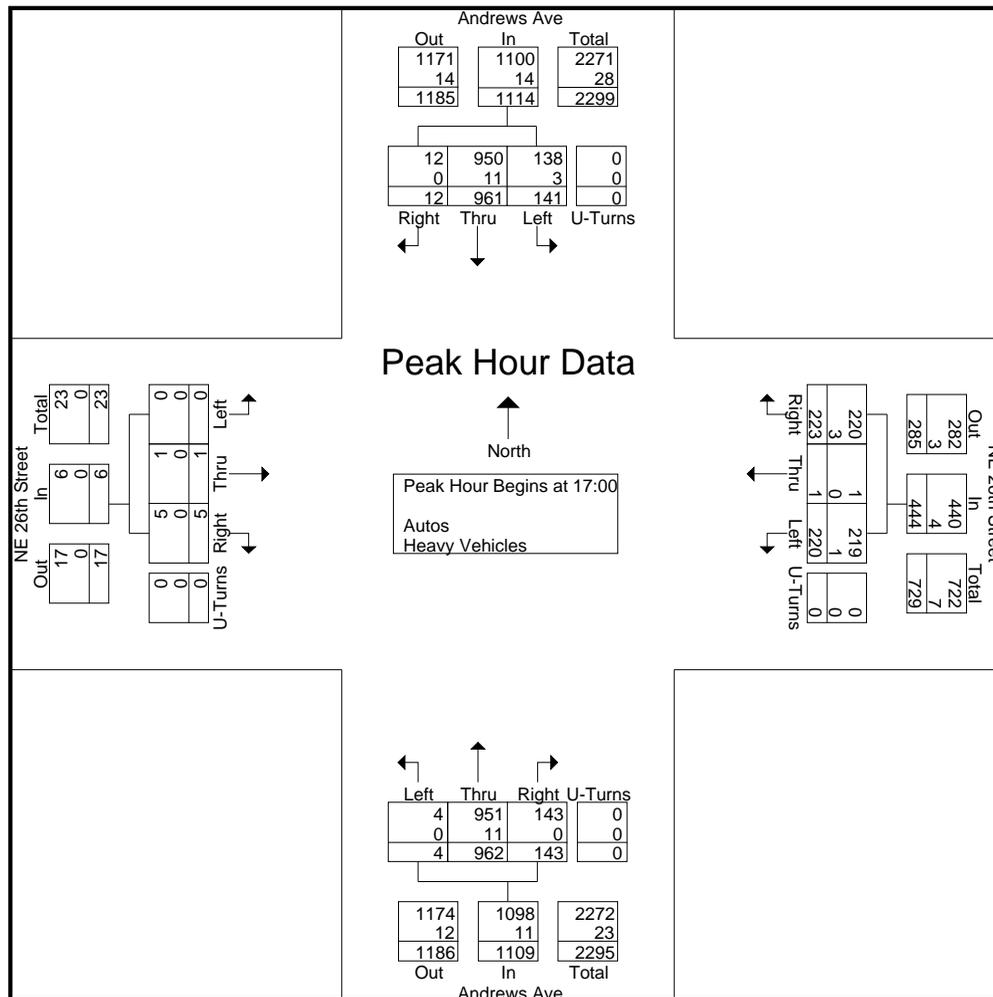
Start Time	Andrews Ave From North					NE 26th Street From East					Andrews Ave From South					NE 26th Street From West					Int. Total
	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	0	215	21	0	236	21	0	26	0	47	20	264	0	0	284	0	0	0	0	0	567
07:45	1	232	32	0	265	34	0	28	0	62	35	232	0	0	267	0	0	0	0	0	594
08:00	2	223	53	0	278	38	0	36	0	74	35	208	0	0	243	0	0	0	0	0	595
08:15	0	263	46	0	309	45	0	39	0	84	30	175	0	0	205	0	0	0	0	0	598
Total Volume	3	933	152	0	1088	138	0	129	0	267	120	879	0	0	999	0	0	0	0	0	2354
% App. Total	0.3	85.8	14	0		51.7	0	48.3	0		12	88	0	0		0	0	0	0		
PHF	.375	.887	.717	.000	.880	.767	.000	.827	.000	.795	.857	.832	.000	.000	.879	.000	.000	.000	.000	.000	.984
Autos	3	907	150	0	1060	132	0	127	0	259	116	865	0	0	981	0	0	0	0	0	2300
% Autos	100	97.2	98.7	0	97.4	95.7	0	98.4	0	97.0	96.7	98.4	0	0	98.2	0	0	0	0	0	97.7
Heavy Vehicles																					
% Heavy Vehicles	0	2.8	1.3	0	2.6	4.3	0	1.6	0	3.0	3.3	1.6	0	0	1.8	0	0	0	0	0	2.3



# Traf Tech Engineering Inc.

File Name : 3-Andrews Ave & NE 26th St  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 5

Start Time	Andrews Ave From North					NE 26th Street From East					Andrews Ave From South					NE 26th Street From West					Int. Total
	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	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	2	205	35	0	242	62	0	56	0	118	35	247	0	0	282	0	0	0	0	0	642
17:15	1	224	37	0	262	64	0	58	0	122	35	255	1	0	291	0	0	0	0	0	675
17:30	4	258	38	0	300	48	1	42	0	91	45	240	2	0	287	4	1	0	0	5	683
17:45	5	274	31	0	310	49	0	64	0	113	28	220	1	0	249	1	0	0	0	1	673
Total Volume	12	961	141	0	1114	223	1	220	0	444	143	962	4	0	1109	5	1	0	0	6	2673
% App. Total	1.1	86.3	12.7	0		50.2	0.2	49.5	0		12.9	86.7	0.4	0		83.3	16.7	0	0		
PHF	.600	.877	.928	.000	.898	.871	.250	.859	.000	.910	.794	.943	.500	.000	.953	.313	.250	.000	.000	.300	.978
Autos	12	950	138	0	1100	220	1	219	0	440	143	951	4	0	1098	5	1	0	0	6	2644
% Autos	100	98.9	97.9	0	98.7	98.7	100	99.5	0	99.1	100	98.9	100	0	99.0	100	100	0	0	100	98.9
Heavy Vehicles																					
% Heavy Vehicles	0	1.1	2.1	0	1.3	1.3	0	0.5	0	0.9	0	1.1	0	0	1.0	0	0	0	0	0	1.1



# Traf Tech Engineering Inc.

File Name : 4-NE 6th Ave & Oakland Park Blvd  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 1

## Groups Printed- Peds & Bikes

Start Time	NE 6th Ave From North				Oakland Park Blvd From East				NE 6th Ave From South				Oakland Park Blvd From West				Int. Total
	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	
07:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
07:15	0	0	0	5	1	0	0	4	1	0	0	0	0	0	0	0	11
07:30	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
07:45	0	0	0	4	1	0	0	0	1	0	0	1	0	0	0	0	7
Total	0	0	0	9	2	0	0	7	3	0	0	1	0	0	0	0	22
08:00	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
08:15	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2
08:30	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	0	4
08:45	0	0	0	0	2	0	0	0	3	0	0	1	0	0	0	0	6
Total	2	0	0	1	3	0	0	3	3	0	0	3	0	0	0	0	15
*** BREAK ***																	
16:00	0	0	0	2	0	0	0	3	1	0	0	0	1	0	0	0	7
16:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
16:45	1	0	0	0	1	0	0	1	1	0	0	2	0	0	0	0	6
Total	1	0	0	2	1	0	0	4	2	0	0	4	1	0	0	0	15
17:00	0	0	0	0	2	0	0	1	0	0	0	1	1	0	0	0	5
17:15	0	0	0	1	1	0	0	2	1	0	0	0	0	0	0	0	5
17:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	2
*** BREAK ***																	
Total	0	0	0	1	3	0	0	4	1	0	0	1	1	0	0	1	12
Grand Total	3	0	0	13	9	0	0	18	9	0	0	9	2	0	0	1	64
Apprch %	18.8	0	0	81.2	33.3	0	0	66.7	50	0	0	50	66.7	0	0	33.3	
Total %	4.7	0	0	20.3	14.1	0	0	28.1	14.1	0	0	14.1	3.1	0	0	1.6	

# Traf Tech Engineering Inc.

File Name : 4-NE 6th Ave & Oakland Park Blvd  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 1

## Groups Printed- Autos - Heavy Vehicles

Start Time	NE 6th Ave From North					Oakland Park Blvd From East					NE 6th Ave From South					Oakland Park Blvd From West					Int. Total
	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	
07:00	8	13	11	0	32	6	197	12	4	219	4	16	22	0	42	11	267	8	1	287	580
07:15	5	26	9	0	40	3	228	4	0	235	8	25	25	0	58	19	319	11	0	349	682
07:30	6	22	20	0	48	10	265	9	2	286	13	27	50	0	90	29	364	14	2	409	833
07:45	12	43	23	0	78	19	236	10	4	269	17	40	30	0	87	23	371	13	1	408	842
Total	31	104	63	0	198	38	926	35	10	1009	42	108	127	0	277	82	1321	46	4	1453	2937
08:00	6	56	17	0	79	14	260	17	0	291	13	25	35	0	73	19	355	12	0	386	829
08:15	10	43	18	0	71	15	196	16	2	229	10	37	31	0	78	29	330	9	2	370	748
08:30	21	47	19	0	87	4	264	10	3	281	14	25	34	0	73	32	403	9	2	446	887
08:45	5	41	20	0	66	17	227	13	3	260	13	30	31	0	74	37	381	6	0	424	824
Total	42	187	74	0	303	50	947	56	8	1061	50	117	131	0	298	117	1469	36	4	1626	3288
*** BREAK ***																					
16:00	12	36	14	0	62	12	383	15	5	415	17	55	39	0	111	25	266	10	1	302	890
16:15	7	33	32	0	72	11	340	20	12	383	7	50	34	0	91	26	283	19	3	331	877
16:30	13	56	28	0	97	23	336	19	5	383	4	29	31	0	64	35	293	11	3	342	886
16:45	10	47	21	0	78	21	294	18	2	335	15	40	31	0	86	46	301	20	2	369	868
Total	42	172	95	0	309	67	1353	72	24	1516	43	174	135	0	352	132	1143	60	9	1344	3521
17:00	16	66	29	0	111	17	415	23	10	465	12	50	29	0	91	41	298	13	2	354	1021
17:15	9	51	13	0	73	13	293	16	8	330	7	67	32	0	106	37	339	15	0	391	900
17:30	17	62	28	0	107	16	316	20	5	357	11	40	31	0	82	31	273	10	1	315	861
17:45	10	46	24	0	80	11	320	18	6	355	11	34	31	0	76	43	327	16	2	388	899
Total	52	225	94	0	371	57	1344	77	29	1507	41	191	123	0	355	152	1237	54	5	1448	3681
Grand Total	167	688	326	0	1181	212	4570	240	71	5093	176	590	516	0	1282	483	5170	196	22	5871	13427
Apprch %	14.1	58.3	27.6	0		4.2	89.7	4.7	1.4		13.7	46	40.2	0		8.2	88.1	3.3	0.4		
Total %	1.2	5.1	2.4	0	8.8	1.6	34	1.8	0.5	37.9	1.3	4.4	3.8	0	9.5	3.6	38.5	1.5	0.2	43.7	
Autos	156	685	320	0	1161	206	4454									5040					13108
% Autos	93.4	99.6	98.2	0	98.3	97.2	97.5	98.3	100	97.5	99.4	98.8	96.5	0	98	98.3	97.5	95.4	100	97.5	97.6
Heavy Vehicles																					
% Heavy Vehicles	6.6	0.4	1.8	0	1.7	2.8	2.5	1.7	0	2.5	0.6	1.2	3.5	0	2	1.7	2.5	4.6	0	2.5	2.4

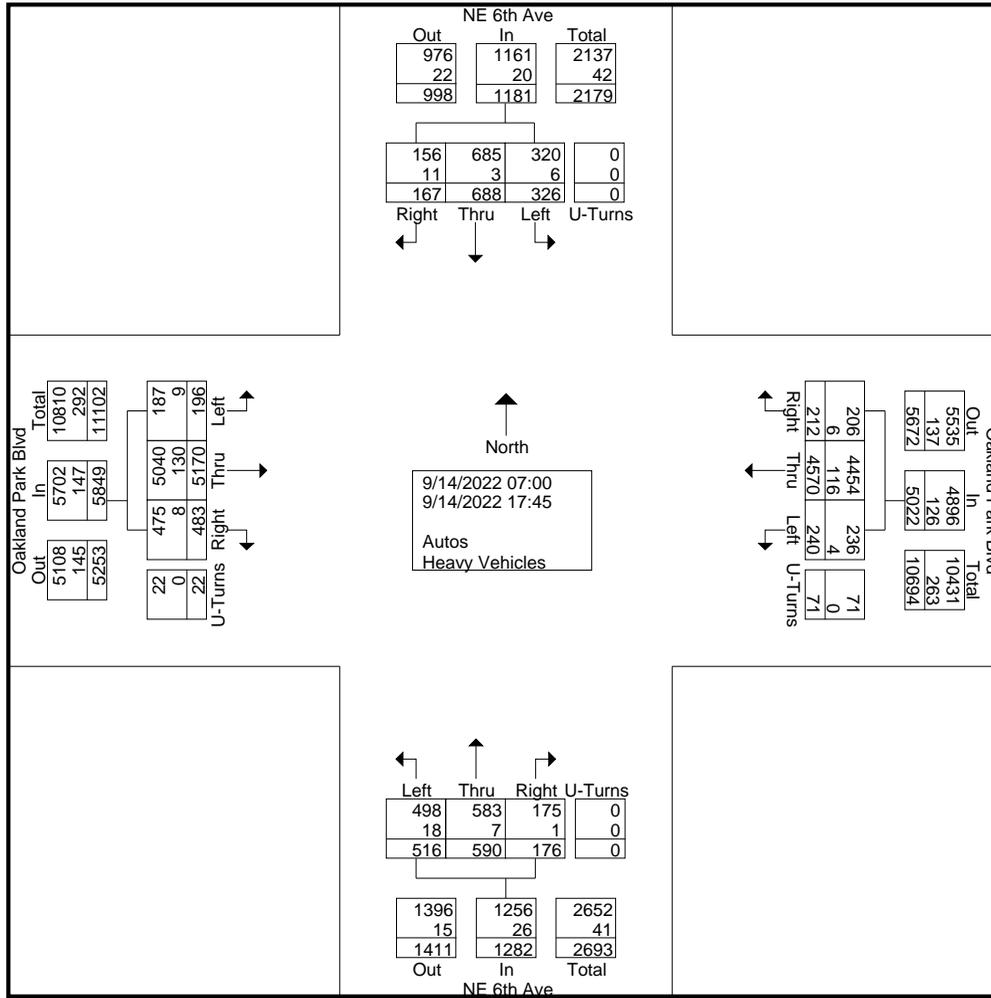
# Traf Tech Engineering Inc.

File Name : 4-NE 6th Ave & Oakland Park Blvd

Site Code : 00000000

Start Date : 9/14/2022

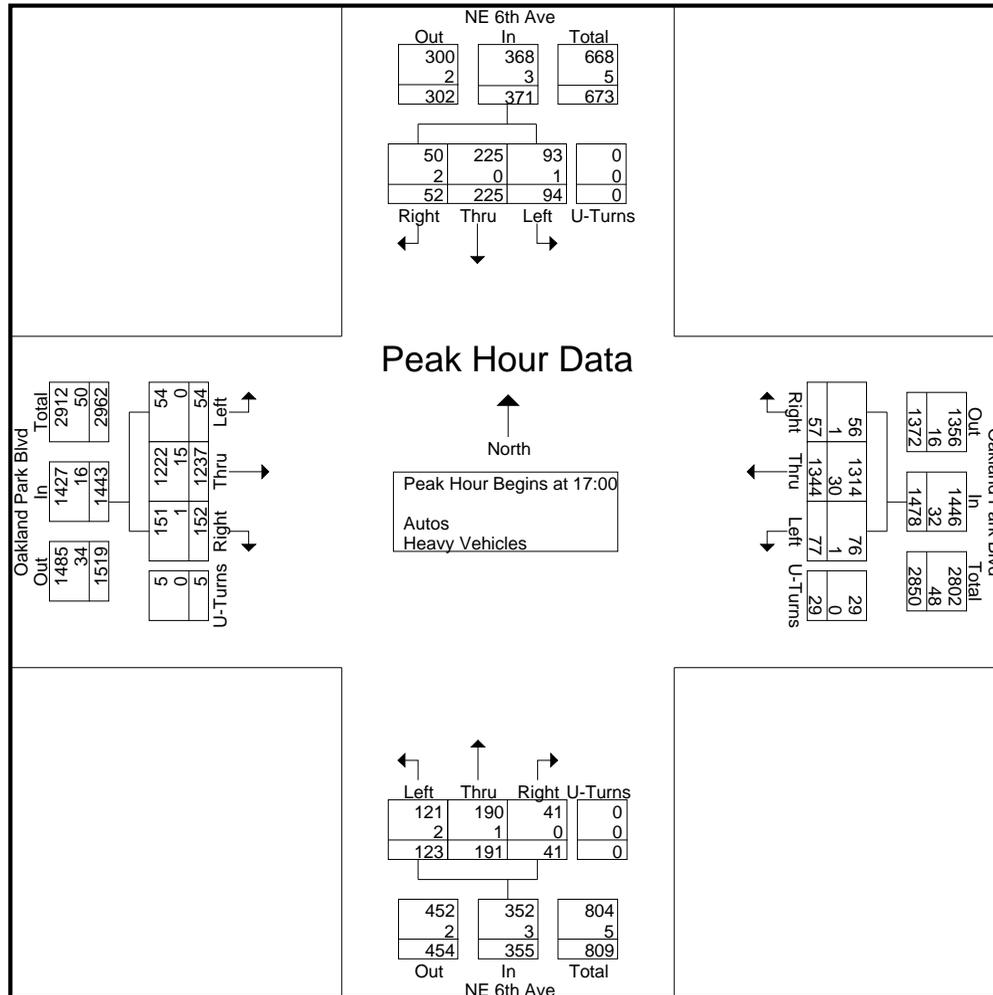
Page No : 2



# Traf Tech Engineering Inc.

File Name : 4-NE 6th Ave & Oakland Park Blvd  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 3

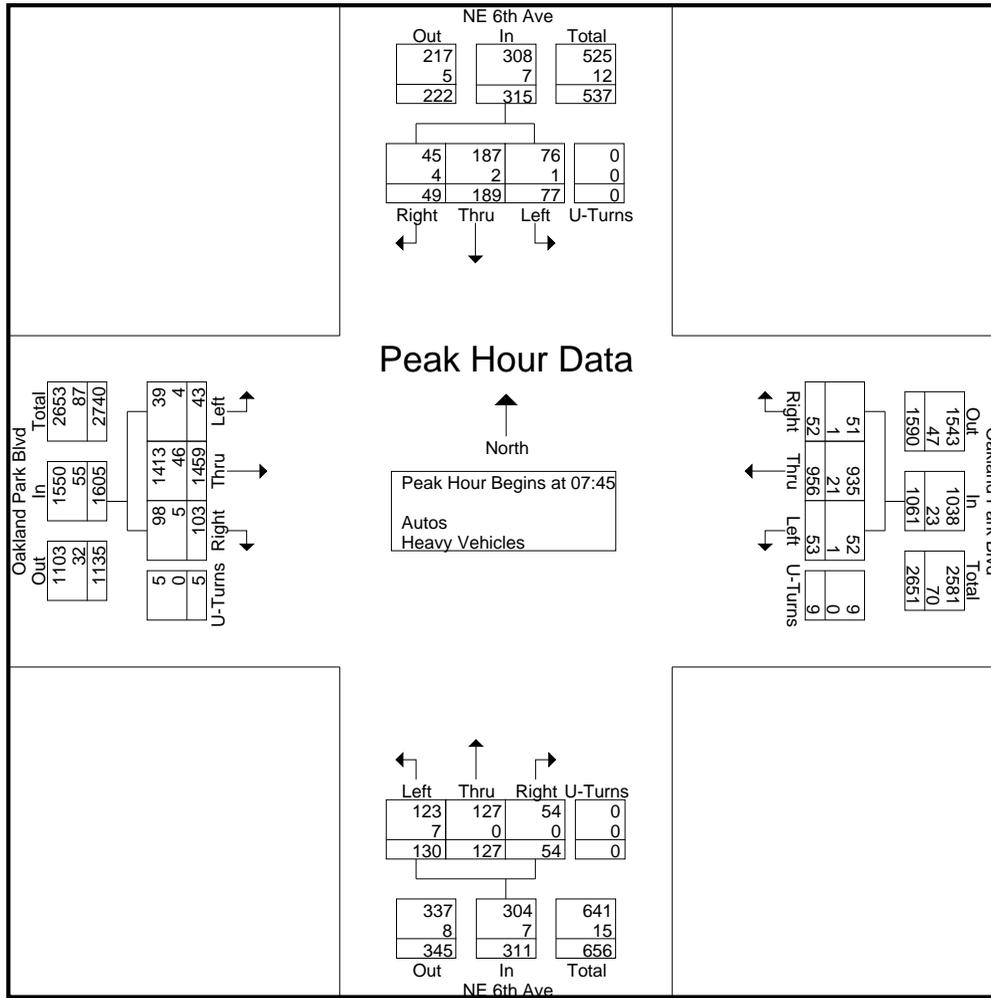
Start Time	NE 6th Ave From North					Oakland Park Blvd From East					NE 6th Ave From South					Oakland Park Blvd From West					Int. Total
	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	16	66	29	0	111	17	415	23	10	465	12	50	29	0	91	41	298	13	2	354	1021
17:15	9	51	13	0	73	13	293	16	8	330	7	67	32	0	106	37	339	15	0	391	900
17:30	17	62	28	0	107	16	316	20	5	357	11	40	31	0	82	31	273	10	1	315	861
17:45	10	46	24	0	80	11	320	18	6	355	11	34	31	0	76	43	327	16	2	388	899
Total Volume	52	225	94	0	371	57	1344	77	29	1507	41	191	123	0	355	152	1237	54	5	1448	3681
% App. Total	14	60.6	25.3	0		3.8	89.2	5.1	1.9		11.5	53.8	34.6	0		10.5	85.4	3.7	0.3		
PHF	.765	.852	.810	.000	.836	.838	.810	.837	.725	.810	.854	.713	.961	.000	.837	.884	.912	.844	.625	.926	.901
Autos	50	225	93	0	368	56	1314									1222					
% Autos	96.2	100	98.9	0	99.2	98.2	97.8	98.7	100	97.9	100	99.5	98.4	0	99.2	99.3	98.8	100	100	98.9	98.5
Heavy Vehicles																					
% Heavy Vehicles	3.8	0	1.1	0	0.8	1.8	2.2	1.3	0	2.1	0	0.5	1.6	0	0.8	0.7	1.2	0	0	1.1	1.5



# Traf Tech Engineering Inc.

File Name : 4-NE 6th Ave & Oakland Park Blvd  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 4

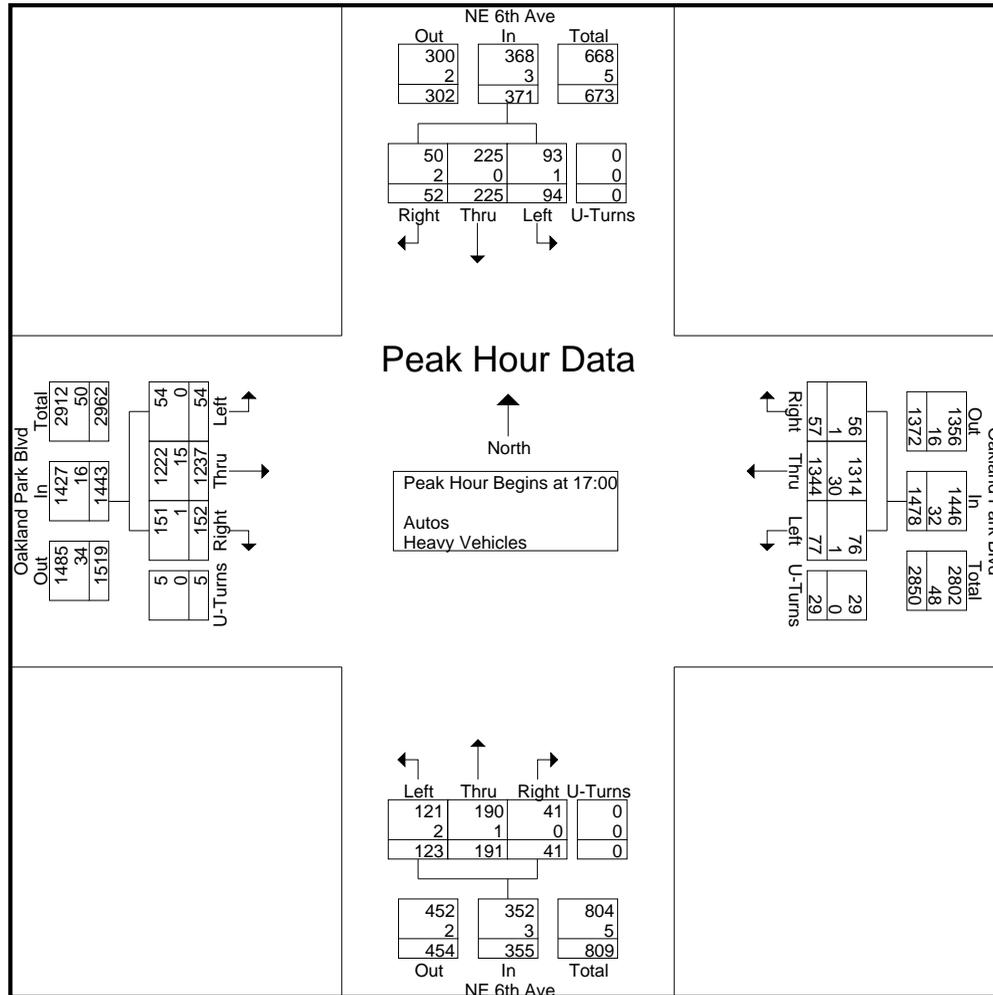
Start Time	NE 6th Ave From North					Oakland Park Blvd From East					NE 6th Ave From South					Oakland Park Blvd From West					Int. Total
	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	12	43	23	0	78	19	236	10	4	269	17	40	30	0	87	23	371	13	1	408	842
08:00	6	56	17	0	79	14	260	17	0	291	13	25	35	0	73	19	355	12	0	386	829
08:15	10	43	18	0	71	15	196	16	2	229	10	37	31	0	78	29	330	9	2	370	748
08:30	21	47	19	0	87	4	264	10	3	281	14	25	34	0	73	32	403	9	2	446	887
Total Volume	49	189	77	0	315	52	956	53	9	1070	54	127	130	0	311	103	1459	43	5	1610	3306
% App. Total	15.6	60	24.4	0		4.9	89.3	5	0.8		17.4	40.8	41.8	0		6.4	90.6	2.7	0.3		
PHF	.583	.844	.837	.000	.905	.684	.905	.779	.563	.919	.794	.794	.929	.000	.894	.805	.905	.827	.625	.902	.932
Autos	45	187	76	0	308	51	935	52	9	1047	54	127	123	0	304	98	1413				
% Autos	91.8	98.9	98.7	0	97.8	98.1	97.8	98.1	100	97.9	100	100	94.6	0	97.7	95.1	96.8	90.7	100	96.6	97.2
Heavy Vehicles																					
% Heavy Vehicles	8.2	1.1	1.3	0	2.2	1.9	2.2	1.9	0	2.1	0	0	5.4	0	2.3	4.9	3.2	9.3	0	3.4	2.8



# Traf Tech Engineering Inc.

File Name : 4-NE 6th Ave & Oakland Park Blvd  
 Site Code : 00000000  
 Start Date : 9/14/2022  
 Page No : 5

Start Time	NE 6th Ave From North					Oakland Park Blvd From East					NE 6th Ave From South					Oakland Park Blvd From West					Int. Total
	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	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	16	66	29	0	111	17	415	23	10	465	12	50	29	0	91	41	298	13	2	354	1021
17:15	9	51	13	0	73	13	293	16	8	330	7	67	32	0	106	37	339	15	0	391	900
17:30	17	62	28	0	107	16	316	20	5	357	11	40	31	0	82	31	273	10	1	315	861
17:45	10	46	24	0	80	11	320	18	6	355	11	34	31	0	76	43	327	16	2	388	899
Total Volume	52	225	94	0	371	57	1344	77	29	1507	41	191	123	0	355	152	1237	54	5	1448	3681
% App. Total	14	60.6	25.3	0		3.8	89.2	5.1	1.9		11.5	53.8	34.6	0		10.5	85.4	3.7	0.3		
PHF	.765	.852	.810	.000	.836	.838	.810	.837	.725	.810	.854	.713	.961	.000	.837	.884	.912	.844	.625	.926	.901
Autos	50	225	93	0	368	56	1314								1222			100	100	98.9	98.5
% Autos	96.2	100	98.9	0	99.2	98.2	97.8	98.7	100	97.9	100	99.5	98.4	0	99.2	99.3	98.8	100	100	98.9	
Heavy Vehicles																					
% Heavy Vehicles	3.8	0	1.1	0	0.8	1.8	2.2	1.3	0	2.1	0	0.5	1.6	0	0.8	0.7	1.2	0	0	1.1	1.5



# Traf Tech Engineering Inc.

File Name : Oakland Park Blvd & Andrews Ave

Site Code : 00000000

Start Date : 8/16/2022

Page No : 1

## Groups Printed- Peds & Bikes

Start Time	Andrews Ave From North				Oakland Park Blvd From East				Andrews Ave From South				Oakland Park Blvd From West				Int. Total	
	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds		
07:00	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	4	6
07:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	3
07:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2
07:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	7
Total	0	0	0	1	1	0	0	1	0	0	0	1	1	0	0	13	18	
08:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	2
08:15	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	3
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	4	7	
*** BREAK ***																		
16:15	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	1	3
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	4
*** BREAK ***																		
Total	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	5	1	7
17:00	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2
17:15	0	0	0	1	1	0	0	3	0	0	0	0	0	0	0	1	1	6
17:30	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2
*** BREAK ***																		
Total	0	0	0	1	2	0	0	4	0	0	0	0	2	0	0	1	1	10
Grand Total	0	0	0	2	5	0	0	7	0	0	0	1	4	0	0	23	1	42
Apprch %	0	0	0	100	41.7	0	0	58.3	0	0	0	100	14.8	0	0	85.2	0	
Total %	0	0	0	4.8	11.9	0	0	16.7	0	0	0	2.4	9.5	0	0	54.8	0	

# Traf Tech Engineering Inc.

File Name : Oakland Park Blvd & Andrews Ave  
 Site Code : 00000000  
 Start Date : 8/16/2022  
 Page No : 1

## Groups Printed- Autos - Heavy Vehicles

Start Time	Andrews Ave From North					Oakland Park Blvd From East					Andrews Ave From South					Oakland Park Blvd From West					Int. Total
	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	
07:00	26	137	17	1	181	6	184	37	0	227	15	81	48	0	144	59	267	40	3	369	921
07:15	37	141	16	0	194	5	224	25	0	254	21	96	60	0	177	79	292	26	5	402	1027
07:30	35	186	20	0	241	14	236	34	0	284	34	148	79	0	261	59	302	41	1	403	1189
07:45	37	144	19	0	200	17	232	33	0	282	40	141	54	0	235	65	392	35	5	497	1214
Total	135	608	72	1	816	42	876	129	0	1047	110	466	241	0	817	262	1253	142	14	1671	4351
08:00	42	160	17	0	219	28	276	34	0	338	30	128	69	0	227	53	367	40	6	466	1250
08:15	34	177	32	0	243	22	265	19	0	306	38	140	65	0	243	56	370	54	1	481	1273
08:30	32	146	20	0	198	28	280	30	0	338	32	133	72	0	237	50	303	52	6	411	1184
08:45	37	150	26	0	213	29	225	31	0	285	37	134	57	0	228	41	229	31	2	303	1029
Total	145	633	95	0	873	107	1046	114	0	1267	137	535	263	0	935	200	1269	177	15	1661	4736
*** BREAK ***																					
16:00	40	130	19	0	189	29	274	41	0	344	29	135	48	0	212	47	263	58	5	373	1118
16:15	34	109	23	0	166	30	260	42	1	333	25	111	48	0	184	51	236	57	5	349	1032
16:30	31	137	21	0	189	25	239	26	0	290	23	163	53	0	239	42	198	48	7	295	1013
16:45	32	178	22	0	232	21	312	29	1	363	31	177	66	0	274	45	221	71	2	339	1208
Total	137	554	85	0	776	105	1085	138	2	1330	108	586	215	0	909	185	918	234	19	1356	4371
17:00	34	141	14	0	189	27	344	41	1	413	36	171	79	0	286	51	229	51	6	337	1225
17:15	19	126	14	0	159	24	352	52	1	429	34	161	88	0	283	51	277	52	9	389	1260
17:30	29	148	23	0	200	29	335	48	0	412	32	204	73	0	309	63	248	63	7	381	1302
17:45	46	152	29	0	227	25	290	50	1	366	30	196	63	0	289	70	260	55	9	394	1276
Total	128	567	80	0	775	105	1321	191	3	1620	132	732	303	0	1167	235	1014	221	31	1501	5063
Grand Total	545	2362	332	1	3240	359	4328	572	5	5264	487	2319	1022	0	3828	882	4454	774	79	6189	18521
Apprch %	16.8	72.9	10.2	0		6.8	82.2	10.9	0.1		12.7	60.6	26.7	0		14.3	72	12.5	1.3		
Total %	2.9	12.8	1.8	0	17.5	1.9	23.4	3.1	0	28.4	2.6	12.5	5.5	0	20.7	4.8	24	4.2	0.4	33.4	
Autos	515	2320				4215					2281					4327					18064
% Autos	94.5	98.2	97	100	97.5	98.3	97.4	98.6	100	97.6	97.7	98.4	97.6	0	98.1	97.1	97.1	97.4	98.7	97.2	97.5
Heavy Vehicles																					
% Heavy Vehicles	5.5	1.8	3	0	2.5	1.7	2.6	1.4	0	2.4	2.3	1.6	2.4	0	1.9	2.9	2.9	2.6	1.3	2.8	2.5

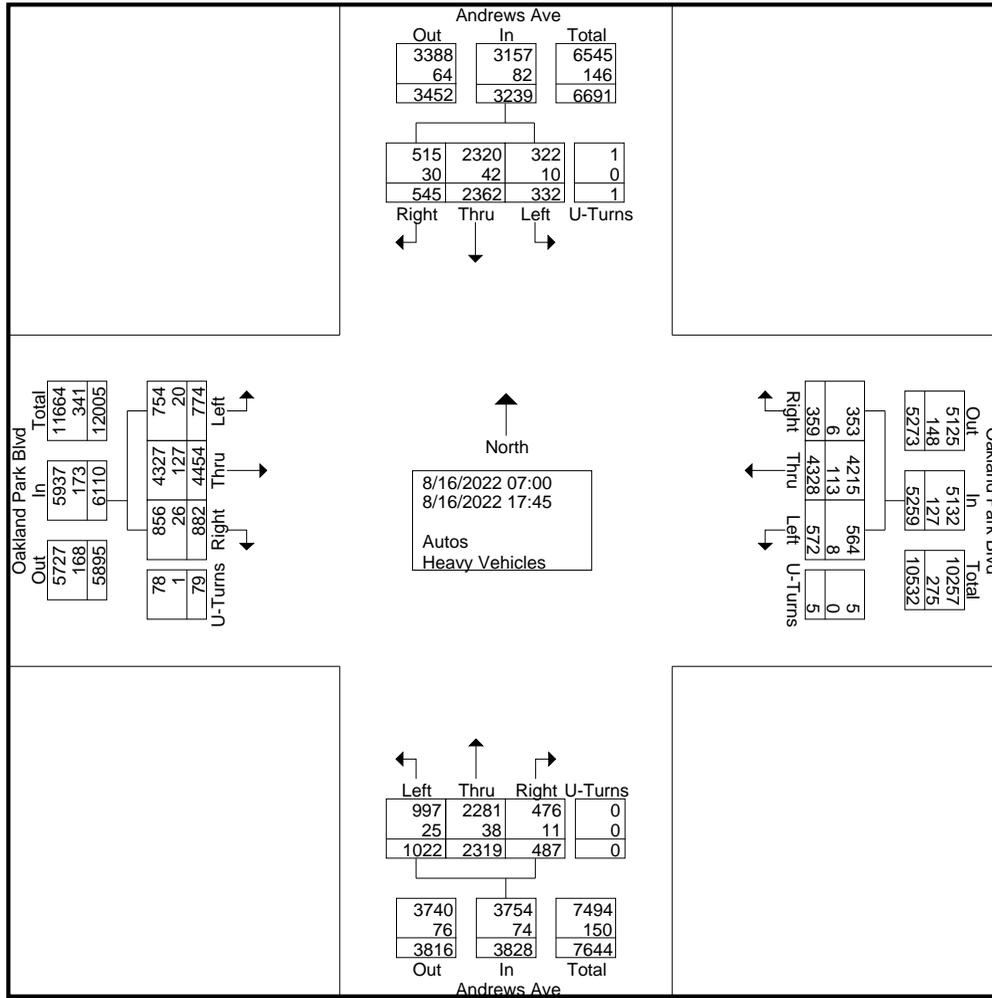
# Traf Tech Engineering Inc.

File Name : Oakland Park Blvd & Andrews Ave

Site Code : 00000000

Start Date : 8/16/2022

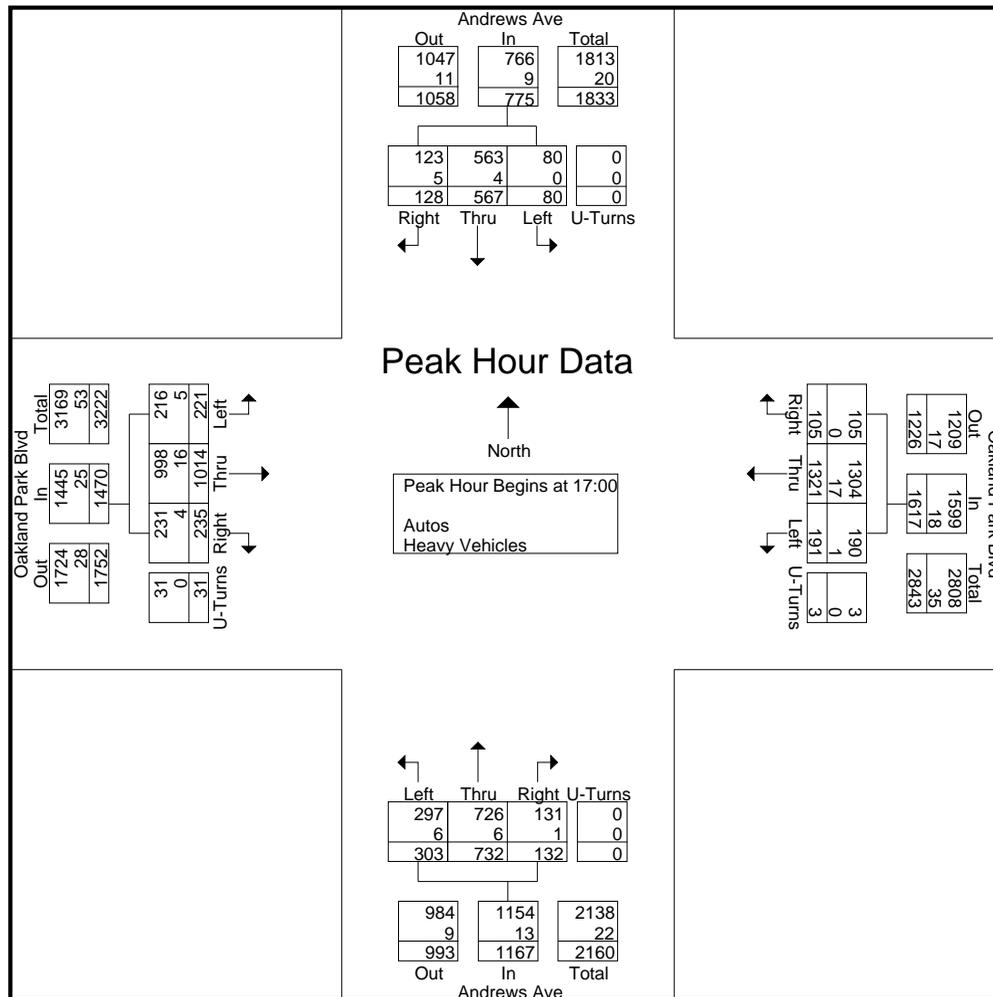
Page No : 2



# Traf Tech Engineering Inc.

File Name : Oakland Park Blvd & Andrews Ave  
 Site Code : 00000000  
 Start Date : 8/16/2022  
 Page No : 3

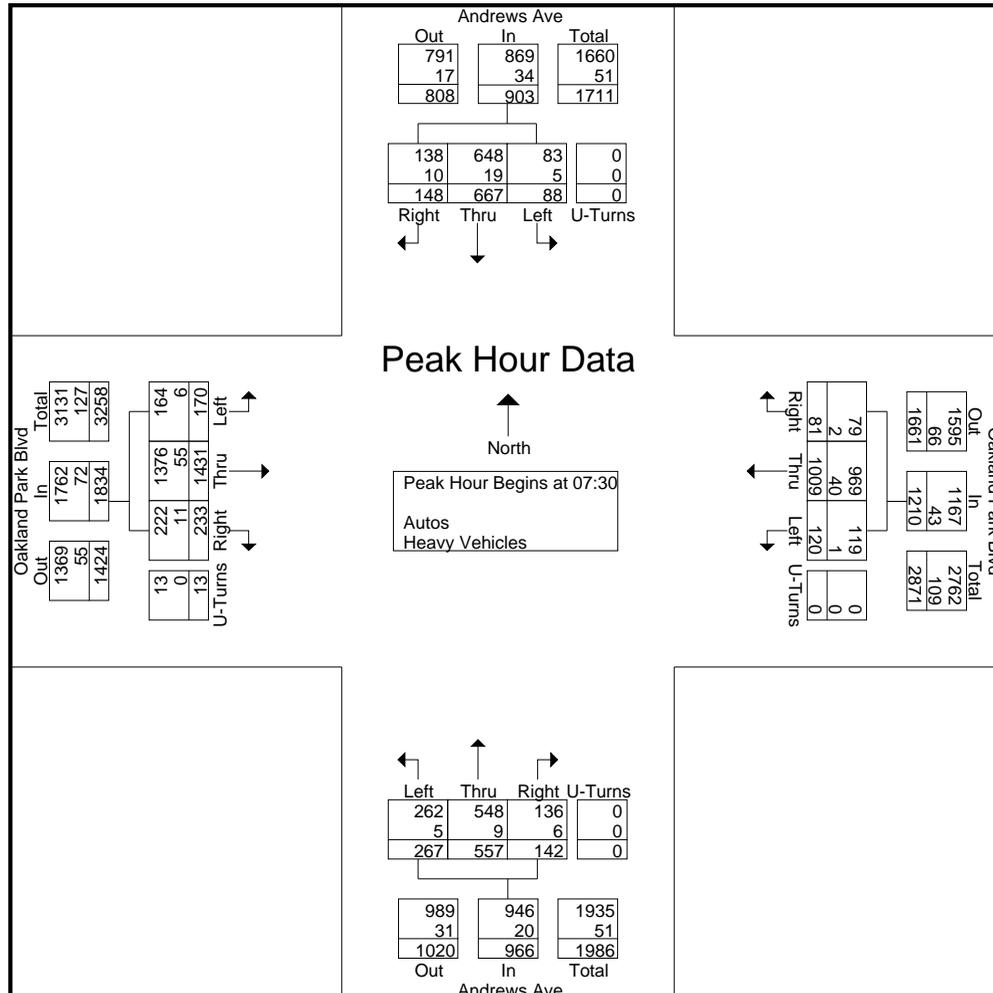
Start Time	Andrews Ave From North					Oakland Park Blvd From East					Andrews Ave From South					Oakland Park Blvd From West					Int. Total
	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	34	141	14	0	189	27	344	41	1	413	36	171	79	0	286	51	229	51	6	337	1225
17:15	19	126	14	0	159	24	352	52	1	429	34	161	88	0	283	51	277	52	9	389	1260
17:30	29	148	23	0	200	29	335	48	0	412	32	204	73	0	309	63	248	63	7	381	1302
17:45	46	152	29	0	227	25	290	50	1	366	30	196	63	0	289	70	260	55	9	394	1276
Total Volume	128	567	80	0	775	105	1321	191	3	1620	132	732	303	0	1167	235	1014	221	31	1501	5063
% App. Total	16.5	73.2	10.3	0		6.5	81.5	11.8	0.2		11.3	62.7	26	0		15.7	67.6	14.7	2.1		
PHF	.696	.933	.690	.000	.854	.905	.938	.918	.750	.944	.917	.897	.861	.000	.944	.839	.915	.877	.861	.952	.972
Autos	123	563	80	0	766	105	1304														
% Autos	96.1	99.3	100	0	98.8	100	98.7	99.5	100	98.9	99.2	99.2	98.0	0	98.9	98.3	98.4	97.7	100	98.3	98.7
Heavy Vehicles																					
% Heavy Vehicles	3.9	0.7	0	0	1.2	0	1.3	0.5	0	1.1	0.8	0.8	2.0	0	1.1	1.7	1.6	2.3	0	1.7	1.3



# Traf Tech Engineering Inc.

File Name : Oakland Park Blvd & Andrews Ave  
 Site Code : 00000000  
 Start Date : 8/16/2022  
 Page No : 4

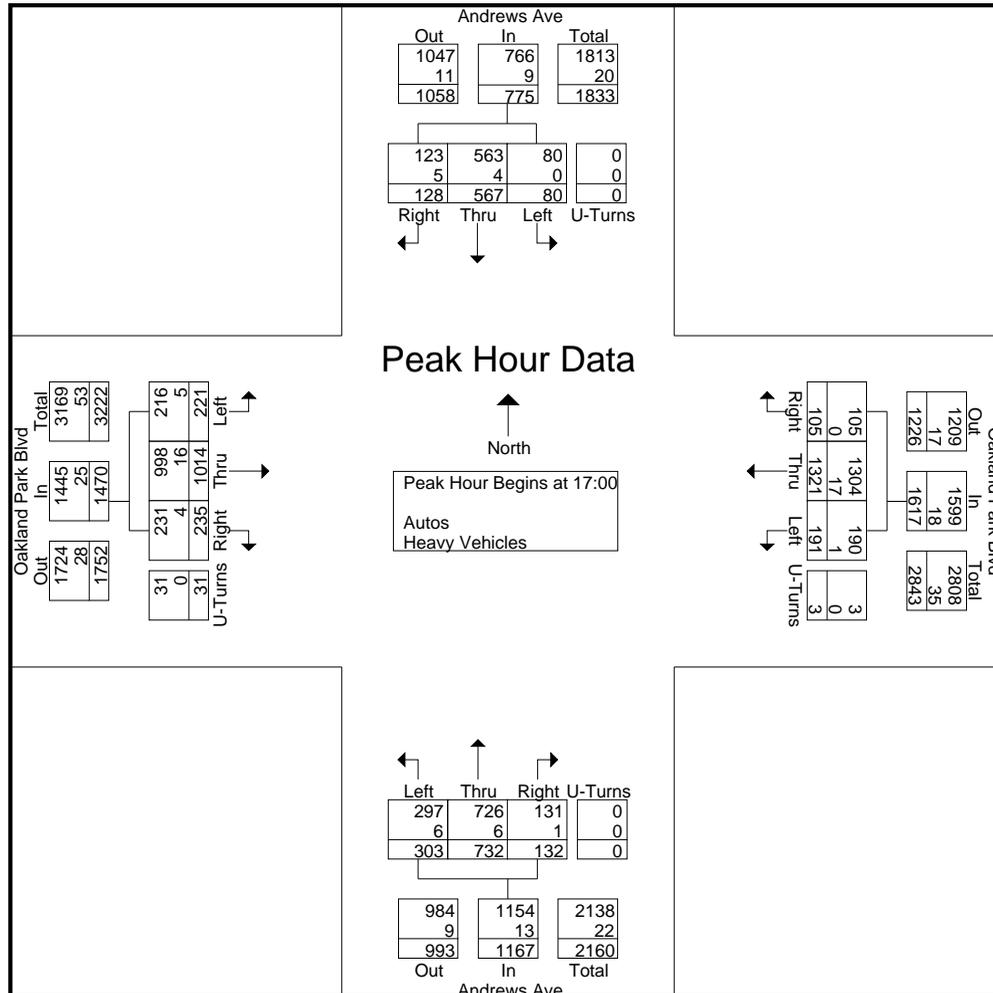
Start Time	Andrews Ave From North					Oakland Park Blvd From East					Andrews Ave From South					Oakland Park Blvd From West					Int. Total
	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	35	186	20	0	241	14	236	34	0	284	34	148	79	0	261	59	302	41	1	403	1189
07:45	37	144	19	0	200	17	232	33	0	282	40	141	54	0	235	65	392	35	5	497	1214
08:00	42	160	17	0	219	28	276	34	0	338	30	128	69	0	227	53	367	40	6	466	1250
08:15	34	177	32	0	243	22	265	19	0	306	38	140	65	0	243	56	370	54	1	481	1273
Total Volume	148	667	88	0	903	81	1009	120	0	1210	142	557	267	0	966	233	1431	170	13	1847	4926
% App. Total	16.4	73.9	9.7	0		6.7	83.4	9.9	0		14.7	57.7	27.6	0		12.6	77.5	9.2	0.7		
PHF	.881	.897	.688	.000	.929	.723	.914	.882	.000	.895	.888	.941	.845	.000	.925	.896	.913	.787	.542	.929	.967
Autos	138	648	83	0	869	79	969	119	0	1167	136	548	262	0	946	222	1376				
% Autos	93.2	97.2	94.3	0	96.2	97.5	96.0	99.2	0	96.4	95.8	98.4	98.1	0	97.9	95.3	96.2	96.5	100	96.1	96.6
Heavy Vehicles																					
% Heavy Vehicles	6.8	2.8	5.7	0	3.8	2.5	4.0	0.8	0	3.6	4.2	1.6	1.9	0	2.1	4.7	3.8	3.5	0	3.9	3.4



# Traf Tech Engineering Inc.

File Name : Oakland Park Blvd & Andrews Ave  
 Site Code : 00000000  
 Start Date : 8/16/2022  
 Page No : 5

Start Time	Andrews Ave From North					Oakland Park Blvd From East					Andrews Ave From South					Oakland Park Blvd From West					Int. Total
	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	
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	34	141	14	0	189	27	344	41	1	413	36	171	79	0	286	51	229	51	6	337	1225
17:15	19	126	14	0	159	24	352	52	1	429	34	161	88	0	283	51	277	52	9	389	1260
17:30	29	148	23	0	200	29	335	48	0	412	32	204	73	0	309	63	248	63	7	381	1302
17:45	46	152	29	0	227	25	290	50	1	366	30	196	63	0	289	70	260	55	9	394	1276
Total Volume	128	567	80	0	775	105	1321	191	3	1620	132	732	303	0	1167	235	1014	221	31	1501	5063
% App. Total	16.5	73.2	10.3	0		6.5	81.5	11.8	0.2		11.3	62.7	26	0		15.7	67.6	14.7	2.1		
PHF	.696	.933	.690	.000	.854	.905	.938	.918	.750	.944	.917	.897	.861	.000	.944	.839	.915	.877	.861	.952	.972
Autos	123	563	80	0	766	105	1304				99.2	99.2	98.0	0	98.9	98.3	98.4	97.7	100	98.3	98.7
% Autos	96.1	99.3	100	0	98.8	100	98.7	99.5	100	98.9											
Heavy Vehicles																					
% Heavy Vehicles	3.9	0.7	0	0	1.2	0	1.3	0.5	0	1.1	0.8	0.8	2.0	0	1.1	1.7	1.6	2.3	0	1.7	1.3



Station : 1037 - Oakland Park Blvd & Powerline Rd ( Standard File )

Phase	1 (EL)	2 (WT)	3 (ST)	4 (NT)	5 (WL)	6 (ET)	7	8	9	10	11	12	13	14	15	16
Walk		7	7	7		7										
Ped Clearance		25	24	27		25										
Min Green	4	10	6	6	4	10										
Gap Ext	1.5	3	2	2	1.5	3										
Max1	12	40	25	40	12	40										
Max2	12	60	30	20	12	60										
Yellow Clr	5	5	5	5	5	5			3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2			1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON	ON	ON	ON	ON										
Auto Flash Entry				ON												
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON							
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable									ON							
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash						
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green				1		1
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180	180	180
Track Veh 1				9		9
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1		2	3	2	4	1
Dwell Cyc Veh 2		6		5		6
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						

Preempt LP

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







Station : 1114 - Oakland Park Blvd & NE 6 Ave ( Standard File )

Phase	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		17		27		17		27								
Min Green	4	10	4	6	4	10	4	6								
Gap Ext	1.5	3	1.5	2	2	3	1.5	2								
Max1	12	50	12	30	12	50	12	30								
Max2																
Yellow Clr	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON															
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON							
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable									ON							
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash	ON	ON	ON	ON	ON	ON
Override Higher Preempt	ON	ON	ON	ON	ON	ON
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						

Preempt LP

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







Station : 1149 - Oakland Park Blvd & Andrews Ave ( Standard File )

Phase	1 (EL)	2 (WT)	3 (SL)	4 (NT)	5 (WL)	6 (ET)	7 (NL)	8 (ST)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		28		23		28		23								
Min Green	5	10	5	6	5	10	5	6								
Gap Ext	1.5	3	1.5	2.2	1.5	3	1.5	2.2								
Max1	20	50	20	40	20	50	20	40								
Max2																
Yellow Clr	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON															
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON							
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry				ON				ON								
Sim Gap Enable									ON							
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash						
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180	180	180
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1	4	2	3	2	4	1
Dwell Cyc Veh 2	8	6	8	5	7	6
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						

Preempt LP

Channel	1	2	3	4
Min				
Max		200		200
Enable				
Lock Mode	MAX	MAX	MAX	MAX
Coord in Preempt		ON		ON
No Skip				
Priority P1		2		6
Priority P2				
Priority P3				
Priority P4				
Lock				
Headway				
Group Lock				
Queue Jump				
Free Mode				
Alt Table				







Station : 2028 - Powerline Rd & NW 29 St ( Standard File )

Phase	1 (SL)	2 (NT)	3	4 (ET)	5	6 (ST)	7	8 (WT)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		14		27		14		27								
Min Green	4	10		6		10		6								
Gap Ext	1.5	3		2		3		2								
Max1	12	50		25		50		25								
Max2																
Yellow Clr	5	5	4	4	4	5	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2	2	2	2	2	2	2	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON		ON		ON		ON								
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON							
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry				ON				ON								
Sim Gap Enable									ON							
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash					ON	ON
Override Higher Preempt					ON	ON
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6	6	6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8	8	8	8
Max Presence	180	180	180	180	180	180
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						

Preempt LP

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







Station : 2164 - Andrews Ave & N 26 St ( Standard File )

Phase	1 (SL)	2 (ST)	3	4 (WR)	5	6	7	8	9	10	11	12	13	14	15	16
Walk		7														
Ped Clearance																
Min Green	4	12		6												
Gap Ext	1.5	3		2												
Max1	15	40		25												
Max2																
Yellow Clr	4	4		4					3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clr	2	2		2					1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Red Revert																
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Enable	ON	ON		ON												
Auto Flash Entry																
Auto Flash Exit																
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON							
Min Recall		ON														
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable									ON							
Guar Passage																
Rest In Walk		ON														
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash	ON	ON	ON	ON	ON	ON
Override Higher Preempt	ON	ON	ON	ON	ON	ON
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green						
Min Walk						
Ped Clear						
Track Green						
Min Dwell						
Max Presence						
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						

Preempt LP

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









**BROWARD COUNTY TRAFFIC ENGINEERING**  
**ACTUATED TRAFFIC SIGNAL TIMING SHEET**

<b>Intersection Number</b>	1037	<b>Initial Operation Date</b>	7/69
<b>Controller Type</b>	2070 LN	<b>System Number</b>	1037
<b>Modification Number</b>	25	<b>Modification Date</b>	02/11/2021
<b>Drawing/Project No</b>	413795-1-52-01	<b>FPL Grid Number</b>	87583523203
<b>Intersection</b>	OAKLAND PARK BLVD(SR 816) and POWERLINE ROAD (SR 845)		
<b>Municipality</b>	WILTON MANORS		

<b>Controller Phase</b>	1	2	3	4	5	6	7	8
<b>Face Number</b>	1	2	3,8	4,7	5	6		
<b>Direction</b>	EBL	WB	SB	NB	WBL	EB		
<b>Initial Green(MIN)</b>	4	10	6	6	4	10		
<b>Vehicle Ext.(GAP)</b>	1.5	3.0	2.0	2.0	1.5	3.0		
<b>Maximum Green I</b>	12	40	25	20	12	40		
<b>Maximum Green II</b>	12	50	30	25	12	50		
<b>Yellow Clearance</b>	5.0	5.0	5.0	5.0	5.0	5.0		
<b>All Red Clearance</b>	2.0	2.0	2.0	2.0	2.0	2.0		
<b>Phase Recall</b>	OFF	MIN	OFF	OFF	OFF	MIN		
<b>Detector Delay</b>								
<b>Walk</b>		7	7	7		7		
<b>Pedestrian Clearance</b>		25	24	27		25		
<b>Permissive</b>	5 SECT				5 SECT			
<b>Flash Operation</b>		RED	RED	RED		RED		

**Attachment**

**NOTES:**

1. ANTI-BACKDOWN EAST/WEST: PHASES 2+6 ON ---> OMIT 1+5.
2. MOD. 25 UPDATES PHASE 4 WALK VALUES.

**Submitted By** \_\_\_\_\_

**Approved By** \_\_\_\_\_



**BROWARD COUNTY TRAFFIC ENGINEERING**  
**ACTUATED TRAFFIC SIGNAL TIMING SHEET**

<b>Intersection Number</b>	1114	<b>Initial Operation Date</b>	UNKNOWN
<b>Controller Type</b>	2070 LN	<b>System Number</b>	1114
<b>Modification Number</b>	14	<b>Modification Date</b>	07/17/2019
<b>Drawing/Project No</b>	DES. GRP. 1	<b>FPL Grid Number</b>	87683603604
<b>Intersection</b>	OAKLAND PARK BLVD (SR 816) and NE 6 AVENUE		
<b>Municipality</b>	OAKLAND PARK		

<b>Controller Phase</b>	1	2	3	4	5	6	7	8
<b>Face Number</b>	1	2	3	4	5	6	7	8
<b>Direction</b>	EBL	WB	SBL	NB	WBL	EB	NBL	SB
<b>Initial Green(MIN)</b>	4	10	4	6	4	10	4	6
<b>Vehicle Ext.(GAP)</b>	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
<b>Maximum Green I</b>	12	50	12	30	12	50	12	30
<b>Maximum Green II</b>								
<b>Yellow Clearance</b>	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
<b>All Red Clearance</b>	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
<b>Phase Recall</b>	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
<b>Detector Delay</b>								
<b>Walk</b>		7		7		7		7
<b>Pedestrian Clearance</b>		17		27		17		27
<b>Permissive</b>	NO		YES		NO		YES	
<b>Flash Operation</b>	RED	YELLOW		RED	RED	YELLOW		RED

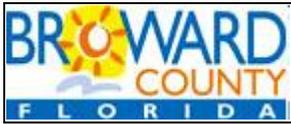
**Attachment**

**NOTES:**

- DUAL ENTRY NORTH/SOUTH.
- MOD. 14 CONVERTS EAST/WEST LEFT TURN MOVEMENT TO PROTECTED ONLY SIGNAL OPERATION VIA WORK ORDER: WOIT2019070686.

**Submitted By** \_\_\_\_\_

**Approved By** \_\_\_\_\_



**BROWARD COUNTY TRAFFIC ENGINEERING**  
**ACTUATED TRAFFIC SIGNAL TIMING SHEET**

<b>Intersection Number</b>	1149	<b>Initial Operation Date</b>	1/12/72
<b>Controller Type</b>	2070 LN	<b>System Number</b>	1149
<b>Modification Number</b>	16	<b>Modification Date</b>	04/08/2014
<b>Drawing/Project No</b>		<b>FPL Grid Number</b>	87683083601
<b>Intersection</b>	OAKLAND PARK BLVD(SR 816) and ANDREWS AVENUE		
<b>Municipality</b>	OAKLAND PARK		

<b>Controller Phase</b>	1	2	3	4	5	6	7	8
<b>Face Number</b>	1	2	3	4	5	6	7	8
<b>Direction</b>	EBL	WB	SBL	NB	WBL	EB	NBL	SB
<b>Initial Green(MIN)</b>	5	10	5	6	5	10	5	6
<b>Vehicle Ext.(GAP)</b>	1.5	3.0	1.5	2.2	1.5	3.0	1.5	2.2
<b>Maximum Green I</b>	20	50	20	40	20	50	20	40
<b>Maximum Green II</b>								
<b>Yellow Clearance</b>	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
<b>All Red Clearance</b>	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
<b>Phase Recall</b>	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
<b>Detector Delay</b>								
<b>Walk</b>		7		7		7		7
<b>Pedestrian Clearance</b>		28		23		28		23
<b>Permissive</b>	NO		NO		NO		DUAL	
<b>Flash Operation</b>	RED	RED						

**Attachment**

**NOTES:**

1. DUAL ENTRY HARDWIRED NORTH/SOUTH.
2. MOD. 16 UPDATES PEDESTRIAN CLEARANCE TIMES.

**Submitted By** \_\_\_\_\_

**Approved By** \_\_\_\_\_



**BROWARD COUNTY TRAFFIC ENGINEERING**  
**ACTUATED TRAFFIC SIGNAL TIMING SHEET**

<b>Intersection Number</b>	2028	<b>Initial Operation Date</b>	6/6/63
<b>Controller Type</b>	2070 LN	<b>System Number</b>	2028
<b>Modification Number</b>	20	<b>Modification Date</b>	03/30/2022
<b>Drawing/Project No</b>	GRP. 1	<b>FPL Grid Number</b>	87583520701
<b>Intersection</b>	POWERLINE ROAD (SR 845) and NW 29 STREET		
<b>Municipality</b>	WILTON MANORS		

<b>Controller Phase</b>	1	2	3	4	5	6	7	8
<b>Face Number</b>	1	2		4		6		8
<b>Direction</b>	SBL	NB		EB		SB		WB
<b>Initial Green(MIN)</b>	4	10		6		10		6
<b>Vehicle Ext.(GAP)</b>	1.5	3.0		2.0		3.0		2.0
<b>Maximum Green I</b>	12	50		25		50		25
<b>Maximum Green II</b>								
<b>Yellow Clearance</b>	5.0	5.0		4.0		5.0		4.0
<b>All Red Clearance</b>	2.0	2.0		2.0		2.0		2.0
<b>Phase Recall</b>	OFF	MIN		OFF		MIN		OFF
<b>Detector Delay</b>								
<b>Walk</b>		7		7+L		7		7+L
<b>Pedestrian Clearance</b>		14		27		14		27
<b>Permissive</b>	5-SECT							
<b>Flash Operation</b>		YELLOW		RED		YELLOW		RED

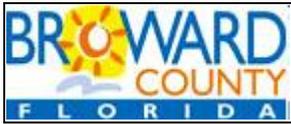
**Attachment**

**NOTES:**

1. ANTI-BACKDOWN SOUTHBOUND: PHASES 2+6 ON---> OMIT PHASE 1.
2. DUAL ENTRY EAST/WEST.
3. LEAD PEDESTRIAN INTERVAL (LPI): 5 SECONDS PHASES 4 AND 8.
4. MOD. 20 UPDATES LPIs.

**Submitted By** \_\_\_\_\_

**Approved By** \_\_\_\_\_



**BROWARD COUNTY TRAFFIC ENGINEERING**  
**ACTUATED TRAFFIC SIGNAL TIMING SHEET**

<b>Intersection Number</b>	2164	<b>Initial Operation Date</b>	UNKNOWN
<b>Controller Type</b>	2070 LN	<b>System Number</b>	2164
<b>Modification Number</b>	11	<b>Modification Date</b>	05/07/2019
<b>Drawing/Project No</b>	600 - DG 3	<b>FPL Grid Number</b>	87682068101
<b>Intersection</b>	ANDREWS AVENUE and N 26 STREET		
<b>Municipality</b>	WILTON MANORS		

<b>Controller Phase</b>	1	2	3	4	5	6	7	8
<b>Face Number</b>	1	2,6		8				
<b>Direction</b>	SBL	N/S		WB				
<b>Initial Green(MIN)</b>	4	12		6				
<b>Vehicle Ext.(GAP)</b>	1.5	3.0		2.0				
<b>Maximum Green I</b>	15	50		25				
<b>Maximum Green II</b>								
<b>Yellow Clearance</b>	4.0	4.0		4.0				
<b>All Red Clearance</b>	2.0	2.0		2.0				
<b>Phase Recall</b>	OFF	MIN		OFF				
<b>Detector Delay</b>								
<b>Walk</b>		7						
<b>Pedestrian Clearance</b>								
<b>Permissive</b>	5 SECT							
<b>Flash Operation</b>		YELLOW		RED				

**Attachment**

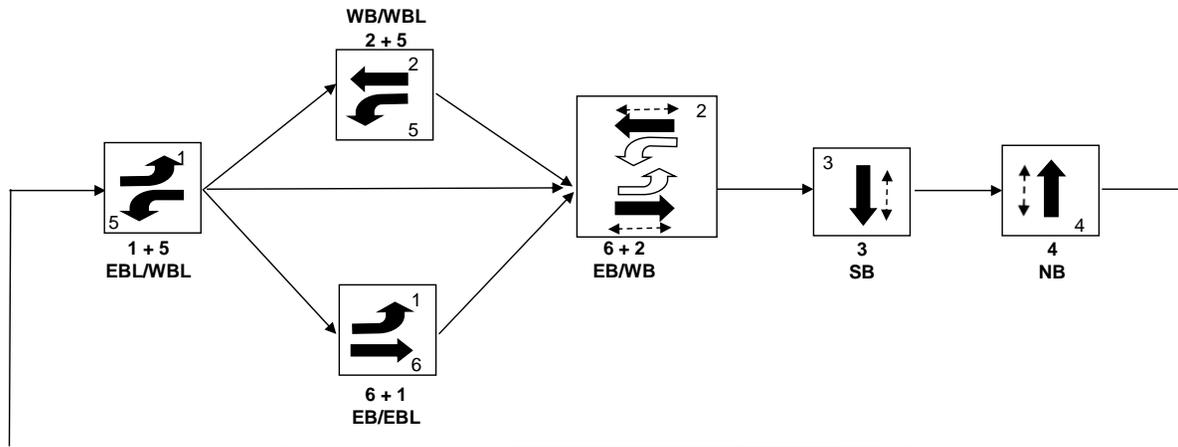
**NOTES:**

1. ANTI-BACKDOWN DIODE SOUTHBOUND.
2. MOD. 11 UPDATE ALL RED CLEARANCE.

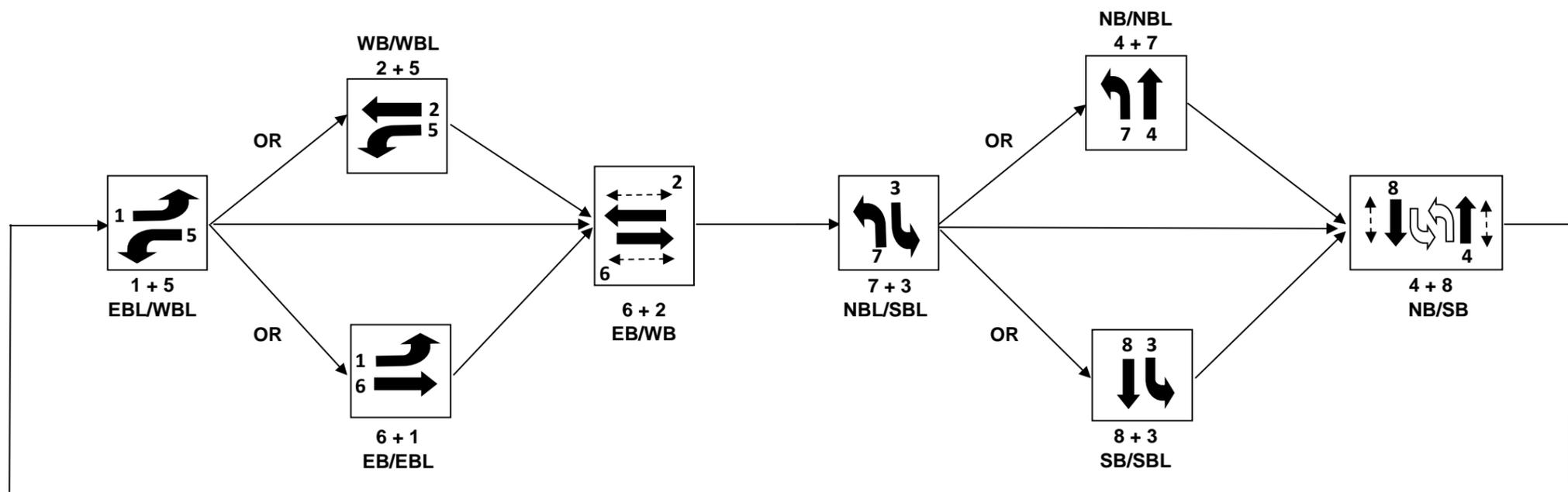
**Submitted By** \_\_\_\_\_

**Approved By** \_\_\_\_\_

**Sequence of Operation for (1037) Oakland Park Blvd (SR 816) & Powerline Road (SR 845)  
Wilton Manors**

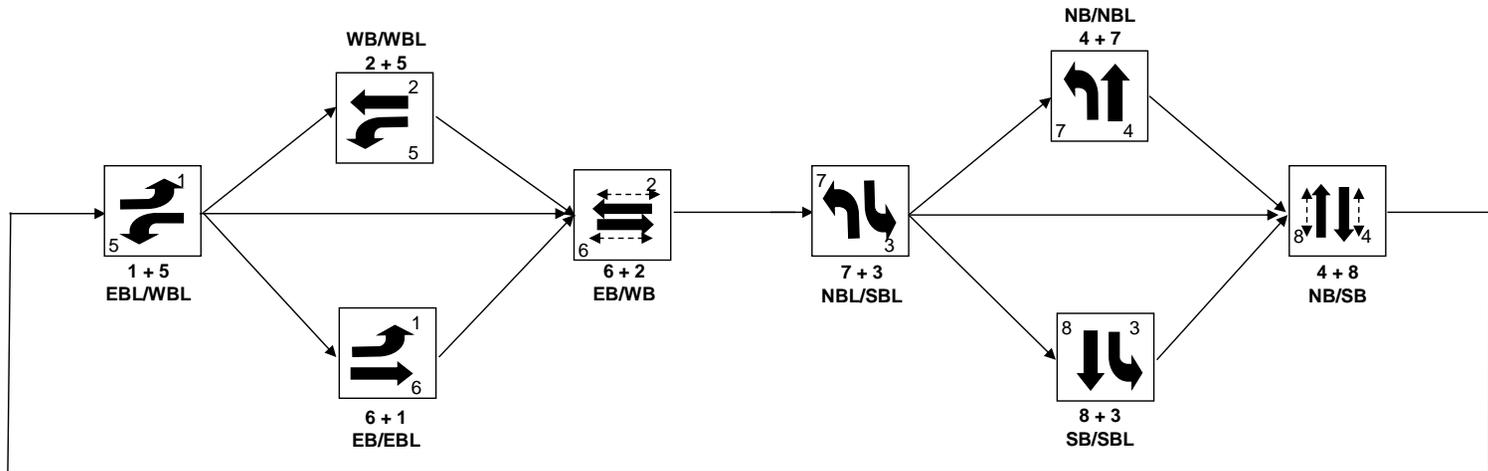


## Sequence of Operation for (1114) Oakland Park Blvd (SR 816) and NE 6 Ave



PERMISSIVE LEFT

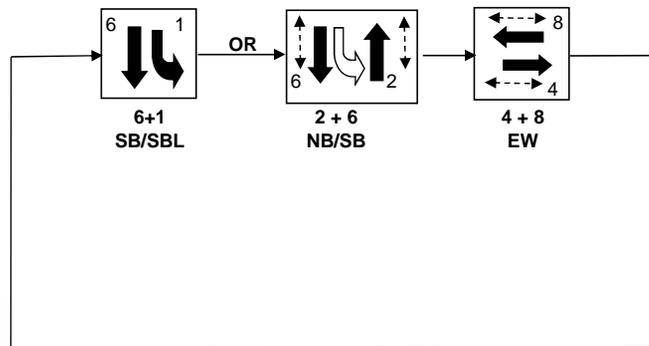
## Sequence of Operation for (1149), Oakland Park Blvd (SR 816) and Andrews Avenue Oakland Park



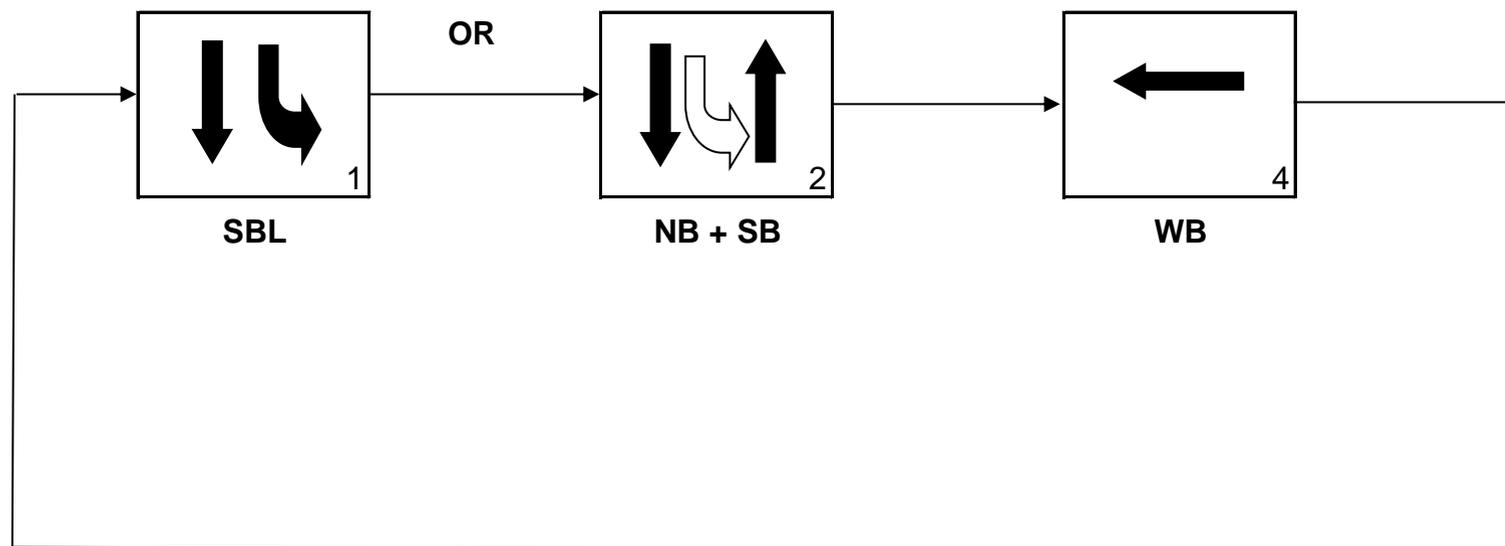
←-----→ Denotes pedestrian signal

# Sequence of Operation for (2028) Powerline Road (SR 845) and NW 29 Street

## Wilton Manors



Sequence of Operation  
Andrews Avenue and N 26 Street  
Intersection Number 2164



**ATTACHMENT D**  
**PSCF and Growth Rate Analysis**

2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL  
 CATEGORY: 8601 CEN.-W OF US1 TO SR7

MOCF: 0.97

WEEK	DATES	SF	PSCF
1	01/01/2022 - 01/01/2022	1.00	1.03
2	01/02/2022 - 01/08/2022	1.01	1.04
3	01/09/2022 - 01/15/2022	1.03	1.06
4	01/16/2022 - 01/22/2022	1.02	1.05
5	01/23/2022 - 01/29/2022	1.00	1.03
6	01/30/2022 - 02/05/2022	0.99	1.02
* 7	02/06/2022 - 02/12/2022	0.98	1.01
* 8	02/13/2022 - 02/19/2022	0.97	1.00
* 9	02/20/2022 - 02/26/2022	0.97	1.00
*10	02/27/2022 - 03/05/2022	0.96	0.99
*11	03/06/2022 - 03/12/2022	0.96	0.99
*12	03/13/2022 - 03/19/2022	0.96	0.99
*13	03/20/2022 - 03/26/2022	0.96	0.99
*14	03/27/2022 - 04/02/2022	0.97	1.00
*15	04/03/2022 - 04/09/2022	0.97	1.00
*16	04/10/2022 - 04/16/2022	0.98	1.01
*17	04/17/2022 - 04/23/2022	0.98	1.01
*18	04/24/2022 - 04/30/2022	0.99	1.02
*19	05/01/2022 - 05/07/2022	0.99	1.02
20	05/08/2022 - 05/14/2022	1.00	1.03
21	05/15/2022 - 05/21/2022	1.00	1.03
22	05/22/2022 - 05/28/2022	1.01	1.04
23	05/29/2022 - 06/04/2022	1.01	1.04
24	06/05/2022 - 06/11/2022	1.02	1.05
25	06/12/2022 - 06/18/2022	1.03	1.06
26	06/19/2022 - 06/25/2022	1.02	1.05
27	06/26/2022 - 07/02/2022	1.02	1.05
28	07/03/2022 - 07/09/2022	1.02	1.05
29	07/10/2022 - 07/16/2022	1.02	1.05
30	07/17/2022 - 07/23/2022	1.02	1.05
31	07/24/2022 - 07/30/2022	1.01	1.04
32	07/31/2022 - 08/06/2022	1.01	1.04
33	08/07/2022 - 08/13/2022	1.00	1.03
34	08/14/2022 - 08/20/2022	1.00	1.03
35	08/21/2022 - 08/27/2022	1.01	1.04
36	08/28/2022 - 09/03/2022	1.02	1.05
37	09/04/2022 - 09/10/2022	1.03	1.06
38	09/11/2022 - 09/17/2022	1.04	1.07
39	09/18/2022 - 09/24/2022	1.03	1.06
40	09/25/2022 - 10/01/2022	1.02	1.05
41	10/02/2022 - 10/08/2022	1.01	1.04
42	10/09/2022 - 10/15/2022	1.00	1.03
43	10/16/2022 - 10/22/2022	1.00	1.03
44	10/23/2022 - 10/29/2022	1.01	1.04
45	10/30/2022 - 11/05/2022	1.01	1.04
46	11/06/2022 - 11/12/2022	1.01	1.04
47	11/13/2022 - 11/19/2022	1.02	1.05
48	11/20/2022 - 11/26/2022	1.01	1.04
49	11/27/2022 - 12/03/2022	1.01	1.04
50	12/04/2022 - 12/10/2022	1.00	1.03
51	12/11/2022 - 12/17/2022	1.00	1.03
52	12/18/2022 - 12/24/2022	1.01	1.04
53	12/25/2022 - 12/31/2022	1.03	1.06

\* PEAK SEASON

23-FEB-2023 09:11:21

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FLORIDA DEPARTMENT OF TRANSPORTATION  
 TRANSPORTATION STATISTICS OFFICE  
 2021 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 0022 - SR 816/OAKLAND PARK BLVD - E OF ANDREWS AVE

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2021	48500	C	E 25000		W 23500	9.00	53.80	7.20
2020	50000	F	E 25500		W 24500	9.00	53.90	4.20
2019	53000	C	E 27000		W 26000	9.00	54.60	4.20
2018	49000	C	E 24500		W 24500	9.00	54.50	4.20
2017	42000	C	E 18000		W 24000	9.00	51.90	4.40
2016	49000	C	E 24500		W 24500	9.00	54.10	4.40
2015	45500	C	E 22500		W 23000	9.00	54.00	4.40
2014	48000	C	E 24500		W 23500	9.00	54.20	4.60
2013	44500	C	E 21500		W 23000	9.00	53.60	4.30
2012	50500	C	E 25500		W 25000	9.00	52.20	4.30
2011	44000	C	E 22000		W 22000	9.00	52.50	3.60
2010	47000	C	E 23500		W 23500	8.35	52.69	3.60
2009	44500	C	E 22500		W 22000	8.53	53.89	3.60
2008	46500	C	E 23000		W 23500	8.81	54.16	8.50
2007	48000	C	E 24500		W 23500	8.63	55.75	8.50
2006	48500	C	E 24500		W 24000	8.40	55.34	2.70

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  
 2022 VEHICLE CLASS HISTORY DATA

COUNTY: 86 -- BROWARD

SITE: 0022 DESCRIPTION: SR 816/OAKLAND PARK BLVD - E OF ANDREWS AVE

YEAR	AADT	PASSENGER VEHICLES		TOTAL TRUCKS		SINGLE UNIT TRUCKS		COMBINATION TRAILER TRUCKS		MULTI TRAILER TRUCKS	
		%	VOLUME	%	VOLUME	%	VOLUME	%	VOLUME	%	VOLUME
2021	48500	92.84	45,027	7.16	3,473	5.89	2,857	1.25	606	0.02	10
2018	49000	95.78	46,932	4.22	2,068	3.77	1,847	0.45	221	0.00	0
2015	45500	95.66	43,525	4.34	1,975	3.22	1,465	0.97	441	0.15	68
2014	48000	95.37	45,777	4.63	2,223	2.97	1,426	1.59	763	0.07	34
2012	50500	95.68	48,318	4.32	2,182	2.65	1,338	1.64	828	0.03	15
2009	44500	96.39	42,894	3.61	1,606	3.03	1,348	0.58	258	0.00	0
2007	48000	91.56	43,948	8.44	4,052	6.09	2,924	2.04	979	0.31	149

NOTE: 1 - PASSENGER VEHICLES = VEHICLE CLASS 1-3, 14, 15  
 2 - TOTAL TRUCKS = VEHICLE CLASS 4-13  
 3 - SINGLE UNIT TRUCKS = VEHICLE CLASS 4-7  
 4 - COMBINATION TRAILER TRUCKS = VEHICLE CLASS 8-10  
 5 - MULTI TRAILER TRUCKS = VEHICLE CLASS 11-13

FLORIDA DEPARTMENT OF TRANSPORTATION  
 TRANSPORTATION STATISTICS OFFICE  
 2021 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 5139 - SR 816/OAKLAND PARK BLVD - W OF ANDREWS AVE

YEAR	AADT		DIRECTION 1		DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2021	56500	C	E 29500		W 27000	9.00	53.80	4.20
2020	56000	F	E 29500		W 26500	9.00	53.90	4.20
2019	59000	C	E 31000		W 28000	9.00	54.60	4.20
2018	57000	C	E 29000		W 28000	9.00	54.50	5.70
2017	54500	C	E 26500		W 28000	9.00	51.90	5.70
2016	64000	C	E 31500		W 32500	9.00	54.10	5.70
2015	53500	C	E 27000		W 26500	9.00	54.00	3.00
2014	57500	C	E 29500		W 28000	9.00	54.20	6.00
2013	57500	C	E 29500		W 28000	9.00	53.60	7.50
2012	63000	C	E 31500		W 31500	9.00	52.20	5.00
2011	53500	C	E 28500		W 25000	9.00	52.50	5.00
2010	59500	C	E 30500		W 29000	8.35	52.69	5.00
2009	60000	C	E 30500		W 29500	8.53	53.89	5.90
2008	59500	C	E 31000		W 28500	8.81	54.16	5.90
2007	53000	C	E 27000		W 26000	8.63	55.75	4.00
2006	55000	C	E 28500		W 26500	8.40	55.34	2.60

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  
2022 VEHICLE CLASS HISTORY DATA

COUNTY: 86 -- BROWARD

SITE: 5139 DESCRIPTION: SR 816/OAKLAND PARK BLVD - W OF ANDREWS AVE

YEAR	AADT	PASSENGER VEHICLES		TOTAL TRUCKS		SINGLE UNIT TRUCKS		COMBINATION TRAILER TRUCKS		MULTI TRAILER TRUCKS	
		%	VOLUME	%	VOLUME	%	VOLUME	%	VOLUME	%	VOLUME
2022	53000	96.61	51,203	3.39	1,797	2.58	1,368	0.77	408	0.04	21
2019	59000	95.80	56,522	4.20	2,478	2.90	1,711	1.27	749	0.03	18
2016	64000	94.29	60,346	5.71	3,654	2.72	1,741	2.66	1,702	0.33	211
2015	53500	96.99	51,890	3.01	1,610	2.24	1,198	0.70	374	0.07	37
2014	57500	94.01	54,055	5.99	3,445	3.69	2,122	2.01	1,156	0.29	167
2013	57500	92.52	53,199	7.48	4,301	3.09	1,777	4.11	2,363	0.28	161
2010	59500	95.00	56,525	5.00	2,975	4.05	2,410	0.94	559	0.01	6
2008	59500	94.13	56,006	5.87	3,494	4.20	2,500	1.47	875	0.20	119
2007	53000	95.99	50,874	4.01	2,126	3.16	1,675	0.82	435	0.03	16

NOTE: 1 - PASSENGER VEHICLES = VEHICLE CLASS 1-3, 14, 15  
2 - TOTAL TRUCKS = VEHICLE CLASS 4-13  
3 - SINGLE UNIT TRUCKS = VEHICLE CLASS 4-7  
4 - COMBINATION TRAILER TRUCKS = VEHICLE CLASS 8-10  
5 - MULTI TRAILER TRUCKS = VEHICLE CLASS 11-13

FLORIDA DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION STATISTICS OFFICE  
2022 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 7446 - ANDREWS AVE, N OF OAKLAND PARK BLVD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	18800 S	N 9100	S 9700	9.00	57.00	5.40
2021	19000 F	N 9200	S 9800	9.00	53.80	14.30
2020	19200 C	N 9300	S 9900	9.00	53.90	8.80
2019	29000 R	N 13500	S 15500	9.00	54.60	5.50
2018	29000 T	N 13500	S 15500	9.00	54.50	6.00
2017	29000 S	N 13500	S 15500	9.00	51.90	6.20
2016	29000 F	N 13500	S 15500	9.00	54.10	2.90
2015	29000 C	N 13500	S 15500	9.00	54.00	3.40
2014	21500 T	N 11000	S 10500	9.00	54.20	7.40
2013	21500 S	N 11000	S 10500	9.00	53.60	7.60
2012	21500 F	N 11000	S 10500	9.00	52.20	5.90
2011	21500 C	N 11000	S 10500	9.00	52.50	6.30
2010	21500 F	N 11000	S 10500	8.35	52.69	9.30
2009	21500 C	N 11000	S 10500	8.53	53.89	5.30
2008	23000 C	N 11000	S 12000	8.81	54.16	6.50
2007	26500 C	N 13000	S 13500	8.63	55.75	4.80

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  
 2022 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 7448 - ANDREWS AVE, S OF OAKLAND PARK BLVD

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	21300 S	N 9800	S 11500	9.00	57.00	5.40
2021	21400 F	N 9900	S 11500	9.00	53.80	14.30
2020	21500 C	N 10000	S 11500	9.00	53.90	8.80
2019	28000 T	N 13500	S 14500	9.00	54.60	5.50
2018	28000 S	N 13500	S 14500	9.00	54.50	6.00
2017	28000 F	N 13500	S 14500	9.00	51.90	6.20
2016	28000 C	N 13500	S 14500	9.00	54.10	2.90
2015	24000 V	0	0	9.00	54.00	3.40
2014	23500 R			9.00	54.20	7.40
2013	23500 T	0	0	9.00	53.60	7.60
2012	23500 S	0	0	9.00	52.20	5.90
2011	23500 F	0	0	9.00	52.50	6.30
2010	23500 C	N 11500	S 12000	8.35	52.69	9.30
2009	22000 F	N 11500	S 10500	8.53	53.89	5.30
2008	23000 C	N 12000	S 11000	8.81	54.16	6.50
2007	27500 C	N 14000	S 13500	8.63	55.75	4.80

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

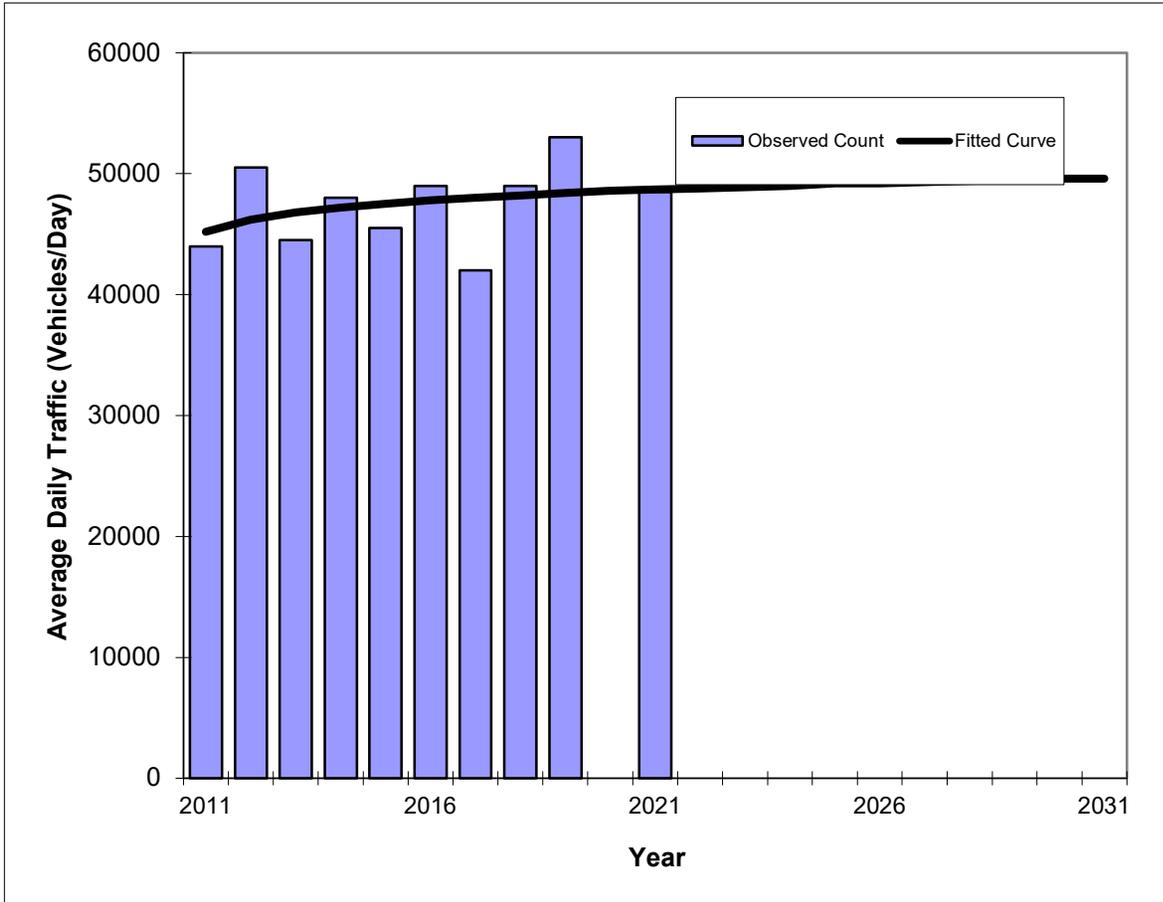
\*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

# Traffic Trends - V03.a

SR 816/OAKLAND PARK BLVD -- E OF ANDREWS AVE

FIN#	0
Location	1

County:	BROWARD
Station #:	0022
Highway:	SR 816/OAKLAND PARK BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2011	44000	45200
2012	50500	46200
2013	44500	46800
2014	48000	47200
2015	45500	47500
2016	49000	47800
2017	42000	48000
2018	49000	48200
2019	53000	48400
2020	n/a	n/a
2021	48500	48700
<b>2023 Opening Year Trend</b>		
2023	N/A	48900
<b>2024 Mid-Year Trend</b>		
2024	N/A	49000
<b>2026 Design Year Trend</b>		
2026	N/A	49200
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	10.82%
Compounded Annual Historic Growth Rate:	0.75%
Compounded Growth Rate (2021 to Design Year):	0.20%
Printed:	4-May-23
<b>Decaying Exponential Growth Option</b>	

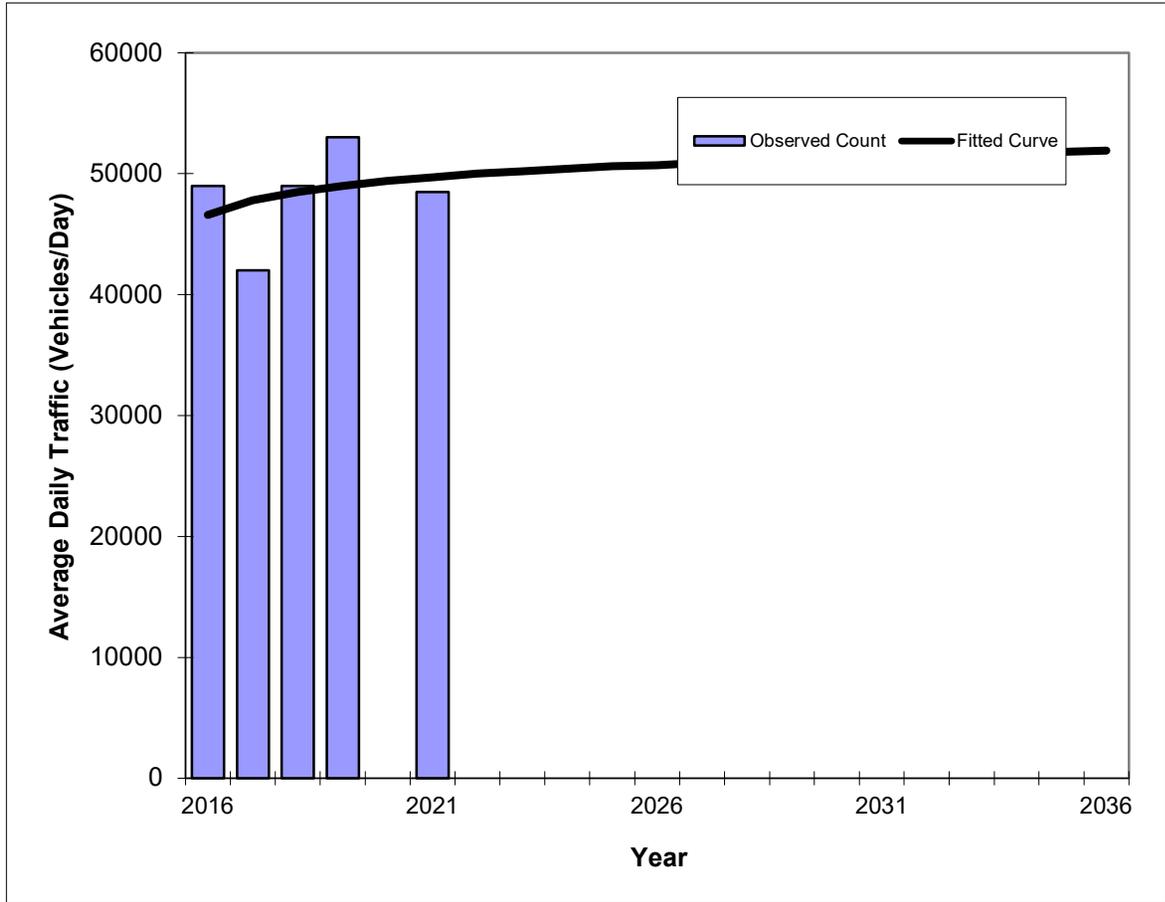
\*Axle-Adjusted

# Traffic Trends - V03.a

SR 816/OAKLAND PARK BLVD -- E OF ANDREWS AVE

FIN#	0
Location	4

County:	BROWARD
Station #:	0022
Highway:	SR 816/OAKLAND PARK BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	49000	46600
2017	42000	47800
2018	49000	48500
2019	53000	49000
2020	n/a	n/a
2021	48500	49700
<b>2023 Opening Year Trend</b>		
2023	N/A	50200
<b>2024 Mid-Year Trend</b>		
2024	N/A	50400
<b>2026 Design Year Trend</b>		
2026	N/A	50700
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	9.09%
Compounded Annual Historic Growth Rate:	1.30%
Compounded Growth Rate (2021 to Design Year):	0.40%
Printed:	4-May-23
<b>Decaying Exponential Growth Option</b>	

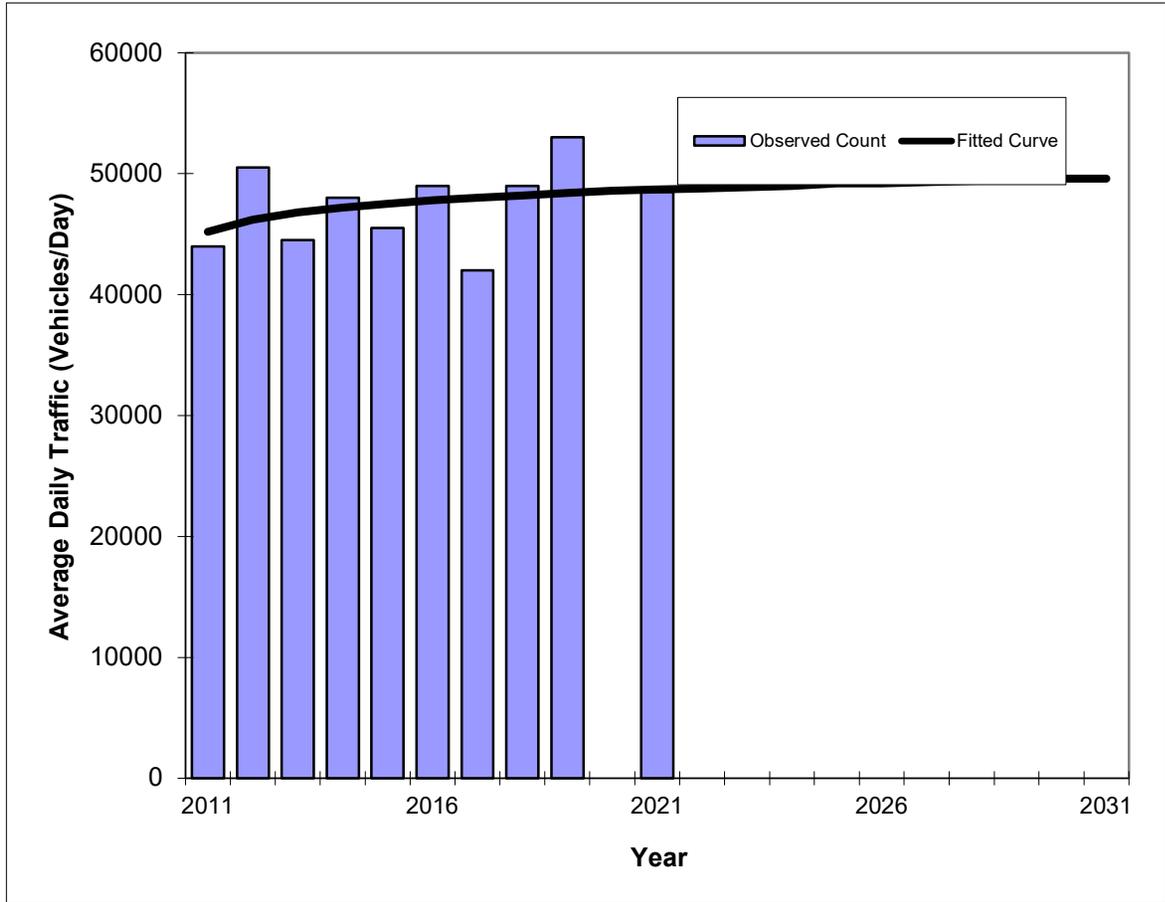
\*Axle-Adjusted

# Traffic Trends - V03.a

SR 816/OAKLAND PARK BLVD -- E OF ANDREWS AVE

FIN#	0
Location	1

County:	BROWARD
Station #:	0022
Highway:	SR 816/OAKLAND PARK BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2011	44000	45200
2012	50500	46200
2013	44500	46800
2014	48000	47200
2015	45500	47500
2016	49000	47800
2017	42000	48000
2018	49000	48200
2019	53000	48400
2020	n/a	n/a
2021	48500	48700
<b>2023 Opening Year Trend</b>		
2023	N/A	48900
<b>2024 Mid-Year Trend</b>		
2024	N/A	49000
<b>2026 Design Year Trend</b>		
2026	N/A	49200
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	12.09%
Compounded Annual Historic Growth Rate:	0.75%
Compounded Growth Rate (2021 to Design Year):	0.20%
Printed:	4-May-23
<b>Exponential Growth Option</b>	

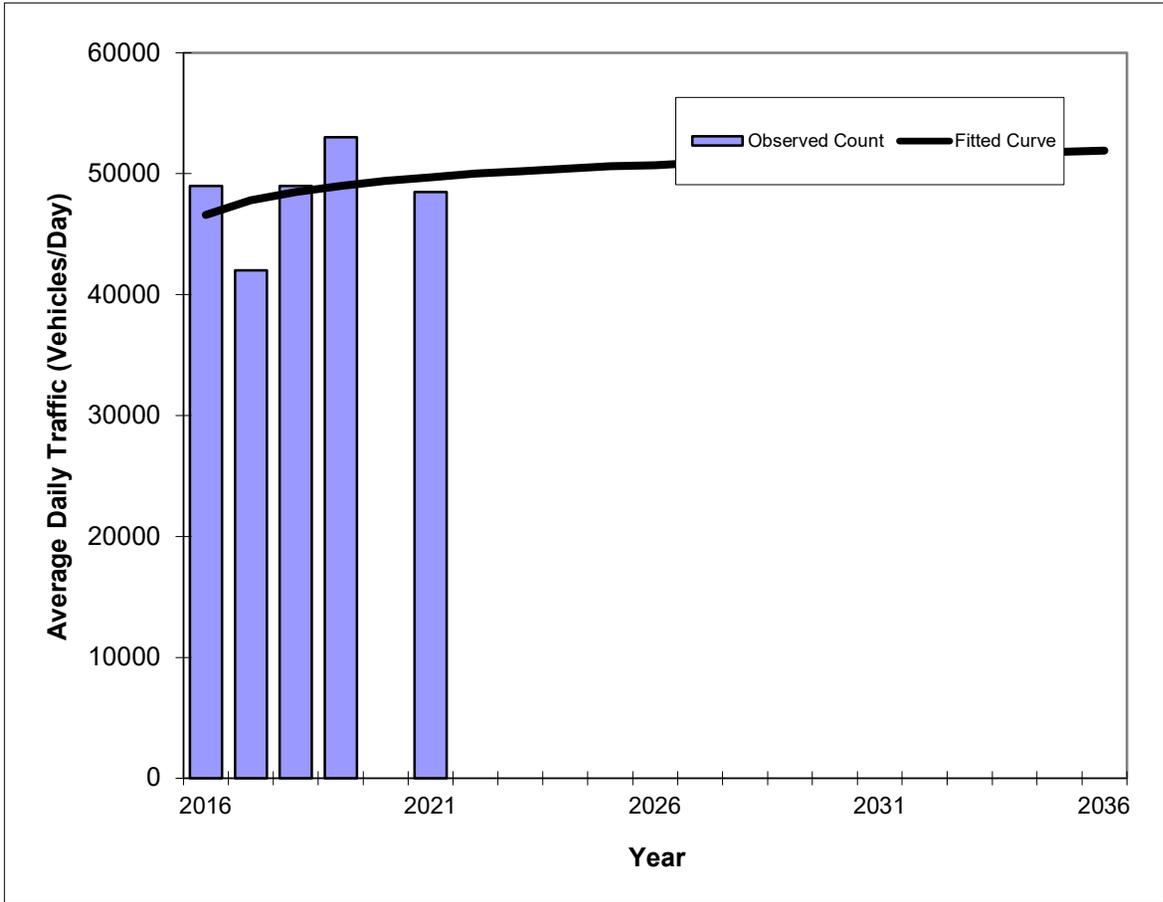
\*Axle-Adjusted

# Traffic Trends - V03.a

SR 816/OAKLAND PARK BLVD -- E OF ANDREWS AVE

FIN#	0
Location	4

County:	BROWARD
Station #:	0022
Highway:	SR 816/OAKLAND PARK BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	49000	46600
2017	42000	47800
2018	49000	48500
2019	53000	49000
2020	n/a	n/a
2021	48500	49700
<b>2023 Opening Year Trend</b>		
2023	N/A	50200
<b>2024 Mid-Year Trend</b>		
2024	N/A	50400
<b>2026 Design Year Trend</b>		
2026	N/A	50700
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	11.36%
Compounded Annual Historic Growth Rate:	1.30%
Compounded Growth Rate (2021 to Design Year):	0.40%
Printed:	4-May-23
<b>Exponential Growth Option</b>	

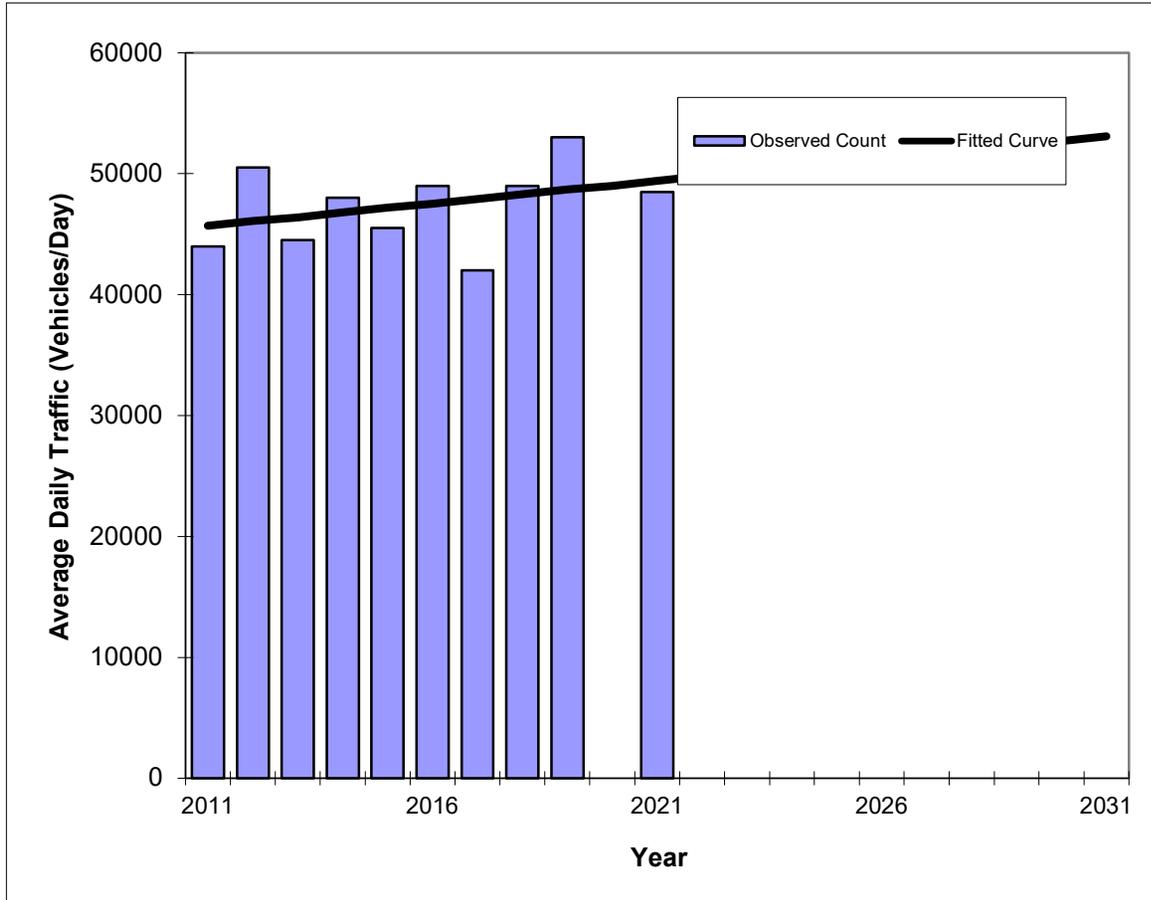
\*Axle-Adjusted

# Traffic Trends - V03.a

SR 816/OAKLAND PARK BLVD -- E OF ANDREWS AVE

FIN#	0
Location	1

County:	BROWARD
Station #:	0022
Highway:	SR 816/OAKLAND PARK BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2011	44000	45700
2012	50500	46100
2013	44500	46400
2014	48000	46800
2015	45500	47200
2016	49000	47500
2017	42000	47900
2018	49000	48300
2019	53000	48700
2020	n/a	n/a
2021	48500	49400
<b>2023 Opening Year Trend</b>		
2023	N/A	50100
<b>2024 Mid-Year Trend</b>		
2024	N/A	50500
<b>2026 Design Year Trend</b>		
2026	N/A	51200
<b>TRANPLAN Forecasts/Trends</b>		

** Annual Trend Increase:	369
Trend R-squared:	12.53%
Trend Annual Historic Growth Rate:	0.81%
Trend Growth Rate (2021 to Design Year):	0.73%
Printed:	4-May-23

**Straight Line Growth Option**

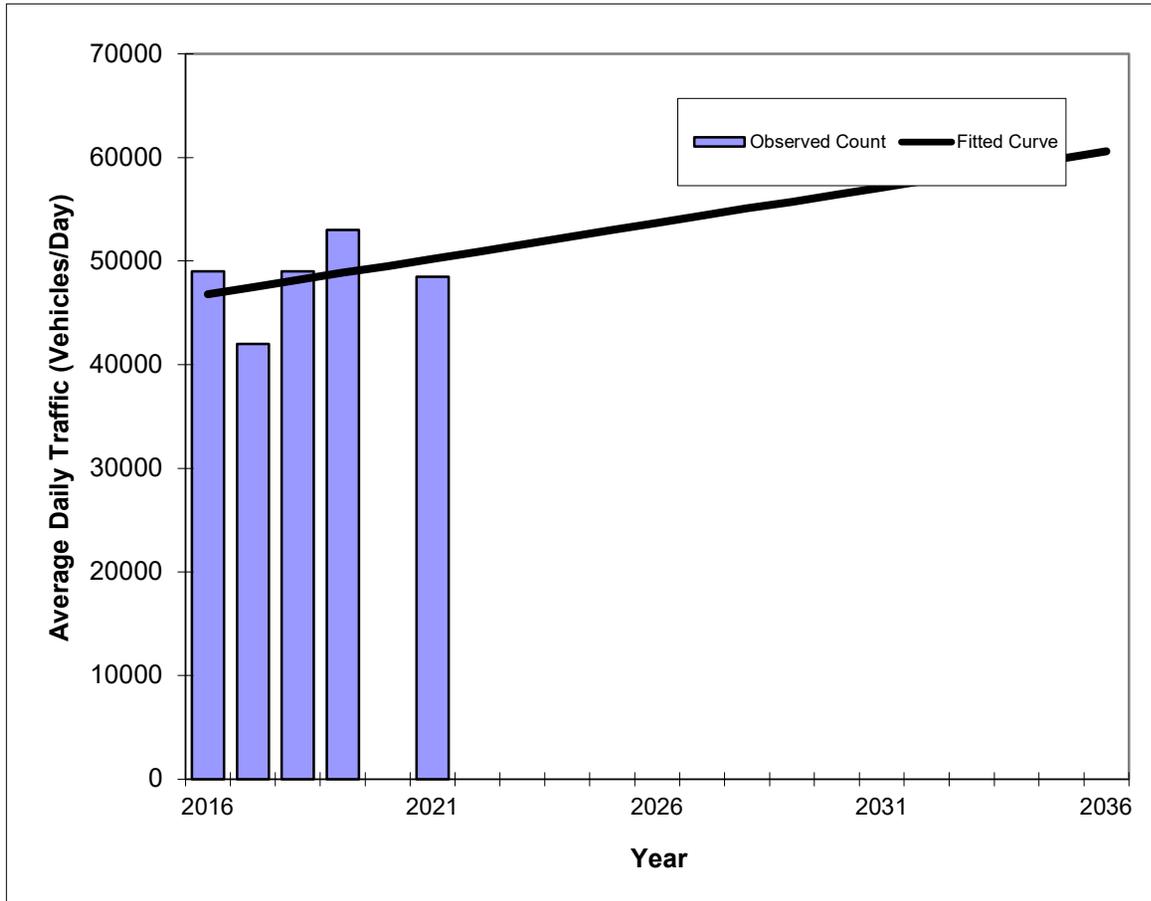
\*Axle-Adjusted

## Traffic Trends - V03.a

**SR 816/OAKLAND PARK BLVD -- E OF ANDREWS AVE**

FIN#	0
Location	4

<b>County:</b>	BROWARD
<b>Station #:</b>	0022
<b>Highway:</b>	SR 816/OAKLAND PARK BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2016	49000	46800
2017	42000	47500
2018	49000	48200
2019	53000	48900
2020	n/a	n/a
2021	48500	50200
2023 Opening Year Trend		
2023	N/A	51600
2024 Mid-Year Trend		
2024	N/A	52300
2026 Design Year Trend		
2026	N/A	53700
TRANPLAN Forecasts/Trends		

<b>** Annual Trend Increase:</b>	689
<b>Trend R-squared:</b>	11.19%
<b>Trend Annual Historic Growth Rate:</b>	1.45%
<b>Trend Growth Rate (2021 to Design Year):</b>	1.39%
<b>Printed:</b>	4-May-23
<b>Straight Line Growth Option</b>	

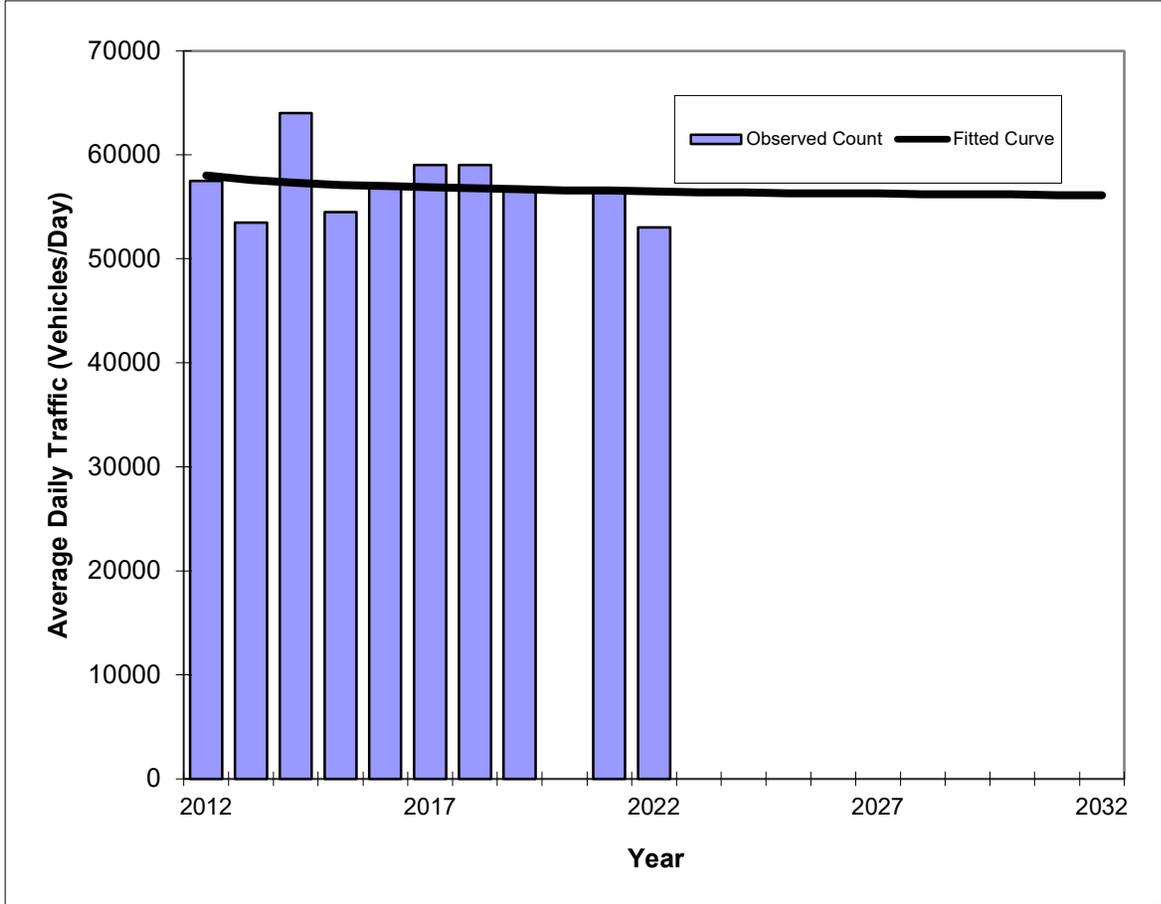
\*Axle-Adjusted

# Traffic Trends - V03.a

SR 816/OAKLAND PARK BLVD -- W OF ANDREWS AVE

FIN#	0
Location	3

County:	BROWARD
Station #:	5139
Highway:	SR 816/OAKLAND PARK BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	57500	58000
2013	53500	57600
2014	64000	57300
2015	54500	57100
2016	57000	57000
2017	59000	56900
2018	59000	56800
2019	56500	56700
2018		
2019		
2020	n/a	n/a
2021		
2022		
<b>2023 Opening Year Trend</b>		
2023	N/A	56400
<b>2024 Mid-Year Trend</b>		
2024	N/A	56400
<b>2026 Design Year Trend</b>		
2026	N/A	56300
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	2.26%
Compounded Annual Historic Growth Rate:	-0.26%
Compounded Growth Rate (2022 to Design Year):	-0.09%
Printed:	4-May-23
<b>Decaying Exponential Growth Option</b>	

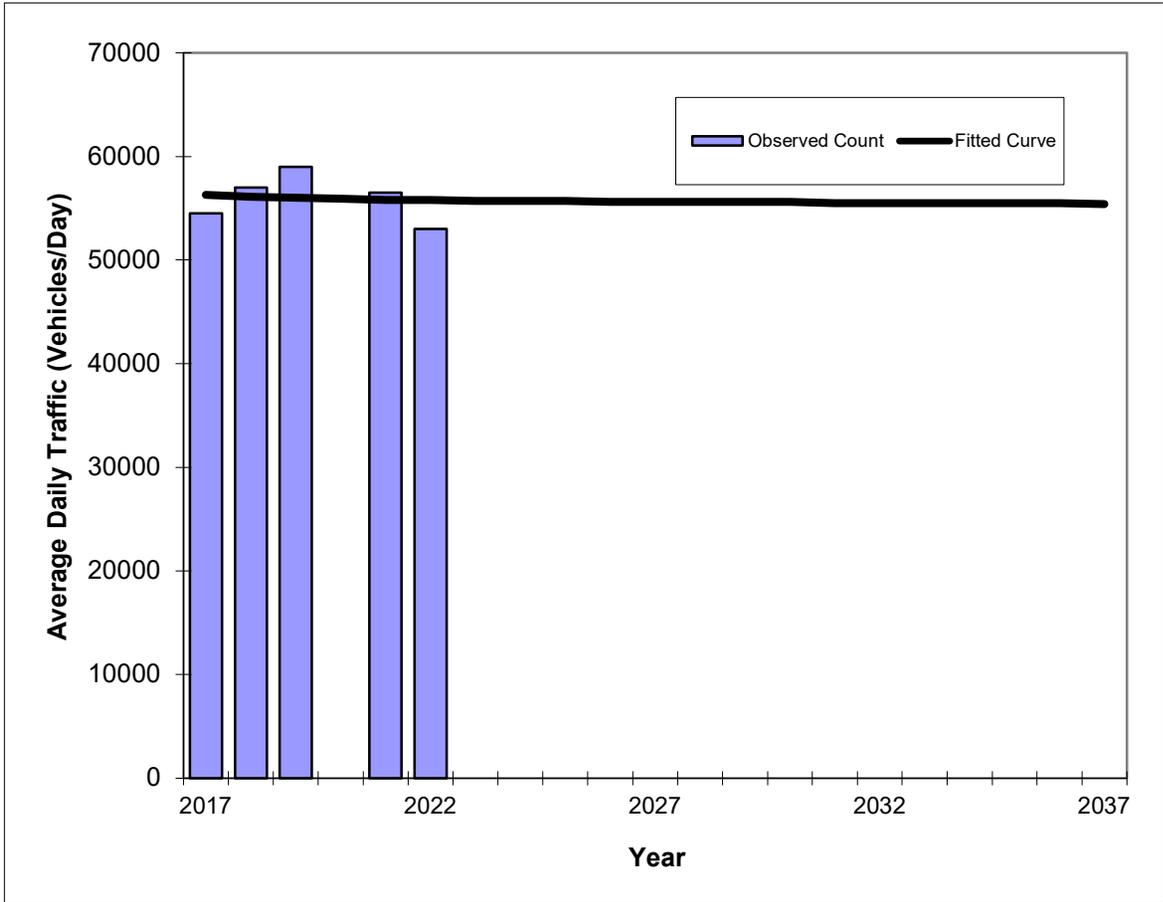
\*Axle-Adjusted

## Traffic Trends - V03.a

**SR 816/OAKLAND PARK BLVD -- W OF ANDREWS AVE**

FIN#	0
Location	3

<b>County:</b>	BROWARD
<b>Station #:</b>	5139
<b>Highway:</b>	SR 816/OAKLAND PARK BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	54500	56300
2018	57000	56100
2019	59000	56000
2020	n/a	n/a
2021	56500	55800
2022	53000	55800
<b>2023 Opening Year Trend</b>		
2023	N/A	55700
<b>2024 Mid-Year Trend</b>		
2024	N/A	55700
<b>2026 Design Year Trend</b>		
2026	N/A	55600
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	0.75%
Compounded Annual Historic Growth Rate:	-0.18%
Compounded Growth Rate (2022 to Design Year):	-0.09%
Printed:	4-May-23
<b>Decaying Exponential Growth Option</b>	

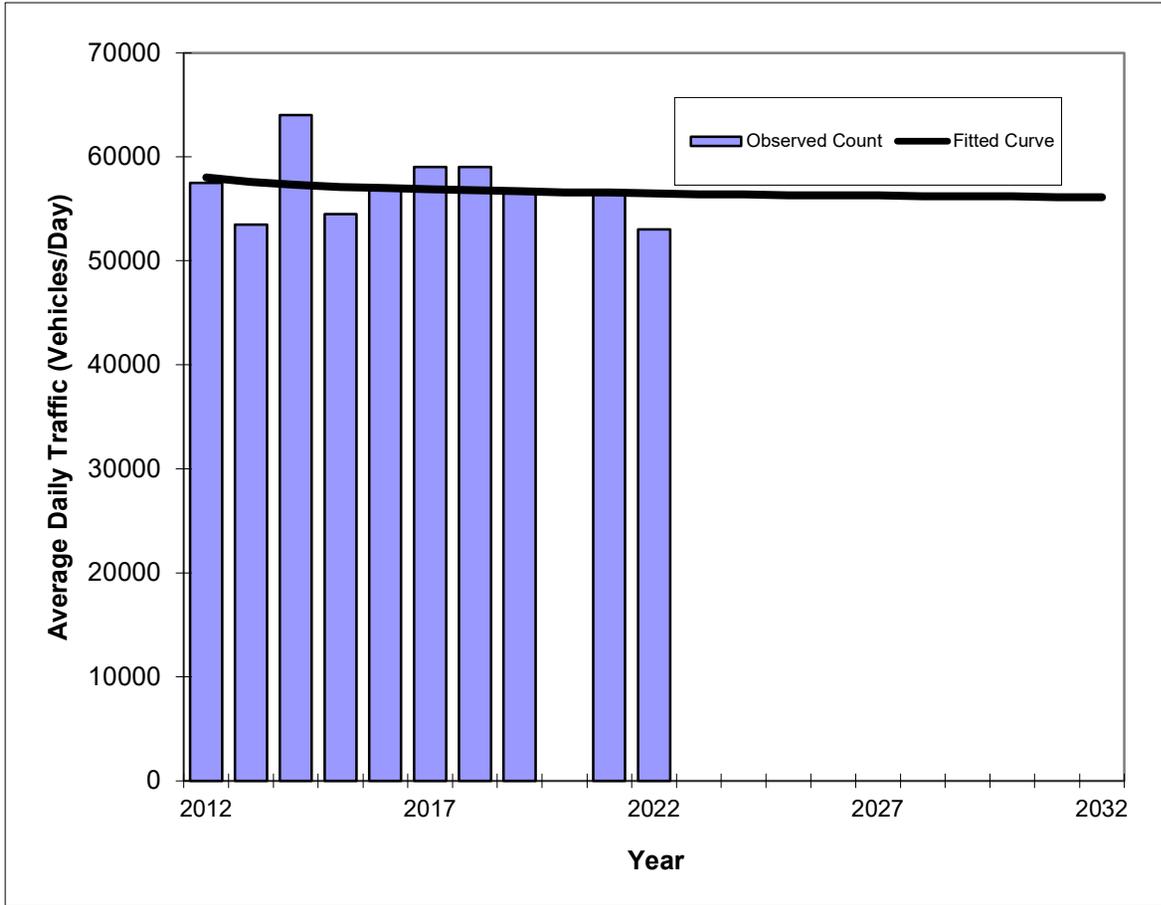
\*Axle-Adjusted

## Traffic Trends - V03.a

**SR 816/OAKLAND PARK BLVD -- W OF ANDREWS AVE**

FIN#	<b>0</b>
Location	<b>3</b>

<b>County:</b>	BROWARD
<b>Station #:</b>	5139
<b>Highway:</b>	SR 816/OAKLAND PARK BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	57500	58000
2013	53500	57600
2014	64000	57300
2015	54500	57100
2016	57000	57000
2017	59000	56900
2018	59000	56800
2019	56500	56700
2018		
2019		
2020	n/a	n/a
2021		
2022		
<b>2023 Opening Year Trend</b>		
2023	N/A	56400
<b>2024 Mid-Year Trend</b>		
2024	N/A	56400
<b>2026 Design Year Trend</b>		
2026	N/A	56300
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	6.81%
Compounded Annual Historic Growth Rate:	-0.26%
Compounded Growth Rate (2022 to Design Year):	-0.09%
Printed:	4-May-23
Exponential Growth Option	

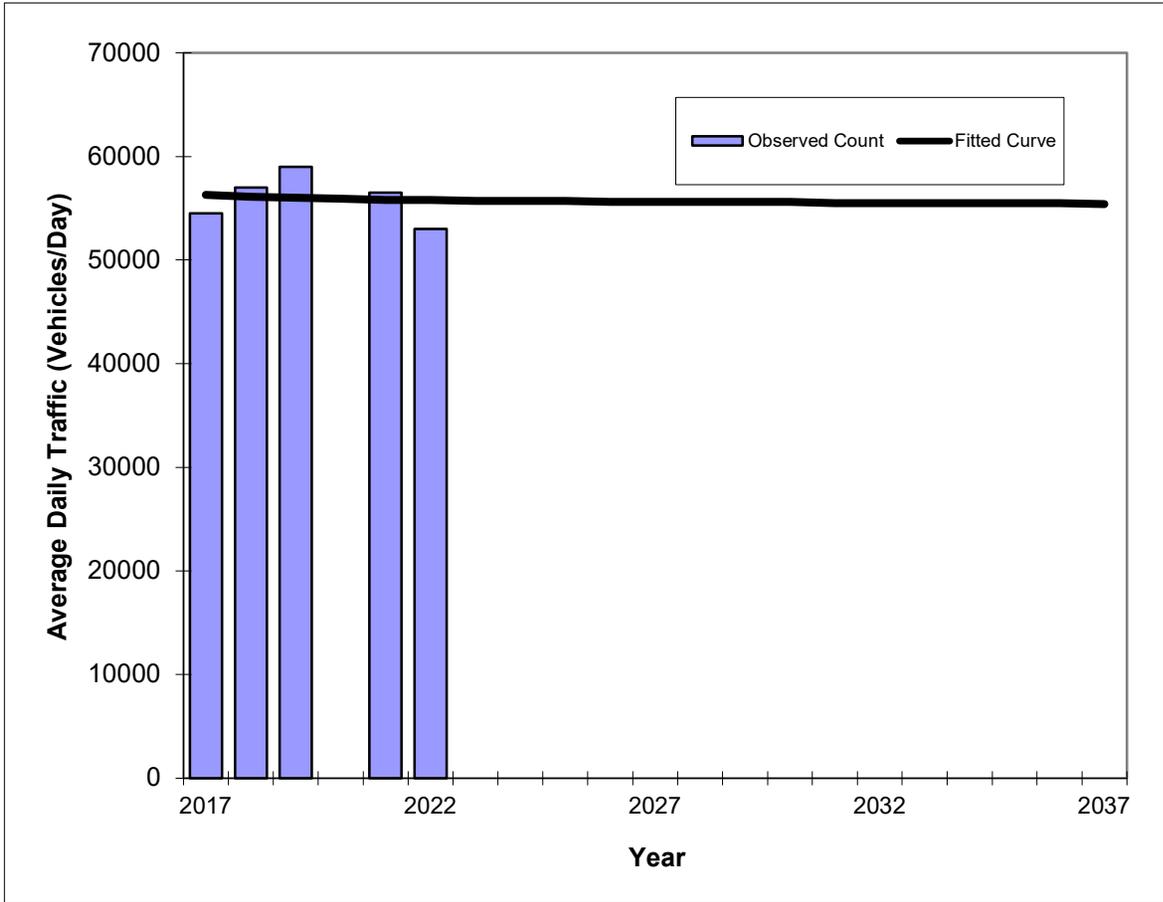
\*Axle-Adjusted

### Traffic Trends - V03.a

SR 816/OAKLAND PARK BLVD -- W OF ANDREWS AVE

FIN#	0
Location	3

County:	BROWARD
Station #:	5139
Highway:	SR 816/OAKLAND PARK BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	54500	56300
2018	57000	56100
2019	59000	56000
2020	n/a	n/a
2021	56500	55800
2022	53000	55800
<b>2023 Opening Year Trend</b>		
2023	N/A	55700
<b>2024 Mid-Year Trend</b>		
2024	N/A	55700
<b>2026 Design Year Trend</b>		
2026	N/A	55600
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	10.12%
Compounded Annual Historic Growth Rate:	-0.18%
Compounded Growth Rate (2022 to Design Year):	-0.09%
Printed:	4-May-23
<b>Exponential Growth Option</b>	

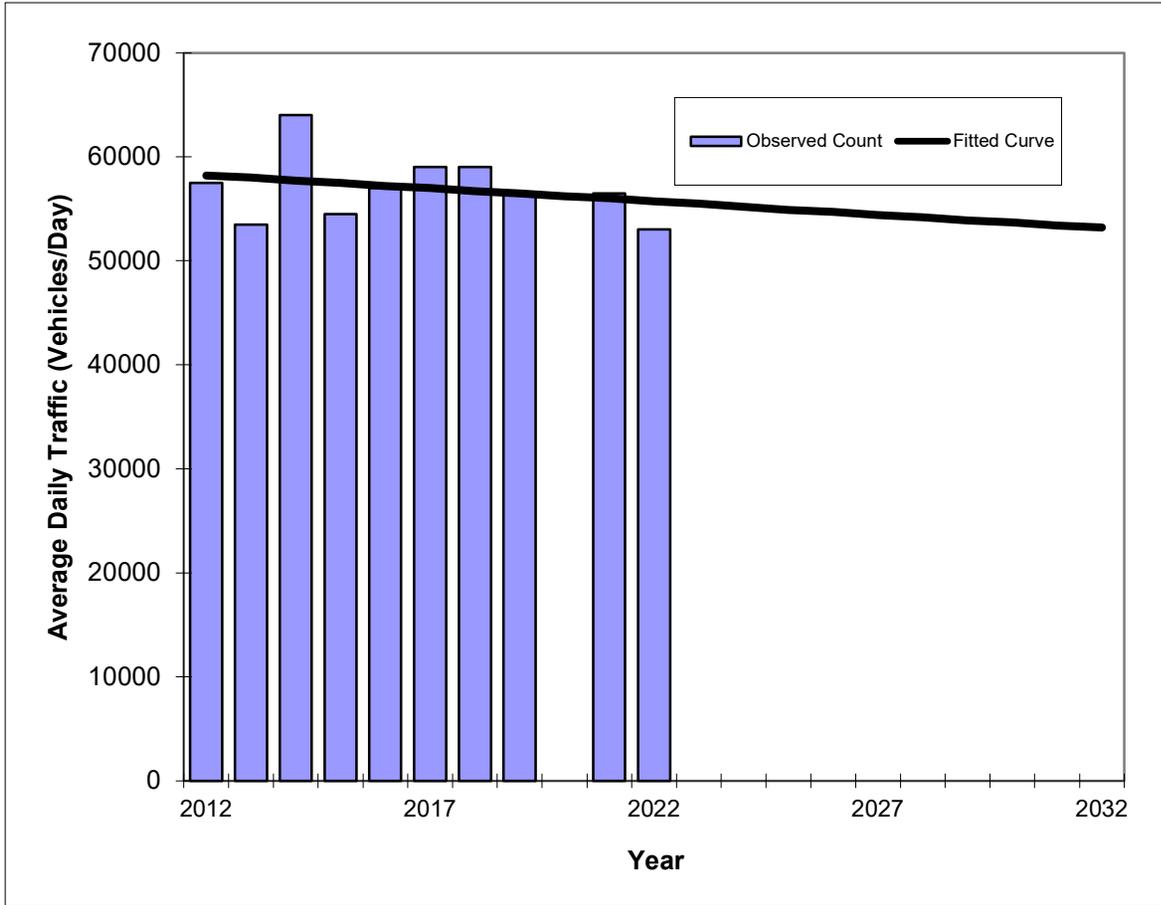
\*Axle-Adjusted

## Traffic Trends - V03.a

**SR 816/OAKLAND PARK BLVD -- W OF ANDREWS AVE**

FIN#	<b>0</b>
Location	<b>3</b>

<b>County:</b>	BROWARD
<b>Station #:</b>	5139
<b>Highway:</b>	SR 816/OAKLAND PARK BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	57500	58200
2013	53500	58000
2014	64000	57700
2015	54500	57500
2016	57000	57200
2017	59000	57000
2018	59000	56700
2019	56500	56500
2018		
2019		
2020	n/a	n/a
2021		
2022		
<b>2023 Opening Year Trend</b>		
2023	N/A	55500
<b>2024 Mid-Year Trend</b>		
2024	N/A	55200
<b>2026 Design Year Trend</b>		
2026	N/A	54700
<b>TRANPLAN Forecasts/Trends</b>		

<b>** Annual Trend Increase:</b>	-253
<b>Trend R-squared:</b>	6.96%
<b>Trend Annual Historic Growth Rate:</b>	-0.43%
<b>Trend Growth Rate (2022 to Design Year):</b>	-0.45%
<b>Printed:</b>	4-May-23
Straight Line Growth Option	

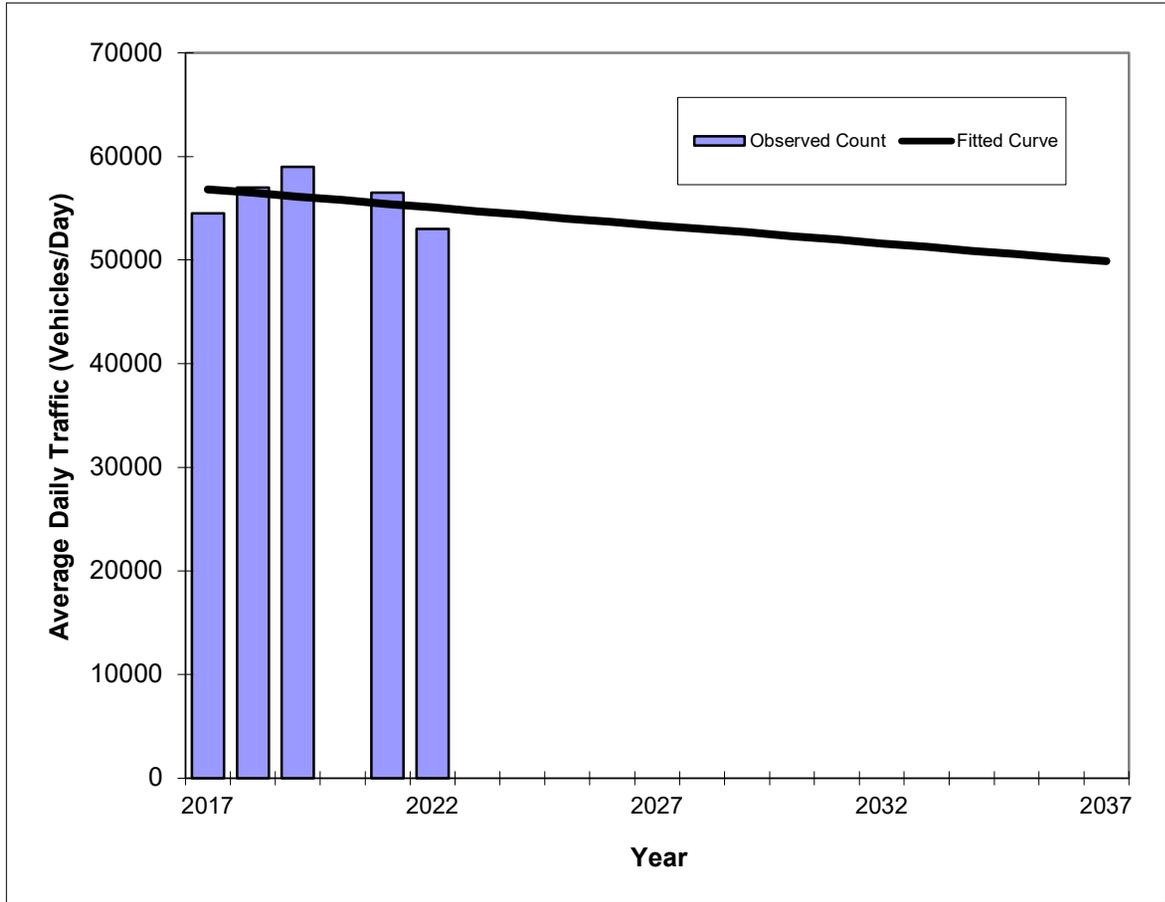
\*Axle-Adjusted

### Traffic Trends - V03.a

SR 816/OAKLAND PARK BLVD -- W OF ANDREWS AVE

FIN#	0
Location	3

County:	BROWARD
Station #:	5139
Highway:	SR 816/OAKLAND PARK BLVD



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	54500	56800
2018	57000	56500
2019	59000	56100
2020	n/a	n/a
2021	56500	55400
2022	53000	55100
<b>2023 Opening Year Trend</b>		
2023	N/A	54700
<b>2024 Mid-Year Trend</b>		
2024	N/A	54400
<b>2026 Design Year Trend</b>		
2026	N/A	53700
<b>TRANPLAN Forecasts/Trends</b>		

** Annual Trend Increase:	-349
Trend R-squared:	9.73%
Trend Annual Historic Growth Rate:	-0.60%
Trend Growth Rate (2022 to Design Year):	-0.64%
Printed:	4-May-23
<b>Straight Line Growth Option</b>	

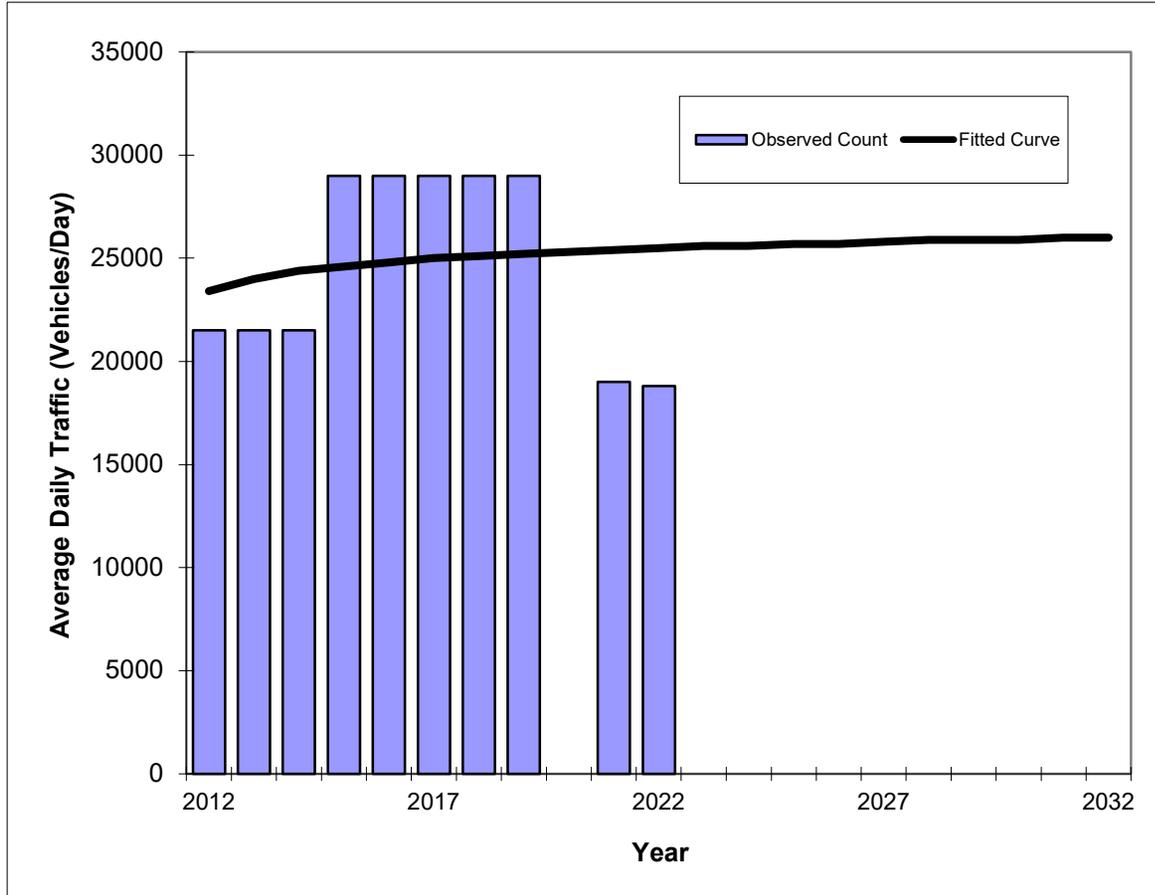
\*Axle-Adjusted

## Traffic Trends - V03.a

### ANDREWS AVE -- N OF OAKLAND PARK BLVD

FIN#	0
Location	3

County:	BROWARD
Station #:	7446
Highway:	ANDREWS AVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	21500	23400
2013	21500	24000
2014	21500	24400
2015	29000	24600
2016	29000	24800
2017	29000	25000
2018	29000	25100
2019	29000	25200
2020	n/a	n/a
2021	19000	25400
2022	18800	25500
<b>2023 Opening Year Trend</b>		
2023	N/A	25600
<b>2024 Mid-Year Trend</b>		
2024	N/A	25600
<b>2026 Design Year Trend</b>		
2026	N/A	25700
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	2.00%
Compounded Annual Historic Growth Rate:	0.86%
Compounded Growth Rate (2022 to Design Year):	0.20%
Printed:	4-May-23
<b>Decaying Exponential Growth Option</b>	

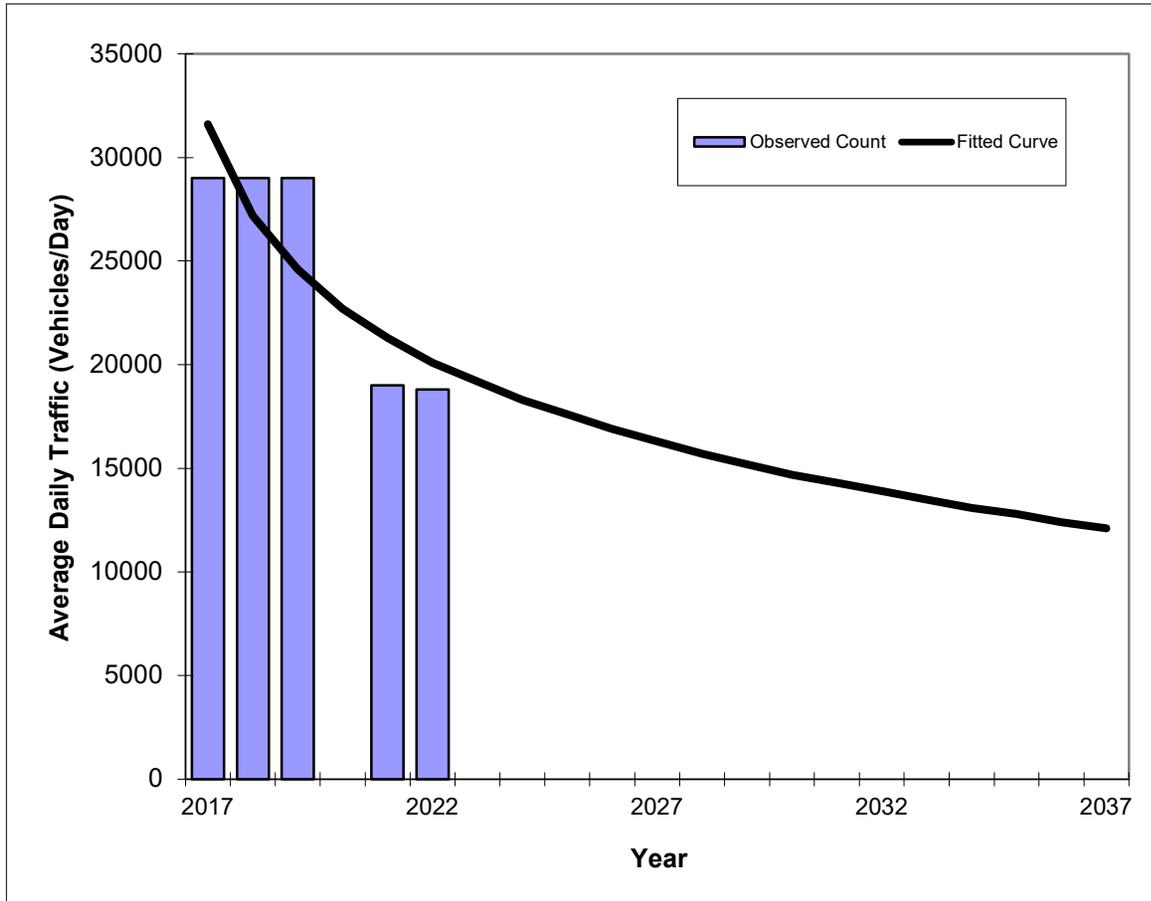
\*Axle-Adjusted

## Traffic Trends - V03.a

### ANDREWS AVE -- N OF OAKLAND PARK BLVD

FIN#	0
Location	2

County:	BROWARD
Station #:	7446
Highway:	ANDREWS AVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	29000	31600
2018	29000	27200
2019	29000	24600
2020	n/a	n/a
2021	19000	21300
2022	18800	20100
<b>2023 Opening Year Trend</b>		
2023	N/A	19200
<b>2024 Mid-Year Trend</b>		
2024	N/A	18300
<b>2025 Design Year Trend</b>		
2025	N/A	17600
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	69.92%
Compounded Annual Historic Growth Rate:	-8.65%
Compounded Growth Rate (2022 to Design Year):	-4.33%
Printed:	4-May-23
<b>Decaying Exponential Growth Option</b>	

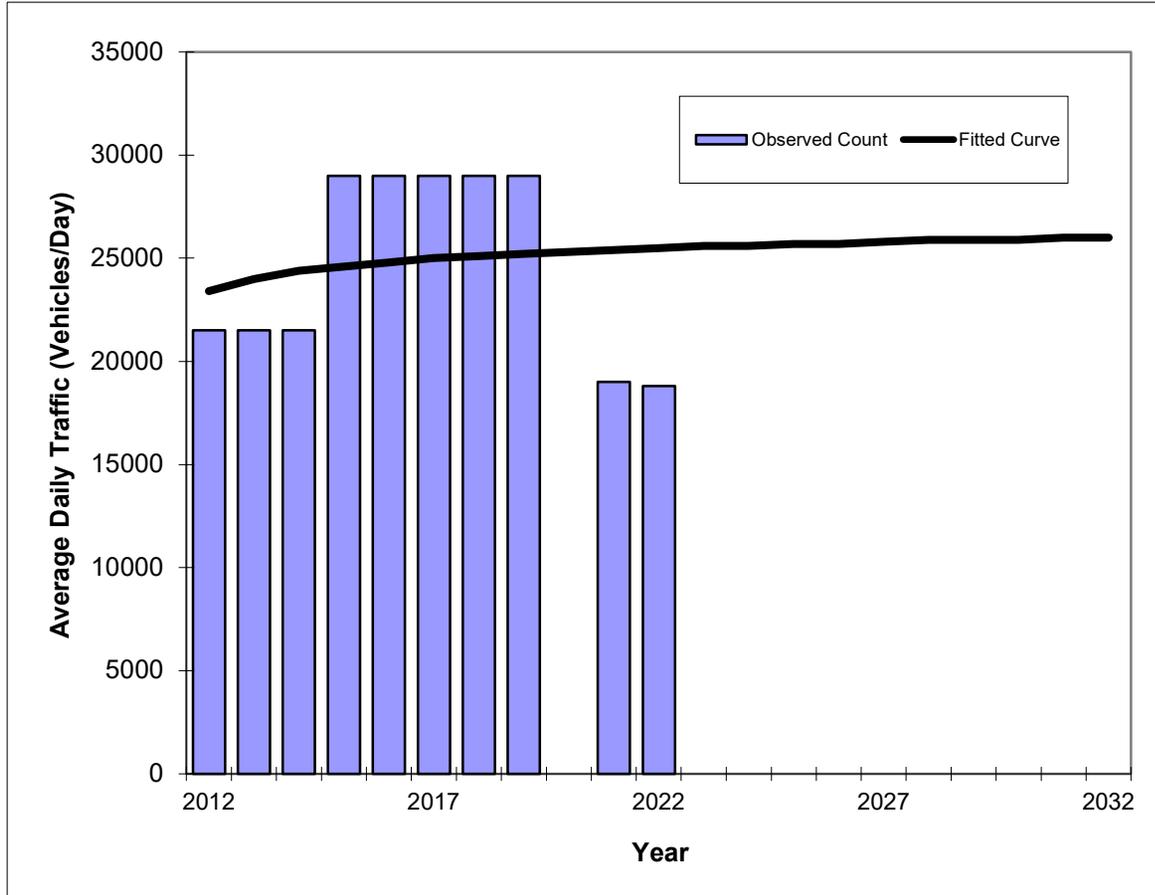
\*Axle-Adjusted

## Traffic Trends - V03.a

### ANDREWS AVE -- N OF OAKLAND PARK BLVD

FIN#	0
Location	3

County:	BROWARD
Station #:	7446
Highway:	ANDREWS AVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	21500	23400
2013	21500	24000
2014	21500	24400
2015	29000	24600
2016	29000	24800
2017	29000	25000
2018	29000	25100
2019	29000	25200
2020	n/a	n/a
2021	19000	25400
2022	18800	25500
<b>2023 Opening Year Trend</b>		
2023	N/A	25600
<b>2024 Mid-Year Trend</b>		
2024	N/A	25600
<b>2026 Design Year Trend</b>		
2026	N/A	25700
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	1.92%
Compounded Annual Historic Growth Rate:	0.86%
Compounded Growth Rate (2022 to Design Year):	0.20%
Printed:	4-May-23
<b>Exponential Growth Option</b>	

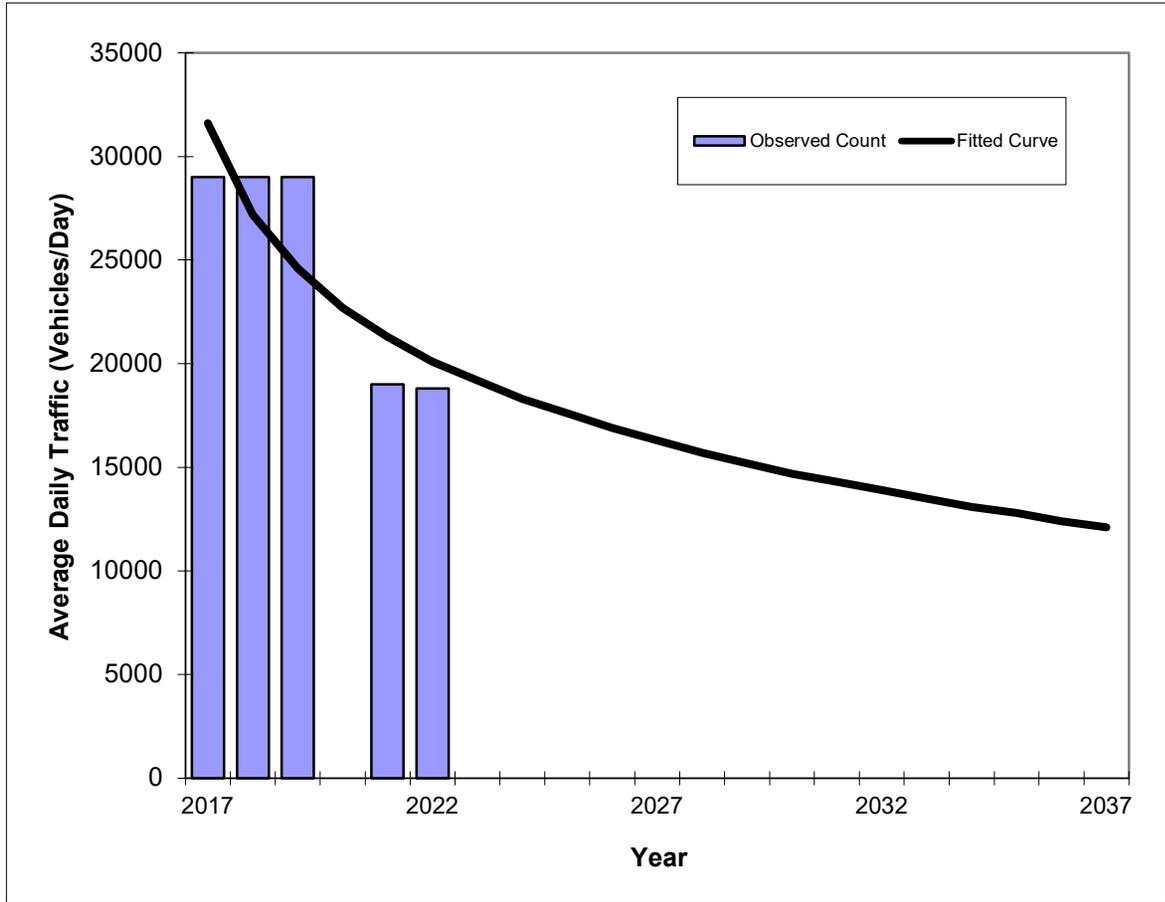
\*Axle-Adjusted

## Traffic Trends - V03.a

### ANDREWS AVE -- N OF OAKLAND PARK BLVD

FIN#	0
Location	2

County:	BROWARD
Station #:	7446
Highway:	ANDREWS AVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	29000	31600
2018	29000	27200
2019	29000	24600
2020	n/a	n/a
2021	19000	21300
2022	18800	20100
<b>2023 Opening Year Trend</b>		
2023	N/A	19200
<b>2024 Mid-Year Trend</b>		
2024	N/A	18300
<b>2025 Design Year Trend</b>		
2025	N/A	17600
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	85.95%
Compounded Annual Historic Growth Rate:	-8.65%
Compounded Growth Rate (2022 to Design Year):	-4.33%
Printed:	4-May-23
<b>Exponential Growth Option</b>	

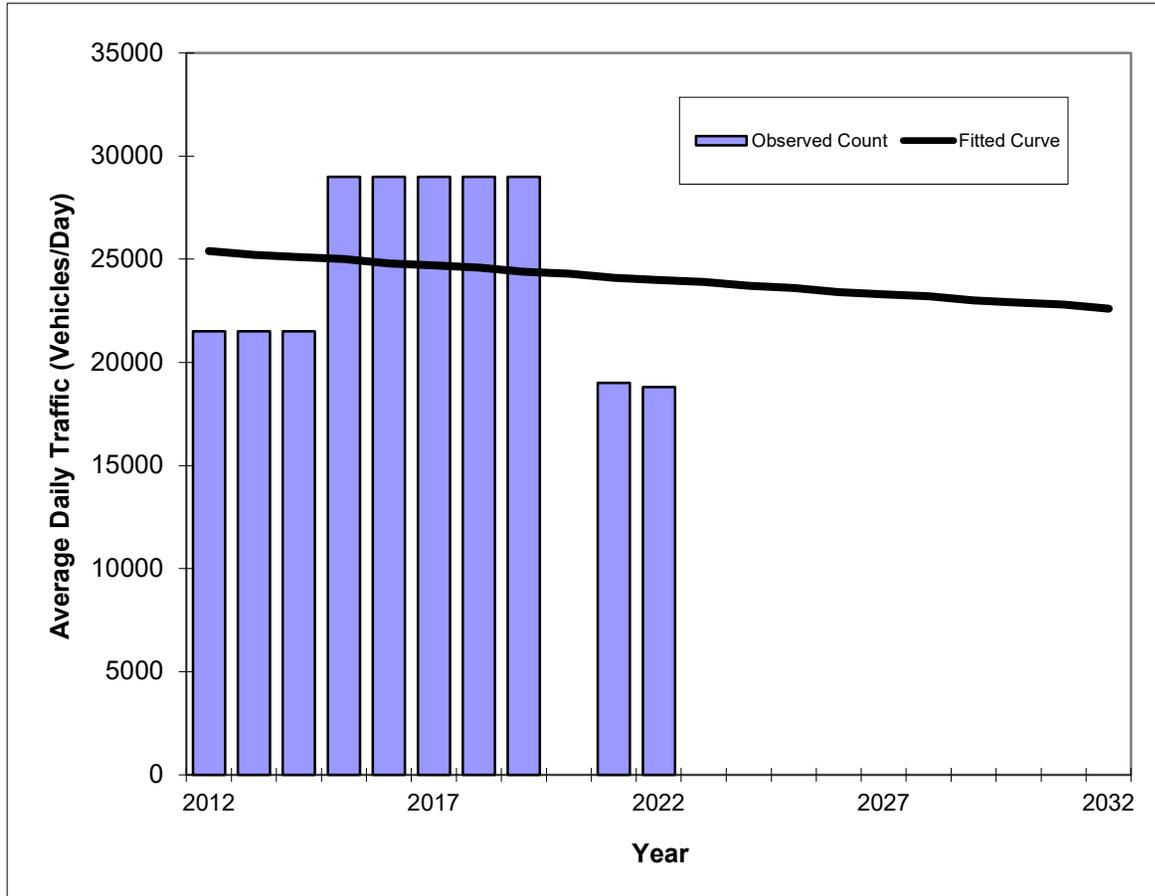
\*Axle-Adjusted

## Traffic Trends - V03.a

### ANDREWS AVE -- N OF OAKLAND PARK BLVD

FIN#	0
Location	3

County:	BROWARD
Station #:	7446
Highway:	ANDREWS AVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	21500	25400
2013	21500	25200
2014	21500	25100
2015	29000	25000
2016	29000	24800
2017	29000	24700
2018	29000	24600
2019	29000	24400
2020	n/a	n/a
2021	19000	24100
2022	18800	24000
<b>2023 Opening Year Trend</b>		
2023	N/A	23900
<b>2024 Mid-Year Trend</b>		
2024	N/A	23700
<b>2026 Design Year Trend</b>		
2026	N/A	23400
<b>TRANPLAN Forecasts/Trends</b>		

** Annual Trend Increase:	-138
Trend R-squared:	1.00%
Trend Annual Historic Growth Rate:	-0.55%
Trend Growth Rate (2022 to Design Year):	-0.63%
Printed:	4-May-23
<b>Straight Line Growth Option</b>	

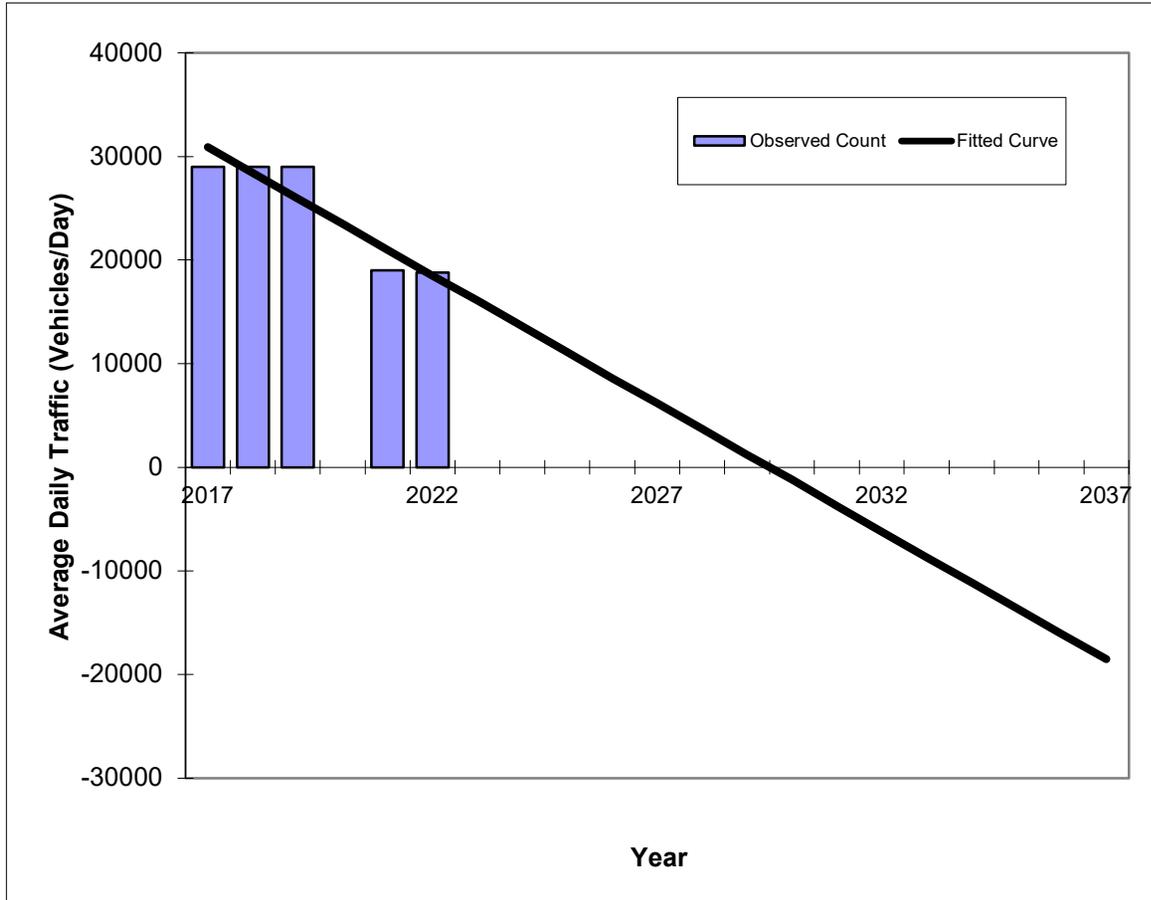
\*Axle-Adjusted

## Traffic Trends - V03.a

### ANDREWS AVE -- N OF OAKLAND PARK BLVD

FIN#	0
Location	2

County:	BROWARD
Station #:	7446
Highway:	ANDREWS AVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	29000	30900
2018	29000	28400
2019	29000	25900
2020	n/a	n/a
2021	19000	21000
2022	18800	18500
<b>2023 Opening Year Trend</b>		
2023	N/A	16100
<b>2024 Mid-Year Trend</b>		
2024	N/A	13600
<b>2025 Design Year Trend</b>		
2025	N/A	11100
<b>TRANPLAN Forecasts/Trends</b>		

** Annual Trend Increase:	-2,472
Trend R-squared:	85.85%
Trend Annual Historic Growth Rate:	-8.03%
Trend Growth Rate (2022 to Design Year):	-13.33%
Printed:	4-May-23
<b>Straight Line Growth Option</b>	

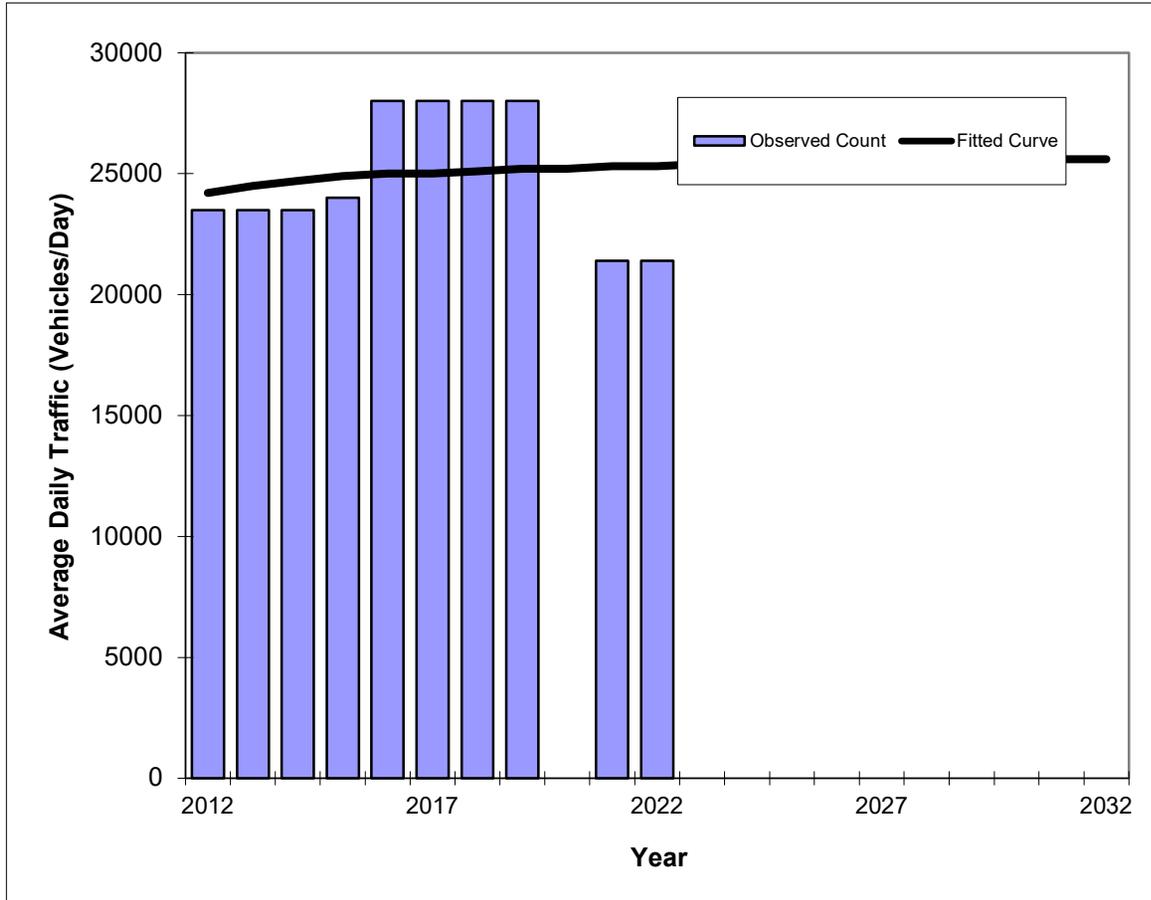
\*Axle-Adjusted

## Traffic Trends - V03.a

### ANDREWS AVE -- S OF OAKLAND PARK BLVD

FIN#	0
Location	1

County:	BROWARD
Station #:	7448
Highway:	ANDREWS AVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	23500	24200
2013	23500	24500
2014	23500	24700
2015	24000	24900
2016	28000	25000
2017	28000	25000
2018	28000	25100
2019	28000	25200
2020	n/a	n/a
2021	21400	25300
2022	21400	25300
<b>2023 Opening Year Trend</b>		
2023	N/A	25400
<b>2024 Mid-Year Trend</b>		
2024	N/A	25400
<b>2026 Design Year Trend</b>		
2026	N/A	25500
<b>TRANPLAN Forecasts/Trends</b>		

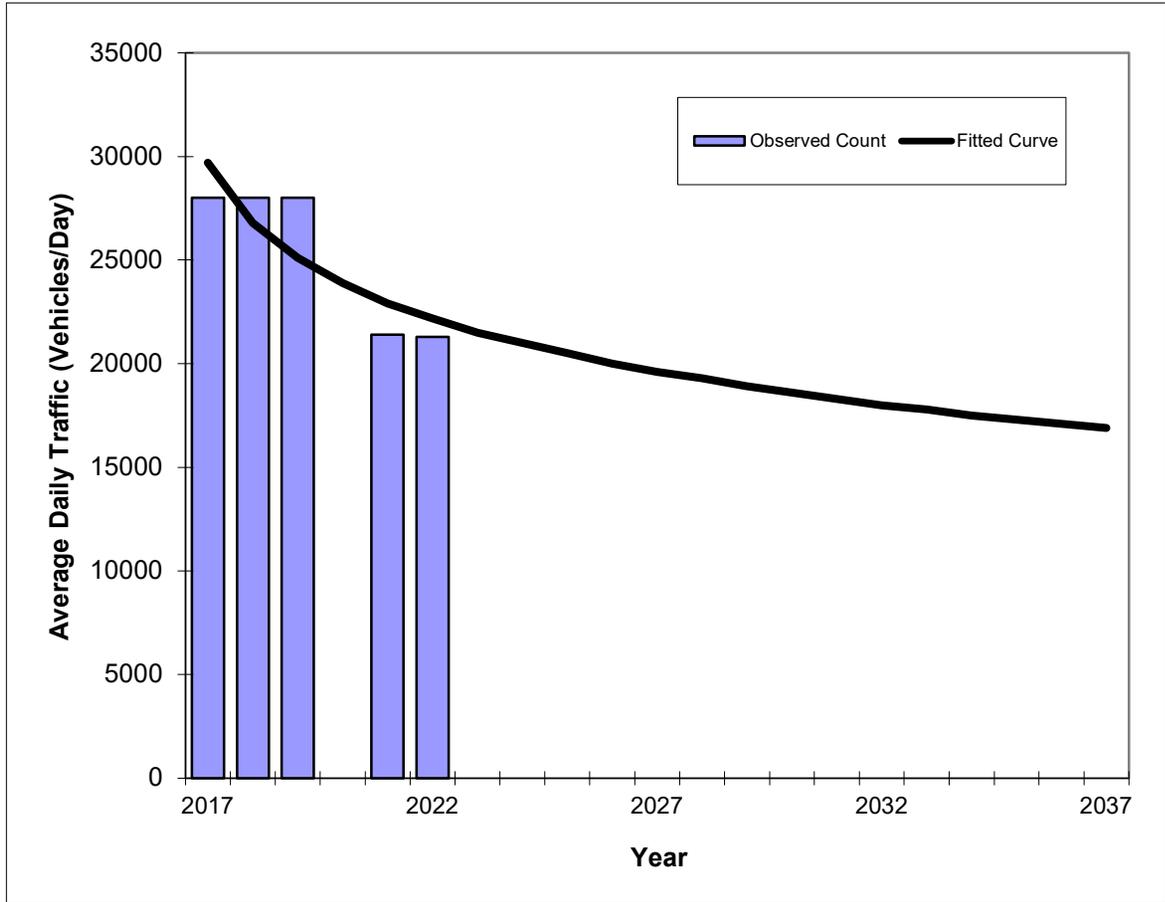
Trend R-squared:	1.55%
Compounded Annual Historic Growth Rate:	0.45%
Compounded Growth Rate (2022 to Design Year):	0.20%
Printed:	4-May-23
<b>Decaying Exponential Growth Option</b>	

\*Axle-Adjusted

**Traffic Trends - V03.a**  
**ANDREWS AVE -- S OF OAKLAND PARK BLVD**

FIN#	0
Location	1

County:	BROWARD
Station #:	7448
Highway:	ANDREWS AVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	28000	29700
2018	28000	26800
2019	28000	25100
2020	n/a	n/a
2022	21300	22200
<b>2023 Opening Year Trend</b>		
2023	N/A	21500
<b>2024 Mid-Year Trend</b>		
2024	N/A	21000
<b>2026 Design Year Trend</b>		
2026	N/A	20000
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	69.88%
Compounded Annual Historic Growth Rate:	-5.65%
Compounded Growth Rate (2022 to Design Year):	-2.58%
Printed:	4-May-23
<b>Decaying Exponential Growth Option</b>	

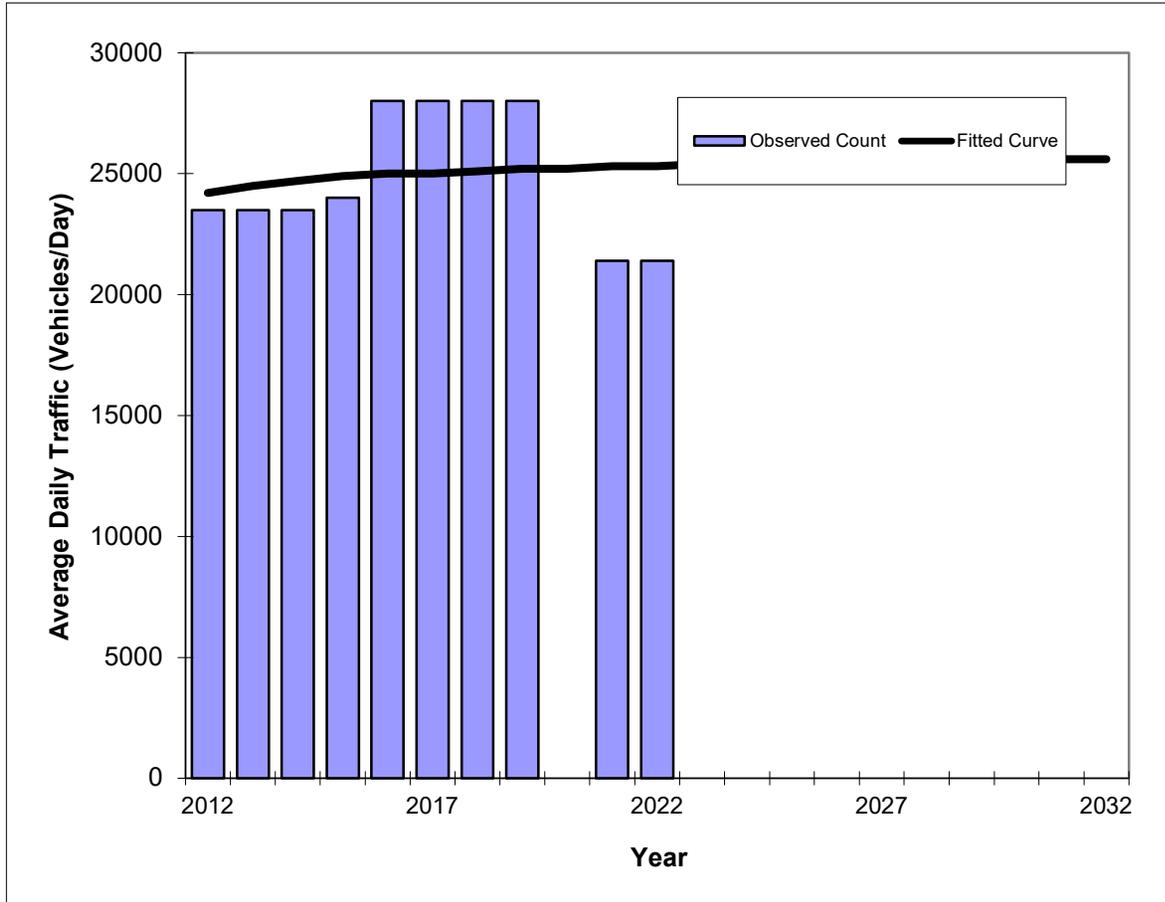
\*Axle-Adjusted

## Traffic Trends - V03.a

### ANDREWS AVE -- S OF OAKLAND PARK BLVD

FIN#	0
Location	1

County:	BROWARD
Station #:	7448
Highway:	ANDREWS AVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	23500	24200
2013	23500	24500
2014	23500	24700
2015	24000	24900
2016	28000	25000
2017	28000	25000
2018	28000	25100
2019	28000	25200
2020	n/a	n/a
2021	21400	25300
2022	21400	25300
<b>2023 Opening Year Trend</b>		
2023	N/A	25400
<b>2024 Mid-Year Trend</b>		
2024	N/A	25400
<b>2026 Design Year Trend</b>		
2026	N/A	25500
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	1.24%
Compounded Annual Historic Growth Rate:	0.45%
Compounded Growth Rate (2022 to Design Year):	0.20%
Printed:	4-May-23
<b>Exponential Growth Option</b>	

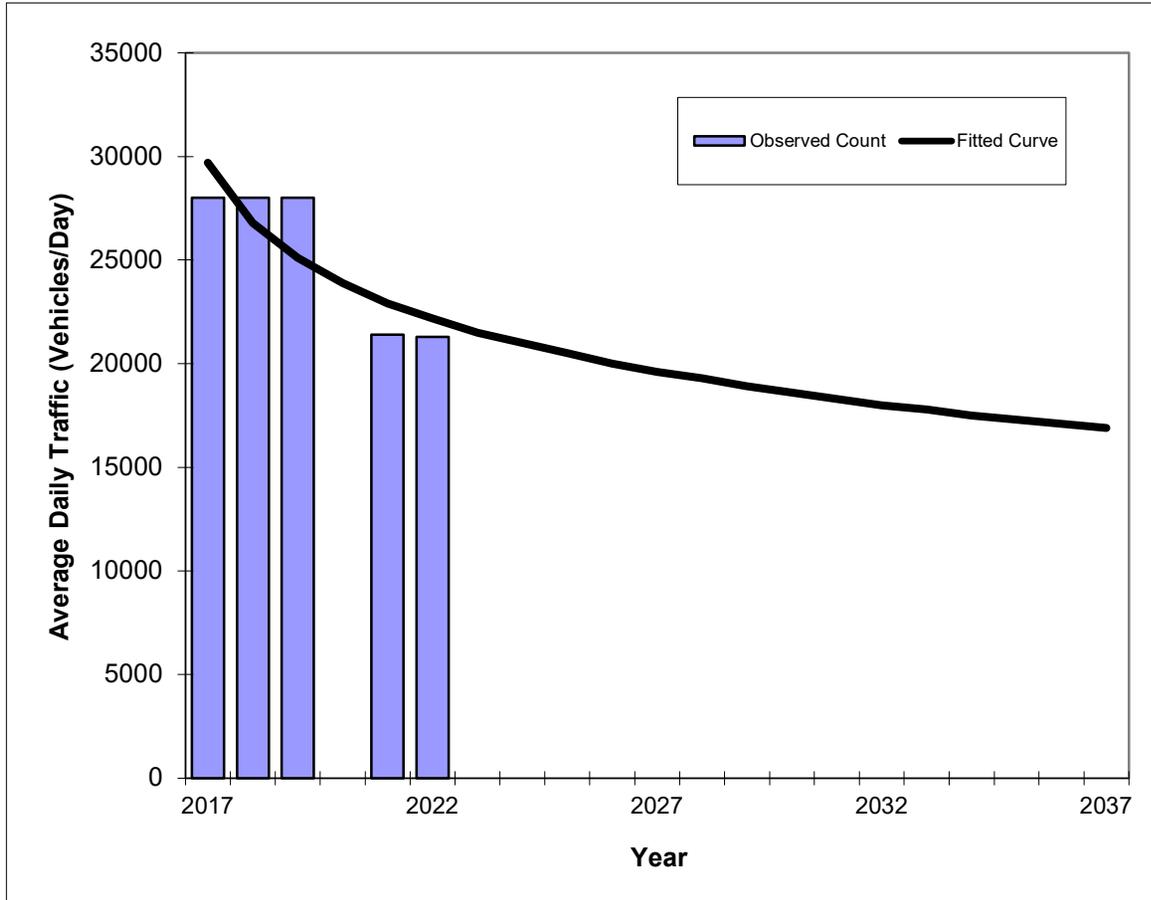
\*Axle-Adjusted

## Traffic Trends - V03.a

### ANDREWS AVE -- S OF OAKLAND PARK BLVD

FIN#	0
Location	1

County:	BROWARD
Station #:	7448
Highway:	ANDREWS AVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	28000	29700
2018	28000	26800
2019	28000	25100
2020	n/a	n/a
2022	21300	22200
<b>2023 Opening Year Trend</b>		
2023	N/A	21500
<b>2024 Mid-Year Trend</b>		
2024	N/A	21000
<b>2026 Design Year Trend</b>		
2026	N/A	20000
<b>TRANPLAN Forecasts/Trends</b>		

Trend R-squared:	85.81%
Compounded Annual Historic Growth Rate:	-5.65%
Compounded Growth Rate (2022 to Design Year):	-2.58%
Printed:	4-May-23
<b>Exponential Growth Option</b>	

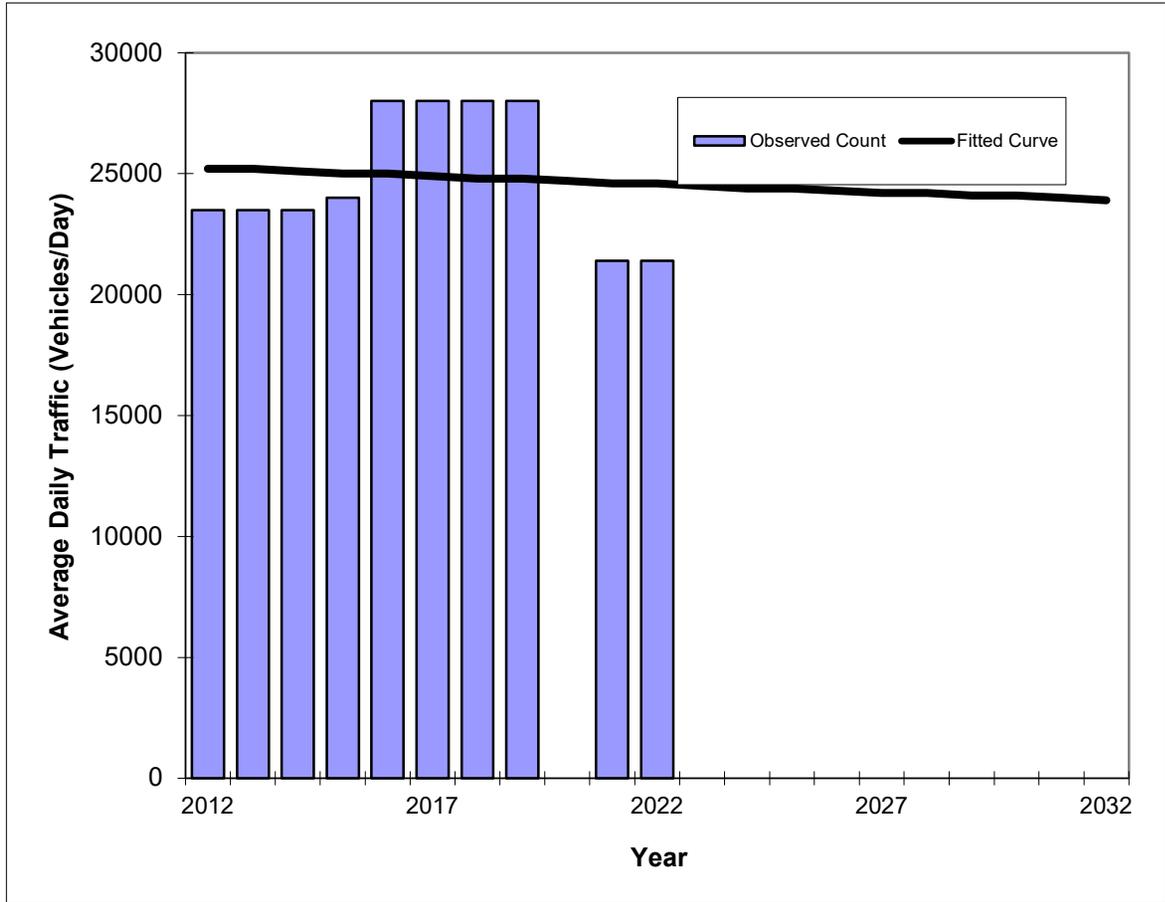
\*Axle-Adjusted

## Traffic Trends - V03.a

### ANDREWS AVE -- S OF OAKLAND PARK BLVD

FIN#	0
Location	1

County:	BROWARD
Station #:	7448
Highway:	ANDREWS AVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	23500	25200
2013	23500	25200
2014	23500	25100
2015	24000	25000
2016	28000	25000
2017	28000	24900
2018	28000	24800
2019	28000	24800
2020	n/a	n/a
2021	21400	24600
2022	21400	24600
<b>2023 Opening Year Trend</b>		
2023	N/A	24500
<b>2024 Mid-Year Trend</b>		
2024	N/A	24400
<b>2026 Design Year Trend</b>		
2026	N/A	24300
<b>TRANPLAN Forecasts/Trends</b>		

** Annual Trend Increase:	-66
Trend R-squared:	0.63%
Trend Annual Historic Growth Rate:	-0.24%
Trend Growth Rate (2022 to Design Year):	-0.30%
Printed:	4-May-23
<b>Straight Line Growth Option</b>	

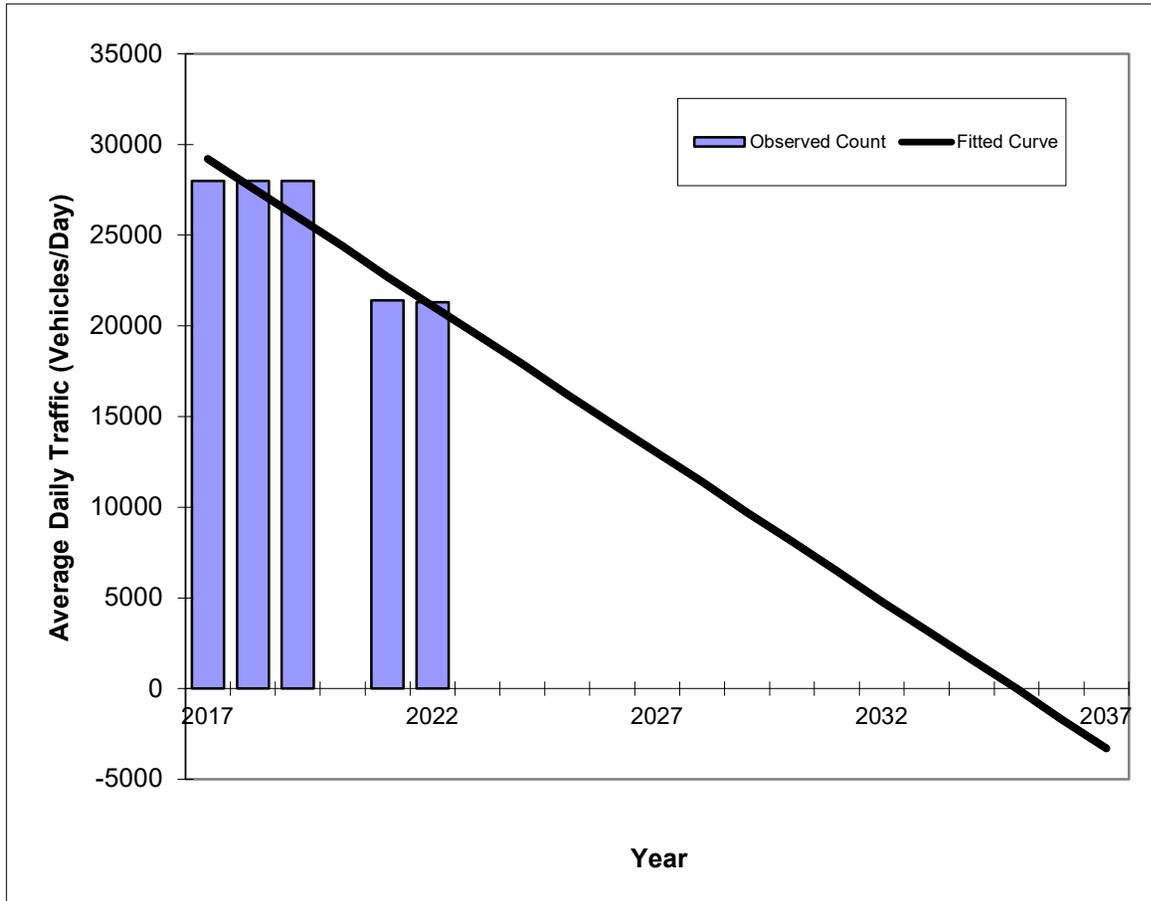
\*Axle-Adjusted

## Traffic Trends - V03.a

### ANDREWS AVE -- S OF OAKLAND PARK BLVD

FIN#	0
Location	1

County:	BROWARD
Station #:	7448
Highway:	ANDREWS AVE



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	28000	29200
2018	28000	27600
2019	28000	26000
2020	n/a	n/a
2022	21300	21100
<b>2023 Opening Year Trend</b>		
2023	N/A	19500
<b>2024 Mid-Year Trend</b>		
2024	N/A	17900
<b>2026 Design Year Trend</b>		
2026	N/A	14600
<b>TRANPLAN Forecasts/Trends</b>		

** Annual Trend Increase:	-1,627
Trend R-squared:	85.76%
Trend Annual Historic Growth Rate:	-5.55%
Trend Growth Rate (2022 to Design Year):	-7.70%
Printed:	4-May-23
<b>Straight Line Growth Option</b>	

\*Axle-Adjusted

Growth Rate Trend Analysis Calculations - 5 Years												
Description	FDOT Historical AADT Data											
	0022			5139			7446			7448		
Option	Linear	Exponential	Decaying Exponential	Linear	Exponential	Decaying Exponential	Linear	Exponential	Decaying Exponential	Linear	Exponential	Decaying Exponential
Trend Growth Rate 5 years	1.45	1.30	1.30	-0.60	-0.18	-0.18	-8.03	-8.65	-8.65	-5.55	-5.65	-5.65
Trend R-squared 5 years	11.19	11.36	9.09	9.73	10.12	0.75	85.85	85.95	69.92	85.76	85.81	69.88
Average Growth Rate (5-year) Linear all stations	-3.18											
Average Growth Rate (5-year) Exponential all stations	-3.30											
Average Growth Rate (5-year) Decaying Exponential all stations	-3.30											
Highest R-Square	85.95						Exponential					
Growth Rate (5-year) with the highest R- Square	-3.30											

Growth Rate Trend Analysis Calculations - 10 Years												
Description	FDOT Historical AADT Data											
	0022			5139			7446			7448		
Option	Linear	Exponential	Decaying Exponential	Linear	Exponential	Decaying Exponential	Linear	Exponential	Decaying Exponential	Linear	Exponential	Decaying Exponential
Trend Growth Rate 10 years	0.81	0.75	0.75	-0.43	-0.26	-0.26	-0.55	0.86	0.86	-0.24	0.45	0.45
Trend R-squared 10 years	12.53	12.09	10.82	6.96	6.81	2.26	1.00	1.92	2.00	0.63	1.24	1.55
Average Growth Rate (10-year) Linear all stations	-0.10											
Average Growth Rate (10-year) Exponential all stations	0.45											
Average Growth Rate (10-year) Decaying Exponential all stations	0.45											
Highest R-Square	12.53						Linear					
Growth Rate (10-year) with highest R- Square	0.45											

Notes:

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.

APPENDIX C: North / South Roadways Capacity and Level of Service Analysis 2019 & 2040

N/S Roadway	Segment	2019				2019				2040				2040					
		Design Code	Daily Conditions			Peak Hour Conditions				Design Code	Daily Conditions			Peak Hour Conditions					
			AADT	Capacity	V/C	LOS	Volume	Capacity	V/C		LOS	Volume	Capacity	V/C	LOS				
Andrews Ave	N of SE 17 St	464	22000	29160	0.75	D	2090	2628	0.79	D	464	39300	29160	1.35	F	3734	2628	1.42	F
Andrews Ave	N of Davie Blvd	464	16600	29160	0.57	D	1577	2628	0.60	D	464	41700	29160	1.43	F	3962	2628	1.51	F
Andrews Ave	N of SW 7 St-CBD	464	16800	29160	0.58	D	1596	2628	0.61	D	464	35500	29160	1.22	F	3373	2628	1.28	F
Andrews Ave	N of Broward Blvd-CBD	464	16800	29160	0.58	D	1596	2628	0.61	D	464	37900	29160	1.30	F	3601	2628	1.37	F
Andrews Ave	N of NE 6 St	464	18300	29160	0.63	D	1739	2628	0.66	D	464	24500	29160	0.84	D	2328	2628	0.89	D
Andrews Ave	N of Sunrise Blvd	464	18300	29160	0.63	D	1739	2628	0.66	D	464	38500	29160	1.32	F	3658	2628	1.39	F
Andrews Ave	N of Oakland Pk Blvd	464	29000	29160	0.99	D	2755	2628	1.05	F	464	35000	29160	1.20	F	3325	2628	1.26	F
Andrews Ave	N of Prospect Rd	464	19100	29160	0.65	D	1815	2628	0.69	D	464	28400	29160	0.97	D	2698	2628	1.03	E
Andrews Ave	N of Commercial Blvd	464	18500	29160	0.63	D	1758	2628	0.67	D	464	30800	29160	1.06	F	2926	2628	1.11	F
Andrews Ave	N of Cypress Crk Rd	622	31000	56905	r 0.54	C	2945	5121	r 0.57	C	622	39000	56905	r 0.69	C	3705	5121	r 0.72	C
Andrews Ave	N of McNab Rd	422	21000	37810	r 0.56	C	1995	3401	r 0.59	C	422	34100	37810	r 0.90	C	3240	3401	r 0.95	C
Andrews Ave	N of Pompano Pk Pl	222	15500	16815	r 0.92	C	1473	1520	r 0.97	D	422	50000	37810	r 1.32	F	4750	3401	r 1.40	F
Andrews Ave	N of Atlantic Blvd	422	15900	37810	r 0.42	C	1511	3401	r 0.44	C	422	49900	37810	r 1.32	F	4741	3401	r 1.39	F

APPENDIX B: East / West Roadways Capacity and Level of Service Analysis 2019 & 2040

ID	E/W Roadway	Segment	2019				2019				2040				2040					
			Design Code	Daily Conditions			Peak Hour Conditions			Code	Daily Conditions			Peak Hour Conditions						
				AADT	Capacity	V/C	LOS	Volume	Capacity		V/C	LOS	Volume	Capacity	V/C	LOS	Volume	Capacity	V/C	LOS
592	Oakland Pk Blvd	E of Nob Hill Rd	622	43500	59900	0.73	C	4133	5390	0.77	C	622	39400	59900	0.66	C	3743	5390	0.69	C
594	Oakland Pk Blvd	E of Pine Island Rd	622	41000	59900	0.68	C	3895	5390	0.72	C	622	55500	59900	0.93	C	5273	5390	0.98	D
596	Oakland Pk Blvd	E of University Dr	622	37500	59900	0.63	C	3563	5390	0.66	C	622	57900	59900	0.97	C	5501	5390	1.02	F
598	Oakland Pk Blvd	E of Inverrary Blvd	622	62000	59900	1.04	F	5890	5390	1.09	F	622	74700	59900	1.25	F	7097	5390	1.32	F
600	Oakland Pk Blvd	E of SR 7	622	60000	59900	1.00	F	5700	5390	1.06	F	622	69400	59900	1.16	F	6593	5390	1.22	F
602	Oakland Pk Blvd	E of SW 31 Ave	622	57000	59900	0.95	C	5415	5390	1.00	F	622	68000	59900	1.14	F	6460	5390	1.20	F
604	Oakland Pk Blvd	E of I-95	632	65500	50000	1.31	F	6223	4500	1.38	F	632	69600	50000	1.39	F	6612	4500	1.47	F
606	Oakland Pk Blvd	E of Andrews Ave	632	41500	50000	0.83	D	3943	4500	0.88	D	632	53200	50000	1.06	F	5054	4500	1.12	F
608	Oakland Pk Blvd	E of US 1	632	36500	50000	0.73	D	3468	4500	0.77	D	632	39400	50000	0.79	D	3743	4500	0.83	D
610	Oakland Pk Blvd	E of Bayview Dr	432	28500	32400	0.88	D	2708	2920	0.93	D	432	38000	32400	1.17	F	3610	2920	1.24	F
612	NW 38 St	E of NW 31 Ave	264	6800	13320	0.51	D	646	1197	0.54	D	264	11000	13320	0.83	D	1045	1197	0.87	D
614	Nw 38 St	E of NW 21 Ave	264	6800	13320	0.51	D	646	1197	0.54	D	264	6200	13320	0.47	C	589	1197	0.49	C
616	NE/NW 38 St	E of Powerline Rd	264	7200	13320	0.54	D	684	1197	0.57	D	264	10000	13320	0.75	D	950	1197	0.79	D
618	NE 38 St	E of Dixie Hwy	264	5800	13320	0.44	C	551	1197	0.46	C	264	16400	13320	1.23	F	1558	1197	1.30	F

APPENDIX C: North / South Roadways Capacity and Level of Service Analysis 2020 & 2045

N/S Roadway	Segment	2020				2020				2045				2045					
		Design Code	Daily Conditions			Peak Hour Conditions				Design Code	Daily Conditions			Peak Hour Conditions					
			AADT	Capacity	V/C	LOS	Volume	Capacity	V/C		LOS	Volume	Capacity	V/C	LOS				
Andrews Ave	N of SE 17 St	464	12100	29160	0.41	C	1150	2628	0.44	C	464	39300	29160	1.35	F	3734	2628	1.42	F
Andrews Ave	N of Davie Blvd	464	11000	29160	0.38	C	1045	2628	0.40	C	464	41700	29160	1.43	F	3962	2628	1.51	F
Andrews Ave	N of SW 7 St-CBD	464	11400	29160	0.39	C	1083	2628	0.41	C	464	35500	29160	1.22	F	3373	2628	1.28	F
Andrews Ave	N of Broward Blvd-CBD	464	11400	29160	0.39	C	1083	2628	0.41	C	464	37900	29160	1.30	F	3601	2628	1.37	F
Andrews Ave	N of NE 6 St	464	17900	29160	0.61	D	1701	2628	0.65	D	464	24500	29160	0.84	D	2328	2628	0.89	D
Andrews Ave	N of Sunrise Blvd	464	17900	29160	0.61	D	1701	2628	0.65	D	464	38500	29160	1.32	F	3658	2628	1.39	F
Andrews Ave	N of Oakland Pk Blvd	464	19200	29160	0.66	D	1824	2628	0.69	D	464	35000	29160	1.20	F	3325	2628	1.26	F
Andrews Ave	N of Prospect Rd	464	15700	29160	0.54	D	1492	2628	0.57	D	464	28400	29160	0.97	D	2698	2628	1.03	E
Andrews Ave	N of Commercial Blvd	464	13300	29160	0.46	D	1264	2628	0.48	D	464	30800	29160	1.06	F	2926	2628	1.11	F
Andrews Ave	N of Cypress Crk Rd	622	19400	56905	r 0.34	C	1843	5121	r 0.36	C	622	39000	56905	r 0.69	C	3705	5121	r 0.72	C
Andrews Ave	N of McNab Rd	422	15900	37810	r 0.42	C	1511	3401	r 0.44	C	422	34100	37810	r 0.90	C	3240	3401	r 0.95	C
Andrews Ave	N of Pompano Pk Pl	222	15700	16815	r 0.93	C	1492	1520	r 0.98	D	422	50000	37810	r 1.32	F	4750	3401	r 1.40	F
Andrews Ave	N of Atlantic Blvd	422	14100	37810	r 0.37	C	1340	3401	r 0.39	C	422	49900	37810	r 1.32	F	4741	3401	r 1.39	F
Andrews Ave	N of NW 15 St	422	14100	37810	r 0.37	C	1340	3401	r 0.39	C	422	42200	37810	r 1.12	F	4009	3401	r 1.18	F

APPENDIX B: East / West Roadways Capacity and Level of Service Analysis 2020 & 2045

E/W Roadway	Segment	2020					2020					2045					2045				
		Design Code	Daily Conditions				Peak Hour Conditions				Code	Daily Conditions				Peak Hour Conditions					
			AADT	Capacity	V/C	LOS	Volume	Capacity	V/C	LOS		Volume	Capacity	V/C	LOS	Volume	Capacity	V/C	LOS		
Oakland Pk Blvd	E of Nob Hill Rd	622	29500	59900	0.49	C	2803	5390	0.52	C	622	39400	59900	0.66	C	3743	5390	0.69	C		
Oakland Pk Blvd	E of Pine Island Rd	622	31500	59900	0.53	C	2993	5390	0.56	C	622	55500	59900	0.93	C	5273	5390	0.98	D		
Oakland Pk Blvd	E of University Dr	622	33500	59900	0.56	C	3183	5390	0.59	C	622	57900	59900	0.97	C	5501	5390	1.02	F		
Oakland Pk Blvd	E of Inverrary Blvd	622	58500	59900	0.98	D	5558	5390	1.03	F	622	74700	59900	1.25	F	7097	5390	1.32	F		
Oakland Pk Blvd	E of SR 7	622	56000	59900	0.93	C	5320	5390	0.99	D	622	69400	59900	1.16	F	6593	5390	1.22	F		
Oakland Pk Blvd	E of SW 31 Ave	622	54000	59900	0.90	C	5130	5390	0.95	C	622	68000	59900	1.14	F	6460	5390	1.20	F		
Oakland Pk Blvd	E of I-95	632	54500	50000	1.09	F	5178	4500	1.15	F	632	69600	50000	1.39	F	6612	4500	1.47	F		
Oakland Pk Blvd	E of Andrews Ave	632	41500	50000	0.83	D	3943	4500	0.88	D	632	53200	50000	1.06	F	5054	4500	1.12	F		
Oakland Pk Blvd	E of US 1	632	34500	50000	0.69	D	3278	4500	0.73	D	632	39400	50000	0.79	D	3743	4500	0.83	D		
Oakland Pk Blvd	E of Bayview Dr	432	23000	32400	0.71	D	2185	2920	0.75	D	432	38000	32400	1.17	F	3610	2920	1.24	F		
NW 38 St	E of NW 31 Ave	264	3500	13320	0.26	C	333	1197	0.28	C	264	11000	13320	0.83	D	1045	1197	0.87	D		
Nw 38 St	E of NW 21 Ave	264	3500	13320	0.26	C	333	1197	0.28	C	264	6200	13320	0.47	C	589	1197	0.49	C		
NE/NW 38 St	E of Powerline Rd	264	6500	13320	0.49	C	618	1197	0.52	D	264	10000	13320	0.75	D	950	1197	0.79	D		
NE 38 St	E of Dixie Hwy	264	5100	13320	0.38	C	485	1197	0.40	C	264	16400	13320	1.23	F	1558	1197	1.30	F		

<b>Table 1</b>			
<b>Future Growth Rate Analysis Based on Model Runs</b>			
<b>Location</b>	<b>Model</b>		<b>Growth Rate</b>
	<b>2019 Volume</b>	<b>2045 Volume</b>	
N of Sunrise Blvd	18,300	38,500	2.9%
N of Oakland Park Blvd	29,000	35,000	0.7%
Oakland Park Blvd, E of I-95	65,500	69,600	0.2%
Oakland Park Blvd, E of Andrews Ave	41,500	53,200	1.0%
Average Rate			1.2%

**ATTACHMENT E**  
**Future Turning Movement Volumes**

## FUTURE TURNING MOVEMENT VOLUME ANALYSIS

### Oakland Park Boulevard and Andrews Avenue AM Peak Hour

Description	Andrews Avenue Northbound			Andrews Avenue Southbound			Oakland Park Boulevard Eastbound			Oakland Park Boulevard Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (8/16/2022)	267	557	142	88	667	148	183	1,431	233	120	1,009	81
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
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
2022 Peak Season Traffic	278	581	148	92	695	154	191	1,492	243	125	1,052	84
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Committed Developments The Ave	25	8	22	3								
2026 Background Traffic	313	610	175	98	721	160	198	1,546	252	130	1,090	88
2916 -2980 N Andrews Avenue	7	2	7		1				1	0		
<b>2026 Total Traffic</b>	<b>320</b>	<b>612</b>	<b>182</b>	<b>98</b>	<b>722</b>	<b>160</b>	<b>198</b>	<b>1,546</b>	<b>253</b>	<b>130</b>	<b>1,090</b>	<b>88</b>

## FUTURE TURNING MOVEMENT VOLUME ANALYSIS

### Oakland Park Boulevard and Andrews Avenue PM Peak Hour

Description	Andrews Avenue Northbound			Andrews Avenue Southbound			Oakland Park Boulevard Eastbound			Oakland Park Boulevard Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (8/16/2022)	303	732	132	80	567	128	252	1,014	235	194	1,321	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
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
2022 Peak Season Traffic	316	763	138	83	591	133	263	1,057	245	202	1,377	109
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Committed Developments The Ave	14	5	12	7								
2026 Background Traffic	341	796	155	93	613	138	272	1,095	254	210	1,427	113
2916 -2980 N Andrews Avenue	1	1	1		2				4	2		
<b>2026 Total Traffic</b>	<b>342</b>	<b>797</b>	<b>156</b>	<b>93</b>	<b>615</b>	<b>138</b>	<b>272</b>	<b>1,095</b>	<b>258</b>	<b>212</b>	<b>1,427</b>	<b>113</b>

## FUTURE TURNING MOVEMENT VOLUME ANALYSIS

### Oakland Park Boulevard and Powerline Road AM Peak Hour

Description	Powerline Road Northbound			Powerline Road Southbound			Oakland Park Boulevard Eastbound			Oakland Park Boulevard Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (9/14/2022)	366	515	185	191	530	184	187	1,754	167	99	1,205	134
Season Adjustment Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
2022 Peak Season Traffic	396	558	200	207	574	199	202	1,899	181	107	1,305	145
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Committed Developments The Ave									9		25	
2026 Background Traffic	411	578	208	214	595	207	210	1,968	196	111	1,377	150
2916 -2980 N Andrews Avenue				0				1		1	4	2
<b>2026 Total Traffic</b>	<b>411</b>	<b>578</b>	<b>208</b>	<b>214</b>	<b>595</b>	<b>207</b>	<b>210</b>	<b>1,969</b>	<b>196</b>	<b>112</b>	<b>1,381</b>	<b>152</b>

## FUTURE TURNING MOVEMENT VOLUME ANALYSIS

### Oakland Park Boulevard and Powerline Road PM Peak Hour

Description	Powerline Road Northbound			Powerline Road Southbound			Oakland Park Boulevard Eastbound			Oakland Park Boulevard Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (9/14/2022)	341	528	128	167	584	151	205	1,575	267	126	1,505	137
Season Adjustment Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
2022 Peak Season Traffic	369	572	139	181	632	164	222	1,705	289	136	1,630	148
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Committed Developments The Ave									21		14	
2026 Background Traffic	383	593	144	187	655	169	230	1,768	321	141	1,703	154
2916 -2980 N Andrews Avenue				1				3		0	1	0
<b>2026 Total Traffic</b>	<b>383</b>	<b>593</b>	<b>144</b>	<b>188</b>	<b>655</b>	<b>169</b>	<b>230</b>	<b>1,771</b>	<b>321</b>	<b>141</b>	<b>1,704</b>	<b>154</b>

## FUTURE TURNING MOVEMENT VOLUME ANALYSIS

### Powerline Road and NE 29 Street AM Peak Hour

Description	Powerline Road Northbound			Powerline Road Southbound			NE 29 Street Eastbound			NE 29 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (9/14/2022)	5	897	88	113	705	13	21	6	10	76	8	150
Season Adjustment Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
2022 Peak Season Traffic	5	971	95	122	763	14	23	6	11	82	9	162
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Committed Developments The Ave				9								
2026 Background Traffic	6	1,007	99	136	791	15	24	7	11	85	9	168
2916 -2980 N Andrews Avenue			0		2							
<b>2026 Total Traffic</b>	<b>6</b>	<b>1,007</b>	<b>99</b>	<b>136</b>	<b>793</b>	<b>15</b>	<b>24</b>	<b>7</b>	<b>11</b>	<b>85</b>	<b>9</b>	<b>168</b>

## FUTURE TURNING MOVEMENT VOLUME ANALYSIS

### Powerline Road and NE 29 Street PM Peak Hour

Description	Powerline Road Northbound			Powerline Road Southbound			NE 29 Street Eastbound			NE 29 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (9/14/2022)	5	841	46	89	877	29	18	6	10	119	20	138
Season Adjustment Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
2022 Peak Season Traffic	5	911	50	96	950	31	19	6	11	129	22	149
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Committed Developments The Ave				21								
2026 Background Traffic	6	944	52	121	984	33	20	7	11	134	22	155
2916 -2980 N Andrews Avenue			1		1							
<b>2026 Total Traffic</b>	<b>6</b>	<b>944</b>	<b>53</b>	<b>121</b>	<b>985</b>	<b>33</b>	<b>20</b>	<b>7</b>	<b>11</b>	<b>134</b>	<b>22</b>	<b>155</b>

**FUTURE TURNING MOVEMENT VOLUME ANALYSIS**

**Andrews Avenue and NE 26 Street  
AM Peak Hour**

Description	Andrews Avenue Northbound			Andrews Avenue Southbound			NE 26 Street Eastbound			NE 26 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (9/14/2022)		879	120	152	936					129		138
Season Adjustment Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
2022 Peak Season Traffic	0	952	130	165	1,014	0	0	0	0	140	0	149
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Committed Developments The Ave		2								8		8
2026 Background Traffic	0	988	135	171	1,050	0	0	0	0	153	0	163
2916 -2980 N Andrews Avenue		0								2		0
<b>2026 Total Traffic</b>	<b>0</b>	<b>988</b>	<b>135</b>	<b>171</b>	<b>1,050</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>155</b>	<b>0</b>	<b>163</b>

## FUTURE TURNING MOVEMENT VOLUME ANALYSIS

### Andrews Avenue and NE 26 Street PM Peak Hour

Description	Andrews Avenue Northbound			Andrews Avenue Southbound			NE 26 Street Eastbound			NE 26 Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (9/14/2022)		966	143	141	973					220		223
Season Adjustment Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
2022 Peak Season Traffic	0	1,046	155	153	1,054	0	0	0	0	238	0	241
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Committed Developments The Ave		7								4		19
2026 Background Traffic	0	1,091	160	158	1,092	0	0	0	0	251	0	269
2916 -2980 N Andrews Avenue		1								0		1
<b>2026 Total Traffic</b>	<b>0</b>	<b>1,092</b>	<b>160</b>	<b>158</b>	<b>1,092</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>251</b>	<b>0</b>	<b>270</b>

## FUTURE TURNING MOVEMENT VOLUME ANALYSIS

### Oakland Park Boulevard and NE 6 Avenue AM Peak Hour

Description	Powerline Road Northbound			Powerline Road Southbound			NE 6 Avenue Eastbound			NE 6 Avenue Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (9/14/2022)	130	127	54	77	189	49	48	1,459	103	62	956	52
Season Adjustment Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
2022 Peak Season Traffic	141	138	58	83	205	53	52	1,580	112	67	1,035	56
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Committed Developments The Ave	6							14	11	5		
2026 Background Traffic	152	143	61	86	212	55	54	1,651	127	75	1,073	58
2916 -2980 N Andrews Avenue						0	2	2	3		0	
<b>2026 Total Traffic</b>	<b>152</b>	<b>143</b>	<b>61</b>	<b>86</b>	<b>212</b>	<b>55</b>	<b>56</b>	<b>1,653</b>	<b>130</b>	<b>75</b>	<b>1,073</b>	<b>58</b>

## FUTURE TURNING MOVEMENT VOLUME ANALYSIS

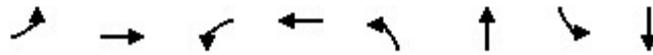
### Oakland Park Boulevard and NE 6 Avenue PM Peak Hour

Description	Powerline Road Northbound			Powerline Road Southbound			NE 6 Avenue Eastbound			NE 6 Avenue Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (9/14/2022)	123	191	41	94	225	52	59	1,237	152	106	1,344	57
Season Adjustment Factor	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07	1.07
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
2022 Peak Season Traffic	133	207	44	102	244	56	64	1,339	165	115	1,455	62
Annual Growth Rate	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%
Committed Developments The Ave	12							8	11	12		
2026 Background Traffic	150	214	46	105	253	58	66	1,396	182	131	1,508	64
2916 -2980 N Andrews Avenue						1	0	1	0		1	
<b>2026 Total Traffic</b>	<b>150</b>	<b>214</b>	<b>46</b>	<b>105</b>	<b>253</b>	<b>59</b>	<b>66</b>	<b>1,397</b>	<b>182</b>	<b>131</b>	<b>1,509</b>	<b>64</b>

**ATTACHMENT F**  
**SYNCHRO Analyses**

# Timings

## 101: Andrews Avenue & Oakland Park Boulevard



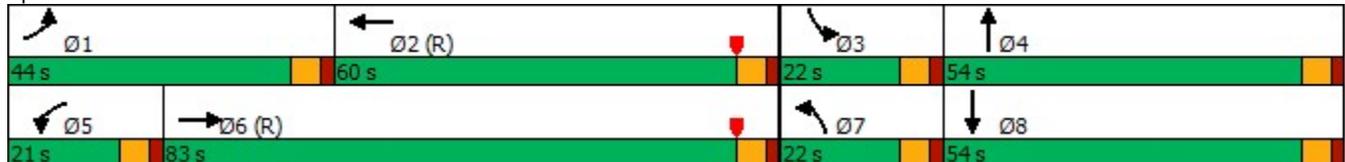
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗↗↗	↖	↔↔↔	↖↖	↗↗	↖	↗↗
Traffic Volume (vph)	191	1492	125	1052	278	581	92	695
Future Volume (vph)	191	1492	125	1052	278	581	92	695
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	6.0	5.0	6.0
Minimum Split (s)	11.0	41.0	11.0	41.0	11.0	36.0	11.0	36.0
Total Split (s)	44.0	83.0	21.0	60.0	22.0	54.0	22.0	54.0
Total Split (%)	24.4%	46.1%	11.7%	33.3%	12.2%	30.0%	12.2%	30.0%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	24.2	78.0	14.5	68.3	16.0	50.5	13.0	47.5
Actuated g/C Ratio	0.13	0.43	0.08	0.38	0.09	0.28	0.07	0.26
v/c Ratio	0.84	0.83	0.91	0.62	0.95	0.78	0.76	0.97
Control Delay	103.7	49.2	111.6	92.9	108.2	72.6	115.7	86.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	103.7	49.2	111.6	92.9	108.2	72.6	115.7	86.7
LOS	F	D	F	F	F	E	F	F
Approach Delay		54.6		94.7		82.5		89.5
Approach LOS		D		F		F		F

### Intersection Summary

Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 110 (61%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.97  
 Intersection Signal Delay: 76.3  
 Intersection Capacity Utilization 93.6%  
 Analysis Period (min) 15

Intersection LOS: E  
 ICU Level of Service F

### Splits and Phases: 101: Andrews Avenue & Oakland Park Boulevard



## Queues

### 101: Andrews Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	197	1789	129	1172	287	752	95	875
v/c Ratio	0.84	0.83	0.91	0.62	0.95	0.78	0.76	0.97
Control Delay	103.7	49.2	111.6	92.9	108.2	72.6	115.7	86.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	103.7	49.2	111.6	92.9	108.2	72.6	115.7	86.7
Queue Length 50th (ft)	231	684	151	510	177	411	112	533
Queue Length 95th (ft)	314	747	m#288	549	#278	547	180	#672
Internal Link Dist (ft)		578		2163		2155		369
Turn Bay Length (ft)	510		340		380		380	
Base Capacity (vph)	369	2145	146	1895	302	962	155	914
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.83	0.88	0.62	0.95	0.78	0.61	0.96

#### Intersection Summary

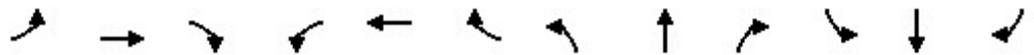
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

# HCM 6th Signalized Intersection Summary

## 101: Andrews Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	1492	243	125	1052	84	278	581	148	92	695	154
Future Volume (veh/h)	191	1492	243	125	1052	84	278	581	148	92	695	154
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		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	197	1538	251	129	1085	87	287	599	153	95	716	159
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	215	1899	309	147	1883	151	305	795	203	113	748	166
Arrive On Green	0.16	0.58	0.58	0.11	0.52	0.52	0.18	0.57	0.57	0.06	0.26	0.26
Sat Flow, veh/h	1767	4389	714	1767	4780	383	3428	2768	705	1767	2853	633
Grp Volume(v), veh/h	197	1182	607	129	766	406	287	381	371	95	442	433
Grp Sat Flow(s),veh/h/ln	1767	1689	1726	1767	1689	1786	1714	1763	1710	1767	1763	1724
Q Serve(g_s), s	19.7	50.1	50.4	12.9	27.8	27.9	14.9	29.1	29.4	9.6	44.5	44.5
Cycle Q Clear(g_c), s	19.7	50.1	50.4	12.9	27.8	27.9	14.9	29.1	29.4	9.6	44.5	44.5
Prop In Lane	1.00		0.41	1.00		0.21	1.00		0.41	1.00		0.37
Lane Grp Cap(c), veh/h	215	1461	747	147	1330	704	305	506	491	113	462	452
V/C Ratio(X)	0.92	0.81	0.81	0.88	0.58	0.58	0.94	0.75	0.76	0.84	0.96	0.96
Avail Cap(c_a), veh/h	373	1461	747	147	1330	704	305	506	491	157	470	460
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.79	0.79	0.79	0.84	0.84	0.84	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.5	32.3	32.4	79.2	32.6	32.6	73.5	33.5	33.5	83.4	65.4	65.4
Incr Delay (d2), s/veh	9.6	4.9	9.4	33.8	1.4	2.7	32.2	4.9	5.1	18.4	30.2	30.7
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	9.4	20.2	21.8	7.2	11.2	12.2	7.4	11.1	10.8	5.0	23.9	23.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.2	37.3	41.8	113.0	34.0	35.3	105.7	38.4	38.7	101.7	95.5	96.1
LnGrp LOS	F	D	D	F	C	D	F	D	D	F	F	F
Approach Vol, veh/h		1986			1301			1039			970	
Approach Delay, s/veh		43.3			42.3			57.1			96.4	
Approach LOS		D			D			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	27.9	76.9	17.5	57.7	20.9	83.9	22.0	53.2				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	38.0	54.0	16.0	48.0	15.0	77.0	16.0	48.0				
Max Q Clear Time (g_c+I1), s	21.7	29.9	11.6	31.4	14.9	52.4	16.9	46.5				
Green Ext Time (p_c), s	0.1	8.9	0.0	3.3	0.0	14.9	0.0	0.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			55.5									
HCM 6th LOS			E									

# Timings

## 102: Powerline Road & Oakland Park Boulevard

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	202	1899	107	1305	145	396	558	207	574
Future Volume (vph)	202	1899	107	1305	145	396	558	207	574
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	6	5	2			4		3
Permitted Phases	6		2		2	4		3	
Detector Phase	1	6	5	2	2	4	4	3	3
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	11.0	39.0	11.0	39.0	39.0	41.0	41.0	38.0	38.0
Total Split (s)	30.0	83.0	18.0	71.0	71.0	41.0	41.0	38.0	38.0
Total Split (%)	16.7%	46.1%	10.0%	39.4%	39.4%	22.8%	22.8%	21.1%	21.1%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes								
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	93.4	77.2	78.2	68.4	68.4	34.0	34.0	31.0	31.0
Actuated g/C Ratio	0.52	0.43	0.43	0.38	0.38	0.19	0.19	0.17	0.17
v/c Ratio	0.85	1.00	0.81	0.70	0.22	1.96	1.56	2.70	1.34
Control Delay	68.3	70.6	80.5	50.2	5.6	499.5	302.5	822.2	216.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.3	70.6	80.5	50.2	5.6	499.5	302.5	822.2	216.0
LOS	E	E	F	D	A	F	F	F	F
Approach Delay		70.4		48.2			336.3		343.9
Approach LOS		E		D			F		F

### Intersection Summary

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 20 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.70

Intersection Signal Delay: 160.8

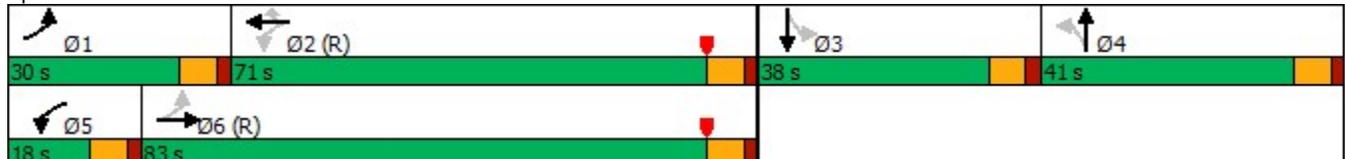
Intersection LOS: F

Intersection Capacity Utilization 111.9%

ICU Level of Service H

Analysis Period (min) 15

### Splits and Phases: 102: Powerline Road & Oakland Park Boulevard



# Queues

## 102: Powerline Road & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	208	2145	110	1345	149	204	985	213	797
v/c Ratio	0.85	1.00	0.81	0.70	0.22	1.96	1.56	2.70	1.34
Control Delay	68.3	70.6	80.5	50.2	5.6	499.5	302.5	822.2	216.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.3	70.6	80.5	50.2	5.6	499.5	302.5	822.2	216.0
Queue Length 50th (ft)	162	~976	79	497	0	~431	~626	~218	~633
Queue Length 95th (ft)	263	#1060	#186	572	50	#641	#731	#312	#773
Internal Link Dist (ft)		715		592			1584		537
Turn Bay Length (ft)	515		350		160	390		260	
Base Capacity (vph)	285	2135	148	1914	682	104	631	79	594
Starvation Cap Reductn	0	0	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	0.73	1.00	0.74	0.70	0.22	1.96	1.56	2.70	1.34

### 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 Signalized Intersection Capacity Analysis

## 102: Powerline Road & Oakland Park Boulevard

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 		 		
Traffic Volume (vph)	202	1899	181	107	1305	145	396	558	200	207	574	199
Future Volume (vph)	202	1899	181	107	1305	145	396	558	200	207	574	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	0.86	0.86		0.97	0.95	
Frbp, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	
Satd. Flow (prot)	1752	4964		1752	5036	1547	1499	4542		3397	3345	
Flt Permitted	0.08	1.00		0.06	1.00	1.00	0.35	0.70		0.13	1.00	
Satd. Flow (perm)	156	4964		108	5036	1547	553	3216		461	3345	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	208	1958	187	110	1345	149	408	575	206	213	592	205
RTOR Reduction (vph)	0	6	0	0	0	92	0	24	0	0	19	0
Lane Group Flow (vph)	208	2139	0	110	1345	57	204	961	0	213	778	0
Confl. Peds. (#/hr)	1		1	1		1	9		3	3		9
Confl. Bikes (#/hr)												1
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4				3
Permitted Phases	6			2		2	4			3		
Actuated Green, G (s)	94.0	77.2		78.2	68.4	68.4	34.0	34.0		31.0	31.0	
Effective Green, g (s)	94.0	77.2		78.2	68.4	68.4	34.0	34.0		31.0	31.0	
Actuated g/C Ratio	0.52	0.43		0.43	0.38	0.38	0.19	0.19		0.17	0.17	
Clearance Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	246	2129		136	1913	587	104	607		79	576	
v/s Ratio Prot	c0.09	c0.43		0.04	0.27							0.23
v/s Ratio Perm	0.35			0.31		0.04	c0.37	0.30		c0.46		
v/c Ratio	0.85	1.00		0.81	0.70	0.10	1.96	1.58		2.70	1.35	
Uniform Delay, d1	44.2	51.4		43.7	47.2	35.9	73.0	73.0		74.5	74.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	21.7	20.6		27.2	2.2	0.3	465.5	270.6		797.9	169.0	
Delay (s)	66.0	72.0		70.9	49.4	36.2	538.5	343.6		872.4	243.5	
Level of Service	E	E		E	D	D	F	F		F	F	
Approach Delay (s)		71.5			49.7			377.0			376.2	
Approach LOS		E			D			F			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			174.8			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.57									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)				28.0		
Intersection Capacity Utilization			111.9%			ICU Level of Service				H		
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary  
102: Powerline Road & Oakland Park Boulevard

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HCM 6th Edition methodology expects strict NEMA phasing.

# Timings

## 103: NW 29 Street & Powerline Road



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↙	↘	↙	↘	↙	↕	↙	↕	↘
Traffic Volume (vph)	23	6	82	9	5	971	122	763	14
Future Volume (vph)	23	6	82	9	5	971	122	763	14
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA	Perm
Protected Phases		4		8		2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	2	2	1	6	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	35.0	35.0	35.0	35.0	28.0	28.0	11.0	28.0	28.0
Total Split (s)	35.0	35.0	35.0	35.0	33.0	33.0	12.0	45.0	45.0
Total Split (%)	43.8%	43.8%	43.8%	43.8%	41.3%	41.3%	15.0%	56.3%	56.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag					Lag	Lag	Lead		
Lead-Lag Optimize?					Yes	Yes	Yes		
Recall Mode	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	9.9	9.9	9.9	9.9	43.3	43.3	57.1	57.1	57.1
Actuated g/C Ratio	0.12	0.12	0.12	0.12	0.54	0.54	0.71	0.71	0.71
v/c Ratio	0.23	0.09	0.54	0.54	0.02	0.63	0.43	0.34	0.01
Control Delay	34.9	19.1	43.5	11.9	11.4	15.6	8.4	5.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	19.1	43.5	11.9	11.4	15.6	8.4	5.2	0.4
LOS	C	B	D	B	B	B	A	A	A
Approach Delay		28.2		22.2		15.6		5.5	
Approach LOS		C		C		B		A	

### Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 7 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 12.6

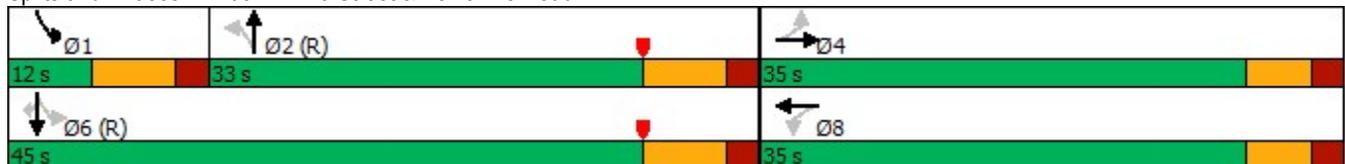
Intersection LOS: B

Intersection Capacity Utilization 72.5%

ICU Level of Service C

Analysis Period (min) 15

### Splits and Phases: 103: NW 29 Street & Powerline Road



## Queues

### 103: NW 29 Street & Powerline Road



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	26	19	91	190	6	1185	136	848	16
v/c Ratio	0.23	0.09	0.54	0.54	0.02	0.63	0.43	0.34	0.01
Control Delay	34.9	19.1	43.5	11.9	11.4	15.6	8.4	5.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.9	19.1	43.5	11.9	11.4	15.6	8.4	5.2	0.4
Queue Length 50th (ft)	12	3	44	4	1	195	17	68	0
Queue Length 95th (ft)	33	20	83	58	8	328	42	118	2
Internal Link Dist (ft)		318		329		280		1584	
Turn Bay Length (ft)	100		100		70		320		320
Base Capacity (vph)	329	612	498	688	332	1873	318	2499	1130
Starvation Cap Reductn	0	0	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	0.08	0.03	0.18	0.28	0.02	0.63	0.43	0.34	0.01

#### Intersection Summary

# HCM 6th Signalized Intersection Summary

## 103: NW 29 Street & Powerline Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	6	11	82	9	162	5	971	95	122	763	14
Future Volume (veh/h)	23	6	11	82	9	162	5	971	95	122	763	14
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		0.97	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	26	7	12	91	10	180	6	1079	106	136	848	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	146	99	170	300	13	242	433	1726	169	355	2384	1057
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.71	0.71	0.71	0.07	0.90	0.90
Sat Flow, veh/h	1184	614	1052	1382	83	1502	643	3232	317	1767	3526	1563
Grp Volume(v), veh/h	26	0	19	91	0	190	6	588	597	136	848	16
Grp Sat Flow(s),veh/h/ln	1184	0	1666	1382	0	1585	643	1763	1787	1767	1763	1563
Q Serve(g_s), s	1.7	0.0	0.8	4.8	0.0	9.1	0.2	13.9	13.9	2.6	2.8	0.1
Cycle Q Clear(g_c), s	10.8	0.0	0.8	5.6	0.0	9.1	0.2	13.9	13.9	2.6	2.8	0.1
Prop In Lane	1.00		0.63	1.00		0.95	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	146	0	269	300	0	256	433	941	954	355	2384	1057
V/C Ratio(X)	0.18	0.00	0.07	0.30	0.00	0.74	0.01	0.62	0.63	0.38	0.36	0.02
Avail Cap(c_a), veh/h	384	0	604	578	0	575	433	941	954	369	2384	1057
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	37.1	0.0	28.5	30.8	0.0	32.0	5.4	7.4	7.4	8.5	1.4	1.3
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	1.6	0.1	3.1	3.1	0.0	0.0	0.0
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	0.5	0.0	0.3	1.6	0.0	3.5	0.0	4.3	4.3	0.8	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.4	0.0	28.5	31.0	0.0	33.6	5.5	10.5	10.5	8.5	1.5	1.3
LnGrp LOS	D	A	C	C	A	C	A	B	B	A	A	A
Approach Vol, veh/h		45			281			1191			1000	
Approach Delay, s/veh		33.6			32.8			10.5			2.4	
Approach LOS		C			C			B			A	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	11.4	49.7		18.9		61.1		18.9				
Change Period (Y+Rc), s	7.0	7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s	5.0	26.0		29.0		38.0		29.0				
Max Q Clear Time (g_c+I1), s	4.6	15.9		12.8		4.8		11.1				
Green Ext Time (p_c), s	0.0	5.5		0.1		7.1		0.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				10.2								
HCM 6th LOS				B								
<b>Notes</b>												
User approved pedestrian interval to be less than phase max green.												

# Timings

## 104: Andrews Avenue & NE 26th Street

	↙	↖	↑	↘	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↙	↖	↑↓	↘	↑↑
Traffic Volume (vph)	140	149	952	165	1014
Future Volume (vph)	140	149	952	165	1014
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	8		2	1	6
Permitted Phases		8		6	
Detector Phase	8	8	2	1	6
Switch Phase					
Minimum Initial (s)	6.0	6.0	12.0	4.0	12.0
Minimum Split (s)	24.0	24.0	24.0	15.0	24.0
Total Split (s)	25.0	25.0	50.0	15.0	65.0
Total Split (%)	27.8%	27.8%	55.6%	16.7%	72.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	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	None	C-Max
Act Effct Green (s)	11.7	11.7	53.5	66.3	66.3
Actuated g/C Ratio	0.13	0.13	0.59	0.74	0.74
v/c Ratio	0.63	0.45	0.54	0.47	0.40
Control Delay	48.8	10.4	12.8	7.2	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	48.8	10.4	12.8	7.2	7.7
LOS	D	B	B	A	A
Approach Delay	29.0		12.8		7.6
Approach LOS	C		B		A

### Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 12.2

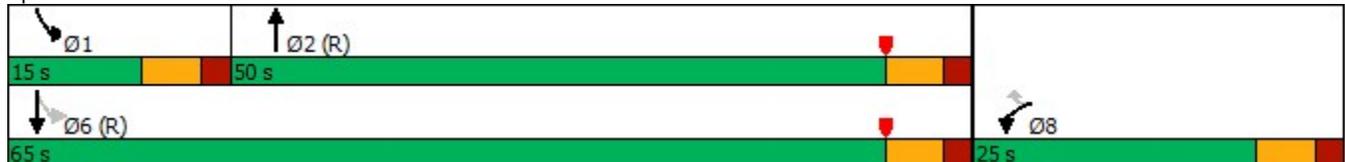
Intersection LOS: B

Intersection Capacity Utilization 62.4%

ICU Level of Service B

Analysis Period (min) 15

### Splits and Phases: 104: Andrews Avenue & NE 26th Street



## Queues

### 104: Andrews Avenue & NE 26th Street



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	143	152	1104	168	1035
v/c Ratio	0.63	0.45	0.54	0.47	0.40
Control Delay	48.8	10.4	12.8	7.2	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	48.8	10.4	12.8	7.2	7.7
Queue Length 50th (ft)	78	0	175	34	290
Queue Length 95th (ft)	130	50	287	m57	m451
Internal Link Dist (ft)	287		336		2155
Turn Bay Length (ft)				130	
Base Capacity (vph)	369	450	2049	391	2582
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.34	0.54	0.43	0.40

#### Intersection Summary

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

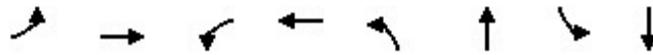
# HCM 6th Signalized Intersection Summary

## 104: Andrews Avenue & NE 26th Street

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	140	149	952	130	165	1014
Future Volume (veh/h)	140	149	952	130	165	1014
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	143	152	971	133	168	1035
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	212	189	1944	266	447	2633
Arrive On Green	0.12	0.12	0.83	0.83	0.07	0.99
Sat Flow, veh/h	1767	1572	3197	425	1767	3618
Grp Volume(v), veh/h	143	152	551	553	168	1035
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1766	1767	1763
Q Serve(g_s), s	7.0	8.5	8.1	8.1	2.9	0.3
Cycle Q Clear(g_c), s	7.0	8.5	8.1	8.1	2.9	0.3
Prop In Lane	1.00	1.00		0.24	1.00	
Lane Grp Cap(c), veh/h	212	189	1104	1106	447	2633
V/C Ratio(X)	0.67	0.81	0.50	0.50	0.38	0.39
Avail Cap(c_a), veh/h	373	332	1104	1106	529	2633
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.33	1.33
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.18	0.18
Uniform Delay (d), s/veh	37.9	38.6	3.5	3.5	5.2	0.1
Incr Delay (d2), s/veh	1.4	3.1	1.6	1.6	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	3.4	2.3	2.3	0.8	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.3	41.7	5.1	5.1	5.2	0.2
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h			1104			1203
Approach Delay, s/veh	40.5		5.1			0.9
Approach LOS	D		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.8	62.4			73.2	16.8
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	9.0	44.0			59.0	19.0
Max Q Clear Time (g_c+I1), s	4.9	10.1			2.3	10.5
Green Ext Time (p_c), s	0.1	9.2			10.0	0.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			7.2			
HCM 6th LOS			A			

# Timings

## 105: NE 6 Avenue & Oakland Park Boulevard



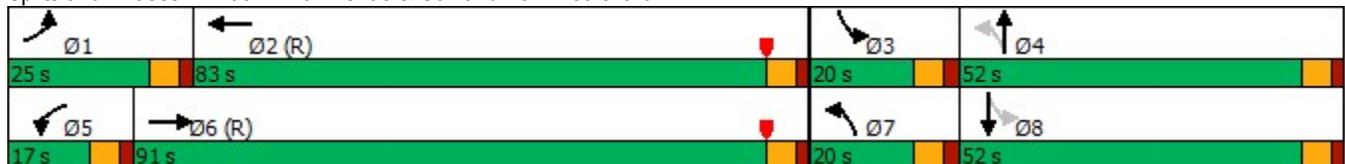
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↕↕↕	↖	↕↕↕	↖	↕	↖	↕
Traffic Volume (vph)	52	1580	67	1035	141	138	83	205
Future Volume (vph)	52	1580	67	1035	141	138	83	205
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	6.0	4.0	6.0
Minimum Split (s)	10.0	30.0	10.0	30.0	10.0	40.0	10.0	40.0
Total Split (s)	25.0	91.0	17.0	83.0	20.0	52.0	20.0	52.0
Total Split (%)	13.9%	50.6%	9.4%	46.1%	11.1%	28.9%	11.1%	28.9%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	Max	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	33.7	99.2	11.5	77.0	48.0	34.5	42.6	31.8
Actuated g/C Ratio	0.19	0.55	0.06	0.43	0.27	0.19	0.24	0.18
v/c Ratio	0.17	0.66	0.65	0.55	0.78	0.61	0.37	0.86
Control Delay	82.5	18.4	107.4	39.5	75.5	70.1	51.2	94.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.5	18.4	107.4	39.5	75.5	70.1	51.2	94.2
LOS	F	B	F	D	E	E	D	F
Approach Delay		20.3		43.4		72.4		83.8
Approach LOS		C		D		E		F

### Intersection Summary

Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 140 (78%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.86  
 Intersection Signal Delay: 38.7  
 Intersection Capacity Utilization 78.6%  
 Analysis Period (min) 15

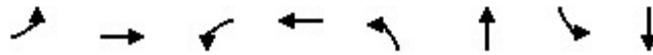
Intersection LOS: D  
 ICU Level of Service D

### Splits and Phases: 105: NE 6 Avenue & Oakland Park Boulevard



## Queues

### 105: NE 6 Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	56	1819	72	1173	152	210	89	277
v/c Ratio	0.17	0.66	0.65	0.55	0.78	0.61	0.37	0.86
Control Delay	82.5	18.4	107.4	39.5	75.5	70.1	51.2	94.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.5	18.4	107.4	39.5	75.5	70.1	51.2	94.2
Queue Length 50th (ft)	66	221	85	376	141	218	80	315
Queue Length 95th (ft)	m85	317	143	424	#202	301	121	406
Internal Link Dist (ft)		2163		358		357		314
Turn Bay Length (ft)	400		400		190		190	
Base Capacity (vph)	328	2746	122	2135	201	456	272	461
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.66	0.59	0.55	0.76	0.46	0.33	0.60

#### Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

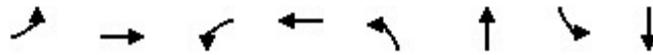
# HCM 6th Signalized Intersection Summary

## 105: NE 6 Avenue & Oakland Park Boulevard

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 							
Traffic Volume (veh/h)	52	1580	112	67	1035	56	141	138	58	83	205	53
Future Volume (veh/h)	52	1580	112	67	1035	56	141	138	58	83	205	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		0.97	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	56	1699	120	72	1113	60	152	148	62	89	220	57
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	187	2736	193	88	2515	135	199	243	102	233	243	63
Arrive On Green	0.14	0.75	0.75	0.07	0.68	0.68	0.08	0.20	0.20	0.05	0.17	0.17
Sat Flow, veh/h	1767	4821	340	1767	4912	265	1767	1233	517	1767	1419	368
Grp Volume(v), veh/h	56	1189	630	72	765	408	152	0	210	89	0	277
Grp Sat Flow(s),veh/h/ln	1767	1689	1784	1767	1689	1800	1767	0	1750	1767	0	1787
Q Serve(g_s), s	5.1	29.2	29.4	7.2	18.6	18.6	12.7	0.0	19.7	7.4	0.0	27.4
Cycle Q Clear(g_c), s	5.1	29.2	29.4	7.2	18.6	18.6	12.7	0.0	19.7	7.4	0.0	27.4
Prop In Lane	1.00		0.19	1.00		0.15	1.00		0.30	1.00		0.21
Lane Grp Cap(c), veh/h	187	1917	1013	88	1729	921	199	0	345	233	0	306
V/C Ratio(X)	0.30	0.62	0.62	0.82	0.44	0.44	0.77	0.00	0.61	0.38	0.00	0.90
Avail Cap(c_a), veh/h	187	1917	1013	108	1729	921	199	0	447	279	0	457
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.45	0.45	0.45	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	71.4	13.1	13.1	83.2	17.0	17.0	57.5	0.0	65.9	57.9	0.0	73.1
Incr Delay (d2), s/veh	1.9	0.7	1.3	26.4	0.8	1.5	14.8	0.0	0.6	0.4	0.0	12.0
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	2.4	9.6	10.3	3.9	6.8	7.5	6.5	0.0	8.9	3.4	0.0	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.3	13.8	14.4	109.6	17.8	18.5	72.3	0.0	66.5	58.3	0.0	85.2
LnGrp LOS	E	B	B	F	B	B	E	A	E	E	A	F
Approach Vol, veh/h		1875			1245			362			366	
Approach Delay, s/veh		15.8			23.4			68.9			78.6	
Approach LOS		B			C			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.0	98.2	15.3	41.5	15.0	108.2	20.0	36.8				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	19.0	77.0	14.0	46.0	11.0	85.0	14.0	46.0				
Max Q Clear Time (g_c+I1), s	7.1	20.6	9.4	21.7	9.2	31.4	14.7	29.4				
Green Ext Time (p_c), s	0.0	10.9	0.0	0.8	0.0	22.5	0.0	1.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			29.2									
HCM 6th LOS			C									

# Timings

## 101: Andrews Avenue & Oakland Park Boulevard

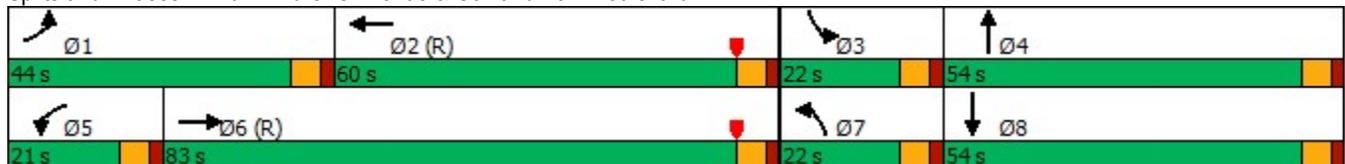


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↘	↕↕↕	↘	↕↕↕	↘↘	↕↕	↘	↕↕
Traffic Volume (vph)	198	1546	130	1090	313	610	98	721
Future Volume (vph)	198	1546	130	1090	313	610	98	721
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	6.0	5.0	6.0
Minimum Split (s)	11.0	41.0	11.0	41.0	11.0	36.0	11.0	36.0
Total Split (s)	44.0	83.0	21.0	60.0	22.0	54.0	22.0	54.0
Total Split (%)	24.4%	46.1%	11.7%	33.3%	12.2%	30.0%	12.2%	30.0%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	24.9	77.2	14.8	67.1	16.0	50.7	13.3	48.0
Actuated g/C Ratio	0.14	0.43	0.08	0.37	0.09	0.28	0.07	0.27
v/c Ratio	0.84	0.87	0.93	0.65	1.07	0.84	0.78	0.99
Control Delay	103.0	52.0	114.1	94.3	133.0	76.2	117.8	91.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	103.0	52.0	114.1	94.3	133.0	76.2	117.8	91.8
LOS	F	D	F	F	F	E	F	F
Approach Delay		57.1		96.3		92.4		94.4
Approach LOS		E		F		F		F

### Intersection Summary

Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 110 (61%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.07  
 Intersection Signal Delay: 80.6  
 Intersection LOS: F  
 Intersection Capacity Utilization 96.8%  
 ICU Level of Service F  
 Analysis Period (min) 15

### Splits and Phases: 101: Andrews Avenue & Oakland Park Boulevard



## Queues

### 101: Andrews Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	204	1854	134	1215	323	809	101	908
v/c Ratio	0.84	0.87	0.93	0.65	1.07	0.84	0.78	0.99
Control Delay	103.0	52.0	114.1	94.3	133.0	76.2	117.8	91.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	103.0	52.0	114.1	94.3	133.0	76.2	117.8	91.8
Queue Length 50th (ft)	239	724	158	530	~218	452	119	562
Queue Length 95th (ft)	323	790	m#295	568	#327	#593	#196	#714
Internal Link Dist (ft)		578		2163		2155		369
Turn Bay Length (ft)	510		340		380		380	
Base Capacity (vph)	369	2124	146	1860	302	964	155	914
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.87	0.92	0.65	1.07	0.84	0.65	0.99

#### 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.

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

# HCM 6th Signalized Intersection Summary

## 101: Andrews Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	1546	252	130	1090	88	313	610	175	98	721	160
Future Volume (veh/h)	198	1546	252	130	1090	88	313	610	175	98	721	160
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		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	204	1594	260	134	1124	91	323	629	180	101	743	165
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	222	1878	305	147	1842	149	305	776	222	119	761	169
Arrive On Green	0.17	0.57	0.57	0.11	0.51	0.51	0.18	0.58	0.58	0.07	0.27	0.27
Sat Flow, veh/h	1767	4390	713	1767	4776	386	3428	2691	769	1767	2853	634
Grp Volume(v), veh/h	204	1225	629	134	794	421	323	412	397	101	459	449
Grp Sat Flow(s),veh/h/ln	1767	1689	1727	1767	1689	1786	1714	1763	1697	1767	1763	1724
Q Serve(g_s), s	20.4	54.4	54.9	13.5	30.0	30.1	16.0	33.4	33.6	10.2	46.5	46.5
Cycle Q Clear(g_c), s	20.4	54.4	54.9	13.5	30.0	30.1	16.0	33.4	33.6	10.2	46.5	46.5
Prop In Lane	1.00		0.41	1.00		0.22	1.00		0.45	1.00		0.37
Lane Grp Cap(c), veh/h	222	1445	739	147	1302	688	305	508	489	119	470	460
V/C Ratio(X)	0.92	0.85	0.85	0.91	0.61	0.61	1.06	0.81	0.81	0.85	0.98	0.98
Avail Cap(c_a), veh/h	373	1445	739	147	1302	688	305	508	489	157	470	460
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.77	0.77	0.77	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.1	33.9	34.0	79.4	34.3	34.3	74.0	34.2	34.2	83.0	65.4	65.4
Incr Delay (d2), s/veh	11.6	6.3	11.9	39.9	1.7	3.1	63.1	7.5	7.9	22.0	35.2	35.7
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	9.8	22.2	24.1	7.7	12.1	13.2	9.2	13.0	12.6	5.4	25.6	25.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.7	40.3	45.9	119.3	35.9	37.4	137.1	41.7	42.1	105.0	100.6	101.2
LnGrp LOS	F	D	D	F	D	D	F	D	D	F	F	F
Approach Vol, veh/h		2058			1349			1132			1009	
Approach Delay, s/veh		46.5			44.6			69.1			101.3	
Approach LOS		D			D			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	28.6	75.4	18.1	57.9	21.0	83.0	22.0	54.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	38.0	54.0	16.0	48.0	15.0	77.0	16.0	48.0				
Max Q Clear Time (g_c+I1), s	22.4	32.1	12.2	35.6	15.5	56.9	18.0	48.5				
Green Ext Time (p_c), s	0.2	8.9	0.0	3.2	0.0	13.5	0.0	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			60.6									
HCM 6th LOS			E									

# Timings

## 102: Powerline Road & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	210	1968	111	1377	150	411	578	214	595
Future Volume (vph)	210	1968	111	1377	150	411	578	214	595
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	6	5	2			4		3
Permitted Phases	6		2		2	4		3	
Detector Phase	1	6	5	2	2	4	4	3	3
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	11.0	39.0	11.0	39.0	39.0	41.0	41.0	38.0	38.0
Total Split (s)	30.0	83.0	18.0	71.0	71.0	41.0	41.0	38.0	38.0
Total Split (%)	16.7%	46.1%	10.0%	39.4%	39.4%	22.8%	22.8%	21.1%	21.1%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes								
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	93.8	77.1	77.0	67.0	67.0	34.0	34.0	31.0	31.0
Actuated g/C Ratio	0.52	0.43	0.43	0.37	0.37	0.19	0.19	0.17	0.17
v/c Ratio	0.88	1.05	0.83	0.76	0.23	2.10	1.63	2.80	1.39
Control Delay	80.6	82.1	83.3	53.0	6.3	558.0	331.2	866.2	235.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.6	82.1	83.3	53.0	6.3	558.0	331.2	866.2	235.1
LOS	F	F	F	D	A	F	F	F	F
Approach Delay		82.0		50.8			370.1		368.3
Approach LOS		F		D			F		F

### Intersection Summary

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 20 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.80

Intersection Signal Delay: 175.9

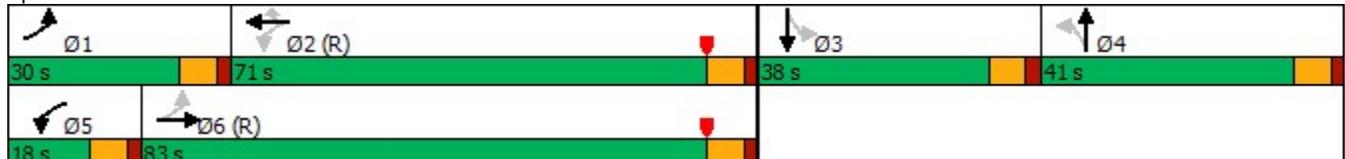
Intersection LOS: F

Intersection Capacity Utilization 115.0%

ICU Level of Service H

Analysis Period (min) 15

### Splits and Phases: 102: Powerline Road & Oakland Park Boulevard



## Queues

### 102: Powerline Road & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	216	2231	114	1420	155	212	1022	221	826
v/c Ratio	0.88	1.05	0.83	0.76	0.23	2.10	1.63	2.80	1.39
Control Delay	80.6	82.1	83.3	53.0	6.3	558.0	331.2	866.2	235.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.6	82.1	83.3	53.0	6.3	558.0	331.2	866.2	235.1
Queue Length 50th (ft)	190	~1056	84	548	2	~458	~663	~228	~671
Queue Length 95th (ft)	#320	#1136	#198	613	56	#672	#768	#324	#810
Internal Link Dist (ft)		715		592			1584		537
Turn Bay Length (ft)	515		350		160	390		260	
Base Capacity (vph)	272	2129	148	1875	671	101	627	79	594
Starvation Cap Reductn	0	0	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	1.05	0.77	0.76	0.23	2.10	1.63	2.80	1.39

#### 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 Signalized Intersection Capacity Analysis

## 102: Powerline Road & Oakland Park Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	1968	196	111	1377	150	411	578	208	214	595	207
Future Volume (vph)	210	1968	196	111	1377	150	411	578	208	214	595	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	0.86	0.86		0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	
Satd. Flow (prot)	1752	4961		1752	5036	1547	1500	4542		3398	3344	
Flt Permitted	0.07	1.00		0.06	1.00	1.00	0.34	0.70		0.13	1.00	
Satd. Flow (perm)	124	4961		110	5036	1547	538	3198		461	3344	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	216	2029	202	114	1420	155	424	596	214	221	613	213
RTOR Reduction (vph)	0	6	0	0	0	95	0	24	0	0	19	0
Lane Group Flow (vph)	216	2225	0	114	1420	60	212	998	0	221	807	0
Confl. Peds. (#/hr)	1		1	1		1	9		3	3		9
Confl. Bikes (#/hr)												1
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4				3
Permitted Phases	6			2		2	4			3		
Actuated Green, G (s)	94.0	77.1		76.9	67.0	67.0	34.0	34.0		31.0	31.0	
Effective Green, g (s)	94.0	77.1		76.9	67.0	67.0	34.0	34.0		31.0	31.0	
Actuated g/C Ratio	0.52	0.43		0.43	0.37	0.37	0.19	0.19		0.17	0.17	
Clearance Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	245	2124		137	1874	575	101	604		79	575	
v/s Ratio Prot	c0.10	c0.45		0.05	0.28							0.24
v/s Ratio Perm	0.36			0.31		0.04	c0.39	0.31		c0.48		
v/c Ratio	0.88	1.05		0.83	0.76	0.10	2.10	1.65		2.80	1.40	
Uniform Delay, d1	53.0	51.5		44.7	49.4	36.9	73.0	73.0		74.5	74.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	28.1	33.3		31.8	2.9	0.4	526.5	301.3		842.9	191.8	
Delay (s)	81.1	84.8		76.5	52.3	37.3	599.5	374.3		917.4	266.3	
Level of Service	F	F		E	D	D	F	F		F	F	
Approach Delay (s)		84.4			52.6			413.0			403.8	
Approach LOS		F			D			F			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			191.3			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.65									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)				28.0		
Intersection Capacity Utilization			115.0%			ICU Level of Service				H		
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary  
102: Powerline Road & Oakland Park Boulevard

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HCM 6th Edition methodology expects strict NEMA phasing.

# Timings

## 103: NW 29 Street & Powerline Road

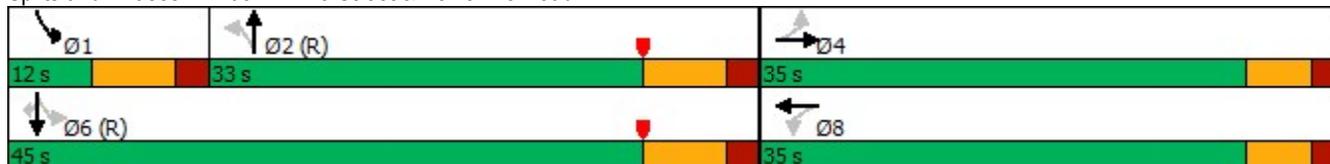


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↕	↖	↕	↗
Traffic Volume (vph)	24	7	85	9	6	1007	136	791	15
Future Volume (vph)	24	7	85	9	6	1007	136	791	15
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA	Perm
Protected Phases		4		8		2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	2	2	1	6	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	35.0	35.0	35.0	35.0	28.0	28.0	11.0	28.0	28.0
Total Split (s)	35.0	35.0	35.0	35.0	33.0	33.0	12.0	45.0	45.0
Total Split (%)	43.8%	43.8%	43.8%	43.8%	41.3%	41.3%	15.0%	56.3%	56.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag					Lag	Lag	Lead		
Lead-Lag Optimize?					Yes	Yes	Yes		
Recall Mode	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	10.1	10.1	10.1	10.1	42.5	42.5	56.9	56.9	56.9
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.53	0.53	0.71	0.71	0.71
v/c Ratio	0.25	0.09	0.54	0.55	0.02	0.67	0.48	0.35	0.02
Control Delay	35.5	19.5	43.7	12.3	12.0	17.0	10.2	5.3	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	19.5	43.7	12.3	12.0	17.0	10.2	5.3	0.5
LOS	D	B	D	B	B	B	B	A	A
Approach Delay		28.7		22.4		17.0		5.9	
Approach LOS		C		C		B		A	

### Intersection Summary

Cycle Length: 80  
 Actuated Cycle Length: 80  
 Offset: 7 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.67  
 Intersection Signal Delay: 13.4  
 Intersection LOS: B  
 Intersection Capacity Utilization 75.2%  
 ICU Level of Service D  
 Analysis Period (min) 15

### Splits and Phases: 103: NW 29 Street & Powerline Road



## Queues

### 103: NW 29 Street & Powerline Road



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	27	20	94	197	7	1229	151	879	17
v/c Ratio	0.25	0.09	0.54	0.55	0.02	0.67	0.48	0.35	0.02
Control Delay	35.5	19.5	43.7	12.3	12.0	17.0	10.2	5.3	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	19.5	43.7	12.3	12.0	17.0	10.2	5.3	0.5
Queue Length 50th (ft)	12	4	45	6	2	212	19	72	0
Queue Length 95th (ft)	34	21	86	60	9	357	51	125	2
Internal Link Dist (ft)		318		329		280		1584	
Turn Bay Length (ft)	100		100		70		320		320
Base Capacity (vph)	315	616	497	690	316	1836	312	2493	1127
Starvation Cap Reductn	0	0	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	0.09	0.03	0.19	0.29	0.02	0.67	0.48	0.35	0.02

#### Intersection Summary

# HCM 6th Signalized Intersection Summary

## 103: NW 29 Street & Powerline Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	7	11	85	9	168	6	1007	99	136	791	15
Future Volume (veh/h)	24	7	11	85	9	168	6	1007	99	136	791	15
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		0.97	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	27	8	12	94	10	187	7	1119	110	151	879	17
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	147	111	167	306	13	250	417	1693	166	343	2366	1049
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.70	0.70	0.70	0.08	0.89	0.89
Sat Flow, veh/h	1176	670	1005	1381	80	1504	625	3232	317	1767	3526	1563
Grp Volume(v), veh/h	27	0	20	94	0	197	7	610	619	151	879	17
Grp Sat Flow(s),veh/h/ln	1176	0	1675	1381	0	1585	625	1763	1787	1767	1763	1563
Q Serve(g_s), s	1.8	0.0	0.8	4.9	0.0	9.5	0.3	15.5	15.6	3.0	3.2	0.1
Cycle Q Clear(g_c), s	11.3	0.0	0.8	5.7	0.0	9.5	0.3	15.5	15.6	3.0	3.2	0.1
Prop In Lane	1.00		0.60	1.00		0.95	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	147	0	279	306	0	264	417	923	936	343	2366	1049
V/C Ratio(X)	0.18	0.00	0.07	0.31	0.00	0.75	0.02	0.66	0.66	0.44	0.37	0.02
Avail Cap(c_a), veh/h	377	0	607	577	0	574	417	923	936	348	2366	1049
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	37.1	0.0	28.1	30.6	0.0	31.7	5.8	8.1	8.1	9.4	1.6	1.4
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	1.6	0.1	3.7	3.7	0.0	0.0	0.0
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	0.5	0.0	0.3	1.6	0.0	3.6	0.0	4.8	4.8	0.9	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.3	0.0	28.2	30.8	0.0	33.3	5.9	11.8	11.8	9.4	1.6	1.4
LnGrp LOS	D	A	C	C	A	C	A	B	B	A	A	A
Approach Vol, veh/h		47			291			1236			1047	
Approach Delay, s/veh		33.4			32.5			11.8			2.7	
Approach LOS		C			C			B			A	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	11.8	48.9		19.3		60.7		19.3				
Change Period (Y+Rc), s	7.0	7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s	5.0	26.0		29.0		38.0		29.0				
Max Q Clear Time (g_c+I1), s	5.0	17.6		13.3		5.2		11.5				
Green Ext Time (p_c), s	0.0	5.0		0.1		7.4		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				10.9								
HCM 6th LOS				B								
<b>Notes</b>												
User approved pedestrian interval to be less than phase max green.												

# Timings

## 104: Andrews Avenue & NE 26th Street



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↶	↷	↶↷	↶	↶↷
Traffic Volume (vph)	153	163	988	171	1050
Future Volume (vph)	153	163	988	171	1050
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	8		2	1	6
Permitted Phases		8		6	
Detector Phase	8	8	2	1	6
Switch Phase					
Minimum Initial (s)	6.0	6.0	12.0	4.0	12.0
Minimum Split (s)	24.0	24.0	24.0	15.0	24.0
Total Split (s)	25.0	25.0	50.0	15.0	65.0
Total Split (%)	27.8%	27.8%	55.6%	16.7%	72.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	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	None	C-Max
Act Effct Green (s)	12.3	12.3	52.6	65.7	65.7
Actuated g/C Ratio	0.14	0.14	0.58	0.73	0.73
v/c Ratio	0.65	0.46	0.57	0.51	0.42
Control Delay	48.9	9.9	13.9	8.4	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	48.9	9.9	13.9	8.4	8.3
LOS	D	A	B	A	A
Approach Delay	28.8		13.9		8.3
Approach LOS	C		B		A

### Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 13.1

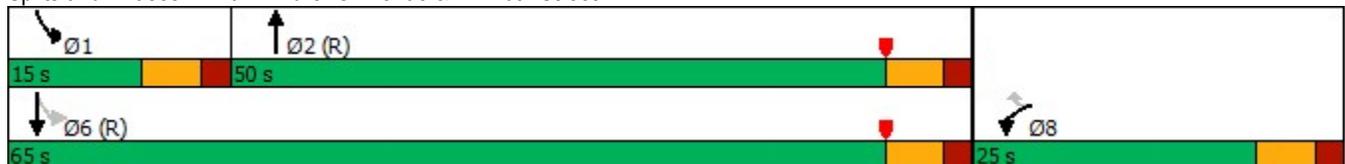
Intersection LOS: B

Intersection Capacity Utilization 64.6%

ICU Level of Service C

Analysis Period (min) 15

### Splits and Phases: 104: Andrews Avenue & NE 26th Street



## Queues

### 104: Andrews Avenue & NE 26th Street



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	156	166	1146	174	1071
v/c Ratio	0.65	0.46	0.57	0.51	0.42
Control Delay	48.9	9.9	13.9	8.4	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	48.9	9.9	13.9	8.4	8.3
Queue Length 50th (ft)	85	0	190	36	313
Queue Length 95th (ft)	139	52	318	m60	m456
Internal Link Dist (ft)	287		336		2155
Turn Bay Length (ft)				130	
Base Capacity (vph)	369	461	2013	375	2557
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.42	0.36	0.57	0.46	0.42

#### Intersection Summary

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

# HCM 6th Signalized Intersection Summary

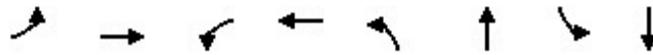
## 104: Andrews Avenue & NE 26th Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	153	163	988	135	171	1050
Future Volume (veh/h)	153	163	988	135	171	1050
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	156	166	1008	138	174	1071
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	228	203	1909	261	428	2601
Arrive On Green	0.13	0.13	0.82	0.82	0.07	0.98
Sat Flow, veh/h	1767	1572	3197	425	1767	3618
Grp Volume(v), veh/h	156	166	572	574	174	1071
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1766	1767	1763
Q Serve(g_s), s	7.6	9.3	9.4	9.4	3.1	0.9
Cycle Q Clear(g_c), s	7.6	9.3	9.4	9.4	3.1	0.9
Prop In Lane	1.00	1.00		0.24	1.00	
Lane Grp Cap(c), veh/h	228	203	1084	1086	428	2601
V/C Ratio(X)	0.69	0.82	0.53	0.53	0.41	0.41
Avail Cap(c_a), veh/h	373	332	1084	1086	505	2601
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.13	0.13
Uniform Delay (d), s/veh	37.5	38.2	4.0	4.0	5.7	0.2
Incr Delay (d2), s/veh	1.4	3.1	1.8	1.8	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	3.7	2.7	2.7	0.9	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.8	41.3	5.8	5.9	5.7	0.3
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h			1146			1245
Approach Delay, s/veh	40.1		5.8			1.1
Approach LOS	D		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.1	61.3			72.4	17.6
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	9.0	44.0			59.0	19.0
Max Q Clear Time (g_c+I1), s	5.1	11.4			2.9	11.3
Green Ext Time (p_c), s	0.1	9.6			10.6	0.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			7.7			
HCM 6th LOS			A			

# Timings

## 105: NE 6 Avenue & Oakland Park Boulevard



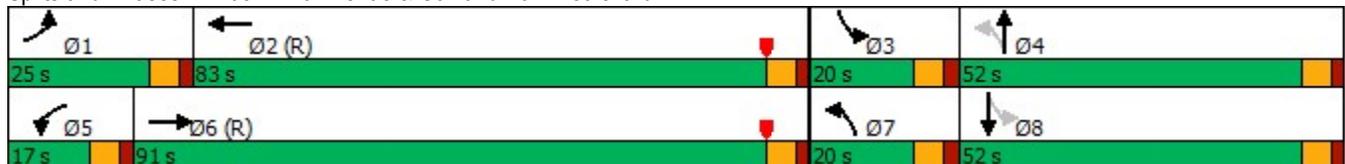
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↕↕↕↗	↖	↕↕↕↗	↖	↗	↖	↗
Traffic Volume (vph)	54	1651	75	1073	152	143	86	212
Future Volume (vph)	54	1651	75	1073	152	143	86	212
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	6.0	4.0	6.0
Minimum Split (s)	10.0	30.0	10.0	30.0	10.0	40.0	10.0	40.0
Total Split (s)	25.0	91.0	17.0	83.0	20.0	52.0	20.0	52.0
Total Split (%)	13.9%	50.6%	9.4%	46.1%	11.1%	28.9%	11.1%	28.9%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	Max	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	32.5	97.4	12.2	77.0	49.2	35.5	43.8	32.8
Actuated g/C Ratio	0.18	0.54	0.07	0.43	0.27	0.20	0.24	0.18
v/c Ratio	0.18	0.71	0.69	0.57	0.83	0.62	0.38	0.87
Control Delay	81.8	20.8	109.4	40.0	81.0	69.7	50.7	93.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.8	20.8	109.4	40.0	81.0	69.7	50.7	93.8
LOS	F	C	F	D	F	E	D	F
Approach Delay		22.6		44.4		74.5		83.3
Approach LOS		C		D		E		F

### Intersection Summary

Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 140 (78%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.87  
 Intersection Signal Delay: 40.2  
 Intersection Capacity Utilization 81.8%  
 Analysis Period (min) 15

Intersection LOS: D  
 ICU Level of Service D

### Splits and Phases: 105: NE 6 Avenue & Oakland Park Boulevard



## Queues

### 105: NE 6 Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	58	1912	81	1216	163	220	92	287
v/c Ratio	0.18	0.71	0.69	0.57	0.83	0.62	0.38	0.87
Control Delay	81.8	20.8	109.4	40.0	81.0	69.7	50.7	93.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.8	20.8	109.4	40.0	81.0	69.7	50.7	93.8
Queue Length 50th (ft)	68	267	95	394	151	228	82	327
Queue Length 95th (ft)	m83	359	158	443	#207	312	124	419
Internal Link Dist (ft)		2163		358		357		314
Turn Bay Length (ft)	400		400		190		190	
Base Capacity (vph)	316	2691	125	2135	201	456	271	461
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.71	0.65	0.57	0.81	0.48	0.34	0.62

#### Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

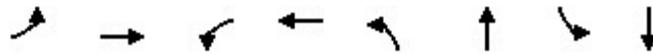
# HCM 6th Signalized Intersection Summary

## 105: NE 6 Avenue & Oakland Park Boulevard

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	1651	127	75	1073	58	152	143	61	86	212	55
Future Volume (veh/h)	54	1651	127	75	1073	58	152	143	61	86	212	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	58	1775	137	81	1154	62	163	154	66	92	228	59
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	187	2668	205	98	2491	134	198	246	105	232	250	65
Arrive On Green	0.14	0.74	0.74	0.07	0.67	0.67	0.08	0.20	0.20	0.05	0.18	0.18
Sat Flow, veh/h	1767	4787	368	1767	4913	264	1767	1224	525	1767	1420	367
Grp Volume(v), veh/h	58	1251	661	81	793	423	163	0	220	92	0	287
Grp Sat Flow(s),veh/h/ln	1767	1689	1778	1767	1689	1800	1767	0	1749	1767	0	1787
Q Serve(g_s), s	5.3	34.0	34.3	8.1	20.0	20.0	13.6	0.0	20.7	7.6	0.0	28.4
Cycle Q Clear(g_c), s	5.3	34.0	34.3	8.1	20.0	20.0	13.6	0.0	20.7	7.6	0.0	28.4
Prop In Lane	1.00		0.21	1.00		0.15	1.00		0.30	1.00		0.21
Lane Grp Cap(c), veh/h	187	1882	991	98	1713	913	198	0	351	232	0	315
V/C Ratio(X)	0.31	0.66	0.67	0.83	0.46	0.46	0.82	0.00	0.63	0.40	0.00	0.91
Avail Cap(c_a), veh/h	187	1882	991	108	1713	913	198	0	447	276	0	457
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.38	0.38	0.38	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	71.5	14.7	14.7	82.5	17.7	17.7	57.5	0.0	65.7	57.2	0.0	72.8
Incr Delay (d2), s/veh	1.6	0.7	1.4	33.4	0.9	1.7	22.6	0.0	0.7	0.4	0.0	13.8
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	2.5	11.4	12.3	4.6	7.4	8.1	7.4	0.0	9.4	3.5	0.0	14.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.1	15.4	16.1	115.9	18.6	19.4	80.1	0.0	66.4	57.6	0.0	86.6
LnGrp LOS	E	B	B	F	B	B	F	A	E	E	A	F
Approach Vol, veh/h		1970			1297			383			379	
Approach Delay, s/veh		17.4			24.9			72.2			79.5	
Approach LOS		B			C			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.0	97.3	15.5	42.2	16.0	106.3	20.0	37.7				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	19.0	77.0	14.0	46.0	11.0	85.0	14.0	46.0				
Max Q Clear Time (g_c+I1), s	7.3	22.0	9.6	22.7	10.1	36.3	15.6	30.4				
Green Ext Time (p_c), s	0.0	11.4	0.0	0.8	0.0	23.5	0.0	1.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				30.9								
HCM 6th LOS				C								

# Timings

## 101: Andrews Avenue & Oakland Park Boulevard

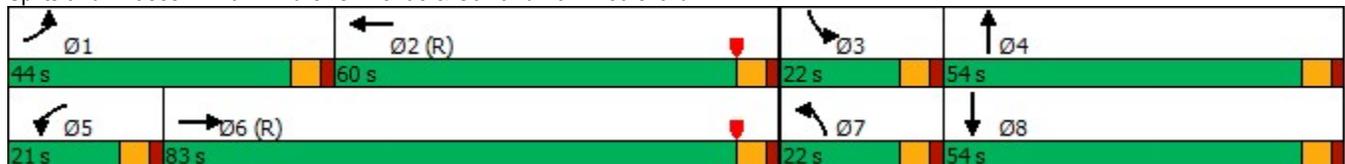


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑↑↑	↘	↑↑↑	↘↘	↑↑	↘	↑↑
Traffic Volume (vph)	198	1546	130	1090	319	612	98	722
Future Volume (vph)	198	1546	130	1090	319	612	98	722
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	6.0	5.0	6.0
Minimum Split (s)	11.0	41.0	11.0	41.0	11.0	36.0	11.0	36.0
Total Split (s)	44.0	83.0	21.0	60.0	22.0	54.0	22.0	54.0
Total Split (%)	24.4%	46.1%	11.7%	33.3%	12.2%	30.0%	12.2%	30.0%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	24.9	77.2	14.8	67.1	16.0	50.7	13.3	48.0
Actuated g/C Ratio	0.14	0.43	0.08	0.37	0.09	0.28	0.07	0.27
v/c Ratio	0.84	0.87	0.93	0.65	1.09	0.85	0.78	0.99
Control Delay	103.0	52.1	114.1	94.3	138.1	76.9	117.8	92.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	103.0	52.1	114.1	94.3	138.1	76.9	117.8	92.0
LOS	F	D	F	F	F	E	F	F
Approach Delay		57.1		96.3		94.4		94.6
Approach LOS		E		F		F		F

### Intersection Summary

Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 110 (61%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 120  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.09  
 Intersection Signal Delay: 81.1  
 Intersection Capacity Utilization 97.1%  
 Analysis Period (min) 15  
 Intersection LOS: F  
 ICU Level of Service F

### Splits and Phases: 101: Andrews Avenue & Oakland Park Boulevard



## Queues

### 101: Andrews Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	204	1855	134	1215	329	819	101	909
v/c Ratio	0.84	0.87	0.93	0.65	1.09	0.85	0.78	0.99
Control Delay	103.0	52.1	114.1	94.3	138.1	76.9	117.8	92.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	103.0	52.1	114.1	94.3	138.1	76.9	117.8	92.0
Queue Length 50th (ft)	239	725	158	530	~225	458	119	562
Queue Length 95th (ft)	323	791	m#295	568	#335	#607	#196	#716
Internal Link Dist (ft)		578		2163		2155		369
Turn Bay Length (ft)	510		340		380		380	
Base Capacity (vph)	369	2124	146	1860	302	964	155	914
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.87	0.92	0.65	1.09	0.85	0.65	0.99

#### Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

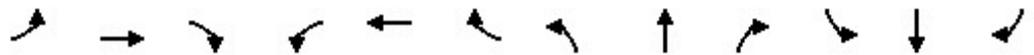
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

# HCM 6th Signalized Intersection Summary

## 101: Andrews Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	1546	253	130	1090	88	319	612	182	98	722	160
Future Volume (veh/h)	198	1546	253	130	1090	88	319	612	182	98	722	160
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		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	204	1594	261	134	1124	91	329	631	188	101	744	165
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	222	1877	306	147	1842	149	305	767	228	119	761	169
Arrive On Green	0.17	0.57	0.57	0.11	0.51	0.51	0.18	0.58	0.58	0.07	0.27	0.27
Sat Flow, veh/h	1767	4388	716	1767	4776	386	3428	2663	792	1767	2854	633
Grp Volume(v), veh/h	204	1225	630	134	794	421	329	417	402	101	459	450
Grp Sat Flow(s),veh/h/ln	1767	1689	1726	1767	1689	1786	1714	1763	1692	1767	1763	1724
Q Serve(g_s), s	20.4	54.4	55.0	13.5	30.0	30.1	16.0	34.3	34.4	10.2	46.5	46.6
Cycle Q Clear(g_c), s	20.4	54.4	55.0	13.5	30.0	30.1	16.0	34.3	34.4	10.2	46.5	46.6
Prop In Lane	1.00		0.41	1.00		0.22	1.00		0.47	1.00		0.37
Lane Grp Cap(c), veh/h	222	1445	738	147	1302	688	305	508	488	119	470	460
V/C Ratio(X)	0.92	0.85	0.85	0.91	0.61	0.61	1.08	0.82	0.82	0.85	0.98	0.98
Avail Cap(c_a), veh/h	373	1445	738	147	1302	688	305	508	488	157	470	460
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.77	0.77	0.77	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.1	33.9	34.0	79.4	34.3	34.3	74.0	34.4	34.4	83.0	65.5	65.5
Incr Delay (d2), s/veh	11.6	6.4	11.9	39.9	1.7	3.1	69.3	8.2	8.7	22.0	35.4	36.0
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	9.8	22.2	24.1	7.7	12.1	13.2	9.5	13.4	12.9	5.4	25.6	25.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.7	40.3	46.0	119.3	35.9	37.4	143.3	42.6	43.1	105.0	100.9	101.4
LnGrp LOS	F	D	D	F	D	D	F	D	D	F	F	F
Approach Vol, veh/h		2059			1349			1148			1010	
Approach Delay, s/veh		46.5			44.6			71.6			101.6	
Approach LOS		D			D			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	28.6	75.4	18.1	57.9	21.0	83.0	22.0	54.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	38.0	54.0	16.0	48.0	15.0	77.0	16.0	48.0				
Max Q Clear Time (g_c+I1), s	22.4	32.1	12.2	36.4	15.5	57.0	18.0	48.6				
Green Ext Time (p_c), s	0.2	8.9	0.0	3.1	0.0	13.5	0.0	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			61.2									
HCM 6th LOS			E									

# Timings

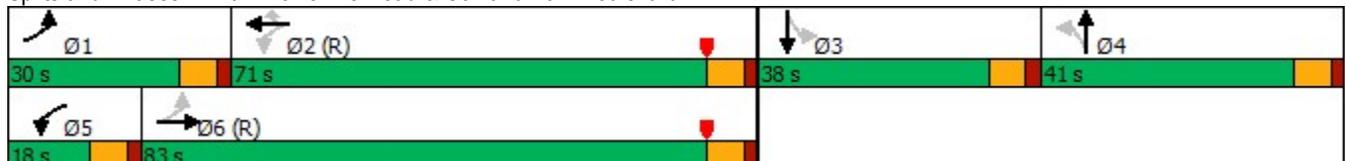
## 102: Powerline Road & Oakland Park Boulevard

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	210	1969	112	1380	152	411	578	214	595
Future Volume (vph)	210	1969	112	1380	152	411	578	214	595
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	6	5	2			4		3
Permitted Phases	6		2		2	4		3	
Detector Phase	1	6	5	2	2	4	4	3	3
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	11.0	39.0	11.0	39.0	39.0	41.0	41.0	38.0	38.0
Total Split (s)	30.0	83.0	18.0	71.0	71.0	41.0	41.0	38.0	38.0
Total Split (%)	16.7%	46.1%	10.0%	39.4%	39.4%	22.8%	22.8%	21.1%	21.1%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes								
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	93.8	77.0	76.9	66.9	66.9	34.0	34.0	31.0	31.0
Actuated g/C Ratio	0.52	0.43	0.43	0.37	0.37	0.19	0.19	0.17	0.17
v/c Ratio	0.88	1.05	0.83	0.76	0.23	2.10	1.63	2.80	1.39
Control Delay	80.9	82.5	84.2	53.2	6.6	558.0	331.2	866.2	235.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.9	82.5	84.2	53.2	6.6	558.0	331.2	866.2	235.1
LOS	F	F	F	D	A	F	F	F	F
Approach Delay		82.3		51.0			370.1		368.3
Approach LOS		F		D			F		F

### Intersection Summary

Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 20 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow  
 Natural Cycle: 130  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 2.80  
 Intersection Signal Delay: 176.0  
 Intersection LOS: F  
 Intersection Capacity Utilization 115.1%  
 ICU Level of Service H  
 Analysis Period (min) 15

### Splits and Phases: 102: Powerline Road & Oakland Park Boulevard



# Queues

## 102: Powerline Road & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	216	2232	115	1423	157	212	1022	221	826
v/c Ratio	0.88	1.05	0.83	0.76	0.23	2.10	1.63	2.80	1.39
Control Delay	80.9	82.5	84.2	53.2	6.6	558.0	331.2	866.2	235.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.9	82.5	84.2	53.2	6.6	558.0	331.2	866.2	235.1
Queue Length 50th (ft)	190	~1057	86	551	4	~458	~663	~228	~671
Queue Length 95th (ft)	#322	#1138	#200	615	58	#672	#768	#324	#810
Internal Link Dist (ft)		715		592			1584		537
Turn Bay Length (ft)	515		350		160	390		260	
Base Capacity (vph)	271	2128	148	1872	670	101	627	79	594
Starvation Cap Reductn	0	0	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	0.80	1.05	0.78	0.76	0.23	2.10	1.63	2.80	1.39

### 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 Signalized Intersection Capacity Analysis

## 102: Powerline Road & Oakland Park Boulevard

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 		 		
Traffic Volume (vph)	210	1969	196	112	1380	152	411	578	208	214	595	207
Future Volume (vph)	210	1969	196	112	1380	152	411	578	208	214	595	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	0.86	0.86		0.97	0.95	
Frbp, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	
Satd. Flow (prot)	1752	4961		1752	5036	1547	1500	4542		3398	3344	
Flt Permitted	0.07	1.00		0.06	1.00	1.00	0.34	0.70		0.13	1.00	
Satd. Flow (perm)	122	4961		110	5036	1547	538	3198		461	3344	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	216	2030	202	115	1423	157	424	596	214	221	613	213
RTOR Reduction (vph)	0	6	0	0	0	96	0	24	0	0	19	0
Lane Group Flow (vph)	216	2226	0	115	1423	61	212	998	0	221	807	0
Confl. Peds. (#/hr)	1		1	1		1	9		3	3		9
Confl. Bikes (#/hr)												1
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4				3
Permitted Phases	6			2		2	4			3		
Actuated Green, G (s)	94.0	77.0		76.9	66.9	66.9	34.0	34.0		31.0	31.0	
Effective Green, g (s)	94.0	77.0		76.9	66.9	66.9	34.0	34.0		31.0	31.0	
Actuated g/C Ratio	0.52	0.43		0.43	0.37	0.37	0.19	0.19		0.17	0.17	
Clearance Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	245	2122		138	1871	574	101	604		79	575	
v/s Ratio Prot	c0.10	c0.45		0.05	0.28							0.24
v/s Ratio Perm	0.36			0.31		0.04	c0.39	0.31		c0.48		
v/c Ratio	0.88	1.05		0.83	0.76	0.11	2.10	1.65		2.80	1.40	
Uniform Delay, d1	53.3	51.5		45.0	49.5	37.0	73.0	73.0		74.5	74.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	28.1	33.8		31.8	3.0	0.4	526.5	301.3		842.9	191.8	
Delay (s)	81.4	85.3		76.8	52.5	37.4	599.5	374.3		917.4	266.3	
Level of Service	F	F		E	D	D	F	F		F	F	
Approach Delay (s)		85.0			52.8			413.0			403.8	
Approach LOS		F			D			F			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			191.4				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			1.65									
Actuated Cycle Length (s)			180.0				Sum of lost time (s)			28.0		
Intersection Capacity Utilization			115.1%				ICU Level of Service			H		
Analysis Period (min)			15									

c Critical Lane Group

HCM 6th Signalized Intersection Summary  
102: Powerline Road & Oakland Park Boulevard

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HCM 6th Edition methodology expects strict NEMA phasing.

# Timings

## 103: NW 29 Street & Powerline Road



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↕	↖	↕	↗
Traffic Volume (vph)	24	7	85	9	6	1007	136	793	15
Future Volume (vph)	24	7	85	9	6	1007	136	793	15
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA	Perm
Protected Phases		4		8		2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	2	2	1	6	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	35.0	35.0	35.0	35.0	28.0	28.0	11.0	28.0	28.0
Total Split (s)	35.0	35.0	35.0	35.0	33.0	33.0	12.0	45.0	45.0
Total Split (%)	43.8%	43.8%	43.8%	43.8%	41.3%	41.3%	15.0%	56.3%	56.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag					Lag	Lag	Lead		
Lead-Lag Optimize?					Yes	Yes	Yes		
Recall Mode	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	10.1	10.1	10.1	10.1	42.5	42.5	56.9	56.9	56.9
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.53	0.53	0.71	0.71	0.71
v/c Ratio	0.25	0.09	0.54	0.55	0.02	0.67	0.48	0.35	0.02
Control Delay	35.5	19.5	43.7	12.3	12.0	17.0	10.2	5.3	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	19.5	43.7	12.3	12.0	17.0	10.2	5.3	0.5
LOS	D	B	D	B	B	B	B	A	A
Approach Delay		28.7		22.4		17.0		5.9	
Approach LOS		C		C		B		A	

### Intersection Summary

Cycle Length: 80

Actuated Cycle Length: 80

Offset: 7 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 13.4

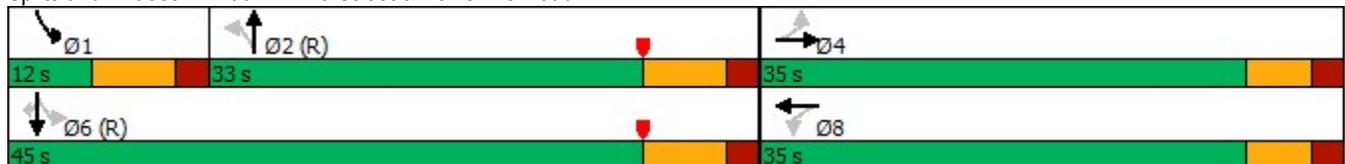
Intersection LOS: B

Intersection Capacity Utilization 75.2%

ICU Level of Service D

Analysis Period (min) 15

### Splits and Phases: 103: NW 29 Street & Powerline Road



# Queues

## 103: NW 29 Street & Powerline Road



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	27	20	94	197	7	1229	151	881	17
v/c Ratio	0.25	0.09	0.54	0.55	0.02	0.67	0.48	0.35	0.02
Control Delay	35.5	19.5	43.7	12.3	12.0	17.0	10.2	5.3	0.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	19.5	43.7	12.3	12.0	17.0	10.2	5.3	0.5
Queue Length 50th (ft)	12	4	45	6	2	212	19	72	0
Queue Length 95th (ft)	34	21	86	60	9	357	51	125	2
Internal Link Dist (ft)		318		329		280		1584	
Turn Bay Length (ft)	100		100		70		320		320
Base Capacity (vph)	315	616	497	690	316	1836	312	2493	1127
Starvation Cap Reductn	0	0	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	0.09	0.03	0.19	0.29	0.02	0.67	0.48	0.35	0.02

### Intersection Summary

# HCM 6th Signalized Intersection Summary

## 103: NW 29 Street & Powerline Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	7	11	85	9	168	6	1007	99	136	793	15
Future Volume (veh/h)	24	7	11	85	9	168	6	1007	99	136	793	15
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		0.97	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	27	8	12	94	10	187	7	1119	110	151	881	17
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	147	111	167	306	13	250	417	1693	166	343	2366	1049
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.70	0.70	0.70	0.08	0.89	0.89
Sat Flow, veh/h	1176	670	1005	1381	80	1504	624	3232	317	1767	3526	1563
Grp Volume(v), veh/h	27	0	20	94	0	197	7	610	619	151	881	17
Grp Sat Flow(s),veh/h/ln	1176	0	1675	1381	0	1585	624	1763	1787	1767	1763	1563
Q Serve(g_s), s	1.8	0.0	0.8	4.9	0.0	9.5	0.3	15.5	15.6	3.0	3.2	0.1
Cycle Q Clear(g_c), s	11.3	0.0	0.8	5.7	0.0	9.5	0.3	15.5	15.6	3.0	3.2	0.1
Prop In Lane	1.00		0.60	1.00		0.95	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	147	0	279	306	0	264	417	923	936	343	2366	1049
V/C Ratio(X)	0.18	0.00	0.07	0.31	0.00	0.75	0.02	0.66	0.66	0.44	0.37	0.02
Avail Cap(c_a), veh/h	377	0	607	577	0	574	417	923	936	348	2366	1049
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	37.1	0.0	28.1	30.6	0.0	31.7	5.8	8.1	8.1	9.4	1.6	1.4
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	1.6	0.1	3.7	3.7	0.0	0.0	0.0
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	0.5	0.0	0.3	1.6	0.0	3.6	0.0	4.8	4.8	0.9	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.3	0.0	28.2	30.8	0.0	33.3	5.9	11.8	11.8	9.4	1.6	1.4
LnGrp LOS	D	A	C	C	A	C	A	B	B	A	A	A
Approach Vol, veh/h		47			291			1236			1049	
Approach Delay, s/veh		33.4			32.5			11.8			2.7	
Approach LOS		C			C			B			A	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	11.8	48.9		19.3		60.7		19.3				
Change Period (Y+Rc), s	7.0	7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s	5.0	26.0		29.0		38.0		29.0				
Max Q Clear Time (g_c+I1), s	5.0	17.6		13.3		5.2		11.5				
Green Ext Time (p_c), s	0.0	5.0		0.1		7.4		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				10.9								
HCM 6th LOS				B								
<b>Notes</b>												
User approved pedestrian interval to be less than phase max green.												

# Timings

## 104: Andrews Avenue & NE 26th Street

	↙	↖	↑	↘	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↙	↖	↑↓	↘	↑↑
Traffic Volume (vph)	155	163	988	171	1050
Future Volume (vph)	155	163	988	171	1050
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	8		2	1	6
Permitted Phases		8		6	
Detector Phase	8	8	2	1	6
Switch Phase					
Minimum Initial (s)	6.0	6.0	12.0	4.0	12.0
Minimum Split (s)	24.0	24.0	24.0	15.0	24.0
Total Split (s)	25.0	25.0	50.0	15.0	65.0
Total Split (%)	27.8%	27.8%	55.6%	16.7%	72.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	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	None	C-Max
Act Effct Green (s)	12.5	12.5	52.5	65.5	65.5
Actuated g/C Ratio	0.14	0.14	0.58	0.73	0.73
v/c Ratio	0.65	0.46	0.57	0.51	0.42
Control Delay	48.8	9.8	13.9	8.4	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	48.8	9.8	13.9	8.4	8.4
LOS	D	A	B	A	A
Approach Delay	28.8		13.9		8.4
Approach LOS	C		B		A

### Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 13.2

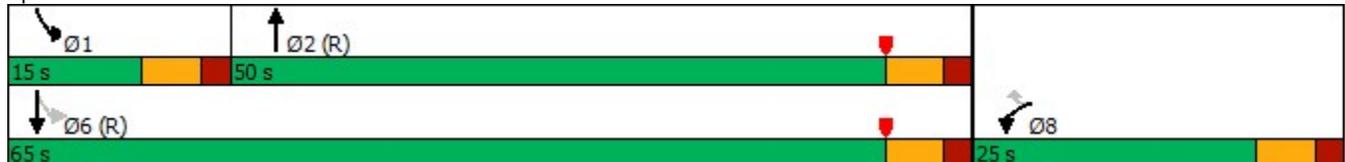
Intersection LOS: B

Intersection Capacity Utilization 64.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 104: Andrews Avenue & NE 26th Street



## Queues

### 104: Andrews Avenue & NE 26th Street



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	158	166	1146	174	1071
v/c Ratio	0.65	0.46	0.57	0.51	0.42
Control Delay	48.8	9.8	13.9	8.4	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	48.8	9.8	13.9	8.4	8.4
Queue Length 50th (ft)	86	0	191	37	317
Queue Length 95th (ft)	141	51	318	m61	m456
Internal Link Dist (ft)	287		336		2155
Turn Bay Length (ft)				130	
Base Capacity (vph)	369	461	2009	374	2552
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.43	0.36	0.57	0.47	0.42

#### Intersection Summary

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

# HCM 6th Signalized Intersection Summary

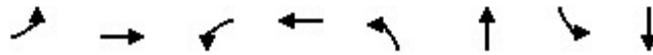
## 104: Andrews Avenue & NE 26th Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	155	163	988	135	171	1050
Future Volume (veh/h)	155	163	988	135	171	1050
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	158	166	1008	138	174	1071
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	228	203	1909	261	428	2601
Arrive On Green	0.13	0.13	0.82	0.82	0.07	0.98
Sat Flow, veh/h	1767	1572	3197	425	1767	3618
Grp Volume(v), veh/h	158	166	572	574	174	1071
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1766	1767	1763
Q Serve(g_s), s	7.7	9.3	9.4	9.4	3.1	0.9
Cycle Q Clear(g_c), s	7.7	9.3	9.4	9.4	3.1	0.9
Prop In Lane	1.00	1.00		0.24	1.00	
Lane Grp Cap(c), veh/h	228	203	1084	1086	428	2601
V/C Ratio(X)	0.69	0.82	0.53	0.53	0.41	0.41
Avail Cap(c_a), veh/h	373	332	1084	1086	505	2601
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.12	0.12
Uniform Delay (d), s/veh	37.5	38.2	4.0	4.0	5.7	0.2
Incr Delay (d2), s/veh	1.4	3.1	1.8	1.8	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.7	2.7	2.7	0.9	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.9	41.3	5.8	5.9	5.7	0.3
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	324		1146			1245
Approach Delay, s/veh	40.1		5.8			1.0
Approach LOS	D		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.1	61.3			72.4	17.6
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	9.0	44.0			59.0	19.0
Max Q Clear Time (g_c+I1), s	5.1	11.4			2.9	11.3
Green Ext Time (p_c), s	0.1	9.6			10.6	0.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			7.7			
HCM 6th LOS			A			

# Timings

## 105: NE 6 Avenue & Oakland Park Boulevard



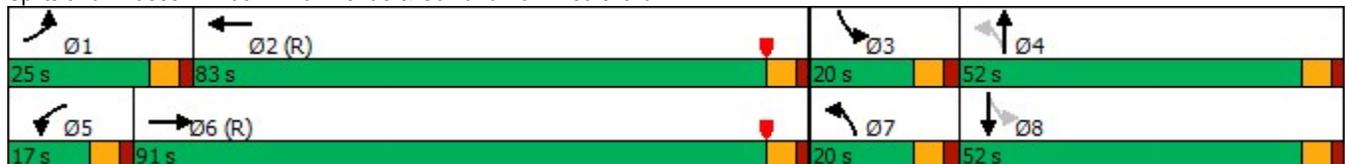
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↕↕↕↕	↖	↕↕↕↕	↖	↕	↖	↕
Traffic Volume (vph)	56	1653	75	1073	152	143	86	212
Future Volume (vph)	56	1653	75	1073	152	143	86	212
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	6.0	4.0	6.0
Minimum Split (s)	10.0	30.0	10.0	30.0	10.0	40.0	10.0	40.0
Total Split (s)	25.0	91.0	17.0	83.0	20.0	52.0	20.0	52.0
Total Split (%)	13.9%	50.6%	9.4%	46.1%	11.1%	28.9%	11.1%	28.9%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	Max	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	32.5	97.4	12.2	77.0	49.2	35.5	43.8	32.8
Actuated g/C Ratio	0.18	0.54	0.07	0.43	0.27	0.20	0.24	0.18
v/c Ratio	0.19	0.71	0.69	0.57	0.83	0.62	0.38	0.87
Control Delay	81.1	20.8	109.4	40.0	81.0	69.7	50.7	93.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.1	20.8	109.4	40.0	81.0	69.7	50.7	93.8
LOS	F	C	F	D	F	E	D	F
Approach Delay		22.7		44.4		74.5		83.3
Approach LOS		C		D		E		F

### Intersection Summary

Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 140 (78%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.87  
 Intersection Signal Delay: 40.3  
 Intersection Capacity Utilization 81.9%  
 Analysis Period (min) 15

Intersection LOS: D  
 ICU Level of Service D

### Splits and Phases: 105: NE 6 Avenue & Oakland Park Boulevard



## Queues

### 105: NE 6 Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	60	1917	81	1216	163	220	92	287
v/c Ratio	0.19	0.71	0.69	0.57	0.83	0.62	0.38	0.87
Control Delay	81.1	20.8	109.4	40.0	81.0	69.7	50.7	93.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.1	20.8	109.4	40.0	81.0	69.7	50.7	93.8
Queue Length 50th (ft)	70	270	95	394	151	228	82	327
Queue Length 95th (ft)	m85	362	158	443	#207	312	124	419
Internal Link Dist (ft)		2163		358		357		314
Turn Bay Length (ft)	400		400		190		190	
Base Capacity (vph)	316	2691	125	2135	201	456	271	461
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.71	0.65	0.57	0.81	0.48	0.34	0.62

#### Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

# HCM 6th Signalized Intersection Summary

## 105: NE 6 Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑		↖	↑↑↑		↖	↑		↖	↑	
Traffic Volume (veh/h)	56	1653	130	75	1073	58	152	143	61	86	212	55
Future Volume (veh/h)	56	1653	130	75	1073	58	152	143	61	86	212	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	60	1777	140	81	1154	62	163	154	66	92	228	59
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	187	2663	209	98	2491	134	198	246	105	232	250	65
Arrive On Green	0.14	0.74	0.74	0.07	0.67	0.67	0.08	0.20	0.20	0.05	0.18	0.18
Sat Flow, veh/h	1767	4778	375	1767	4913	264	1767	1224	525	1767	1420	367
Grp Volume(v), veh/h	60	1254	663	81	793	423	163	0	220	92	0	287
Grp Sat Flow(s),veh/h/ln	1767	1689	1777	1767	1689	1800	1767	0	1749	1767	0	1787
Q Serve(g_s), s	5.5	34.2	34.5	8.1	20.0	20.0	13.6	0.0	20.7	7.6	0.0	28.4
Cycle Q Clear(g_c), s	5.5	34.2	34.5	8.1	20.0	20.0	13.6	0.0	20.7	7.6	0.0	28.4
Prop In Lane	1.00		0.21	1.00		0.15	1.00		0.30	1.00		0.21
Lane Grp Cap(c), veh/h	187	1882	990	98	1713	913	198	0	351	232	0	315
V/C Ratio(X)	0.32	0.67	0.67	0.83	0.46	0.46	0.82	0.00	0.63	0.40	0.00	0.91
Avail Cap(c_a), veh/h	187	1882	990	108	1713	913	198	0	447	276	0	457
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.38	0.38	0.38	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	71.6	14.7	14.8	82.5	17.7	17.7	57.5	0.0	65.7	57.2	0.0	72.8
Incr Delay (d2), s/veh	1.7	0.7	1.4	33.4	0.9	1.7	22.6	0.0	0.7	0.4	0.0	13.8
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	2.6	11.5	12.3	4.6	7.4	8.1	7.4	0.0	9.4	3.5	0.0	14.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.3	15.5	16.2	115.9	18.6	19.4	80.1	0.0	66.4	57.6	0.0	86.6
LnGrp LOS	E	B	B	F	B	B	F	A	E	E	A	F
Approach Vol, veh/h		1977			1297			383			379	
Approach Delay, s/veh		17.4			24.9			72.2			79.5	
Approach LOS		B			C			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	25.0	97.3	15.5	42.2	16.0	106.3	20.0	37.7				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	19.0	77.0	14.0	46.0	11.0	85.0	14.0	46.0				
Max Q Clear Time (g_c+I1), s	7.5	22.0	9.6	22.7	10.1	36.5	15.6	30.4				
Green Ext Time (p_c), s	0.0	11.4	0.0	0.8	0.0	23.6	0.0	1.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				30.9								
HCM 6th LOS				C								

HCM 6th TWSC  
 201: Andrews Avenue & Out Driveway

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗↗			↗↗
Traffic Vol, veh/h	0	19	1149	0	0	1226
Future Vol, veh/h	0	19	1149	0	0	1226
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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, %	3	3	3	3	3	3
Mvmt Flow	0	21	1249	0	0	1333

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	625	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.5	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3	-
Pot Cap-1 Maneuver	0	705	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	-	705	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 705	-
HCM Lane V/C Ratio	- 0.029	-
HCM Control Delay (s)	- 10.3	-
HCM Lane LOS	- B	-
HCM 95th %tile Q(veh)	- 0.1	-

HCM 6th TWSC  
 202: Andrews Avenue & In Driveway

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↑↑		↔	↑↑
Traffic Vol, veh/h	0	0	1149	2	5	1221
Future Vol, veh/h	0	0	1149	2	5	1221
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	0	1249	2	5	1327

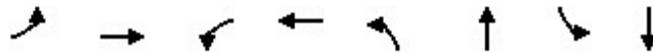
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1924	626	0	0	1251	0
Stage 1	1250	-	-	-	-	-
Stage 2	674	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	4.16	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	2.23	-
Pot Cap-1 Maneuver	58	425	-	-	547	-
Stage 1	231	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	57	425	-	-	547	-
Mov Cap-2 Maneuver	163	-	-	-	-	-
Stage 1	231	-	-	-	-	-
Stage 2	461	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	547	-
HCM Lane V/C Ratio	-	-	0.01	-
HCM Control Delay (s)	-	-	0	11.6
HCM Lane LOS	-	-	A	B
HCM 95th %tile Q(veh)	-	-	0	0

# Timings

## 101: Andrews Avenue & Oakland Park Boulevard

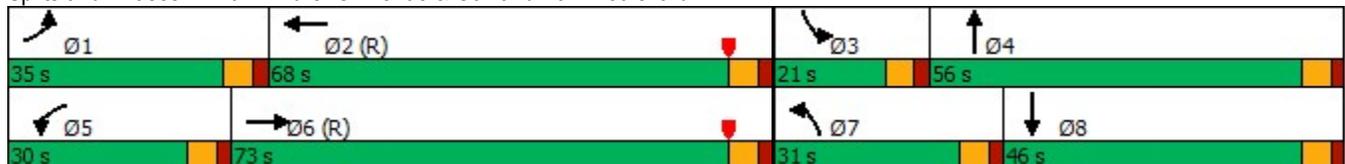


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑↑↓	↘	↑↑↓	↘↘	↑↓	↘	↑↓
Traffic Volume (vph)	263	1057	202	1377	316	763	83	591
Future Volume (vph)	263	1057	202	1377	316	763	83	591
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	6.0	5.0	6.0
Minimum Split (s)	11.0	41.0	11.0	41.0	11.0	36.0	11.0	36.0
Total Split (s)	35.0	73.0	30.0	68.0	31.0	56.0	21.0	46.0
Total Split (%)	19.4%	40.6%	16.7%	37.8%	17.2%	31.1%	11.7%	25.6%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	28.6	69.6	23.0	64.0	20.8	51.3	12.1	42.6
Actuated g/C Ratio	0.16	0.39	0.13	0.36	0.12	0.28	0.07	0.24
v/c Ratio	0.97	0.70	0.93	0.86	0.83	0.95	0.73	0.92
Control Delay	120.8	48.1	101.0	95.5	91.7	77.0	114.7	81.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	120.8	48.1	101.0	95.5	91.7	77.0	114.7	81.8
LOS	F	D	F	F	F	E	F	F
Approach Delay		60.3		96.1		80.8		85.2
Approach LOS		E		F		F		F

### Intersection Summary

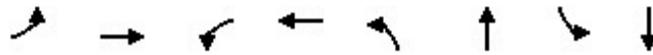
Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 114 (63%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.97  
 Intersection Signal Delay: 80.3  
 Intersection Capacity Utilization 93.9%  
 Analysis Period (min) 15  
 Intersection LOS: F  
 ICU Level of Service F

### Splits and Phases: 101: Andrews Avenue & Oakland Park Boulevard



## Queues

### 101: Andrews Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	271	1343	208	1532	326	929	86	746
v/c Ratio	0.97	0.70	0.93	0.86	0.83	0.95	0.73	0.92
Control Delay	120.8	48.1	101.0	95.5	91.7	77.0	114.7	81.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	120.8	48.1	101.0	95.5	91.7	77.0	114.7	81.8
Queue Length 50th (ft)	323	490	258	606	173	599	101	445
Queue Length 95th (ft)	#518	547	m#411	658	231	#726	167	#597
Internal Link Dist (ft)		578		2163		2155		369
Turn Bay Length (ft)	510		340		380		380	
Base Capacity (vph)	282	1914	233	1774	472	982	146	813
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.96	0.70	0.89	0.86	0.69	0.95	0.59	0.92

#### Intersection Summary

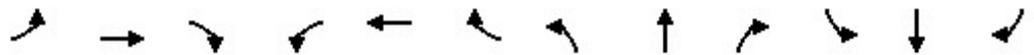
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

# HCM 6th Signalized Intersection Summary

## 101: Andrews Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑		↗	↑↑↑		↗↘	↑↑		↗	↑↑	
Traffic Volume (veh/h)	263	1057	245	202	1377	109	316	763	138	83	591	133
Future Volume (veh/h)	263	1057	245	202	1377	109	316	763	138	83	591	133
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		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	271	1090	253	208	1420	112	326	787	142	86	609	137
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	285	1662	386	225	1774	140	367	822	148	104	649	146
Arrive On Green	0.21	0.54	0.54	0.17	0.49	0.49	0.04	0.09	0.09	0.06	0.23	0.23
Sat Flow, veh/h	1767	4107	953	1767	4787	378	3428	2974	537	1767	2849	639
Grp Volume(v), veh/h	271	896	447	208	1002	530	326	466	463	86	376	370
Grp Sat Flow(s),veh/h/ln	1767	1689	1683	1767	1689	1787	1714	1763	1747	1767	1763	1726
Q Serve(g_s), s	27.2	34.1	34.1	20.9	44.7	44.7	17.0	47.4	47.4	8.7	37.7	37.9
Cycle Q Clear(g_c), s	27.2	34.1	34.1	20.9	44.7	44.7	17.0	47.4	47.4	8.7	37.7	37.9
Prop In Lane	1.00		0.57	1.00		0.21	1.00		0.31	1.00		0.37
Lane Grp Cap(c), veh/h	285	1366	681	225	1252	663	367	487	483	104	401	393
V/C Ratio(X)	0.95	0.66	0.66	0.93	0.80	0.80	0.89	0.96	0.96	0.83	0.94	0.94
Avail Cap(c_a), veh/h	285	1366	681	236	1252	663	476	490	485	147	401	393
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.61	0.61	0.61	0.74	0.74	0.74	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.0	32.6	32.6	73.9	40.0	40.0	85.7	80.8	80.8	83.8	68.2	68.3
Incr Delay (d2), s/veh	40.0	2.5	4.9	26.5	3.4	6.2	10.0	24.7	24.9	16.5	29.3	30.5
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	15.2	13.8	14.2	11.0	18.4	20.0	8.5	26.1	25.9	4.5	20.4	20.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	110.0	35.1	37.5	100.5	43.4	46.3	95.7	105.5	105.6	100.3	97.5	98.8
LnGrp LOS	F	D	D	F	D	D	F	F	F	F	F	F
Approach Vol, veh/h		1614			1740			1255				832
Approach Delay, s/veh		48.3			51.1			103.0				98.4
Approach LOS		D			D			F				F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.0	72.7	16.5	55.7	28.9	78.8	25.3	47.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	29.0	62.0	15.0	50.0	24.0	67.0	25.0	40.0				
Max Q Clear Time (g_c+I1), s	29.2	46.7	10.7	49.4	22.9	36.1	19.0	39.9				
Green Ext Time (p_c), s	0.0	9.3	0.0	0.3	0.0	11.8	0.2	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				69.5								
HCM 6th LOS				E								

# Timings

## 102: Powerline Road & Oakland Park Boulevard

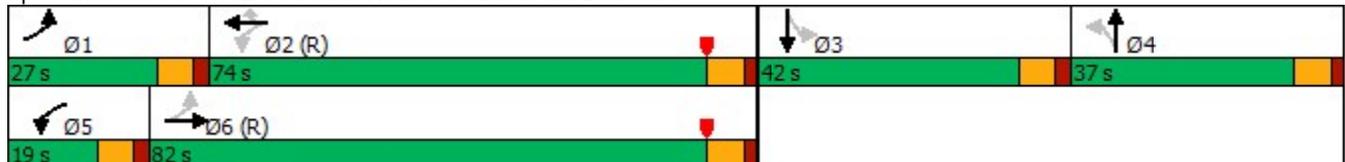


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑↑↑	↘	↑↑↑	↗	↘	↔↑↑	↗↗	↑↑
Traffic Volume (vph)	222	1705	136	1630	148	369	572	181	632
Future Volume (vph)	222	1705	136	1630	148	369	572	181	632
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	6	5	2			4		3
Permitted Phases	6		2		2	4		3	
Detector Phase	1	6	5	2	2	4	4	3	3
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	11.0	39.0	11.0	39.0	39.0	37.0	37.0	38.0	38.0
Total Split (s)	27.0	82.0	19.0	74.0	74.0	37.0	37.0	42.0	42.0
Total Split (%)	15.0%	45.6%	10.6%	41.1%	41.1%	20.6%	20.6%	23.3%	23.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes						
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	94.0	75.5	78.6	67.1	67.1	30.0	30.0	35.0	35.0
Actuated g/C Ratio	0.52	0.42	0.44	0.37	0.37	0.17	0.17	0.19	0.19
v/c Ratio	0.97	0.98	0.91	0.89	0.22	2.07	1.67dl	2.34	1.21
Control Delay	104.5	66.0	96.8	59.8	5.5	547.9	341.0	669.1	165.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	104.5	66.0	96.8	59.8	5.5	547.9	341.0	669.1	165.5
LOS	F	E	F	E	A	F	F	F	F
Approach Delay		69.8		58.2			376.3		259.0
Approach LOS		E		E			F		F

### Intersection Summary

Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 20 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow  
 Natural Cycle: 145  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 2.34  
 Intersection Signal Delay: 149.6  
 Intersection LOS: F  
 Intersection Capacity Utilization 110.4%  
 ICU Level of Service H  
 Analysis Period (min) 15  
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

### Splits and Phases: 102: Powerline Road & Oakland Park Boulevard



# Queues

## 102: Powerline Road & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	227	2035	139	1663	151	188	915	185	812
v/c Ratio	0.97	0.98	0.91	0.89	0.22	2.07	1.67dl	2.34	1.21
Control Delay	104.5	66.0	96.8	59.8	5.5	547.9	341.0	669.1	165.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	104.5	66.0	96.8	59.8	5.5	547.9	341.0	669.1	165.5
Queue Length 50th (ft)	220	863	114	676	0	~404	~601	~182	~606
Queue Length 95th (ft)	#406	#977	#253	741	50	#610	#705	#273	#747
Internal Link Dist (ft)		715		592			1584		537
Turn Bay Length (ft)	515		350		160	390		260	
Base Capacity (vph)	235	2077	158	1876	672	91	555	79	670
Starvation Cap Reductn	0	0	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	0.97	0.98	0.88	0.89	0.22	2.07	1.65	2.34	1.21

### 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.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

# HCM Signalized Intersection Capacity Analysis

## 102: Powerline Road & Oakland Park Boulevard

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			  		 	 	
Traffic Volume (vph)	222	1705	289	136	1630	148	369	572	139	181	632	164
Future Volume (vph)	222	1705	289	136	1630	148	369	572	139	181	632	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	0.86	0.86		0.97	0.95	
Frbp, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	
Satd. Flow (prot)	1752	4926		1752	5036	1547	1505	4589		3400	3383	
Flt Permitted	0.05	1.00		0.06	1.00	1.00	0.35	0.70		0.11	1.00	
Satd. Flow (perm)	100	4926		110	5036	1547	547	3250		409	3383	
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)	227	1740	295	139	1663	151	377	584	142	185	645	167
RTOR Reduction (vph)	0	13	0	0	0	95	0	13	0	0	13	0
Lane Group Flow (vph)	227	2022	0	139	1663	56	188	902	0	185	799	0
Confl. Peds. (#/hr)	1					1	3		2	2		3
Confl. Bikes (#/hr)												2
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4				3
Permitted Phases	6			2		2	4			3		
Actuated Green, G (s)	94.0	75.5		78.6	67.1	67.1	30.0	30.0		35.0	35.0	
Effective Green, g (s)	94.0	75.5		78.6	67.1	67.1	30.0	30.0		35.0	35.0	
Actuated g/C Ratio	0.52	0.42		0.44	0.37	0.37	0.17	0.17		0.19	0.19	
Clearance Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	234	2066		152	1877	576	91	541		79	657	
v/s Ratio Prot	c0.11	c0.41		0.06	0.33							0.24
v/s Ratio Perm	0.40			0.34		0.04	c0.34	0.28		c0.45		
v/c Ratio	0.97	0.98		0.91	0.89	0.10	2.07	1.67dl		2.34	1.22	
Uniform Delay, d1	60.9	51.5		50.9	52.9	36.7	75.0	75.0		72.5	72.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	50.0	15.4		47.5	6.6	0.3	515.4	308.1		641.2	110.9	
Delay (s)	111.0	66.9		98.4	59.5	37.1	590.4	383.1		713.7	183.4	
Level of Service	F	E		F	E	D	F	F		F	F	
Approach Delay (s)		71.3			60.5			418.4			281.8	
Approach LOS		E			E			F			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			161.8			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.53									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)				28.0		
Intersection Capacity Utilization			110.4%			ICU Level of Service				H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

HCM 6th Signalized Intersection Summary  
102: Powerline Road & Oakland Park Boulevard

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HCM 6th Edition methodology expects strict NEMA phasing.

# Timings

## 103: NW 29 Street & Powerline Road

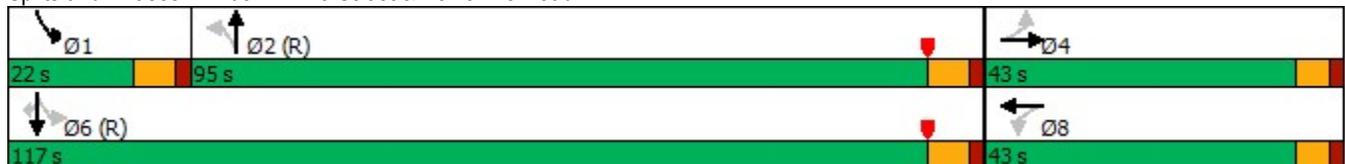


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	19	6	129	22	5	911	96	950	31
Future Volume (vph)	19	6	129	22	5	911	96	950	31
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA	Perm
Protected Phases		4		8		2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	2	2	1	6	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	43.0	43.0	43.0	43.0	28.0	28.0	11.0	28.0	28.0
Total Split (s)	43.0	43.0	43.0	43.0	95.0	95.0	22.0	117.0	117.0
Total Split (%)	26.9%	26.9%	26.9%	26.9%	59.4%	59.4%	13.8%	73.1%	73.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag					Lag	Lag	Lead		
Lead-Lag Optimize?					Yes	Yes	Yes		
Recall Mode	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	21.3	21.3	21.3	21.3	112.3	112.3	125.7	125.7	125.7
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.70	0.70	0.79	0.79	0.79
v/c Ratio	0.27	0.08	0.80	0.54	0.02	0.44	0.30	0.39	0.03
Control Delay	68.2	32.7	95.5	17.5	9.8	11.8	6.7	6.2	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.2	32.7	95.5	17.5	9.8	11.8	6.7	6.2	1.6
LOS	E	C	F	B	A	B	A	A	A
Approach Delay		51.3		51.1		11.7		6.1	
Approach LOS		D		D		B		A	

### Intersection Summary

Cycle Length: 160  
 Actuated Cycle Length: 160  
 Offset: 67 (42%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow  
 Natural Cycle: 85  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.80  
 Intersection Signal Delay: 14.8  
 Intersection Capacity Utilization 67.0%  
 Analysis Period (min) 15  
 Intersection LOS: B  
 ICU Level of Service C

### Splits and Phases: 103: NW 29 Street & Powerline Road



## Queues

### 103: NW 29 Street & Powerline Road



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	21	19	145	192	6	1080	108	1067	35
v/c Ratio	0.27	0.08	0.80	0.54	0.02	0.44	0.30	0.39	0.03
Control Delay	68.2	32.7	95.5	17.5	9.8	11.8	6.7	6.2	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.2	32.7	95.5	17.5	9.8	11.8	6.7	6.2	1.6
Queue Length 50th (ft)	20	7	149	23	2	236	23	158	0
Queue Length 95th (ft)	48	31	217	95	8	344	48	238	10
Internal Link Dist (ft)		318		329		280		1584	
Turn Bay Length (ft)	100		100		70		320		320
Base Capacity (vph)	136	395	317	499	346	2439	439	2753	1204
Starvation Cap Reductn	0	0	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	0.15	0.05	0.46	0.38	0.02	0.44	0.25	0.39	0.03

#### Intersection Summary

# HCM 6th Signalized Intersection Summary

## 103: NW 29 Street & Powerline Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	6	11	129	22	149	5	911	50	96	950	31
Future Volume (veh/h)	19	6	11	129	22	149	5	911	50	96	950	31
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		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	21	7	12	145	25	167	6	1024	56	108	1067	35
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	81	90	154	234	31	204	412	2372	130	441	2723	1188
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.93	0.93	0.93	0.04	1.00	1.00
Sat Flow, veh/h	1182	614	1052	1382	209	1395	524	3394	186	1767	3526	1538
Grp Volume(v), veh/h	21	0	19	145	0	192	6	532	548	108	1067	35
Grp Sat Flow(s),veh/h/ln	1182	0	1666	1382	0	1604	524	1763	1817	1767	1763	1538
Q Serve(g_s), s	2.8	0.0	1.6	16.2	0.0	18.6	0.1	5.7	5.7	2.7	0.0	0.0
Cycle Q Clear(g_c), s	21.4	0.0	1.6	17.8	0.0	18.6	0.1	5.7	5.7	2.7	0.0	0.0
Prop In Lane	1.00		0.63	1.00		0.87	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	81	0	244	234	0	235	412	1232	1270	441	2723	1188
V/C Ratio(X)	0.26	0.00	0.08	0.62	0.00	0.82	0.01	0.43	0.43	0.24	0.39	0.03
Avail Cap(c_a), veh/h	181	0	385	351	0	371	412	1232	1270	554	2723	1188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(l)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	76.6	0.0	59.0	66.6	0.0	66.2	1.7	1.9	1.9	5.9	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.1	1.0	0.0	3.7	0.1	1.1	1.1	0.0	0.0	0.0
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	0.9	0.0	0.7	5.8	0.0	7.9	0.0	1.8	1.8	1.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.2	0.0	59.0	67.6	0.0	69.9	1.8	3.0	3.0	5.9	0.0	0.0
LnGrp LOS	E	A	E	E	A	E	A	A	A	A	A	A
Approach Vol, veh/h		40			337			1086			1210	
Approach Delay, s/veh		68.6			68.9			3.0			0.6	
Approach LOS		E			E			A			A	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	11.7	118.8		29.4		130.6		29.4				
Change Period (Y+Rc), s	7.0	7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s	15.0	88.0		37.0		110.0		37.0				
Max Q Clear Time (g_c+I1), s	4.7	7.7		23.4		2.0		20.6				
Green Ext Time (p_c), s	0.1	9.7		0.0		11.0		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				11.2								
HCM 6th LOS				B								

# Timings

## 104: Andrews Avenue & NE 26th Street

	↙	↖	↑	↘	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↙	↖	↑↔	↘	↑↑
Traffic Volume (vph)	238	241	1046	153	1054
Future Volume (vph)	238	241	1046	153	1054
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	8		2	1	6
Permitted Phases		8		6	
Detector Phase	8	8	2	1	6
Switch Phase					
Minimum Initial (s)	6.0	6.0	12.0	4.0	12.0
Minimum Split (s)	24.0	24.0	24.0	15.0	24.0
Total Split (s)	25.0	25.0	50.0	15.0	65.0
Total Split (%)	27.8%	27.8%	55.6%	16.7%	72.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	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	None	C-Max
Act Effct Green (s)	15.8	15.8	49.3	62.2	62.2
Actuated g/C Ratio	0.18	0.18	0.55	0.69	0.69
v/c Ratio	0.79	0.53	0.65	0.55	0.44
Control Delay	53.5	9.7	16.9	18.3	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	53.5	9.7	16.9	18.3	11.9
LOS	D	A	B	B	B
Approach Delay	31.4		16.9		12.7
Approach LOS	C		B		B

### Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 33 (37%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 17.6

Intersection LOS: B

Intersection Capacity Utilization 70.5%

ICU Level of Service C

Analysis Period (min) 15

### Splits and Phases: 104: Andrews Avenue & NE 26th Street



## Queues

### 104: Andrews Avenue & NE 26th Street



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	243	246	1225	156	1076
v/c Ratio	0.79	0.53	0.65	0.55	0.44
Control Delay	53.5	9.7	16.9	18.3	11.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	53.5	9.7	16.9	18.3	11.9
Queue Length 50th (ft)	132	6	241	76	300
Queue Length 95th (ft)	208	67	351	m104	m439
Internal Link Dist (ft)	287		336		2155
Turn Bay Length (ft)				130	
Base Capacity (vph)	369	510	1889	322	2420
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.66	0.48	0.65	0.48	0.44

#### Intersection Summary

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

# HCM 6th Signalized Intersection Summary

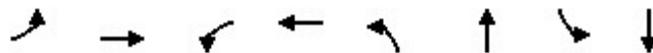
## 104: Andrews Avenue & NE 26th Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	238	241	1046	155	153	1054
Future Volume (veh/h)	238	241	1046	155	153	1054
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	243	246	1067	158	156	1076
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	315	281	1741	257	363	2426
Arrive On Green	0.18	0.18	0.75	0.75	0.08	0.92
Sat Flow, veh/h	1767	1572	3173	455	1767	3618
Grp Volume(v), veh/h	243	246	610	615	156	1076
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1773	1767	1763
Q Serve(g_s), s	11.8	13.7	14.3	14.4	3.1	3.9
Cycle Q Clear(g_c), s	11.8	13.7	14.3	14.4	3.1	3.9
Prop In Lane	1.00	1.00		0.26	1.00	
Lane Grp Cap(c), veh/h	315	281	996	1002	363	2426
V/C Ratio(X)	0.77	0.88	0.61	0.61	0.43	0.44
Avail Cap(c_a), veh/h	373	332	996	1002	440	2426
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.33	1.33
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.27	0.27
Uniform Delay (d), s/veh	35.2	36.0	6.6	6.7	8.4	1.4
Incr Delay (d2), s/veh	6.5	18.0	2.8	2.8	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	6.5	4.2	4.3	1.0	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.7	54.1	9.4	9.5	8.4	1.5
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	489		1225			1232
Approach Delay, s/veh	47.9		9.5			2.4
Approach LOS	D		A			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.1	56.9			67.9	22.1
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	9.0	44.0			59.0	19.0
Max Q Clear Time (g_c+I1), s	5.1	16.4			5.9	15.7
Green Ext Time (p_c), s	0.0	10.0			10.6	0.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			12.9			
HCM 6th LOS			B			

# Timings

## 105: NE 6 Avenue & Oakland Park Boulevard

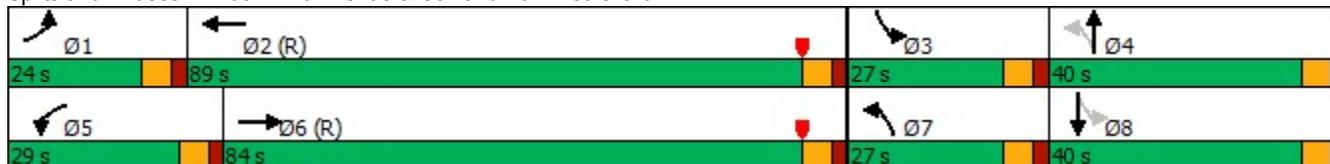


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↖	↑↑↑	↖	↑	↖	↑
Traffic Volume (vph)	64	1339	115	1455	133	207	102	244
Future Volume (vph)	64	1339	115	1455	133	207	102	244
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	6.0	4.0	6.0
Minimum Split (s)	10.0	30.0	10.0	30.0	10.0	40.0	10.0	40.0
Total Split (s)	24.0	84.0	29.0	89.0	27.0	40.0	27.0	40.0
Total Split (%)	13.3%	46.7%	16.1%	49.4%	15.0%	22.2%	15.0%	22.2%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	Max	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	20.6	86.7	16.9	83.0	55.9	40.0	48.9	36.5
Actuated g/C Ratio	0.11	0.48	0.09	0.46	0.31	0.22	0.27	0.20
v/c Ratio	0.35	0.70	0.78	0.73	0.70	0.70	0.47	0.91
Control Delay	84.8	26.8	108.9	41.6	62.2	73.4	50.1	96.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.8	26.8	108.9	41.6	62.2	73.4	50.1	96.1
LOS	F	C	F	D	E	E	D	F
Approach Delay		29.2		46.4		69.5		84.5
Approach LOS		C		D		E		F

### Intersection Summary

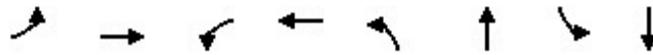
Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 139 (77%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.91  
 Intersection Signal Delay: 45.7  
 Intersection LOS: D  
 Intersection Capacity Utilization 80.0%  
 ICU Level of Service D  
 Analysis Period (min) 15

### Splits and Phases: 105: NE 6 Avenue & Oakland Park Boulevard



## Queues

### 105: NE 6 Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	71	1671	128	1686	148	279	113	333
v/c Ratio	0.35	0.70	0.78	0.73	0.70	0.70	0.47	0.91
Control Delay	84.8	26.8	108.9	41.6	62.2	73.4	50.1	96.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.8	26.8	108.9	41.6	62.2	73.4	50.1	96.1
Queue Length 50th (ft)	83	293	151	586	127	295	95	376
Queue Length 95th (ft)	m124	m384	223	642	190	423	150	#604
Internal Link Dist (ft)		2163		358		357		314
Turn Bay Length (ft)	400		400		190		190	
Base Capacity (vph)	200	2388	223	2308	257	401	322	368
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.70	0.57	0.73	0.58	0.70	0.35	0.90

#### Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

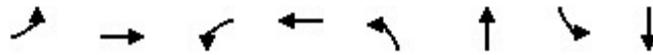
m Volume for 95th percentile queue is metered by upstream signal.

HCM 6th Signalized Intersection Summary  
 105: NE 6 Avenue & Oakland Park Boulevard

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 						 	
Traffic Volume (veh/h)	64	1339	165	115	1455	62	133	207	44	102	244	56
Future Volume (veh/h)	64	1339	165	115	1455	62	133	207	44	102	244	56
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		0.98	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	71	1488	183	128	1617	69	148	230	49	113	271	62
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	177	2355	289	146	2488	106	182	303	64	214	275	63
Arrive On Green	0.13	0.69	0.69	0.11	0.66	0.66	0.08	0.20	0.20	0.06	0.19	0.19
Sat Flow, veh/h	1767	4557	560	1767	4982	213	1767	1476	315	1767	1455	333
Grp Volume(v), veh/h	71	1102	569	128	1096	590	148	0	279	113	0	333
Grp Sat Flow(s),veh/h/ln	1767	1689	1740	1767	1689	1817	1767	0	1791	1767	0	1788
Q Serve(g_s), s	6.6	32.5	32.5	12.8	34.5	34.5	12.1	0.0	26.4	9.2	0.0	33.4
Cycle Q Clear(g_c), s	6.6	32.5	32.5	12.8	34.5	34.5	12.1	0.0	26.4	9.2	0.0	33.4
Prop In Lane	1.00		0.32	1.00		0.12	1.00		0.18	1.00		0.19
Lane Grp Cap(c), veh/h	177	1745	899	146	1686	907	182	0	367	214	0	338
V/C Ratio(X)	0.40	0.63	0.63	0.88	0.65	0.65	0.81	0.00	0.76	0.53	0.00	0.99
Avail Cap(c_a), veh/h	177	1745	899	226	1686	907	250	0	367	310	0	338
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.65	0.65	0.65	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	73.1	18.7	18.7	79.2	20.9	20.9	55.9	0.0	67.4	55.6	0.0	72.8
Incr Delay (d2), s/veh	4.4	1.1	2.2	14.1	2.0	3.6	9.7	0.0	8.1	0.8	0.0	45.0
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	3.2	11.7	12.4	6.3	12.9	14.4	5.9	0.0	13.0	4.2	0.0	19.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.5	19.8	20.9	93.3	22.9	24.5	65.7	0.0	75.5	56.4	0.0	117.7
LnGrp LOS	E	B	C	F	C	C	E	A	E	E	A	F
Approach Vol, veh/h		1742			1814			427			446	
Approach Delay, s/veh		22.5			28.4			72.1			102.2	
Approach LOS		C			C			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	24.0	95.9	17.2	42.9	20.9	99.0	20.1	40.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	18.0	83.0	21.0	34.0	23.0	78.0	21.0	34.0				
Max Q Clear Time (g_c+I1), s	8.6	36.5	11.2	28.4	14.8	34.5	14.1	35.4				
Green Ext Time (p_c), s	0.0	18.7	0.1	0.5	0.1	18.2	0.1	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				37.7								
HCM 6th LOS				D								

# Timings

## 101: Andrews Avenue & Oakland Park Boulevard

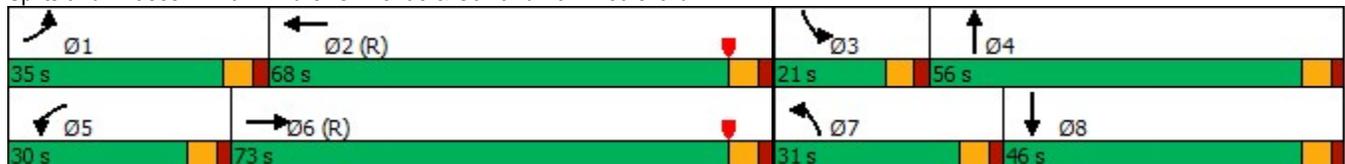


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↗↗↗	↖	↔↔↔	↖↖	↗↗	↖	↗↗
Traffic Volume (vph)	272	1095	210	1427	341	796	93	613
Future Volume (vph)	272	1095	210	1427	341	796	93	613
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	6.0	5.0	6.0
Minimum Split (s)	11.0	41.0	11.0	41.0	11.0	36.0	11.0	36.0
Total Split (s)	35.0	73.0	30.0	68.0	31.0	56.0	21.0	46.0
Total Split (%)	19.4%	40.6%	16.7%	37.8%	17.2%	31.1%	11.7%	25.6%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	29.0	67.6	23.4	62.0	21.9	52.3	12.7	43.1
Actuated g/C Ratio	0.16	0.38	0.13	0.34	0.12	0.29	0.07	0.24
v/c Ratio	0.99	0.75	0.95	0.92	0.85	0.98	0.78	0.94
Control Delay	124.9	50.7	103.0	99.5	92.5	82.0	118.9	84.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	124.9	50.7	103.0	99.5	92.5	82.0	118.9	84.4
LOS	F	D	F	F	F	F	F	F
Approach Delay		63.1		99.9		84.8		88.2
Approach LOS		E		F		F		F

### Intersection Summary

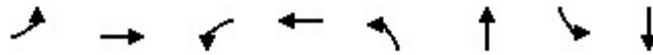
Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 114 (63%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 120  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.99  
 Intersection Signal Delay: 83.7  
 Intersection LOS: F  
 Intersection Capacity Utilization 97.3%  
 ICU Level of Service F  
 Analysis Period (min) 15

### Splits and Phases: 101: Andrews Avenue & Oakland Park Boulevard



## Queues

### 101: Andrews Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	280	1391	216	1587	352	981	96	774
v/c Ratio	0.99	0.75	0.95	0.92	0.85	0.98	0.78	0.94
Control Delay	124.9	50.7	103.0	99.5	92.5	82.0	118.9	84.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	124.9	50.7	103.0	99.5	92.5	82.0	118.9	84.4
Queue Length 50th (ft)	336	515	269	631	189	~641	113	472
Queue Length 95th (ft)	#543	574	m#421	685	254	#788	#191	#635
Internal Link Dist (ft)		578		2163		2155		369
Turn Bay Length (ft)	510		340		380		380	
Base Capacity (vph)	282	1860	233	1719	472	998	146	824
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.75	0.93	0.92	0.75	0.98	0.66	0.94

#### 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.

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

# HCM 6th Signalized Intersection Summary

## 101: Andrews Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑		↗	↑↑↑		↗↘	↑↑		↗	↑↑	
Traffic Volume (veh/h)	272	1095	254	210	1427	113	341	796	155	93	613	138
Future Volume (veh/h)	272	1095	254	210	1427	113	341	796	155	93	613	138
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		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	280	1129	262	216	1471	116	352	821	160	96	632	142
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	285	1614	374	233	1739	137	393	814	159	114	648	145
Arrive On Green	0.21	0.52	0.52	0.17	0.48	0.48	0.04	0.09	0.09	0.06	0.23	0.23
Sat Flow, veh/h	1767	4107	953	1767	4787	377	3428	2932	571	1767	2850	639
Grp Volume(v), veh/h	280	928	463	216	1038	549	352	494	487	96	391	383
Grp Sat Flow(s),veh/h/ln	1767	1689	1683	1767	1689	1787	1714	1763	1740	1767	1763	1726
Q Serve(g_s), s	28.4	37.2	37.2	21.7	48.3	48.4	18.4	50.0	50.0	9.7	39.6	39.7
Cycle Q Clear(g_c), s	28.4	37.2	37.2	21.7	48.3	48.4	18.4	50.0	50.0	9.7	39.6	39.7
Prop In Lane	1.00		0.57	1.00		0.21	1.00		0.33	1.00		0.37
Lane Grp Cap(c), veh/h	285	1327	661	233	1227	649	393	490	483	114	401	393
V/C Ratio(X)	0.98	0.70	0.70	0.93	0.85	0.85	0.90	1.01	1.01	0.84	0.97	0.98
Avail Cap(c_a), veh/h	285	1327	661	236	1227	649	476	490	483	147	401	393
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.57	0.57	0.57	0.69	0.69	0.69	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.5	35.0	35.0	73.4	42.1	42.1	85.5	81.8	81.8	83.3	69.0	69.0
Incr Delay (d2), s/veh	48.5	3.1	6.1	26.7	4.3	7.8	11.4	35.8	36.0	23.0	37.8	39.0
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	16.4	15.2	15.7	11.4	20.0	21.8	9.2	28.8	28.5	5.2	22.1	21.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	119.0	38.1	41.1	100.1	46.4	49.9	96.9	117.5	117.8	106.3	106.7	108.0
LnGrp LOS	F	D	D	F	D	D	F	F	F	F	F	F
Approach Vol, veh/h		1671			1803			1333				870
Approach Delay, s/veh		52.4			53.9			112.2				107.2
Approach LOS		D			D			F				F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.0	71.4	17.6	56.0	29.7	76.7	26.6	47.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	29.0	62.0	15.0	50.0	24.0	67.0	25.0	40.0				
Max Q Clear Time (g_c+I1), s	30.4	50.4	11.7	52.0	23.7	39.2	20.4	41.7				
Green Ext Time (p_c), s	0.0	7.8	0.0	0.0	0.0	11.8	0.2	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				75.3								
HCM 6th LOS				E								

# Timings

## 102: Powerline Road & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑↑↑	↘	↑↑↑	↗	↘	↔↑↑	↗↗	↑↑
Traffic Volume (vph)	230	1768	141	1703	154	383	593	187	655
Future Volume (vph)	230	1768	141	1703	154	383	593	187	655
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	6	5	2			4		3
Permitted Phases	6		2		2	4		3	
Detector Phase	1	6	5	2	2	4	4	3	3
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	11.0	39.0	11.0	39.0	39.0	37.0	37.0	38.0	38.0
Total Split (s)	27.0	82.0	19.0	74.0	74.0	37.0	37.0	42.0	42.0
Total Split (%)	15.0%	45.6%	10.6%	41.1%	41.1%	20.6%	20.6%	23.3%	23.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes						
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	94.0	75.3	78.7	67.0	67.0	30.0	30.0	35.0	35.0
Actuated g/C Ratio	0.52	0.42	0.44	0.37	0.37	0.17	0.17	0.19	0.19
v/c Ratio	1.00	1.03	0.93	0.93	0.23	2.22	1.77dl	2.42	1.25
Control Delay	112.7	77.6	101.2	63.6	6.3	612.3	369.7	701.7	180.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.7	77.6	101.2	63.6	6.3	612.3	369.7	701.7	180.9
LOS	F	E	F	E	A	F	F	F	F
Approach Delay		81.1		61.9			411.1		277.4
Approach LOS		F		E			F		F

### Intersection Summary

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 20 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.42

Intersection Signal Delay: 163.2

Intersection LOS: F

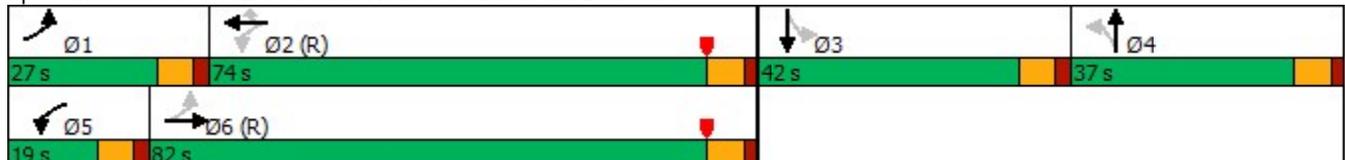
Intersection Capacity Utilization 113.8%

ICU Level of Service H

Analysis Period (min) 15

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

### Splits and Phases: 102: Powerline Road & Oakland Park Boulevard



## Queues

### 102: Powerline Road & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	235	2132	144	1738	157	195	948	191	840
v/c Ratio	1.00	1.03	0.93	0.93	0.23	2.22	1.77dl	2.42	1.25
Control Delay	112.7	77.6	101.2	63.6	6.3	612.3	369.7	701.7	180.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.7	77.6	101.2	63.6	6.3	612.3	369.7	701.7	180.9
Queue Length 50th (ft)	231	~979	120	722	4	~427	~634	~190	~643
Queue Length 95th (ft)	#428	#1063	#268	790	56	#636	#739	#282	#784
Internal Link Dist (ft)		715		592			1584		537
Turn Bay Length (ft)	515		350		160	390		260	
Base Capacity (vph)	235	2071	158	1874	671	88	552	79	670
Starvation Cap Reductn	0	0	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	1.00	1.03	0.91	0.93	0.23	2.22	1.72	2.42	1.25

#### 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.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

# HCM Signalized Intersection Capacity Analysis

## 102: Powerline Road & Oakland Park Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	1768	321	141	1703	154	383	593	144	187	655	169
Future Volume (vph)	230	1768	321	141	1703	154	383	593	144	187	655	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	0.86	0.86		0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	
Satd. Flow (prot)	1752	4920		1752	5036	1547	1505	4589		3400	3384	
Flt Permitted	0.05	1.00		0.06	1.00	1.00	0.34	0.70		0.11	1.00	
Satd. Flow (perm)	100	4920		110	5036	1547	532	3232		409	3384	
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)	235	1804	328	144	1738	157	391	605	147	191	668	172
RTOR Reduction (vph)	0	15	0	0	0	95	0	13	0	0	13	0
Lane Group Flow (vph)	235	2117	0	144	1738	62	195	935	0	191	827	0
Confl. Peds. (#/hr)	1					1	3		2	2		3
Confl. Bikes (#/hr)												2
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4				3
Permitted Phases	6			2		2	4			3		
Actuated Green, G (s)	94.0	75.3		78.7	67.0	67.0	30.0	30.0		35.0	35.0	
Effective Green, g (s)	94.0	75.3		78.7	67.0	67.0	30.0	30.0		35.0	35.0	
Actuated g/C Ratio	0.52	0.42		0.44	0.37	0.37	0.17	0.17		0.19	0.19	
Clearance Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	235	2058		154	1874	575	88	538		79	658	
v/s Ratio Prot	c0.11	c0.43		0.06	0.35							0.24
v/s Ratio Perm	0.41			0.35		0.04	c0.37	0.29		c0.47		
v/c Ratio	1.00	1.03		0.94	0.93	0.11	2.22	1.77dl		2.42	1.26	
Uniform Delay, d1	62.2	52.4		52.7	54.2	36.9	75.0	75.0		72.5	72.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	58.7	27.6		52.6	9.5	0.4	582.2	339.5		674.7	127.8	
Delay (s)	120.9	80.0		105.2	63.7	37.3	657.2	414.5		747.2	200.3	
Level of Service	F	E		F	E	D	F	F		F	F	
Approach Delay (s)		84.1			64.6			455.9			301.6	
Approach LOS		F			E			F			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			176.7			HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio			1.60									
Actuated Cycle Length (s)			180.0	Sum of lost time (s)				28.0				
Intersection Capacity Utilization			113.8%	ICU Level of Service			H					
Analysis Period (min)	15											
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

HCM 6th Signalized Intersection Summary  
102: Powerline Road & Oakland Park Boulevard

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HCM 6th Edition methodology expects strict NEMA phasing.

# Timings

## 103: NW 29 Street & Powerline Road



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	20	7	134	22	6	944	121	984	33
Future Volume (vph)	20	7	134	22	6	944	121	984	33
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA	Perm
Protected Phases		4		8		2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	2	2	1	6	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	43.0	43.0	43.0	43.0	28.0	28.0	11.0	28.0	28.0
Total Split (s)	43.0	43.0	43.0	43.0	95.0	95.0	22.0	117.0	117.0
Total Split (%)	26.9%	26.9%	26.9%	26.9%	59.4%	59.4%	13.8%	73.1%	73.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag					Lag	Lag	Lead		
Lead-Lag Optimize?					Yes	Yes	Yes		
Recall Mode	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	22.0	22.0	22.0	22.0	110.8	110.8	125.0	125.0	125.0
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.69	0.69	0.78	0.78	0.78
v/c Ratio	0.28	0.08	0.80	0.54	0.02	0.47	0.39	0.40	0.03
Control Delay	68.0	32.7	94.8	16.9	10.5	12.8	8.0	6.6	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.0	32.7	94.8	16.9	10.5	12.8	8.0	6.6	1.7
LOS	E	C	F	B	B	B	A	A	A
Approach Delay		51.2		50.5		12.7		6.6	
Approach LOS		D		D		B		A	

### Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 67 (42%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 15.2

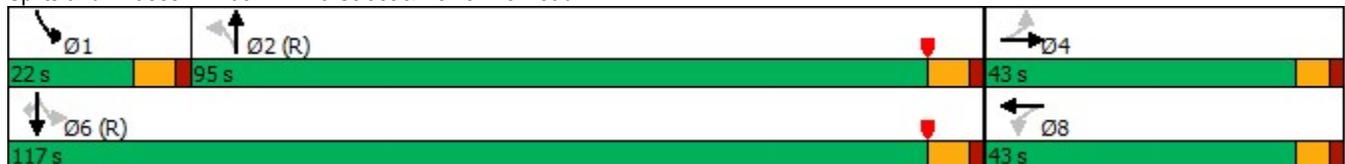
Intersection LOS: B

Intersection Capacity Utilization 68.8%

ICU Level of Service C

Analysis Period (min) 15

### Splits and Phases: 103: NW 29 Street & Powerline Road



## Queues

### 103: NW 29 Street & Powerline Road



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	22	20	151	199	7	1119	136	1106	37
v/c Ratio	0.28	0.08	0.80	0.54	0.02	0.47	0.39	0.40	0.03
Control Delay	68.0	32.7	94.8	16.9	10.5	12.8	8.0	6.6	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.0	32.7	94.8	16.9	10.5	12.8	8.0	6.6	1.7
Queue Length 50th (ft)	21	7	155	23	2	258	30	172	0
Queue Length 95th (ft)	50	32	224	96	10	376	60	256	10
Internal Link Dist (ft)		318		329		280		1584	
Turn Bay Length (ft)	100		100		70		320		320
Base Capacity (vph)	133	397	317	504	329	2406	421	2737	1198
Starvation Cap Reductn	0	0	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	0.17	0.05	0.48	0.39	0.02	0.47	0.32	0.40	0.03

#### Intersection Summary

# HCM 6th Signalized Intersection Summary

## 103: NW 29 Street & Powerline Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	7	11	134	22	155	6	944	52	121	984	33
Future Volume (veh/h)	20	7	11	134	22	155	6	944	52	121	984	33
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		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	22	8	12	151	25	174	7	1061	58	136	1106	37
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	82	102	152	240	31	212	393	2336	128	428	2705	1180
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.92	0.92	0.92	0.05	1.00	1.00
Sat Flow, veh/h	1174	670	1005	1381	201	1402	505	3394	186	1767	3526	1538
Grp Volume(v), veh/h	22	0	20	151	0	199	7	551	568	136	1106	37
Grp Sat Flow(s),veh/h/ln	1174	0	1675	1381	0	1603	505	1763	1817	1767	1763	1538
Q Serve(g_s), s	3.0	0.0	1.6	16.9	0.0	19.2	0.2	7.2	7.2	3.6	0.0	0.0
Cycle Q Clear(g_c), s	22.2	0.0	1.6	18.5	0.0	19.2	0.2	7.2	7.2	3.6	0.0	0.0
Prop In Lane	1.00		0.60	1.00		0.87	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	82	0	254	240	0	243	393	1213	1251	428	2705	1180
V/C Ratio(X)	0.27	0.00	0.08	0.63	0.00	0.82	0.02	0.45	0.45	0.32	0.41	0.03
Avail Cap(c_a), veh/h	175	0	387	350	0	371	393	1213	1251	532	2705	1180
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	76.5	0.0	58.3	66.2	0.0	65.8	2.1	2.4	2.4	6.3	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.0	0.0	4.7	0.1	1.2	1.2	0.0	0.0	0.0
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	0.9	0.0	0.7	6.0	0.0	8.2	0.0	2.2	2.3	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.2	0.0	58.3	67.2	0.0	70.4	2.2	3.6	3.6	6.4	0.0	0.0
LnGrp LOS	E	A	E	E	A	E	A	A	A	A	A	A
Approach Vol, veh/h		42			350			1126			1279	
Approach Delay, s/veh		68.2			69.1			3.6			0.7	
Approach LOS		E			E			A			A	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	12.6	117.1		30.2		129.8		30.2				
Change Period (Y+Rc), s	7.0	7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s	15.0	88.0		37.0		110.0		37.0				
Max Q Clear Time (g_c+I1), s	5.6	9.2		24.2		2.0		21.2				
Green Ext Time (p_c), s	0.1	10.4		0.0		11.6		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				11.4								
HCM 6th LOS				B								

# Timings

## 104: Andrews Avenue & NE 26th Street

	↙	↖	↑	↘	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↙	↖	↑↔	↘	↑↑
Traffic Volume (vph)	251	269	1091	158	1092
Future Volume (vph)	251	269	1091	158	1092
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	8		2	1	6
Permitted Phases		8		6	
Detector Phase	8	8	2	1	6
Switch Phase					
Minimum Initial (s)	6.0	6.0	12.0	4.0	12.0
Minimum Split (s)	24.0	24.0	24.0	15.0	24.0
Total Split (s)	25.0	25.0	50.0	15.0	65.0
Total Split (%)	27.8%	27.8%	55.6%	16.7%	72.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	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	None	C-Max
Act Effct Green (s)	16.3	16.3	48.6	61.7	61.7
Actuated g/C Ratio	0.18	0.18	0.54	0.69	0.69
v/c Ratio	0.81	0.59	0.68	0.59	0.46
Control Delay	54.8	12.9	18.1	21.7	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	54.8	12.9	18.1	21.7	12.9
LOS	D	B	B	C	B
Approach Delay	33.2		18.1		14.0
Approach LOS	C		B		B

### Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 33 (37%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 19.0

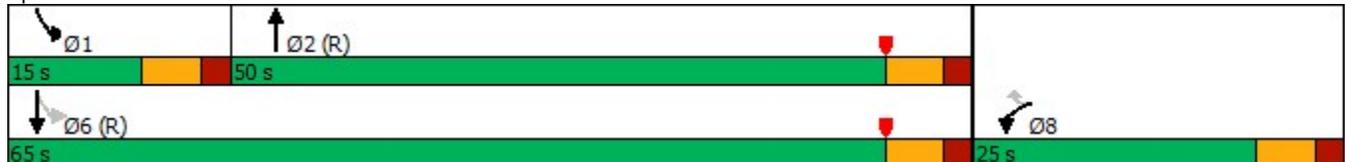
Intersection LOS: B

Intersection Capacity Utilization 72.9%

ICU Level of Service C

Analysis Period (min) 15

### Splits and Phases: 104: Andrews Avenue & NE 26th Street



## Queues

### 104: Andrews Avenue & NE 26th Street



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	256	274	1276	161	1114
v/c Ratio	0.81	0.59	0.68	0.59	0.46
Control Delay	54.8	12.9	18.1	21.7	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	54.8	12.9	18.1	21.7	12.9
Queue Length 50th (ft)	138	22	265	84	362
Queue Length 95th (ft)	#233	93	374	m106	m450
Internal Link Dist (ft)	287		336		2155
Turn Bay Length (ft)				130	
Base Capacity (vph)	369	505	1864	303	2402
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.69	0.54	0.68	0.53	0.46

#### Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

# HCM 6th Signalized Intersection Summary

## 104: Andrews Avenue & NE 26th Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	251	269	1091	160	158	1092
Future Volume (veh/h)	251	269	1091	160	158	1092
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	256	274	1113	163	161	1114
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	344	306	1684	246	338	2369
Arrive On Green	0.19	0.19	0.73	0.73	0.08	0.89
Sat Flow, veh/h	1767	1572	3179	451	1767	3618
Grp Volume(v), veh/h	256	274	635	641	161	1114
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1774	1767	1763
Q Serve(g_s), s	12.3	15.3	17.0	17.2	3.4	5.2
Cycle Q Clear(g_c), s	12.3	15.3	17.0	17.2	3.4	5.2
Prop In Lane	1.00	1.00		0.25	1.00	
Lane Grp Cap(c), veh/h	344	306	962	968	338	2369
V/C Ratio(X)	0.74	0.90	0.66	0.66	0.48	0.47
Avail Cap(c_a), veh/h	373	332	962	968	409	2369
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.22	0.22
Uniform Delay (d), s/veh	34.1	35.3	7.9	8.0	9.9	1.8
Incr Delay (d2), s/veh	6.1	22.9	3.5	3.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	7.7	5.1	5.2	1.1	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.2	58.3	11.5	11.5	10.0	2.0
LnGrp LOS	D	E	B	B	A	A
Approach Vol, veh/h	530		1276			1275
Approach Delay, s/veh	49.6		11.5			3.0
Approach LOS	D		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.4	55.1			66.5	23.5
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	9.0	44.0			59.0	19.0
Max Q Clear Time (g_c+I1), s	5.4	19.2			7.2	17.3
Green Ext Time (p_c), s	0.0	10.2			11.1	0.2
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			14.5			
HCM 6th LOS			B			

# Timings

## 105: NE 6 Avenue & Oakland Park Boulevard

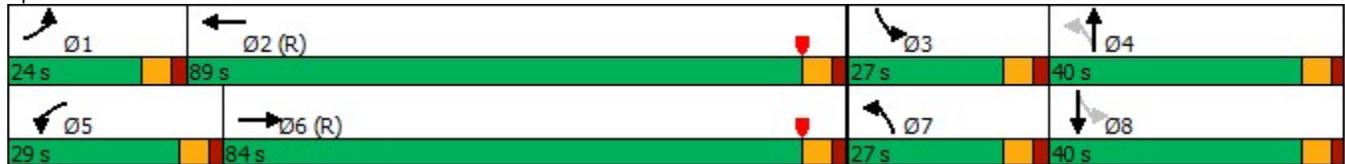


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↶	↶↶↶	↶	↶↶↶	↶	↶	↶	↶
Traffic Volume (vph)	66	1396	131	1508	150	214	105	253
Future Volume (vph)	66	1396	131	1508	150	214	105	253
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	6.0	4.0	6.0
Minimum Split (s)	10.0	30.0	10.0	30.0	10.0	40.0	10.0	40.0
Total Split (s)	24.0	84.0	29.0	89.0	27.0	40.0	27.0	40.0
Total Split (%)	13.3%	46.7%	16.1%	49.4%	15.0%	22.2%	15.0%	22.2%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	Max	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	18.7	83.4	18.3	83.0	58.8	41.7	49.8	37.2
Actuated g/C Ratio	0.10	0.46	0.10	0.46	0.33	0.23	0.28	0.21
v/c Ratio	0.40	0.76	0.82	0.76	0.76	0.69	0.47	0.92
Control Delay	86.0	30.3	112.2	42.7	67.2	72.2	49.4	97.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	86.0	30.3	112.2	42.7	67.2	72.2	49.4	97.8
LOS	F	C	F	D	E	E	D	F
Approach Delay		32.5		48.0		70.4		85.6
Approach LOS		C		D		E		F

### Intersection Summary

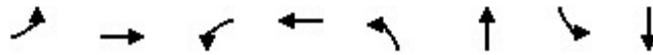
Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 139 (77%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.92  
 Intersection Signal Delay: 47.8  
 Intersection LOS: D  
 Intersection Capacity Utilization 83.8%  
 ICU Level of Service E  
 Analysis Period (min) 15

### Splits and Phases: 105: NE 6 Avenue & Oakland Park Boulevard



# Queues

## 105: NE 6 Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	73	1753	146	1747	167	289	117	345
v/c Ratio	0.40	0.76	0.82	0.76	0.76	0.69	0.47	0.92
Control Delay	86.0	30.3	112.2	42.7	67.2	72.2	49.4	97.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	86.0	30.3	112.2	42.7	67.2	72.2	49.4	97.8
Queue Length 50th (ft)	87	332	172	619	145	309	98	398
Queue Length 95th (ft)	m122	m420	253	677	221	440	154	#639
Internal Link Dist (ft)		2163		358		357		314
Turn Bay Length (ft)	400		400		190		190	
Base Capacity (vph)	182	2296	223	2308	253	418	328	374
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.76	0.65	0.76	0.66	0.69	0.36	0.92

### Intersection Summary

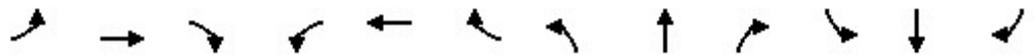
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

# HCM 6th Signalized Intersection Summary

## 105: NE 6 Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑		↖	↑↑↑		↖	↑		↗	↑	
Traffic Volume (veh/h)	66	1396	182	131	1508	64	150	214	46	105	253	58
Future Volume (veh/h)	66	1396	182	131	1508	64	150	214	46	105	253	58
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		0.98	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	73	1551	202	146	1676	71	167	238	51	117	281	64
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	177	2253	293	164	2446	104	194	312	67	218	275	63
Arrive On Green	0.13	0.66	0.66	0.12	0.65	0.65	0.09	0.21	0.21	0.06	0.19	0.19
Sat Flow, veh/h	1767	4523	588	1767	4983	211	1767	1475	316	1767	1456	332
Grp Volume(v), veh/h	73	1157	596	146	1135	612	167	0	289	117	0	345
Grp Sat Flow(s),veh/h/ln	1767	1689	1734	1767	1689	1817	1767	0	1791	1767	0	1788
Q Serve(g_s), s	6.8	38.3	38.4	14.6	38.0	38.1	13.6	0.0	27.3	9.5	0.0	34.0
Cycle Q Clear(g_c), s	6.8	38.3	38.4	14.6	38.0	38.1	13.6	0.0	27.3	9.5	0.0	34.0
Prop In Lane	1.00		0.34	1.00		0.12	1.00		0.18	1.00		0.19
Lane Grp Cap(c), veh/h	177	1682	864	164	1657	892	194	0	379	218	0	338
V/C Ratio(X)	0.41	0.69	0.69	0.89	0.69	0.69	0.86	0.00	0.76	0.54	0.00	1.02
Avail Cap(c_a), veh/h	177	1682	864	226	1657	892	246	0	379	311	0	338
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.58	0.58	0.58	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	73.2	21.7	21.7	78.0	22.5	22.5	55.3	0.0	66.7	55.4	0.0	73.0
Incr Delay (d2), s/veh	4.1	1.4	2.6	21.7	2.3	4.3	18.3	0.0	8.0	0.8	0.0	54.6
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	3.3	14.2	14.9	7.5	14.4	16.0	7.1	0.0	13.4	4.4	0.0	20.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.3	23.1	24.4	99.7	24.8	26.8	73.6	0.0	74.7	56.2	0.0	127.6
LnGrp LOS	E	C	C	F	C	C	E	A	E	E	A	F
Approach Vol, veh/h		1826			1893			456			462	
Approach Delay, s/veh		25.7			31.2			74.3			109.5	
Approach LOS		C			C			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	24.0	94.3	17.6	44.1	22.7	95.6	21.7	40.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	18.0	83.0	21.0	34.0	23.0	78.0	21.0	34.0				
Max Q Clear Time (g_c+I1), s	8.8	40.1	11.5	29.3	16.6	40.4	15.6	36.0				
Green Ext Time (p_c), s	0.0	19.2	0.1	0.5	0.1	18.4	0.1	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			41.1									
HCM 6th LOS			D									

# Timings

## 101: Andrews Avenue & Oakland Park Boulevard

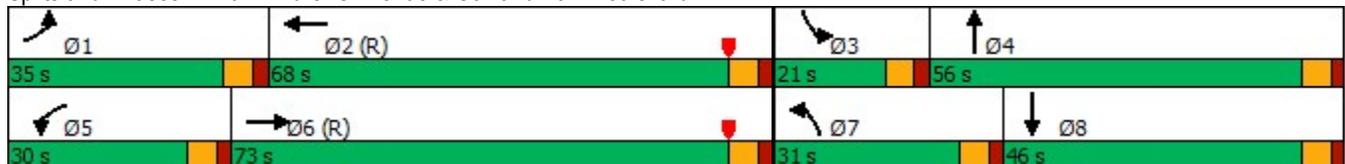


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑↑↓	↘	↑↑↓	↘↘	↑↓	↘	↑↓
Traffic Volume (vph)	272	1095	212	1427	342	797	93	615
Future Volume (vph)	272	1095	212	1427	342	797	93	615
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	6.0	5.0	6.0
Minimum Split (s)	11.0	41.0	11.0	41.0	11.0	36.0	11.0	36.0
Total Split (s)	35.0	73.0	30.0	68.0	31.0	56.0	21.0	46.0
Total Split (%)	19.4%	40.6%	16.7%	37.8%	17.2%	31.1%	11.7%	25.6%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	29.0	67.5	23.5	62.0	21.9	52.3	12.7	43.1
Actuated g/C Ratio	0.16	0.38	0.13	0.34	0.12	0.29	0.07	0.24
v/c Ratio	0.99	0.75	0.96	0.92	0.85	0.98	0.78	0.94
Control Delay	124.9	50.9	104.4	99.4	92.7	82.3	118.9	84.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	124.9	50.9	104.4	99.4	92.7	82.3	118.9	84.7
LOS	F	D	F	F	F	F	F	F
Approach Delay		63.2		100.0		85.0		88.5
Approach LOS		E		F		F		F

### Intersection Summary

Cycle Length: 180	
Actuated Cycle Length: 180	
Offset: 114 (63%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 83.9	Intersection LOS: F
Intersection Capacity Utilization 97.4%	ICU Level of Service F
Analysis Period (min) 15	

### Splits and Phases: 101: Andrews Avenue & Oakland Park Boulevard



## Queues

### 101: Andrews Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	280	1395	219	1587	353	983	96	776
v/c Ratio	0.99	0.75	0.96	0.92	0.85	0.98	0.78	0.94
Control Delay	124.9	50.9	104.4	99.4	92.7	82.3	118.9	84.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	124.9	50.9	104.4	99.4	92.7	82.3	118.9	84.7
Queue Length 50th (ft)	336	517	273	631	189	~642	113	474
Queue Length 95th (ft)	#543	575	m#428	685	255	#792	#191	#637
Internal Link Dist (ft)		578		2163		2155		369
Turn Bay Length (ft)	510		340		380		380	
Base Capacity (vph)	282	1855	233	1719	472	998	146	825
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.75	0.94	0.92	0.75	0.98	0.66	0.94

#### 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.

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

# HCM 6th Signalized Intersection Summary

## 101: Andrews Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑		↗	↑↑↑		↗↘	↑↑		↗	↑↑	
Traffic Volume (veh/h)	272	1095	258	212	1427	113	342	797	156	93	615	138
Future Volume (veh/h)	272	1095	258	212	1427	113	342	797	156	93	615	138
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		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	280	1129	266	219	1471	116	353	822	161	96	634	142
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	285	1602	377	235	1739	137	394	814	159	114	648	145
Arrive On Green	0.21	0.52	0.52	0.18	0.48	0.48	0.04	0.09	0.09	0.06	0.23	0.23
Sat Flow, veh/h	1767	4094	964	1767	4787	377	3428	2929	574	1767	2851	638
Grp Volume(v), veh/h	280	931	464	219	1038	549	353	495	488	96	392	384
Grp Sat Flow(s),veh/h/ln	1767	1689	1681	1767	1689	1787	1714	1763	1740	1767	1763	1726
Q Serve(g_s), s	28.4	37.6	37.6	22.0	48.3	48.4	18.5	50.0	50.0	9.7	39.7	39.9
Cycle Q Clear(g_c), s	28.4	37.6	37.6	22.0	48.3	48.4	18.5	50.0	50.0	9.7	39.7	39.9
Prop In Lane	1.00		0.57	1.00		0.21	1.00		0.33	1.00		0.37
Lane Grp Cap(c), veh/h	285	1321	658	235	1227	649	394	490	483	114	401	392
V/C Ratio(X)	0.98	0.70	0.70	0.93	0.85	0.85	0.90	1.01	1.01	0.84	0.98	0.98
Avail Cap(c_a), veh/h	285	1321	658	236	1227	649	476	490	483	147	401	392
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.57	0.57	0.57	0.69	0.69	0.69	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.5	35.3	35.3	73.2	42.1	42.1	85.5	81.8	81.8	83.3	69.1	69.1
Incr Delay (d2), s/veh	48.5	3.2	6.2	27.1	4.3	7.8	11.4	36.4	36.6	23.0	38.7	39.9
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	16.4	15.4	15.9	11.6	20.0	21.8	9.2	28.9	28.6	5.2	22.3	22.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	119.0	38.5	41.5	100.4	46.4	49.9	96.9	118.1	118.3	106.3	107.8	109.1
LnGrp LOS	F	D	D	F	D	D	F	F	F	F	F	F
Approach Vol, veh/h		1675			1806			1336				872
Approach Delay, s/veh		52.8			54.0			112.6				108.2
Approach LOS		D			D			F				F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.0	71.4	17.6	56.0	30.0	76.4	26.7	46.9				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	29.0	62.0	15.0	50.0	24.0	67.0	25.0	40.0				
Max Q Clear Time (g_c+I1), s	30.4	50.4	11.7	52.0	24.0	39.6	20.5	41.9				
Green Ext Time (p_c), s	0.0	7.8	0.0	0.0	0.0	11.8	0.2	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay					75.7							
HCM 6th LOS					E							

# Timings

## 102: Powerline Road & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↖	↑↑↑	↖	↖	↖↑↑	↖↖	↑↑
Traffic Volume (vph)	230	1771	141	1704	154	383	593	188	655
Future Volume (vph)	230	1771	141	1704	154	383	593	188	655
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	6	5	2			4		3
Permitted Phases	6		2		2	4		3	
Detector Phase	1	6	5	2	2	4	4	3	3
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	11.0	39.0	11.0	39.0	39.0	37.0	37.0	38.0	38.0
Total Split (s)	27.0	82.0	19.0	74.0	74.0	37.0	37.0	42.0	42.0
Total Split (%)	15.0%	45.6%	10.6%	41.1%	41.1%	20.6%	20.6%	23.3%	23.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes						
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	94.0	75.3	78.7	67.0	67.0	30.0	30.0	35.0	35.0
Actuated g/C Ratio	0.52	0.42	0.44	0.37	0.37	0.17	0.17	0.19	0.19
v/c Ratio	1.00	1.03	0.93	0.93	0.23	2.22	1.77dl	2.43	1.25
Control Delay	112.7	78.0	101.2	63.7	6.3	612.3	369.7	707.1	180.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.7	78.0	101.2	63.7	6.3	612.3	369.7	707.1	180.9
LOS	F	E	F	E	A	F	F	F	F
Approach Delay		81.5		61.9			411.1		278.8
Approach LOS		F		E			F		F

### Intersection Summary

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 20 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.43

Intersection Signal Delay: 163.6

Intersection LOS: F

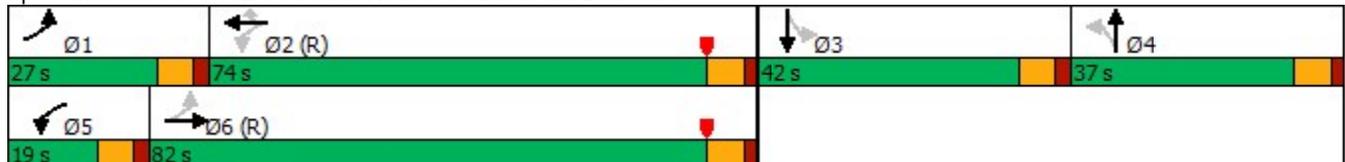
Intersection Capacity Utilization 113.9%

ICU Level of Service H

Analysis Period (min) 15

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

### Splits and Phases: 102: Powerline Road & Oakland Park Boulevard



## Queues

### 102: Powerline Road & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	235	2135	144	1739	157	195	948	192	840
v/c Ratio	1.00	1.03	0.93	0.93	0.23	2.22	1.77dl	2.43	1.25
Control Delay	112.7	78.0	101.2	63.7	6.3	612.3	369.7	707.1	180.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.7	78.0	101.2	63.7	6.3	612.3	369.7	707.1	180.9
Queue Length 50th (ft)	231	~981	120	723	4	~427	~634	~191	~643
Queue Length 95th (ft)	#428	#1065	#268	790	56	#636	#739	#284	#784
Internal Link Dist (ft)		715		592			1584		537
Turn Bay Length (ft)	515		350		160	390		260	
Base Capacity (vph)	235	2071	158	1874	671	88	552	79	670
Starvation Cap Reductn	0	0	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	1.00	1.03	0.91	0.93	0.23	2.22	1.72	2.43	1.25

#### 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.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

# HCM Signalized Intersection Capacity Analysis

## 102: Powerline Road & Oakland Park Boulevard

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	1771	321	141	1704	154	383	593	144	188	655	169
Future Volume (vph)	230	1771	321	141	1704	154	383	593	144	188	655	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	0.86	0.86		0.97	0.95	
Frbp, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	
Satd. Flow (prot)	1752	4920		1752	5036	1547	1505	4589		3400	3384	
Flt Permitted	0.05	1.00		0.06	1.00	1.00	0.34	0.70		0.11	1.00	
Satd. Flow (perm)	100	4920		110	5036	1547	532	3232		409	3384	
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)	235	1807	328	144	1739	157	391	605	147	192	668	172
RTOR Reduction (vph)	0	15	0	0	0	95	0	13	0	0	13	0
Lane Group Flow (vph)	235	2120	0	144	1739	62	195	935	0	192	827	0
Confl. Peds. (#/hr)	1					1	3		2	2		3
Confl. Bikes (#/hr)												2
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4				3
Permitted Phases	6			2		2	4			3		
Actuated Green, G (s)	94.0	75.3		78.7	67.0	67.0	30.0	30.0		35.0	35.0	
Effective Green, g (s)	94.0	75.3		78.7	67.0	67.0	30.0	30.0		35.0	35.0	
Actuated g/C Ratio	0.52	0.42		0.44	0.37	0.37	0.17	0.17		0.19	0.19	
Clearance Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	235	2058		154	1874	575	88	538		79	658	
v/s Ratio Prot	c0.11	c0.43		0.06	0.35							0.24
v/s Ratio Perm	0.41			0.35		0.04	c0.37	0.29		c0.47		
v/c Ratio	1.00	1.03		0.94	0.93	0.11	2.22	1.77dl		2.43	1.26	
Uniform Delay, d1	62.2	52.4		52.7	54.2	36.9	75.0	75.0		72.5	72.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	58.7	28.1		52.6	9.6	0.4	582.2	339.5		680.3	127.8	
Delay (s)	120.9	80.4		105.2	63.7	37.3	657.2	414.5		752.8	200.3	
Level of Service	F	F		F	E	D	F	F		F	F	
Approach Delay (s)		84.5			64.6			455.9			303.1	
Approach LOS		F			E			F			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			177.0			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			1.61									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)				28.0		
Intersection Capacity Utilization			113.9%			ICU Level of Service				H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

HCM 6th Signalized Intersection Summary  
102: Powerline Road & Oakland Park Boulevard

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HCM 6th Edition methodology expects strict NEMA phasing.

# Timings

## 103: NW 29 Street & Powerline Road

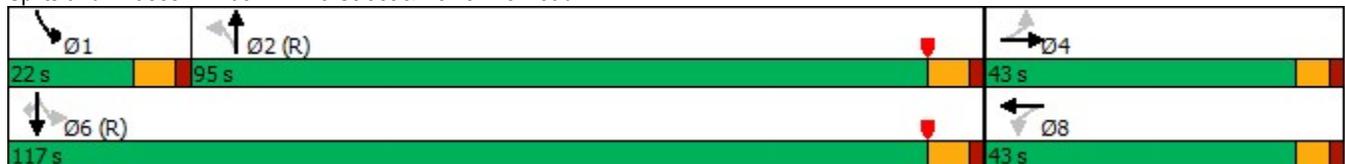


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	20	7	134	22	6	944	121	985	33
Future Volume (vph)	20	7	134	22	6	944	121	985	33
Turn Type	Perm	NA	Perm	NA	Perm	NA	pm+pt	NA	Perm
Protected Phases		4		8		2	1	6	
Permitted Phases	4		8		2		6		6
Detector Phase	4	4	8	8	2	2	1	6	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	10.0	10.0	4.0	10.0	10.0
Minimum Split (s)	43.0	43.0	43.0	43.0	28.0	28.0	11.0	28.0	28.0
Total Split (s)	43.0	43.0	43.0	43.0	95.0	95.0	22.0	117.0	117.0
Total Split (%)	26.9%	26.9%	26.9%	26.9%	59.4%	59.4%	13.8%	73.1%	73.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag					Lag	Lag	Lead		
Lead-Lag Optimize?					Yes	Yes	Yes		
Recall Mode	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	22.0	22.0	22.0	22.0	110.8	110.8	125.0	125.0	125.0
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.69	0.69	0.78	0.78	0.78
v/c Ratio	0.28	0.08	0.80	0.54	0.02	0.47	0.39	0.40	0.03
Control Delay	68.0	32.7	94.8	16.9	10.5	12.8	8.0	6.6	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.0	32.7	94.8	16.9	10.5	12.8	8.0	6.6	1.7
LOS	E	C	F	B	B	B	A	A	A
Approach Delay		51.2		50.5		12.7		6.6	
Approach LOS		D		D		B		A	

### Intersection Summary

Cycle Length: 160	
Actuated Cycle Length: 160	
Offset: 67 (42%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow	
Natural Cycle: 85	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 15.2	Intersection LOS: B
Intersection Capacity Utilization 68.8%	ICU Level of Service C
Analysis Period (min) 15	

### Splits and Phases: 103: NW 29 Street & Powerline Road



# Queues

## 103: NW 29 Street & Powerline Road



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	22	20	151	199	7	1121	136	1107	37
v/c Ratio	0.28	0.08	0.80	0.54	0.02	0.47	0.39	0.40	0.03
Control Delay	68.0	32.7	94.8	16.9	10.5	12.8	8.0	6.6	1.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.0	32.7	94.8	16.9	10.5	12.8	8.0	6.6	1.7
Queue Length 50th (ft)	21	7	155	23	2	258	30	172	0
Queue Length 95th (ft)	50	32	224	96	10	377	60	257	10
Internal Link Dist (ft)		318		329		280		1584	
Turn Bay Length (ft)	100		100		70		320		320
Base Capacity (vph)	133	397	317	504	329	2407	420	2737	1198
Starvation Cap Reductn	0	0	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	0.17	0.05	0.48	0.39	0.02	0.47	0.32	0.40	0.03

### Intersection Summary

# HCM 6th Signalized Intersection Summary

## 103: NW 29 Street & Powerline Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	7	11	134	22	155	6	944	53	121	985	33
Future Volume (veh/h)	20	7	11	134	22	155	6	944	53	121	985	33
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		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	22	8	12	151	25	174	7	1061	60	136	1107	37
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	82	102	152	240	31	212	393	2331	132	428	2705	1180
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.92	0.92	0.92	0.05	1.00	1.00
Sat Flow, veh/h	1174	670	1005	1381	201	1402	505	3387	191	1767	3526	1538
Grp Volume(v), veh/h	22	0	20	151	0	199	7	552	569	136	1107	37
Grp Sat Flow(s),veh/h/ln	1174	0	1675	1381	0	1603	505	1763	1816	1767	1763	1538
Q Serve(g_s), s	3.0	0.0	1.6	16.9	0.0	19.2	0.2	7.3	7.3	3.6	0.0	0.0
Cycle Q Clear(g_c), s	22.2	0.0	1.6	18.5	0.0	19.2	0.2	7.3	7.3	3.6	0.0	0.0
Prop In Lane	1.00		0.60	1.00		0.87	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	82	0	254	240	0	243	393	1213	1250	428	2705	1180
V/C Ratio(X)	0.27	0.00	0.08	0.63	0.00	0.82	0.02	0.46	0.46	0.32	0.41	0.03
Avail Cap(c_a), veh/h	175	0	387	350	0	371	393	1213	1250	531	2705	1180
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.09	0.09	0.09
Uniform Delay (d), s/veh	76.5	0.0	58.3	66.2	0.0	65.8	2.1	2.4	2.4	6.3	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.0	0.0	4.7	0.1	1.2	1.2	0.0	0.0	0.0
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	0.9	0.0	0.7	6.0	0.0	8.2	0.0	2.2	2.3	1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.2	0.0	58.3	67.2	0.0	70.4	2.2	3.7	3.6	6.4	0.0	0.0
LnGrp LOS	E	A	E	E	A	E	A	A	A	A	A	A
Approach Vol, veh/h		42			350			1128			1280	
Approach Delay, s/veh		68.2			69.1			3.6			0.7	
Approach LOS		E			E			A			A	
Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	12.6	117.1		30.2		129.8		30.2				
Change Period (Y+Rc), s	7.0	7.0		6.0		7.0		6.0				
Max Green Setting (Gmax), s	15.0	88.0		37.0		110.0		37.0				
Max Q Clear Time (g_c+I1), s	5.6	9.3		24.2		2.0		21.2				
Green Ext Time (p_c), s	0.1	10.4		0.0		11.7		0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				11.4								
HCM 6th LOS				B								

# Timings

## 104: Andrews Avenue & NE 26th Street

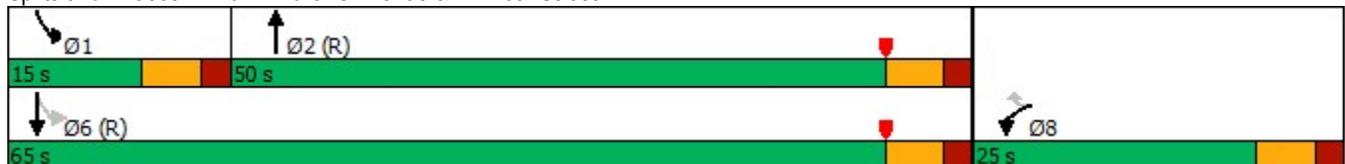
	↙	↖	↑	↘	↓
Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Configurations	↙	↖	↑↓	↘	↑↑
Traffic Volume (vph)	251	270	1092	158	1092
Future Volume (vph)	251	270	1092	158	1092
Turn Type	Prot	Perm	NA	pm+pt	NA
Protected Phases	8		2	1	6
Permitted Phases		8		6	
Detector Phase	8	8	2	1	6
Switch Phase					
Minimum Initial (s)	6.0	6.0	12.0	4.0	12.0
Minimum Split (s)	24.0	24.0	24.0	15.0	24.0
Total Split (s)	25.0	25.0	50.0	15.0	65.0
Total Split (%)	27.8%	27.8%	55.6%	16.7%	72.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	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	None	C-Max
Act Effct Green (s)	16.3	16.3	48.6	61.7	61.7
Actuated g/C Ratio	0.18	0.18	0.54	0.69	0.69
v/c Ratio	0.81	0.59	0.69	0.59	0.46
Control Delay	54.8	13.1	18.1	21.7	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	54.8	13.1	18.1	21.7	12.9
LOS	D	B	B	C	B
Approach Delay	33.2		18.1		14.0
Approach LOS	C		B		B

### Intersection Summary

Cycle Length: 90  
 Actuated Cycle Length: 90  
 Offset: 33 (37%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.81  
 Intersection Signal Delay: 19.0  
 Intersection Capacity Utilization 73.0%  
 Analysis Period (min) 15

Intersection LOS: B  
 ICU Level of Service C

### Splits and Phases: 104: Andrews Avenue & NE 26th Street



## Queues

### 104: Andrews Avenue & NE 26th Street



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	256	276	1277	161	1114
v/c Ratio	0.81	0.59	0.69	0.59	0.46
Control Delay	54.8	13.1	18.1	21.7	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	54.8	13.1	18.1	21.7	12.9
Queue Length 50th (ft)	138	23	265	84	361
Queue Length 95th (ft)	#233	95	375	m106	m448
Internal Link Dist (ft)	287		336		2155
Turn Bay Length (ft)				130	
Base Capacity (vph)	369	505	1864	303	2402
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.69	0.55	0.69	0.53	0.46

#### Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

# HCM 6th Signalized Intersection Summary

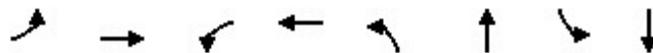
## 104: Andrews Avenue & NE 26th Street



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	251	270	1092	160	158	1092
Future Volume (veh/h)	251	270	1092	160	158	1092
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	256	276	1114	163	161	1114
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	346	308	1681	245	337	2365
Arrive On Green	0.20	0.20	0.72	0.72	0.08	0.89
Sat Flow, veh/h	1767	1572	3179	450	1767	3618
Grp Volume(v), veh/h	256	276	635	642	161	1114
Grp Sat Flow(s),veh/h/ln	1767	1572	1763	1774	1767	1763
Q Serve(g_s), s	12.3	15.4	17.2	17.3	3.4	5.3
Cycle Q Clear(g_c), s	12.3	15.4	17.2	17.3	3.4	5.3
Prop In Lane	1.00	1.00		0.25	1.00	
Lane Grp Cap(c), veh/h	346	308	960	966	337	2365
V/C Ratio(X)	0.74	0.90	0.66	0.66	0.48	0.47
Avail Cap(c_a), veh/h	373	332	960	966	408	2365
HCM Platoon Ratio	1.00	1.00	1.33	1.33	1.33	1.33
Upstream Filter(l)	1.00	1.00	1.00	1.00	0.22	0.22
Uniform Delay (d), s/veh	34.0	35.3	8.0	8.0	10.0	1.9
Incr Delay (d2), s/veh	6.0	23.3	3.6	3.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	7.7	5.1	5.2	1.1	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.0	58.6	11.6	11.6	10.1	2.0
LnGrp LOS	D	E	B	B	B	A
Approach Vol, veh/h	532		1277			1275
Approach Delay, s/veh	49.6		11.6			3.0
Approach LOS	D		B			A
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.4	55.0			66.4	23.6
Change Period (Y+Rc), s	6.0	6.0			6.0	6.0
Max Green Setting (Gmax), s	9.0	44.0			59.0	19.0
Max Q Clear Time (g_c+I1), s	5.4	19.3			7.3	17.4
Green Ext Time (p_c), s	0.0	10.2			11.1	0.2
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			14.6			
HCM 6th LOS			B			

# Timings

## 105: NE 6 Avenue & Oakland Park Boulevard

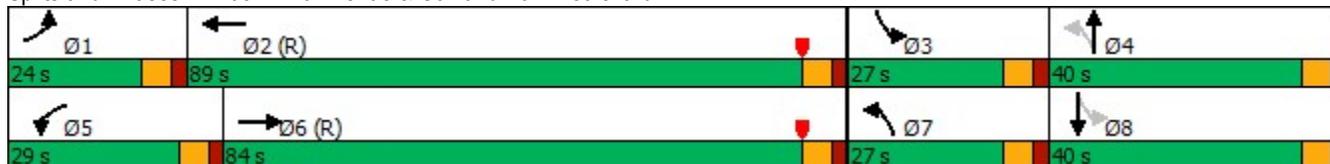


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↙	↑↑↑	↙	↑↑↑	↙	↑	↙	↑
Traffic Volume (vph)	66	1397	131	1509	150	214	105	253
Future Volume (vph)	66	1397	131	1509	150	214	105	253
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	6.0	4.0	6.0
Minimum Split (s)	10.0	30.0	10.0	30.0	10.0	40.0	10.0	40.0
Total Split (s)	24.0	84.0	29.0	89.0	27.0	40.0	27.0	40.0
Total Split (%)	13.3%	46.7%	16.1%	49.4%	15.0%	22.2%	15.0%	22.2%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	Max	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	18.5	83.2	18.3	83.0	59.0	41.9	50.0	37.4
Actuated g/C Ratio	0.10	0.46	0.10	0.46	0.33	0.23	0.28	0.21
v/c Ratio	0.41	0.77	0.82	0.76	0.76	0.69	0.47	0.93
Control Delay	85.9	30.5	112.2	42.7	67.4	71.9	49.3	97.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	85.9	30.5	112.2	42.7	67.4	71.9	49.3	97.9
LOS	F	C	F	D	E	E	D	F
Approach Delay		32.7		48.0		70.3		85.7
Approach LOS		C		D		E		F

### Intersection Summary

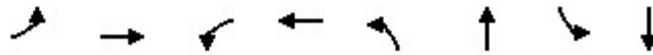
Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 139 (77%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.93  
 Intersection Signal Delay: 48.0  
 Intersection Capacity Utilization 83.9%  
 Analysis Period (min) 15  
 Intersection LOS: D  
 ICU Level of Service E

### Splits and Phases: 105: NE 6 Avenue & Oakland Park Boulevard



## Queues

### 105: NE 6 Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	73	1754	146	1748	167	289	117	347
v/c Ratio	0.41	0.77	0.82	0.76	0.76	0.69	0.47	0.93
Control Delay	85.9	30.5	112.2	42.7	67.4	71.9	49.3	97.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	85.9	30.5	112.2	42.7	67.4	71.9	49.3	97.9
Queue Length 50th (ft)	87	334	172	620	145	309	98	401
Queue Length 95th (ft)	m122	m422	253	677	222	440	154	#644
Internal Link Dist (ft)		2163		358		357		314
Turn Bay Length (ft)	400		400		190		190	
Base Capacity (vph)	180	2290	223	2308	253	420	330	375
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.77	0.65	0.76	0.66	0.69	0.35	0.93

#### Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

# HCM 6th Signalized Intersection Summary

## 105: NE 6 Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑		↖	↑↑↑		↖	↑		↖	↑	
Traffic Volume (veh/h)	66	1397	182	131	1509	64	150	214	46	105	253	59
Future Volume (veh/h)	66	1397	182	131	1509	64	150	214	46	105	253	59
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		0.98	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	73	1552	202	146	1677	71	167	238	51	117	281	66
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	177	2253	293	164	2446	103	194	312	67	218	273	64
Arrive On Green	0.13	0.66	0.66	0.12	0.65	0.65	0.09	0.21	0.21	0.06	0.19	0.19
Sat Flow, veh/h	1767	4524	588	1767	4984	211	1767	1475	316	1767	1447	340
Grp Volume(v), veh/h	73	1158	596	146	1136	612	167	0	289	117	0	347
Grp Sat Flow(s),veh/h/ln	1767	1689	1734	1767	1689	1817	1767	0	1791	1767	0	1786
Q Serve(g_s), s	6.8	38.3	38.5	14.6	38.1	38.1	13.6	0.0	27.3	9.5	0.0	34.0
Cycle Q Clear(g_c), s	6.8	38.3	38.5	14.6	38.1	38.1	13.6	0.0	27.3	9.5	0.0	34.0
Prop In Lane	1.00		0.34	1.00		0.12	1.00		0.18	1.00		0.19
Lane Grp Cap(c), veh/h	177	1682	864	164	1657	892	194	0	379	218	0	337
V/C Ratio(X)	0.41	0.69	0.69	0.89	0.69	0.69	0.86	0.00	0.76	0.54	0.00	1.03
Avail Cap(c_a), veh/h	177	1682	864	226	1657	892	246	0	379	311	0	337
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.57	0.57	0.57	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	73.2	21.7	21.7	78.0	22.5	22.5	55.3	0.0	66.7	55.4	0.0	73.0
Incr Delay (d2), s/veh	4.0	1.3	2.6	21.7	2.3	4.3	18.3	0.0	8.0	0.8	0.0	56.5
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	3.3	14.2	14.9	7.5	14.4	16.0	7.1	0.0	13.4	4.4	0.0	21.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.2	23.0	24.3	99.7	24.8	26.8	73.6	0.0	74.7	56.2	0.0	129.5
LnGrp LOS	E	C	C	F	C	C	E	A	E	E	A	F
Approach Vol, veh/h		1827			1894			456			464	
Approach Delay, s/veh		25.6			31.3			74.3			111.0	
Approach LOS		C			C			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	24.0	94.3	17.6	44.1	22.7	95.6	21.7	40.0				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	18.0	83.0	21.0	34.0	23.0	78.0	21.0	34.0				
Max Q Clear Time (g_c+I1), s	8.8	40.1	11.5	29.3	16.6	40.5	15.6	36.0				
Green Ext Time (p_c), s	0.0	19.2	0.1	0.5	0.1	18.4	0.1	0.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			41.2									
HCM 6th LOS			D									

HCM 6th TWSC  
 201: Andrews Avenue & Out Driveway

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕			↕
Traffic Vol, veh/h	0	13	1355	0	0	1264
Future Vol, veh/h	0	13	1355	0	0	1264
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
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, %	3	3	3	3	3	3
Mvmt Flow	0	14	1473	0	0	1374

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	737	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.5	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3	-
Pot Cap-1 Maneuver	0	639	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	-	639	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 639	-
HCM Lane V/C Ratio	- 0.022	-
HCM Control Delay (s)	- 10.8	-
HCM Lane LOS	- B	-
HCM 95th %tile Q(veh)	- 0.1	-

HCM 6th TWSC  
 202: Andrews Avenue & In Driveway

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	TT		TT		T	TT
Traffic Vol, veh/h	0	0	1354	8	14	1250
Future Vol, veh/h	0	0	1354	8	14	1250
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	0	0	1472	9	15	1359

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2187	741	0	0	1481
Stage 1	1477	-	-	-	-
Stage 2	710	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	4.16
Critical Hdwy Stg 1	5.86	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	2.23
Pot Cap-1 Maneuver	38	356	-	-	445
Stage 1	174	-	-	-	-
Stage 2	446	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	37	356	-	-	445
Mov Cap-2 Maneuver	127	-	-	-	-
Stage 1	174	-	-	-	-
Stage 2	431	-	-	-	-

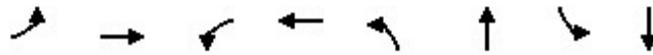
Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	445
HCM Lane V/C Ratio	-	-	-	0.034
HCM Control Delay (s)	-	-	0	13.4
HCM Lane LOS	-	-	A	B
HCM 95th %tile Q(veh)	-	-	-	0.1

# **Future Conditions with Signal Optimization**

# Timings

## 101: Andrews Avenue & Oakland Park Boulevard

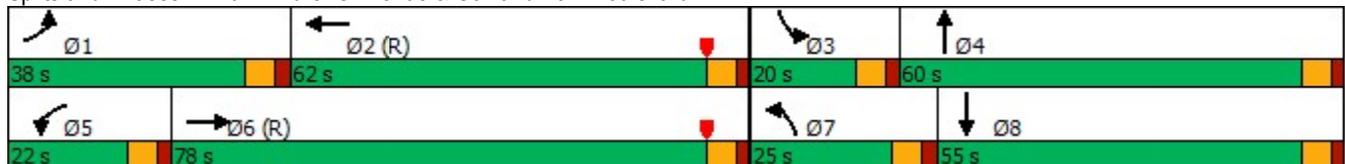


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↘	↗↗↗	↘	↗↗↗	↘↘	↗↗	↘	↗↗
Traffic Volume (vph)	198	1546	130	1090	320	612	98	722
Future Volume (vph)	198	1546	130	1090	320	612	98	722
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	6.0	5.0	6.0
Minimum Split (s)	11.0	41.0	11.0	41.0	11.0	36.0	11.0	36.0
Total Split (s)	38.0	78.0	22.0	62.0	25.0	60.0	20.0	55.0
Total Split (%)	21.1%	43.3%	12.2%	34.4%	13.9%	33.3%	11.1%	30.6%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	24.6	73.2	15.3	63.9	18.7	54.9	12.7	48.8
Actuated g/C Ratio	0.14	0.41	0.08	0.36	0.10	0.30	0.07	0.27
v/c Ratio	0.85	0.92	0.91	0.69	0.94	0.79	0.82	0.98
Control Delay	105.2	58.8	114.1	90.5	99.8	66.5	125.1	87.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	105.2	58.8	114.1	90.5	99.8	66.5	125.1	87.6
LOS	F	E	F	F	F	E	F	F
Approach Delay		63.4		92.8		76.1		91.4
Approach LOS		E		F		E		F

### Intersection Summary

Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 110 (61%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 120  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.98  
 Intersection Signal Delay: 78.2  
 Intersection LOS: E  
 Intersection Capacity Utilization 97.1%  
 ICU Level of Service F  
 Analysis Period (min) 15

### Splits and Phases: 101: Andrews Avenue & Oakland Park Boulevard



## Queues

### 101: Andrews Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	204	1855	134	1215	330	819	101	909
v/c Ratio	0.85	0.92	0.91	0.69	0.94	0.79	0.82	0.98
Control Delay	105.2	58.8	114.1	90.5	99.8	66.5	125.1	87.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	105.2	58.8	114.1	90.5	99.8	66.5	125.1	87.6
Queue Length 50th (ft)	239	763	160	478	203	425	119	558
Queue Length 95th (ft)	326	832	m#291	564	#302	573	#220	#703
Internal Link Dist (ft)		578		2163		2155		369
Turn Bay Length (ft)	510		340		380		380	
Base Capacity (vph)	311	2012	155	1771	358	1043	136	933
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.66	0.92	0.86	0.69	0.92	0.79	0.74	0.97

#### Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

# HCM 6th Signalized Intersection Summary

## 101: Andrews Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑		↗	↑↑↑		↗↗	↑↑		↗	↑↑	
Traffic Volume (veh/h)	198	1546	253	130	1090	88	320	612	182	98	722	160
Future Volume (veh/h)	198	1546	253	130	1090	88	320	612	182	98	722	160
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		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	204	1594	261	134	1124	91	330	631	188	101	744	165
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	222	1778	290	152	1746	141	361	821	244	119	772	171
Arrive On Green	0.17	0.54	0.54	0.11	0.49	0.49	0.21	0.62	0.62	0.07	0.27	0.27
Sat Flow, veh/h	1767	4388	716	1767	4776	386	3428	2663	792	1767	2854	633
Grp Volume(v), veh/h	204	1225	630	134	794	421	330	417	402	101	459	450
Grp Sat Flow(s),veh/h/ln	1767	1689	1726	1767	1689	1786	1714	1763	1693	1767	1763	1724
Q Serve(g_s), s	20.5	58.2	58.8	13.4	31.7	31.7	16.9	31.0	31.2	10.2	46.3	46.3
Cycle Q Clear(g_c), s	20.5	58.2	58.8	13.4	31.7	31.7	16.9	31.0	31.2	10.2	46.3	46.3
Prop In Lane	1.00		0.41	1.00		0.22	1.00		0.47	1.00		0.37
Lane Grp Cap(c), veh/h	222	1369	700	152	1235	653	361	543	522	119	477	466
V/C Ratio(X)	0.92	0.90	0.90	0.88	0.64	0.64	0.91	0.77	0.77	0.85	0.96	0.96
Avail Cap(c_a), veh/h	314	1369	700	157	1235	653	362	543	522	137	480	469
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.82	0.82	0.82	0.81	0.81	0.81	1.00	1.00	1.00
Uniform Delay (d), s/veh	74.1	38.1	38.2	78.9	37.5	37.5	70.3	29.8	29.8	83.0	64.8	64.8
Incr Delay (d2), s/veh	21.0	9.4	16.8	33.2	2.1	4.0	22.8	5.0	5.3	30.2	31.7	32.2
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	10.4	24.5	26.8	7.4	13.0	14.1	8.0	11.4	11.0	5.7	25.1	24.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	95.1	47.5	55.0	112.0	39.6	41.5	93.0	34.8	35.1	113.3	96.5	97.0
LnGrp LOS	F	D	E	F	D	D	F	C	D	F	F	F
Approach Vol, veh/h		2059			1349			1149			1010	
Approach Delay, s/veh		54.5			47.4			51.6			98.4	
Approach LOS		D			D			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	28.6	71.8	18.1	61.5	21.4	79.0	24.9	54.7				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	32.0	56.0	14.0	54.0	16.0	72.0	19.0	49.0				
Max Q Clear Time (g_c+I1), s	22.5	33.7	12.2	33.2	15.4	60.8	18.9	48.3				
Green Ext Time (p_c), s	0.1	9.0	0.0	3.9	0.0	8.6	0.0	0.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				60.1								
HCM 6th LOS				E								

# Timings

## 102: Powerline Road & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↕↕↕	↖	↕↕↕	↗	↖	↕↕↕	↖↖	↕↕
Traffic Volume (vph)	210	1969	112	1381	152	411	578	214	595
Future Volume (vph)	210	1969	112	1381	152	411	578	214	595
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	6	5	2			4		3
Permitted Phases	6		2		2	4		3	
Detector Phase	1	6	5	2	2	4	4	3	3
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	11.0	39.0	11.0	39.0	39.0	41.0	41.0	38.0	38.0
Total Split (s)	13.0	52.0	11.0	50.0	50.0	49.0	49.0	68.0	68.0
Total Split (%)	7.2%	28.9%	6.1%	27.8%	27.8%	27.2%	27.2%	37.8%	37.8%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes								
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	51.0	45.0	47.0	43.0	43.0	42.0	42.0	61.0	61.0
Actuated g/C Ratio	0.28	0.25	0.26	0.24	0.24	0.23	0.23	0.34	0.34
v/c Ratio	2.18	1.79	1.44	1.18	0.35	1.70	1.33	2.80	0.72
Control Delay	588.8	395.0	292.0	148.1	20.8	383.5	207.0	864.2	54.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	588.8	395.0	292.0	148.1	20.8	383.5	207.0	864.2	54.2
LOS	F	F	F	F	C	F	F	F	D
Approach Delay		412.1		146.1			237.3		225.2
Approach LOS		F		F			F		F

### Intersection Summary

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 20 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 2.80

Intersection Signal Delay: 277.9

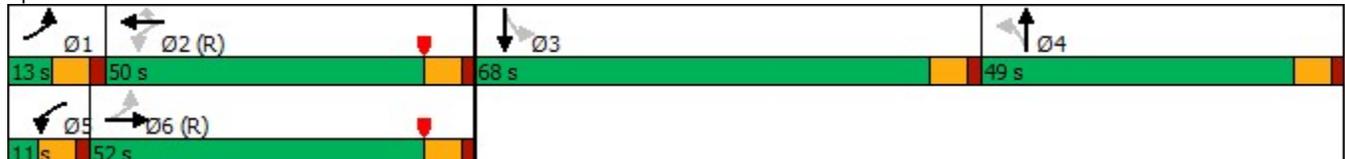
Intersection LOS: F

Intersection Capacity Utilization 115.1%

ICU Level of Service H

Analysis Period (min) 15

### Splits and Phases: 102: Powerline Road & Oakland Park Boulevard



## Queues

### 102: Powerline Road & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	216	2232	115	1424	157	212	1022	221	826
v/c Ratio	2.18	1.79	1.44	1.18	0.35	1.70	1.33	2.80	0.72
Control Delay	588.8	395.0	292.0	148.1	20.8	383.5	207.0	864.2	54.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	588.8	395.0	292.0	148.1	20.8	383.5	207.0	864.2	54.2
Queue Length 50th (ft)	~359	~1447	~145	~736	45	~424	~596	~228	436
Queue Length 95th (ft)	#547	#1529	#285	#833	117	#637	#700	#278	517
Internal Link Dist (ft)		715		592			1584		537
Turn Bay Length (ft)	515		350		160	390		260	
Base Capacity (vph)	99	1246	80	1203	452	125	767	79	1152
Starvation Cap Reductn	0	0	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	2.18	1.79	1.44	1.18	0.35	1.70	1.33	2.80	0.72

#### 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 Signalized Intersection Capacity Analysis

## 102: Powerline Road & Oakland Park Boulevard

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations		 			 			 		 			
Traffic Volume (vph)	210	1969	196	112	1381	152	411	578	208	214	595	207	
Future Volume (vph)	210	1969	196	112	1381	152	411	578	208	214	595	207	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0		
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	0.86	0.86		0.97	0.95		
Frbp, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00		1.00	0.99		
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00		
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.97		1.00	0.96		
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00		
Satd. Flow (prot)	1752	4961		1752	5036	1547	1500	4542		3400	3345		
Flt Permitted	0.09	1.00		0.09	1.00	1.00	0.34	0.69		0.07	1.00		
Satd. Flow (perm)	164	4961		172	5036	1547	538	3184		235	3345		
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	
Adj. Flow (vph)	216	2030	202	115	1424	157	424	596	214	221	613	213	
RTOR Reduction (vph)	0	7	0	0	0	83	0	24	0	0	19	0	
Lane Group Flow (vph)	216	2225	0	115	1424	74	212	998	0	221	807	0	
Confl. Peds. (#/hr)	1		1	1		1	9		3	3		9	
Confl. Bikes (#/hr)												1	
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA		
Protected Phases	1	6		5	2			4				3	
Permitted Phases	6			2		2	4			3			
Actuated Green, G (s)	51.0	45.0		47.0	43.0	43.0	42.0	42.0		61.0	61.0		
Effective Green, g (s)	51.0	45.0		47.0	43.0	43.0	42.0	42.0		61.0	61.0		
Actuated g/C Ratio	0.28	0.25		0.26	0.24	0.24	0.23	0.23		0.34	0.34		
Clearance Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0		
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	2.0	2.0		2.0	2.0		
Lane Grp Cap (vph)	99	1240		80	1203	369	125	742		79	1133		
v/s Ratio Prot	c0.07	0.45		0.03	0.28							0.24	
v/s Ratio Perm	c0.54			0.34		0.05	c0.39	0.31		c0.94			
v/c Ratio	2.18	1.79		1.44	1.18	0.20	1.70	1.35		2.80	0.71		
Uniform Delay, d1	60.8	67.5		67.1	68.5	54.8	69.0	69.0		59.5	51.8		
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00		
Incremental Delay, d2	563.5	360.8		254.1	91.4	1.2	345.1	164.3		842.9	1.8		
Delay (s)	624.3	428.3		321.2	159.9	56.0	414.1	233.3		902.4	53.6		
Level of Service	F	F		F	F	E	F	F		F	D		
Approach Delay (s)		445.6			161.2			264.4			232.8		
Approach LOS		F			F			F			F		
<b>Intersection Summary</b>													
HCM 2000 Control Delay			301.0									HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			2.31										
Actuated Cycle Length (s)			180.0									Sum of lost time (s)	28.0
Intersection Capacity Utilization			115.1%									ICU Level of Service	H
Analysis Period (min)			15										
c Critical Lane Group													

HCM 6th Signalized Intersection Summary  
102: Powerline Road & Oakland Park Boulevard

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HCM 6th Edition methodology expects strict NEMA phasing.

# Timings

## 105: NE 6 Avenue & Oakland Park Boulevard



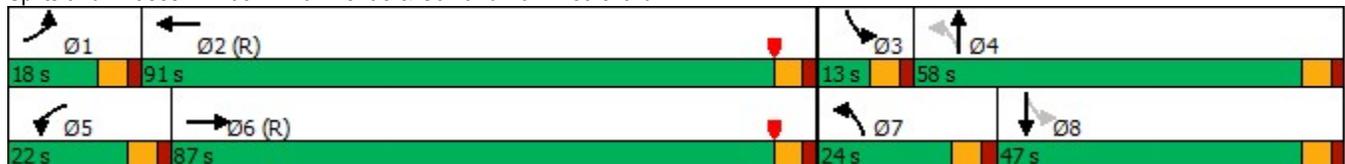
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↙	↑↑↑	↙	↑↑↑	↙	↑	↙	↑
Traffic Volume (vph)	56	1653	75	1073	152	143	86	212
Future Volume (vph)	56	1653	75	1073	152	143	86	212
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	6.0	4.0	6.0
Minimum Split (s)	10.0	30.0	10.0	30.0	10.0	40.0	10.0	40.0
Total Split (s)	18.0	87.0	22.0	91.0	24.0	58.0	13.0	47.0
Total Split (%)	10.0%	48.3%	12.2%	50.6%	13.3%	32.2%	7.2%	26.1%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	Max	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	22.2	95.2	11.9	85.0	54.7	41.8	39.4	32.4
Actuated g/C Ratio	0.12	0.53	0.07	0.47	0.30	0.23	0.22	0.18
v/c Ratio	0.28	0.73	0.70	0.52	0.74	0.53	0.37	0.88
Control Delay	84.9	25.8	111.5	33.9	66.1	60.4	51.0	95.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.9	25.8	111.5	33.9	66.1	60.4	51.0	95.9
LOS	F	C	F	C	E	E	D	F
Approach Delay		27.6		38.8		62.8		85.0
Approach LOS		C		D		E		F

### Intersection Summary

Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 140 (78%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.88  
 Intersection Signal Delay: 39.9  
 Intersection Capacity Utilization 81.9%  
 Analysis Period (min) 15

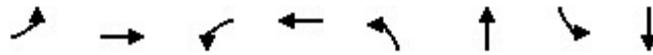
Intersection LOS: D  
 ICU Level of Service D

### Splits and Phases: 105: NE 6 Avenue & Oakland Park Boulevard



## Queues

### 105: NE 6 Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	60	1917	81	1216	163	220	92	287
v/c Ratio	0.28	0.73	0.70	0.52	0.74	0.53	0.37	0.88
Control Delay	84.9	25.8	111.5	33.9	66.1	60.4	51.0	95.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.9	25.8	111.5	33.9	66.1	60.4	51.0	95.9
Queue Length 50th (ft)	73	325	95	362	146	215	79	327
Queue Length 95th (ft)	m84	382	157	406	201	289	122	424
Internal Link Dist (ft)		2163		358		357		314
Turn Bay Length (ft)	400		400		190		190	
Base Capacity (vph)	215	2633	155	2357	234	514	249	412
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.73	0.52	0.52	0.70	0.43	0.37	0.70

#### Intersection Summary

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

# HCM 6th Signalized Intersection Summary

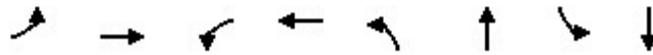
## 105: NE 6 Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑		↖	↑↑↑		↖	↑		↖	↑	
Traffic Volume (veh/h)	56	1653	130	75	1073	58	152	143	61	86	212	55
Future Volume (veh/h)	56	1653	130	75	1073	58	152	143	61	86	212	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	60	1777	140	81	1154	62	163	154	66	92	228	59
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, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	118	2630	207	98	2649	142	210	272	116	235	249	65
Arrive On Green	0.09	0.73	0.73	0.07	0.72	0.72	0.09	0.22	0.22	0.04	0.18	0.18
Sat Flow, veh/h	1767	4778	375	1767	4913	264	1767	1224	525	1767	1420	367
Grp Volume(v), veh/h	60	1254	663	81	793	423	163	0	220	92	0	287
Grp Sat Flow(s),veh/h/ln	1767	1689	1777	1767	1689	1800	1767	0	1749	1767	0	1787
Q Serve(g_s), s	5.8	35.4	35.7	8.1	17.4	17.4	13.3	0.0	20.1	7.0	0.0	28.4
Cycle Q Clear(g_c), s	5.8	35.4	35.7	8.1	17.4	17.4	13.3	0.0	20.1	7.0	0.0	28.4
Prop In Lane	1.00		0.21	1.00		0.15	1.00		0.30	1.00		0.21
Lane Grp Cap(c), veh/h	118	1859	978	98	1821	970	210	0	388	235	0	314
V/C Ratio(X)	0.51	0.67	0.68	0.83	0.44	0.44	0.78	0.00	0.57	0.39	0.00	0.91
Avail Cap(c_a), veh/h	118	1859	978	157	1821	970	236	0	505	235	0	407
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.28	0.28	0.28	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	79.2	15.6	15.6	82.5	14.2	14.2	55.5	0.0	62.3	60.0	0.0	72.9
Incr Delay (d2), s/veh	4.4	0.6	1.1	8.6	0.8	1.4	11.5	0.0	0.5	0.4	0.0	18.9
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	2.8	12.0	12.9	3.9	6.1	6.7	6.7	0.0	9.1	0.5	0.0	14.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.6	16.2	16.7	91.1	15.0	15.6	67.0	0.0	62.8	60.4	0.0	91.7
LnGrp LOS	F	B	B	F	B	B	E	A	E	E	A	F
Approach Vol, veh/h		1977			1297			383			379	
Approach Delay, s/veh		18.4			19.9			64.6			84.1	
Approach LOS		B			B			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.0	103.1	13.0	45.9	16.0	105.1	21.3	37.6				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	12.0	85.0	7.0	52.0	16.0	81.0	18.0	41.0				
Max Q Clear Time (g_c+I1), s	7.8	19.4	9.0	22.1	10.1	37.7	15.3	30.4				
Green Ext Time (p_c), s	0.0	11.6	0.0	0.9	0.0	22.4	0.0	0.8				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				29.4								
HCM 6th LOS				C								

# Timings

## 101: Andrews Avenue & Oakland Park Boulevard

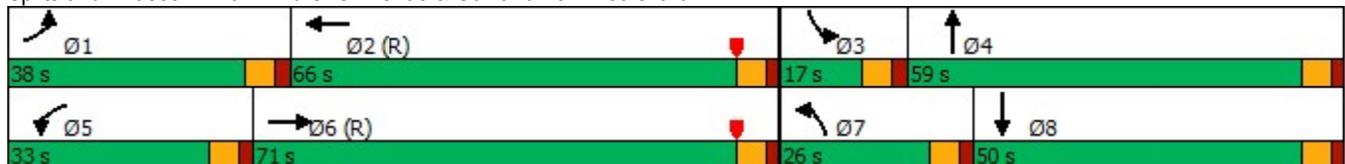


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↘	↑↑↓	↘	↑↑↓	↘↘	↑↓	↘	↑↓
Traffic Volume (vph)	272	1095	212	1427	342	797	93	615
Future Volume (vph)	272	1095	212	1427	342	797	93	615
Turn Type	Prot	NA	Prot	NA	Prot	NA	Prot	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases								
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	6.0	5.0	6.0
Minimum Split (s)	11.0	41.0	11.0	41.0	11.0	36.0	11.0	36.0
Total Split (s)	38.0	71.0	33.0	66.0	26.0	59.0	17.0	50.0
Total Split (%)	21.1%	39.4%	18.3%	36.7%	14.4%	32.8%	9.4%	27.8%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	None	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	30.5	67.6	24.7	61.8	19.8	52.8	10.9	43.9
Actuated g/C Ratio	0.17	0.38	0.14	0.34	0.11	0.29	0.06	0.24
v/c Ratio	0.95	0.75	0.91	0.93	0.95	0.97	0.91	0.92
Control Delay	112.7	51.2	91.1	104.2	109.4	79.2	146.0	82.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.7	51.2	91.1	104.2	109.4	79.2	146.0	82.2
LOS	F	D	F	F	F	E	F	F
Approach Delay		61.5		102.6		87.2		89.2
Approach LOS		E		F		F		F

### Intersection Summary

Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 114 (63%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 120  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.97  
 Intersection Signal Delay: 84.8  
 Intersection LOS: F  
 Intersection Capacity Utilization 97.4%  
 ICU Level of Service F  
 Analysis Period (min) 15

### Splits and Phases: 101: Andrews Avenue & Oakland Park Boulevard



## Queues

### 101: Andrews Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	280	1395	219	1587	353	983	96	776
v/c Ratio	0.95	0.75	0.91	0.93	0.95	0.97	0.91	0.92
Control Delay	112.7	51.2	91.1	104.2	109.4	79.2	146.0	82.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	112.7	51.2	91.1	104.2	109.4	79.2	146.0	82.2
Queue Length 50th (ft)	329	527	271	665	200	631	115	468
Queue Length 95th (ft)	#507	587	m#369	#728	#315	#755	#238	#588
Internal Link Dist (ft)		578		2163		2155		369
Turn Bay Length (ft)	510		340		380		380	
Base Capacity (vph)	311	1856	262	1714	377	1012	107	841
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.90	0.75	0.84	0.93	0.94	0.97	0.90	0.92

#### Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

# HCM 6th Signalized Intersection Summary

## 101: Andrews Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	272	1095	258	212	1427	113	342	797	156	93	615	138
Future Volume (veh/h)	272	1095	258	212	1427	113	342	797	156	93	615	138
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		0.98
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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	280	1129	266	219	1471	116	353	822	161	96	634	142
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	296	1556	367	236	1657	131	381	855	168	108	690	154
Arrive On Green	0.22	0.51	0.51	0.18	0.46	0.46	0.07	0.20	0.20	0.06	0.24	0.24
Sat Flow, veh/h	1767	4094	964	1767	4787	377	3428	2929	574	1767	2852	638
Grp Volume(v), veh/h	280	931	464	219	1038	549	353	495	488	96	391	385
Grp Sat Flow(s),veh/h/ln	1767	1689	1681	1767	1689	1787	1714	1763	1740	1767	1763	1726
Q Serve(g_s), s	28.1	38.8	38.8	22.0	50.5	50.5	18.4	50.0	50.0	9.7	39.0	39.1
Cycle Q Clear(g_c), s	28.1	38.8	38.8	22.0	50.5	50.5	18.4	50.0	50.0	9.7	39.0	39.1
Prop In Lane	1.00		0.57	1.00		0.21	1.00		0.33	1.00		0.37
Lane Grp Cap(c), veh/h	296	1284	639	236	1169	619	381	515	508	108	427	418
V/C Ratio(X)	0.95	0.73	0.73	0.93	0.89	0.89	0.93	0.96	0.96	0.89	0.92	0.92
Avail Cap(c_a), veh/h	314	1284	639	265	1169	619	381	519	512	108	431	422
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	0.67	0.67	0.67	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	0.52	0.52	0.52	0.69	0.69	0.69	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.1	37.2	37.2	73.2	45.4	45.4	82.6	71.4	71.4	83.9	66.5	66.5
Incr Delay (d2), s/veh	34.9	3.6	7.1	21.1	5.7	10.0	21.6	23.4	23.6	52.0	24.0	24.8
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	15.3	16.0	16.5	11.2	21.2	23.2	9.5	26.7	26.4	6.0	20.5	20.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.1	40.8	44.2	94.3	51.1	55.4	104.1	94.8	95.0	135.9	90.4	91.3
LnGrp LOS	F	D	D	F	D	E	F	F	F	F	F	F
Approach Vol, veh/h		1675			1806			1336			872	
Approach Delay, s/veh		52.3			57.6			97.3			95.8	
Approach LOS		D			E			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	36.1	68.3	17.0	58.6	30.0	74.4	26.0	49.6				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	32.0	60.0	11.0	53.0	27.0	65.0	20.0	44.0				
Max Q Clear Time (g_c+I1), s	30.1	52.5	11.7	52.0	24.0	40.8	20.4	41.1				
Green Ext Time (p_c), s	0.1	5.5	0.0	0.5	0.1	11.1	0.0	1.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			71.2									
HCM 6th LOS			E									

# Timings

## 102: Powerline Road & Oakland Park Boulevard

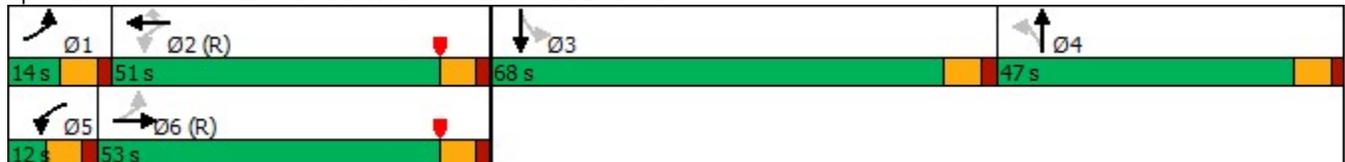


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations	↖	↕	↖	↕	↗	↖	↕	↗	↕
Traffic Volume (vph)	230	1771	141	1704	154	383	593	188	655
Future Volume (vph)	230	1771	141	1704	154	383	593	188	655
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Perm	NA	Perm	NA
Protected Phases	1	6	5	2			4		3
Permitted Phases	6		2		2	4		3	
Detector Phase	1	6	5	2	2	4	4	3	3
Switch Phase									
Minimum Initial (s)	4.0	10.0	4.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	11.0	39.0	11.0	39.0	39.0	37.0	37.0	38.0	38.0
Total Split (s)	14.0	53.0	12.0	51.0	51.0	47.0	47.0	68.0	68.0
Total Split (%)	7.8%	29.4%	6.7%	28.3%	28.3%	26.1%	26.1%	37.8%	37.8%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes						
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None
Act Effct Green (s)	53.0	46.0	49.0	44.0	44.0	40.0	40.0	61.0	61.0
Actuated g/C Ratio	0.29	0.26	0.27	0.24	0.24	0.22	0.22	0.34	0.34
v/c Ratio	2.16	1.68	1.62	1.41	0.34	1.65	1.37dl	2.43	0.72
Control Delay	574.4	347.2	356.5	237.0	20.4	368.1	197.6	704.8	55.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	574.4	347.2	356.5	237.0	20.4	368.1	197.6	704.8	55.2
LOS	F	F	F	F	C	F	F	F	E
Approach Delay		369.7		228.8			226.7		176.1
Approach LOS		F		F			F		F

### Intersection Summary

Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 20 (11%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow  
 Natural Cycle: 135  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 2.43  
 Intersection Signal Delay: 270.9  
 Intersection LOS: F  
 Intersection Capacity Utilization 113.9%  
 ICU Level of Service H  
 Analysis Period (min) 15  
 dl Defacto Left Lane. Recode with 1 though lane as a left lane.

### Splits and Phases: 102: Powerline Road & Oakland Park Boulevard



## Queues

### 102: Powerline Road & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	235	2135	144	1739	157	195	948	192	840
v/c Ratio	2.16	1.68	1.62	1.41	0.34	1.65	1.37dl	2.43	0.72
Control Delay	574.4	347.2	356.5	237.0	20.4	368.1	197.6	704.8	55.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	574.4	347.2	356.5	237.0	20.4	368.1	197.6	704.8	55.2
Queue Length 50th (ft)	~394	~1345	~190	~1006	45	~386	~549	~191	450
Queue Length 95th (ft)	#587	#1429	#353	#1097	116	#594	#655	#238	532
Internal Link Dist (ft)		715		592			1584		537
Turn Bay Length (ft)	515		350		160	390		260	
Base Capacity (vph)	109	1271	89	1231	460	118	727	79	1159
Starvation Cap Reductn	0	0	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	2.16	1.68	1.62	1.41	0.34	1.65	1.30	2.43	0.72

#### 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.

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

# HCM Signalized Intersection Capacity Analysis

## 102: Powerline Road & Oakland Park Boulevard

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	1771	321	141	1704	154	383	593	144	188	655	169
Future Volume (vph)	230	1771	321	141	1704	154	383	593	144	188	655	169
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	0.86	0.86		0.97	0.95	
Frbp, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	
Satd. Flow (prot)	1752	4920		1752	5036	1547	1505	4589		3400	3384	
Flt Permitted	0.09	1.00		0.09	1.00	1.00	0.34	0.69		0.07	1.00	
Satd. Flow (perm)	160	4920		168	5036	1547	532	3212		235	3384	
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)	235	1807	328	144	1739	157	391	605	147	192	668	172
RTOR Reduction (vph)	0	14	0	0	0	82	0	13	0	0	13	0
Lane Group Flow (vph)	235	2121	0	144	1739	75	195	935	0	192	827	0
Confl. Peds. (#/hr)	1					1	3		2	2		3
Confl. Bikes (#/hr)												2
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4				3
Permitted Phases	6			2		2	4			3		
Actuated Green, G (s)	53.0	46.0		49.0	44.0	44.0	40.0	40.0		61.0	61.0	
Effective Green, g (s)	53.0	46.0		49.0	44.0	44.0	40.0	40.0		61.0	61.0	
Actuated g/C Ratio	0.29	0.26		0.27	0.24	0.24	0.22	0.22		0.34	0.34	
Clearance Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0		7.0	7.0	
Vehicle Extension (s)	1.5	3.0		1.5	3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	109	1257		89	1231	378	118	713		79	1146	
v/s Ratio Prot	c0.08	0.43		0.04	0.35							0.24
v/s Ratio Perm	c0.55			0.39		0.05	c0.37	0.29		c0.82		
v/c Ratio	2.16	1.69		1.62	1.41	0.20	1.65	1.37dl		2.43	0.72	
Uniform Delay, d1	58.3	67.0		63.6	68.0	54.0	70.0	70.0		59.5	52.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	549.3	312.7		323.6	190.6	1.2	328.2	149.9		680.3	1.9	
Delay (s)	607.6	379.7		387.2	258.6	55.2	398.2	219.9		739.8	54.0	
Level of Service	F	F		F	F	E	F	F		F	D	
Approach Delay (s)		402.3			252.0			250.3			181.6	
Approach LOS		F			F			F			F	
<b>Intersection Summary</b>												
HCM 2000 Control Delay			294.8			HCM 2000 Level of Service				F		
HCM 2000 Volume to Capacity ratio			2.15									
Actuated Cycle Length (s)			180.0			Sum of lost time (s)				28.0		
Intersection Capacity Utilization			113.9%			ICU Level of Service				H		
Analysis Period (min)			15									
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

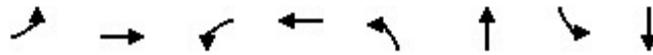
HCM 6th Signalized Intersection Summary  
102: Powerline Road & Oakland Park Boulevard

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HCM 6th Edition methodology expects strict NEMA phasing.

# Timings

## 105: NE 6 Avenue & Oakland Park Boulevard

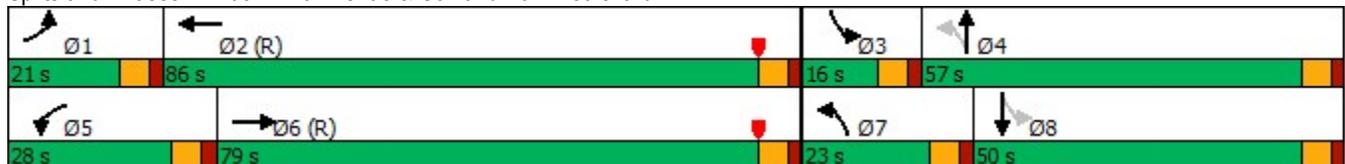


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↖	↑↑↑	↖	↑	↖	↑
Traffic Volume (vph)	66	1397	131	1509	150	214	105	253
Future Volume (vph)	66	1397	131	1509	150	214	105	253
Turn Type	Prot	NA	Prot	NA	pm+pt	NA	pm+pt	NA
Protected Phases	1	6	5	2	7	4	3	8
Permitted Phases					4		8	
Detector Phase	1	6	5	2	7	4	3	8
Switch Phase								
Minimum Initial (s)	4.0	10.0	4.0	10.0	4.0	6.0	4.0	6.0
Minimum Split (s)	10.0	30.0	10.0	30.0	10.0	40.0	10.0	40.0
Total Split (s)	21.0	79.0	28.0	86.0	23.0	57.0	16.0	50.0
Total Split (%)	11.7%	43.9%	15.6%	47.8%	12.8%	31.7%	8.9%	27.8%
Yellow Time (s)	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
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	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes							
Recall Mode	Max	C-Max	None	C-Max	None	None	None	None
Act Effct Green (s)	22.3	84.2	18.1	80.0	59.1	44.0	47.7	38.0
Actuated g/C Ratio	0.12	0.47	0.10	0.44	0.33	0.24	0.26	0.21
v/c Ratio	0.34	0.76	0.83	0.79	0.80	0.65	0.50	0.91
Control Delay	83.7	32.7	113.8	45.8	70.1	66.4	50.4	95.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.7	32.7	113.8	45.8	70.1	66.4	50.4	95.7
LOS	F	C	F	D	E	E	D	F
Approach Delay		34.7		51.0		67.8		84.3
Approach LOS		C		D		E		F

### Intersection Summary

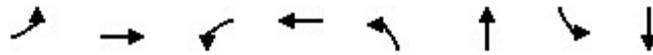
Cycle Length: 180  
 Actuated Cycle Length: 180  
 Offset: 139 (77%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.91  
 Intersection Signal Delay: 49.6  
 Intersection Capacity Utilization 83.9%  
 Analysis Period (min) 15  
 Intersection LOS: D  
 ICU Level of Service E

### Splits and Phases: 105: NE 6 Avenue & Oakland Park Boulevard



## Queues

### 105: NE 6 Avenue & Oakland Park Boulevard



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	73	1754	146	1748	167	289	117	347
v/c Ratio	0.34	0.76	0.83	0.79	0.80	0.65	0.50	0.91
Control Delay	83.7	32.7	113.8	45.8	70.1	66.4	50.4	95.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.7	32.7	113.8	45.8	70.1	66.4	50.4	95.7
Queue Length 50th (ft)	86	357	172	641	143	299	97	396
Queue Length 95th (ft)	m121	m449	255	700	#214	396	146	513
Internal Link Dist (ft)		2163		358		357		314
Turn Bay Length (ft)	400		400		190		190	
Base Capacity (vph)	217	2318	214	2224	220	511	239	441
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.76	0.68	0.79	0.76	0.57	0.49	0.79

#### Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

# HCM 6th Signalized Intersection Summary

## 105: NE 6 Avenue & Oakland Park Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑		↖	↑↑↑		↖	↑		↖	↑	
Traffic Volume (veh/h)	66	1397	182	131	1509	64	150	214	46	105	253	59
Future Volume (veh/h)	66	1397	182	131	1509	64	150	214	46	105	253	59
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		0.98	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	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	73	1552	202	146	1677	71	167	238	51	117	281	66
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	147	2183	284	164	2451	104	206	348	75	234	299	70
Arrive On Green	0.11	0.64	0.64	0.12	0.65	0.65	0.08	0.24	0.24	0.06	0.21	0.21
Sat Flow, veh/h	1767	4524	588	1767	4984	211	1767	1475	316	1767	1447	340
Grp Volume(v), veh/h	73	1158	596	146	1136	612	167	0	289	117	0	347
Grp Sat Flow(s),veh/h/ln	1767	1689	1734	1767	1689	1817	1767	0	1791	1767	0	1787
Q Serve(g_s), s	7.0	40.6	40.8	14.6	37.9	38.0	13.2	0.0	26.5	9.4	0.0	34.4
Cycle Q Clear(g_c), s	7.0	40.6	40.8	14.6	37.9	38.0	13.2	0.0	26.5	9.4	0.0	34.4
Prop In Lane	1.00		0.34	1.00		0.12	1.00		0.18	1.00		0.19
Lane Grp Cap(c), veh/h	147	1629	837	164	1661	894	206	0	423	234	0	370
V/C Ratio(X)	0.50	0.71	0.71	0.89	0.68	0.68	0.81	0.00	0.68	0.50	0.00	0.94
Avail Cap(c_a), veh/h	147	1629	837	216	1661	894	223	0	507	234	0	437
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	0.56	0.56	0.56	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	76.5	24.0	24.0	78.0	22.4	22.4	52.9	0.0	62.7	53.8	0.0	70.2
Incr Delay (d2), s/veh	6.5	1.5	2.9	24.3	2.3	4.2	16.9	0.0	1.9	0.6	0.0	24.5
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	3.4	15.3	16.1	7.7	14.3	16.0	6.9	0.0	12.4	4.3	0.0	18.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	83.0	25.5	26.9	102.3	24.7	26.6	69.9	0.0	64.5	54.4	0.0	94.7
LnGrp LOS	F	C	C	F	C	C	E	A	E	D	A	F
Approach Vol, veh/h		1827			1894			456				464
Approach Delay, s/veh		28.2			31.3			66.5				84.5
Approach LOS		C			C			E				F
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	21.0	94.5	16.0	48.5	22.7	92.8	21.2	43.3				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	15.0	80.0	10.0	51.0	22.0	73.0	17.0	44.0				
Max Q Clear Time (g_c+I1), s	9.0	40.0	11.4	28.5	16.6	42.8	15.2	36.4				
Green Ext Time (p_c), s	0.0	18.7	0.0	1.1	0.1	16.5	0.0	0.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				38.9								
HCM 6th LOS				D								