

July 11, 2025

Dwayne L. Dickerson, Esq.
Partner - Miskel Backman LLP
14 SE 4th Street, Suite 36
Boca Raton, Florida 33432

Re: Pembroke Gardens – Impacts to the Shops at Pembroke Gardens & SW 145th Avenue Driveways

Dear Dwayne:

I reviewed the color-coded map with four types of intersections/driveways provided by the City of Pembroke Pines in an email sent to you by Michael Stamm dated June 12, 2025. The intersections and driveways documented in the June 2025 email are summarized below as shown in the attached map provided by the city:

One (1) proposed right-turn in/driveway on SW 145th Avenue for the future residential project (**green color**) – **This was evaluated in the traffic study**

Two (2) major signalized intersections (SW 145th Avenue/Pines Boulevard and SW 145th Avenue/Pembroke Road) (**blue color**) – **These were evaluated in the traffic study.**

Three (3) driveways on SW 145th Avenue, two stop-controlled and one signal control (**orange color**) – **These were evaluated in the traffic study.**

Five (5) driveways along access roadways that provide access to the Shops at Pembroke Gardens (**orange color**) – These are minor internal driveways which are typically not evaluated as part of traffic impact analyses. No-to-minimal traffic impacts anticipated on these driveways.

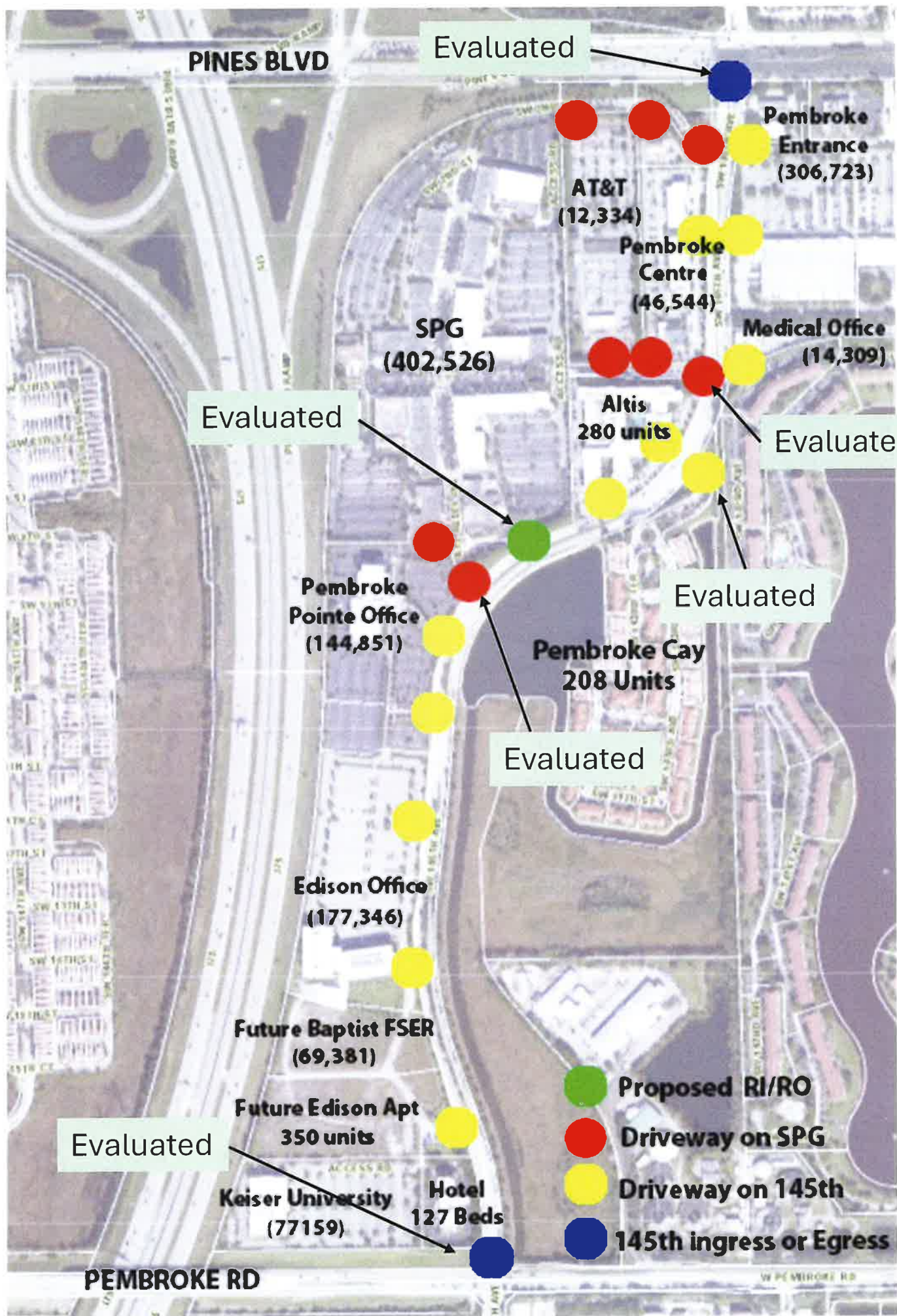
Twelve (12) driveways along SW 145th Avenue (yellow color) – These are minor driveways, and the residential project will add traffic to the northbound and southbound through movement (no turns anticipated at these locations) and therefore, minimal traffic impacts anticipated on these driveways. **Per the City's traffic consultant, they recommended that we evaluate the driveway that provides access to the Pembroke Cay, and this was evaluated in the traffic study.**

I hope the above addresses the concerns expressed by the City of Pembroke Pines. Please give me a call if you have any questions.

Sincerely,

TRAFTECH ENGINEERING, INC.

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





Pembroke Gardens Residential

Pembroke Pines, Florida

prepared for:

Federal Realty

traffic study

TRAFTECH
ENGINEERING, INC.

April 2025

April 3, 2025

Mr. Ramsey Meiser
Senior Vice President, Development
Federal Realty
7930 Jones Branch Drive, Suite 350
McLean, VA 22102

Re: Pembroke Gardens Residential - Traffic Study

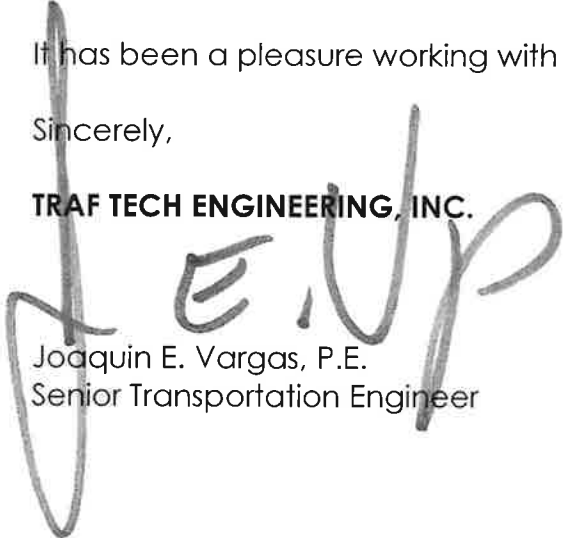
Dear Ramsey:

Traf Tech Engineering, Inc. is pleased to provide you with the results of the traffic study associated with the proposed Pembroke Gardens residential development planned (Building A) to be located at in Pembroke Pines, Florida.

It has been a pleasure working with Federal Realty on this project.

Sincerely,

TRAF TECH ENGINEERING, INC.



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

ENGINEER'S CERTIFICATION

I, Hereby certify that I am a registered professional engineer in the State of Florida, practicing with Traf Tech Engineering, Inc., a Florida Corporation under Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes, Professional License Number 44174, by the State of Florida, Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluation, findings, opinions, conclusions, or technical advice hereby reported for:

Project: Pembroke Gardens Residential
Location: Pembroke Pines, Florida
Client: Federal Realty

Report Prepared by: Traf Tech Engineering, Inc
8400 N. University Drive, Suite 309
Tamarac, FL 33321

I acknowledge that the procedures and references used to develop the results contained in this report are standards to the professional practice of transportation engineering as applied through professional judgement and experience.

Signature:
Name:
License No.
Date:

Joaquin E. Vargas, P.E.
FL 44174
April 3, 2025



April 3, 2025

TABLE OF CONTENTS

INTRODUCTION	1
INVENTORY	3
Existing Land Use	3
Proposed Land Use and Access	3
EXISTING CONDITIONS	4
Roadway System.....	4
Nearby Intersections	4
TRAFFIC COUNTS	6
TRIP GENERATION.....	8
TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT	9
TRAFFIC ANALYSES	11
Future Conditions Traffic Volumes	11
Level of Service (LOS) Analyses	14
CONCLUSIONS	16

LIST OF FIGURES

FIGURE 1 – Project Location Map	2
FIGURE 2 – Existing Lane Geometry	5
FIGURE 3 – Existing Traffic Counts	7
FIGURE 4 – Project Traffic Assignment.....	10
FIGURE 5 – Background Traffic (Year 2027)	12
FIGURE 6 – Total Traffic with Project (Year 2027).....	13

LIST OF TABLES

TABLE 1 – Trip Generation	8
TABLE 2 – Intersection Capacity Analysis.....	14
TABLE 3 – 95 th Percentile Queue	15

APPENDICES

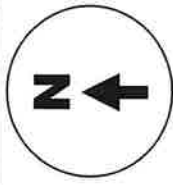
APPENDIX A – Site Plan	
APPENDIX B – Traffic Counts	
APPENDIX C – Signal Timing, PSCF, Historical Data, and Growth Rate	
APPENDIX D – Future Turning Movement Volumes and Committed Developments Information	
APPENDIX E – SYNCHRO Analyses	

INTRODUCTION

Pembroke Gardens is a proposed residential development to be located at 527 SW 145th Terrace, in the City of Pembroke Pines in Broward County, Florida. The location of the project site is illustrated in Figure 1 on the following page.

Traf Tech Engineering, Inc. was retained to conduct a traffic study in connection with the proposed development. The study addresses trip generation and the traffic impacts created by the proposed project on the nearby transportation network. This study is divided into seven (7) sections, as listed below:

1. Inventory
2. Existing Conditions
3. Traffic Counts
4. Trip Generation
5. Trip Distribution and Traffic Assignment
6. Traffic Impact Analysis
7. Conclusions and Recommendations



Pines Boulevard

SW 145 Avenue

SW 2nd Street



SW 5th Street



Blg. A

SW 8th Street



SW 145th Terrace



Pembroke Road



LEGEND

Subject Site



PROJECT LOCATION MAP

FIGURE 1

Pembroke Gardens Residential
Pembroke Pines, Florida

INVENTORY

Existing Land Use

The project site is currently occupied by a parking lot that belongs to the Pembroke Gardens shopping mall. The parking lot will be replaced with the subject residential development.

Proposed Land Uses and Access

- Building A: 308 Mid-rise units

Access to the site is provided via the SW 2nd Street, SW 5th Street, SW 145 Terrace and a new access driveway onto SW 145th Avenue. The proposed development is anticipated to be built and occupied in 2027. Appendix A contains a copy of the proposed site plan for the project site.

EXISTING CONDITIONS

This section addresses the existing roadway system located in the vicinity of the project site and nearby intersections.

Roadway System

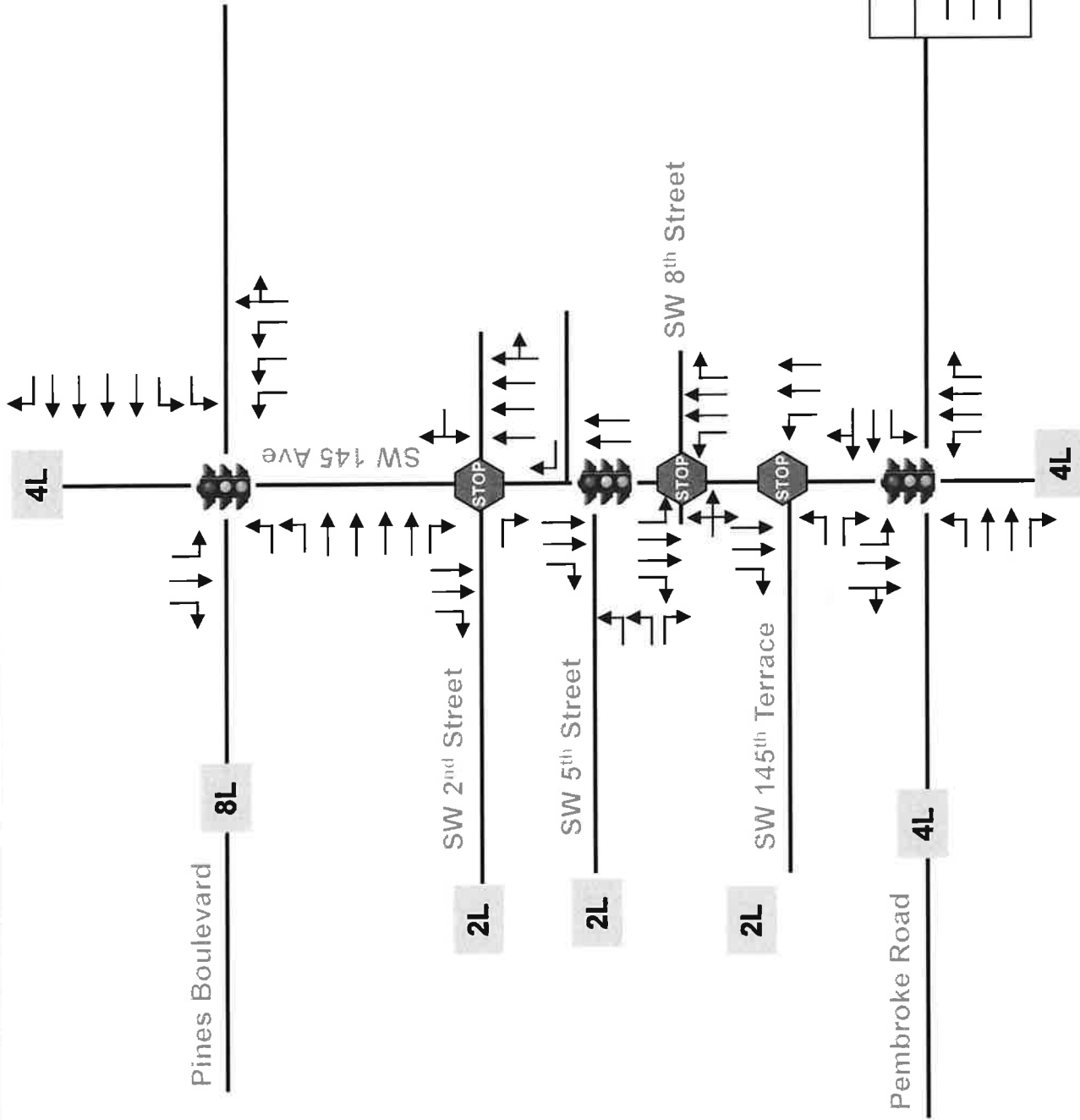
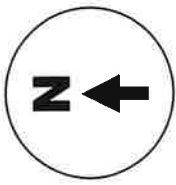
The roadway system located near the project site includes SW 145th Avenue, Pines Boulevard, SW 2nd Street, SW 5th Street, SW 145th Terrace, and Pembroke Road.

Nearby Intersections

Five intersections plus the driveway were identified as the locations that will be impacted the most by the proposed project. These six intersections include:

1. SW 145th Avenue and Pines Boulevard (signalized)
2. SW 145th Avenue and SW 2nd Street (unsignalized)
3. SW 145th Avenue and SW 5th Street (signalized)
4. SW 145th Avenue and SW 145th Terrace (unsignalized)
5. SW 145th Avenue and Pembroke Road (signalized)
6. SW 145th Avenue and SW 8th Street (unsignalized)

Figure 2 shows the existing lane geometry of the five intersections selected for analysis purposes. The number of lanes on the street system surrounding the project site is also depicted in the figures.



LEGEND	
	Left-Turn Lane
	Through Lane
	Right-Turn Lane

FIGURE 2

Pembroke Gardens Residential
Pembroke Pines, Florida

EXISTING LANE GEOMETRY

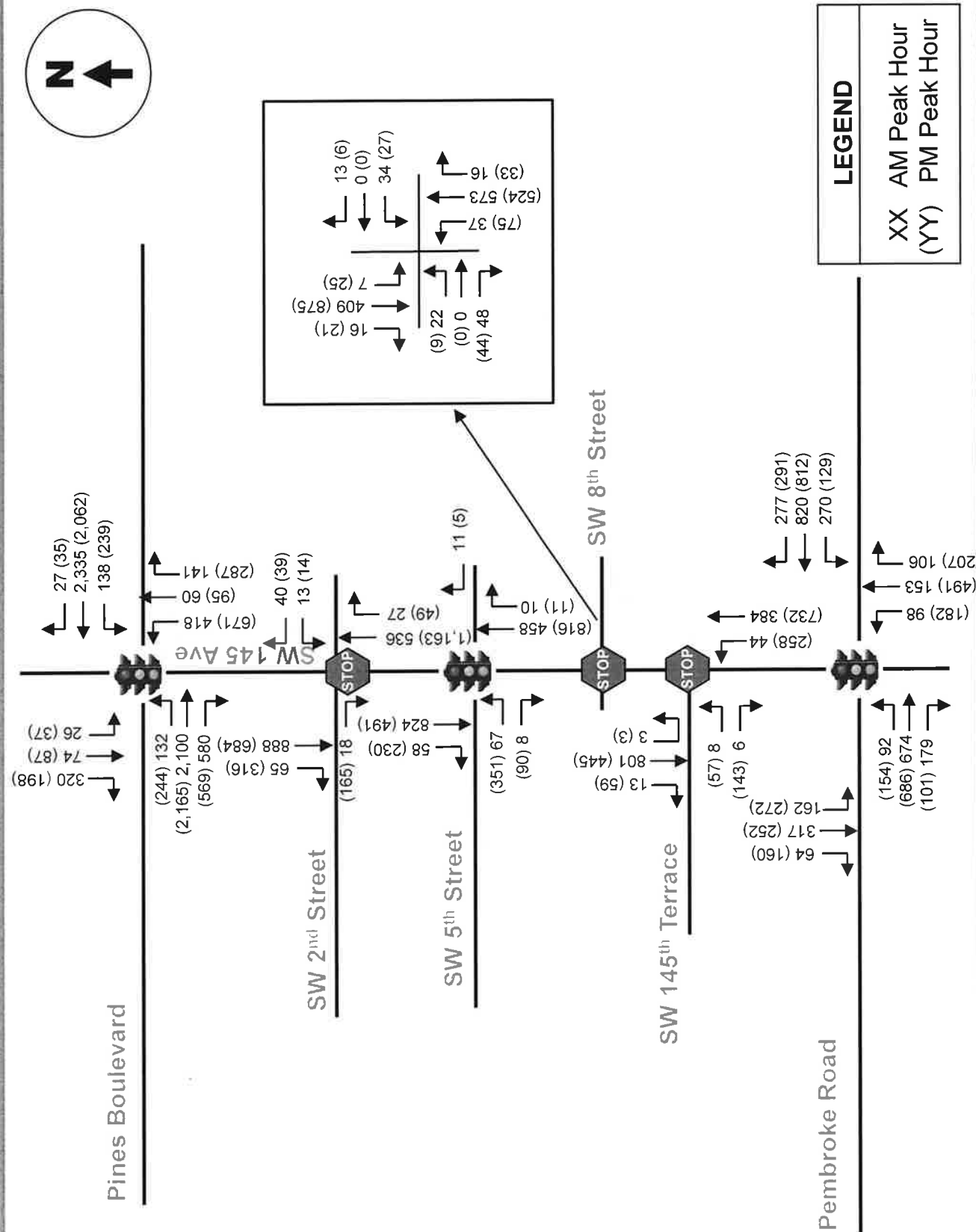
TRAFFIC COUNTS

Traf Tech Engineering, Inc., collected intersection turning movement counts at the study intersections. The intersection turning movement counts were collected on Thursday, December 14, 2023 and Thursday February 13, 2025 from 7:00 AM and 9:00 AM and from 4:00 PM and 6:00 PM at the following intersections located near the project site:

1. SW 145th Avenue and Pines Boulevard
2. SW 145th Avenue and SW 2nd Street
3. SW 145th Avenue and SW 5th Street
4. SW 145th Avenue and SW 145th Terrace
5. SW 145th Avenue and Pembroke Road
6. SW 145th Avenue and SW 8th Street

Appendix B contains the intersection turning movement counts, as collected in the field. The latest signal timing plans for the signalized intersections were obtained from Broward County Traffic Engineering Division and are included in Appendix C. The traffic counts were adjusted to account for peak season conditions. Adjustment factors of 1.02 and 1.0 were applied to counts collected in the field. The State-published adjustment factors are also contained in Appendix C.

Figure 3 shows the 2023 peak season AM and PM peak hour traffic volumes.



EXISTING TRAFFIC COUNTS – AM & (PM) Peak Hour

FIGURE 3
Pembroke Gardens Residential
Pembroke Pines, Florida

TRIP GENERATION

The trip generation for the project was based on information contained in the Institute of Transportation Engineer's (ITE) *Trip Generation Manual* (11th Edition). According to the subject ITE manual, the most appropriate "land use" category for the proposed land use includes ITE's Land Use 221 – Multifamily Housing (Mid-Rise).

The trip generation analysis was undertaken for AM peak hour and PM peak hour conditions. Using the trip generation equations from the ITE document, a trip generation analysis was undertaken for the proposed project. The results of this effort are documented in Table 1.

TABLE 1 Trip Generation Summary (Proposed Uses) Pembroke Gardens Residential								
Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			Total Trips	Inbound	Outbound	Total Trips	Inbound	Outbound
Mid Rise LUC 221 (Blg A)	308	1,423	124	28	96	120	73	47
Subtotal		1,423	124	28	95	119	72	47
Driveway Volumes		1,423	124	28	95	119	72	47

Source: ITE Trip Generation Manual (11th Edition)

Daily: $T = 4.77(X) - 46.46$

AM Peak: $T = 0.44(X) - 11.61$ (23%entering, 77%exiting)

PM Peak: $T = 0.39(X) + 0.34$ (61%entering, 39%exiting)

As indicated in Table 1, the proposed project is anticipated to generate approximately 124 AM peak hour trips (28 inbound and 95 outbound) and approximately 119 PM peak hour trips (72 inbound and 47 outbound).

TRIP DISTRIBUTION AND TRAFFIC ASSIGNMENT

The trip distribution and traffic assignment for the project were based on knowledge of the study area, examination of the surrounding roadway network characteristics, review of current traffic volumes, and existing land use patterns. The trip distribution assumed for the subject residential development is summarized below:

- 10% to and from the north via SW 145th Avenue
- 5% to and from the south via SW 145th Avenue
- 30% to and from the east via Pines Boulevard
- 15% to and from the east via Pembroke Road
- 30% to and from the west via Pines Boulevard
- 10% to and from the west via Pembroke Road

The new peak hour traffic generated by the project was assigned to the nearby transportation network using the traffic assignment documented above. The project traffic assignment is summarized in Figure 4.

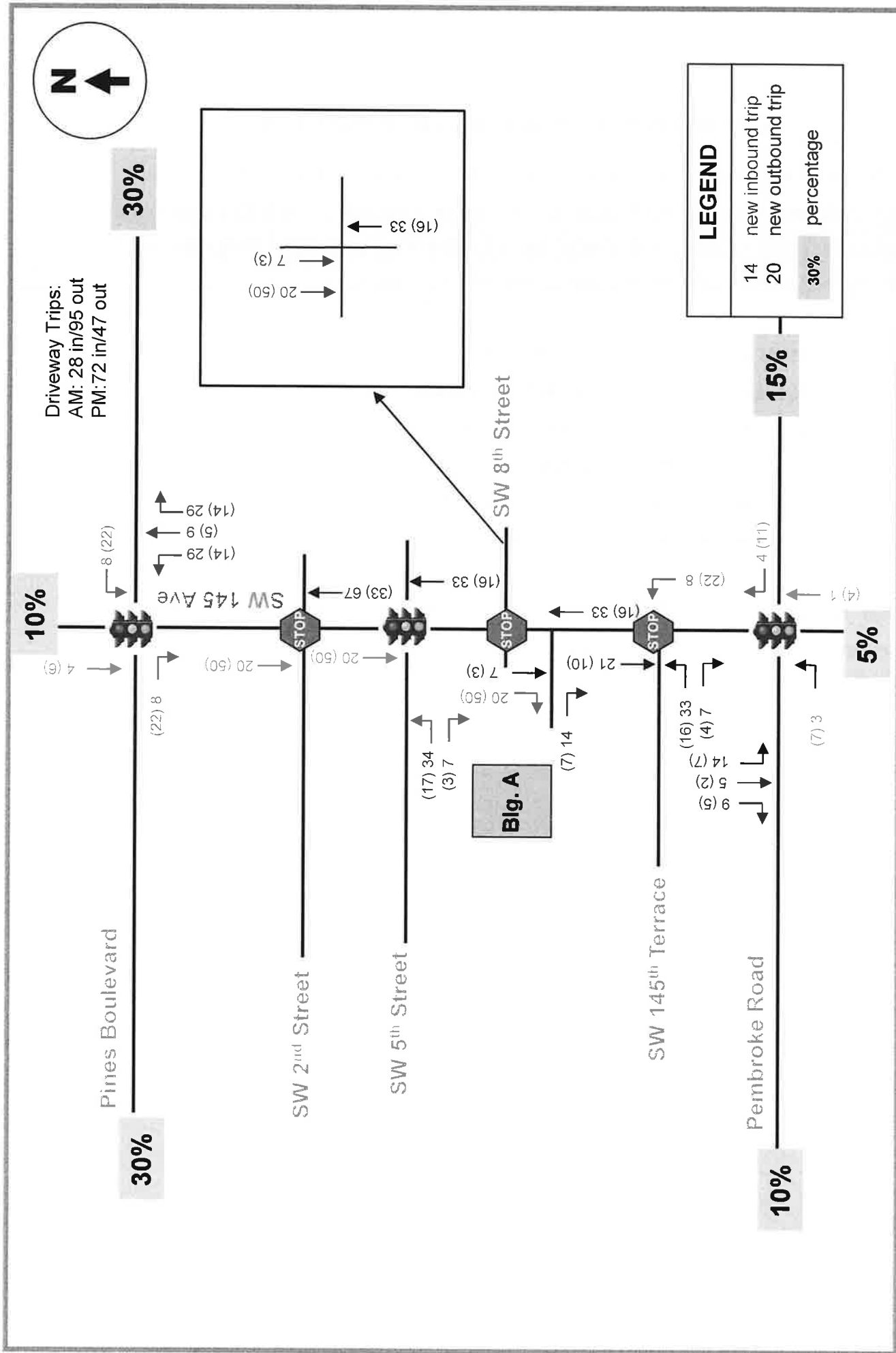


FIGURE 4

NEW PROJECT TRAFFIC ASSIGNMENT
 Weekday New Peak Hour Trips AM & (PM)

Pembroke Gardens Residential
 Pembroke Pines, Florida

TRAFITECH
 ENGINEERING, INC.

TRAFFIC ANALYSIS

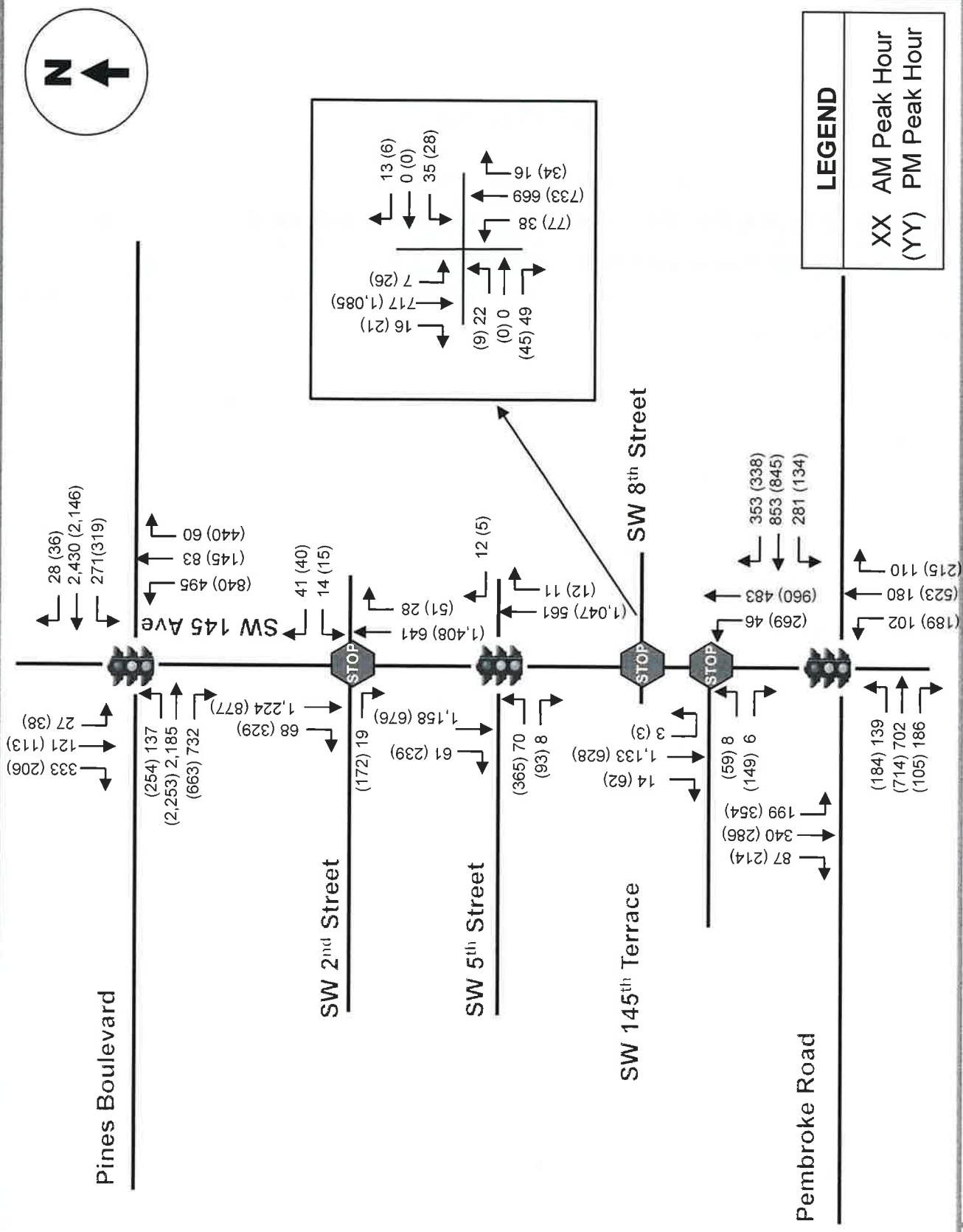
This section of the study is divided into two parts. The first part consists of developing the future conditions traffic volumes for the study area. The second part includes level-of-service analyses for existing and future conditions.

Future Conditions Traffic Volumes

Two sets of future traffic volumes were developed. The first set includes project buildout conditions without the proposed project and the second set adds the new trips anticipated to be generated by the project.

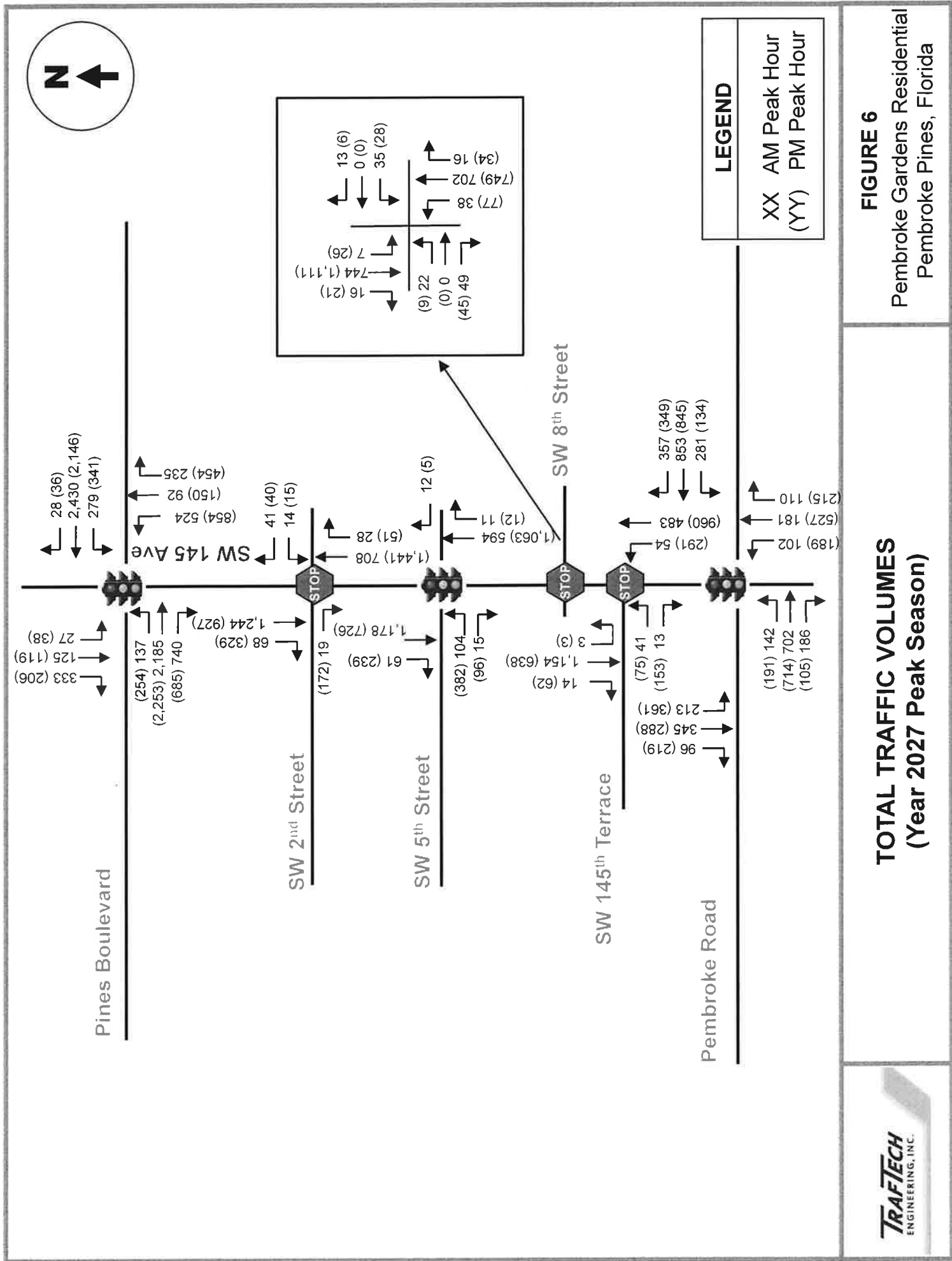
In order to develop year 2027 traffic volumes (project anticipated to be built and occupied by the year 2027), without the proposed project, two separate analyses were undertaken. The first analysis converts the existing peak hour traffic counts collected in the field to average peak season conditions. Based on FDOT's Peak Season Factor Category report, factors of 1.02 and 1.00 are required to convert collected traffic counts to average peak season conditions (refer to Appendix C). The second analysis includes a growth factor to project 2023 peak season traffic volumes to the year 2027. Based on traffic growth data published by the FDOT for a nearby traffic count station, traffic growth has not occurred during the past five years (refer to Appendix C). In order to assess impacts a 1.0% growth rate was used for purposes of this study. In addition, committed development trips associated with Edison Pembroke were added.

The new trips generated by the proposed project (refer to Figure 4) were added to the 2027 background traffic in order to develop total traffic conditions. The future traffic projections for the study intersections are presented in tabular format in Appendix D. Figures 5 and 6 present the year 2027 future traffic volumes for the study area. Figure 5 includes background traffic only (without the proposed project) and Figure 6 includes the additional traffic anticipated to be generated by the project.



**BACKGROUND TRAFFIC – Year 2027
AM & (PM) Peak Hour**

FIGURE 5
Pembroke Gardens Residential
Pembroke Pines, Florida



Level of Service Analyses

Intersection capacity/level of service analyses were conducted for the study intersections including the project driveway that provide access to the project. The analyses were undertaken following the capacity/level of service procedures outlined in the Highway Capacity Manual (HCM) 7th Edition using the SYNCHRO software. The results of the capacity analyses are summarized in Table 2.

TABLE 2 Level of Service Analyses Pembroke Gardens Residential									
Intersection	Time Period	EASTBOUND		WESTBOUND		NORTHBOUND		SOUTHBOUND	
		Approach		Approach		Approach		Approach	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay (sec)
SW 145 Avenue & Pines Boulevard	AM	C/C/C/D	27.8/32.9/34.0/43.7	C/D/D/D	31.6/46.5/49.4/44.9	E/F/F/E	79.6/87.9/94.9/79.4	F/F/F/F	297.3/297.4/284.4/178.5
	PM	D/D/D/E	41.5/48.2/48.3/59.9	D/E/E/E	43.7/62.5/65.0/62.0	E/F/F/F	78.4/126.8/136.5/130.1	F/F/F/F	84.3/84.2/83.9/77.0
SW 2 Street & SW 145 Avenue	AM	A/B/B	9.7/10.57/10.63	A/B/B	9.76/10.97/11.27				
	PM	A/B/B	9.99/10.61/10.77	B/C/C	11.43/15.07/15.42				
SW 145 Avenue & SW 5th Street	AM	C/C/C	26.7/26.7/26.6	B/C/C**	11.05/15.54/16.16	A/A/A	2.9/3.3/3.4	A/A/A	3.4/4.2/4.6
	PM	C/C/C	27.3/27.3/27.3	B/D/D**	12.7/33.3/34.1	A/A/A	5.5/6.5/6.7	A/A/A	4.8/5.2/5.5
SW 145 Avenue & SW 8th Street	AM	B/B/B	10.08/11.78/12.01	B/C/C	12.52/15.13/15.68				
	PM	B/B/B	11.96/13.72/14.24	C/D/D	18.14/25.86/27.4				
SW 145 Avenue & SW 145 Terrace	AM	B/C/C	13.61/17.57/23.82						
	PM	B/C/C	14.07/17.4/21.59						
SW 145 Avenue & Pembroke Road	AM	C/C/C	26.6/23.0/23.4	C/C/C	21.3/26.7/27.5	E/D/D	55.2/53.9/53.4	D/D/D	54.7/54.3/55.0
	PM	C/C/C/C	24.4/28.7/29.9/33.8	C/D/D/D	33.4/40.6/42.2/49.5	D/E/E/D	53.8/55.1/55.1/54.8	F/F/F/F	81.8/151.4/156.9/113.3
SW 145 Ave & Driveway	AM	B	13.91						
	PM	B	11.1						

SOURCE: SYNCHRO, LEGEND: Existing / Background/Future Total

* With minor signal optimization

** Unsignalized leg

As indicated in Table 2, all study intersections are currently operating adequately and will continue to operate at a good level of service in the year 2027 with the proposed project in place, except for two intersections. The exceptions are the intersection of SW 145 Avenue & Pines Boulevard and the intersection of SW 145 Avenue & Pembroke Road during the PM Peak hour.

The intersection of SW 145 Avenue & Pines Boulevard is projected to fail under future conditions with and without the proposed project in place. However, with minor signal optimization the intersection's LOS is expected to improve. Similarly, the intersection of SW 145 Avenue & Pembroke Road is projected to fail under future conditions with and without the proposed project in place.

The increase in delay due to proposed project is less than five seconds. However, with minor signal optimization the intersection's LOS is expected to improve.

Table 3 summarizes the 95th percentile vehicle queues for the turn lanes that are affected by the project trips. The 95th Percentile is the length of the queue that should not be exceed in the 95% of all cycles. The table includes the existing turn lane storage and the 95th percentile vehicle queue for each scenario.

Intersection	Time Period	EASTBOUND				WESTBOUND		NORTHBOUND		SOUTHBOUND			
		L		R		L		R		L		R	
		Storage (ft)	95th percentile (ft)	Storage (ft)	95th percentile (ft)	Storage (ft)	95th percentile (ft)	Storage (ft)	95th percentile (ft)	Storage (ft)	95th percentile (ft)	Storage (ft)	95th percentile (ft)
RW 145 Avenue & Pines Boulevard (1)	AMF			100	120/524/133	270	129/910/1430	450	221/254/269				
	PMF				200/766/108		422/1432/1351		102/442/448				
SW 2nd Street & SW 148 Avenue	AMF											100	0/0/0
	PMF												0/0/0
RW 145th Avenue & SW 5th Street	AMF	100	25/30/40	100	11/11/15							180	0/0/0
	PMF		110/122/127		35/35/36								24/25/25
SW 145 Avenue & SW 8th Street	AMF							200	2/2/4	200	0/0/0	270	0/0/0
	PMF								8/20/10		22/4/4		0/0/0
SW 125 Avenue & SW 145 Terrace	AMF							250	4/6/8			150	0/0/0
	PMF								22/30/14				0/0/0
RW 145 Avenue & Pembroke Road (1)	AMF	170	84/108/115					180	108/110/209	180	170/207/224		
	PMF		131/210/422						175/4135/4185		438/456/7548		

Existing/Background/Future
 a 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
 (1) Queues extending beyond the existing storage bay are expected during background conditions without the proposed project in place

The computer printouts of the intersection capacity analyses are contained in Appendix E.

CONCLUSIONS AND RECOMMENDATIONS

Pembroke Gardens is a proposed residential development to be located at 527 SW 145th Terrace, in the City of Pembroke Pines in Broward County, Florida. The site will be developed with the following land use and intensity:

- Building A: 308 Mid-rise units

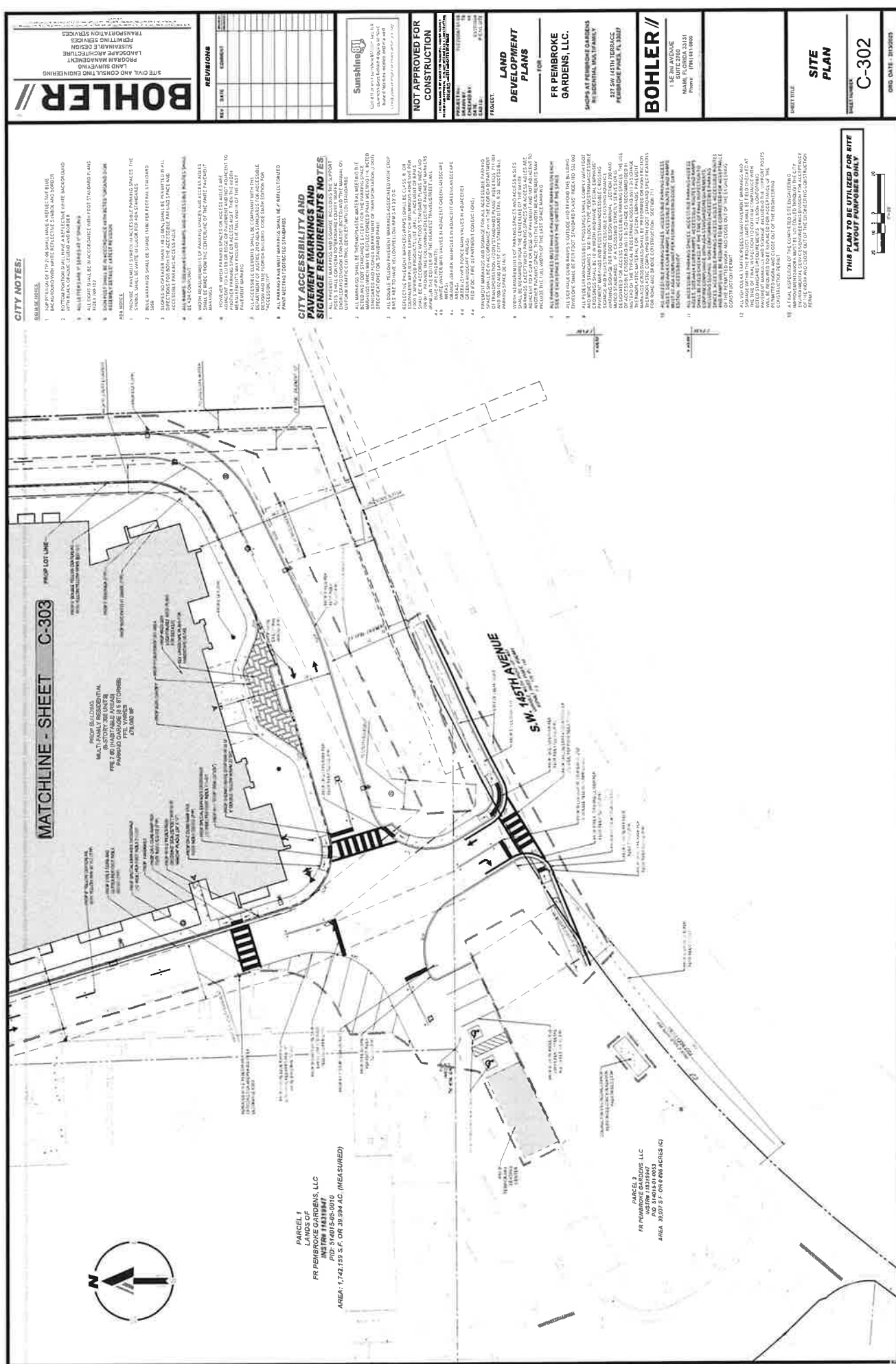
Access to the site is provided via the SW 2nd Street, SW 5th Street, SW 145 Terrace and a new access driveway onto SW 145th Avenue. The proposed development is anticipated to be built and occupied in 2027.

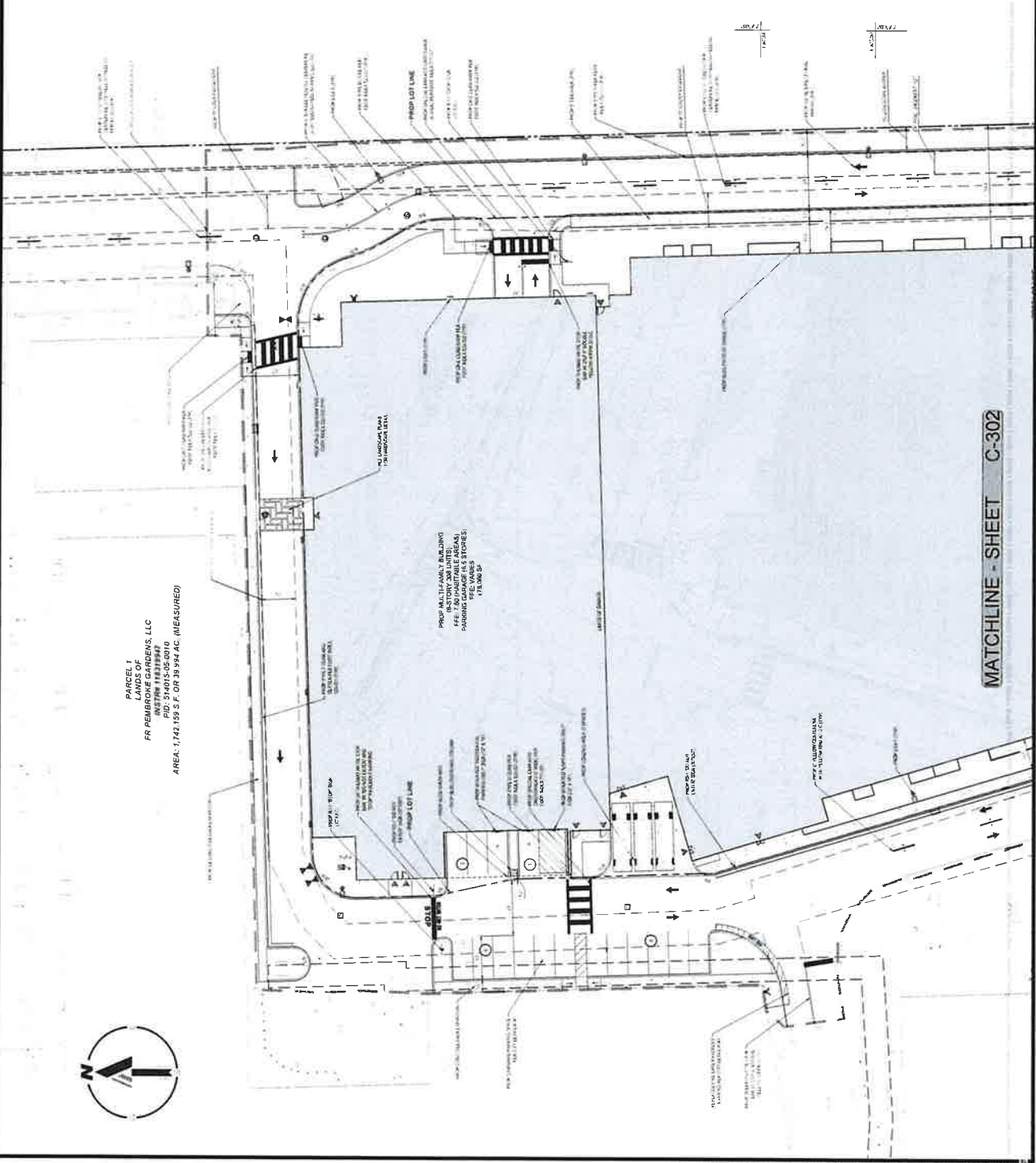
The conclusions and recommendations of the traffic study are presented below:

- The proposed project is anticipated to generate approximately 124 AM peak hour trips (28 inbound and 95 outbound) and approximately 119 PM peak hour trips (72 inbound and 47 outbound).
- All study intersections are currently operating adequately and will continue to operate at a good level of service in the year 2027 with the proposed project in place, except for two intersections. The exceptions are the intersection of SW 145 Avenue & Pines Boulevard and the intersection SW 145 Avenue & Pembroke Road during the PM Peak hour. The intersection of SW 145 Avenue & Pines Boulevard is projected to fail under future conditions with and without the proposed project in place. However, with minor signal optimization the intersection's LOS is expected to improve. Similarly, the intersection of SW 145 Avenue & Pembroke Road is projected to fail under future conditions with and without the proposed project in place. The increase in delay due to proposed project is less than five seconds. However, with minor signal optimization the intersection's LOS is expected to improve.

APPENDIX A

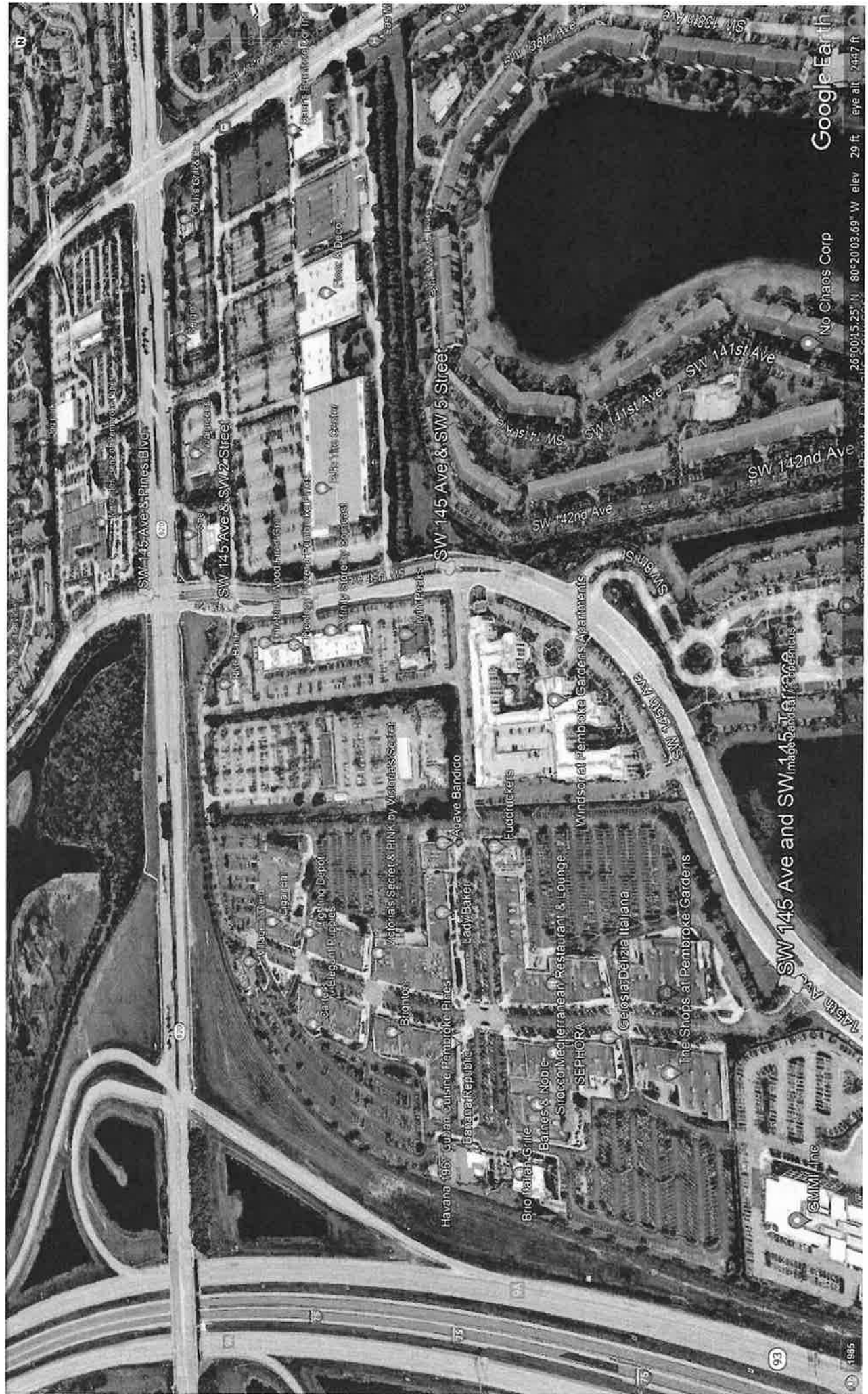
Site Plan – Pembroke Gardens Residential





APPENDIX B

Traffic Counts



Google Earth

No Chaos Corp

26°00'15.25" N 80°20'03.69" W elev 29 ft eye alt 247.7 ft

SW 145 Ave and SW 145 St

©MM Inc

© 1985

Traf Tech Engineering Inc.

File Name : 1-SW 145th Ave & Pines Blvd

Site Code : 00000000

Start Date : 12/14/2023

Page No : 1

Groups Printed- Autos - Heavy Vehicles

Start Time	SW 145th Ave From North					Pines Blvd From East					SW 145th Ave From South					Pines 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	74	7	4	0	85	2	605	12	1	620	19	11	70	0	100	71	363	10	5	449	1254
07:15	65	7	12	1	85	11	612	13	2	638	24	19	101	0	144	74	442	20	2	538	1405
07:30	101	24	4	0	129	6	584	24	1	615	29	26	110	0	165	107	448	23	4	582	1491
07:45	66	16	5	0	87	8	592	48	3	651	27	12	109	0	148	151	564	26	4	745	1631
Total	306	54	25	1	386	27	2393	97	7	2524	99	68	390	0	557	403	1817	79	15	2314	5781
08:00	81	18	9	0	108	7	566	25	1	599	51	12	99	1	163	148	504	25	2	679	1549
08:15	66	15	7	0	88	5	547	30	3	585	31	9	91	0	131	163	543	42	3	751	1555
08:30	43	16	7	1	67	8	481	50	2	541	37	12	65	0	114	170	530	42	4	746	1468
08:45	48	27	15	0	90	11	483	48	1	543	33	21	76	0	130	192	514	32	3	741	1504
Total	238	76	38	1	353	31	2077	153	7	2268	152	54	331	1	538	673	2091	141	12	2917	6076
*** BREAK ***																					
16:00	41	14	11	0	66	8	552	50	3	613	70	18	149	1	238	154	549	61	10	774	1691
16:15	39	24	4	0	67	9	486	57	3	555	64	23	186	0	273	147	506	60	6	719	1614
16:30	62	29	12	0	103	8	554	57	0	619	81	14	140	0	235	160	532	66	2	760	1717
16:45	52	18	9	0	79	9	430	61	3	503	66	38	181	1	286	97	536	30	4	667	1535
Total	194	85	36	0	315	34	2022	225	9	2290	281	93	656	2	1032	558	2123	217	22	2920	6557
17:00	49	23	4	0	76	10	521	71	2	604	54	40	145	0	239	154	466	57	9	686	1605
17:15	33	26	10	0	69	10	487	55	4	556	87	28	214	0	329	138	560	37	2	737	1691
17:30	34	24	4	1	63	7	471	65	4	547	62	24	138	0	224	118	406	63	10	597	1431
17:45	54	28	13	0	95	14	457	53	2	526	73	30	189	0	292	113	446	39	2	600	1513
Total	170	101	31	1	303	41	1936	244	12	2233	276	122	686	0	1084	523	1878	196	23	2620	6240
Grand Total	908	316	130	3	1357	133	8428	719	35	9315	808	337	2063	3	3211	2157	7909	633	72	10771	24654
Apprch %	66.9	23.3	9.6	0.2		1.4	90.5	7.7	0.4		25.2	10.5	64.2	0.1		20	73.4	5.9	0.7		
Total %	3.7	1.3	0.5	0	5.5	0.5	34.2	2.9	0.1	37.8	3.3	1.4	8.4	0	13	8.7	32.1	2.6	0.3	43.7	
Autos	904	312	130	3	1349	132	8352						2022			2141	7784			10622	24362
% Autos	99.6	98.7	100	100	99.4	99.2	99.1	99.2	100	99.1	99.1	98.8	98	100	98.4	99.3	98.4	99.1	97.2	98.6	98.8
Heavy Vehicles																					
% Heavy Vehicles	0.4	1.3	0	0	0.6	0.8	0.9	0.8	0	0.9	0.9	1.2	2	0	1.6	0.7	1.6	0.9	2.8	1.4	1.2

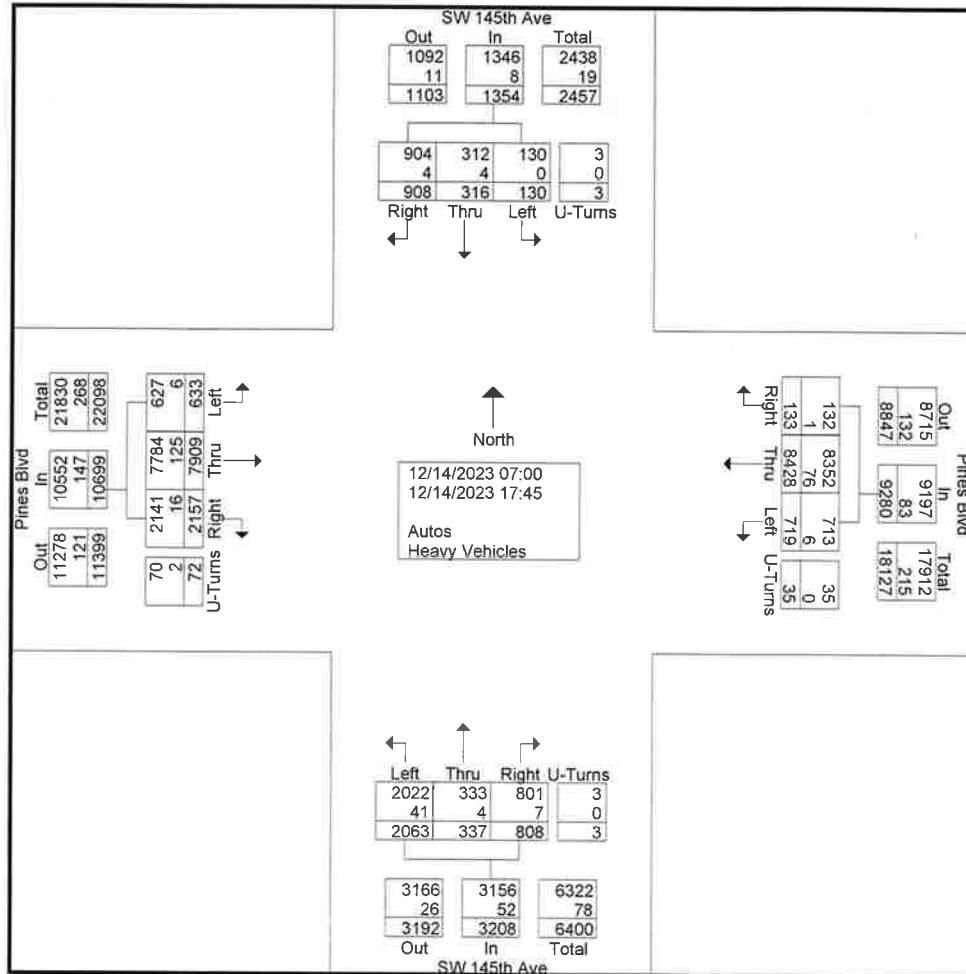
Traf Tech Engineering Inc.

File Name : 1-SW 145th Ave & Pines Blvd

Site Code : 00000000

Start Date : 12/14/2023

Page No : 2



Traf Tech Engineering Inc.

File Name : 1-SW 145th Ave & Pines Blvd

Site Code : 00000000

Start Date : 12/14/2023

Page No : 3

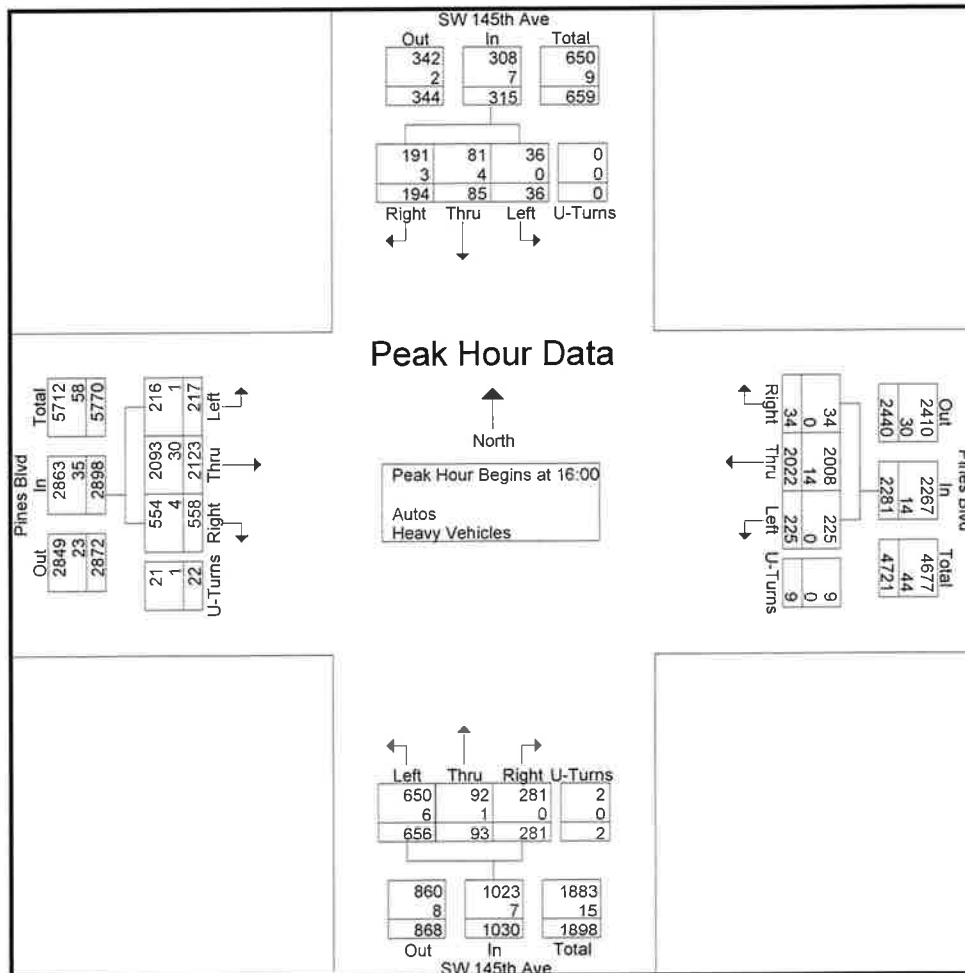
SB

WB

NB

EB

	SW 145th Ave From North					Pines Blvd From East					SW 145th Ave From South					Pines Blvd From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	41	14	11	0	66	8	552	50	3	613	70	18	149	1	238	154	549	61	10	774	1691
16:15	39	24	4	0	67	9	486	57	3	555	64	23	186	0	273	147	506	60	6	719	1614
16:30	62	29	12	0	103	8	554	57	0	619	81	14	140	0	235	160	532	66	2	760	1717
16:45	52	18	9	0	79	9	430	61	3	503	66	38	181	1	286	97	536	30	4	667	1535
Total Volume	194	85	36	0	315	34	2022	225	9	2290	281	93	656	2	1032	558	2123	217	22	2920	6557
% App. Total	61.6	27	11.4	0		1.5	88.3	9.8	0.4		27.2	9	63.6	0.2		19.1	72.7	7.4	0.8		
PHF	.782	.733	.750	.000	.765	.944	.912	.922	.750	.925	.867	.612	.882	.500	.902	.872	.967	.822	.550	.943	.955
Autos	191	81	36	0	308	34	2008								2093						
% Autos	98.5	95.3	100	0	97.8	100	99.3	100	100	99.4	100	98.9	99.1	100	99.3	99.3	98.6	99.5	95.5	98.8	99.0
Heavy Vehicles																					
% Heavy Vehicles	1.5	4.7	0	0	2.2	0	0.7	0	0	0.6	0	1.1	0.9	0	0.7	0.7	1.4	0.5	4.5	1.2	1.0



Traf Tech Engineering Inc.

File Name : 1-SW 145th Ave & Pines Blvd

Site Code : 00000000

Start Date : 12/14/2023

Page No : 4

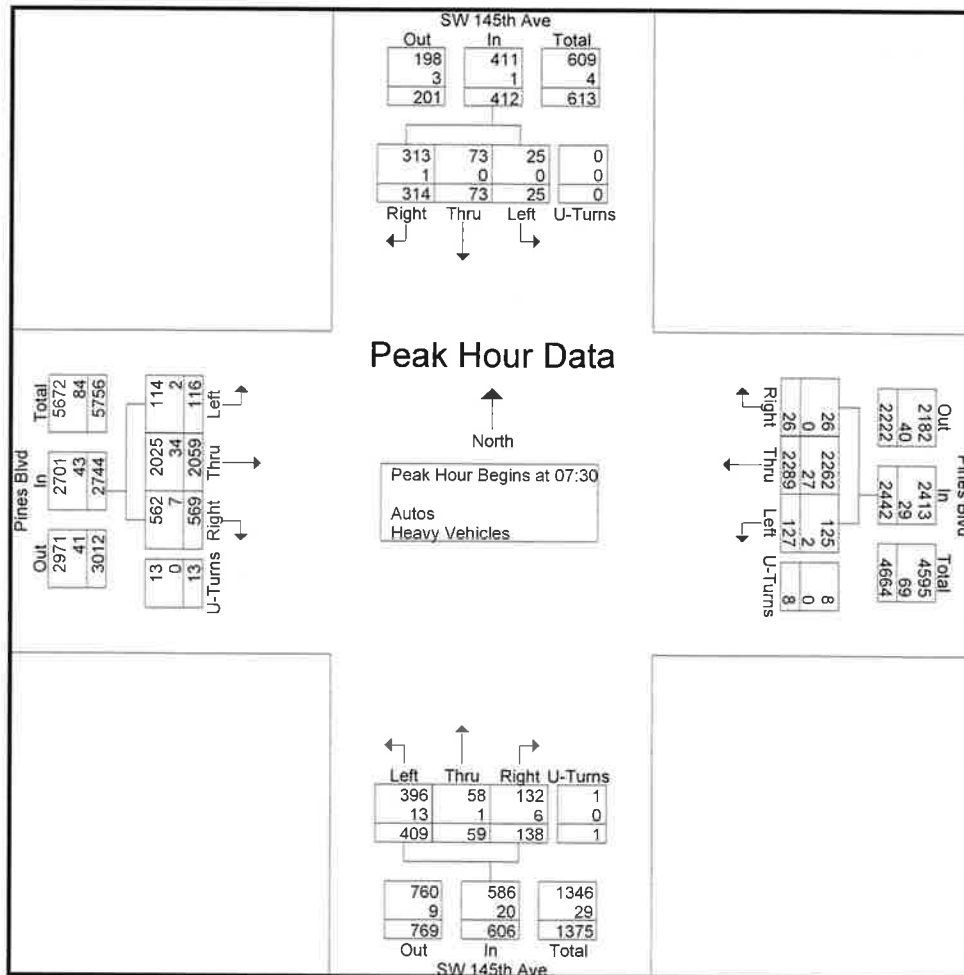
SB

VVR

NB

EP

	SW 145th Ave From North					Pines Blvd From East					SW 145th Ave From South					Pines Blvd From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	101	24	4	0	129	6	584	24	1	615	29	26	110	0	165	107	448	23	4	582	1491
07:45	66	16	5	0	87	8	592	48	3	651	27	12	109	0	148	151	564	26	4	745	1631
08:00	81	18	9	0	108	7	566	25	1	599	51	12	99	1	163	148	504	25	2	679	1549
08:15	66	15	7	0	88	5	547	30	3	585	31	9	91	0	131	163	543	42	3	751	1555
Total Volume	314	73	25	0	412	26	2289	127	8	2450	138	59	409	1	607	569	2059	116	13	2757	6226
% App. Total	76.2	17.7	6.1	0		1.1	93.4	5.2	0.3		22.7	9.7	67.4	0.2		20.6	74.7	4.2	0.5		
PHF	.777	.760	.694	.000	.798	.813	.967	.661	.667	.941	.676	.567	.930	.250	.920	.873	.913	.690	.813	.918	.954
Autos	313	73	25	0	411	26	2262									2025					
% Autos	99.7	100	100	0	99.8	100	98.8	98.4	100	98.8	95.7	98.3	96.8	100	96.7	98.8	98.3	98.3	100	98.4	98.5
Heavy Vehicles																					
% Heavy Vehicles	0.3	0	0	0	0.2	0	1.2	1.6	0	1.2	4.3	1.7	3.2	0	3.3	1.2	1.7	1.7	0	1.6	1.5



Traf Tech Engineering Inc.

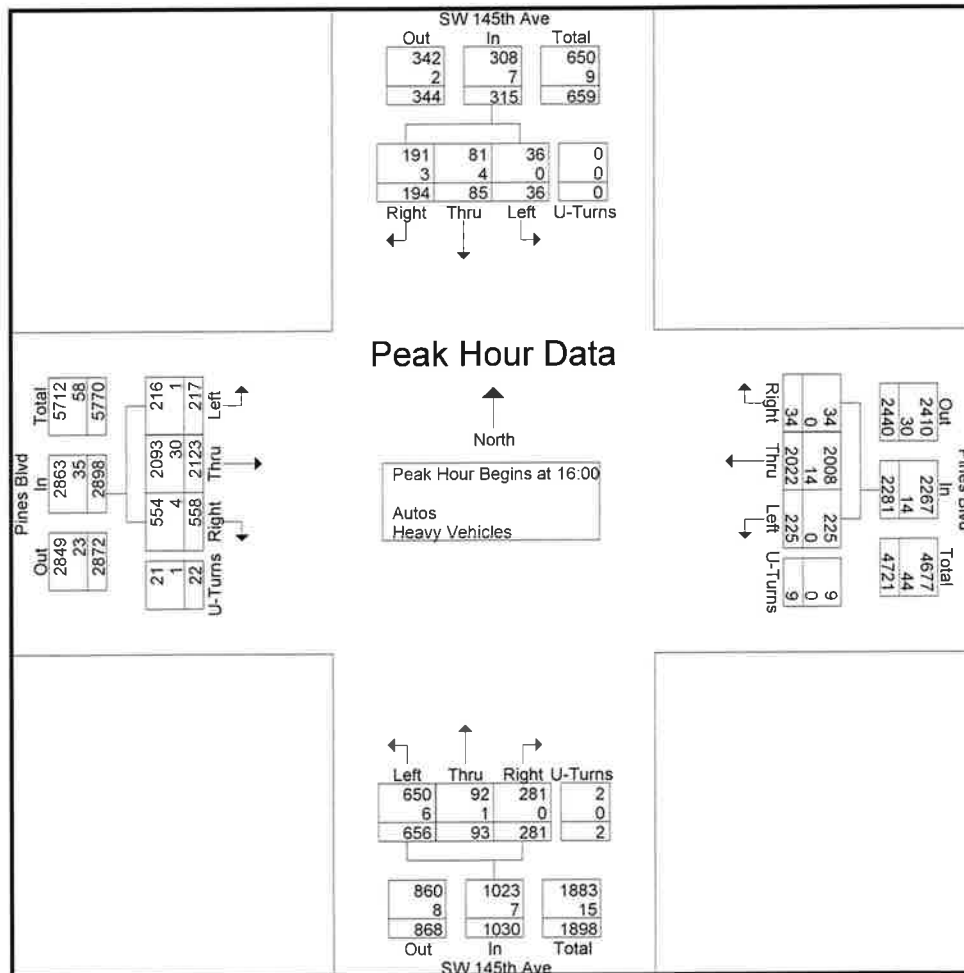
File Name : 1-SW 145th Ave & Pines Blvd

Site Code : 00000000

Start Date : 12/14/2023

Page No : 5

	SW 145th Ave From North					Pines Blvd From East					SW 145th Ave From South					Pines Blvd From West					
Start Time	Right	Thru	Left	U-Turns	App Total	Right	Thru	Left	U-Turns	App Total	Right	Thru	Left	U-Turns	App Total	Right	Thru	Left	U-Turns	App Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	41	14	11	0	66	8	552	50	3	613	70	18	149	1	238	154	549	61	10	774	1691
16:15	39	24	4	0	67	9	486	57	3	555	64	23	186	0	273	147	506	60	6	719	1614
16:30	62	29	12	0	103	8	554	57	0	619	81	14	140	0	235	160	532	66	2	760	1717
16:45	52	18	9	0	79	9	430	61	3	503	66	38	181	1	286	97	536	30	4	667	1535
Total Volume	194	85	36	0	315	34	2022	225	9	2290	281	93	656	2	1032	558	2123	217	22	2920	6557
% App. Total	61.6	27	11.4	0		1.5	88.3	9.8	0.4		27.2	9	63.6	0.2		19.1	72.7	7.4	0.8		
PHF	.782	.733	.750	.000	.765	.944	.912	.922	.750	.925	.867	.612	.882	.500	.902	.872	.967	.822	.550	.943	.955
Autos	191	81	36	0	308	34	2008									2093					
% Autos	98.5	95.3	100	0	97.8	100	99.3	100	100	99.4	100	98.9	99.1	100	99.3	99.3	98.6	99.5	95.5	98.8	99.0
Heavy Vehicles																					
% Heavy Vehicles	1.5	4.7	0	0	2.2	0	0.7	0	0	0.6	0	1.1	0.9	0	0.7	0.7	1.4	0.5	4.5	1.2	1.0



Traf Tech Engineering Inc.

File Name : 2- SW 145 Avenue and SW 2nd St

Site Code : 00000000

Start Date : 12/14/2023

Page No : 1

Groups Printed- Autos - Heavy Vehicles

	SW 145th Ave From North					SW 2nd St From East					SW 145th Ave From South					SW 2nd St From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00	14	80	0	0	94	4	0	6	0	10	5	112	0	0	117	6	0	1	0	7	228
07:15	4	93	0	0	97	6	0	3	0	9	3	138	0	0	141	2	0	2	0	4	251
07:30	16	172	0	0	188	9	0	4	0	13	3	148	0	0	151	2	0	0	0	2	354
07:45	22	170	0	0	192	8	0	7	0	15	9	146	0	0	155	1	0	0	0	1	363
Total	56	515	0	0	571	27	0	20	0	47	20	544	0	0	564	11	0	3	0	14	1196
08:00	16	187	0	0	203	16	0	2	0	18	2	155	0	0	157	7	0	0	0	7	385
08:15	6	210	0	0	216	6	0	6	0	12	7	120	0	0	127	2	0	0	0	2	357
08:30	11	228	0	0	239	7	0	2	0	9	8	118	0	0	126	4	0	0	0	4	378
08:45	31	246	0	0	277	10	0	3	0	13	9	132	0	0	141	5	0	0	0	5	436
Total	64	871	0	0	935	39	0	13	0	52	26	525	0	0	551	18	0	0	0	18	1556
09:00	49	104	0	0	153	0	0	0	0	0	0	0	0	0	0	20	0	0	0	20	173
*** BREAK ***																					
Total	49	104	0	0	153	0	0	0	0	0	0	0	0	0	0	20	0	0	0	20	173
*** BREAK ***																					
16:00	68	166	0	0	234	9	0	5	0	14	11	298	0	0	309	30	0	0	0	30	587
16:15	65	180	0	0	245	7	0	2	0	9	5	218	0	0	223	37	0	0	0	37	514
16:30	69	200	0	0	269	9	0	2	0	11	11	257	0	0	268	52	0	1	0	53	601
16:45	57	129	0	0	186	15	0	5	0	20	2	249	0	0	251	31	0	1	0	32	489
Total	259	675	0	0	934	40	0	14	0	54	29	1022	0	0	1051	150	0	2	0	152	2191
17:00	84	177	0	0	261	7	0	5	0	12	13	275	0	0	288	29	0	1	0	30	591
17:15	72	163	0	0	235	10	0	3	0	13	9	323	0	0	332	37	0	0	0	37	617
17:30	69	180	0	0	249	11	0	2	0	13	7	275	0	0	282	37	0	0	0	37	581
17:45	85	151	0	0	236	10	0	4	0	14	19	267	0	0	286	59	0	2	0	61	597
Total	310	671	0	0	981	38	0	14	0	52	48	1140	0	0	1188	162	0	3	0	165	2386
Grand Total	738	2836	0	0	3574	144	0	61	0	205	123	3231	0	0	3354	361	0	8	0	369	7502
Apprch %	20.6	79.4	0	0		70.2	0	29.8	0		3.7	96.3	0	0		97.8	0	2.2	0		
Total %	9.8	37.8	0	0	47.6	1.9	0	0.8	0	2.7	1.6	43.1	0	0	44.7	4.8	0	0.1	0	4.9	
Autos	731	2795										3160									
% Autos	99.1	98.6	0	0	98.7	95.8	0	98.4	0	96.6	96.7	97.8	0	0	97.8	98.6	0	87.5	0	98.4	98.2
Heavy Vehicles																					
% Heavy Vehicles	0.9	1.4	0	0	1.3	4.2	0	1.6	0	3.4	3.3	2.2	0	0	2.2	1.4	0	12.5	0	1.6	1.8

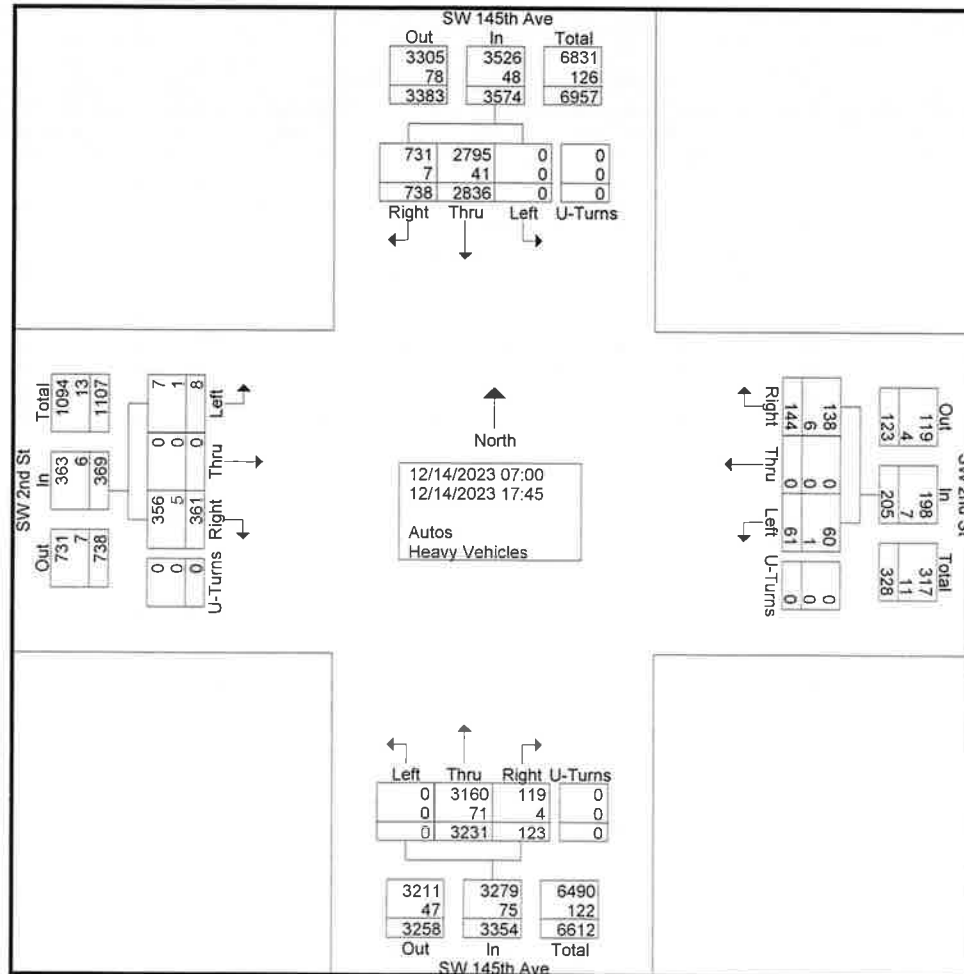
Traf Tech Engineering Inc.

File Name : 2- SW 145 Avenue and SW 2nd St

Site Code : 00000000

Start Date : 12/14/2023

Page No : 2



Traf Tech Engineering Inc.

File Name : 2- SW 145 Avenue and SW 2nd St

Site Code : 00000000

Start Date : 12/14/2023

Page No : 3

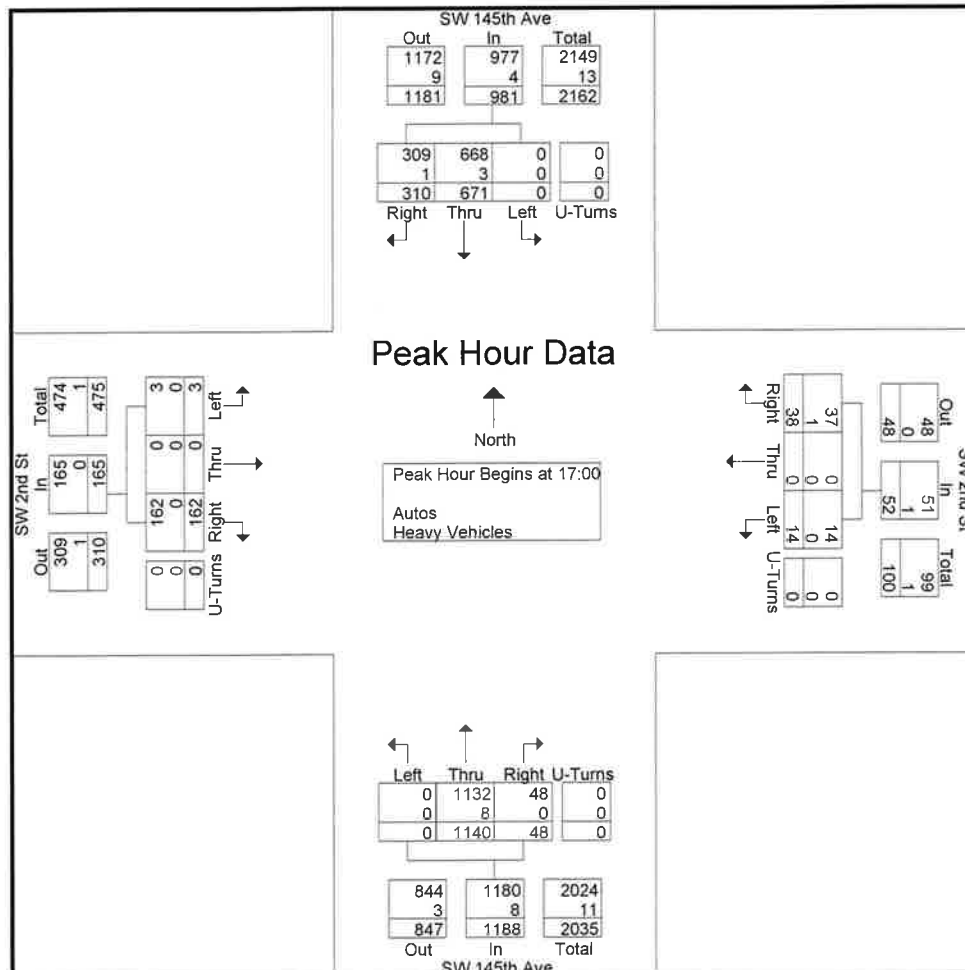
SB

WB

NB

EB

	SW 145th Ave From North					SW 2nd St From East					SW 145th Ave From South					SW 2nd St From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	84	177	0	0	261	7	0	5	0	12	13	275	0	0	288	29	0	1	0	30	591
17:15	72	163	0	0	235	10	0	3	0	13	9	323	0	0	332	37	0	0	0	37	617
17:30	69	180	0	0	249	11	0	2	0	13	7	275	0	0	282	37	0	0	0	37	581
17:45	85	151	0	0	236	10	0	4	0	14	19	267	0	0	286	59	0	2	0	61	597
Total Volume	310	671	0	0	981	38	0	14	0	52	48	1140	0	0	1188	162	0	3	0	165	2386
% App. Total	31.6	68.4	0	0		73.1	0	26.9	0		4	96	0	0		98.2	0	1.8	0		
PHF	.912	.932	.000	.000	.940	.864	.000	.700	.000	.929	.632	.882	.000	.000	.895	.686	.000	.375	.000	.676	.967
Autos	309	668	0	0	977	37	0	14	0	51	48	1132	0	0	1180	160	0	3	0	163	2375
% Autos	99.7	99.6	0	0	99.6	97.4	0	100	0	98.1	100	99.3	0	0	99.3	100	0	100	0	100	99.5
Heavy Vehicles																					
% Heavy Vehicles	0.3	0.4	0	0	0.4	2.6	0	0	0	1.9	0	0.7	0	0	0.7	0	0	0	0	0	0.5



Traf Tech Engineering Inc.

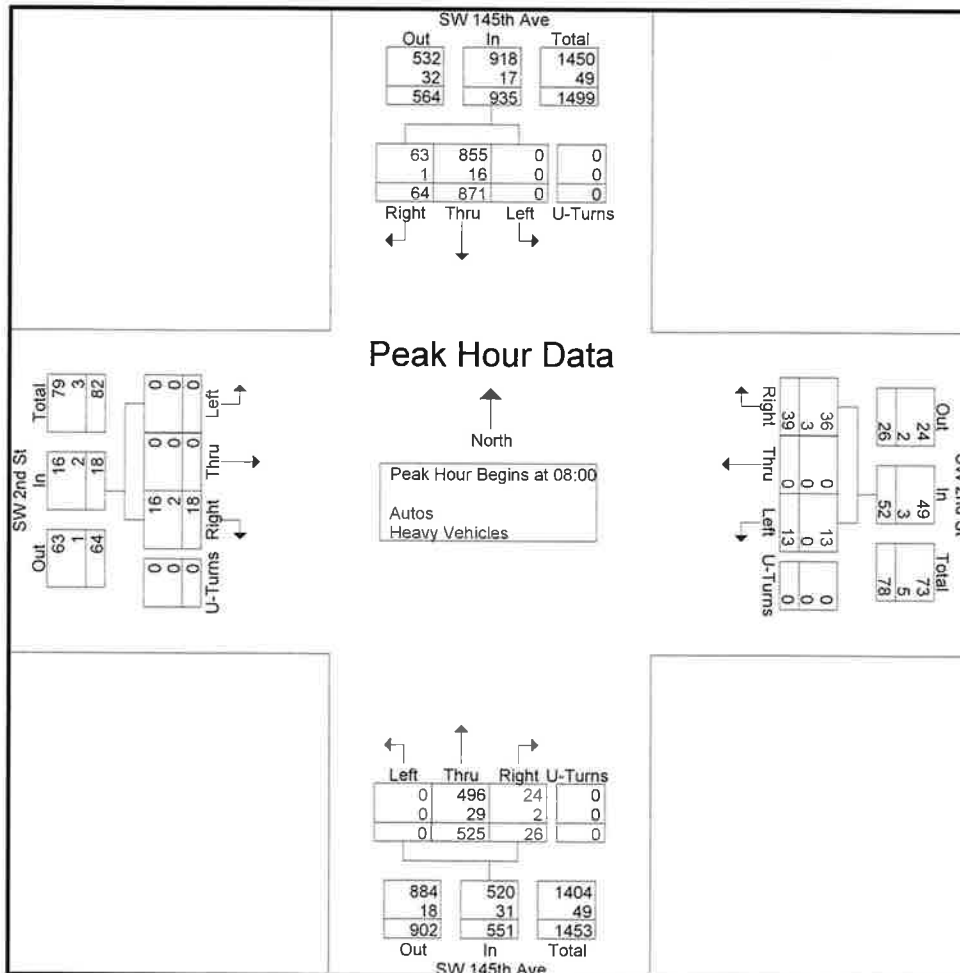
File Name : 2- SW 145 Avenue and SW 2nd St

Site Code : 00000000

Start Date : 12/14/2023

Page No : 4

	SW 145th Ave From North					SW 2nd St From East					SW 145th Ave From South					SW 2nd St From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	16	187	0	0	203	16	0	2	0	18	2	155	0	0	157	7	0	0	0	7	385
08:15	6	210	0	0	216	6	0	6	0	12	7	120	0	0	127	2	0	0	0	2	357
08:30	11	228	0	0	239	7	0	2	0	9	8	118	0	0	126	4	0	0	0	4	378
08:45	31	246	0	0	277	10	0	3	0	13	9	132	0	0	141	5	0	0	0	5	436
Total Volume	64	871	0	0	935	39	0	13	0	52	26	525	0	0	551	18	0	0	0	18	1556
% App. Total	6.8	93.2	0	0		75	0	25	0		4.7	95.3	0	0		100	0	0	0		
PHF	.516	.885	.000	.000	.844	.609	.000	.542	.000	.722	.722	.847	.000	.000	.877	.643	.000	.000	.000	.643	.892
Autos	63	855	0	0	918	36	0	13	0	49	24	496	0	0	520	16	0	0	0	16	1503
% Autos	98.4	98.2	0	0	98.2	92.3	0	100	0	94.2	92.3	94.5	0	0	94.4	88.9	0	0	0	88.9	96.6
Heavy Vehicles																					
% Heavy Vehicles	1.6	1.8	0	0	1.8	7.7	0	0	0	5.8	7.7	5.5	0	0	5.6	11.1	0	0	0	11.1	3.4



Traf Tech Engineering Inc.

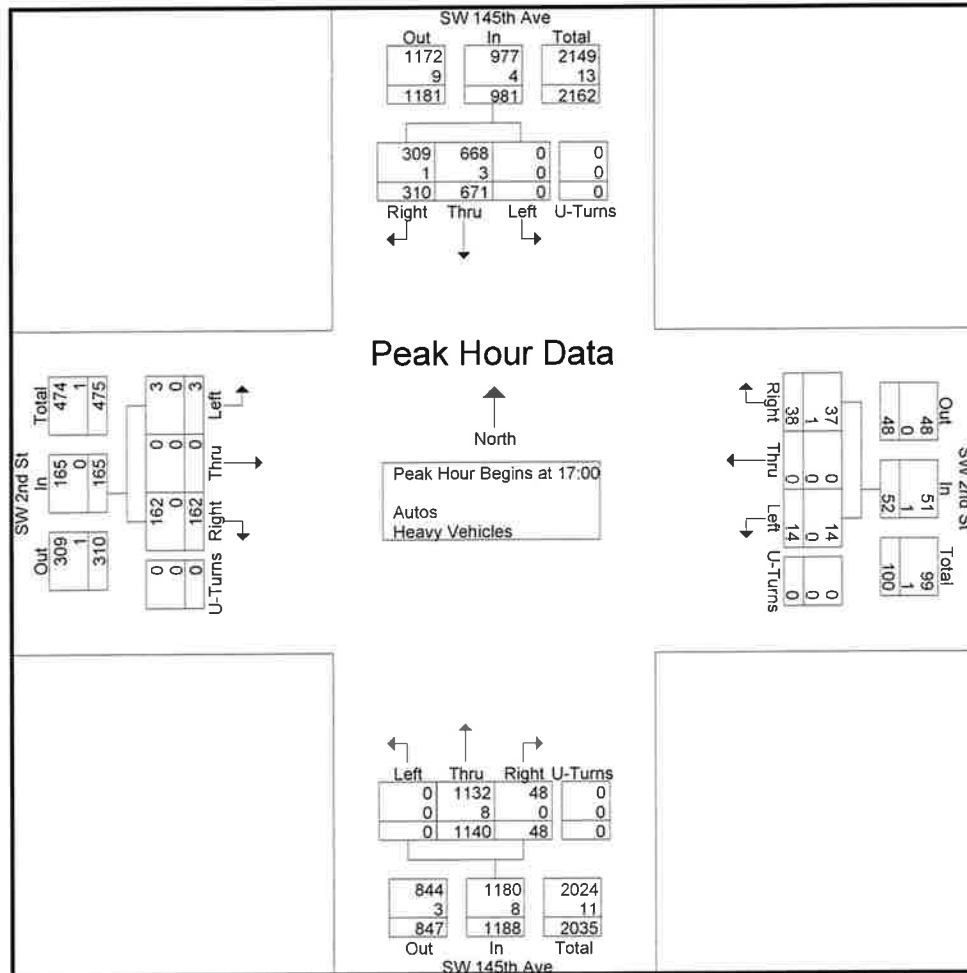
File Name : 2- SW 145 Avenue and SW 2nd St

Site Code : 00000000

Start Date : 12/14/2023

Page No : 5

	SW 145th Ave From North					SW 2nd St From East					SW 145th Ave From South					SW 2nd St From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	84	177	0	0	261	7	0	5	0	12	13	275	0	0	288	29	0	1	0	30	591
17:15	72	163	0	0	235	10	0	3	0	13	9	323	0	0	332	37	0	0	0	37	617
17:30	69	180	0	0	249	11	0	2	0	13	7	275	0	0	282	37	0	0	0	37	581
17:45	85	151	0	0	236	10	0	4	0	14	19	267	0	0	286	59	0	2	0	61	597
Total Volume	310	671	0	0	981	38	0	14	0	52	48	1140	0	0	1188	162	0	3	0	165	2386
% App. Total	31.6	68.4	0	0		73.1	0	26.9	0		4	96	0	0		98.2	0	1.8	0		
PHF	.912	.932	.000	.000	.940	.864	.000	.700	.000	.929	.632	.882	.000	.000	.895	.686	.000	.375	.000	.676	.967
Autos	309	668	0	0	977	37	0	14	0	51	48	1132	0	0	1188	160	0	3	0	163	2386
% Autos	99.7	99.6	0	0	99.6	97.4	0	100	0	98.1	100	99.3	0	0	99.3	100	0	100	0	100	99.5
Heavy Vehicles																					
% Heavy Vehicles	0.3	0.4	0	0	0.4	2.6	0	0	0	1.9	0	0.7	0	0	0.7	0	0	0	0	0	0.5



Traf Tech Engineering Inc.

File Name : 2- SW 145 Avenue and SW 2nd St

Site Code : 00000000

Start Date : 12/14/2023

Page No : 1

Groups Printed- Peds & Bikes

Start Time	SW 145th Ave From North				SW 2nd St From East				SW 145th Ave From South				SW 2nd St 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	1	0	0	0	0	3
07:15	0	0	0	0	1	0	0	2	0	0	0	0	0	0	0	0	3
*** BREAK ***																	
Total	0	0	0	0	1	0	0	4	0	0	0	1	0	0	0	0	6
*** 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	0	0	0	1	0	0	0	0	0	0	0	0	1
*** BREAK ***																	
Grand Total	0	0	0	0	1	0	0	5	0	0	0	1	0	0	0	0	7
Apprch %	0	0	0	0	16.7	0	0	83.3	0	0	0	100	0	0	0	0	
Total %	0	0	0	0	14.3	0	0	71.4	0	0	0	14.3	0	0	0	0	

Traf Tech Engineering Inc.

File Name : 3- SW 145 Ave and SW 5 St

Site Code : 00000000

Start Date : 12/14/2023

Page No : 1

Groups Printed- Autos - Heavy Vehicles

	SW 145th Ave From North					SW 5th St From East					SW 145th Ave From South					SW 5th St From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00	6	77	0	0	83	1	0	0	0	1	1	100	0	0	101	2	0	12	0	14	199
07:15	5	89	0	0	94	3	0	0	0	3	0	118	0	0	118	1	0	10	0	11	226
07:30	5	146	0	0	151	0	0	0	0	0	2	134	0	0	136	1	0	13	0	14	301
07:45	15	168	0	0	183	1	0	0	0	1	6	146	0	0	152	2	0	9	0	11	347
Total	31	480	0	0	511	5	0	0	0	5	9	498	0	0	507	6	0	44	0	50	1073
08:00	10	195	0	0	205	3	0	0	0	3	2	120	0	0	122	1	0	26	0	27	357
08:15	10	192	0	0	202	0	0	0	0	0	2	114	0	0	116	1	0	20	0	21	339
08:30	16	200	0	0	216	4	0	0	0	4	4	103	0	0	107	3	0	11	0	14	341
08:45	21	221	0	0	242	4	0	0	0	4	2	112	0	0	114	3	0	9	0	12	372
Total	57	808	0	0	865	11	0	0	0	11	10	449	0	0	459	8	0	66	0	74	1409
*** BREAK ***																					
16:00	46	116	0	0	162	2	0	0	0	2	5	190	0	0	195	22	1	79	0	102	461
16:15	62	115	0	0	177	1	0	0	0	1	3	146	0	0	149	15	1	66	0	82	409
16:30	63	127	0	0	190	10	0	0	0	10	3	164	0	0	167	22	0	92	0	114	481
16:45	50	115	0	1	166	4	0	0	0	4	2	171	0	0	173	13	0	59	0	72	415
Total	221	473	0	1	695	17	0	0	0	17	13	671	0	0	684	72	2	296	0	370	1766
17:00	55	132	0	0	187	4	0	0	0	4	1	221	0	0	222	27	0	100	0	127	540
17:15	66	111	0	0	177	0	0	0	0	0	1	210	0	0	211	30	0	90	0	120	508
17:30	55	121	0	0	176	0	0	0	0	0	2	194	0	0	196	18	0	78	0	96	468
17:45	49	117	0	0	166	1	0	0	0	1	7	175	0	0	182	12	1	76	0	89	438
Total	225	481	0	0	706	5	0	0	0	5	11	800	0	0	811	87	1	344	0	432	1954
Grand Total	534	2242	0	1	2777	38	0	0	0	38	43	2418	0	0	2461	173	3	750	0	926	6202
Apprch %	19.2	80.7	0	0		100	0	0	0		1.7	98.3	0	0		18.7	0.3	81	0		
Total %	8.6	36.1	0	0	44.8	0.6	0	0	0	0.6	0.7	39	0	0	39.7	2.8	0	12.1	0	14.9	
Autos	523	2218										2387									
% Autos	97.9	98.9	0	100	98.7	92.1	0	0	0	92.1	100	98.7	0	0	98.7	96.5	100	94.7	0	95	98.1
Heavy Vehicles																					
% Heavy Vehicles	2.1	1.1	0	0	1.3	7.9	0	0	0	7.9	0	1.3	0	0	1.3	3.5	0	5.3	0	5	1.9

Traf Tech Engineering Inc.

File Name : 3- SW 145 Ave and SW 5 St
Site Code : 00000000
Start Date : 12/14/2023
Page No : 2

Traf Tech Engineering Inc.

File Name : 3- SW 145 Ave and SW 5 St

Site Code : 00000000

Start Date : 12/14/2023

Page No : 3

SB WB NB EB

	SW 145th Ave From North					SW 5th St From East					SW 145th Ave From South					SW 5th St From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	55	132	0	0	187	4	0	0	0	4	1	221	0	0	222	27	0	100	0	127	540
17:15	66	111	0	0	177	0	0	0	0	0	1	210	0	0	211	30	0	90	0	120	508
17:30	55	121	0	0	176	0	0	0	0	0	2	194	0	0	196	18	0	78	0	96	468
17:45	49	117	0	0	166	1	0	0	0	1	7	175	0	0	182	12	1	76	0	89	438
Total Volume	225	481	0	0	706	5	0	0	0	5	11	800	0	0	811	87	1	344	0	432	1954
% App. Total	31.9	68.1	0	0		100	0	0	0		1.4	98.6	0	0		20.1	0.2	79.6	0		
PHF	.852	.911	.000	.000	.944	.313	.000	.000	.000	.313	.393	.905	.000	.000	.913	.725	.250	.860	.000	.850	.905
Autos	225	478	0	0	703	5	0	0	0	5	11	798	0	0	809	87	1	339	0	427	1944
% Autos	100	99.4	0	0	99.6	100	0	0	0	100	100	99.8	0	0	99.8	100	100	98.5	0	98.8	99.5
Heavy Vehicles																					
% Heavy Vehicles	0	0.6	0	0	0.4	0	0	0	0	0	0	0.3	0	0	0.2	0	0	1.5	0	1.2	0.5

Traf Tech Engineering Inc.

File Name : 3- SW 145 Ave and SW 5 St

Site Code : 00000000

Start Date : 12/14/2023

Page No : 4

SB

WB

AB

EB

	SW 145th Ave From North					SW 5th St From East					SW 145th Ave From South					SW 5th St From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	10	195	0	0	205	3	0	0	0	3	2	120	0	0	122	1	0	26	0	27	357
08:15	10	192	0	0	202	0	0	0	0	0	2	114	0	0	116	1	0	20	0	21	339
08:30	16	200	0	0	216	4	0	0	0	4	4	103	0	0	107	3	0	11	0	14	341
08:45	21	221	0	0	242	4	0	0	0	4	2	112	0	0	114	3	0	9	0	12	372
Total Volume	57	808	0	0	865	11	0	0	0	11	10	449	0	0	459	8	0	66	0	74	1409
% App. Total	6.6	93.4	0	0		100	0	0	0		2.2	97.8	0	0		10.8	0	89.2	0		
PHF	.679	.914	.000	.000	.894	.688	.000	.000	.000	.688	.625	.935	.000	.000	.941	.667	.000	.635	.000	.685	.947
Autos	53	799	0	0	852	9	0	0	0	9	10	436	0	0	446	7	0	49	0	56	1363
% Autos	93.0	98.9	0	0	98.5	81.8	0	0	0	81.8	100	97.1	0	0	97.2	87.5	0	74.2	0	75.7	96.7
Heavy Vehicles																					
% Heavy Vehicles	7.0	1.1	0	0	1.5	18.2	0	0	0	18.2	0	2.9	0	0	2.8	12.5	0	25.8	0	24.3	3.3

Traf Tech Engineering Inc.

File Name : 3- SW 145 Ave and SW 5 St

Site Code : 00000000

Start Date : 12/14/2023

Page No : 5

	SW 145th Ave From North					SW 5th St From East					SW 145th Ave From South					SW 5th St From West					
Start Time	Right	Thru	Left	U-Turns	App Total	Right	Thru	Left	U-Turns	App Total	Right	Thru	Left	U-Turns	App Total	Right	Thru	Left	U-Turns	App Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	55	132	0	0	187	4	0	0	0	4	1	221	0	0	222	27	0	100	0	127	540
17:15	66	111	0	0	177	0	0	0	0	0	1	210	0	0	211	30	0	90	0	120	508
17:30	55	121	0	0	176	0	0	0	0	0	2	194	0	0	196	18	0	78	0	96	468
17:45	49	117	0	0	166	1	0	0	0	1	7	175	0	0	182	12	1	76	0	89	438
Total Volume	225	481	0	0	706	5	0	0	0	5	11	800	0	0	811	87	1	344	0	432	1954
% App. Total	31.9	68.1	0	0		100	0	0	0		1.4	98.6	0	0		20.1	0.2	79.6	0		
PHF	852	911	.000	.000	.944	.313	.000	.000	.000	.313	.393	.905	.000	.000	.913	.725	.250	.860	.000	.850	.905
Autos	225	478	0	0	703	5	0	0	0	5	11	798	0	0	809	87	1	339	0	427	1944
% Autos	100	99.4	0	0	99.6	100	0	0	0	100	100	99.8	0	0	99.8	100	100	98.5	0	98.8	99.5
Heavy Vehicles																					
% Heavy Vehicles	0	0.6	0	0	0.4	0	0	0	0	0	0	0.3	0	0	0.2	0	0	1.5	0	1.2	0.5

Traf Tech Engineering Inc.

File Name : 3- SW 145 Ave and SW 5 St
 Site Code : 00000000
 Start Date : 12/14/2023
 Page No : 1

Groups Printed- Peds & Bikes

Start Time	SW 145th Ave From North				SW 5th St From East				SW 145th Ave From South				SW 5th St From West				Int. Total
	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	
*** BREAK ***																	
08:30	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
*** BREAK ***																	
Total	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	2
*** BREAK ***																	
16:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2
Total	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	3
17:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
*** BREAK ***																	
Total	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
Grand Total	0	0	0	1	1	0	0	2	0	0	0	4	0	0	0	0	8
Apprch %	0	0	0	100	33.3	0	0	66.7	0	0	0	100	0	0	0	0	
Total %	0	0	0	12.5	12.5	0	0	25	0	0	0	50	0	0	0	0	

Traf Tech Engineering Inc.

File Name : 4-SW 145th Ave & SW 145th Ter

Site Code : 00000000

Start Date : 12/14/2023

Page No : 1

Groups Printed- Autos - Heavy Vehicles

Start Time	SW 145th Ave From North					SW 145th Ter From East					SW 145th Ave From South					SW 145th Ter 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	0	81	0	1	82	0	0	0	0	0	0	70	4	0	74	3	0	0	0	3	159
07:15	1	90	0	0	91	0	0	0	0	0	0	91	3	0	94	1	0	0	0	1	186
07:30	0	128	0	0	128	0	0	0	0	0	0	115	4	0	119	0	0	1	0	1	248
07:45	3	176	0	0	179	0	0	0	0	0	0	125	8	1	134	0	0	0	0	0	313
Total	4	475	0	1	480	0	0	0	0	0	0	401	19	1	421	4	0	1	0	5	906
08:00	1	185	0	0	186	0	0	0	0	0	0	97	12	0	109	1	0	0	0	1	296
08:15	3	190	0	2	195	0	0	0	0	0	0	104	1	0	105	1	0	5	0	6	306
08:30	5	183	0	0	188	0	0	0	0	0	0	88	14	2	104	2	0	2	0	4	296
08:45	4	227	0	1	232	0	0	0	0	0	0	87	13	1	101	2	0	1	0	3	336
Total	13	785	0	3	801	0	0	0	0	0	0	376	40	3	419	6	0	8	0	14	1234
*** BREAK ***																					
16:00	13	101	0	1	115	0	0	0	0	0	0	155	49	0	204	37	0	17	0	54	373
16:15	9	118	0	0	127	0	0	0	0	0	0	143	56	0	199	31	0	8	0	39	365
16:30	24	103	0	0	127	0	0	0	0	0	0	153	60	2	215	27	0	14	0	41	383
16:45	16	107	0	0	123	0	0	0	0	0	0	153	54	0	207	31	0	13	0	44	374
Total	62	429	0	1	492	0	0	0	0	0	0	604	219	2	825	126	0	52	0	178	1495
17:00	18	111	0	0	129	0	0	0	0	0	0	193	52	2	247	37	0	11	0	48	424
17:15	12	114	0	1	127	0	0	0	0	0	0	201	73	0	274	32	0	12	0	44	445
17:30	12	109	0	0	121	0	0	0	0	0	0	151	51	0	202	32	0	19	0	51	374
17:45	16	102	0	2	120	0	0	0	0	0	0	173	75	0	248	39	0	14	0	53	421
Total	58	436	0	3	497	0	0	0	0	0	0	718	251	2	971	140	0	56	0	196	1664
Grand Total	137	2125	0	8	2270	0	0	0	0	0	0	2099	529	8	2636	276	0	117	0	393	5299
Apprch %	6	93.6	0	0.4		0	0	0	0		0	79.6	20.1	0.3		70.2	0	29.8	0		
Total %	2.6	40.1	0	0.2	42.8	0	0	0	0	0	0	39.6	10	0.2	49.7	5.2	0	2.2	0	7.4	
Autos	136	2106										2089									
% Autos	99.3	99.1	0	100	99.1	0	0	0	0	0	0	99.5	99.8	100	99.6	100	0	98.3	0	99.5	99.4
Heavy Vehicles																					
% Heavy Vehicles	0.7	0.9	0	0	0.9	0	0	0	0	0	0	0.5	0.2	0	0.4	0	0	1.7	0	0.5	0.6

Traf Tech Engineering Inc.

File Name : 4-SW 145th Ave & SW 145th Ter
Site Code : 00000000
Start Date : 12/14/2023
Page No : 2

Traf Tech Engineering Inc.

File Name : 4-SW 145th Ave & SW 145th Ter

Site Code : 00000000

Start Date : 12/14/2023

Page No : 3

SB

WB

AB

EB

	SW 145th Ave From North					SW 145th Ter From East					SW 145th Ave From South					SW 145th Ter From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	18	111	0	0	129	0	0	0	0	0	0	193	52	2	247	37	0	11	0	48	424
17:15	12	114	0	1	127	0	0	0	0	0	0	201	73	0	274	32	0	12	0	44	445
17:30	12	109	0	0	121	0	0	0	0	0	0	151	51	0	202	32	0	19	0	51	374
17:45	16	102	0	2	120	0	0	0	0	0	0	173	75	0	248	39	0	14	0	53	421
Total Volume	58	436	0	3	497	0	0	0	0	0	0	718	251	2	971	140	0	56	0	196	1664
% App. Total	11.7	87.7	0	0.6		0	0	0	0		0	73.9	25.8	0.2		71.4	0	28.6	0		
PHF	.806	.956	.000	.375	.963	.000	.000	.000	.000	.000	.000	.893	.837	.250	.886	.897	.000	.737	.000	.925	.935
Autos	58	435	0	3	496	0	0	0	0	0	0	718	250	2	970	140	0	56	0	196	1662
% Autos	100	99.8	0	100	99.8	0	0	0	0	0	0	100	99.6	100	99.9	100	0	100	0	100	99.9
Heavy Vehicles																					
% Heavy Vehicles	0	0.2	0	0	0.2	0	0	0	0	0	0	0	0.4	0	0.1	0	0	0	0	0	0.1

Traf Tech Engineering Inc.

File Name : 4-SW 145th Ave & SW 145th Ter

Site Code : 00000000

Start Date : 12/14/2023

Page No : 4

SB WRB NB EB

	SW 145th Ave From North					SW 145th Ter From East					SW 145th Ave From South					SW 145th Ter From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	1	185	0	0	186	0	0	0	0	0	0	97	12	0	109	1	0	0	0	1	296
08:15	3	190	0	2	195	0	0	0	0	0	0	104	1	0	105	1	0	5	0	6	306
08:30	5	183	0	0	188	0	0	0	0	0	0	88	14	2	104	2	0	2	0	4	296
08:45	4	227	0	1	232	0	0	0	0	0	0	87	13	1	101	2	0	1	0	3	336
Total Volume	13	785	0	3	801	0	0	0	0	0	0	376	40	3	419	6	0	8	0	14	1234
% App. Total	1.6	98	0	0.4		0	0	0	0		0	89.7	9.5	0.7		42.9	0	57.1	0		
PHF	.650	.865	.000	.375	.863	.000	.000	.000	.000	.000	.000	.904	.714	.375	.961	.750	.000	.400	.000	.583	.918
Autos	13	778	0	3	794	0	0	0	0	0	0	371	40	3	414	6	0	8	0	14	1222
% Autos	100	99.1	0	100	99.1	0	0	0	0	0	0	98.7	100	100	98.8	100	0	100	0	100	99.0
Heavy Vehicles																					
% Heavy Vehicles	0	0.9	0	0	0.9	0	0	0	0	0	0	1.3	0	0	1.2	0	0	0	0	0	1.0

Traf Tech Engineering Inc.

File Name : 4-SW 145th Ave & SW 145th Ter

Site Code : 00000000

Start Date : 12/14/2023

Page No : 5

	SW 145th Ave From North					SW 145th Ter From East					SW 145th Ave From South					SW 145th Ter From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	18	111	0	0	129	0	0	0	0	0	0	193	52	2	247	37	0	11	0	48	424
17:15	12	114	0	1	127	0	0	0	0	0	0	201	73	0	274	32	0	12	0	44	445
17:30	12	109	0	0	121	0	0	0	0	0	0	151	51	0	202	32	0	19	0	51	374
17:45	16	102	0	2	120	0	0	0	0	0	0	173	75	0	248	39	0	14	0	53	421
Total Volume	58	436	0	3	497	0	0	0	0	0	0	718	251	2	971	140	0	56	0	196	1664
% App. Total	11.7	87.7	0	0.6		0	0	0	0		0	73.9	25.8	0.2		71.4	0	28.6	0		
PHF	.806	.956	.000	.375	.963	.000	.000	.000	.000	.000	.000	.893	.837	.250	.886	.897	.000	.737	.000	.925	.935
Autos	58	435	0	3	496	0	0	0	0	0	0	718	250	2	970	140	0	56	0	196	1662
% Autos	100	99.8	0	100	99.8	0	0	0	0	0	0	100	99.6	100	99.9	100	0	100	0	100	99.9
Heavy Vehicles																					
% Heavy Vehicles	0	0.2	0	0	0.2	0	0	0	0	0	0	0	0.4	0	0.1	0	0	0	0	0	0.1

Traf Tech Engineering Inc.

File Name : 4-SW 145th Ave & SW 145th Ter

Site Code : 00000000

Start Date : 12/14/2023

Page No : 1

Groups Printed- Peds & Bikes																		
	SW 145th Ave From North				SW 145th Ter From East				SW 145th Ave From South				SW 145th Ter From West					
Start Time	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	Int. Total	
*** BREAK ***																		
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
*** BREAK ***																		
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Apprch %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	
Total %	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	

Traf Tech Engineering Inc.

File Name : 5-SW 145th Ave & Pembroke Rd

Site Code : 00000000

Start Date : 12/14/2023

Page No : 1

Groups Printed- Autos - Heavy Vehicles

	SW 145th Ave From North					Pembroke Rd From East					SW 145th Ave From South					Pembroke Rd From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
07:00	7	38	29	0	74	50	199	76	2	327	19	16	12	1	48	17	107	25	0	149	598
07:15	8	55	33	0	96	68	191	89	0	348	19	19	10	0	48	29	105	26	0	160	652
07:30	11	45	35	0	91	72	214	69	0	355	24	25	15	0	64	47	171	24	0	242	752
07:45	17	75	51	0	143	71	182	65	0	318	32	49	31	0	112	43	177	20	0	240	813
Total	43	213	148	0	404	261	786	299	2	1348	94	109	68	1	272	136	560	95	0	791	2815
08:00	17	94	33	1	145	66	224	65	0	355	18	43	30	0	91	37	163	21	0	221	812
08:15	18	97	39	0	154	63	184	66	0	313	30	33	20	0	83	48	150	25	0	223	773
08:30	15	82	32	0	129	49	176	60	0	285	21	53	14	2	90	46	168	22	0	236	740
08:45	17	108	41	0	166	72	162	63	0	297	25	37	25	1	88	50	153	23	0	226	777
Total	67	381	145	1	594	250	746	254	0	1250	94	166	89	3	352	181	634	91	0	906	3102
*** BREAK ***																					
16:00	37	45	59	0	141	68	195	38	0	301	52	84	24	0	160	23	173	36	0	232	834
16:15	34	55	65	1	155	80	175	29	0	284	57	79	38	0	174	24	148	41	0	213	826
16:30	51	48	65	1	165	48	156	34	0	238	42	88	46	0	176	17	167	44	1	229	808
16:45	40	52	60	1	153	78	211	34	0	323	47	84	35	0	166	17	150	38	0	205	847
Total	162	200	249	3	614	274	737	135	0	1146	198	335	143	0	676	81	638	159	1	879	3315
17:00	30	57	75	0	162	68	191	36	0	295	62	162	51	1	276	30	167	42	0	239	972
17:15	45	71	67	1	184	71	194	24	0	289	43	108	45	1	197	20	192	40	0	252	922
17:30	42	67	63	0	172	68	200	32	0	300	51	127	45	0	223	32	164	31	0	227	922
17:45	32	53	62	0	147	107	201	40	0	348	33	72	35	0	140	25	140	41	0	206	841
Total	149	248	267	1	665	314	786	132	0	1232	189	469	176	2	836	107	663	154	0	924	3657
Grand Total	421	1042	809	5	2277	1099	3055	820	2	4976	575	1079	476	6	2136	505	2495	499	1	3500	12889
Apprch %	18.5	45.8	35.5	0.2		22.1	61.4	16.5	0		26.9	50.5	22.3	0.3		14.4	71.3	14.3	0		
Total %	3.3	8.1	6.3	0	17.7	8.5	23.7	6.4	0	38.6	4.5	8.4	3.7	0	16.6	3.9	19.4	3.9	0	27.2	
Autos	417	1033				1080	3012				1072					2442					12719
% Autos	99	99.1	98.5	100	98.9	98.3	98.6	99.4	100	98.7	99	99.4	99.4	100	99.3	98.2	97.9	100	100	98.2	98.7
Heavy Vehicles																					
% Heavy Vehicles	1	0.9	1.5	0	1.1	1.7	1.4	0.6	0	1.3	1	0.6	0.6	0	0.7	1.8	2.1	0	0	1.8	1.3

Traf Tech Engineering Inc.

File Name : 5-SW 145th Ave & Pembroke Rd
Site Code : 00000000
Start Date : 12/14/2023
Page No : 2

Traf Tech Engineering Inc.

File Name : 5-SW 145th Ave & Pembroke Rd

Site Code : 00000000

Start Date : 12/14/2023

Page No : 3

SB WB NB EB

	SW 145th Ave From North					Pembroke Rd From East					SW 145th Ave From South					Pembroke Rd From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1 ✓																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	40	52	60	1	153	78	211	34	0	323	47	84	35	0	166	17	150	38	0	205	847
17:00	30	57	75	0	162	68	191	36	0	295	62	162	51	1	276	30	167	42	0	239	972
17:15	45	71	67	1	184	71	194	24	0	289	43	108	45	1	197	20	192	40	0	252	922
17:30	42	67	63	0	172	68	200	32	0	300	51	127	45	0	223	32	164	31	0	227	922
Total Volume	157	247	265	2	671	285	796	126	0	1207	203	481	176	2	862	99	673	151	0	923	3663
% App. Total	23.4	36.8	39.5	0.3		23.6	65.9	10.4	0		23.5	55.8	20.4	0.2		10.7	72.9	16.4	0		
PHF	.872	.870	.883	.500	.912	.913	.943	.875	.000	.934	.819	.742	.863	.500	.781	.773	.876	.899	.000	.916	.942 ✓
Autos	157	247	263	2	669	283	782	125	0	1190	203	481	176	2	862	98	666	151	0	915	3636
% Autos	100	100	99.2	100	99.7	99.3	98.2	99.2	0	98.6	100	100	100	100	100	99.0	99.0	100	0	99.1	99.3
Heavy Vehicles																					
% Heavy Vehicles	0	0	0.8	✓ 0	0.3	0.7	1.8	0.8	✓ 0	1.4	0	0	0	✓ 0	0	1.0	1.0	0	0	✓ 0.9	0.7

Traf Tech Engineering Inc.

File Name : 5-SW 145th Ave & Pembroke Rd

Site Code : 00000000

Start Date : 12/14/2023

Page No : 4

	SW 145th Ave From North					Pembroke Rd From East					SW 145th Ave From South					Pembroke Rd From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30																					
07:30	11	45	35	0	91	72	214	69	0	355	24	25	15	0	64	47	171	24	0	242	752
07:45	17	75	51	0	143	71	182	65	0	318	32	49	31	0	112	43	177	20	0	240	813
08:00	17	94	33	1	145	66	224	65	0	355	18	43	30	0	91	37	163	21	0	221	812
08:15	18	97	39	0	154	63	184	66	0	313	30	33	20	0	83	48	150	25	0	223	773
Total Volume	63	311	158	1	533	272	804	265	0	1341	104	150	96	0	350	175	661	90	0	926	3150
% App. Total	11.8	58.3	29.6	0.2		20.3	60	19.8	0		29.7	42.9	27.4	0		18.9	71.4	9.7	0		
PHF	.875	.802	.775	.250	.865	.944	.897	.960	.000	.944	.813	.765	.774	.000	.781	.911	.934	.900	.000	.957	.969
Autos	62	307	155	1	525	267	793	264	0	1324	102	148	96	0	346	174	647	90	0	911	3106
% Autos	98.4	98.7	98.1	100	98.5	98.2	98.6	99.6	0	98.7	98.1	98.7	100	0	98.9	99.4	97.9	100	0	98.4	98.6
Heavy Vehicles																					
% Heavy Vehicles	1.6	1.3	1.9	0	1.5	1.8	1.4	0.4	0	1.3	1.9	1.3	0	0	1.1	0.6	2.1	0	0	1.6	1.4

Traf Tech Engineering Inc.

File Name : 5-SW 145th Ave & Pembroke Rd

Site Code : 00000000

Start Date : 12/14/2023

Page No : 1

Groups Printed- Peds & Bikes

	SW 145th Ave From North				Pembroke Rd From East				SW 145th Ave From South				Pembroke Rd From West				Int. Total
Start Time	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	
07:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
*** BREAK ***																	
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	3
*** BREAK ***																	
Grand Total	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	3
Apprch %	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	100	
Total %	0	0	0	0	0	0	0	0	33.3	0	0	0	0	0	0	66.7	

Traf Tech Engineering Inc.

File Name : 5-SW 145th Ave & Pembroke Rd

Site Code : 00000000

Start Date : 12/14/2023

Page No : 5

	SW 145th Ave From North					Pembroke Rd From East					SW 145th Ave From South					Pembroke Rd From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:45																					
16:45	40	52	60	1	153	78	211	34	0	323	47	84	35	0	166	17	150	38	0	205	847
17:00	30	57	75	0	162	68	191	36	0	295	62	162	51	1	276	30	167	42	0	239	972
17:15	45	71	67	1	184	71	194	24	0	289	43	108	45	1	197	20	192	40	0	252	922
17:30	42	67	63	0	172	68	200	32	0	300	51	127	45	0	223	32	164	31	0	227	922
Total Volume	157	247	265	2	671	285	796	126	0	1207	203	481	176	2	862	99	673	151	0	923	3663
% App. Total	23.4	36.8	39.5	0.3		23.6	65.9	10.4	0		23.5	55.8	20.4	0.2		10.7	72.9	16.4	0		
PHF	.872	.870	.883	.500	.912	.913	.943	.875	.000	.934	.819	.742	.863	.500	.781	.773	.876	.899	.000	.916	.942
Autos	157	247	263	2	669	283	782	125	0	1190	203	481	176	2	862	98	666	151	0	915	3636
% Autos	100	100	99.2	100	99.7	99.3	98.2	99.2	0	98.6	100	100	100	100	100	99.0	99.0	100	0	99.1	99.3
Heavy Vehicles																					
% Heavy Vehicles	0	0	0.8	0	0.3	0.7	1.8	0.8	0	1.4	0	0	0	0	0	1.0	1.0	0	0	0.9	0.7

Traff Tech Engineering Inc.

File Name : SW 145th Ave & SW 8th St

Site Code : 00000000

Start Date : 2/13/2025

Page No : 1

Groups Printed- Autos - Heavy Vehicles

	SW 145th Ave From North					SW 8th Street From East					SW 145th Ave From South					SW 8th Street From West					
Start Time	Right	Thru	Left	U-Turns	App Total	Right	Thru	Left	U-Turns	App Total	Right	Thru	Left	U-Turns	App Total	Right	Thru	Left	U-Turns	App Total	Int Total
07:00	1	75	0	0	76	1	0	7	0	8	5	51	3	2	61	17	0	6	0	23	168
07:15	0	84	2	0	86	2	0	9	0	11	2	78	4	0	84	17	0	3	0	20	201
07:30	0	139	1	0	140	1	0	15	0	16	2	113	10	3	128	17	0	3	0	20	304
07:45	2	118	1	0	121	2	0	9	0	11	3	131	2	2	138	11	0	8	0	19	289
Total	3	416	4	0	423	6	0	40	0	46	12	373	19	7	411	62	0	20	0	82	962
08:00	5	106	1	1	113	5	0	9	0	14	7	127	9	3	146	16	0	5	0	21	294
08:15	3	84	2	0	89	3	0	6	0	9	4	158	7	3	172	11	0	4	0	15	285
08:30	6	101	1	1	109	3	0	10	0	13	2	157	9	2	170	10	0	5	0	15	307
08:45	0	76	0	0	76	3	0	8	0	11	3	127	4	1	135	10	0	4	0	14	236
Total	14	367	4	2	387	14	0	33	0	47	16	569	29	9	623	47	0	18	0	65	1122
*** BREAK ***																					
16:00	4	178	3	1	186	1	1	4	0	6	7	131	7	4	149	9	0	6	0	15	356
16:15	7	187	2	0	196	3	0	2	0	5	12	115	4	6	137	2	0	2	0	4	342
16:30	5	230	6	3	244	1	0	5	0	6	7	117	5	6	135	13	0	2	1	16	401
16:45	5	180	5	1	191	2	0	8	0	10	9	116	15	5	145	8	0	3	0	11	357
Total	21	775	16	5	817	7	1	19	0	27	35	479	31	21	566	32	0	13	1	46	1456
17:00	7	239	3	0	249	2	0	7	0	9	9	139	19	2	169	16	0	2	0	18	445
17:15	4	226	6	1	237	1	0	7	0	8	8	152	18	5	183	7	0	2	0	9	437
17:30	5	201	4	0	210	0	0	7	0	7	9	134	11	0	154	11	0	3	0	14	385
17:45	5	188	3	1	197	0	0	2	0	2	17	140	8	1	166	5	0	3	0	8	373
Total	21	854	16	2	893	3	0	23	0	26	43	565	56	8	672	39	0	10	0	49	1640
Grand Total	59	2412	40	9	2520	30	1	115	0	146	106	1966	135	45	2272	180	0	61	1	242	5180
Apprch %	2.3	95.7	1.6	0.4		20.5	0.7	78.8	0		4.7	87.4	5.9	2		74.4	0	25.2	0.4		
Total %	1.1	46.6	0.8	0.2	48.6	0.6	0	2.2	0	2.8	2	38.3	2.6	0.9	43.9	3.5	0	1.2	0	4.7	
Autos	58	2385									1966										
% Autos	98.3	98.9	100	100	98.9	100	100	100	0	100	99.1	99	100	95.6	99	99.4	0	100	100	99.6	99
Heavy Vehicles																					
% Heavy Vehicles	1.7	1.1	0	0	1.1	0	0	0	0	0	0.9	1	0	4.4	1	0.6	0	0	0	0.4	1

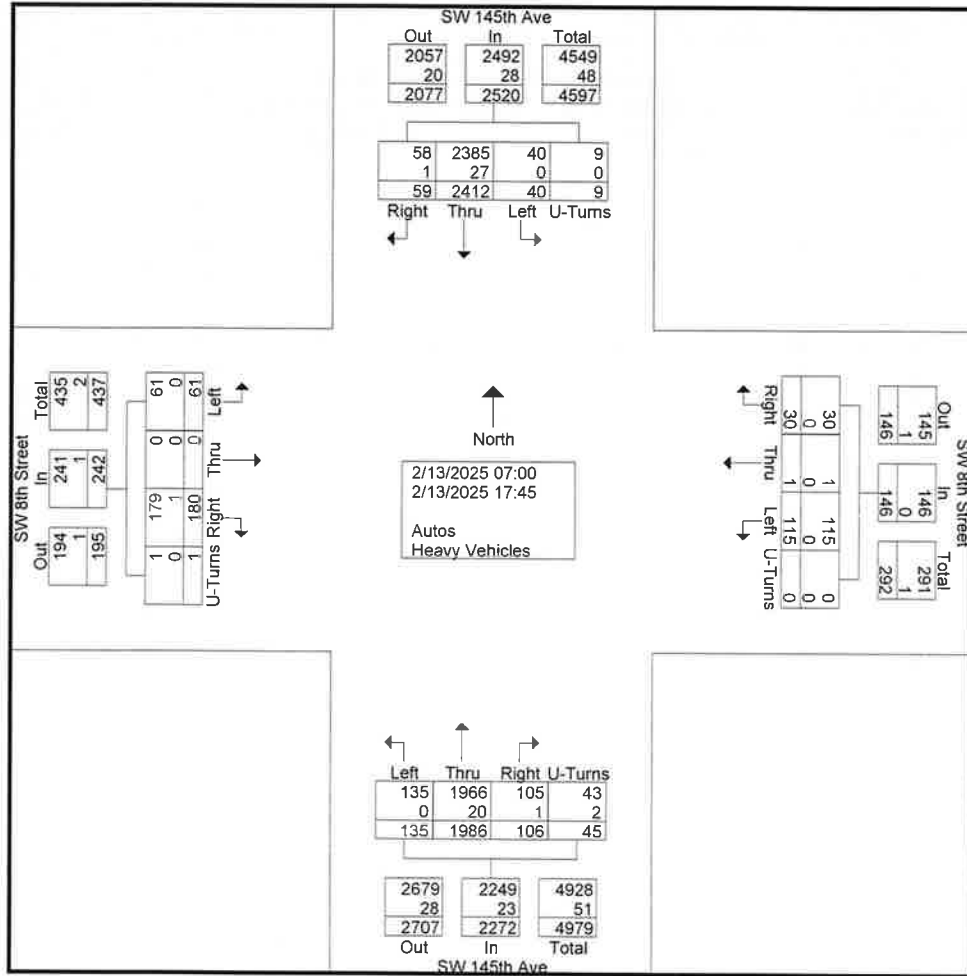
Traff Tech Engineering Inc.

File Name : SW 145th Ave & SW 8th St

Site Code : 00000000

Start Date : 2/13/2025

Page No : 2



Traff Tech Engineering Inc.

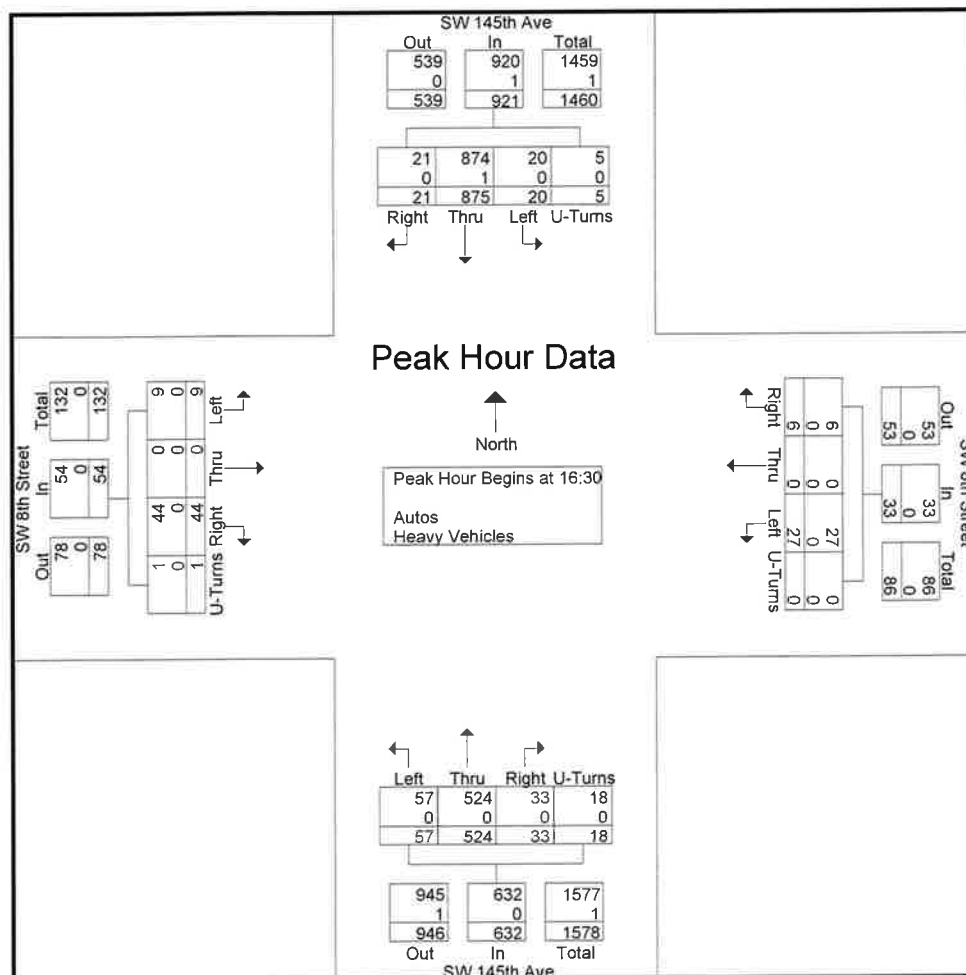
File Name : SW 145th Ave & SW 8th St

Site Code : 00000000

Start Date : 2/13/2025

Page No : 3

	SW 145th Ave From North					SW 8th Street From East					SW 145th Ave From South					SW 8th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:30																					
16:30	5	230	6	3	244	1	0	5	0	6	7	117	5	6	135	13	0	2	1	16	401
16:45	5	180	5	1	191	2	0	8	0	10	9	116	15	5	145	8	0	3	0	11	357
17:00	7	239	3	0	249	2	0	7	0	9	9	139	19	2	169	16	0	2	0	18	445
17:15	4	226	6	1	237	1	0	7	0	8	8	152	18	5	183	7	0	2	0	9	437
Total Volume	21	875	20	5	921	6	0	27	0	33	33	524	57	18	632	44	0	9	1	54	1640
% App. Total	2.3	95	2.2	0.5		18.2	0	81.8	0		5.2	82.9	9	2.8		81.5	0	16.7	1.9		
PHF	.750	.915	.833	.417	.925	.750	.000	.844	.000	.825	.917	.862	.750	.750	.863	.688	.000	.750	.250	.750	.921
Autos	21	874	20	5	920	6	0	27	0	33	33	524	57	18	632	44	0	9	1	54	1639
% Autos	100	99.9	100	100	99.9	100	0	100	0	100	100	100	100	100	100	100	0	100	100	100	99.9
Heavy Vehicles																					
% Heavy Vehicles	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1



Traff Tech Engineering Inc.

File Name : SW 145th Ave & SW 8th St

Site Code : 00000000

Start Date : 2/13/2025

Page No : 4

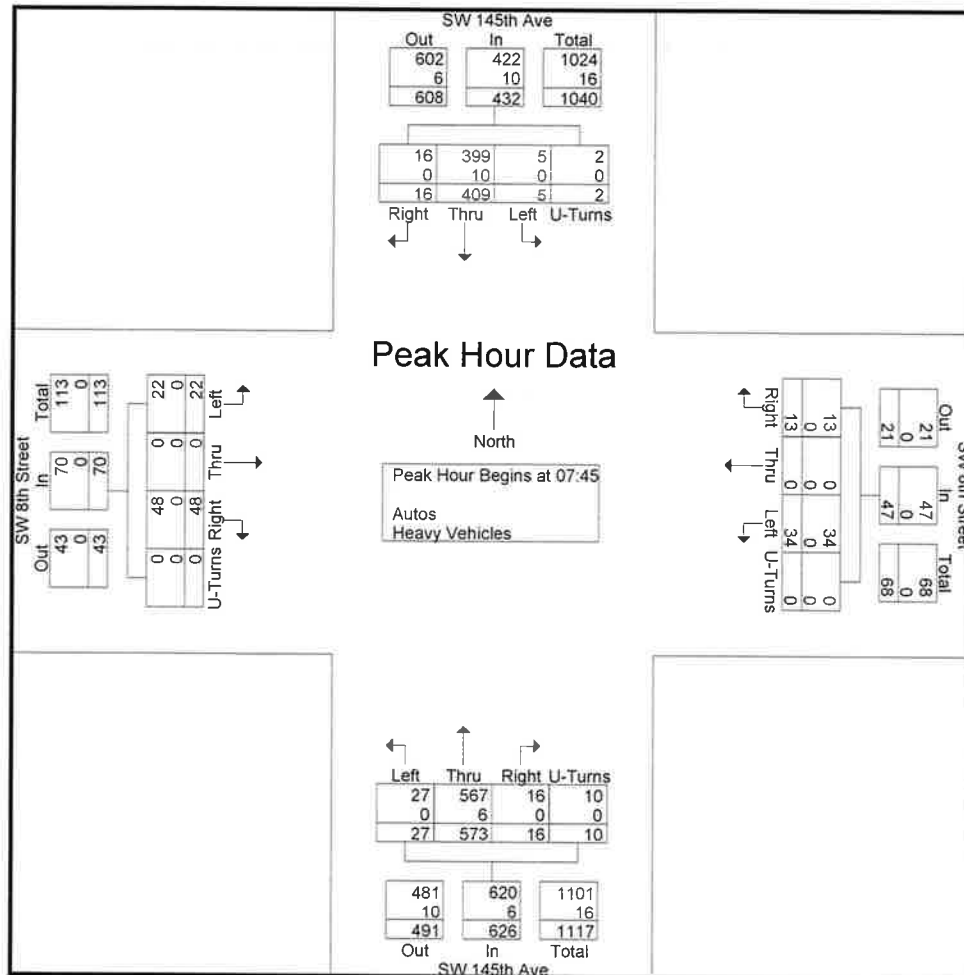
FB

SB

WB

NB

	SW 145th Ave From North					SW 8th Street From East					SW 145th Ave From South					SW 8th Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45																					
07:45	2	118	1	0	121	2	0	9	0	11	3	131	2	2	138	11	0	8	0	19	289
08:00	5	106	1	1	113	5	0	9	0	14	7	127	9	3	146	16	0	5	0	21	294
08:15	3	84	2	0	89	3	0	6	0	9	4	158	7	3	172	11	0	4	0	15	285
08:30	6	101	1	1	109	3	0	10	0	13	2	157	9	2	170	10	0	5	0	15	307
Total Volume	16	409	5	2	432	13	0	34	0	47	16	573	27	10	626	48	0	22	0	70	1175
% App. Total	3.7	94.7	1.2	0.5		27.7	0	72.3	0		2.6	91.5	4.3	1.6		68.6	0	31.4	0		
PHF	.667	.867	.625	.500	.893	.650	.000	.850	.000	.839	.571	.907	.750	.833	.910	.750	.000	.688	.000	.833	.957
Autos	16	399	5	2	422	13	0	34	0	47	16	567	27	10	620	48	0	22	0	70	1159
% Autos	100	97.6	100	100	97.7	100	0	100	0	100	100	99.0	100	100	99.0	100	0	100	0	100	98.6
Heavy Vehicles																					
% Heavy Vehicles	0	2.4	0	0	2.3	0	0	0	0	0	0	1.0	0	0	1.0	0	0	0	0	0	1.4



Traff Tech Engineering Inc.

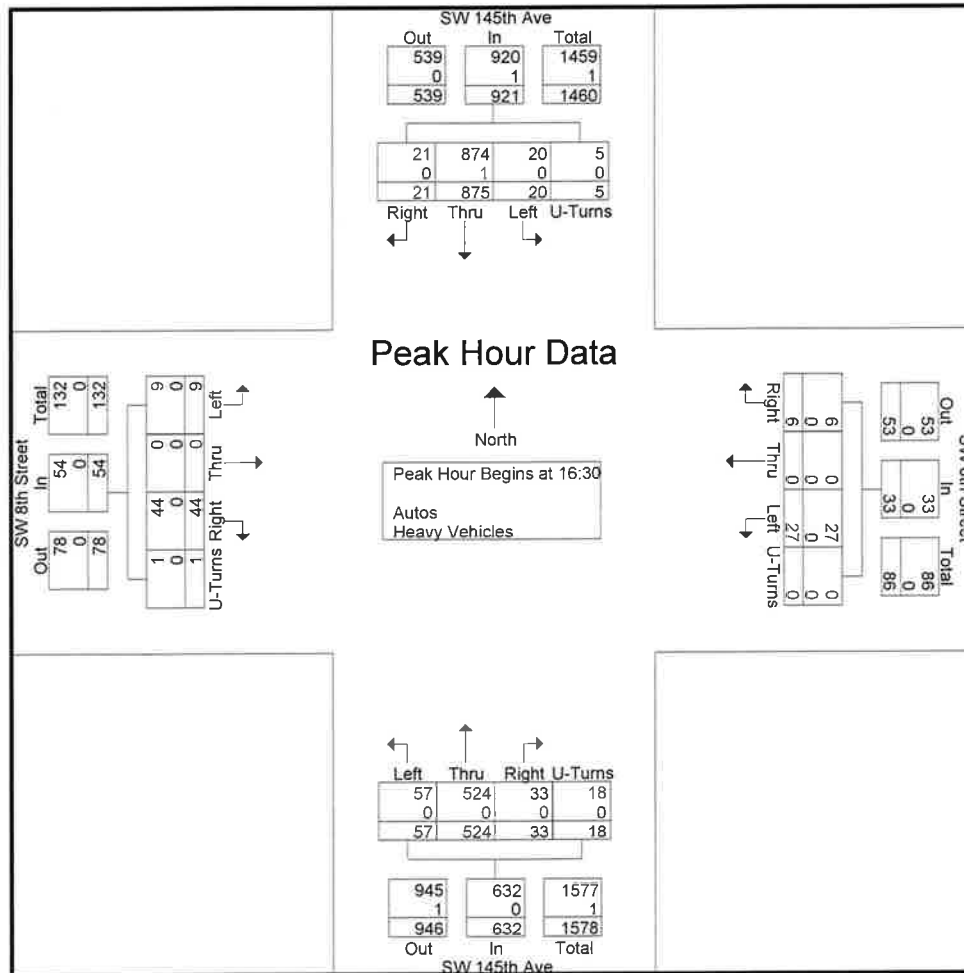
File Name : SW 145th Ave & SW 8th St

Site Code : 00000000

Start Date : 2/13/2025

Page No : 5

	SW 145th Ave From North					SW 8th Street From East					SW 145th Ave From South					SW 8th Street From West					
Start Time	Right	Thru	Left	U-Turns	App Total	Right	Thru	Left	U-Turns	App Total	Right	Thru	Left	U-Turns	App Total	Right	Thru	Left	U-Turns	App Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:30																					
16:30	5	230	6	3	244	1	0	5	0	6	7	117	5	6	135	13	0	2	1	16	401
16:45	5	180	5	1	191	2	0	8	0	10	9	116	15	5	145	8	0	3	0	11	357
17:00	7	239	3	0	249	2	0	7	0	9	9	139	19	2	169	16	0	2	0	18	445
17:15	4	226	6	1	237	1	0	7	0	8	8	152	18	5	183	7	0	2	0	9	437
Total Volume	21	875	20	5	921	6	0	27	0	33	33	524	57	18	632	44	0	9	1	54	1640
% App. Total	2.3	95	2.2	0.5		18.2	0	81.8	0		5.2	82.9	9	2.8		81.5	0	16.7	1.9		
PHF	.750	.915	.833	.417	.925	.750	.000	.844	.000	.825	.917	.862	.750	.750	.863	.688	.000	.750	.250	.750	.921
Autos	21	874	20	5	920	6	0	27	0	33	33	524	57	18	632	44	0	9	1	54	1639
% Autos	100	99.9	100	100	99.9	100	0	100	0	100	100	100	100	100	100	100	0	100	100	100	99.9
Heavy Vehicles																					
% Heavy Vehicles	0	0.1	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1



Traff Tech Engineering Inc.

File Name : SW 145th Ave & SW 8th St

Site Code : 00000000

Start Date : 2/13/2025

Page No : 1

Groups Printed- Peds & Bikes

Start Time	SW 145th Ave From North				SW 8th Street From East				SW 145th Ave From South				SW 8th Street 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	2
*** BREAK ***																	
07:45	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	3
08:00	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	3
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
*** BREAK ***																	
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	5	7
*** BREAK ***																	
16:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
16:15	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
16:30	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	2	6
17:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
*** BREAK ***																	
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	3
Grand Total	0	0	0	0	1	0	0	5	0	0	0	0	4	0	0	9	19
Apprch %	0	0	0	0	16.7	0	0	83.3	0	0	0	0	30.8	0	0	69.2	
Total %	0	0	0	0	5.3	0	0	26.3	0	0	0	0	21.1	0	0	47.4	

APPENDIX C

Signal Timing, PSCF, Historical Data, and Growth Rate

Broward County

Timing Sheet

2/20/2024 9:14:15 AM

Station : 3570 - Pembroke Rd & SW 145th Ave (Standard File)

Phase	1 (EL)	2 (WR)	3	4 (NR)	5 (WL)	6 (ER)	7	8 (SR)	9	10	11	12	13	14	15	16
Walk		7		7		7		7								
Ped Clearance		32		31		32		32								
Min Green	4	10	4	6	4	10	4	6								
Gap Ext	1.5	3	1.5	2	1.5	3	1.5	2								
Max1	20	50	20	45	20	50	20	45								
Max2																
Yellow Clr	5	5	4.5	4.5	5	5	4.5	4.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red 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		60			45	60		80								
Dynamic Max Step		10			25	10		15								
Enable	ON	ON	ON	ON	ON	ON	ON	ON								
Auto Flash Entry				ON				ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall		ON				ON										
Ped Recall																
Soft Recall																
Dual Entry		ON		ON		ON		ON								
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk		ON				ON										
Cond Service																
Add Init Calc																

Preemption

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash	ON	ON	ON	ON	ON	ON
Override Higher Preempt	ON	ON	ON	ON	ON	ON
Flash in Dwell	ON	ON	ON	ON	ON	ON
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						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						

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

Timing Sheet

2/20/2024 9:13:55 AM

Station : 3563 - SW 145 Ave & SW 5 St (Standard File)

Phase	1	2 (NT)	3	4 (ET)	5	6 (ST)	7	8	9	10	11	12	13	14	15	16
Walk				7		7										
Ped Clearance				24		19										
Min Green		12		6		12										
Gap Ext		3		2		3										
Max1		50		25		50										
Max2																
Yellow Clr	3.5	4.5	3.5	4	3.5	4.5	3.5	3.5	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				ON												
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry																
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk																
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		
Override Higher Preempt				ON		
Flash in Dwell				ON		
Link to Preempt						
Delay						
Min Duration						
Min Green	6	6	6		6	6
Min Walk						
Ped Clear						
Track Green						
Min Dwell	8	8	8		8	8
Max Presence	180	180	180		180	180
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1	2	4	2		2	4
Dwell Cyc Veh 2	6		6			
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						

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

Timing Sheet

2/20/2024 9:13:37 AM

Station : 3547 - Pines Blvd & NW 142 Ave/SW 145 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		32		46		32		46								
Min Green	10	10	10	10	10	10	10	10								
Gap Ext	1	1	1	1	1	1	1	1								
Max1	15	60	13	40	15	60	15	25								
Max2																
Yellow Clr	5	5	4	4	5	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	ON	ON	ON								
Auto Flash Entry								ON								
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Lock Call									ON	ON	ON	ON	ON		ON	
Min Recall																
Max Recall																
Ped Recall														ON		ON
Soft Recall																
Dual Entry																
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage																
Rest In Walk																
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						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						

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				

[illegible]



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	3563	Initial Operation Date	4/24/2014
Controller Type	2070 LN	System Number	3563
Modification Number	0	Modification Date	
Drawing/Project No		FPL Grid Number	
Intersection	SW 145 AVENUE and SW 5 STREET		
Municipality	PEMBROKE PINES		

Controller Phase	2	4	6
Face Number	2	4	6
Direction	NB	EB	SB
Initial Green(MIN)	12	6	12
Vehicle Ext.(GAP)	3.0	2.0	3.0
Maximum Green I	50	25	50
Maximum Green II			
Yellow Clearance	4.5	4.0	4.5
All Red Clearance	2.0	2.0	2.0
Phase Recall	MIN	OFF	MIN
Detector Delay			
Walk		7	7
Pedestrian Clearance		24	19
Permissive			
Flash Operation	YELLOW	RED	YELLOW

Attachment

NOTES:

1. INITIAL DATE IS DATE OF BROWARD COUNTY INSPECTION.

Submitted By _____

Approved By _____



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	3547	Initial Operation Date	02/17/2010
Controller Type	2070 TS2	System Number	3547
Modification Number	8	Modification Date	03/30/2021
Drawing/Project No	433182-1-58-01	FPL Grid Number	
Intersection	PINES BOULEVARD (SR 820) and NW 142/SW 145 AVENUES		
Municipality	PEMBROKE PINES		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2	3,2R	4	5	6	7,6R	8
Direction	EBL	WB	SBL	NB	WBL	EB	NBL	SB
Initial Green(MIN)	10	10	10	10	10	10	10	10
Vehicle Ext.(GAP)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Maximum Green I	15	60	13	40	15	60	15	25
Maximum Green II								
Yellow Clearance	5.0	5.0	4.0	4.0	5.0	5.0	4.0	4.0
All Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Phase Recall	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF
Detector Delay								
Walk		7		7		7		7
Pedestrian Clearance		32		46		32		46
Permissive	DUAL		NO		DUAL		TRIPLE	
Flash Operation	RED	YELLOW	RED	RED	RED	YELLOW	RED	RED

Attachment

NOTES:

1. WBR (2R) OVERLAPS WITH SBL. EBR (6R) OVERLAPS WITH NBL.
2. DUAL ENTRY NORTH/SOUTH.
3. ADAPTIVE CONTROL: RECALLS OFF, NO REST IN WALK AND DETECTOR MAX PRESENCE = 0.
4. MOD. 8 UPDATES INITIAL GREENS.

Submitted By _____

Approved By _____



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	3570	Initial Operation Date	2/29/2016
Controller Type	2070 LN2 (BIU)	System Number	3570
Modification Number	2	Modification Date	12/19/2016
Drawing/Project No	BC #5255	FPL Grid Number	
Intersection	PEMBROKE ROAD and SW 145 AVENUE		
Municipality	PEMBROKE PINES		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	I	2	3	4	5	6	7	8
Direction	EBL	WB	SBL	NB	WBL	EB	NBL	SB
Initial Green(MIN)	4	10	4	6	4	10	4	6
Vehicle Ext.(GAP)	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
Maximum Green I	20	50	20	45	20	50	20	45
Maximum Green II								
Yellow Clearance	5.0	5.0	4.5	4.5	5.0	5.0	4.5	4.5
All Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
Detector Delay								
Walk		7		7		7		7
Pedestrian Clearance		32		31		32		32
Permissive	YES		YES		YES		YES	
Flash Operation		YELLOW		RED		YELLOW		RED

Attachment

NOTES:

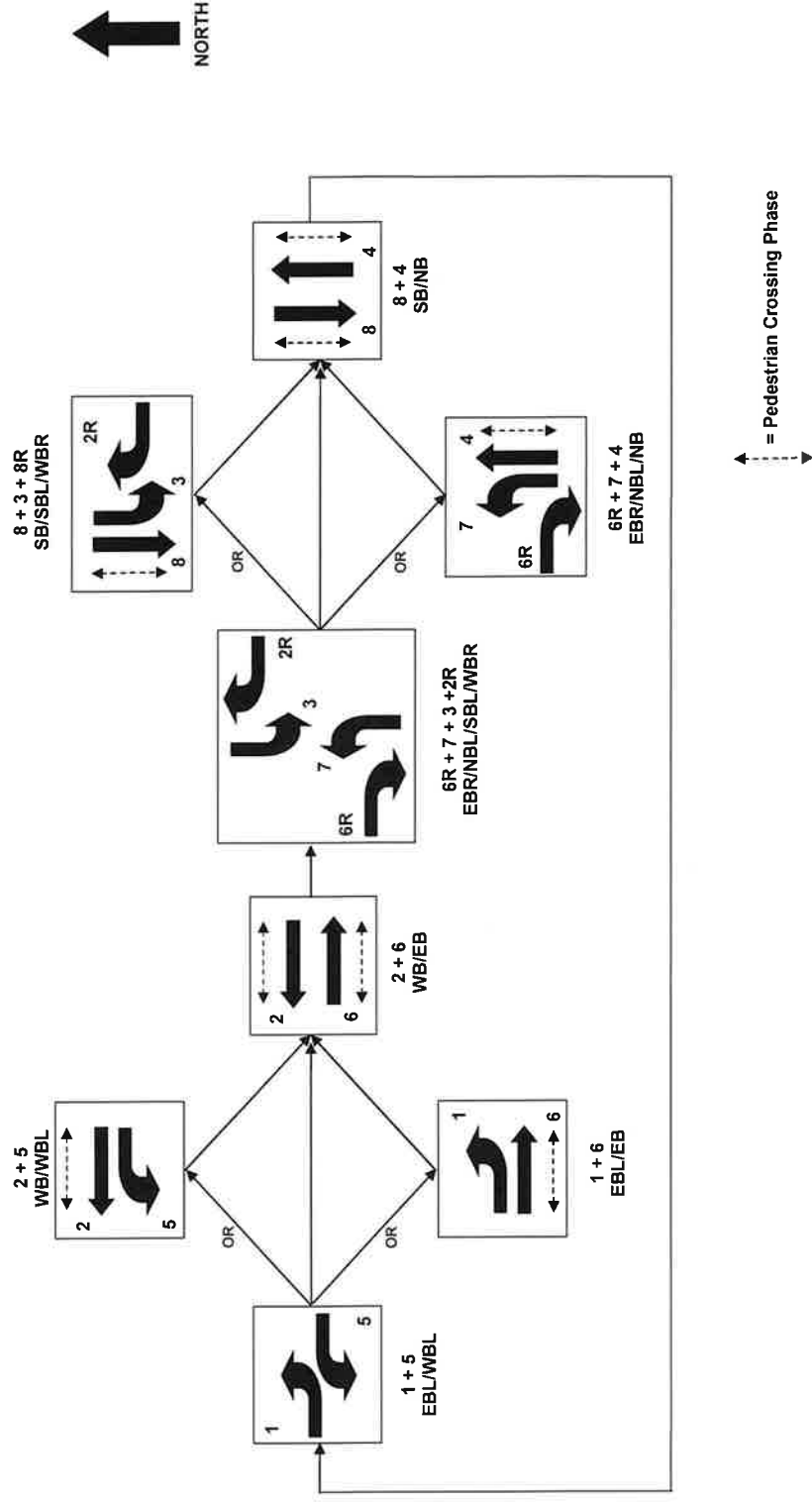
1. DUAL ENTRY HARDWIRED NORTH/SOUTH.
2. ANTI-BACKDOWN EAST/WEST: PHASES 2+6 ON ---> OMIT PHASES 1+5.
3. MOD. 2 REFLECTS INSTALLATION OF NORTHBOUND PROTECTED/PERMISSIVE LEFT TURN PHASE.

Submitted By _____

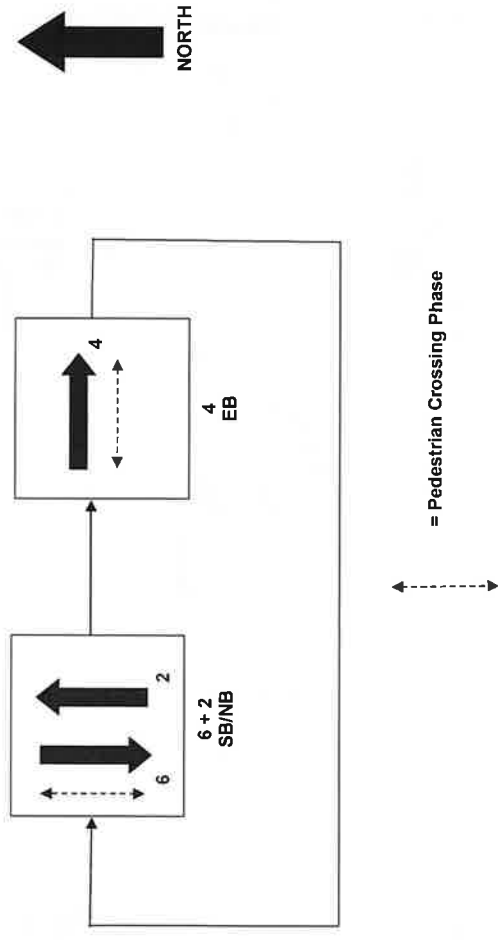
Approved By _____

Sequence of Operation

Pines Boulevard (SR820) and NW 142 Avenue/SW 145 Avenue
Intersection Number 3547(Pembroke Pines) Mod 8 and Higher

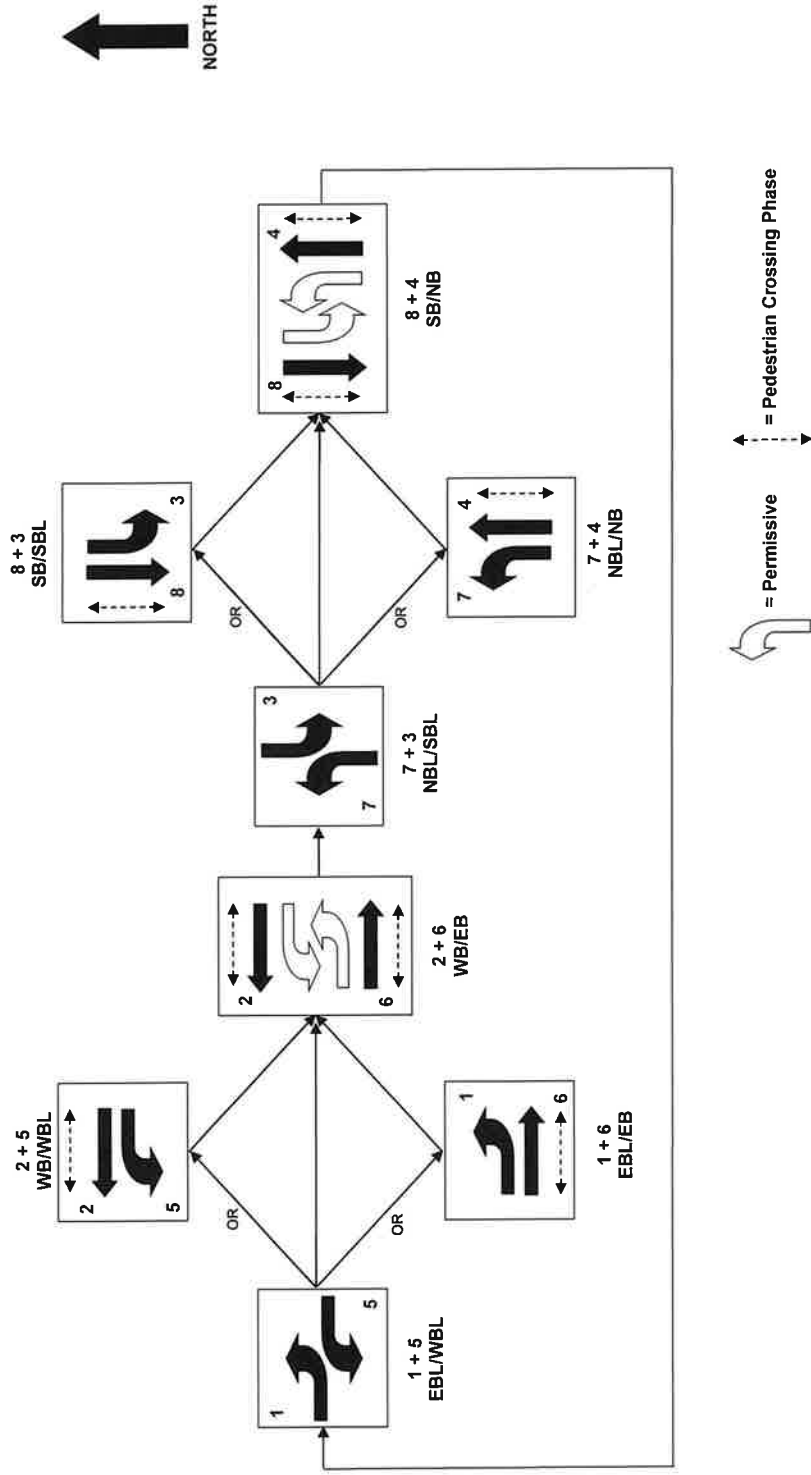


Sequence of Operation
SW 145 Avenue and SW 5 Street
Intersection Number 3563 (Pembroke Pines) Mod 0 and Higher



Sequence of Operation

Pembroke Road and SW 145 Avenue
Intersection Number 3570 (Pembroke Pines) Mod 2 and Higher



2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 8630 WEST-W OF US441

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2022 - 01/01/2022	0.99	1.02
2	01/02/2022 - 01/08/2022	1.01	1.04
3	01/09/2022 - 01/15/2022	1.02	1.05
4	01/16/2022 - 01/22/2022	1.01	1.04
5	01/23/2022 - 01/29/2022	1.00	1.03
6	01/30/2022 - 02/05/2022	0.98	1.01
* 7	02/06/2022 - 02/12/2022	0.97	1.00
* 8	02/13/2022 - 02/19/2022	0.96	0.99
* 9	02/20/2022 - 02/26/2022	0.96	0.99
*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	0.97	1.00
*17	04/17/2022 - 04/23/2022	0.97	1.00
*18	04/24/2022 - 04/30/2022	0.98	1.01
*19	05/01/2022 - 05/07/2022	0.98	1.01
20	05/08/2022 - 05/14/2022	0.99	1.02
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	1.02	1.05
24	06/05/2022 - 06/11/2022	1.03	1.06
25	06/12/2022 - 06/18/2022	1.04	1.07
26	06/19/2022 - 06/25/2022	1.04	1.07
27	06/26/2022 - 07/02/2022	1.05	1.08
28	07/03/2022 - 07/09/2022	1.05	1.08
29	07/10/2022 - 07/16/2022	1.06	1.09
30	07/17/2022 - 07/23/2022	1.05	1.08
31	07/24/2022 - 07/30/2022	1.04	1.07
32	07/31/2022 - 08/06/2022	1.03	1.06
33	08/07/2022 - 08/13/2022	1.02	1.05
34	08/14/2022 - 08/20/2022	1.01	1.04
35	08/21/2022 - 08/27/2022	1.02	1.05
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	1.03	1.06
39	09/18/2022 - 09/24/2022	1.02	1.05
40	09/25/2022 - 10/01/2022	1.01	1.04
41	10/02/2022 - 10/08/2022	0.99	1.02
42	10/09/2022 - 10/15/2022	0.98	1.01
43	10/16/2022 - 10/22/2022	0.99	1.02
44	10/23/2022 - 10/29/2022	1.00	1.03
45	10/30/2022 - 11/05/2022	1.00	1.03
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	0.99	1.02
52	12/18/2022 - 12/24/2022	1.01	1.04
53	12/25/2022 - 12/31/2022	1.02	1.05

* PEAK SEASON

23-FEB-2023 09:11:21

830UPD

4_8630_PKSEASON.TXT

2023 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 8630 WEST-W OF US441

MOCF: 0.98

WEEK	DATES	SF	PSCF
1	01/01/2023 - 01/07/2023	1.01	1.03
2	01/08/2023 - 01/14/2023	1.01	1.03
3	01/15/2023 - 01/21/2023	1.00	1.02
4	01/22/2023 - 01/28/2023	0.99	1.01
* 5	01/29/2023 - 02/04/2023	0.98	1.00
* 6	02/05/2023 - 02/11/2023	0.98	1.00
* 7	02/12/2023 - 02/18/2023	0.97	<u>0.99</u>
* 8	02/19/2023 - 02/25/2023	0.97	0.99
* 9	02/26/2023 - 03/04/2023	0.97	0.99
*10	03/05/2023 - 03/11/2023	0.97	0.99
*11	03/12/2023 - 03/18/2023	0.97	0.99
*12	03/19/2023 - 03/25/2023	0.97	0.99
*13	03/26/2023 - 04/01/2023	0.98	1.00
*14	04/02/2023 - 04/08/2023	0.99	1.01
*15	04/09/2023 - 04/15/2023	0.99	1.01
*16	04/16/2023 - 04/22/2023	0.99	1.01
*17	04/23/2023 - 04/29/2023	0.99	1.01
18	04/30/2023 - 05/06/2023	0.99	1.01
19	05/07/2023 - 05/13/2023	0.99	1.01
20	05/14/2023 - 05/20/2023	0.99	1.01
21	05/21/2023 - 05/27/2023	1.00	1.02
22	05/28/2023 - 06/03/2023	1.01	1.03
23	06/04/2023 - 06/10/2023	1.02	1.04
24	06/11/2023 - 06/17/2023	1.02	1.04
25	06/18/2023 - 06/24/2023	1.03	1.05
26	06/25/2023 - 07/01/2023	1.04	1.06
27	07/02/2023 - 07/08/2023	1.04	1.06
28	07/09/2023 - 07/15/2023	1.05	1.07
29	07/16/2023 - 07/22/2023	1.04	1.06
30	07/23/2023 - 07/29/2023	1.04	1.06
31	07/30/2023 - 08/05/2023	1.03	1.05
32	08/06/2023 - 08/12/2023	1.02	1.04
33	08/13/2023 - 08/19/2023	1.02	1.04
34	08/20/2023 - 08/26/2023	1.02	1.04
35	08/27/2023 - 09/02/2023	1.02	1.04
36	09/03/2023 - 09/09/2023	1.02	1.04
37	09/10/2023 - 09/16/2023	1.02	1.04
38	09/17/2023 - 09/23/2023	1.01	1.03
39	09/24/2023 - 09/30/2023	1.00	1.02
40	10/01/2023 - 10/07/2023	1.00	1.02
41	10/08/2023 - 10/14/2023	0.99	1.01
42	10/15/2023 - 10/21/2023	0.98	1.00
43	10/22/2023 - 10/28/2023	0.99	1.01
44	10/29/2023 - 11/04/2023	1.00	1.02
45	11/05/2023 - 11/11/2023	1.01	1.03
46	11/12/2023 - 11/18/2023	1.02	1.04
47	11/19/2023 - 11/25/2023	1.02	1.04
48	11/26/2023 - 12/02/2023	1.02	1.04
49	12/03/2023 - 12/09/2023	1.01	1.03
50	12/10/2023 - 12/16/2023	1.01	1.03
51	12/17/2023 - 12/23/2023	1.01	1.03
52	12/24/2023 - 12/30/2023	1.01	1.03
53	12/31/2023 - 12/31/2023	1.00	1.02

* PEAK SEASON

09-MAR-2024 18:41:40

830UPD

4_8630_PKSEASON.TXT

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 86 - BROWARD

SITE: 9485 - NW 142 AVENUE, N OF PINE BLVD.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	5800 S	N 2700	S 3100	9.00	53.80	5.40
2021	5800 F	N 2700	S 3100	9.00	54.00	14.30
2020	5800 C	N 2700	S 3100	9.00	55.10	8.80
2019	7700 T	N 3600	S 4100	9.00	56.00	5.50
2018	7700 S	N 3600	S 4100	9.00	56.30	6.00
2017	7500 F	N 3500	S 4000	9.00	57.10	6.20
2016	7300 C	N 3400	S 3900	9.00	56.10	2.90
2015	6000 R	N 2900	S 3100	9.00	56.20	3.40
2014	5800 T	N 2800	S 3000	9.00	56.80	7.40
2013	5600 S	N 2700	S 2900	9.00	56.20	7.60
2012	5600 F	N 2700	S 2900	9.00	57.00	5.90
2011	5600 C	N 2700	S 2900	9.00	59.10	6.30
2010	3900 F	N 2000	S 1900	9.60	57.92	9.30
2009	3900 C	N 2000	S 1900	9.71	58.42	5.30
2008	3800 C	N 1900	S 1900	9.67	56.67	6.50
2007	4900 C	N 2500	S 2400	10.19	60.63	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: 0035 - SR 820/HOLLYWOOD BLVD - 1000' E OF SR 93/I-75

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	72500 C	E 35500	W 37000	9.00	53.80	4.40
2021	77500 C	E 40000	W 37500	9.00	54.00	4.40
2020	71000 F	E 34500	W 36500	9.00	55.10	2.30
2019	75000 C	E 36500	W 38500	9.00	56.00	2.30
2018	79000 C	E 39500	W 39500	9.00	56.30	2.30
2017	79500 C	E 40000	W 39500	9.00	57.10	7.80
2016	84000 C	E 42500	W 41500	9.00	56.10	7.80
2015	81500 C	E 41500	W 40000	9.00	56.20	7.80
2014	81000 C	E 41500	W 39500	9.00	56.80	4.90
2013	78500 C	E 40000	W 38500	9.00	56.20	5.70
2012	81000 C	E 41000	W 40000	9.00	57.00	5.70
2011	72500 C	E 38500	W 34000	9.00	59.10	2.00
2010	73500 C	E 37500	W 36000	9.60	57.92	2.00
2009	76000 C	E 35000	W 41000	9.71	58.42	2.00
2008	70500 C	E 35000	W 35500	9.67	56.67	5.80
2007	69000 C	E 35000	W 34000	10.19	60.63	5.80

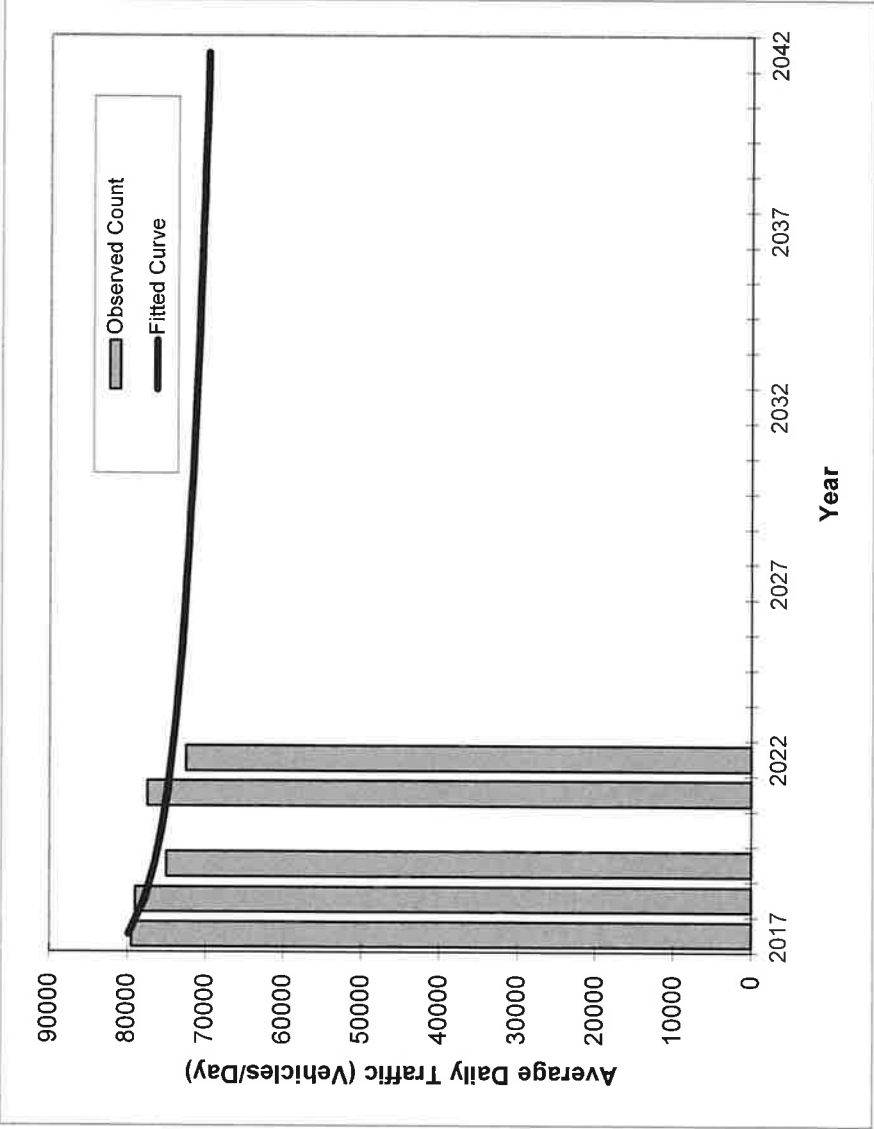
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V03.a

SR 820/HOLLYWOOD BLVD -- 1000' E OF SR 93/I-75

FIN#	1234
Location	1

County:	Broward
Station #:	860035
Highway:	SR 820/HOLLYWOOD BLVD



Trend R-squared:	59.01%
Compounded Annual Historic Growth Rate:	-1.42%
Compounded Growth Rate (2022 to Design Year):	-0.52%
Printed:	21-Feb-24
Decaying Exponential Growth Option	

Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	79500	79900
2018	79000	77800
2019	75000	76500
2020	N/A	N/A
2021	77500	74900
2022	72500	74400
2024 Opening Year Trend		
2024	N/A	73500
2025 Mid-Year Trend		
2025	N/A	73100
2027 Design Year Trend		
2027	N/A	72500
TRANPLAN Forecasts/Trends		

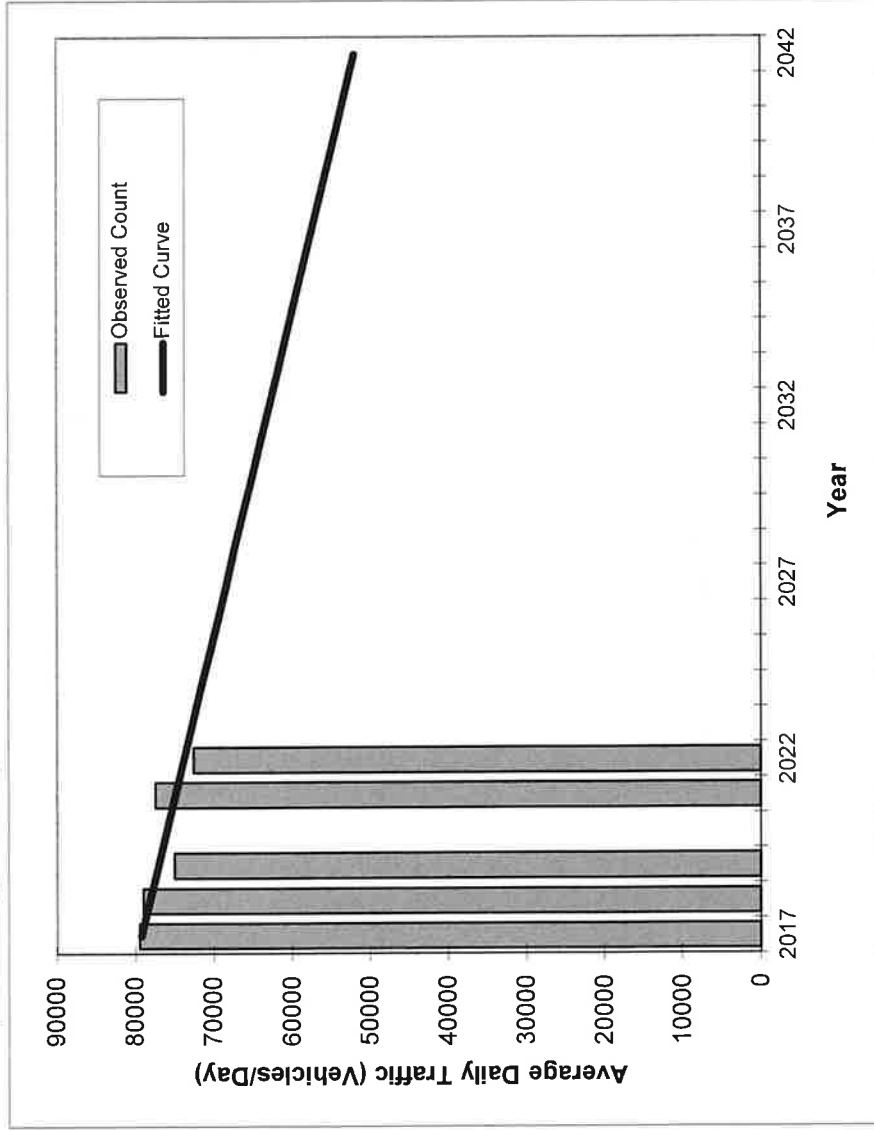
*Axle-Adjusted

Traffic Trends - V03.a

SR 820/HOLLYWOOD BLVD -- 1000' E OF SR 93/I-75

FIN#	1234
Location	1

County:	Broward
Station #:	860035
Highway:	SR 820/HOLLYWOOD BLVD



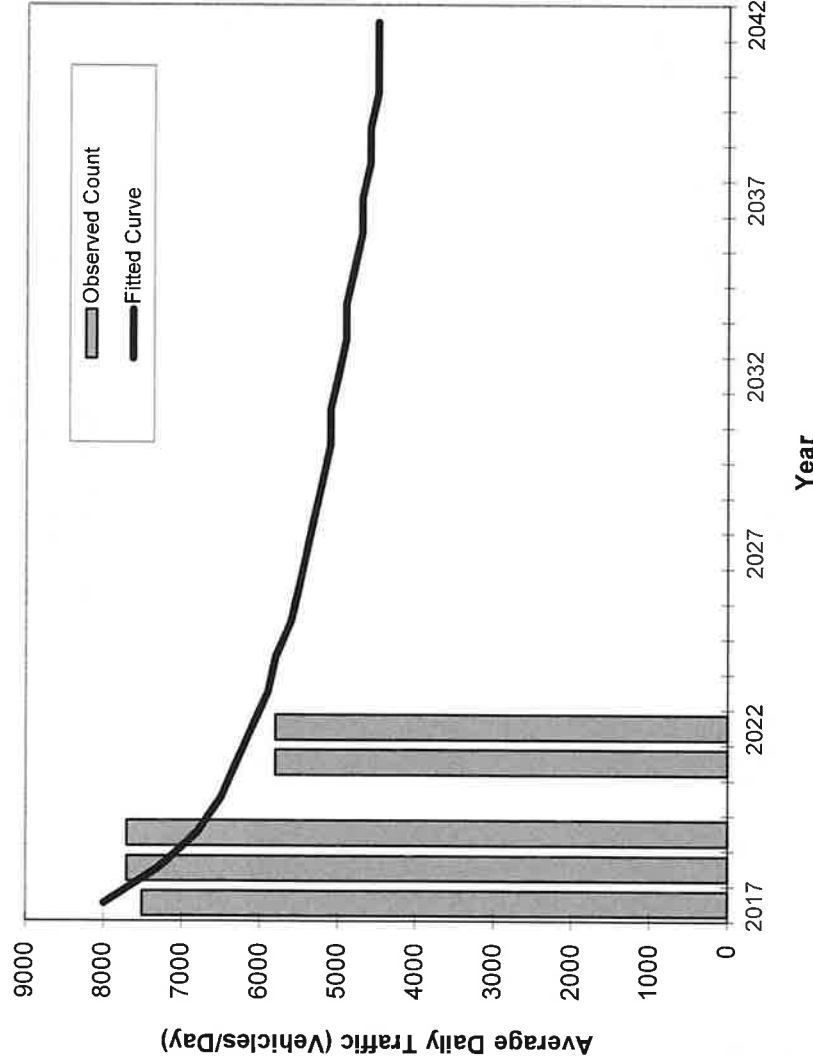
** Annual Trend Increase:	-1,099
Trend R-squared:	60.55%
Trend Annual Historic Growth Rate:	-1.39%
Trend Growth Rate (2022 to Design Year):	-1.49%
Printed:	21-Feb-24
Straight Line Growth Option	

Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	79500	79300
2018	79000	78200
2019	75000	77100
2020	N/A	N/A
2021	77500	74900
2022	72500	73800
2024 Opening Year Trend		
2024	N/A	71600
2025 Mid-Year Trend		
2025	N/A	70500
2027 Design Year Trend		
2027	N/A	68300
TRANPLAN Forecasts/Trends		

Traffic Trends - V03.a NW 142 AVENUE -- N OF PINE BLVD

FIN#	1234
Location	2

County:	Broward
Station #:	869485
Highway:	NW 142 AVENUE



Trend R-squared: 81.19%
 Compounded Annual Historic Growth Rate: -5.28%
 Compounded Growth Rate (2022 to Design Year): -2.41%
 Printed: 21-Feb-24

Exponential Growth Option

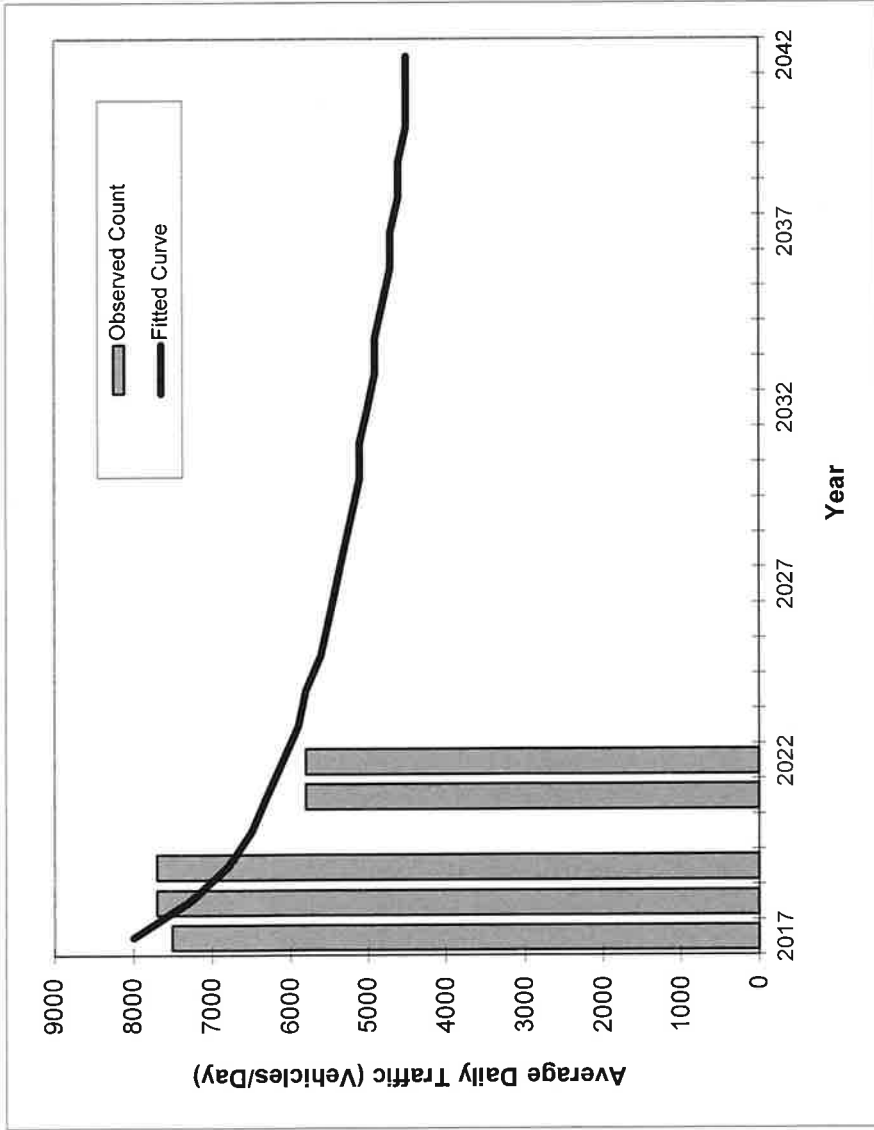
*Axle-Adjusted

Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	7500	8000
2018	7700	7300
2019	7700	6800
2020	N/A	N/A
2021	5800	6300
2022	5800	6100
2024 Opening Year Trend		
2024	N/A	5800
2025 Mid-Year Trend		
2025	N/A	5600
2027 Design Year Trend		
2027	N/A	5400
TRANPLAN Forecasts/Trends		

Traffic Trends - V03.a NW 142 AVENUE -- N OF PINE BLVD

FIN#	1234
Location	2

County:	Broward
Station #:	869485
Highway:	NW 142 AVENUE



Trend R-squared:	62.63%
Compounded Annual Historic Growth Rate:	-5.28%
Compounded Growth Rate (2022 to Design Year):	-2.41%
Printed:	21-Feb-24
Decaying Exponential Growth Option	

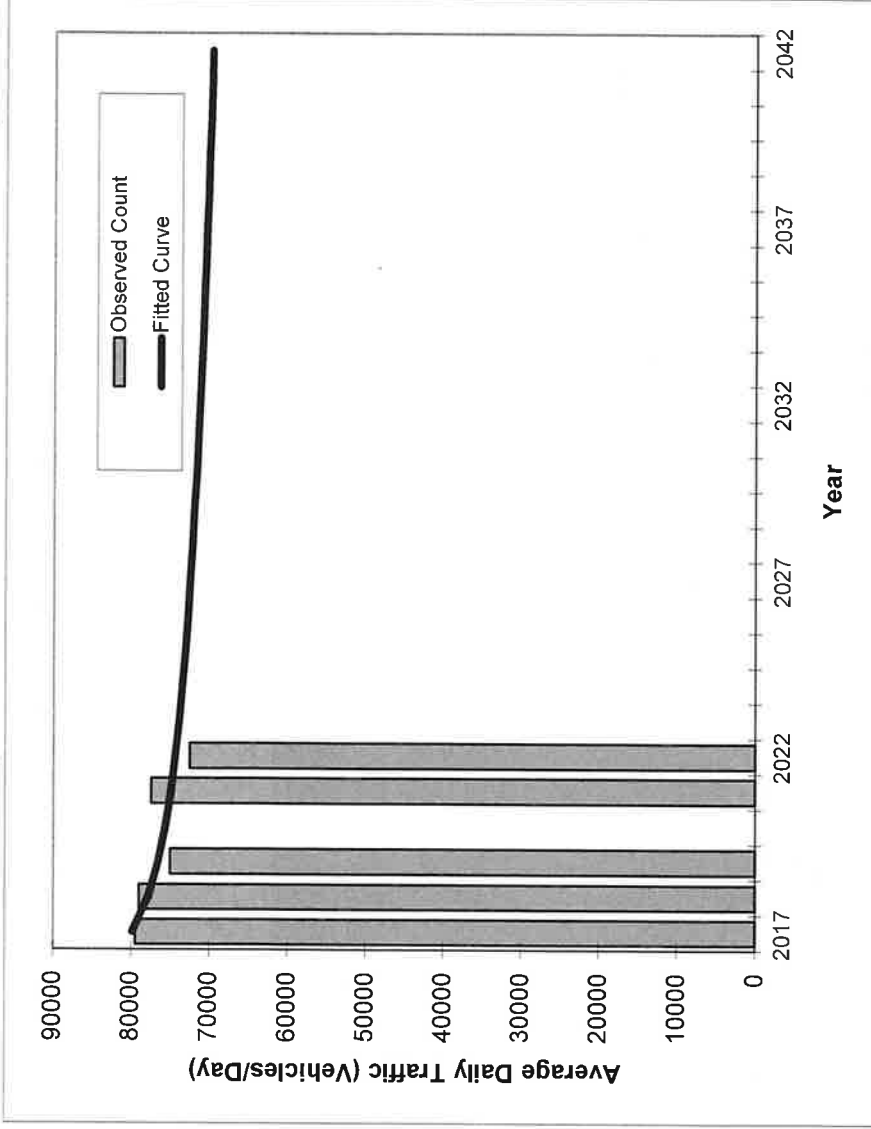
Year	Traffic (ADT/AAADT)	
	Count*	Trend**
2017	7500	8000
2018	7700	7300
2019	7700	6800
2020	N/A	N/A
2021	5800	6300
2022	5800	6100
2024 Opening Year Trend		
2024	N/A	5800
2025 Mid-Year Trend		
2025	N/A	5600
2027 Design Year Trend		
2027	N/A	5400
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Traffic Trends - V03.a SR 820/HOLLYWOOD BLVD -- 1000' E OF SR 93/I-75

FIN#	1234
Location	1

County:	Broward
Station #:	860035
Highway:	SR 820/HOLLYWOOD BLVD



Trend R-squared: 60.35%

Compounded Annual Historic Growth Rate: -1.42%

Compounded Growth Rate (2022 to Design Year): -0.52%

Printed: 21-Feb-24

Exponential Growth Option

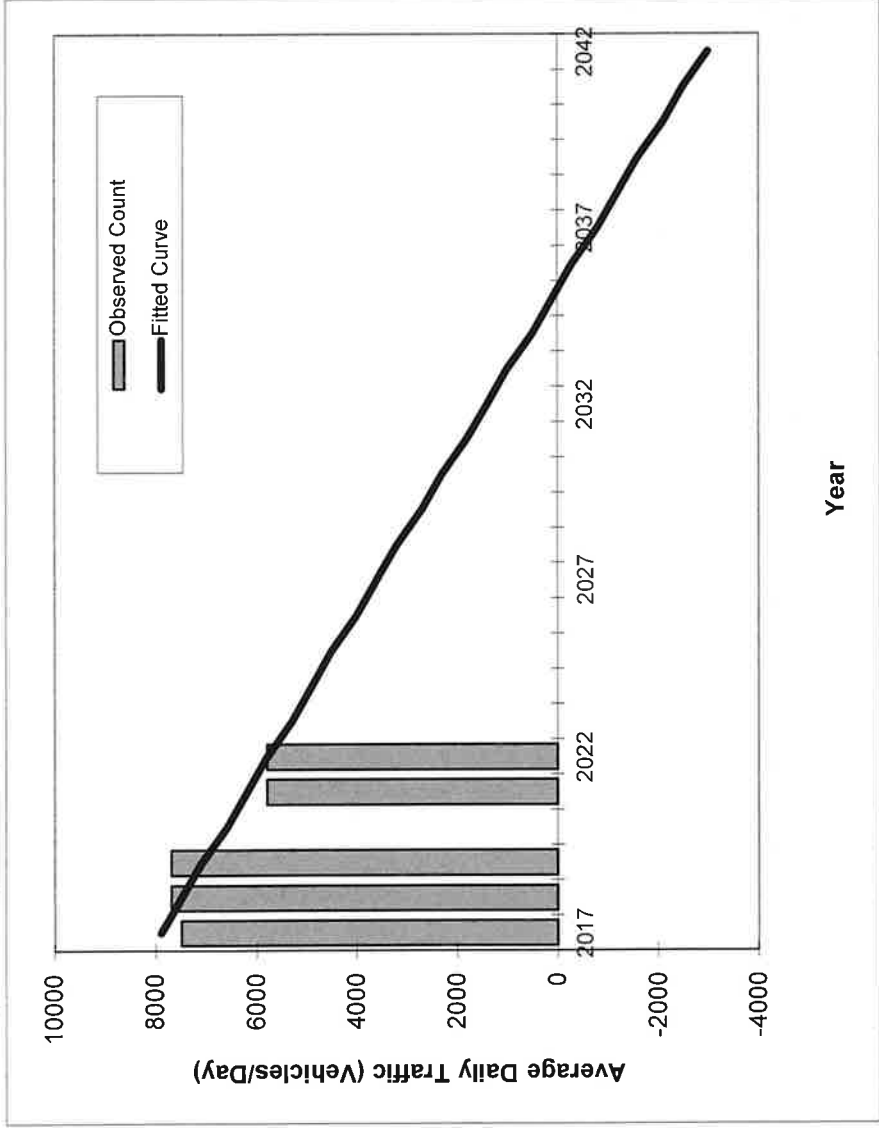
Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	79500	79900
2018	79000	77800
2019	75000	76500
2020	N/A	N/A
2021	77500	74900
2022	72500	74400
2024 Opening Year Trend		
2024	N/A	73500
2025 Mid-Year Trend		
2025	N/A	73100
2027 Design Year Trend		
2027	N/A	72500
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Traffic Trends - V03.a NW 142 AVENUE -- N OF PINE BLVD

FIN#	1234
Location	2

County:	Broward
Station #:	869485
Highway:	NW 142 AVENUE



** Annual Trend Increase:	-436
Trend R-squared:	80.55%
Trend Annual Historic Growth Rate:	-5.32%
Trend Growth Rate (2022 to Design Year):	-7.59%
Printed:	21-Feb-24

Straight Line Growth Option

Year	Traffic (ADT/AADT)	
	Count*	Trend**
2017	7500	7900
2018	7700	7500
2019	7700	7100
2020	N/A	N/A
2021	5800	6200
2022	5800	5800
2024 Opening Year Trend		
2024	N/A	4900
2025 Mid-Year Trend		
2025	N/A	4500
2027 Design Year Trend		
2027	N/A	3600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Growth Rate Trend Analysis Calculations - 5 Years						
Description		FDOT Historical AADT Data				
		0035			9485	
Option	Linear	Exponential	Decaying Exponential	Linear	Exponential	Decaying Exponential
Trend Growth Rate 5 years	-1.39	-1.42	-1.42	-5.32	-5.28	-5.28
Adjusted Growth Rate	0.50	0.50	0.50	0.50	0.50	0.50
Trend R-squared 5 years	60.55	60.35	59.01	80.55	81.19	62.63
Average Growth Rate (5-year) Linear all stations				0.50		
Average Growth Rate (5-year) Exponential all stations				0.50		
Average Growth Rate (5-year) Decaying Exponential all stations				0.50		
Highest R-Square				81.19		
Growth Rate (5-year) with the highest R- Square				0.50		
Growth Rate Used				1.00		

Notes: Negative growth rates were adjusted. A 0.5% growth rate was used.

What is R-squared?

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

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

$R\text{-squared} = \frac{\text{Explained variation}}{\text{Total variation}}$

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 D

Future Turning Movement Volumes and Committed Developments Information

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 145th Ave & Pines Blvd
AM Peak Hour

Description	SW 145th Ave Northbound			SW 145th Ave Southbound			Pines Blvd Eastbound			Pines Blvd Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (12/14/2023)	410	59	138	25	73	314	129	2,059	569	135	2,289	26
Season Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Traffic	418	60	141	26	74	320	132	2100	580	138	2335	27
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
Edison Pembroke - Baptist	60	20	60		44				128	128		
2027 Background Traffic	495	83	206	27	121	333	137	2,185	732	271	2,430	28
Project	29	9	29		4				8	8		
2027 Total Traffic	524	92	235	27	125	333	137	2,185	740	279	2,430	28

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 145th Ave & Pines Blvd PM Peak Hour

Description	SW 145th Ave Northbound			SW 145th Ave Southbound			Pines Blvd Eastbound			Pines Blvd Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (12/14/2023)	658	93	281	36	85	194	239	2,123	558	234	2,022	34
Season Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Traffic	671	95	287	37	87	198	244	2165	569	239	2062	35
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
Edison Pembroke - Baptist	142	46	142		23				71	71		
2027 Background Traffic	840	145	440	38	113	206	254	2,253	663	319	2,146	36
Project	14	5	14		6				22	22		
2027 Total Traffic	854	150	454	38	119	206	254	2,253	685	341	2,146	36

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 145th Ave & SW 2nd St
AM Peak Hour

Description	SW 145th Ave Northbound			SW 145th Ave Southbound			SW 2nd St Eastbound			SW 2nd St Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (12/14/2023)												
Season Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Traffic	0	536	27	0	888	65	0	0	18	13	0	40
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
Edison Pembroke - Baptist	84			300								
2027 Background Traffic	0	641	28	0	1,224	68	0	0	19	14	0	41
Project		67		20								
2027 Total Traffic	0	708	28	0	1,244	68	0	0	19	14	0	41

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 145th Ave & SW 2nd St
AM Peak Hour

Description	SW 145th Ave Northbound			SW 145th Ave Southbound			SW 2nd St Eastbound			SW 2nd St Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (12/14/2023)		1,140	48		671	310			162		14	38
Season Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Traffic	0	1163	49	0	684	316	0	0	165	14	0	39
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
Edison Pembroke - Baptist		198			165							
2027 Background Traffic	0	1,408	51	0	877	329	0	0	172	15	0	40
Project		33			50							
2027 Total Traffic	0	1,441	51	0	927	329	0	0	172	15	0	40

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 145th Ave & SW 5th St
AM Peak Hour

Description	SW 145th Ave Northbound			SW 145th Ave Southbound			SW 5th St Eastbound			SW 5th St Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (12/14/2023)	0	449	10	0	808	57	66		8			11
Season Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Traffic	0	458	10	0	824	58	67	0	8	0	0	11
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
Edison Pembroke - Baptist		84			300							
2027 Background Traffic	0	561	11	0	1,158	61	70	0	8	0	0	12
Project		33			20		34		7			
2027 Total Traffic	0	594	11	0	1,178	61	104	0	15	0	0	12

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 145th Ave & SW 5th St
PM Peak Hour

Description	SW 145th Ave Northbound			SW 145th Ave Southbound			SW 5th St Eastbound			SW 5th St Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (12/14/2023)	0	800	11	0	481	225	344	88				
Season Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Traffic	0	816	11	0	491	230	351	90		0	0	5
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
Edison Pembroke - Baptist		198			165							
2027 Background Traffic	0	1,047	12	0	676	239	365	0	93	0	0	5
Project		16			50		17	3				
2027 Total Traffic	0	1,063	12	0	726	239	382	0	96	0	0	5

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 145th Ave & SW 145th Ter
AM Peak Hour

Description	SW 145th Ave Northbound			SW 145th Ave Southbound			SW 145th Ter Eastbound			SW 145th Ter Westbound		
	Left	Through	Right	U-turn	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (12/14/2023)	43	376		3	785	13	8		6			
Season Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Traffic	44	384	0	3	801	13	8	0	6	0	0	0
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
Edison Pembroke - Baptist		84			300							
2027 Background Traffic	46	483	0	3	1,133	14	8	0	6	0	0	0
Project	8				21		33		7			
2027 Total Traffic	54	483	0	3	1,154	14	41	0	13	0	0	0

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 145th Ave & SW 145th Ter PM Peak Hour

Description	SW 145th Ave Northbound			SW 145th Ave Southbound			SW 145th Ter Eastbound			SW 145th Ter Westbound		
	Left	Through	Right	U-turn	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (12/14/2023)	253	718	1.02	3	436	58	56	140	1.02	1.02	1.02	1.02
Season Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Traffic	258	732	0	3	445	59	57	0	143	0	0	0
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
Edison Pembroke - Baptist	198				165							
2027 Background Traffic	269	960	0	3	628	62	59	0	149	0	0	0
Project	22				10		16	4				
2027 Total Traffic	291	960	0	3	638	62	75	0	153	0	0	0

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 145th Ave & Pembroke Rd
AM Peak Hour

Description	SW 145th Ave Northbound			SW 145th Ave Southbound			Pembroke Rd Eastbound			Pembroke Rd Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (12/14/2023)	96	150	104	159	311	63	90	661	175	265	804	272
Season Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Traffic	98	153	106	162	317	64	92	674	179	270	820	277
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
Edison Pembroke - Baptist		21		30	10	20	43					64
2027 Background Traffic	102	180	110	199	340	87	139	702	186	281	853	353
Project		1		14	5	9	3					4
2027 Total Traffic	102	181	110	213	345	96	142	702	186	281	853	357

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 145th Ave & Pembroke Rd PM Peak Hour

Description	SW 145th Ave Northbound			SW 145th Ave Southbound			Pembroke Rd Eastbound			Pembroke Rd Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (12/14/2023)	178	481	203	267	247	157	151	673	99	126	796	285
Season Adjustment Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
2023 Peak Season Traffic	182	491	207	272	252	160	154	686	101	129	812	291
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
Edison Pembroke - Baptist	12			71	24	47	24					35
2027 Background Traffic	189	523	215	354	286	214	184	714	105	134	845	338
Project		4		7	2	5	7					11
2027 Total Traffic	189	527	215	361	288	219	191	714	105	134	845	349

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 145th Ave & SW 8th Street
AM Peak Hour

Description	SW 145th Ave Northbound			SW 145th Ave Southbound			SW 8th Street Eastbound			SW 8th Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (2/13/2025)	37	573	16	7	409	16	22	0	48	34	0	13
Season Adjustment Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2025 Peak Season Traffic	37	573	16	7	409	16	22	0	48	34	0	13
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
Edison Pembroke - Baptist		84			300							
2027 Background Traffic	38	669	16	7	717	16	22	0	49	35	0	13
Project		33			27							
2027 Total Traffic	38	702	16	7	744	16	22	0	49	35	0	13

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

SW 145th Ave & SW 8th Street PM Peak Hour

Description	SW 145th Ave Northbound			SW 145th Ave Southbound			SW 8th Street Eastbound			SW 8th Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (2/13/2025)	75	524	33	25	875	21	9	1.00	44	27	1.00	6
Season Adjustment Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2025 Peak Season Traffic	75	524	33	25	875	21	9	0	44	27	0	6
Annual Growth Rate	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Committed Developments:												
Edison Pembroke - Baptist		198			165							
2027 Background Traffic	77	733	34	26	1,058	21	9	0	45	28	0	6
Project		16			53							
2027 Total Traffic	77	749	34	26	1,111	21	9	0	45	28	0	6



Edison Pembroke Baptist

Pembroke Pines, Florida

prepared for:

Pembroke 145 Office, LLC

queuing analysis

ENGINEER'S CERTIFICATION

I, Hereby certify that I am a registered professional engineer in the State of Florida, practicing with Traf Tech Engineering, Inc., a Florida Corporation under Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes, Professional License Number 44174, by the State of Florida, Department of Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluation, findings, opinions, conclusions, or technical advice hereby reported for:

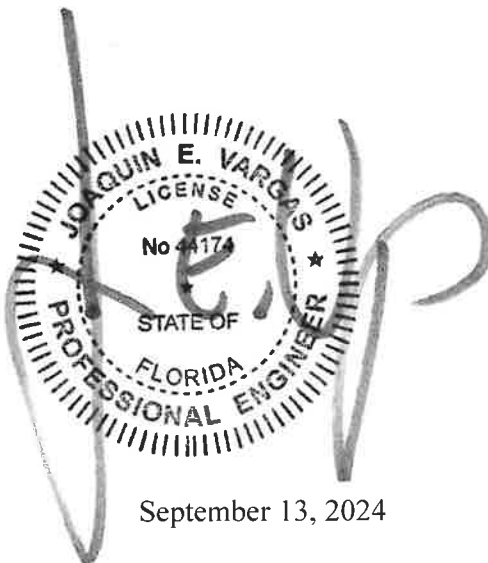
Project: Edison Pembroke Baptist – Queueing Study
Location: Pembroke Pines, Florida
Client: Pembroke 145 Office, LLC

Report Prepared by: Traf Tech Engineering, Inc
8400 N. University Drive, Suite 309
Tamarac, FL 33321

I acknowledge that the procedures and references used to develop the results contained in this report are standards to the professional practice of transportation engineering as applied through professional judgement and experience.

Signature:
Name:
License No.
Date:

Joaquin E. Vargas, P.E.
FL 44174
September 13, 2024



September 13, 2024

September 13, 2024

Mr. Evan Shaw
Pembroke 145 Office, LLC
1776 Peachtree Street NW, Suite 100
Atlanta, Georgia 30309

Re: **Edison Pembroke Baptist – Pembroke Pines, Florida**

Dear Evan:

Traf Tech Engineering, Inc. is pleased to provide you with the results of the queuing analysis associated with proposed mixed-use development located on the west side of SW 145th Avenue approximately 600 feet north of Pembroke Road in the City of Pembroke Pines in Broward County, Florida.

Project Description and Access

The project will consist of 201,000 square feet of office space, a hotel with 125 rooms, 350 mid-rise residential units, and Baptist Health with a 25,394 square-foot ER plus 43,987 square feet of medical office use. Access to the project is planned via three access driveways on SW 145th Avenue; one driveway is planned to be for ingress only (middle access) and the north and south driveways are full access (all movements are permitted). Appendix A contains the site plan associated with the proposed development. For purposes of this traffic evaluation, a conservative growth rate was used to develop year 2026 traffic volumes to account for the anticipated buildout year of the project. The following tasks were undertaken as part of this evaluation:

- o Determined the trip generation of the proposed land uses based on the trip generation equations/rates published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition). Table 1 below documents the trip generation associated with the subject project. As presented in Table 1, the proposed project is projected to generate approximately 7,036 daily trips, approximately 628 AM peak hour trips (428 inbound and 200 outbound) and approximately 708 trips during the typical afternoon peak hour (236 inbound and 472). Appendix B contains trip generation rates and equations of all land uses included in Table 1 and trip Internalization calculation details.

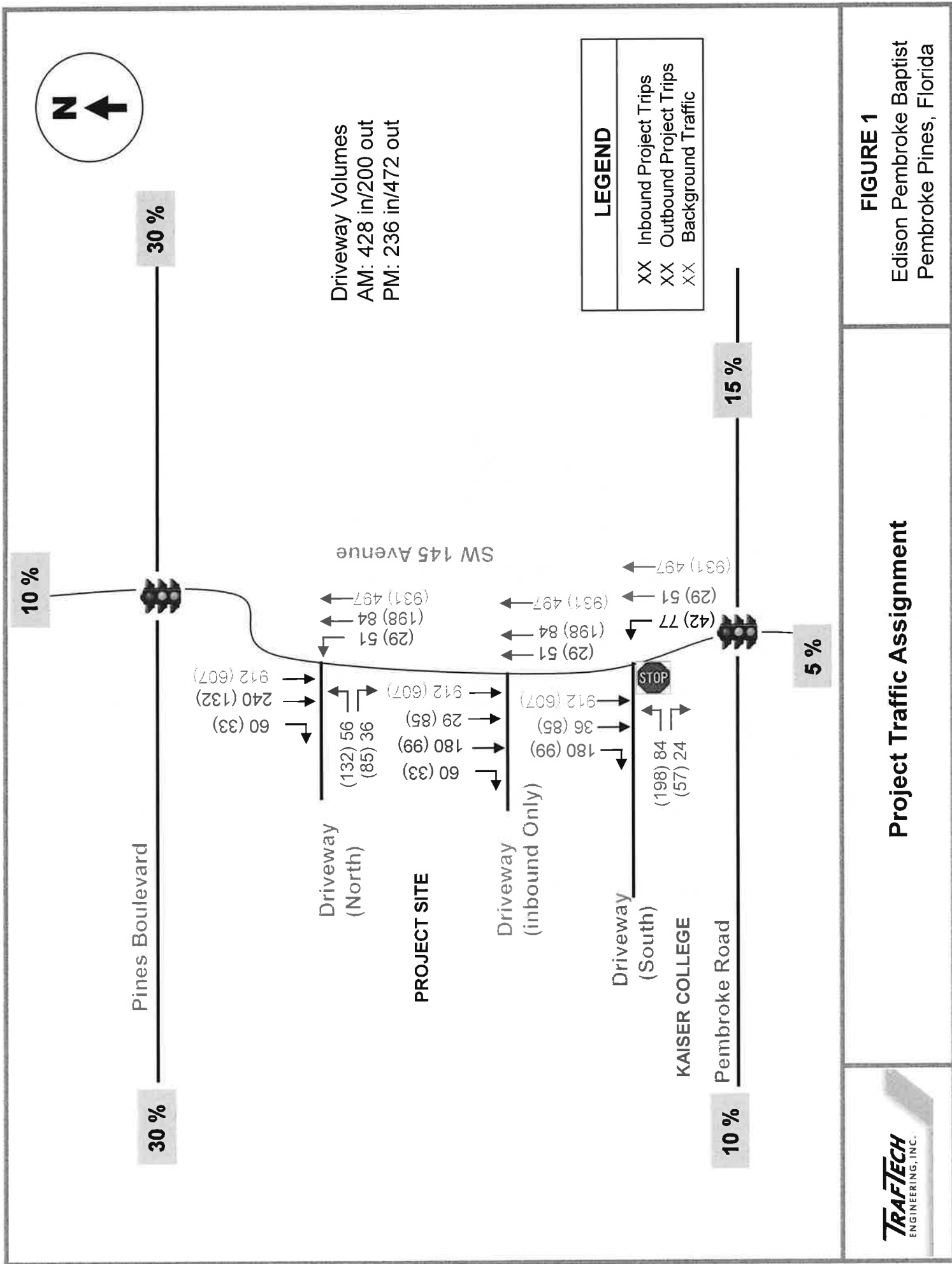


FIGURE 1

Edison Pembroke Baptist
 Pembroke Pines, Florida

APPENDIX E

SYNCHRO Analyses

Timings

04/02/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	132	2100	580	138	2335	27	418	60	26	74	320
Future Volume (vph)	132	2100	580	138	2335	27	418	60	26	74	320
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm
Protected Phases	1	6	7	5	2	3	7	4	3	8	
Permitted Phases			6			2					8
Detector Phase	1	6	7	5	2	3	7	4	3	8	8
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	17.0	46.0	16.0	17.0	46.0	16.0	16.0	45.0	16.0	30.0	30.0
Total Split (s)	20.0	95.0	35.0	20.0	95.0	20.0	35.0	45.0	20.0	30.0	30.0
Total Split (%)	11.1%	52.8%	19.4%	11.1%	52.8%	11.1%	19.4%	25.0%	11.1%	16.7%	16.7%
Yellow Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	6.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None
Act Effct Green (s)	11.2	91.6	118.0	11.3	91.7	102.7	19.5	44.3	10.0	31.7	31.7
Actuated g/C Ratio	0.06	0.51	0.66	0.06	0.51	0.57	0.11	0.25	0.06	0.18	0.18
v/c Ratio	0.65	0.68	0.53	0.67	0.75	0.03	0.82	0.47	0.28	0.24	0.86
Control Delay (s/veh)	97.1	34.9	7.5	98.2	37.4	0.1	91.7	45.3	89.0	66.4	62.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	97.1	34.9	7.5	98.2	37.4	0.1	91.7	45.3	89.0	66.4	62.3
LOS	F	C	A	F	D	A	F	D	F	E	E
Approach Delay (s/veh)		32.2			40.4			76.7		64.7	
Approach LOS		C			D			E		E	

Intersection Summary

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 101 (56%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay (s/veh): 41.9

Intersection LOS: D

Intersection Capacity Utilization 80.4%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 101: SW 145 Avenue & Pines Boulevard

							
Ø1	Ø2 (R)		Ø3	Ø4		Ø5	Ø6 (R)
20 s	95 s		20 s	45 s		20 s	95 s
							
Ø5	Ø6 (R)		Ø7			Ø8	
20 s	95 s		35 s			30 s	

Existing AM Peak Hour

Synchro 12 Light Report

Queues

04/02/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	139	2211	611	145	2458	28	440	211	27	78	337
v/c Ratio	0.65	0.68	0.53	0.67	0.75	0.03	0.82	0.47	0.28	0.24	0.86
Control Delay (s/veh)	97.1	34.9	7.5	98.2	37.4	0.1	91.7	45.3	89.0	66.4	62.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	97.1	34.9	7.5	98.2	37.4	0.1	91.7	45.3	89.0	66.4	62.3
Queue Length 50th (ft)	84	572	139	88	674	0	183	155	31	79	238
Queue Length 95th (ft)	124	623	220	129	731	0	221	246	70	139	#439
Internal Link Dist (ft)		848			992			550		495	
Turn Bay Length (ft)	400		300	270		270	450		300		280
Base Capacity (vph)	247	3259	1226	247	3263	966	796	447	137	327	392
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.68	0.50	0.59	0.75	0.03	0.55	0.47	0.20	0.24	0.86

Intersection Summary

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

HCM 7th Signalized Intersection Summary
101: SW 145 Avenue & Pines Boulevard

04/02/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	2100	580	138	2335	27	418	60	141	26	74	320
Future Volume (veh/h)	132	2100	580	138	2335	27	418	60	141	26	74	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	139	2211	611	145	2458	28	440	63	148	27	78	337
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	2	4	2	2	2
Cap, veh/h	192	3646	1056	192	3647	952	498	95	224	73	249	211
Arrive On Green	0.06	0.57	0.57	0.06	0.57	0.57	0.10	0.19	0.19	0.04	0.13	0.13
Sat Flow, veh/h	3456	6434	1584	3456	6434	1564	4983	495	1164	1781	1870	1585
Grp Volume(v), veh/h	139	2211	611	145	2458	28	440	0	211	27	78	337
Grp Sat Flow(s),veh/h/ln	1728	1609	1584	1728	1609	1564	1661	0	1659	1781	1870	1585
Q Serve(g_s), s	7.1	40.8	37.7	7.4	48.2	1.3	15.7	0.0	21.2	2.7	6.8	24.0
Cycle Q Clear(g_c), s	7.1	40.8	37.7	7.4	48.2	1.3	15.7	0.0	21.2	2.7	6.8	24.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	192	3646	1056	192	3647	952	498	0	319	73	249	211
V/C Ratio(X)	0.72	0.61	0.58	0.76	0.67	0.03	0.88	0.00	0.66	0.37	0.31	1.59
Avail Cap(c_a), veh/h	250	3646	1056	250	3647	952	803	0	359	139	249	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	83.7	25.7	16.3	83.8	27.3	14.1	80.0	0.0	67.3	84.0	70.5	78.0
Incr Delay (d2), s/veh	4.4	0.8	2.3	6.3	1.0	0.1	4.3	0.0	2.6	1.1	0.3	288.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	15.4	13.9	3.5	18.2	0.5	6.9	0.0	9.2	1.2	3.3	26.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	88.1	26.5	18.6	90.1	28.3	14.1	84.2	0.0	69.9	85.2	70.8	366.7
LnGrp LOS	F	C	B	F	C	B	F		E	F	E	F
Approach Vol, veh/h		2961			2631			651			442	
Approach Delay, s/veh		27.8			31.6			79.6			297.3	
Approach LOS		C			C			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	109.0	13.4	40.6	17.0	109.0	24.0	30.0				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	88.0	14.0	39.0	13.0	88.0	29.0	24.0				
Max Q Clear Time (g_c+l1), s	9.1	50.2	4.7	23.2	9.4	42.8	17.7	26.0				
Green Ext Time (p_c), s	0.0	9.6	0.0	0.4	0.0	8.5	0.3	0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 52.1
HCM 7th LOS D

Notes

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

Intersection

Int Delay, s/veh 0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗		↕			↗↕↘			↗↕	↘
Traffic Vol, veh/h	0	0	18	13	0	40	0	402	27	0	888	65
Future Vol, veh/h	0	0	18	13	0	40	0	402	27	0	888	65
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	11	2	2	8	2	5	8	2	2	2
Mvmt Flow	0	0	20	15	0	45	0	452	30	0	998	73

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	499	966	1538	241	-	0	0	-	-	0
Stage 1	-	-	-	467	467	-	-	-	-	-	-	-
Stage 2	-	-	-	499	1071	-	-	-	-	-	-	-
Critical Hdwy	-	-	4.5	5	6.54	4.5	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	5	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	5	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3	3	3	3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	786	457	130	980	0	-	-	0	-	-
Stage 1	0	0	-	757	706	-	0	-	-	0	-	-
Stage 2	0	0	-	734	349	-	0	-	-	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	786	445	130	980	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	538	264	-	-	-	-	-	-	-
Stage 1	-	-	-	757	706	-	-	-	-	-	-	-
Stage 2	-	-	-	715	349	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.7	9.76	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	786	816	-	-
HCM Lane V/C Ratio	-	-	0.026	0.073	-	-
HCM Control Delay (s/veh)	-	-	9.7	9.8	-	-
HCM Lane LOS	-	-	A	A	-	-
HCM 95th %tile Q(veh)	-	-	0.1	0.2	-	-

Timings

04/02/2025

103: SW 145th Avenue & SW 5th Street

					
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	67	8	458	824	58
Future Volume (vph)	67	8	458	824	58
Turn Type	Prot	Perm	NA	NA	Perm
Protected Phases	4		2	6	
Permitted Phases		4			6
Detector Phase	4	4	2	6	6
Switch Phase					
Minimum Initial (s)	6.0	6.0	12.0	12.0	12.0
Minimum Split (s)	25.0	25.0	37.5	32.5	32.5
Total Split (s)	25.0	25.0	50.0	50.0	50.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%
Yellow Time (s)	4.0	4.0	4.5	4.5	4.5
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	6.5	6.5	6.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effct Green (s)	6.2	6.2	51.9	51.9	51.9
Actuated g/C Ratio	0.10	0.10	0.82	0.82	0.82
v/c Ratio	0.21	0.05	0.17	0.30	0.05
Control Delay (s/veh)	27.5	16.3	2.6	3.1	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.5	16.3	2.6	3.1	1.1
LOS	C	B	A	A	A
Approach Delay (s/veh)	26.4		2.6	2.9	
Approach LOS	C		A	A	

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 63.4

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.30

Intersection Signal Delay (s/veh): 4.1

Intersection LOS: A

Intersection Capacity Utilization 38.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 103: SW 145th Avenue & SW 5th Street

	Ø2		Ø4
50 s		25 s	
	Ø6		
50 s			

Existing AM Peak Hour

Synchro 12 Light Report

Queues

04/02/2025

103: SW 145th Avenue & SW 5th Street



Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	71	8	482	867	61
v/c Ratio	0.21	0.05	0.17	0.30	0.05
Control Delay (s/veh)	27.5	16.3	2.6	3.1	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.5	16.3	2.6	3.1	1.1
Queue Length 50th (ft)	12	0	25	52	0
Queue Length 95th (ft)	29	11	41	80	8
Internal Link Dist (ft)	444		522	711	
Turn Bay Length (ft)					180
Base Capacity (vph)	1028	437	2868	2896	1245
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	0.07	0.02	0.17	0.30	0.05

Intersection Summary

HCM 7th Signalized Intersection Summary
103: SW 145th Avenue & SW 5th Street

04/02/2025

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	67	8	0	458	824	58
Future Volume (veh/h)	67	8	0	458	824	58
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1722	0	1856	1870	1796
Adj Flow Rate, veh/h	71	8	0	482	867	61
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	12	0	3	2	7
Cap, veh/h	252	106	0	2539	2559	1096
Arrive On Green	0.07	0.07	0.00	0.72	0.72	0.72
Sat Flow, veh/h	3456	1459	0	3711	3647	1522
Grp Volume(v), veh/h	71	8	0	482	867	61
Grp Sat Flow(s),veh/h/ln	1728	1459	0	1763	1777	1522
Q Serve(g_s), s	1.2	0.3	0.0	2.7	5.5	0.7
Cycle Q Clear(g_c), s	1.2	0.3	0.0	2.7	5.5	0.7
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	252	106	0	2539	2559	1096
V/C Ratio(X)	0.28	0.08	0.00	0.19	0.34	0.06
Avail Cap(c_a), veh/h	1087	459	0	2539	2559	1096
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	26.1	0.0	2.7	3.1	2.5
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.2	0.4	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	0.5	0.1	0.0	0.6	1.2	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.7	26.2	0.0	2.9	3.5	2.6
LnGrp LOS	C	C		A	A	A
Approach Vol, veh/h	79			482	928	
Approach Delay, s/veh	26.7			2.9	3.4	
Approach LOS	C			A	A	
Timer - Assigned Phs	2			4		6
Phs Duration (G+Y+Rc), s	50.0			10.4		50.0
Change Period (Y+Rc), s	6.5			6.0		6.5
Max Green Setting (Gmax), s	43.5			19.0		43.5
Max Q Clear Time (g_c+I1), s	4.7			3.2		7.5
Green Ext Time (p_c), s	3.6			0.1		7.6

Intersection Summary

HCM 7th Control Delay, s/veh	4.5
HCM 7th LOS	A

Notes

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

HCM 7th TWSC
1003: SW 145th Avenue & Unsignalized leg

04/02/2025

Intersection

Int Delay, s/veh 0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	11	458	10	0	882
Future Vol, veh/h	0	11	458	10	0	882
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	95	95	95	95	95	95
Heavy Vehicles, %	0	18	2	7	0	3
Mvmt Flow	0	12	482	11	0	928

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	246	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	7.46	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	4.08	-
Pot Cap-1 Maneuver	0	607	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	607	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.05	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	607	-
HCM Lane V/C Ratio	-	0.019	-
HCM Control Delay (s/veh)	-	11	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0.1	-

Intersection

Int Delay, s/veh 0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↗	↖	↑↑	↑↑	↗
Traffic Vol, veh/h	8	6	44	384	801	13
Future Vol, veh/h	8	6	44	384	801	13
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	250	-	-	150
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	7	48	417	871	14

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1178	438	888
Stage 1	874	-	-
Stage 2	304	-	-
Critical Hdwy	5.5	4.5	4.14
Critical Hdwy Stg 1	5.5	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.22
Pot Cap-1 Maneuver	285	762	759
Stage 1	400	-	-
Stage 2	722	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	265	760	756
Mov Cap-2 Maneuver	322	-	-
Stage 1	374	-	-
Stage 2	720	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	13.61	1.04	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	756	-	322	760	-	-
HCM Lane V/C Ratio	0.063	-	0.027	0.009	-	-
HCM Control Delay (s/veh)	10.1	-	16.5	9.8	-	-
HCM Lane LOS	B	-	C	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	0	-	-

Timings

04/02/2025

105: SW 145 Avenue & Pembroke Road

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	92	674	179	270	820	98	153	106	162	317
Future Volume (vph)	92	674	179	270	820	98	153	106	162	317
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	6.0	6.0	4.0	6.0
Minimum Split (s)	11.0	46.0	46.0	11.0	46.0	10.5	44.5	44.5	10.5	45.5
Total Split (s)	20.0	50.0	50.0	20.0	50.0	20.0	45.0	45.0	20.0	45.0
Total Split (%)	14.8%	37.0%	37.0%	14.8%	37.0%	14.8%	33.3%	33.3%	14.8%	33.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	70.6	63.0	63.0	85.4	71.0	27.1	17.0	17.0	31.8	19.3
Actuated g/C Ratio	0.52	0.47	0.47	0.63	0.53	0.20	0.13	0.13	0.24	0.14
v/c Ratio	0.37	0.42	0.22	0.58	0.63	0.48	0.36	0.34	0.53	0.78
Control Delay (s/veh)	16.3	26.7	4.4	17.0	25.4	44.9	55.0	6.0	45.4	63.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.3	26.7	4.4	17.0	25.4	44.9	55.0	6.0	45.4	63.8
LOS	B	C	A	B	C	D	D	A	D	E
Approach Delay (s/veh)		21.4			23.7		37.7			58.3
Approach LOS		C			C		D			E

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

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

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay (s/veh): 30.5

Intersection LOS: C

Intersection Capacity Utilization 76.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 105: SW 145 Avenue & Pembroke Road

 Ø1	 Ø2 (R)	 Ø3	 Ø4
20 s	50 s	20 s	45 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
20 s	50 s	20 s	45 s

Existing AM Peak Hour

Synchro 12 Light Report

Queues

04/02/2025

105: SW 145 Avenue & Pembroke Road

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	95	695	185	278	1131	101	158	109	167	393
v/c Ratio	0.37	0.42	0.22	0.58	0.63	0.48	0.36	0.34	0.53	0.78
Control Delay (s/veh)	16.3	26.7	4.4	17.0	25.4	44.9	55.0	6.0	45.4	63.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	16.3	26.7	4.4	17.0	25.4	44.9	55.0	6.0	45.4	63.8
Queue Length 50th (ft)	30	210	0	100	343	69	68	0	119	169
Queue Length 95th (ft)	64	313	50	174	512	108	97	28	170	217
Internal Link Dist (ft)		990			1187		695			620
Turn Bay Length (ft)	370		300	200		180		180	180	
Base Capacity (vph)	331	1651	828	483	1806	254	1009	552	328	993
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.42	0.22	0.58	0.63	0.40	0.16	0.20	0.51	0.40
Intersection Summary										

HCM 7th Signalized Intersection Summary
105: SW 145 Avenue & Pembroke Road

04/02/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	674	179	270	820	277	98	153	106	162	317	64
Future Volume (veh/h)	92	674	179	270	820	277	98	153	106	162	317	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	95	695	185	278	845	286	101	158	109	167	327	66
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	292	1792	789	453	1442	487	201	394	175	303	425	85
Arrive On Green	0.04	0.50	0.50	0.09	0.55	0.55	0.06	0.11	0.11	0.10	0.14	0.14
Sat Flow, veh/h	1781	3554	1565	1781	2607	881	1781	3554	1576	1781	2942	586
Grp Volume(v), veh/h	95	695	185	278	575	556	101	158	109	167	196	197
Grp Sat Flow(s), veh/h/ln	1781	1777	1565	1781	1777	1712	1781	1777	1576	1781	1777	1751
Q Serve(g_s), s	3.5	16.3	9.0	9.9	28.9	29.0	6.7	5.6	8.9	11.1	14.3	14.7
Cycle Q Clear(g_c), s	3.5	16.3	9.0	9.9	28.9	29.0	6.7	5.6	8.9	11.1	14.3	14.7
Prop In Lane	1.00		1.00	1.00		0.51	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	292	1792	789	453	982	946	201	394	175	303	256	253
V/C Ratio(X)	0.33	0.39	0.23	0.61	0.59	0.59	0.50	0.40	0.62	0.55	0.76	0.78
Avail Cap(c_a), veh/h	393	1792	789	467	982	946	267	1013	450	309	507	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.1	20.6	18.8	14.6	20.0	20.0	49.2	55.8	57.3	46.9	55.5	55.7
Incr Delay (d2), s/veh	0.2	0.6	0.7	1.6	2.6	2.7	0.7	0.2	1.4	1.1	1.8	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	6.7	3.4	3.9	11.9	11.6	3.0	2.5	3.6	5.0	6.5	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.4	21.3	19.5	16.3	22.5	22.6	50.0	56.1	58.7	48.0	57.3	57.7
LnGrp LOS	B	C	B	B	C	C	D	E	E	D	E	E
Approach Vol, veh/h		975			1409			368			560	
Approach Delay, s/veh		20.6			21.3			55.2			54.7	
Approach LOS		C			C			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.3	81.6	19.5	21.5	18.9	75.1	15.0	26.0				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	13.0	43.0	13.5	38.5	13.0	43.0	13.5	38.5				
Max Q Clear Time (g_c+I1), s	5.5	31.0	13.1	10.9	11.9	18.3	8.7	16.7				
Green Ext Time (p_c), s	0.0	5.4	0.0	0.7	0.0	5.2	0.0	1.3				
Intersection Summary												
HCM 7th Control Delay, s/veh			30.5									
HCM 7th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔↔↔	↔	↔	↔↔	↔
Traffic Vol, veh/h	22	0	48	34	0	13	37	573	16	7	409	16
Future Vol, veh/h	22	0	48	34	0	13	37	573	16	7	409	16
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	2	2	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	200	-	200	200	-	270
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	3	2
Mvmt Flow	23	0	50	35	0	14	39	597	17	7	426	17

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	758	1135	215	904	1135	300	445	0	0	616	0	0
Stage 1	443	443	-	676	676	-	-	-	-	-	-	-
Stage 2	316	693	-	228	459	-	-	-	-	-	-	-
Critical Hdwy	5	4.5	4.5	5	4.5	4.5	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	5	4.5	-	5	4.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5	4.5	-	5	4.5	-	-	-	-	-	-	-
Follow-up Hdwy	3	3	3	3	3	3	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	565	449	1002	487	449	932	1112	-	-	597	-	-
Stage 1	776	825	-	614	674	-	-	-	-	-	-	-
Stage 2	880	665	-	960	813	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	529	426	1000	440	426	930	1110	-	-	596	-	-
Mov Cap-2 Maneuver	529	426	-	440	426	-	-	-	-	-	-	-
Stage 1	765	814	-	591	650	-	-	-	-	-	-	-
Stage 2	837	640	-	901	802	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v10.08		12.52	0.49	0.18
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1110	-	-	782	440	930	596	-	-
HCM Lane V/C Ratio	0.035	-	-	0.093	0.08	0.015	0.012	-	-
HCM Control Delay (s/veh)	8.4	-	-	10.1	13.9	8.9	11.1	-	-
HCM Lane LOS	A	-	-	B	B	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	0	0	-	-

Timings

04/02/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	137	2185	732	271	2430	28	495	83	27	121	333
Future Volume (vph)	137	2185	732	271	2430	28	495	83	27	121	333
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm
Protected Phases	1	6	7	5	2	3	7	4	3	8	
Permitted Phases			6			2					8
Detector Phase	1	6	7	5	2	3	7	4	3	8	8
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	17.0	46.0	16.0	17.0	46.0	16.0	16.0	45.0	16.0	30.0	30.0
Total Split (s)	20.0	95.0	35.0	20.0	95.0	20.0	35.0	45.0	20.0	30.0	30.0
Total Split (%)	11.1%	52.8%	19.4%	11.1%	52.8%	11.1%	19.4%	25.0%	11.1%	16.7%	16.7%
Yellow Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	6.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None
Act Effct Green (s)	11.3	88.0	117.4	13.0	89.7	100.7	22.4	46.2	10.0	30.6	30.6
Actuated g/C Ratio	0.06	0.49	0.65	0.07	0.50	0.56	0.12	0.26	0.06	0.17	0.17
v/c Ratio	0.67	0.73	0.70	1.15	0.80	0.03	0.85	0.66	0.29	0.40	0.91
Control Delay (s/veh)	98.1	38.4	17.3	173.8	40.3	0.1	90.4	55.4	89.4	72.0	71.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	98.1	38.4	17.3	173.8	40.3	0.1	90.4	55.4	89.4	72.0	71.5
LOS	F	D	B	F	D	A	F	E	F	E	E
Approach Delay (s/veh)		36.1			53.1			77.5		72.6	
Approach LOS		D			D			E		E	

Intersection Summary

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 101 (56%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.15

Intersection Signal Delay (s/veh): 49.8

Intersection LOS: D

Intersection Capacity Utilization 91.5%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 101: SW 145 Avenue & Pines Boulevard

			
Ø1	Ø2 (R)	Ø3	Ø4
20 s	95 s	20 s	45 s
			
Ø5	Ø6 (R)	Ø7	Ø8
20 s	95 s	35 s	30 s

Queues

04/02/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	144	2300	771	285	2558	29	521	304	28	127	351
v/c Ratio	0.67	0.73	0.70	1.15	0.80	0.03	0.85	0.66	0.29	0.40	0.91
Control Delay (s/veh)	98.1	38.4	17.3	173.8	40.3	0.1	90.4	55.4	89.4	72.0	71.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	98.1	38.4	17.3	173.8	40.3	0.1	90.4	55.4	89.4	72.0	71.5
Queue Length 50th (ft)	87	623	416	-203	722	0	217	265	32	136	264
Queue Length 95th (ft)	128	661	524	#307	778	0	256	385	71	216	#506
Internal Link Dist (ft)		848			992			550		495	
Turn Bay Length (ft)	400		300	270		270	450		300		280
Base Capacity (vph)	247	3132	1154	247	3194	950	796	464	137	316	384
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.73	0.67	1.15	0.80	0.03	0.65	0.66	0.20	0.40	0.91

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 7th Signalized Intersection Summary
101: SW 145 Avenue & Pines Boulevard

04/02/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	2185	732	271	2430	28	495	83	206	27	121	333
Future Volume (veh/h)	137	2185	732	271	2430	28	495	83	206	27	121	333
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	144	2300	771	285	2558	29	521	87	217	28	127	351
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	2	4	2	2	2
Cap, veh/h	192	3435	1030	250	3542	927	579	98	245	75	249	211
Arrive On Green	0.06	0.53	0.53	0.07	0.55	0.55	0.12	0.21	0.21	0.04	0.13	0.13
Sat Flow, veh/h	3456	6434	1584	3456	6434	1564	4983	474	1182	1781	1870	1585
Grp Volume(v), veh/h	144	2300	771	285	2558	29	521	0	304	28	127	351
Grp Sat Flow(s),veh/h/ln	1728	1609	1584	1728	1609	1564	1661	0	1656	1781	1870	1585
Q Serve(g_s), s	7.4	46.7	59.7	13.0	53.4	1.4	18.6	0.0	32.1	2.8	11.4	24.0
Cycle Q Clear(g_c), s	7.4	46.7	59.7	13.0	53.4	1.4	18.6	0.0	32.1	2.8	11.4	24.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	192	3435	1030	250	3542	927	579	0	344	75	249	211
V/C Ratio(X)	0.75	0.67	0.75	1.14	0.72	0.03	0.90	0.00	0.88	0.38	0.51	1.66
Avail Cap(c_a), veh/h	250	3435	1030	250	3542	927	803	0	359	139	249	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	83.8	30.4	21.5	83.5	30.2	15.2	78.5	0.0	69.2	83.9	72.5	78.0
Incr Delay (d2), s/veh	5.9	1.1	5.0	100.7	1.3	0.1	8.3	0.0	20.6	1.2	0.7	317.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	17.9	22.7	9.3	20.4	0.5	8.4	0.0	15.5	1.3	5.5	28.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	89.7	31.5	26.5	184.2	31.5	15.3	86.9	0.0	89.8	85.1	73.2	395.4
LnGrp LOS	F	C	C	F	C	B	F		F	F	E	F
Approach Vol, veh/h	3215			2872			825			506		
Approach Delay, s/veh	32.9			46.5			87.9			297.4		
Approach LOS	C			D			F			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	106.1	13.5	43.4	20.0	103.1	26.9	30.0				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	88.0	14.0	39.0	13.0	88.0	29.0	24.0				
Max Q Clear Time (g_c+I1), s	9.4	55.4	4.8	34.1	15.0	61.7	20.6	26.0				
Green Ext Time (p_c), s	0.0	10.2	0.0	0.3	0.0	8.7	0.3	0.0				

Intersection Summary

HCM 7th Control Delay, s/veh 62.3
HCM 7th LOS E

Notes

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

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗		↔			↗↗↗			↗↗	↗
Traffic Vol, veh/h	0	0	19	14	0	41	0	641	28	0	1224	68
Future Vol, veh/h	0	0	19	14	0	41	0	641	28	0	1224	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	11	2	2	8	2	5	8	2	2	2
Mvmt Flow	0	0	21	16	0	46	0	720	31	0	1375	76

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	-	-	688	1424	2188	376	-	0
Stage 1	-	-	-	736	736	-	-	-
Stage 2	-	-	-	688	1452	-	-	-
Critical Hdwy	-	-	4.5	5	6.54	4.5	-	-
Critical Hdwy Stg 1	-	-	-	5	5.54	-	-	-
Critical Hdwy Stg 2	-	-	-	5	5.54	-	-	-
Follow-up Hdwy	-	-	3	3	3	3	-	-
Pot Cap-1 Maneuver	0	0	667	284	49	874	0	-
Stage 1	0	0	-	578	517	-	0	-
Stage 2	0	0	-	607	222	-	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	667	275	49	874	-	-
Mov Cap-2 Maneuver	-	-	-	391	160	-	-	-
Stage 1	-	-	-	578	517	-	-	-
Stage 2	-	-	-	587	222	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v10.57		10.97	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	-	-	667	665	-
HCM Lane V/C Ratio	-	-	0.032	0.093	-
HCM Control Delay (s/veh)	-	-	10.6	11	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0.1	0.3	-

Timings

04/02/2025

103: SW 145th Avenue & SW 5th Street

					
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	70	8	561	1158	61
Future Volume (vph)	70	8	561	1158	61
Turn Type	Prot	Perm	NA	NA	Perm
Protected Phases	4		2	6	
Permitted Phases		4			6
Detector Phase	4	4	2	6	6
Switch Phase					
Minimum Initial (s)	6.0	6.0	12.0	12.0	12.0
Minimum Split (s)	25.0	25.0	37.5	32.5	32.5
Total Split (s)	25.0	25.0	50.0	50.0	50.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%
Yellow Time (s)	4.0	4.0	4.5	4.5	4.5
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	6.5	6.5	6.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effct Green (s)	6.3	6.3	49.3	49.3	49.3
Actuated g/C Ratio	0.10	0.10	0.77	0.77	0.77
v/c Ratio	0.22	0.05	0.22	0.45	0.05
Control Delay (s/veh)	27.9	16.3	3.3	4.4	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.9	16.3	3.3	4.4	1.1
LOS	C	B	A	A	A
Approach Delay (s/veh)	26.7		3.3	4.3	
Approach LOS	C		A	A	

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 64.4

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.45

Intersection Signal Delay (s/veh): 4.9

Intersection LOS: A

Intersection Capacity Utilization 47.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 103: SW 145th Avenue & SW 5th Street

	Ø2		Ø4
50 s		25 s	
	Ø6		
50 s			

Queues

04/02/2025

103: SW 145th Avenue & SW 5th Street

					
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	74	8	591	1219	64
v/c Ratio	0.22	0.05	0.22	0.45	0.05
Control Delay (s/veh)	27.9	16.3	3.3	4.4	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.9	16.3	3.3	4.4	1.1
Queue Length 50th (ft)	13	0	32	85	0
Queue Length 95th (ft)	30	11	52	127	8
Internal Link Dist (ft)	444		522	711	
Turn Bay Length (ft)					180
Base Capacity (vph)	1014	431	2680	2706	1169
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	0.07	0.02	0.22	0.45	0.05
Intersection Summary					

HCM 7th Signalized Intersection Summary
103: SW 145th Avenue & SW 5th Street

04/02/2025

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	70	8	0	561	1158	61
Future Volume (veh/h)	70	8	0	561	1158	61
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1722	0	1856	1870	1796
Adj Flow Rate, veh/h	74	8	0	591	1219	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	12	0	3	2	7
Cap, veh/h	256	108	0	2535	2556	1095
Arrive On Green	0.07	0.07	0.00	0.72	0.72	0.72
Sat Flow, veh/h	3456	1459	0	3711	3647	1522
Grp Volume(v), veh/h	74	8	0	591	1219	64
Grp Sat Flow(s),veh/h/ln	1728	1459	0	1763	1777	1522
Q Serve(g_s), s	1.2	0.3	0.0	3.4	8.9	0.7
Cycle Q Clear(g_c), s	1.2	0.3	0.0	3.4	8.9	0.7
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	256	108	0	2535	2556	1095
V/C Ratio(X)	0.29	0.07	0.00	0.23	0.48	0.06
Avail Cap(c_a), veh/h	1085	458	0	2535	2556	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	26.1	0.0	2.9	3.6	2.5
Incr Delay (d2), s/veh	0.2	0.1	0.0	0.2	0.6	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	0.5	0.1	0.0	0.7	1.9	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.7	26.2	0.0	3.1	4.3	2.6
LnGrp LOS	C	C		A	A	A
Approach Vol, veh/h	82			591	1283	
Approach Delay, s/veh	26.7			3.1	4.2	
Approach LOS	C			A	A	
Timer - Assigned Phs	2			4		6
Phs Duration (G+Y+Rc), s	50.0			10.5		50.0
Change Period (Y+Rc), s	6.5			6.0		6.5
Max Green Setting (Gmax), s	43.5			19.0		43.5
Max Q Clear Time (g_c+I1), s	5.4			3.2		10.9
Green Ext Time (p_c), s	4.6			0.1		11.8
Intersection Summary						
HCM 7th Control Delay, s/veh			4.8			
HCM 7th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 7th TWSC
1003: SW 145th Avenue & Unsignalized leg

04/02/2025

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑↑↑			↑↑↑↑
Traffic Vol, veh/h	0	12	1117	11	0	2131
Future Vol, veh/h	0	12	1117	11	0	2131
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	95	95	95	95	95	95
Heavy Vehicles, %	0	18	2	7	0	3
Mvmt Flow	0	13	1176	12	0	2243
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	594	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.46	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.08	-	-	-	-
Pot Cap-1 Maneuver	0	354	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	-	354	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s/v15.54		0	0			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT			
Capacity (veh/h)	-	-	354	-		
HCM Lane V/C Ratio	-	-	0.036	-		
HCM Control Delay (s/veh)	-	-	15.5	-		
HCM Lane LOS	-	-	C	-		
HCM 95th %tile Q(veh)	-	-	0.1	-		

Intersection

Int Delay, s/veh 0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	6	46	483	1133	14
Future Vol, veh/h	8	6	46	483	1133	14
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	250	-	-	150
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	7	50	525	1232	15

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1597	619	1250
Stage 1	1235	-	-
Stage 2	363	-	-
Critical Hdwy	5.5	4.5	4.14
Critical Hdwy Stg 1	5.5	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.22
Pot Cap-1 Maneuver	176	657	553
Stage 1	267	-	-
Stage 2	675	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	159	655	551
Mov Cap-2 Maneuver	211	-	-
Stage 1	242	-	-
Stage 2	673	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v17.57		1.06	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	551	-	211	655	-	-
HCM Lane V/C Ratio	0.091	-	0.041	0.01	-	-
HCM Control Delay (s/veh)	12.2	-	22.8	10.6	-	-
HCM Lane LOS	B	-	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.1	0	-	-

Timings

04/02/2025

105: SW 145 Avenue & Pembroke Road

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	139	702	186	281	853	102	180	110	199	340
Future Volume (vph)	139	702	186	281	853	102	180	110	199	340
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	6.0	6.0	4.0	6.0
Minimum Split (s)	11.0	46.0	46.0	11.0	46.0	10.5	44.5	44.5	10.5	45.5
Total Split (s)	20.0	50.0	50.0	20.0	50.0	20.0	45.0	45.0	20.0	45.0
Total Split (%)	14.8%	37.0%	37.0%	14.8%	37.0%	14.8%	33.3%	33.3%	14.8%	33.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	69.2	58.5	58.5	83.2	65.9	28.6	18.3	18.3	34.1	21.1
Actuated g/C Ratio	0.51	0.43	0.43	0.62	0.49	0.21	0.14	0.14	0.25	0.16
v/c Ratio	0.59	0.47	0.24	0.62	0.74	0.50	0.39	0.34	0.62	0.80
Control Delay (s/veh)	26.0	30.2	4.8	19.0	31.7	44.4	54.2	6.1	47.7	62.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.0	30.2	4.8	19.0	31.7	44.4	54.2	6.1	47.7	62.7
LOS	C	C	A	B	C	D	D	A	D	E
Approach Delay (s/veh)		25.0			29.3		38.2			57.9
Approach LOS		C			C		D			E

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

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

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay (s/veh): 34.1

Intersection LOS: C

Intersection Capacity Utilization 84.2%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 105: SW 145 Avenue & Pembroke Road

					
Ø1	Ø2 (R)		Ø3	Ø4	
20 s	50 s		20 s	45 s	
					
Ø5	Ø6 (R)		Ø7	Ø8	
20 s	50 s		20 s	45 s	

Queues

04/02/2025

105: SW 145 Avenue & Pembroke Road

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	143	724	192	290	1243	105	186	113	205	441
v/c Ratio	0.59	0.47	0.24	0.62	0.74	0.50	0.39	0.34	0.62	0.80
Control Delay (s/veh)	26.0	30.2	4.8	19.0	31.7	44.4	54.2	6.1	47.7	62.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.0	30.2	4.8	19.0	31.7	44.4	54.2	6.1	47.7	62.7
Queue Length 50th (ft)	49	235	0	110	434	71	79	0	146	188
Queue Length 95th (ft)	108	343	53	190	#684	110	110	31	201	237
Internal Link Dist (ft)		990			1187		695			620
Turn Bay Length (ft)	370		300	200		180		180	180	
Base Capacity (vph)	283	1533	786	469	1677	250	1009	552	335	992
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.47	0.24	0.62	0.74	0.42	0.18	0.20	0.61	0.44

Intersection Summary

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

HCM 7th Signalized Intersection Summary
105: SW 145 Avenue & Pembroke Road

04/02/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	702	186	281	853	353	102	180	110	199	340	87
Future Volume (veh/h)	139	702	186	281	853	353	102	180	110	199	340	87
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	143	724	192	290	879	364	105	186	113	205	351	90
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	1708	752	437	1280	527	202	438	194	312	444	112
Arrive On Green	0.06	0.48	0.48	0.10	0.52	0.52	0.06	0.12	0.12	0.10	0.16	0.16
Sat Flow, veh/h	1781	3554	1565	1781	2454	1011	1781	3554	1577	1781	2797	707
Grp Volume(v), veh/h	143	724	192	290	635	608	105	186	113	205	221	220
Grp Sat Flow(s),veh/h/ln	1781	1777	1565	1781	1777	1688	1781	1777	1577	1781	1777	1727
Q Serve(g_s), s	5.5	17.9	9.8	11.0	35.9	36.4	6.9	6.5	9.1	13.5	16.1	16.6
Cycle Q Clear(g_c), s	5.5	17.9	9.8	11.0	35.9	36.4	6.9	6.5	9.1	13.5	16.1	16.6
Prop In Lane	1.00		1.00	1.00		0.60	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	265	1708	752	437	926	880	202	438	194	312	282	274
V/C Ratio(X)	0.54	0.42	0.26	0.66	0.69	0.69	0.52	0.42	0.58	0.66	0.78	0.80
Avail Cap(c_a), veh/h	338	1708	752	437	926	880	265	1013	450	312	507	493
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	22.9	20.8	16.6	24.1	24.2	47.9	54.8	55.9	46.0	54.6	54.8
Incr Delay (d2), s/veh	0.6	0.8	0.8	3.0	4.1	4.4	0.8	0.2	1.0	4.0	1.8	2.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	7.4	3.7	4.6	15.3	14.8	3.1	2.9	3.7	6.3	7.3	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.6	23.6	21.6	19.6	28.2	28.6	48.7	55.0	56.9	50.0	56.4	56.9
LnGrp LOS	C	C	C	B	C	C	D	E	E	D	E	E
Approach Vol, veh/h		1059			1533			404			646	
Approach Delay, s/veh		23.0			26.7			53.9			54.5	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.5	77.4	20.0	23.1	20.0	71.9	15.2	27.9				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	13.0	43.0	13.5	38.5	13.0	43.0	13.5	38.5				
Max Q Clear Time (g_c+l1), s	7.5	38.4	15.5	11.1	13.0	19.9	8.9	18.6				
Green Ext Time (p_c), s	0.0	2.9	0.0	0.9	0.0	5.4	0.0	1.5				
Intersection Summary												
HCM 7th Control Delay, s/veh			33.6									
HCM 7th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕	↕	↕	↕	↕	↕	↕	↕
Traffic Vol, veh/h	22	0	49	35	0	13	38	669	16	7	717	16
Future Vol, veh/h	22	0	49	35	0	13	38	669	16	7	717	16
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	2	2	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	200	-	200	200	-	270
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	3	2
Mvmt Flow	23	0	51	36	0	14	40	697	17	7	747	17

Major/Minor	Minor2		Minor1		Major1		Major2		Major2		Major2	
Conflicting Flow All	1121	1558	375	1166	1558	350	766	0	0	716	0	0
Stage 1	763	763	-	778	778	-	-	-	-	-	-	-
Stage 2	358	795	-	388	780	-	-	-	-	-	-	-
Critical Hdwy	5	4.5	4.5	5	4.5	4.5	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	5	4.5	-	5	4.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5	4.5	-	5	4.5	-	-	-	-	-	-	-
Follow-up Hdwy	3	3	3	3	3	3	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	389	306	874	371	306	893	844	-	-	536	-	-
Stage 1	562	625	-	553	617	-	-	-	-	-	-	-
Stage 2	844	608	-	819	615	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	359	286	872	328	286	891	842	-	-	535	-	-
Mov Cap-2 Maneuver	359	286	-	328	286	-	-	-	-	-	-	-
Stage 1	553	615	-	526	587	-	-	-	-	-	-	-
Stage 2	792	578	-	761	606	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v11.78		15.11	0.5	0.11
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	842	-	-	605	328	891	535	-	-
HCM Lane V/C Ratio	0.047	-	-	0.122	0.111	0.015	0.014	-	-
HCM Control Delay (s/veh)	9.5	-	-	11.8	17.3	9.1	11.8	-	-
HCM Lane LOS	A	-	-	B	C	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.4	0	0	-	-

Timings

04/02/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	137	2185	740	279	2430	28	524	92	27	125	333
Future Volume (vph)	137	2185	740	279	2430	28	524	92	27	125	333
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm
Protected Phases	1	6	7	5	2	3	7	4	3	8	
Permitted Phases			6			2					8
Detector Phase	1	6	7	5	2	3	7	4	3	8	8
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	17.0	46.0	16.0	17.0	46.0	16.0	16.0	45.0	16.0	30.0	30.0
Total Split (s)	20.0	95.0	35.0	20.0	95.0	20.0	35.0	45.0	20.0	30.0	30.0
Total Split (%)	11.1%	52.8%	19.4%	11.1%	52.8%	11.1%	19.4%	25.0%	11.1%	16.7%	16.7%
Yellow Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	6.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None
Act Effct Green (s)	11.3	88.0	118.5	13.0	89.7	100.7	23.5	46.2	10.0	29.5	29.5
Actuated g/C Ratio	0.06	0.49	0.66	0.07	0.50	0.56	0.13	0.26	0.06	0.16	0.16
v/c Ratio	0.67	0.73	0.70	1.19	0.80	0.03	0.86	0.74	0.29	0.43	0.94
Control Delay (s/veh)	98.1	38.4	17.5	184.7	40.3	0.1	89.9	61.1	89.4	73.9	75.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	98.1	38.4	17.5	184.7	40.3	0.1	89.9	61.1	89.4	73.9	75.9
LOS	F	D	B	F	D	A	F	E	F	E	E
Approach Delay (s/veh)		36.0			54.6			78.8		76.2	
Approach LOS		D			D			E		E	

Intersection Summary

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 101 (56%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.19

Intersection Signal Delay (s/veh): 51.0

Intersection LOS: D

Intersection Capacity Utilization 93.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 101: SW 145 Avenue & Pines Boulevard

			
Ø1	Ø2 (R)	Ø3	Ø4
20 s	95 s	20 s	45 s
			
Ø5	Ø6 (R)	Ø7	Ø8
20 s	95 s	35 s	30 s

Future AM Peak Hour

Synchro 12 Light Report

Queues

04/02/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	144	2300	779	294	2558	29	552	344	28	132	351
v/c Ratio	0.67	0.73	0.70	1.19	0.80	0.03	0.86	0.74	0.29	0.43	0.94
Control Delay (s/veh)	98.1	38.4	17.5	184.7	40.3	0.1	89.9	61.1	89.4	73.9	75.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	98.1	38.4	17.5	184.7	40.3	0.1	89.9	61.1	89.4	73.9	75.9
Queue Length 50th (ft)	87	623	427	~214	722	0	230	319	32	142	266
Queue Length 95th (ft)	128	661	532	#320	778	0	269	451	71	226	#518
Internal Link Dist (ft)		848			992			550		495	
Turn Bay Length (ft)	400		300	270		270	450		300		280
Base Capacity (vph)	247	3132	1151	247	3194	950	796	465	137	305	375
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.73	0.68	1.19	0.80	0.03	0.69	0.74	0.20	0.43	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.

HCM 7th Signalized Intersection Summary
101: SW 145 Avenue & Pines Boulevard

04/02/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	2185	740	279	2430	28	524	92	235	27	125	333
Future Volume (veh/h)	137	2185	740	279	2430	28	524	92	235	27	125	333
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	144	2300	779	294	2558	29	552	97	247	28	132	351
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	2	4	2	2	2
Cap, veh/h	192	3377	1025	250	3484	913	610	101	257	75	255	216
Arrive On Green	0.06	0.52	0.52	0.07	0.54	0.54	0.12	0.22	0.22	0.04	0.14	0.14
Sat Flow, veh/h	3456	6434	1584	3456	6434	1564	4983	467	1188	1781	1870	1585
Grp Volume(v), veh/h	144	2300	779	294	2558	29	552	0	344	28	132	351
Grp Sat Flow(s),veh/h/ln	1728	1609	1584	1728	1609	1564	1661	0	1655	1781	1870	1585
Q Serve(g_s), s	7.4	47.6	61.4	13.0	54.5	1.4	19.7	0.0	37.0	2.8	11.8	24.5
Cycle Q Clear(g_c), s	7.4	47.6	61.4	13.0	54.5	1.4	19.7	0.0	37.0	2.8	11.8	24.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.72	1.00		1.00
Lane Grp Cap(c), veh/h	192	3377	1025	250	3484	913	610	0	358	75	255	216
V/C Ratio(X)	0.75	0.68	0.76	1.18	0.73	0.03	0.91	0.00	0.96	0.38	0.52	1.63
Avail Cap(c_a), veh/h	250	3377	1025	250	3484	913	803	0	358	139	255	216
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	83.8	31.6	22.0	83.5	31.4	15.9	78.0	0.0	69.7	83.9	72.3	77.7
Incr Delay (d2), s/veh	5.9	1.1	5.3	113.7	1.4	0.1	9.8	0.0	36.6	1.2	0.9	302.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	18.3	23.4	9.7	20.9	0.5	8.9	0.0	19.2	1.3	5.7	28.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	89.7	32.8	27.3	197.2	32.8	16.0	87.7	0.0	106.3	85.1	73.1	379.8
LnGrp LOS	F	C	C	F	C	B	F		F	F	E	F
Approach Vol, veh/h		3223			2881			896			511	
Approach Delay, s/veh		34.0			49.4			94.9			284.4	
Approach LOS		C			D			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.0	104.5	13.5	45.0	20.0	101.5	28.0	30.5				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	88.0	14.0	39.0	13.0	88.0	29.0	24.0				
Max Q Clear Time (g_c+I1), s	9.4	56.5	4.8	39.0	15.0	63.4	21.7	26.5				
Green Ext Time (p_c), s	0.0	10.1	0.0	0.0	0.0	8.5	0.3	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh			64.2									
HCM 7th LOS			E									
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗		↕			↑↑↑			↑↑	↗
Traffic Vol, veh/h	0	0	19	14	0	41	0	708	28	0	1244	68
Future Vol, veh/h	0	0	19	14	0	41	0	708	28	0	1244	68
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	11	2	2	8	2	5	8	2	2	2
Mvmt Flow	0	0	21	16	0	46	0	796	31	0	1398	76

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	-	-	699	1510	2285	413	-	0
Stage 1	-	-	-	811	811	-	-	-
Stage 2	-	-	-	699	1474	-	-	-
Critical Hdwy	-	-	4.5	5	6.54	4.5	-	-
Critical Hdwy Stg 1	-	-	-	5	5.54	-	-	-
Critical Hdwy Stg 2	-	-	-	5	5.54	-	-	-
Follow-up Hdwy	-	-	3	3	3	3	-	-
Pot Cap-1 Maneuver	0	0	661	259	42	846	0	-
Stage 1	0	0	-	535	474	-	0	-
Stage 2	0	0	-	600	216	-	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	661	251	42	846	-	-
Mov Cap-2 Maneuver	-	-	-	368	151	-	-	-
Stage 1	-	-	-	535	474	-	-	-
Stage 2	-	-	-	580	216	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v10.63		11.27	0	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	661	636	-	-
HCM Lane V/C Ratio	-	-	0.032	0.097	-	-
HCM Control Delay (s/veh)	-	-	10.6	11.3	-	-
HCM Lane LOS	-	-	B	B	-	-
HCM 95th %tile Q(veh)	-	-	0.1	0.3	-	-

Timings

04/02/2025

103: SW 145th Avenue & SW 5th Street

					
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	104	15	594	1178	61
Future Volume (vph)	104	15	594	1178	61
Turn Type	Prot	Perm	NA	NA	Perm
Protected Phases	4		2	6	
Permitted Phases		4			6
Detector Phase	4	4	2	6	6
Switch Phase					
Minimum Initial (s)	6.0	6.0	12.0	12.0	12.0
Minimum Split (s)	25.0	25.0	37.5	32.5	32.5
Total Split (s)	25.0	25.0	50.0	50.0	50.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%
Yellow Time (s)	4.0	4.0	4.5	4.5	4.5
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	6.5	6.5	6.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effect Green (s)	6.7	6.7	47.7	47.7	47.7
Actuated g/C Ratio	0.11	0.11	0.75	0.75	0.75
v/c Ratio	0.30	0.10	0.24	0.47	0.06
Control Delay (s/veh)	28.1	14.4	3.6	4.8	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.1	14.4	3.6	4.8	1.2
LOS	C	B	A	A	A
Approach Delay (s/veh)	26.3		3.6	4.6	
Approach LOS	C		A	A	

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 63.3

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay (s/veh): 5.6

Intersection LOS: A

Intersection Capacity Utilization 48.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 103: SW 145th Avenue & SW 5th Street

	Ø2		Ø4
50 s		25 s	
	Ø6		
50 s			

Future AM Peak Hour

Synchro 12 Light Report

Queues

04/02/2025

103: SW 145th Avenue & SW 5th Street

					
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	109	16	625	1240	64
v/c Ratio	0.30	0.10	0.24	0.47	0.06
Control Delay (s/veh)	28.1	14.4	3.6	4.8	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	28.1	14.4	3.6	4.8	1.2
Queue Length 50th (ft)	20	0	35	90	0
Queue Length 95th (ft)	40	15	58	140	9
Internal Link Dist (ft)	444		522	711	
Turn Bay Length (ft)					180
Base Capacity (vph)	1030	444	2640	2666	1152
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	0.11	0.04	0.24	0.47	0.06
Intersection Summary					

HCM 7th Signalized Intersection Summary
103: SW 145th Avenue & SW 5th Street

04/02/2025

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	104	15	0	594	1178	61
Future Volume (veh/h)	104	15	0	594	1178	61
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1722	0	1856	1870	1796
Adj Flow Rate, veh/h	109	16	0	625	1240	64
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	12	0	3	2	7
Cap, veh/h	298	126	0	2502	2522	1080
Arrive On Green	0.09	0.09	0.00	0.71	0.71	0.71
Sat Flow, veh/h	3456	1459	0	3711	3647	1522
Grp Volume(v), veh/h	109	16	0	625	1240	64
Grp Sat Flow(s),veh/h/ln	1728	1459	0	1763	1777	1522
Q Serve(g_s), s	1.8	0.6	0.0	3.8	9.5	0.8
Cycle Q Clear(g_c), s	1.8	0.6	0.0	3.8	9.5	0.8
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	298	126	0	2502	2522	1080
V/C Ratio(X)	0.37	0.13	0.00	0.25	0.49	0.06
Avail Cap(c_a), veh/h	1071	452	0	2502	2522	1080
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	25.9	0.0	3.1	4.0	2.7
Incr Delay (d2), s/veh	0.3	0.2	0.0	0.2	0.7	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	0.7	0.2	0.0	0.9	2.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.7	26.0	0.0	3.4	4.7	2.8
LnGrp LOS	C	C		A	A	A
Approach Vol, veh/h	125			625	1304	
Approach Delay, s/veh	26.6			3.4	4.6	
Approach LOS	C			A	A	
Timer - Assigned Phs	2			4		6
Phs Duration (G+Y+Rc), s	50.0			11.3		50.0
Change Period (Y+Rc), s	6.5			6.0		6.5
Max Green Setting (Gmax), s	43.5			19.0		43.5
Max Q Clear Time (g_c+I1), s	5.8			3.8		11.5
Green Ext Time (p_c), s	4.9			0.2		12.0
Intersection Summary						
HCM 7th Control Delay, s/veh			5.5			
HCM 7th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 7th TWSC
1003: SW 145th Avenue & Unsignalized leg

04/02/2025

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑↑			↑↑↑
Traffic Vol, veh/h	0	12	1184	11	0	2151
Future Vol, veh/h	0	12	1184	11	0	2151
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	95	95	95	95	95	95
Heavy Vehicles, %	0	18	2	7	0	3
Mvmt Flow	0	13	1246	12	0	2264

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	629	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	7.46	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	4.08	-
Pot Cap-1 Maneuver	0	335	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	335	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	16.16	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	335	-
HCM Lane V/C Ratio	-	0.038	-
HCM Control Delay (s/veh)	-	16.2	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.1	-

Intersection

Int Delay, s/veh 1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	41	13	54	483	1154	14
Future Vol, veh/h	41	13	54	483	1154	14
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	250	-	-	150
Veh In Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	14	59	525	1254	15

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1637	630	1273
Stage 1	1257	-	-
Stage 2	380	-	-
Critical Hdwy	5.5	4.5	4.14
Critical Hdwy Stg 1	5.5	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.22
Pot Cap-1 Maneuver	168	650	542
Stage 1	260	-	-
Stage 2	661	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	149	649	540
Mov Cap-2 Maneuver	201	-	-
Stage 1	231	-	-
Stage 2	659	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v23.82		1.25	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	540	-	201	649	-	-
HCM Lane V/C Ratio	0.109	-	0.222	0.022	-	-
HCM Control Delay (s/veh)	12.5	-	28	10.7	-	-
HCM Lane LOS	B	-	D	B	-	-
HCM 95th %tile Q(veh)	0.4	-	0.8	0.1	-	-

Timings

04/02/2025

105: SW 145 Avenue & Pembroke Road

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	142	702	186	281	853	102	181	110	213	345
Future Volume (vph)	142	702	186	281	853	102	181	110	213	345
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	6.0	6.0	4.0	6.0
Minimum Split (s)	11.0	46.0	46.0	11.0	46.0	10.5	44.5	44.5	10.5	45.5
Total Split (s)	20.0	50.0	50.0	20.0	50.0	20.0	45.0	45.0	20.0	45.0
Total Split (%)	14.8%	37.0%	37.0%	14.8%	37.0%	14.8%	33.3%	33.3%	14.8%	33.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	68.7	57.8	57.8	82.6	65.1	29.0	18.7	18.7	34.9	21.7
Actuated g/C Ratio	0.51	0.43	0.43	0.61	0.48	0.21	0.14	0.14	0.26	0.16
v/c Ratio	0.60	0.48	0.25	0.62	0.75	0.51	0.38	0.33	0.66	0.80
Control Delay (s/veh)	27.7	30.8	4.8	19.4	32.6	44.0	53.7	6.0	49.1	62.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.7	30.8	4.8	19.4	32.6	44.0	53.7	6.0	49.1	62.2
LOS	C	C	A	B	C	D	D	A	D	E
Approach Delay (s/veh)		25.7			30.1		37.9			57.9
Approach LOS		C			C		D			E

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

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

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay (s/veh): 34.8

Intersection LOS: C

Intersection Capacity Utilization 84.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 105: SW 145 Avenue & Pembroke Road

 Ø1	 Ø2 (R)	 Ø3	 Ø4
20 s	50 s	20 s	45 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
20 s	50 s	20 s	45 s

Future AM Peak Hour

Synchro 12 Light Report

Queues

04/02/2025

105: SW 145 Avenue & Pembroke Road

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	146	724	192	290	1247	105	187	113	220	455
v/c Ratio	0.60	0.48	0.25	0.62	0.75	0.51	0.38	0.33	0.66	0.80
Control Delay (s/veh)	27.7	30.8	4.8	19.4	32.6	44.0	53.7	6.0	49.1	62.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	27.7	30.8	4.8	19.4	32.6	44.0	53.7	6.0	49.1	62.2
Queue Length 50th (ft)	51	237	0	111	442	70	79	0	158	193
Queue Length 95th (ft)	115	346	54	192	#698	109	110	30	214	243
Internal Link Dist (ft)		990			1187		695			620
Turn Bay Length (ft)	370		300	200		180		180	180	
Base Capacity (vph)	279	1515	779	466	1658	249	1009	552	338	991
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.48	0.25	0.62	0.75	0.42	0.19	0.20	0.65	0.46

Intersection Summary

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

HCM 7th Signalized Intersection Summary
105: SW 145 Avenue & Pembroke Road

04/02/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	702	186	281	853	357	102	181	110	213	345	96
Future Volume (veh/h)	142	702	186	281	853	357	102	181	110	213	345	96
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	146	724	192	290	879	368	105	187	113	220	356	99
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	1693	746	434	1262	526	201	452	201	316	447	122
Arrive On Green	0.06	0.48	0.48	0.10	0.52	0.52	0.06	0.13	0.13	0.10	0.16	0.16
Sat Flow, veh/h	1781	3554	1565	1781	2446	1018	1781	3554	1578	1781	2744	752
Grp Volume(v), veh/h	146	724	192	290	637	610	105	187	113	220	229	226
Grp Sat Flow(s),veh/h/ln	1781	1777	1565	1781	1777	1687	1781	1777	1578	1781	1777	1719
Q Serve(g_s), s	5.6	18.1	9.9	11.1	36.5	37.0	6.8	6.5	9.1	13.5	16.7	17.1
Cycle Q Clear(g_c), s	5.6	18.1	9.9	11.1	36.5	37.0	6.8	6.5	9.1	13.5	16.7	17.1
Prop In Lane	1.00		1.00	1.00		0.60	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	262	1693	746	434	917	871	201	452	201	316	289	280
V/C Ratio(X)	0.56	0.43	0.26	0.67	0.69	0.70	0.52	0.41	0.56	0.70	0.79	0.81
Avail Cap(c_a), veh/h	333	1693	746	434	917	871	265	1013	450	316	507	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	23.2	21.1	16.9	24.6	24.7	47.5	54.3	55.4	46.5	54.3	54.5
Incr Delay (d2), s/veh	0.7	0.8	0.8	3.2	4.3	4.7	0.8	0.2	0.9	5.5	1.8	2.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.5	3.7	4.7	15.6	15.1	3.1	2.9	3.6	6.9	7.5	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.2	24.0	21.9	20.1	29.0	29.4	48.3	54.5	56.3	52.0	56.1	56.6
LnGrp LOS	C	C	C	C	C	C	D	D	E	D	E	E
Approach Vol, veh/h		1062			1537			405			675	
Approach Delay, s/veh		23.4			27.5			53.4			55.0	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	76.7	20.0	23.7	20.0	71.3	15.2	28.5				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	13.0	43.0	13.5	38.5	13.0	43.0	13.5	38.5				
Max Q Clear Time (g_c+I1), s	7.6	39.0	15.5	11.1	13.1	20.1	8.8	19.1				
Green Ext Time (p_c), s	0.0	2.6	0.0	0.9	0.0	5.3	0.0	1.5				
Intersection Summary												
HCM 7th Control Delay, s/veh			34.2									
HCM 7th LOS			C									
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	22	0	49	35	0	13	38	702	16	7	744	16
Future Vol, veh/h	22	0	49	35	0	13	38	702	16	7	744	16
Conflicting Peds, #/hr	0	0	0	0	0	0	2	0	2	2	0	2
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	200	-	200	200	-	270
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	3	2
Mvmt Flow	23	0	51	36	0	14	40	731	17	7	775	17

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	1163	1621	390	1215	1621	368	794	0
Stage 1	792	792	-	812	812	-	-	-
Stage 2	372	829	-	402	808	-	-	-
Critical Hdwy	5	4.5	4.5	5	4.5	4.5	4.14	-
Critical Hdwy Stg 1	5	4.5	-	5	4.5	-	-	-
Critical Hdwy Stg 2	5	4.5	-	5	4.5	-	-	-
Follow-up Hdwy	3	3	3	3	3	3	2.22	-
Pot Cap-1 Maneuver	373	288	864	353	288	880	823	-
Stage 1	546	609	-	534	598	-	-	-
Stage 2	833	590	-	808	600	-	-	-
Platoon blocked, %								-
Mov Cap-1 Maneuver	344	270	862	311	270	878	822	-
Mov Cap-2 Maneuver	344	270	-	311	270	-	-	-
Stage 1	537	600	-	508	568	-	-	-
Stage 2	780	560	-	749	591	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v12.01		15.68	0.48	0.11
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	822	-	-	587	311	878	515	-	-
HCM Lane V/C Ratio	0.048	-	-	0.126	0.117	0.015	0.014	-	-
HCM Control Delay (s/veh)	9.6	-	-	12	18.1	9.2	12.1	-	-
HCM Lane LOS	A	-	-	B	C	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.4	0.4	0	0	-	-

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↑		↑↑	↑↑	
Traffic Vol, veh/h	0	14	0	524	1154	20
Future Vol, veh/h	0	14	0	524	1154	20
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, %	2	2	2	2	2	2
Mvmt Flow	0	15	0	570	1254	22

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	- 638	-	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	- 6.94	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	- 3.32	-	-
Pot Cap-1 Maneuver	0 419	0	-
Stage 1	0	0	-
Stage 2	0	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	- 419	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v13.91		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	- 419	-	-
HCM Lane V/C Ratio	- 0.036	-	-
HCM Control Delay (s/veh)	- 13.9	-	-
HCM Lane LOS	- B	-	-
HCM 95th %tile Q(veh)	- 0.1	-	-

Timings

04/03/2025

101: SW 145 Avenue & Pines Boulevard

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	137	2185	740	279	2430	28	524	92	27	125	333	
Future Volume (vph)	137	2185	740	279	2430	28	524	92	27	125	333	
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	
Protected Phases	1	6	7	5	2	3	7	4	3	8		
Permitted Phases			6			2					8	
Detector Phase	1	6	7	5	2	3	7	4	3	8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
Minimum Split (s)	17.0	46.0	16.0	17.0	46.0	16.0	16.0	45.0	16.0	30.0	30.0	
Total Split (s)	17.0	79.0	39.0	25.0	87.0	16.0	39.0	60.0	16.0	37.0	37.0	
Total Split (%)	9.4%	43.9%	21.7%	13.9%	48.3%	8.9%	21.7%	33.3%	8.9%	20.6%	20.6%	
Yellow Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	6.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None	
Act Effct Green (s)	10.8	86.9	117.5	18.2	94.2	105.2	23.6	42.2	10.0	25.4	25.4	
Actuated g/C Ratio	0.06	0.48	0.65	0.10	0.52	0.58	0.13	0.23	0.06	0.14	0.14	
v/c Ratio	0.70	0.74	0.68	0.85	0.76	0.03	0.85	0.79	0.29	0.50	0.93	
Control Delay (s/veh)	100.4	41.5	15.9	100.8	37.8	0.1	89.6	63.4	89.4	76.4	66.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	100.4	41.5	15.9	100.8	37.8	0.1	89.6	63.4	89.4	76.4	66.5	
LOS	F	D	B	F	D	A	F	E	F	E	E	
Approach Delay (s/veh)		37.9			43.8			79.5		70.3		
Approach LOS		D			D			E		E		

Intersection Summary

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 101 (56%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay (s/veh): 47.3

Intersection LOS: D

Intersection Capacity Utilization 93.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 101: SW 145 Avenue & Pines Boulevard

										
Ø1	Ø2 (R)		Ø3	Ø4		Ø5	Ø6 (R)	Ø7	Ø8	
17 s	87 s		16 s	60 s		25 s	79 s	39 s	37 s	

Queues

04/03/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	144	2300	779	294	2558	29	552	344	28	132	351
v/c Ratio	0.70	0.74	0.68	0.85	0.76	0.03	0.85	0.79	0.29	0.50	0.93
Control Delay (s/veh)	100.4	41.5	15.9	100.8	37.8	0.1	89.6	63.4	89.4	76.4	66.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	100.4	41.5	15.9	100.8	37.8	0.1	89.6	63.4	89.4	76.4	66.5
Queue Length 50th (ft)	87	647	357	177	698	0	230	316	32	146	213
Queue Length 95th (ft)	#143	784	582	#260	850	0	269	403	71	209	333
Internal Link Dist (ft)		848			992			701		495	
Turn Bay Length (ft)	400		300	270		270	450		300		280
Base Capacity (vph)	205	3093	1205	362	3354	954	906	538	98	331	431
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.70	0.74	0.65	0.81	0.76	0.03	0.61	0.64	0.29	0.40	0.81

Intersection Summary

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

HCM 7th Signalized Intersection Summary 101: SW 145 Avenue & Pines Boulevard

04/03/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	2185	740	279	2430	28	524	92	235	27	125	333
Future Volume (veh/h)	137	2185	740	279	2430	28	524	92	235	27	125	333
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1856	1870	1841	1870	1870	1870
Adj Flow Rate, veh/h	144	2300	779	294	2558	29	552	97	247	28	132	351
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	3	2	4	2	2	2
Cap, veh/h	192	2994	931	330	3251	856	611	118	301	75	322	273
Arrive On Green	0.06	0.47	0.47	0.10	0.51	0.51	0.12	0.25	0.25	0.04	0.17	0.17
Sat Flow, veh/h	3456	6434	1584	3456	6434	1564	4983	467	1188	1781	1870	1585
Grp Volume(v), veh/h	144	2300	779	294	2558	29	552	0	344	28	132	351
Grp Sat Flow(s),veh/h/ln	1728	1609	1584	1728	1609	1564	1661	0	1655	1781	1870	1585
Q Serve(g_s), s	7.4	53.5	71.8	15.1	58.8	1.5	19.7	0.0	35.3	2.8	11.3	31.0
Cycle Q Clear(g_c), s	7.4	53.5	71.8	15.1	58.8	1.5	19.7	0.0	35.3	2.8	11.3	31.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.72	1.00		1.00
Lane Grp Cap(c), veh/h	192	2994	931	330	3251	856	611	0	419	75	322	273
V/C Ratio(X)	0.75	0.77	0.84	0.89	0.79	0.03	0.90	0.00	0.82	0.38	0.41	1.29
Avail Cap(c_a), veh/h	192	2994	931	346	3251	856	914	0	496	99	322	273
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	83.8	40.0	30.1	80.5	36.6	18.8	77.9	0.0	63.4	83.9	66.4	74.5
Incr Delay (d2), s/veh	13.6	2.0	8.8	22.4	2.0	0.1	6.5	0.0	7.9	1.2	0.3	153.5
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	8.6	21.1	28.7	7.7	22.9	0.6	8.8	0.0	15.7	1.3	5.4	24.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	97.4	42.0	38.9	102.9	38.6	18.9	84.4	0.0	71.3	85.1	66.7	228.0
LnGrp LOS	F	D	D	F	D	B	F		E	F	E	F
Approach Vol, veh/h	3223			2881			896			511		
Approach Delay, s/veh	43.7			44.9			79.4			178.5		
Approach LOS	D			D			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.0	97.9	13.5	51.5	24.2	90.8	28.1	37.0				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	80.0	80.0	10.0	54.0	18.0	72.0	33.0	31.0				
Max Q Clear Time (g_c+I), s	19.4	60.8	4.8	37.3	17.1	73.8	21.7	33.0				
Green Ext Time (p_c), s	0.0	8.5	0.0	0.7	0.0	0.0	0.4	0.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	57.6											
HCM 7th LOS	E											
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings

04/02/2025

101: SW 145 Avenue & Pines Boulevard

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR	
Lane Configurations												
Traffic Volume (vph)	244	2165	569	239	2062	35	671	95	37	87	198	
Future Volume (vph)	244	2165	569	239	2062	35	671	95	37	87	198	
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	
Protected Phases	1	6	7	5	2	3	7	4	3	8		
Permitted Phases			6			2					8	
Detector Phase	1	6	7	5	2	3	7	4	3	8	8	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	12.0	46.0	11.0	12.0	46.0	11.0	11.0	45.0	11.0	33.0	33.0	
Total Split (s)	20.0	72.0	35.0	20.0	72.0	23.0	35.0	45.0	23.0	33.0	33.0	
Total Split (%)	12.5%	45.0%	21.9%	12.5%	45.0%	14.4%	21.9%	28.1%	14.4%	20.6%	20.6%	
Yellow Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	6.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None	
Act Effct Green (s)	15.7	76.1	108.7	14.8	75.2	89.4	25.6	38.1	7.3	17.5	17.5	
Actuated g/C Ratio	0.10	0.48	0.68	0.09	0.47	0.56	0.16	0.24	0.05	0.11	0.11	
v/c Ratio	0.79	0.75	0.50	0.80	0.72	0.04	0.88	0.88	0.49	0.46	0.66	
Control Delay (s/veh)	86.7	37.8	6.3	88.8	37.3	0.1	79.3	65.9	93.9	72.3	28.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	86.7	37.8	6.3	88.8	37.3	0.1	79.3	65.9	93.9	72.3	28.3	
LOS	F	D	A	F	D	A	E	E	F	E	C	
Approach Delay (s/veh)		35.8			42.0			74.4		47.8		
Approach LOS		D			D			E		D		

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 80 (50%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay (s/veh): 44.6

Intersection LOS: D

Intersection Capacity Utilization 85.6%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 101: SW 145 Avenue & Pines Boulevard

			
Ø1	Ø2 (R)	Ø3	Ø4
20 s	72 s	23 s	45 s
			
Ø5	Ø6 (R)	Ø7	Ø8
20 s	72 s	35 s	33 s

Existing PM Peak Hour

Synchro 12 Light Report

Queues

04/02/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	257	2279	599	252	2171	37	706	402	39	92	208
v/c Ratio	0.79	0.75	0.50	0.80	0.72	0.04	0.88	0.88	0.49	0.46	0.66
Control Delay (s/veh)	86.7	37.8	6.3	88.8	37.3	0.1	79.3	65.9	93.9	72.3	28.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	86.7	37.8	6.3	88.8	37.3	0.1	79.3	65.9	93.9	72.3	28.3
Queue Length 50th (ft)	136	575	97	134	540	0	259	331	41	91	50
Queue Length 95th (ft)	#232	683	200	#221	636	0	302	443	82	144	134
Internal Link Dist (ft)		848			992			550		495	
Turn Bay Length (ft)	400		300	270		270	450		300		280
Base Capacity (vph)	327	3047	1220	320	3010	1022	904	484	188	305	397
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.75	0.49	0.79	0.72	0.04	0.78	0.83	0.21	0.30	0.52

Intersection Summary

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

HCM 7th Signalized Intersection Summary
101: SW 145 Avenue & Pines Boulevard

04/02/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	244	2165	569	239	2062	35	671	95	287	37	87	198
Future Volume (veh/h)	244	2165	569	239	2062	35	671	95	287	37	87	198
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1826	1870	1870	1870	1870	1870	1870	1870	1870	1870	1826	1870
Adj Flow Rate, veh/h	257	2279	599	252	2171	37	706	100	302	39	92	208
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	2	2	2	2	2	2	2	2	2	5	2
Cap, veh/h	274	2937	967	281	2937	768	770	110	332	50	267	231
Arrive On Green	0.08	0.46	0.46	0.08	0.46	0.46	0.15	0.27	0.27	0.03	0.15	0.15
Sat Flow, veh/h	3374	6434	1585	3456	6434	1585	5023	405	1222	1781	1826	1575
Grp Volume(v), veh/h	257	2279	599	252	2171	37	706	0	402	39	92	208
Grp Sat Flow(s),veh/h/ln	1687	1609	1585	1728	1609	1585	1674	0	1627	1781	1826	1575
Q Serve(g_s), s	12.1	47.7	37.9	11.6	44.3	2.0	22.2	0.0	38.3	3.5	7.2	20.8
Cycle Q Clear(g_c), s	12.1	47.7	37.9	11.6	44.3	2.0	22.2	0.0	38.3	3.5	7.2	20.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.75	1.00		1.00
Lane Grp Cap(c), veh/h	274	2937	967	281	2937	768	770	0	442	50	267	231
V/C Ratio(X)	0.94	0.78	0.62	0.90	0.74	0.05	0.92	0.00	0.91	0.78	0.34	0.90
Avail Cap(c_a), veh/h	274	2937	967	281	2937	768	910	0	442	189	308	266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.1	36.6	19.6	72.8	35.7	21.7	66.7	0.0	56.4	77.2	61.4	67.2
Incr Delay (d2), s/veh	37.4	2.1	3.0	28.2	1.7	0.1	11.5	0.0	22.2	9.1	0.3	26.8
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	6.6	18.6	14.3	6.2	17.2	0.8	10.2	0.0	18.2	1.7	3.4	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	110.5	38.7	22.6	101.1	37.4	21.9	78.2	0.0	78.6	86.3	61.7	93.9
LnGrp LOS	F	D	C	F	D	C	E		E	F	E	F
Approach Vol, veh/h	3135			2460			1108			339		
Approach Delay, s/veh	41.5			43.7			78.4			84.3		
Approach LOS	D			D			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.0	80.0	10.5	49.4	20.0	80.0	30.5	29.4				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	65.0	17.0	39.0	13.0	65.0	29.0	27.0				
Max Q Clear Time (g_c+I1), s	14.1	46.3	5.5	40.3	13.6	49.7	24.2	22.8				
Green Ext Time (p_c), s	0.0	6.6	0.0	0.0	0.0	6.9	0.4	0.1				

Intersection Summary

HCM 7th Control Delay, s/veh 50.1
HCM 7th LOS D

Notes

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

Intersection

Int Delay, s/veh 1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗		↔			↑↑↑			↑↑	↗
Traffic Vol, veh/h	0	0	165	14	0	39	0	872	49	0	684	316
Future Vol, veh/h	0	0	165	14	0	39	0	872	49	0	684	316
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	3	2	2	2	2	2	2
Mvmt Flow	0	0	170	14	0	40	0	899	51	0	705	326

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	353	1277	1955	475	-	0	0	-	-	0
Stage 1	-	-	-	924	924	-	-	-	-	-	-	-
Stage 2	-	-	-	353	1031	-	-	-	-	-	-	-
Critical Hdwy	-	-	4.5	5	6.54	4.5	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	5	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	5	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3	3	3	3	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	891	331	70	803	0	-	-	0	-	-
Stage 1	0	0	-	477	415	-	0	-	-	0	-	-
Stage 2	0	0	-	849	366	-	0	-	-	0	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	-	891	268	70	803	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	372	209	-	-	-	-	-	-	-
Stage 1	-	-	-	477	415	-	-	-	-	-	-	-
Stage 2	-	-	-	687	366	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	9.99	11.43	0	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	-	-	891 614	-	-
HCM Lane V/C Ratio	-	-	0.191 0.089	-	-
HCM Control Delay (s/veh)	-	-	10 11.4	-	-
HCM Lane LOS	-	-	A B	-	-
HCM 95th %tile Q(veh)	-	-	0.7 0.3	-	-

Timings

04/02/2025

103: SW 145th Avenue & SW 5th Street

					
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	351	90	816	491	230
Future Volume (vph)	351	90	816	491	230
Turn Type	Prot	Perm	NA	NA	Perm
Protected Phases	4		2	6	
Permitted Phases		4			6
Detector Phase	4	4	2	6	6
Switch Phase					
Minimum Initial (s)	6.0	6.0	12.0	12.0	12.0
Minimum Split (s)	25.0	25.0	37.5	32.5	32.5
Total Split (s)	25.0	25.0	50.0	50.0	50.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%
Yellow Time (s)	4.0	4.0	4.5	4.5	4.5
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	6.5	6.5	6.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effct Green (s)	11.9	11.9	43.6	43.6	43.6
Actuated g/C Ratio	0.18	0.18	0.64	0.64	0.64
v/c Ratio	0.64	0.28	0.40	0.24	0.23
Control Delay (s/veh)	31.2	8.0	6.9	5.8	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	8.0	6.9	5.8	1.4
LOS	C	A	A	A	A
Approach Delay (s/veh)	26.5		6.9	4.4	
Approach LOS	C		A	A	

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 68

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay (s/veh): 10.4

Intersection LOS: B

Intersection Capacity Utilization 44.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 103: SW 145th Avenue & SW 5th Street

	Ø2		Ø4
50 s		25 s	
	Ø6		
50 s			

Queues

04/02/2025

103: SW 145th Avenue & SW 5th Street



Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	386	99	897	540	253
v/c Ratio	0.64	0.28	0.40	0.24	0.23
Control Delay (s/veh)	31.2	8.0	6.9	5.8	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.2	8.0	6.9	5.8	1.4
Queue Length 50th (ft)	77	0	81	42	0
Queue Length 95th (ft)	118	35	134	75	24
Internal Link Dist (ft)	444		522	711	
Turn Bay Length (ft)					180
Base Capacity (vph)	960	508	2268	2268	1105
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	0.40	0.19	0.40	0.24	0.23
Intersection Summary					

HCM 7th Signalized Intersection Summary
103: SW 145th Avenue & SW 5th Street

04/02/2025

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	351	90	0	816	491	230
Future Volume (veh/h)	351	90	0	816	491	230
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	386	99	0	897	540	253
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	514	236	0	2350	2350	1048
Arrive On Green	0.15	0.15	0.00	0.66	0.66	0.66
Sat Flow, veh/h	3456	1585	0	3741	3647	1585
Grp Volume(v), veh/h	386	99	0	897	540	253
Grp Sat Flow(s),veh/h/ln	1728	1585	0	1777	1777	1585
Q Serve(g_s), s	7.0	3.7	0.0	7.5	4.0	4.2
Cycle Q Clear(g_c), s	7.0	3.7	0.0	7.5	4.0	4.2
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	514	236	0	2350	2350	1048
V/C Ratio(X)	0.75	0.42	0.00	0.38	0.23	0.24
Avail Cap(c_a), veh/h	998	458	0	2350	2350	1048
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	25.4	0.0	5.0	4.4	4.5
Incr Delay (d2), s/veh	0.8	0.4	0.0	0.5	0.2	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	1.4	0.0	2.1	1.1	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	27.7	25.9	0.0	5.5	4.7	5.0
LnGrp LOS	C	C		A	A	A
Approach Vol, veh/h	485			897	793	
Approach Delay, s/veh	27.3			5.5	4.8	
Approach LOS	C			A	A	
Timer - Assigned Phs	2		4		6	
Phs Duration (G+Y+Rc), s	50.0		15.8		50.0	
Change Period (Y+Rc), s	6.5		6.0		6.5	
Max Green Setting (Gmax), s	43.5		19.0		43.5	
Max Q Clear Time (g_c+l1), s	9.5		9.0		6.2	
Green Ext Time (p_c), s	7.6		0.7		5.1	
Intersection Summary						
HCM 7th Control Delay, s/veh			10.1			
HCM 7th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 7th TWSC
1003: SW 145th Avenue & Unsignalized leg

04/02/2025

Intersection

Int Delay, s/veh 0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↑↑↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	5	816	11	0	721
Future Vol, veh/h	0	5	816	11	0	721
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	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	897	12	0	792

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	454	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	7.14	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.92	-
Pot Cap-1 Maneuver	0	473	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	473	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	473
HCM Lane V/C Ratio	-	-	0.012
HCM Control Delay (s/veh)	-	-	12.7
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0

HCM 7th TWSC
104: SW 145 Avenue & SW 145 Terrace

04/02/2025

Intersection

Int Delay, s/veh 3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	57	143	258	732	445	59
Future Vol, veh/h	57	143	258	732	445	59
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	250	-	-	150
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	61	154	277	787	478	63

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1428	240	543
Stage 1	479	-	-
Stage 2	948	-	-
Critical Hdwy	5.5	4.5	4.14
Critical Hdwy Stg 1	5.5	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.22
Pot Cap-1 Maneuver	214	895	1022
Stage 1	616	-	-
Stage 2	337	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	156	894	1021
Mov Cap-2 Maneuver	244	-	-
Stage 1	448	-	-
Stage 2	337	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	14.07	2.56	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1021	-	244	894	-	-
HCM Lane V/C Ratio	0.272	-	0.251	0.172	-	-
HCM Control Delay (s/veh)	9.8	-	24.6	9.9	-	-
HCM Lane LOS	A	-	C	A	-	-
HCM 95th %tile Q(veh)	1.1	-	1	0.6	-	-

Timings

04/02/2025

105: SW 145 Avenue & Pembroke Road

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	154	686	101	129	812	182	491	207	272	252
Future Volume (vph)	154	686	101	129	812	182	491	207	272	252
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	6.0	6.0	4.0	6.0
Minimum Split (s)	11.0	46.0	46.0	11.0	46.0	10.5	44.5	44.5	10.5	45.5
Total Split (s)	20.0	50.0	50.0	20.0	50.0	20.0	45.0	45.0	20.0	45.0
Total Split (%)	14.8%	37.0%	37.0%	14.8%	37.0%	14.8%	33.3%	33.3%	14.8%	33.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	72.9	60.3	60.3	65.9	56.8	37.8	25.1	25.1	39.5	26.0
Actuated g/c Ratio	0.54	0.45	0.45	0.49	0.42	0.28	0.19	0.19	0.29	0.19
v/c Ratio	0.68	0.46	0.14	0.38	0.81	0.70	0.79	0.47	1.15	0.60
Control Delay (s/veh)	35.8	28.5	2.3	18.6	39.7	47.2	61.5	8.6	138.4	40.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	35.8	28.5	2.3	18.6	39.7	47.2	61.5	8.6	138.4	40.8
LOS	D	C	A	B	D	D	E	A	F	D
Approach Delay (s/veh)		26.9			37.5		46.1			79.6
Approach LOS		C			D		D			E

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

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

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.15

Intersection Signal Delay (s/veh): 44.6

Intersection LOS: D

Intersection Capacity Utilization 91.4%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 105: SW 145 Avenue & Pembroke Road

			
Ø1	Ø2 (R)	Ø3	Ø4
20 s	50 s	20 s	45 s
			
Ø5	Ø6 (R)	Ø7	Ø8
20 s	50 s	20 s	45 s

Existing PM Peak Hour

Synchro 12 Light Report

Queues

04/02/2025

105: SW 145 Avenue & Pembroke Road

											
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	
Lane Group Flow (vph)	164	730	107	137	1174	194	522	220	289	438	
v/c Ratio	0.68	0.46	0.14	0.38	0.81	0.70	0.79	0.47	1.15	0.60	
Control Delay (s/veh)	35.8	28.5	2.3	18.6	39.7	47.2	61.5	8.6	138.4	40.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay (s/veh)	35.8	28.5	2.3	18.6	39.7	47.2	61.5	8.6	138.4	40.8	
Queue Length 50th (ft)	67	231	0	54	457	127	232	0	~231	143	
Queue Length 95th (ft)	151	331	22	99	#706	179	280	65	#384	188	
Internal Link Dist (ft)		990			1187		695			620	
Turn Bay Length (ft)	370		300	200		180		180	180		
Base Capacity (vph)	266	1580	782	412	1451	290	1009	608	251	1025	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.62	0.46	0.14	0.33	0.81	0.67	0.52	0.36	1.15	0.43	

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 7th Signalized Intersection Summary
105: SW 145 Avenue & Pembroke Road

04/02/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	686	101	129	812	291	182	491	207	272	252	160
Future Volume (veh/h)	154	686	101	129	812	291	182	491	207	272	252	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	164	730	107	137	864	310	194	522	220	289	268	170
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	1673	746	370	1186	424	279	620	276	255	369	226
Arrive On Green	0.06	0.47	0.47	0.06	0.46	0.46	0.10	0.17	0.17	0.10	0.17	0.17
Sat Flow, veh/h	1781	3554	1585	1781	2564	918	1781	3554	1585	1781	2115	1299
Grp Volume(v), veh/h	164	730	107	137	598	576	194	522	220	289	224	214
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1705	1781	1777	1585	1781	1777	1637
Q Serve(g_s), s	6.5	18.5	5.2	5.4	36.8	37.0	12.0	19.2	18.0	13.5	16.1	16.8
Cycle Q Clear(g_c), s	6.5	18.5	5.2	5.4	36.8	37.0	12.0	19.2	18.0	13.5	16.1	16.8
Prop In Lane	1.00		1.00	1.00		0.54	1.00		1.00	1.00		0.79
Lane Grp Cap(c), veh/h	256	1673	746	370	822	789	279	620	276	255	310	285
V/C Ratio(X)	0.64	0.44	0.14	0.37	0.73	0.73	0.70	0.84	0.80	1.14	0.72	0.75
Avail Cap(c_a), veh/h	315	1673	746	444	822	789	279	1013	452	255	507	467
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	23.8	20.3	18.4	29.4	29.4	41.2	53.9	53.4	46.1	52.6	52.9
Incr Delay (d2), s/veh	1.5	0.8	0.4	0.2	5.6	5.9	6.2	1.6	2.0	97.8	1.2	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	7.7	2.0	2.2	16.2	15.7	5.7	8.6	7.2	8.9	7.2	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.9	24.6	20.7	18.7	35.0	35.3	47.4	55.6	55.4	143.9	53.8	54.5
LnGrp LOS	C	C	C	B	C	D	D	E	E	F	D	D
Approach Vol, veh/h		1001			1311			936			727	
Approach Delay, s/veh		24.4			33.4			53.8			89.8	
Approach LOS		C			C			D			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	15.5	69.4	20.0	30.0	14.4	70.5	20.0	30.0				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	13.0	43.0	13.5	38.5	13.0	43.0	13.5	38.5				
Max Q Clear Time (g_c+l1), s	8.5	39.0	15.5	21.2	7.4	20.5	14.0	18.8				
Green Ext Time (p_c), s	0.1	2.5	0.0	2.3	0.0	5.0	0.0	1.5				
Intersection Summary												
HCM 7th Control Delay, s/veh			46.3									
HCM 7th LOS			D									
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	9	0	44	27	0	6	75	524	33	25	875	21
Future Vol, veh/h	9	0	44	27	0	6	75	524	33	25	875	21
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	1	1	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	200	-	200	200	-	270
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	48	29	0	7	82	570	36	27	951	23

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1399	1778	479	1264	1765	286	977	0	0	606	0	0
Stage 1	1008	1008	-	734	734	-	-	-	-	-	-	-
Stage 2	391	769	-	530	1031	-	-	-	-	-	-	-
Critical Hdwy	5	4.5	4.5	5	4.5	4.5	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	5	4.5	-	5	4.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5	4.5	-	5	4.5	-	-	-	-	-	-	-
Follow-up Hdwy	3	3	3	3	3	3	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	291	249	800	336	252	943	702	-	-	603	-	-
Stage 1	437	503	-	579	641	-	-	-	-	-	-	-
Stage 2	817	621	-	711	493	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	243	210	798	266	212	943	700	-	-	603	-	-
Mov Cap-2 Maneuver	243	210	-	266	212	-	-	-	-	-	-	-
Stage 1	416	479	-	511	566	-	-	-	-	-	-	-
Stage 2	717	548	-	638	469	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v11.96		18.14	1.28	0.31
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	700	-	-	575	266	943	603	-	-
HCM Lane V/C Ratio	0.116	-	-	0.1	0.11	0.007	0.045	-	-
HCM Control Delay (s/veh)	10.8	-	-	12	20.2	8.8	11.3	-	-
HCM Lane LOS	B	-	-	B	C	A	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.3	0.4	0	0.1	-	-

Timings
101: SW 145 Avenue & Pines Boulevard

04/02/2025

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	254	2253	663	319	2146	36	840	145	38	113	206
Future Volume (vph)	254	2253	663	319	2146	36	840	145	38	113	206
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm
Protected Phases	1	6	7	5	2	3	7	4	3	8	
Permitted Phases			6			2					8
Detector Phase	1	6	7	5	2	3	7	4	3	8	8
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	46.0	11.0	12.0	46.0	11.0	11.0	45.0	11.0	33.0	33.0
Total Split (s)	20.0	72.0	35.0	20.0	72.0	23.0	35.0	45.0	23.0	33.0	33.0
Total Split (%)	12.5%	45.0%	21.9%	12.5%	45.0%	14.4%	21.9%	28.1%	14.4%	20.6%	20.6%
Yellow Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	6.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None
Act Effct Green (s)	13.0	65.0	101.0	13.0	65.0	79.3	29.0	50.9	7.3	27.0	27.0
Actuated g/C Ratio	0.08	0.41	0.63	0.08	0.41	0.50	0.18	0.32	0.05	0.17	0.17
v/c Ratio	0.99	0.91	0.63	1.21	0.87	0.05	0.98	1.06	0.49	0.39	0.55
Control Delay (s/veh)	123.6	51.1	12.2	181.0	48.1	0.1	89.4	98.4	94.0	63.5	23.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	123.6	51.1	12.2	181.0	48.1	0.1	89.4	98.4	94.0	63.5	23.5
LOS	F	D	B	F	D	A	F	F	F	E	C
Approach Delay (s/veh)		48.8			64.3			93.1		43.7	
Approach LOS		D			E			F		D	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 80 (50%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.21

Intersection Signal Delay (s/veh): 62.2

Intersection LOS: E

Intersection Capacity Utilization 94.2%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 101: SW 145 Avenue & Pines Boulevard

				
Ø1	Ø2 (R)		Ø3	Ø4
20 s	72 s		23 s	45 s
				
Ø5	Ø6 (R)		Ø7	Ø8
20 s	72 s		35 s	33 s

Queues

04/02/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	267	2372	698	336	2259	38	884	616	40	119	217
v/c Ratio	0.99	0.91	0.63	1.21	0.87	0.05	0.98	1.06	0.49	0.39	0.55
Control Delay (s/veh)	123.6	51.1	12.2	181.0	48.1	0.1	89.4	98.4	94.0	63.5	23.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	123.6	51.1	12.2	181.0	48.1	0.1	89.4	98.4	94.0	63.5	23.5
Queue Length 50th (ft)	146	676	241	~219	627	0	330	~659	42	112	55
Queue Length 95th (ft)	#246	725	366	#325	674	0	#424	#941	83	181	146
Internal Link Dist (ft)		848			992			550		495	
Turn Bay Length (ft)	400		300	270		270	450		300		280
Base Capacity (vph)	270	2603	1109	278	2603	928	904	580	188	305	397
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.91	0.63	1.21	0.87	0.04	0.98	1.06	0.21	0.39	0.55

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 7th Signalized Intersection Summary
101: SW 145 Avenue & Pines Boulevard

04/02/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	2253	663	319	2146	36	840	145	440	38	113	206
Future Volume (veh/h)	254	2253	663	319	2146	36	840	145	440	38	113	206
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1870	1870	1870	1870	1870	1870	1870	1870	1870	1826	1870
Adj Flow Rate, veh/h	267	2372	698	336	2259	38	884	153	463	40	119	217
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	2	2	2	2	2	2	2	2	2	5	2
Cap, veh/h	274	2726	959	281	2726	717	910	123	371	52	276	239
Arrive On Green	0.08	0.42	0.42	0.08	0.42	0.42	0.18	0.30	0.30	0.03	0.15	0.15
Sat Flow, veh/h	3374	6434	1585	3456	6434	1585	5023	404	1223	1781	1826	1576
Grp Volume(v), veh/h	267	2372	698	336	2259	38	884	0	616	40	119	217
Grp Sat Flow(s),veh/h/ln	1687	1609	1585	1728	1609	1585	1674	0	1627	1781	1826	1576
Q Serve(g_s), s	12.6	53.9	49.7	13.0	49.9	2.2	28.0	0.0	48.6	3.6	9.5	21.7
Cycle Q Clear(g_c), s	12.6	53.9	49.7	13.0	49.9	2.2	28.0	0.0	48.6	3.6	9.5	21.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.75	1.00		1.00
Lane Grp Cap(c), veh/h	274	2726	959	281	2726	717	910	0	494	52	276	239
V/C Ratio(X)	0.97	0.87	0.73	1.20	0.83	0.05	0.97	0.00	1.25	0.78	0.43	0.91
Avail Cap(c_a), veh/h	274	2726	959	281	2726	717	910	0	494	189	308	266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.3	42.1	22.3	73.5	41.0	24.6	65.1	0.0	55.7	77.2	61.6	66.8
Incr Delay (d2), s/veh	46.9	4.1	4.8	117.8	3.1	0.1	22.8	0.0	127.0	8.9	0.4	29.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	21.5	19.0	10.3	19.8	0.8	13.7	0.0	37.0	1.8	4.4	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	120.2	46.2	27.2	191.3	44.0	24.7	87.9	0.0	182.7	86.0	62.0	96.1
LnGrp LOS	F	D	C	F	D	C	F		F	F	E	F
Approach Vol, veh/h		3337			2633			1500			376	
Approach Delay, s/veh		48.2			62.5			126.8			84.2	
Approach LOS		D			E			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.0	74.8	10.6	54.6	20.0	74.8	35.0	30.2				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	65.0	17.0	39.0	13.0	65.0	29.0	27.0				
Max Q Clear Time (g_c+l1), s	14.6	51.9	5.6	50.6	15.0	55.9	30.0	23.7				
Green Ext Time (p_c), s	0.0	6.0	0.0	0.0	0.0	5.5	0.0	0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh			69.8									
HCM 7th LOS			E									
Notes												
User approved pedestrian interval to be less than phase max green.												

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗		↕			↗↖↕			↗↖	↗
Traffic Vol, veh/h	0	0	172	15	0	40	0	1408	51	0	877	329
Future Vol, veh/h	0	0	172	15	0	40	0	1408	51	0	877	329
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	3	2	2	2	2	2	2
Mvmt Flow	0	0	177	15	0	41	0	1452	53	0	904	339

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	-	-	452	1930	2721	752	-	0
Stage 1	-	-	-	1478	1478	-	-	-
Stage 2	-	-	-	452	1243	-	-	-
Critical Hdwy	-	-	4.5	5	6.54	4.5	-	-
Critical Hdwy Stg 1	-	-	-	5	5.54	-	-	-
Critical Hdwy Stg 2	-	-	-	5	5.54	-	-	-
Follow-up Hdwy	-	-	3	3	3	3	-	-
Pot Cap-1 Maneuver	0	0	818	165	22	631	0	-
Stage 1	0	0	-	268	215	-	0	-
Stage 2	0	0	-	769	284	-	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	818	130	22	631	-	-
Mov Cap-2 Maneuver	-	-	-	216	121	-	-	-
Stage 1	-	-	-	268	215	-	-	-
Stage 2	-	-	-	602	284	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v10.61		15.07	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	818	414	-	-
HCM Lane V/C Ratio	-	-	0.217	0.137	-	-
HCM Control Delay (s/veh)	-	-	10.6	15.1	-	-
HCM Lane LOS	-	-	B	C	-	-
HCM 95th %tile Q(veh)	-	-	0.8	0.5	-	-

Timings

04/02/2025

103: SW 145th Avenue & SW 5th Street

					
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	365	93	1047	676	239
Future Volume (vph)	365	93	1047	676	239
Turn Type	Prot	Perm	NA	NA	Perm
Protected Phases	4		2	6	
Permitted Phases		4			6
Detector Phase	4	4	2	6	6
Switch Phase					
Minimum Initial (s)	6.0	6.0	12.0	12.0	12.0
Minimum Split (s)	25.0	25.0	37.5	32.5	32.5
Total Split (s)	25.0	25.0	50.0	50.0	50.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%
Yellow Time (s)	4.0	4.0	4.5	4.5	4.5
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	6.5	6.5	6.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effct Green (s)	12.2	12.2	43.6	43.6	43.6
Actuated g/C Ratio	0.18	0.18	0.64	0.64	0.64
v/c Ratio	0.65	0.28	0.51	0.33	0.24
Control Delay (s/veh)	31.4	7.9	8.0	6.5	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.4	7.9	8.0	6.5	1.5
LOS	C	A	A	A	A
Approach Delay (s/veh)	26.6		8.0	5.2	
Approach LOS	C		A	A	

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 68.3

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay (s/veh): 10.5

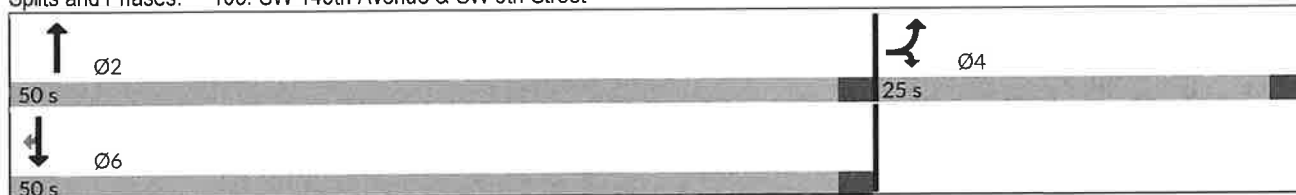
Intersection LOS: B

Intersection Capacity Utilization 51.2%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 103: SW 145th Avenue & SW 5th Street



Queues

04/02/2025

103: SW 145th Avenue & SW 5th Street

					
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	401	102	1151	743	263
v/c Ratio	0.65	0.28	0.51	0.33	0.24
Control Delay (s/veh)	31.4	7.9	8.0	6.5	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.4	7.9	8.0	6.5	1.5
Queue Length 50th (ft)	81	0	116	64	0
Queue Length 95th (ft)	122	35	191	108	25
Internal Link Dist (ft)	444		522	711	
Turn Bay Length (ft)					180
Base Capacity (vph)	956	508	2258	2258	1105
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	0.20	0.51	0.33	0.24
Intersection Summary					

HCM 7th Signalized Intersection Summary
103: SW 145th Avenue & SW 5th Street

04/02/2025

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	365	93	0	1047	676	239
Future Volume (veh/h)	365	93	0	1047	676	239
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	401	102	0	1151	743	263
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	529	242	0	2338	2338	1043
Arrive On Green	0.15	0.15	0.00	0.66	0.66	0.66
Sat Flow, veh/h	3456	1585	0	3741	3647	1585
Grp Volume(v), veh/h	401	102	0	1151	743	263
Grp Sat Flow(s),veh/h/ln	1728	1585	0	1777	1777	1585
Q Serve(g_s), s	7.4	3.9	0.0	10.8	6.0	4.5
Cycle Q Clear(g_c), s	7.4	3.9	0.0	10.8	6.0	4.5
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	529	242	0	2338	2338	1043
V/C Ratio(X)	0.76	0.42	0.00	0.49	0.32	0.25
Avail Cap(c_a), veh/h	993	456	0	2338	2338	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	25.3	0.0	5.7	4.9	4.6
Incr Delay (d2), s/veh	0.9	0.4	0.0	0.7	0.4	0.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	1.4	0.0	3.1	1.7	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	27.7	25.8	0.0	6.5	5.2	5.2
LnGrp LOS	C	C		A	A	A
Approach Vol, veh/h	503			1151	1006	
Approach Delay, s/veh	27.3			6.5	5.2	
Approach LOS	C			A	A	
Timer - Assigned Phs	2			4		6
Phs Duration (G+Y+Rc), s	50.0			16.1		50.0
Change Period (Y+Rc), s	6.5			6.0		6.5
Max Green Setting (Gmax), s	43.5			19.0		43.5
Max Q Clear Time (g_c+I1), s	12.8			9.4		8.0
Green Ext Time (p_c), s	10.3			0.8		7.2
Intersection Summary						
HCM 7th Control Delay, s/veh			9.9			
HCM 7th LOS			A			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 7th TWSC
1003: SW 145th Avenue & Unsignalized leg

04/02/2025

Intersection

Int Delay, s/veh 0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑↑			↑↑↑
Traffic Vol, veh/h	0	5	2331	12	0	1522
Future Vol, veh/h	0	5	2331	12	0	1522
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	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	2562	13	0	1673

Major/Minor

	Minor1	Major1	Major2
Conflicting Flow All	-	1287	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	7.14	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.92	-
Pot Cap-1 Maneuver	0	133	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	133	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach

	WB	NB	SB
HCM Control Delay, s/v33.25		0	0
HCM LOS	D		

Minor Lane/Major Mvmt

	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	133	-
HCM Lane V/C Ratio	-	0.041	-
HCM Control Delay (s/veh)	-	33.3	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	0.1	-

Intersection

Int Delay, s/veh 3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↰	↱	↰	↱	↱	↰
Traffic Vol, veh/h	59	149	269	960	628	62
Future Vol, veh/h	59	149	269	960	628	62
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	250	-	-	150
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	160	289	1032	675	67

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1771	339	743
Stage 1	676	-	-
Stage 2	1095	-	-
Critical Hdwy	5.5	4.5	4.14
Critical Hdwy Stg 1	5.5	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.22
Pot Cap-1 Maneuver	144	827	860
Stage 1	497	-	-
Stage 2	282	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	95	826	859
Mov Cap-2 Maneuver	182	-	-
Stage 1	330	-	-
Stage 2	282	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	17.4	2.47	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	859	-	182	826	-	-
HCM Lane V/C Ratio	0.337	-	0.349	0.194	-	-
HCM Control Delay (s/veh)	11.3	-	35.1	10.4	-	-
HCM Lane LOS	B	-	E	B	-	-
HCM 95th %tile Q(veh)	1.5	-	1.5	0.7	-	-

Timings

04/02/2025

105: SW 145 Avenue & Pembroke Road

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	184	714	105	134	845	189	523	215	354	286
Future Volume (vph)	184	714	105	134	845	189	523	215	354	286
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	6.0	6.0	4.0	6.0
Minimum Split (s)	11.0	46.0	46.0	11.0	46.0	10.5	44.5	44.5	10.5	45.5
Total Split (s)	20.0	50.0	50.0	20.0	50.0	20.0	45.0	45.0	20.0	45.0
Total Split (%)	14.8%	37.0%	37.0%	14.8%	37.0%	14.8%	33.3%	33.3%	14.8%	33.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	73.5	58.5	58.5	62.2	52.7	39.3	26.6	26.6	40.8	27.3
Actuated g/C Ratio	0.54	0.43	0.43	0.46	0.39	0.29	0.20	0.20	0.30	0.20
v/c Ratio	0.77	0.50	0.15	0.42	0.93	0.79	0.80	0.46	1.51	0.68
Control Delay (s/veh)	52.2	30.3	2.9	20.3	51.6	55.1	60.5	8.3	276.7	40.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.2	30.3	2.9	20.3	51.6	55.1	60.5	8.3	276.7	40.4
LOS	D	C	A	C	D	E	E	A	F	D
Approach Delay (s/veh)		31.5			48.4		47.3			138.4
Approach LOS		C			D		D			F

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

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

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.51

Intersection Signal Delay (s/veh): 62.7

Intersection LOS: E

Intersection Capacity Utilization 100.9%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 105: SW 145 Avenue & Pembroke Road

 Ø1	 Ø2 (R)	 Ø3	 Ø4
20 s	50 s	20 s	45 s
 Ø5	 Ø6 (R)	 Ø7	 Ø8
20 s	50 s	20 s	45 s

Queues

04/02/2025

105: SW 145 Avenue & Pembroke Road

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	196	760	112	143	1259	201	556	229	377	532
v/c Ratio	0.77	0.50	0.15	0.42	0.93	0.79	0.80	0.46	1.51	0.68
Control Delay (s/veh)	52.2	30.3	2.9	20.3	51.6	55.1	60.5	8.3	276.7	40.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	52.2	30.3	2.9	20.3	51.6	55.1	60.5	8.3	276.7	40.4
Queue Length 50th (ft)	114	248	0	58	544	130	246	0	~396	170
Queue Length 95th (ft)	210	355	26	107	#802	#185	294	66	#567	220
Internal Link Dist (ft)		990			1187		695			620
Turn Bay Length (ft)	370		300	200		180		180	180	
Base Capacity (vph)	263	1533	763	390	1351	264	1009	615	250	1046
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.50	0.15	0.37	0.93	0.76	0.55	0.37	1.51	0.51

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 7th Signalized Intersection Summary 105: SW 145 Avenue & Pembroke Road

04/02/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	714	105	134	845	338	189	523	215	354	286	214
Future Volume (veh/h)	184	714	105	134	845	338	189	523	215	354	286	214
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	196	760	112	143	899	360	201	556	229	377	304	228
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	240	1624	724	354	1093	435	257	655	292	254	361	264
Arrive On Green	0.07	0.46	0.46	0.06	0.44	0.44	0.10	0.18	0.18	0.10	0.18	0.18
Sat Flow, veh/h	1781	3554	1585	1781	2482	988	1781	3554	1585	1781	1958	1431
Grp Volume(v), veh/h	196	760	112	143	642	617	201	556	229	377	275	257
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1693	1781	1777	1585	1781	1777	1613
Q Serve(g_s), s	8.1	19.9	5.6	5.9	42.7	43.3	12.3	20.4	18.6	13.5	20.2	20.9
Cycle Q Clear(g_c), s	8.1	19.9	5.6	5.9	42.7	43.3	12.3	20.4	18.6	13.5	20.2	20.9
Prop In Lane	1.00		1.00	1.00		0.58	1.00		1.00	1.00		0.89
Lane Grp Cap(c), veh/h	240	1624	724	354	783	746	257	655	292	254	328	297
V/C Ratio(X)	0.82	0.47	0.15	0.40	0.82	0.83	0.78	0.85	0.78	1.48	0.84	0.86
Avail Cap(c_a), veh/h	278	1624	724	421	783	746	257	1013	452	254	507	460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	25.3	21.4	19.9	33.1	33.2	41.0	53.2	52.5	45.1	53.1	53.4
Incr Delay (d2), s/veh	13.3	1.0	0.5	0.3	9.4	10.2	13.1	2.5	2.0	237.2	4.3	6.5
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	4.1	8.3	2.1	2.4	19.6	19.0	6.3	9.2	7.5	18.8	9.3	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	42.0	26.3	21.9	20.2	42.5	43.4	54.1	55.8	54.5	282.3	57.5	60.0
LnGrp LOS	D	C	C	C	D	D	D	E	D	F	E	E
Approach Vol, veh/h	1068			1402			986			909		
Approach Delay, s/veh	28.7			40.6			55.1			151.4		
Approach LOS	C			D			E			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.1	66.5	20.0	31.4	14.9	68.7	20.0	31.4				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	13.0	43.0	13.5	38.5	13.0	43.0	13.5	38.5				
Max Q Clear Time (g_c+I1), s	10.1	45.3	15.5	22.4	7.9	21.9	14.3	22.9				
Green Ext Time (p_c), s	0.0	0.0	0.0	2.5	0.0	5.2	0.0	1.8				

Intersection Summary

HCM 7th Control Delay, s/veh 64.1
HCM 7th LOS E

Notes

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

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↔	↔	↔	↔	↔
Traffic Vol, veh/h	9	0	45	28	0	6	77	733	34	26	1058	21
Future Vol, veh/h	9	0	45	28	0	6	77	733	34	26	1058	21
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	1	1	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	200	-	200	200	-	270
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	49	30	0	7	84	797	37	28	1150	23

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1696	2212	578	1597	2197	399	1176	0	0	835	0	0
Stage 1	1210	1210	-	965	965	-	-	-	-	-	-	-
Stage 2	486	1002	-	632	1232	-	-	-	-	-	-	-
Critical Hdwy	5	4.5	4.5	5	4.5	4.5	4.14	-	-	5.34	-	-
Critical Hdwy Stg 1	5	4.5	-	5	4.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5	4.5	-	5	4.5	-	-	-	-	-	-	-
Follow-up Hdwy	3	3	3	3	3	3	2.22	-	-	3.12	-	-
Pot Cap-1 Maneuver	213	166	734	236	168	856	590	-	-	470	-	-
Stage 1	355	420	-	457	523	-	-	-	-	-	-	-
Stage 2	743	506	-	642	411	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	170	133	732	178	135	856	588	-	-	470	-	-
Mov Cap-2 Maneuver	170	133	-	178	135	-	-	-	-	-	-	-
Stage 1	333	394	-	392	448	-	-	-	-	-	-	-
Stage 2	632	433	-	563	386	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v13.72		25.86	1.11	0.31
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	588	-	-	472	178	856	470	-	-
HCM Lane V/C Ratio	0.142	-	-	0.124	0.171	0.008	0.06	-	-
HCM Control Delay (s/veh)	12.1	-	-	13.7	29.4	9.2	13.2	-	-
HCM Lane LOS	B	-	-	B	D	A	B	-	-
HCM 95th %tile Q(veh)	0.5	-	-	0.4	0.6	0	0.2	-	-

Timings

04/02/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	254	2253	685	341	2146	36	854	150	38	119	206
Future Volume (vph)	254	2253	685	341	2146	36	854	150	38	119	206
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm
Protected Phases	1	6	7	5	2	3	7	4	3	8	
Permitted Phases			6			2					8
Detector Phase	1	6	7	5	2	3	7	4	3	8	8
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	46.0	11.0	12.0	46.0	11.0	11.0	45.0	11.0	33.0	33.0
Total Split (s)	20.0	72.0	35.0	20.0	72.0	23.0	35.0	45.0	23.0	33.0	33.0
Total Split (%)	12.5%	45.0%	21.9%	12.5%	45.0%	14.4%	21.9%	28.1%	14.4%	20.6%	20.6%
Yellow Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	6.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None
Act Effct Green (s)	13.0	65.0	101.0	13.0	65.0	79.3	29.0	50.9	7.3	27.0	27.0
Actuated g/C Ratio	0.08	0.41	0.63	0.08	0.41	0.50	0.18	0.32	0.05	0.17	0.17
v/c Ratio	0.99	0.91	0.65	1.29	0.87	0.05	0.99	1.10	0.49	0.41	0.55
Control Delay (s/veh)	123.6	51.1	13.5	209.6	48.1	0.1	93.1	109.0	94.0	64.0	23.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	123.6	51.1	13.5	209.6	48.1	0.1	93.1	109.0	94.0	64.0	23.5
LOS	F	D	B	F	D	A	F	F	F	E	C
Approach Delay (s/veh)		48.8			69.2			99.7		44.2	
Approach LOS		D			E			F		D	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 80 (50%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.29

Intersection Signal Delay (s/veh): 65.3

Intersection LOS: E

Intersection Capacity Utilization 95.9%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 101: SW 145 Avenue & Pines Boulevard

							
Ø1	Ø2 (R)		Ø3	Ø4			
20 s	72 s		23 s	45 s			
							
Ø5	Ø6 (R)		Ø7	Ø8			
20 s	72 s		35 s	33 s			

Queues

04/02/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	267	2372	721	359	2259	38	899	636	40	125	217
v/c Ratio	0.99	0.91	0.65	1.29	0.87	0.05	0.99	1.10	0.49	0.41	0.55
Control Delay (s/veh)	123.6	51.1	13.5	209.6	48.1	0.1	93.1	109.0	94.0	64.0	23.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	123.6	51.1	13.5	209.6	48.1	0.1	93.1	109.0	94.0	64.0	23.5
Queue Length 50th (ft)	146	676	274	~245	627	0	337	~702	42	118	55
Queue Length 95th (ft)	#246	725	408	#353	674	0	#436	#987	83	188	146
Internal Link Dist (ft)		848			992			550		495	
Turn Bay Length (ft)	400		300	270		270	450		300		280
Base Capacity (vph)	270	2603	1103	278	2603	928	904	580	188	305	397
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.99	0.91	0.65	1.29	0.87	0.04	0.99	1.10	0.21	0.41	0.55

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 7th Signalized Intersection Summary
101: SW 145 Avenue & Pines Boulevard

04/02/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	2253	685	341	2146	36	854	150	454	38	119	206
Future Volume (veh/h)	254	2253	685	341	2146	36	854	150	454	38	119	206
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1870	1870	1870	1870	1870	1870	1870	1870	1870	1826	1870
Adj Flow Rate, veh/h	267	2372	721	359	2259	38	899	158	478	40	125	217
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	2	2	2	2	2	2	2	2	2	5	2
Cap, veh/h	274	2725	959	281	2725	717	910	123	371	52	276	239
Arrive On Green	0.08	0.42	0.42	0.08	0.42	0.42	0.18	0.30	0.30	0.03	0.15	0.15
Sat Flow, veh/h	3374	6434	1585	3456	6434	1585	5023	404	1223	1781	1826	1576
Grp Volume(v), veh/h	267	2372	721	359	2259	38	899	0	636	40	125	217
Grp Sat Flow(s), veh/h/ln	1687	1609	1585	1728	1609	1585	1674	0	1627	1781	1826	1576
Q Serve(g_s), s	12.6	53.9	52.8	13.0	49.9	2.2	28.6	0.0	48.6	3.6	10.0	21.7
Cycle Q Clear(g_c), s	12.6	53.9	52.8	13.0	49.9	2.2	28.6	0.0	48.6	3.6	10.0	21.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.75	1.00		1.00
Lane Grp Cap(c), veh/h	274	2725	959	281	2725	717	910	0	494	52	276	239
V/C Ratio(X)	0.97	0.87	0.75	1.28	0.83	0.05	0.99	0.00	1.29	0.78	0.45	0.91
Avail Cap(c_a), veh/h	274	2725	959	281	2725	717	910	0	494	189	308	266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	73.3	42.1	22.9	73.5	41.0	24.6	65.3	0.0	55.7	77.2	61.8	66.8
Incr Delay (d2), s/veh	46.9	4.1	5.4	150.0	3.1	0.1	26.6	0.0	143.8	8.9	0.4	29.2
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	7.2	21.5	20.3	11.5	19.8	0.8	14.3	0.0	39.4	1.8	4.6	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	120.2	46.2	28.3	223.5	44.0	24.7	91.9	0.0	199.5	86.0	62.3	96.0
LnGrp LOS	F	D	C	F	D	C	F		F	F	E	F
Approach Vol, veh/h		3360			2656			1535			382	
Approach Delay, s/veh		48.3			68.0			136.5			83.9	
Approach LOS		D			E			F			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	20.0	74.8	10.6	54.6	20.0	74.8	35.0	30.2				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	13.0	65.0	17.0	39.0	13.0	65.0	29.0	27.0				
Max Q Clear Time (g_c+I1), s	14.6	51.9	5.6	50.6	15.0	55.9	30.6	23.7				
Green Ext Time (p_c), s	0.0	6.0	0.0	0.0	0.0	5.5	0.0	0.1				

Intersection Summary

HCM 7th Control Delay, s/veh 73.7
HCM 7th LOS E

Notes

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

Intersection

Int Delay, s/veh 0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗		↔			↗↗↗			↗↗	↗
Traffic Vol, veh/h	0	0	172	15	0	40	0	1441	51	0	927	329
Future Vol, veh/h	0	0	172	15	0	40	0	1441	51	0	927	329
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	-	-	-	-	-	-	100
Veh in Median Storage, #	-	0	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	3	2	2	2	2	2	2
Mvmt Flow	0	0	177	15	0	41	0	1486	53	0	956	339

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	-	-	478	1990	2807	769	-	0
Stage 1	-	-	-	1512	1512	-	-	-
Stage 2	-	-	-	478	1295	-	-	-
Critical Hdwy	-	-	4.5	5	6.54	4.5	-	-
Critical Hdwy Stg 1	-	-	-	5	5.54	-	-	-
Critical Hdwy Stg 2	-	-	-	5	5.54	-	-	-
Follow-up Hdwy	-	-	3	3	3	3	-	-
Pot Cap-1 Maneuver	0	0	801	155	19	621	0	-
Stage 1	0	0	-	259	206	-	0	-
Stage 2	0	0	-	749	267	-	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	801	121	19	621	-	-
Mov Cap-2 Maneuver	-	-	-	207	115	-	-	-
Stage 1	-	-	-	259	206	-	-	-
Stage 2	-	-	-	583	267	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v10.77		15.42	0	0
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	-	-	801	402	-	-
HCM Lane V/C Ratio	-	-	0.222	0.141	-	-
HCM Control Delay (s/veh)	-	-	10.8	15.4	-	-
HCM Lane LOS	-	-	B	C	-	-
HCM 95th %tile Q(veh)	-	-	0.8	0.5	-	-

Timings
103: SW 145th Avenue & SW 5th Street

04/02/2025

					
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	382	96	1063	726	239
Future Volume (vph)	382	96	1063	726	239
Turn Type	Prot	Perm	NA	NA	Perm
Protected Phases	4		2	6	
Permitted Phases		4			6
Detector Phase	4	4	2	6	6
Switch Phase					
Minimum Initial (s)	6.0	6.0	12.0	12.0	12.0
Minimum Split (s)	25.0	25.0	37.5	32.5	32.5
Total Split (s)	25.0	25.0	50.0	50.0	50.0
Total Split (%)	33.3%	33.3%	66.7%	66.7%	66.7%
Yellow Time (s)	4.0	4.0	4.5	4.5	4.5
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	6.5	6.5	6.5
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Max	Max	Max
Act Effct Green (s)	12.6	12.6	43.6	43.6	43.6
Actuated g/C Ratio	0.18	0.18	0.63	0.63	0.63
v/c Ratio	0.67	0.28	0.52	0.36	0.24
Control Delay (s/veh)	31.5	7.6	8.3	6.9	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.5	7.6	8.3	6.9	1.5
LOS	C	A	A	A	A
Approach Delay (s/veh)	26.7		8.3	5.5	
Approach LOS	C		A	A	

Intersection Summary

Cycle Length: 75

Actuated Cycle Length: 68.7

Natural Cycle: 65

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay (s/veh): 10.8

Intersection LOS: B

Intersection Capacity Utilization 52.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 103: SW 145th Avenue & SW 5th Street



Queues

04/02/2025

103: SW 145th Avenue & SW 5th Street

					
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Group Flow (vph)	420	105	1168	798	263
v/c Ratio	0.67	0.28	0.52	0.36	0.24
Control Delay (s/veh)	31.5	7.6	8.3	6.9	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	31.5	7.6	8.3	6.9	1.5
Queue Length 50th (ft)	85	0	122	72	0
Queue Length 95th (ft)	127	36	200	121	25
Internal Link Dist (ft)	444		522	711	
Turn Bay Length (ft)					180
Base Capacity (vph)	950	508	2243	2243	1100
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	0.44	0.21	0.52	0.36	0.24
Intersection Summary					

HCM 7th Signalized Intersection Summary
103: SW 145th Avenue & SW 5th Street

04/02/2025

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	382	96	0	1063	726	239
Future Volume (veh/h)	382	96	0	1063	726	239
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	0	1870	1870	1870
Adj Flow Rate, veh/h	420	105	0	1168	798	263
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	0	2	2	2
Cap, veh/h	547	251	0	2323	2323	1036
Arrive On Green	0.16	0.16	0.00	0.65	0.65	0.65
Sat Flow, veh/h	3456	1585	0	3741	3647	1585
Grp Volume(v), veh/h	420	105	0	1168	798	263
Grp Sat Flow(s),veh/h/ln	1728	1585	0	1777	1777	1585
Q Serve(g_s), s	7.7	4.0	0.0	11.3	6.7	4.6
Cycle Q Clear(g_c), s	7.7	4.0	0.0	11.3	6.7	4.6
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	547	251	0	2323	2323	1036
V/C Ratio(X)	0.77	0.42	0.00	0.50	0.34	0.25
Avail Cap(c_a), veh/h	987	453	0	2323	2323	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	25.2	0.0	5.9	5.1	4.8
Incr Delay (d2), s/veh	0.9	0.4	0.0	0.8	0.4	0.6
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	1.5	0.0	3.3	1.9	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	27.7	25.7	0.0	6.7	5.5	5.4
LnGrp LOS	C	C		A	A	A
Approach Vol, veh/h	525			1168	1061	
Approach Delay, s/veh	27.3			6.7	5.5	
Approach LOS	C			A	A	
Timer - Assigned Phs	2			4		6
Phs Duration (G+Y+Rc), s	50.0			16.5		50.0
Change Period (Y+Rc), s	6.5			6.0		6.5
Max Green Setting (Gmax), s	43.5			19.0		43.5
Max Q Clear Time (g_c+I1), s	13.3			9.7		8.7
Green Ext Time (p_c), s	10.5			0.8		7.8
Intersection Summary						
HCM 7th Control Delay, s/veh			10.2			
HCM 7th LOS			B			
Notes						
User approved pedestrian interval to be less than phase max green.						

HCM 7th TWSC
1003: SW 145th Avenue & Unsignalized leg

04/02/2025

Intersection

Int Delay, s/veh 0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↘ ↘ ↘	↗ ↘ ↘ ↘			↗ ↘ ↘ ↘
Traffic Vol, veh/h	0	5	2364	12	0	1572
Future Vol, veh/h	0	5	2364	12	0	1572
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	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	2598	13	0	1727

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	- 1305	0	0
Stage 1	- -	-	-
Stage 2	- -	-	-
Critical Hdwy	- 7.14	-	-
Critical Hdwy Stg 1	- -	-	-
Critical Hdwy Stg 2	- -	-	-
Follow-up Hdwy	- 3.92	-	-
Pot Cap-1 Maneuver	0 129	-	0
Stage 1	0 -	-	0
Stage 2	0 -	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	- 129	-	-
Mov Cap-2 Maneuver	- -	-	-
Stage 1	- -	-	-
Stage 2	- -	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	34.1	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	- 129	-
HCM Lane V/C Ratio	-	- 0.043	-
HCM Control Delay (s/veh)	-	- 34.1	-
HCM Lane LOS	-	- D	-
HCM 95th %tile Q(veh)	-	- 0.1	-

HCM 7th TWSC
104: SW 145 Avenue & SW 145 Terrace

04/02/2025

Intersection

Int Delay, s/veh 3.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	75	153	291	960	638	62
Future Vol, veh/h	75	153	291	960	638	62
Conflicting Peds, #/hr	0	0	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	250	-	-	150
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	81	165	313	1032	686	67

Major/Minor

	Minor2	Major1	Major2
Conflicting Flow All	1829	344	754
Stage 1	687	-	-
Stage 2	1142	-	-
Critical Hdwy	5.5	4.5	4.14
Critical Hdwy Stg 1	5.5	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	3.32	2.22
Pot Cap-1 Maneuver	134	823	852
Stage 1	492	-	-
Stage 2	266	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	85	822	851
Mov Cap-2 Maneuver	169	-	-
Stage 1	311	-	-
Stage 2	266	-	-

Approach

	EB	NB	SB
HCM Control Delay, s/v21.59		2.71	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	851	-	169	822	-	-
HCM Lane V/C Ratio	0.368	-	0.477	0.2	-	-
HCM Control Delay (s/veh)	11.7	-	44.3	10.5	-	-
HCM Lane LOS	B	-	E	B	-	-
HCM 95th %tile Q(veh)	1.7	-	2.3	0.7	-	-

Timings
105: SW 145 Avenue & Pembroke Road

04/02/2025

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	191	714	105	134	845	189	527	215	361	288
Future Volume (vph)	191	714	105	134	845	189	527	215	361	288
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	6.0	6.0	4.0	6.0
Minimum Split (s)	11.0	46.0	46.0	11.0	46.0	10.5	44.5	44.5	10.5	45.5
Total Split (s)	20.0	50.0	50.0	20.0	50.0	20.0	45.0	45.0	20.0	45.0
Total Split (%)	14.8%	37.0%	37.0%	14.8%	37.0%	14.8%	33.3%	33.3%	14.8%	33.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	73.7	58.3	58.3	61.2	51.8	39.5	26.8	26.8	41.0	27.5
Actuated g/C Ratio	0.55	0.43	0.43	0.45	0.38	0.29	0.20	0.20	0.30	0.20
v/c Ratio	0.77	0.50	0.15	0.42	0.96	0.79	0.80	0.46	1.54	0.68
Control Delay (s/veh)	51.3	30.5	2.9	20.5	55.8	55.0	60.4	8.2	288.8	40.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.3	30.5	2.9	20.5	55.8	55.0	60.4	8.2	288.8	40.6
LOS	D	C	A	C	E	E	E	A	F	D
Approach Delay (s/veh)		31.5			52.3		47.2			143.8
Approach LOS		C			D		D			F

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

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

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.54

Intersection Signal Delay (s/veh): 65.3

Intersection LOS: E

Intersection Capacity Utilization 102.2%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 105: SW 145 Avenue & Pembroke Road

 Ø1 20 s	 Ø2 (R) 50 s		 Ø3 20 s	 Ø4 45 s
 Ø5 20 s	 Ø6 (R) 50 s		 Ø7 20 s	 Ø8 45 s

Future PM Peak Hour

Synchro 12 Light Report

Queues

04/02/2025

105: SW 145 Avenue & Pembroke Road

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	203	760	112	143	1270	201	561	229	384	539
v/c Ratio	0.77	0.50	0.15	0.42	0.96	0.79	0.80	0.46	1.54	0.68
Control Delay (s/veh)	51.3	30.5	2.9	20.5	55.8	55.0	60.4	8.2	288.8	40.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.3	30.5	2.9	20.5	55.8	55.0	60.4	8.2	288.8	40.6
Queue Length 50th (ft)	120	249	0	59	560	129	248	0	~410	173
Queue Length 95th (ft)	#232	356	26	107	#812	#185	297	66	#582	223
Internal Link Dist (ft)		990			1187		695			620
Turn Bay Length (ft)	370		300	200		180		180	180	
Base Capacity (vph)	270	1527	761	388	1327	264	1009	615	250	1045
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.50	0.15	0.37	0.96	0.76	0.56	0.37	1.54	0.52

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 7th Signalized Intersection Summary
105: SW 145 Avenue & Pembroke Road

04/02/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	714	105	134	845	349	189	527	215	361	288	219
Future Volume (veh/h)	191	714	105	134	845	349	189	527	215	361	288	219
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	203	760	112	143	899	371	201	561	229	384	306	233
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	1618	722	353	1073	440	257	660	294	254	361	268
Arrive On Green	0.08	0.46	0.46	0.06	0.44	0.44	0.10	0.19	0.19	0.10	0.19	0.19
Sat Flow, veh/h	1781	3554	1585	1781	2458	1008	1781	3554	1585	1781	1944	1443
Grp Volume(v), veh/h	203	760	112	143	648	622	201	561	229	384	279	260
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1689	1781	1777	1585	1781	1777	1611
Q Serve(g_s), s	8.4	20.0	5.6	5.9	43.7	44.3	12.3	20.6	18.6	13.5	20.5	21.2
Cycle Q Clear(g_c), s	8.4	20.0	5.6	5.9	43.7	44.3	12.3	20.6	18.6	13.5	20.5	21.2
Prop In Lane	1.00		1.00	1.00		0.60	1.00		1.00	1.00		0.90
Lane Grp Cap(c), veh/h	239	1618	722	353	776	737	257	660	294	254	330	299
V/C Ratio(X)	0.85	0.47	0.16	0.40	0.84	0.84	0.78	0.85	0.78	1.51	0.84	0.87
Avail Cap(c_a), veh/h	272	1618	722	420	776	737	257	1013	452	254	507	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	25.5	21.5	20.1	33.7	33.9	40.9	53.1	52.3	45.0	53.1	53.4
Incr Delay (d2), s/veh	18.0	1.0	0.5	0.3	10.3	11.3	13.4	2.7	1.9	249.1	4.8	7.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	8.4	2.1	2.4	20.1	19.6	6.3	9.3	7.4	19.6	9.4	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.1	26.5	22.0	20.4	44.1	45.2	54.3	55.8	54.2	294.1	57.9	60.5
LnGrp LOS	D	C	C	C	D	D	D	E	D	F	E	E
Approach Vol, veh/h		1075			1413			991			923	
Approach Delay, s/veh		29.9			42.2			55.1			156.9	
Approach LOS		C			D			E			F	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	17.5	65.9	20.0	31.6	15.0	68.5	20.0	31.6				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	13.0	43.0	13.5	38.5	13.0	43.0	13.5	38.5				
Max Q Clear Time (g_c+I1), s	10.4	46.3	15.5	22.6	7.9	22.0	14.3	23.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	2.5	0.0	5.2	0.0	1.8				

Intersection Summary

HCM 7th Control Delay, s/veh 66.1
HCM 7th LOS E

Notes

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

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔			↔			↔			↔		
Traffic Vol, veh/h	9	0	45	28	0	6	77	749	34	26	1111	21
Future Vol, veh/h	9	0	45	28	0	6	77	749	34	26	1111	21
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	1	1	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	200	-	200	200	-	270
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	0	49	30	0	7	84	814	37	28	1208	23

Major/Minor	Minor2		Minor1		Major1		Major2	
Conflicting Flow All	1760	2287	607	1643	2272	408	1233	0
Stage 1	1267	1267	-	983	983	-	-	-
Stage 2	493	1019	-	660	1290	-	-	-
Critical Hdwy	5	4.5	4.5	5	4.5	4.5	4.14	-
Critical Hdwy Stg 1	5	4.5	-	5	4.5	-	-	-
Critical Hdwy Stg 2	5	4.5	-	5	4.5	-	-	-
Follow-up Hdwy	3	3	3	3	3	3	2.22	-
Pot Cap-1 Maneuver	198	154	716	225	156	850	561	-
Stage 1	334	399	-	449	515	-	-	-
Stage 2	738	498	-	624	390	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	157	123	714	167	124	849	559	-
Mov Cap-2 Maneuver	157	123	-	167	124	-	-	-
Stage 1	313	373	-	381	437	-	-	-
Stage 2	623	423	-	545	365	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v14.24		27.4	1.13	0.3
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	559	-	-	448	167	849	461	-	-
HCM Lane V/C Ratio	0.15	-	-	0.131	0.182	0.008	0.061	-	-
HCM Control Delay (s/veh)	12.6	-	-	14.2	31.3	9.3	13.3	-	-
HCM Lane LOS	B	-	-	B	D	A	B	-	-
HCM 95th %tile Q(veh)	0.5	-	-	0.4	0.6	0	0.2	-	-

Intersection

Int Delay, s/veh 0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		7		↑↑	↑↑	
Traffic Vol, veh/h	0	7	0	1035	693	50
Future Vol, veh/h	0	7	0	1035	693	50
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, %	2	2	2	2	2	2
Mvmt Flow	0	8	0	1125	753	54

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	-	404	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.94	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.32	-
Pot Cap-1 Maneuver	0	596	0
Stage 1	0	-	0
Stage 2	0	-	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	596	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v11.12		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT EBLn1	SBT	SBR
Capacity (veh/h)	-	596	-
HCM Lane V/C Ratio	-	0.013	-
HCM Control Delay (s/veh)	-	11.1	-
HCM Lane LOS	-	B	-
HCM 95th %tile Q(veh)	-	0	-

Timings

04/03/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	254	2253	685	341	2146	36	854	150	38	119	206
Future Volume (vph)	254	2253	685	341	2146	36	854	150	38	119	206
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm
Protected Phases	1	6	7	5	2	3	7	4	3	8	
Permitted Phases			6			2					8
Detector Phase	1	6	7	5	2	3	7	4	3	8	8
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	46.0	11.0	12.0	46.0	11.0	11.0	45.0	11.0	33.0	33.0
Total Split (s)	21.0	67.0	37.0	23.0	69.0	11.0	37.0	59.0	11.0	33.0	33.0
Total Split (%)	13.1%	41.9%	23.1%	14.4%	43.1%	6.9%	23.1%	36.9%	6.9%	20.6%	20.6%
Yellow Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	6.0	7.0	7.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	C-Max	None	None	None	None	None	None
Act Effect Green (s)	13.8	60.0	97.3	16.0	62.2	74.2	30.3	55.2	5.0	27.7	27.7
Actuated g/C Ratio	0.09	0.38	0.61	0.10	0.39	0.46	0.19	0.35	0.03	0.17	0.17
v/c Ratio	0.93	0.99	0.67	1.05	0.91	0.05	0.95	1.01	0.73	0.40	0.54
Control Delay (s/veh)	109.1	64.8	15.2	128.3	52.5	0.1	83.2	81.2	134.0	63.5	23.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	109.1	64.8	15.2	128.3	52.5	0.1	83.2	81.2	134.0	63.5	23.3
LOS	F	E	B	F	D	A	F	F	F	E	C
Approach Delay (s/veh)		57.7			62.0			82.4		48.1	
Approach LOS		E			E			F		D	

Intersection Summary

Cycle Length: 160

Actuated Cycle Length: 160

Offset: 80 (50%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay (s/veh): 63.4

Intersection LOS: E

Intersection Capacity Utilization 95.9%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 101: SW 145 Avenue & Pines Boulevard

							
Ø1	Ø2 (R)			Ø4			
21 s	69 s			11 s	59 s		
							
Ø5	Ø6 (R)			Ø7		Ø8	
23 s	67 s			37 s		33 s	

Queues

04/03/2025

101: SW 145 Avenue & Pines Boulevard

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	267	2372	721	359	2259	38	899	636	40	125	217
v/c Ratio	0.93	0.99	0.67	1.05	0.91	0.05	0.95	1.01	0.73	0.40	0.54
Control Delay (s/veh)	109.1	64.8	15.2	128.3	52.5	0.1	83.2	81.2	134.0	63.5	23.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	109.1	64.8	15.2	128.3	52.5	0.1	83.2	81.2	134.0	63.5	23.3
Queue Length 50th (ft)	145	714	294	~209	648	0	332	~643	42	118	55
Queue Length 95th (ft)	#234	#803	438	#317	697	0	#412	#893	#113	188	146
Internal Link Dist (ft)		848			992			732		495	
Turn Bay Length (ft)	400		300	270		270	450		300		280
Base Capacity (vph)	291	2403	1077	343	2490	792	966	630	55	312	403
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.99	0.67	1.05	0.91	0.05	0.93	1.01	0.73	0.40	0.54

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 7th Signalized Intersection Summary

101: SW 145 Avenue & Pines Boulevard

04/03/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	2253	685	341	2146	36	854	150	454	38	119	206
Future Volume (veh/h)	254	2253	685	341	2146	36	854	150	454	38	119	206
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1826	1870	1870	1870	1870	1870	1870	1870	1870	1870	1826	1870
Adj Flow Rate, veh/h	267	2372	721	359	2259	38	899	158	478	40	125	217
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	2	2	2	2	2	2	2	2	2	5	2
Cap, veh/h	295	2428	899	346	2508	664	954	134	405	52	311	268
Arrive On Green	0.09	0.38	0.38	0.10	0.39	0.39	0.19	0.33	0.33	0.03	0.17	0.17
Sat Flow, veh/h	3374	6434	1585	3456	6434	1585	5023	404	1223	1781	1826	1577
Grp Volume(v), veh/h	267	2372	721	359	2259	38	899	0	636	40	125	217
Grp Sat Flow(s),veh/h/ln	1687	1609	1585	1728	1609	1585	1674	0	1628	1781	1826	1577
Q Serve(g_s), s	12.5	58.2	57.8	16.0	52.8	2.3	28.3	0.0	53.0	3.6	9.8	21.2
Cycle Q Clear(g_c), s	12.5	58.2	57.8	16.0	52.8	2.3	28.3	0.0	53.0	3.6	9.8	21.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.75	1.00		1.00
Lane Grp Cap(c), veh/h	295	2428	899	346	2508	664	954	0	539	52	311	268
V/C Ratio(X)	0.90	0.98	0.80	1.04	0.90	0.06	0.94	0.00	1.18	0.78	0.40	0.81
Avail Cap(c_a), veh/h	295	2428	899	346	2508	664	973	0	539	56	311	268
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	72.3	49.1	27.5	72.0	45.9	27.7	63.9	0.0	53.5	77.2	59.1	63.9
Incr Delay (d2), s/veh	28.6	13.6	7.5	58.9	5.8	0.2	16.3	0.0	98.8	41.4	0.3	15.5
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	6.5	24.9	22.9	9.8	21.5	0.9	13.4	0.0	36.0	2.2	4.5	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	100.9	62.7	35.0	130.9	51.7	27.9	80.3	0.0	152.3	118.6	59.4	79.4
LnGrp LOS	F	E	C	F	D	C	F		F	F	E	E
Approach Vol, veh/h	3360			2656			1535			382		
Approach Delay, s/veh	59.8			62.0			110.1			77.0		
Approach LOS	E			E			F			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	31.0	69.4	10.6	59.0	23.0	67.4	36.4	33.2				
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	6.0	6.0				
Max Green Setting (Gmax), s	4.0	62.0	5.0	53.0	16.0	60.0	31.0	27.0				
Max Q Clear Time (g_c+T4), s	4.0	54.8	5.6	55.0	18.0	60.2	30.3	23.2				
Green Ext Time (p_c), s	0.0	4.1	0.0	0.0	0.0	0.0	0.1	0.1				
Intersection Summary												
HCM 7th Control Delay, s/veh	71.1											
HCM 7th LOS	E											
Notes												
User approved pedestrian interval to be less than phase max green.												

Timings

04/03/2025

105: SW 145 Avenue & Pembroke Road

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	191	714	105	134	845	189	527	215	361	288
Future Volume (vph)	191	714	105	134	845	189	527	215	361	288
Turn Type	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	1	6		5	2	7	4		3	8
Permitted Phases	6		6	2		4		4	8	
Detector Phase	1	6	6	5	2	7	4	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	10.0	10.0	4.0	10.0	4.0	6.0	6.0	4.0	6.0
Minimum Split (s)	11.0	46.0	46.0	11.0	46.0	10.5	44.5	44.5	10.5	45.5
Total Split (s)	20.0	47.0	47.0	20.0	47.0	18.0	45.0	45.0	23.0	50.0
Total Split (%)	14.8%	34.8%	34.8%	14.8%	34.8%	13.3%	33.3%	33.3%	17.0%	37.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.5	6.5	6.5	6.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	70.6	55.0	55.0	58.5	48.8	37.9	26.8	26.8	48.6	32.1
Actuated g/C Ratio	0.52	0.41	0.41	0.43	0.36	0.28	0.20	0.20	0.36	0.24
v/c Ratio	0.77	0.53	0.15	0.44	1.01	0.76	0.80	0.46	1.33	0.60
Control Delay (s/veh)	51.4	33.3	3.2	22.6	70.2	50.1	60.4	8.2	199.2	34.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.4	33.3	3.2	22.6	70.2	50.1	60.4	8.2	199.2	34.9
LOS	D	C	A	C	E	D	E	A	F	C
Approach Delay (s/veh)		33.5			65.4		46.3			103.2
Approach LOS		C			E		D			F

Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

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

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.33

Intersection Signal Delay (s/veh): 61.2

Intersection LOS: E

Intersection Capacity Utilization 102.2%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 105: SW 145 Avenue & Pembroke Road

							
Ø1	Ø2 (R)		Ø3		Ø4		
20 s	47 s		23 s		45 s		
							
Ø5	Ø6 (R)		Ø7		Ø8		
20 s	47 s		18 s		50 s		

Future + Imp PM Peak Hour

Synchro 12 Light Report

Queues

04/03/2025

105: SW 145 Avenue & Pembroke Road

										
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	203	760	112	143	1270	201	561	229	384	539
v/c Ratio	0.77	0.53	0.15	0.44	1.01	0.76	0.80	0.46	1.33	0.60
Control Delay (s/veh)	51.4	33.3	3.2	22.6	70.2	50.1	60.4	8.2	199.2	34.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	51.4	33.3	3.2	22.6	70.2	50.1	60.4	8.2	199.2	34.9
Queue Length 50th (ft)	120	261	0	62	~618	125	248	0	~370	161
Queue Length 95th (ft)	#234	371	27	112	#849	174	297	66	#547	207
Internal Link Dist (ft)		990			1187		695			270
Turn Bay Length (ft)	370		300	200		180		180	180	
Base Capacity (vph)	270	1441	726	368	1252	271	1009	615	289	1167
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.75	0.53	0.15	0.39	1.01	0.74	0.56	0.37	1.33	0.46

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 7th Signalized Intersection Summary
105: SW 145 Avenue & Pembroke Road

04/03/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	714	105	134	845	349	189	527	215	361	288	219
Future Volume (veh/h)	191	714	105	134	845	349	189	527	215	361	288	219
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	203	760	112	143	899	371	201	561	229	384	306	233
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	227	1532	683	337	1011	415	268	660	294	294	433	322
Arrive On Green	0.08	0.43	0.43	0.06	0.41	0.41	0.09	0.19	0.19	0.12	0.22	0.22
Sat Flow, veh/h	1781	3554	1585	1781	2458	1008	1781	3554	1585	1781	1944	1443
Grp Volume(v), veh/h	203	760	112	143	648	622	201	561	229	384	279	260
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1689	1781	1777	1585	1781	1777	1611
Q Serve(g_s), s	8.9	20.9	5.8	6.2	45.6	46.3	11.5	20.6	18.6	16.5	19.5	20.2
Cycle Q Clear(g_c), s	8.9	20.9	5.8	6.2	45.6	46.3	11.5	20.6	18.6	16.5	19.5	20.2
Prop In Lane	1.00		1.00	1.00		0.60	1.00		1.00	1.00		0.90
Lane Grp Cap(c), veh/h	227	1532	683	337	731	695	268	660	294	294	396	359
V/C Ratio(X)	0.90	0.50	0.16	0.42	0.89	0.89	0.75	0.85	0.78	1.31	0.70	0.72
Avail Cap(c_a), veh/h	255	1532	683	400	731	695	268	1013	452	294	573	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	27.8	23.5	22.0	36.8	37.0	42.8	53.1	52.3	42.3	48.4	48.6
Incr Delay (d2), s/veh	27.0	1.2	0.5	0.3	14.9	16.4	9.9	2.7	1.9	160.6	0.9	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	8.8	2.3	2.5	21.9	21.4	6.2	9.3	7.4	21.0	8.6	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.5	28.9	24.0	22.3	51.7	53.4	52.6	55.8	54.2	202.8	49.2	49.7
LnGrp LOS	E	C	C	C	D	D	D	E	D	F	D	D
Approach Vol, veh/h	1075			1413			991			923		
Approach Delay, s/veh	33.8			49.5			54.8			113.3		
Approach LOS	C			D			D			F		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	7.9	62.5	23.0	31.6	15.2	65.2	18.0	36.6				
Change Period (Y+Rc), s	7.0	7.0	6.5	6.5	7.0	7.0	6.5	6.5				
Max Green Setting (Gmax), s	40.0	40.0	16.5	38.5	13.0	40.0	11.5	43.5				
Max Q Clear Time (g_c+T0), s	48.3	48.3	18.5	22.6	8.2	22.9	13.5	22.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	2.5	0.0	4.8	0.0	2.0				
Intersection Summary												
HCM 7th Control Delay, s/veh	60.2											
HCM 7th LOS	E											
Notes												
User approved pedestrian interval to be less than phase max green.												