RGA

Richard Garcia & Associates, Inc.

Traffic Impact Study

Soleste Bay Village



18301 South Dixie Highway
Palmetto Bay, Florida

Original: November 30th, 2016
Update: January 23rd, 2017

May 12th, 2017

Engineer's Certification

I, Carlos X. Valentin, P.E. # 78422, certify that I currently hold an active Professional Engineers License in the State of Florida and am competent through education and experience to provide engineering services in the civil and traffic engineering disciplines contained in this report. In addition, the firm Richard Garcia & Associates, Inc. holds a Certificate of Authorization # 9592 in the State of Florida. I further certify that this report was prepared by me or under my responsible charge as defined in Chapter 61G15-18.001 F.A.C. and that all statements, conclusions and recommendations made herein are true and correct to the best of my knowledge and ability.

PROJECT DESCRIPTION: Soleste Bay Village - Traffic Impact Study

PROJECT LOCATION: 18301 South Dixie Highway
Palmetto Bay, Florida



Florida Registration No. 78422 5/12/2017 Date

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Executive Summary

This study was prepared to determine the vehicle trips associated with the subject project and to evaluate the traffic impacts within the study area.

The subject site is located on the southeast corner of South Dixie Highway (SR 5) and SW 183rd Street in the Village of Palmetto Bay, Florida. This site has a church and the proposed redevelopment consists of 218 rental apartment units and 3,400 square feet of retail. Of the 218 apartment units, 11 units are considered "Live/Work units" and may be used as commercial space. As such, the total square footage (9,135 SF) for the 11 "Live/Work" units was analyzed as retail and as apartments (i.e. both land uses) in the trip generation analysis as a conservative approach since this project will not have detached retail. Similarly, the proposed 3,100 square feet of leasing office was also analyzed as a separate land use although this office space is an ancillary use to the apartments and retail. The project build-out is slated for 2019.

The trip generation characteristics for the subject project were obtained from **ITE's Trip Generation Manual, 9th Edition**. The trip generation analysis was performed for a typical weekday's AM and PM peak hour. This analysis includes internal capture rates (i.e. project internalization trips for the AM and PM peak hour). The internal capture rates were estimated following the methodology of Multi-Use Development Trip Generation and Internal Capture from the **ITE Trip Generation Handbook, 3rd Edition**. This methodology estimate an internal capture rate between each pair of land uses within a multi-use development. The following land uses, as identified by the Institute of Transportation Engineers (ITE), most closely resemble the subject project. These land uses (LU) are as follows:

Existing

- LU 560: Church with 11,123 Square Feet

Proposed

- LU 220: Apartment with 218 Dwelling Units (11 Live/Work Units)
- LU 710: General Office with 3,100 Square Feet
- LU 826: Specialty Retail (Live/Work Units) with 9,135 Square Feet
- LU 826: Specialty Retail with 3,400 Square Feet

Based on the trip generation analysis, the subject project will generate **118 net external trips** (29 trips-in & 89 trips-out) during the AM peak hour and **151 net external trips** (91 trips-in & 60 trips-out) in the PM peak hour. The peak hour trips were distributed to the studied intersections and were assigned to the project's driveways consistent with the trip distribution percentages of the project's Traffic Analysis Zone 1144.

Manual Turning Movement Counts (TMC's) and traffic operational characteristics were gathered at the intersections of *South Dixie Highway (SR 5)/SW 183rd Street, SW 98th Court/SW 183rd Street and SW 98th Avenue Road/SW 183rd Street.* These turning movement counts were performed on Thursday, November 10th, 2016 during the typical weekday's AM peak period of 7:00 AM to 9:00 AM and PM peak period of 4:00 PM to 6:00 PM. Subsequently, the AM and PM peak hour traffic volumes were determined, adjusted for seasonal variations by using the Florida Department of Transportation (FDOT) Seasonal Factor and utilized in the operational analysis for the existing condition. The operational analysis revealed that all the intersections are currently operating at LOS A during the AM and PM peak hour.

Based on historical trends regression analysis, a background growth rate of 1.71 percent was utilized to estimate the background traffic within the project's vicinity. As such, the existing seasonally adjusted turning movement counts were augmented with the background traffic and the project net trips. The resulting traffic volumes represent the future condition with project in 2019 and were utilized to evaluate the future traffic operations at each intersection within the study area. As a result, the operational analysis revealed that all the intersections within the study area will maintain the existing LOS A for the AM and PM peak hour. Lastly, the proposed driveways were also evaluated and yielded LOS A. Table 1 summarizes the LOS and delay per approach for the each intersection and project's driveways.

In conclusion, the most impacted intersections are currently operating within the Village's acceptable LOS threshold and will continue to do so with the new traffic generated by the subject project. Therefore, no off-site improvements are required or recommended at this time.

Table 1: Intersection Level of Service Summary

	Location	Intersection Control	Approach	Existing Condition (2016)				Future Condition with Project (2019)			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)
Intersections	S Dixie Highway (SR 5) & SW 183 Street	Two-Way Stop	EB	B	10.5	B	13.9	B	10.7	C	15.0
			WB	C	18.7 *	C	18.2 *	D	25.0 *	C	24.3 *
			NB	A	0.1	A	1.3	A	0.1	A	1.5
			SB	A	0.5	A	0.4	A	0.9	A	0.8
			Overall	**A**	**0.6**	**A**	**1.1**	**A**	**1.2**	**A**	**1.7**
	SW 183 Street & SW 98 Court	Two-Way Stop	EB	A	9.0 *	A	9.0 *	A	9.4 *	A	9.5 *
			WB	-	-	-	-	-	-	-	-
			NB	A	4.4	A	5.2	A	5.9	A	6.3
			SB	A	0.0	A	0.0	A	0.0	A	0.0
			Overall	**A**	**5.8**	**A**	**7.1**	**A**	**6.8**	**A**	**7.9**
	SW 183 Street & SW 98 Avenue Road	Two-Way Stop	EB	A	0.1	A	0.2	A	0.1	A	0.2
			WB	A	0.0	A	0.0	A	0.0	A	0.0
			NB	-	-	-	-	-	-	-	-
			SB	A	9.2 *	A	9.4 *	A	9.5 *	A	9.6 *
			Overall	**A**	**1.2**	**A**	**1.9**	**A**	**1.0**	**A**	**1.6**
Driveways	SW 183 Street & Driveway 1 (DW1) **	All-Way Stop	EB	-	-	-	-	-	-	-	-
			WB	-	-	-	-	A	7.1	A	7.4
			NB	-	-	-	-	A	7.3	A	7.3
			SB	-	-	-	-	A	7.9	A	8.6
			Overall	**-**	**-**	**-**	**-**	**A**	**7.4**	**A**	**8.2**
	SW 183 Street & Driveway 2 (DW2)	Two-Way Stop	EB	-	-	-	-	A	0.0	A	0.0
			WB	-	-	-	-	A	0.5	A	1.2
			NB	-	-	-	-	A	9.4 *	A	9.8 *
			SB	-	-	-	-	-	-	-	-
			Overall	**-**	**-**	**-**	**-**	**A**	**2.3**	**A**	**1.5**

* TWSC Critical Approach

** Intersection was analyzed as All-Way Stop since HCM analysis does not support intersection sign configuration.

Introduction

The main objective of this report is to determine the vehicle trips associated with the subject project and to evaluate the traffic impacts within the study area. As such, an operational analysis was performed to determine the capacity and Level of Service at the studied intersections during the typical weekday's AM and PM peak hour.

Project Description / Location

The subject site is located on the southeast corner of South Dixie Highway (SR 5) and SW 183rd Street in the Village of Palmetto Bay, Florida. This site has a church and the proposed redevelopment consists of 218 rental apartment units and 3,400 square feet of retail. Of the 218 apartment units, 11 units are considered "Live/Work units" and may be used as commercial space. As such, the total square footage (9,135 SF) for the 11 "Live/Work" units was analyzed as retail and as apartments (i.e. both land uses) in the trip generation analysis as a conservative approach since this project will not have detached retail. Similarly, the proposed 3,100 square feet of leasing office was also analyzed as a separate land use although this office space is an ancillary use to the apartments and retail. The project build-out is slated for 2019.

Lastly, the subject project will have one service driveway and two (2) other driveways to provide access to the parking area. Figure 1 depicts the site's location map while Figure 2 is the site plan included for illustrative purpose only.

Figure 1: Location Map

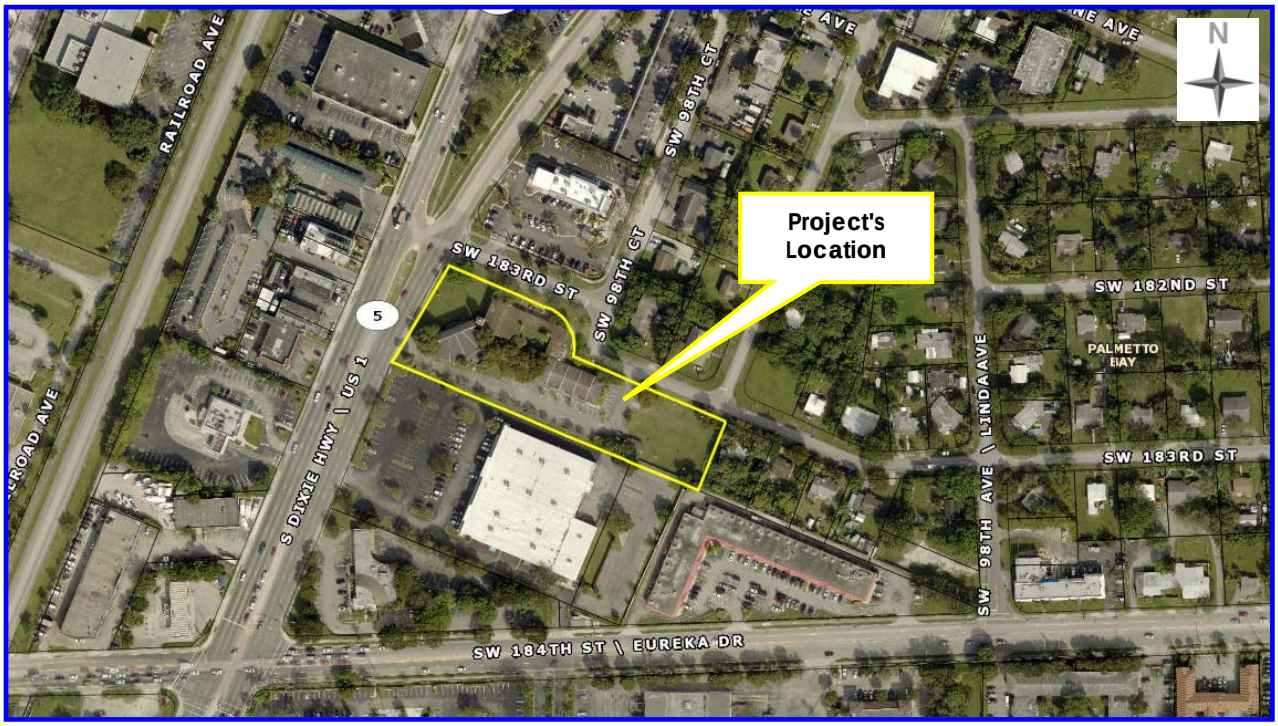
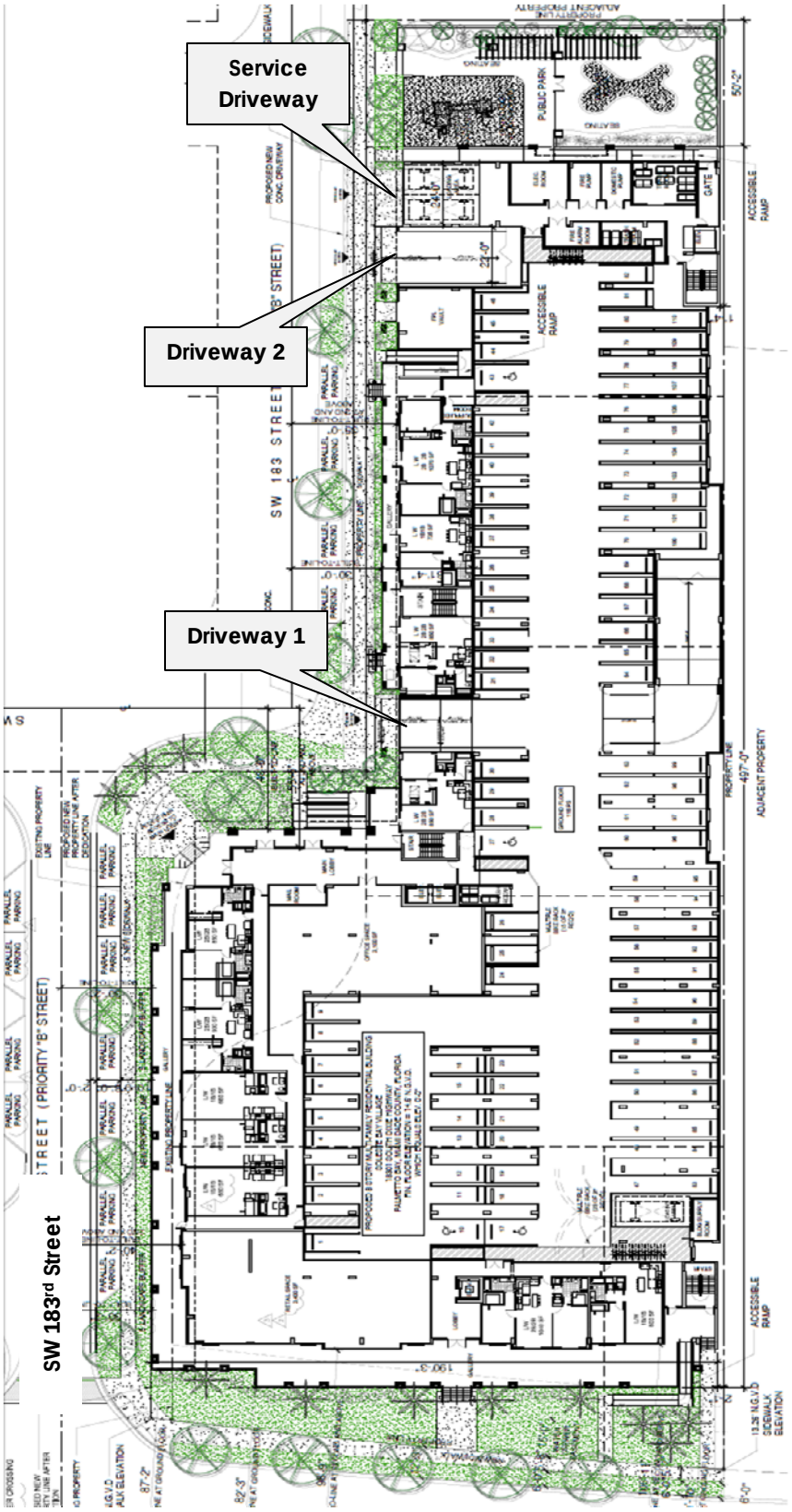


Figure 2: Site Plan



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Existing Condition (2016)

The purpose of this section is to identify the current operational and geometric characteristics of the studied intersections in order to provide a comparison to future conditions.

Turning Movement Counts (TMC's)

Manual Turning Movement Counts (TMC's) and traffic operational characteristics were gathered at the intersections identified below. These turning movement counts were performed on Thursday, November 10th, 2016 during the typical weekday's AM peak period of 7:00 AM to 9:00 AM and PM peak period of 4:00 PM to 6:00 PM. Subsequently, the AM and PM peak hour traffic volumes were determined, adjusted for seasonal variations by using the Florida Department of Transportation (FDOT) Seasonal Factor and utilized in the operational analysis for the existing condition. Traffic counts and operational characteristics were gathered at the following intersections:

- South Dixie Highway (SR 5) & & SW 183rd Street
- SW 98th Court & SW 183rd Street
- SW 98th Avenue Road & SW 183rd Street

Figures 3 and 4 are graphical representations of the seasonally adjusted existing AM and PM peak hour TMC's, respectively. Appendix D contains the raw traffic data.

Level of Service (LOS)

The turning movement counts shown in Figures 3 and 4 were utilized to perform an operational analysis for the AM and PM peak hour condition. This analysis was performed consistent with the traffic operational characteristics (i.e. lane geometry, traffic control, etc.) at the time data collection took place and follows the Highway Capacity Manual (HCM) methodology.

The operational analysis revealed that all the studied intersections are currently operating at LOS A during the AM and PM peak hour. Table 2 summarizes the LOS results and vehicle delay. Appendix E contains other outputs such as volume to capacity ratio (V/C) and 95th Percentile Queue.

Figure 3: Existing Seasonally Adjusted TMC's - AM Peak Hour

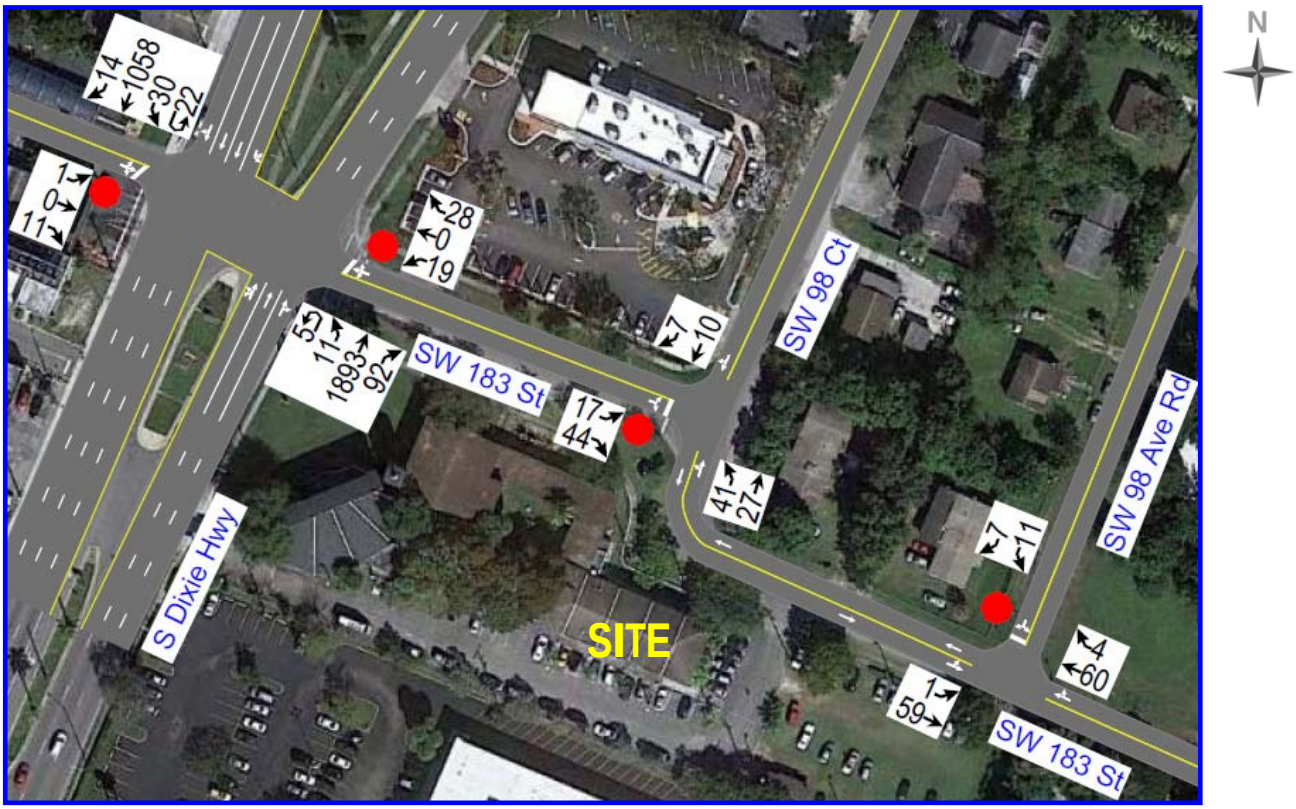


Figure 4: Existing Seasonally Adjusted TMC's - PM Peak Hour

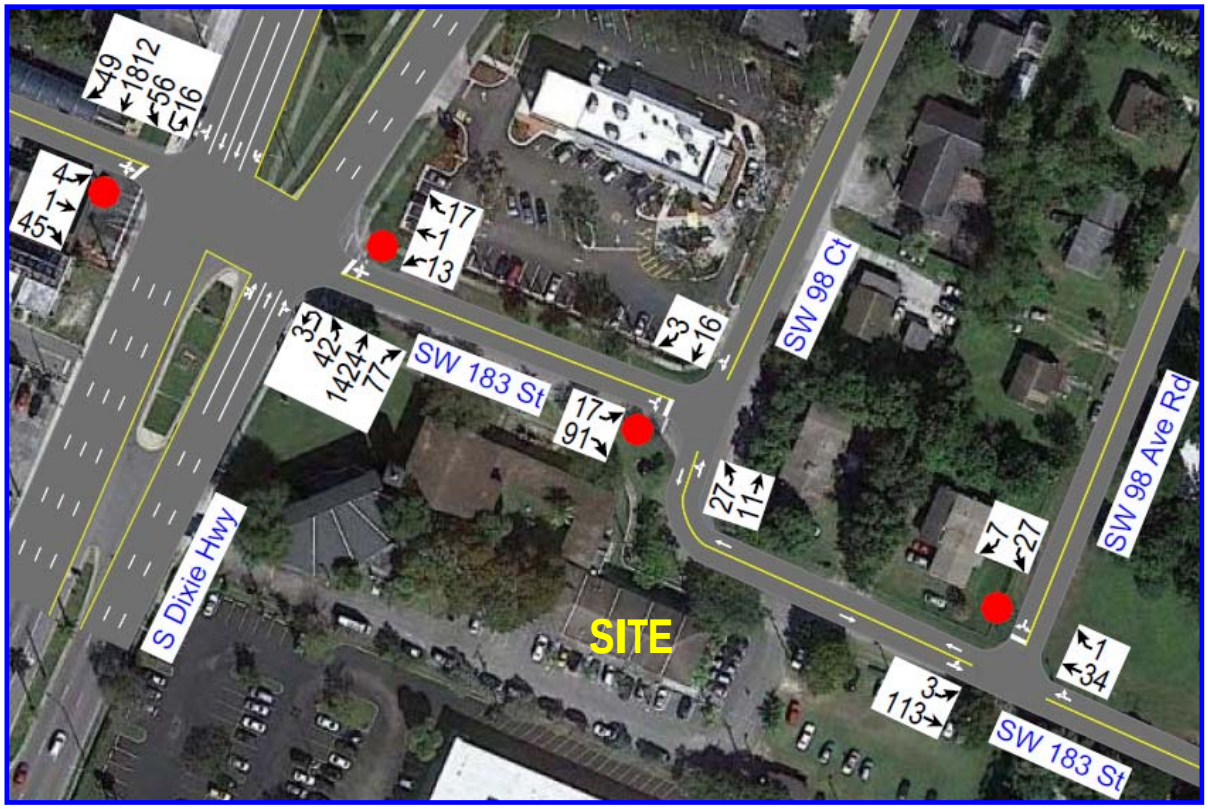


Table 2: Existing Intersection LOS & Delay - AM & PM Peak Hour

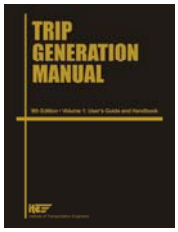
	Location	Intersection Control	Approach	Existing Condition (2016)			
				AM Peak Hour		PM Peak Hour	
				LOS	Delay (s)	LOS	Delay (s)
Intersections	S Dixie Highway (SR 5) & SW 183 Street	Two-Way Stop	EB	B	10.5	B	13.9
			WB	C	18.7 *	C	18.2 *
			NB	A	0.1	A	1.3
			SB	A	0.5	A	0.4
			Overall	**A**	**0.6**	**A**	**1.1**
	SW 183 Street & SW 98 Court	Two-Way Stop	EB	A	9.0 *	A	9.0 *
			WB	-	-	-	-
			NB	A	4.4	A	5.2
			SB	A	0.0	A	0.0
			Overall	**A**	**5.8**	**A**	**7.1**
	SW 183 Street & SW 98 Avenue Road	Two-Way Stop	EB	A	0.1	A	0.2
			WB	A	0.0	A	0.0
			NB	-	-	-	-
			SB	A	9.2 *	A	9.4 *
			Overall	**A**	**1.2**	**A**	**1.9**

* TWSC Critical Approach

Project Traffic

This section of the report describes the analysis for estimating the traffic associated with the subject project.

Trip Generation



The trip generation characteristics for the subject project were obtained from **ITE's Trip Generation Manual, 9th Edition**. The trip generation analysis was performed for a typical weekday's AM and PM peak hour. This analysis includes internal capture rates (i.e. project internalization trips for the AM and PM peak hour). The internal capture rates were estimated following the methodology of Multi-Use Development Trip Generation and Internal Capture from the **ITE Trip Generation Handbook, 3rd Edition**. This methodology estimate an internal capture rate between each pair of land uses within a multi-use development. The following land uses, as identified by the Institute of Transportation Engineers (ITE), most closely resemble the subject project. These land uses (LU) are as follows:

Existing

- LU 560: Church with 11,123 Square Feet

Proposed

- LU 220: Apartment with 218 Dwelling Units (11 Live/Work Units)
- LU 710: General Office with 3,100 Square Feet
- LU 826: Specialty Retail (Live/Work Units) with 9,135 Square Feet
- LU 826: Specialty Retail with 3,400 Square Feet

Based on the trip generation analysis, the subject project will generate **118 net external trips** (29 trips-in & 89 trips-out) during the AM peak hour and **151 net external trips** (91 trips-in & 60 trips-out) in the PM peak hour. These vehicle trips are likely to be reduced based on the rate and extent of the transit and pedestrian usage since neither of these adjustments were utilized in the trip generation analysis. Tables 3 and 4 summarize the trip generation results for the AM and PM peak hour, respectively. Appendix A contains the supporting documentation.

Table 3: Trip Generation - AM Peak Hour

LAND USE (LU)	UNITS	ITE LU CODE	ITE TRIP GENERATION RATE	AM PEAK HOUR TRIPS		
				IN	OUT	TOTAL
Existing						
Church	11.123 Th.Sq.Ft.	560	0.56	4	2	6
Proposed						
Apartments	218 D.U.	220	0.51	22	89	111
General Office	3.100 Th.Sq.Ft.	710	1.56	4	1	5
Retail (Live/Work) *	9.135 Th.Sq.Ft.	820	0.96	6	3	9
Specialty Retail *	3.400 Th.Sq.Ft.	820	0.96	2	1	3
External Trips *(Proposed Trips)*				**34**	**94**	**128**
Internal Trip Capture	*3.0% of External Trips*			*1*	*3*	*4*
Net External Trips *(External Trips - Existing Trips - Internal Trips)*				**29**	**89**	**118**

Notes: ITE Trip Generation, 9th Edition & ITE Trip Generation Handbook, 3rd Edition.
* Since ITE does not provide AM data for Specialty Retail (LU 826), ITE's rate for LU 820 (Shopping Center) was used to estimate the AM peak hour trips.

Table 4: Trip Generation - PM Peak Hour

LAND USE (LU)	UNITS	ITE LU CODE	ITE TRIP GENERATION RATE	PM PEAK HOUR TRIPS		
				IN	OUT	TOTAL
Existing						
Church	11.123 Th.Sq.Ft.	560	0.55	3	3	6
Proposed						
Apartments	218 D.U.	220	0.62	88	47	135
General Office	3.100 Th.Sq.Ft.	710	1.49	1	4	5
Retail (Live/Work)	9.135 Th.Sq.Ft.	826	2.71	11	14	25
Specialty Retail	3.400 Th.Sq.Ft.	826	2.71	4	5	9
External Trips *(Proposed Trips)*				**104**	**70**	**174**
Internal Trip Capture	*9.4% of External Trips*			*10*	*7*	*17*
Net External Trips *(External Trips - Existing Trips - Internal Trips)*				**91**	**60**	**151**

Notes: ITE Trip Generation, 9th Edition & ITE Trip Generation Handbook, 3rd Edition.

Trip Distribution

The subject project is located within the Traffic Analysis Zone (TAZ) 1144 as assigned by the Metropolitan Planning Organization's (MPO) on the Miami-Dade Transportation Plan (to the Year 2040) Directional Trips Distribution Report, October 2014. As such, the trip distribution was performed consistent with the trip distribution percentages of TAZ 1144 and by interpolating between the 2010 and 2040 TAZ data for the projected design year of 2019. Figure 5 depicts the TAZ map while the directional trip distribution percentages are outlined in Table 5. Appendix B contains the supporting documentation.

Figure 5: Traffic Analysis Zone (TAZ) Map

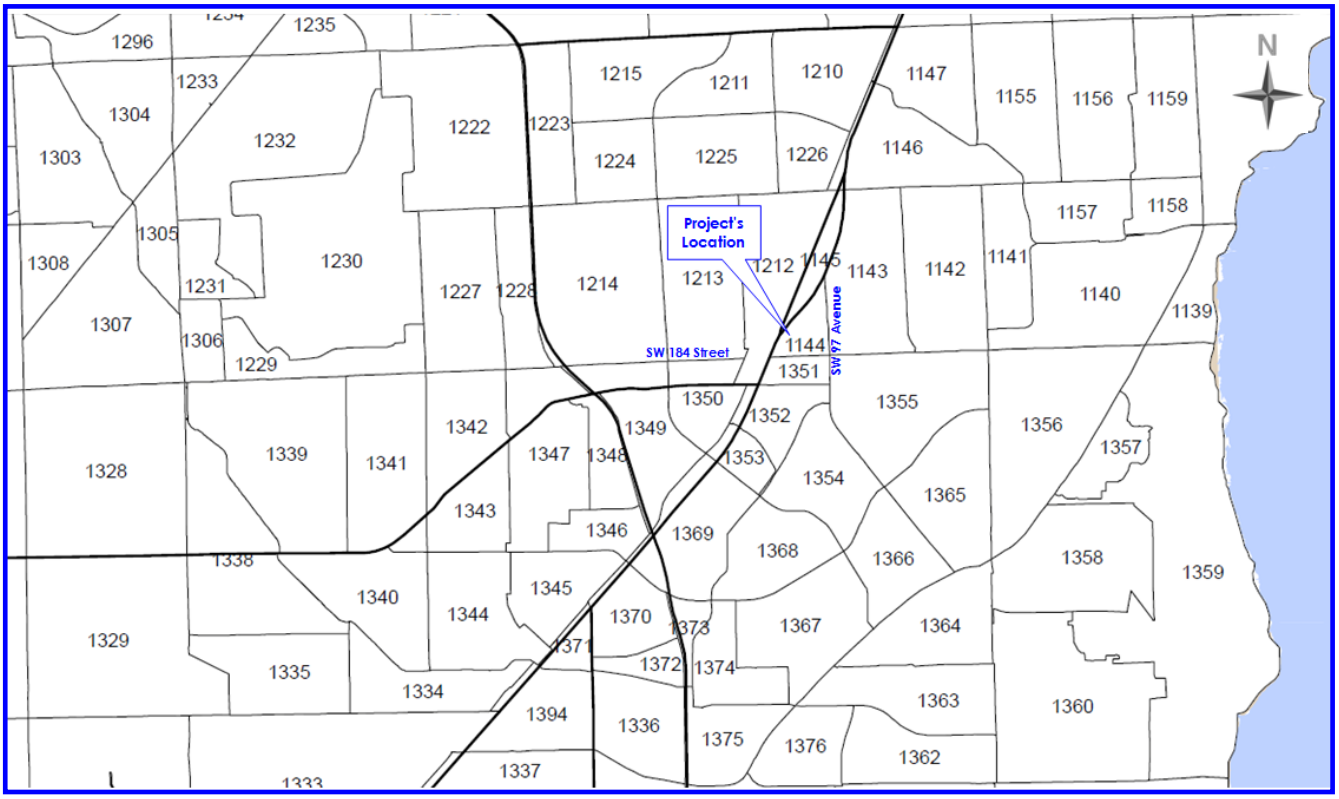


Table 5: Directional Trip Distribution

DIRECTION	DISTRIBUTION PERCENTAGES (%)		
	MIAMI-DADE LRTP MODEL YEAR		DESIGN YEAR
	2010	2040	2019
NNE	27.90	27.20	27.69
ENE	0.80	2.00	1.16
ESE	3.70	5.10	4.12
SSE	8.80	8.20	8.62
SSW	22.30	23.40	22.63
WSW	14.20	9.60	12.82
WNW	8.80	10.40	9.28
NNW	13.60	14.10	13.75
TOTAL	100.00	100.00	100.00

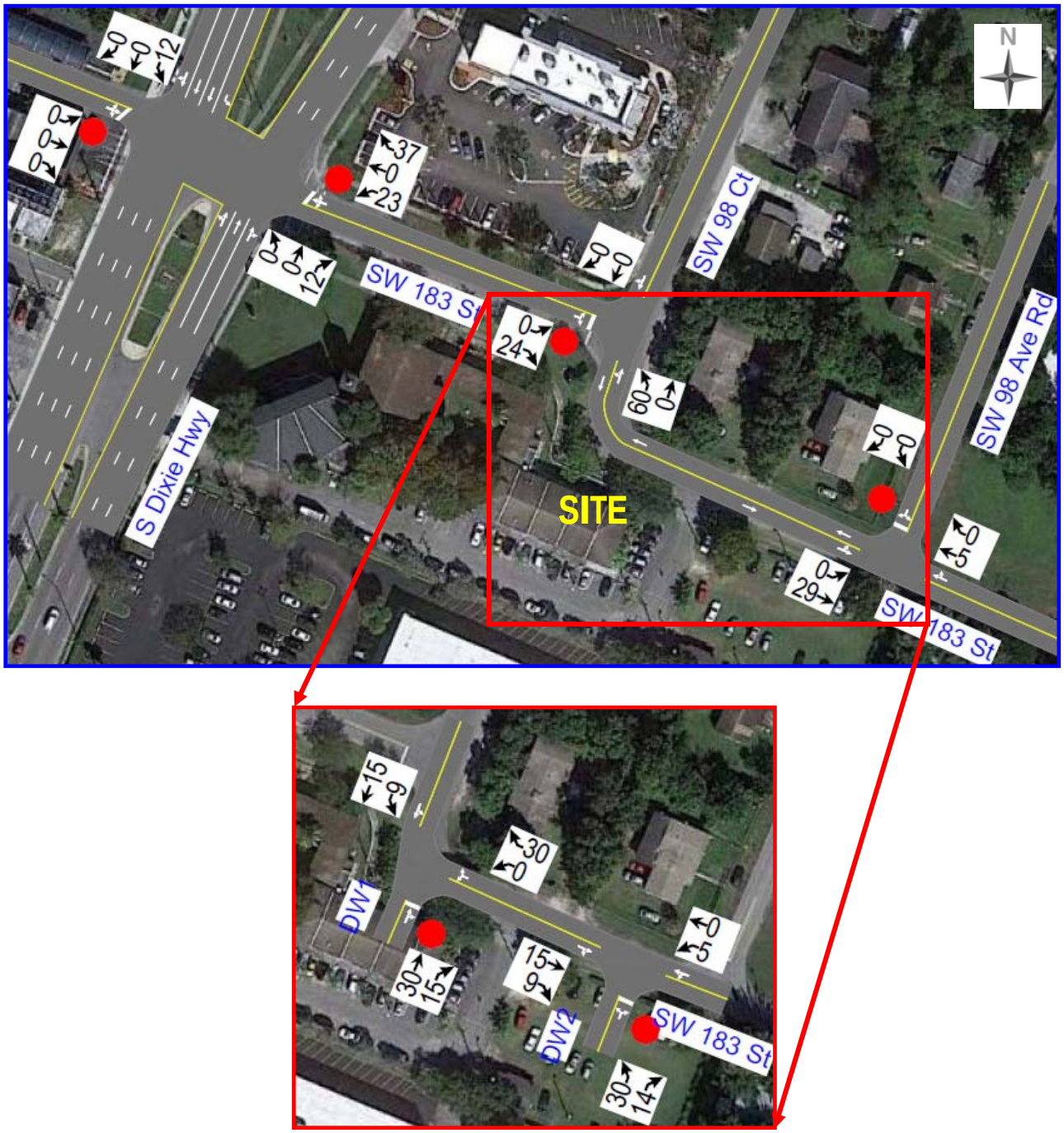
Trip Assignment

The net external trips were distributed into the four quadrants: North, South, East and West. Table 6 includes the trip distribution percentages and the corresponding trip assignments for the AM and PM peak hour. Lastly, Figures 6 and 7 depict the trips assigned to the studied intersections and project's driveways for the AM and PM peak hour, respectively.

Table 6: Directional Trip Assignment

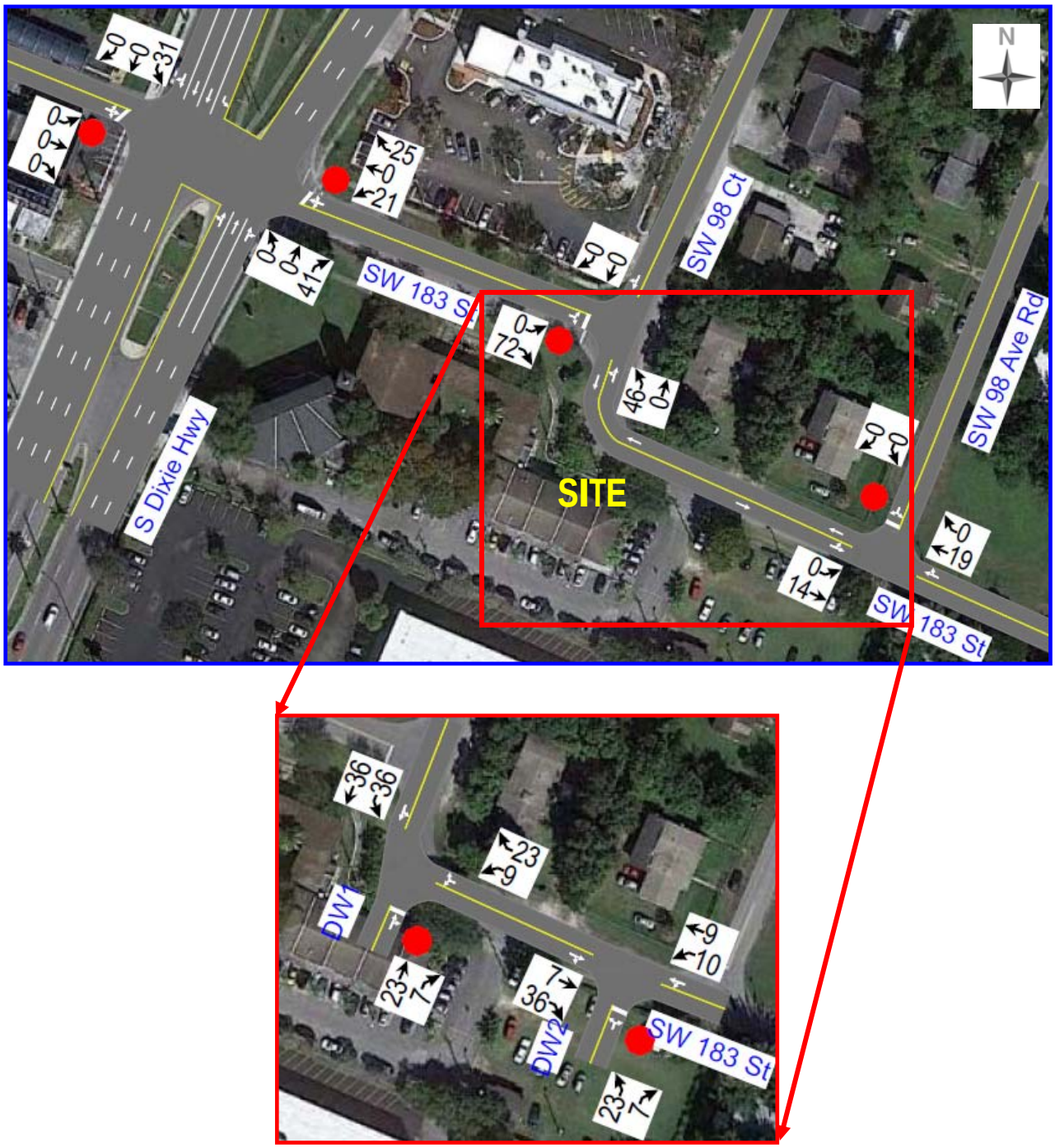
DIRECTION	DISTRIBUTION	AM PEAK HOUR			PM PEAK HOUR		
		IN	OUT	TOTAL	IN	OUT	TOTAL
NORTH	41.44%	12	37	49	37	25	62
EAST	5.28%	1	5	6	5	3	8
SOUTH	31.25%	9	28	37	29	19	48
WEST	22.10%	7	19	26	20	13	33
	100.00%	**29**	**89**	**118**	**91**	**60**	**151**

Figure 6: Project Net Trips - AM Peak Hour



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Figure 7: Project Net Trips - PM Peak Hour



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Future Condition (2019)

This section of the report describes the traffic parameters utilized to develop and to evaluate the future peak hour volumes with project in 2019.

Background Traffic Growth

Using available traffic data from the Florida Department of Transportation (FDOT Count Stations 2562 & 2563), a regression analysis was performed to estimate the background traffic growth within the project's vicinity and resulted in negative growth rate (-0.11%).

Similarly, a growth rate was calculated using the trips documented in the Miami-Dade County SERPM travel demand traffic model for the subject project TAZ 1144. This calculation yielded a growth rate of 1.71 percent and therefore, was utilized to estimate the background traffic volumes for the project build-out year of 2019. Appendix C contains the supporting documentation.

Future Traffic Volumes - AM & PM Peak Hour

The existing seasonally adjusted turning movement counts were augmented with the background growth rate of 1.71 % and the project net trips. The resulting traffic volumes represent the proposed future condition with project in 2019 and were utilized to evaluate the future traffic operations at the studied intersections. The calculations for the specific movements at each intersection are contained in Appendix D. Figures 8 and 9 depict the future traffic volumes for the AM and PM peak hour, respectively.

Level of Service (LOS)

The future traffic volumes with project traffic were evaluated to determine the Level of Service at the each intersection in 2019. The operational analysis for the future conditions revealed that all the studied intersections will maintain the existing LOS A during the future AM and PM peak hour condition. Lastly, the project's driveways were also evaluated and resulted in LOS A. Table 7 summarizes the LOS results while Appendix E includes the Synchro software sheets with other outputs such as queue lengths and volume to capacity (v/c) ratio.

Figure 8: Proposed Future Condition with Project - AM Peak Hour



Figure 9: Proposed Future Condition with Project - PM Peak Hour

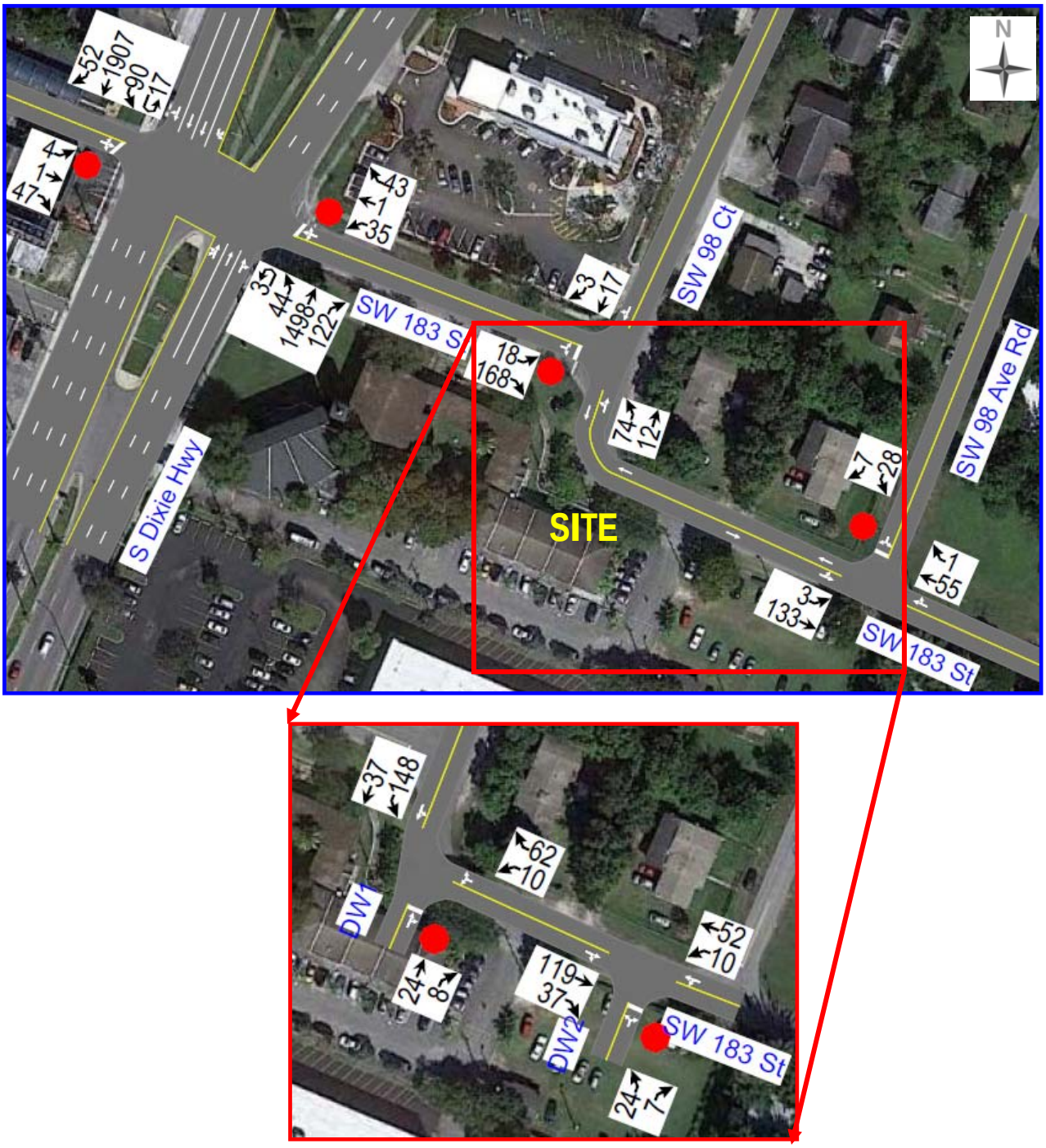


Table 7: Future Intersection LOS & Delay - AM & PM Peak Hour

	Location	Intersection Control	Approach	Future Condition with Project (2019)			
				AM Peak Hour		PM Peak Hour	
				LOS	Delay (s)	LOS	Delay (s)
Intersections	**S Dixie Highway (SR 5) & SW 183 Street**	Two-Way Stop	EB	B	10.7	C	15.0
			WB	D	25.0 *	C	24.3 *
			NB	A	0.1	A	1.5
			SB	A	0.9	A	0.8
			Overall	**A**	**1.2**	**A**	**1.7**
	SW 183 Street & SW 98 Court	Two-Way Stop	EB	A	9.4 *	A	9.5 *
			WB	-	-	-	-
			NB	A	5.9	A	6.3
			SB	A	0.0	A	0.0
			Overall	**A**	**6.8**	**A**	**7.9**
	SW 183 Street & SW 98 Avenue Road	Two-Way Stop	EB	A	0.1	A	0.2
			WB	A	0.0	A	0.0
			NB	-	-	-	-
			SB	A	9.5 *	A	9.6 *
			Overall	**A**	**1.0**	**A**	**1.6**
Driveways	**SW 183 Street & Driveway 1 (DW1) ****	All-Way Stop	EB	-	-	-	-
			WB	A	7.1	A	7.4
			NB	A	7.3	A	7.3
			SB	A	7.9	A	8.6
			Overall	**A**	**7.4**	**A**	**8.2**
	SW 183 Street & Driveway 2 (DW2)	Two-Way Stop	EB	A	0.0	A	0.0
			WB	A	0.5	A	1.2
			NB	A	9.4 *	A	9.8 *
			SB	-	-	-	-
			Overall	**A**	**2.3**	**A**	**1.5**

* TWSC Critical Approach

** Intersection was analyzed as All-Way Stop since HCM analysis does not support intersection sign configuration.

Conclusion

Based on the analysis documented in the this report, the studied intersections are currently operating within the Village's acceptable LOS threshold and will continue to do so with the new traffic generated by the subject project. Therefore, no off-site improvements are required or recommended at this time.

Lastly, it is fair to conclude that the subject project will not adversely impact the traffic operations within the study area.

Appendix A: Trip Generation

TABLE: A1

TRIP GENERATION ANALYSIS
AM PEAK HOUR

Project Name: Soleste - Bay Village

LAND USE (LU)	UNITS	ITE LU CODE	ITE TRIP GENERATION RATE	AM PEAK HOUR TRIPS				
				%	IN	%	OUT	TOTAL
Existing								
Church	11.123 Th.Sq.Ft.	560	0.56	62%	4	38%	2	6
Proposed								
Apartments	218 D.U.	220	0.51	20%	22	80%	89	111
General Office	3.100 Th.Sq.Ft.	710	1.56	88%	4	12%	1	5
Retail (Live/Work) *	9.135 Th.Sq.Ft.	820	0.96	62%	6	38%	3	9
Specialty Retail *	3.400 Th.Sq.Ft.	820	0.96	62%	2	38%	1	3
External Trips *(Proposed Trips)*				**27%**	**34**	**73%**	**94**	**128**
Internal Trip Capture			*3.0% of ExternalTrips*	*25%*	*1*	*75%*	*3*	*4*
Net External Trips *(External Trips - Existing Trips - Internal Trips)*				**25%**	**29**	**75%**	**89**	**118**

Notes: ITE Trip Generation, 9th Edition & ITE Trip Generation Handbook, 3rd Edition.

* Since ITE does not provide AM data for Specialty Retail (LU 826), ITE's rate for LU 820 (Shopping Center) was used to estimate the AM peak hour trips.

TABLE: A2

TRIP GENERATION ANALYSIS
PM PEAK HOUR

Project Name: Soleste - Bay Village

LAND USE (LU)	UNITS	ITE LU CODE	ITE TRIP GENERATION RATE	PM PEAK HOUR TRIPS				
				%	IN	%	OUT	TOTAL
Existing								
Church	11.123 Th.Sq.Ft.	560	0.55	48%	3	52%	3	6
Proposed								
Apartments	218 D.U.	220	0.62	65%	88	35%	47	135
General Office	3.100 Th.Sq.Ft.	710	1.49	17%	1	83%	4	5
Retail (Live/Work)	9.135 Th.Sq.Ft.	826	2.71	44%	11	56%	14	25
Specialty Retail	3.400 Th.Sq.Ft.	826	2.71	44%	4	56%	5	9
External Trips *(Proposed Trips)*				**60%**	**104**	**40%**	**70**	**174**
Internal Trip Capture			*9.4% of ExternalTrips*	*59%*	*10*	*41%*	*7*	*17*
Net External Trips *(External Trips - Existing Trips - Internal Trips)*				**60%**	**91**	**40%**	**60**	**151**

Notes: ITE Trip Generation, 9th Edition & ITE Trip Generation Handbook, 3rd Edition.

TABLE: A3

TRIP GENERATION ANALYSIS
DAILY CONDITION

Project Name: Soleste - Bay Village

LAND USE (LU)	UNITS	ITE LU CODE	ITE TRIP GENERATION RATE	DAILY TRIPS				
				%	IN	%	OUT	TOTAL
Existing								
Church	11.123 Th.Sq.Ft.	560	9.11	50%	51	50%	50	101
Proposed								
Apartment	218 D.U.	220	6.65	50%	725	50%	725	1,450
General Office	3.100 Th.Sq.Ft.	710	11.03	50%	17	50%	17	34
Retail (Live/Work)	9.135 Th.Sq.Ft.	826	44.32	50%	202	50%	203	405
Specialty Retail	3.400 Th.Sq.Ft.	826	44.32	50%	75	50%	76	151
Gross External Trips				**50%**	**1,019**	**50%**	**1,021**	**2,040**

Sources: ITE Trip Generation, 9th Edition & ITE Trip Generation Handbook, 3rd Edition.

Apartment
(220)

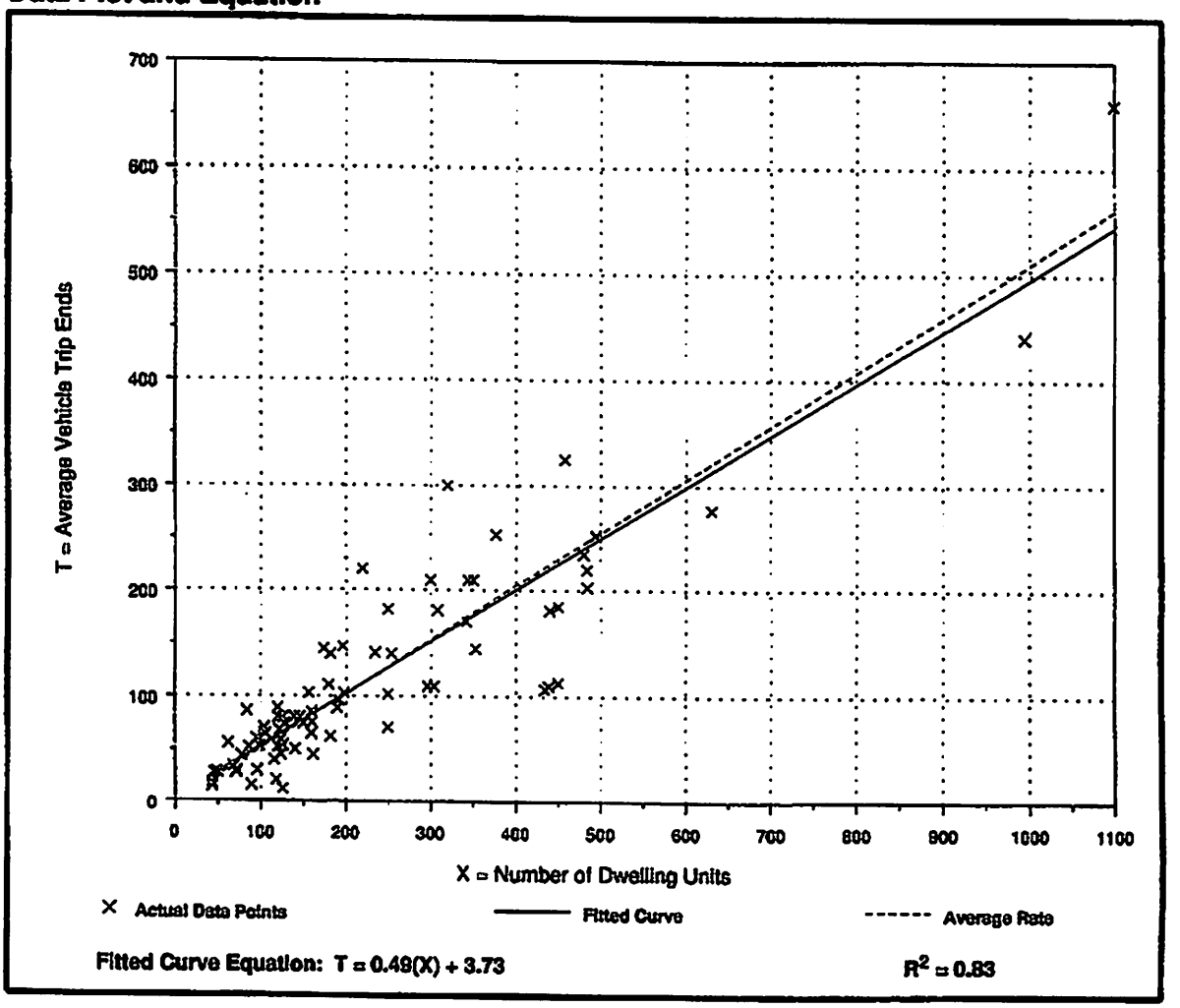
Average Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 78
Avg. Number of Dwelling Units: 235
Directional Distribution: 20% entering, 80% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.10 - 1.02	0.73

Data Plot and Equation



Fitted Curve Equation: T = 0.49(X) + 3.73

R^2 = 0.83

Apartment
(220)

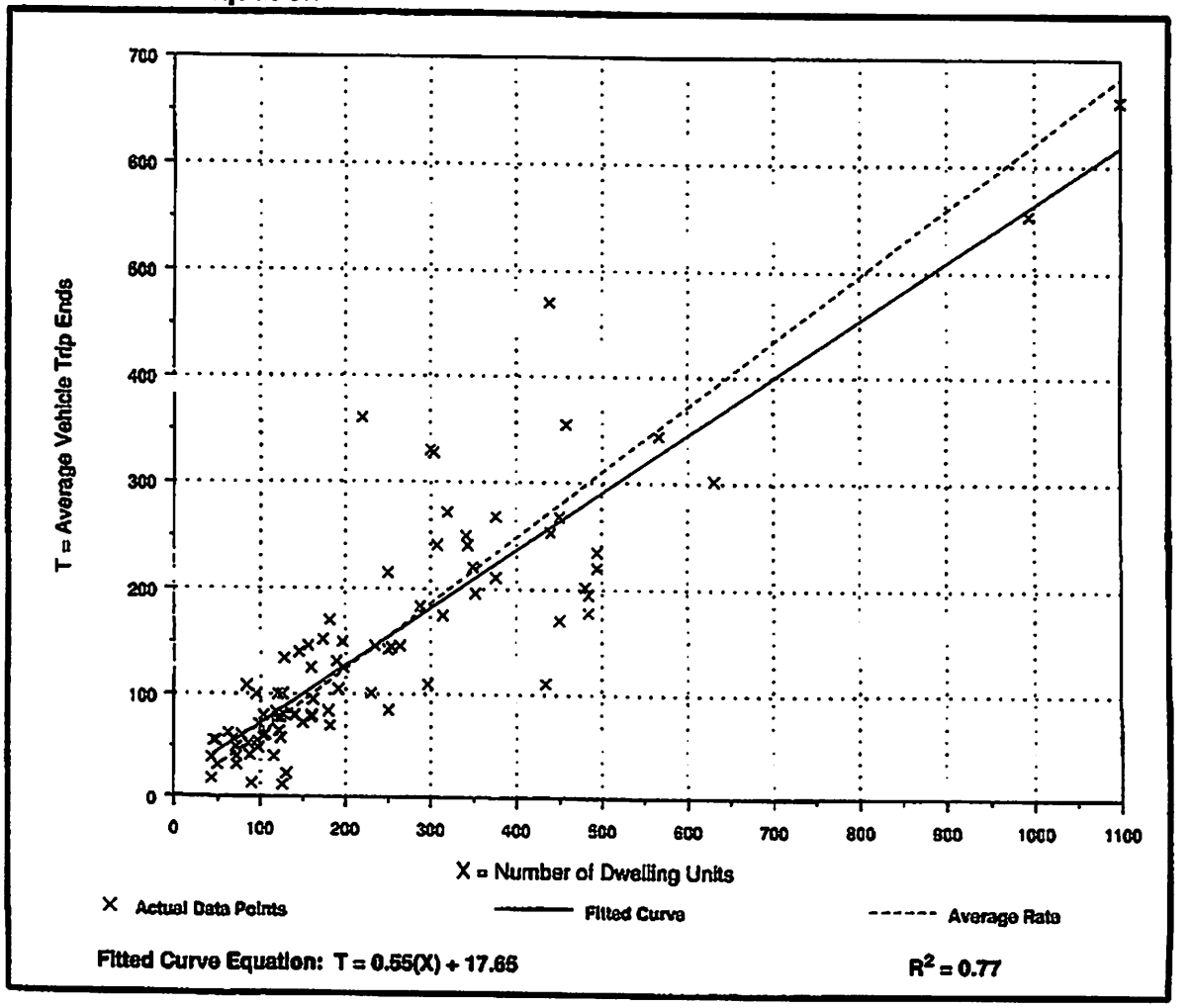
Average Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 90
Avg. Number of Dwelling Units: 233
Directional Distribution: 65% entering, 35% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.62	0.10 - 1.64	0.82

Data Plot and Equation



Fitted Curve Equation: T = 0.55(X) + 17.65

R^2 = 0.77

Apartment
(220)

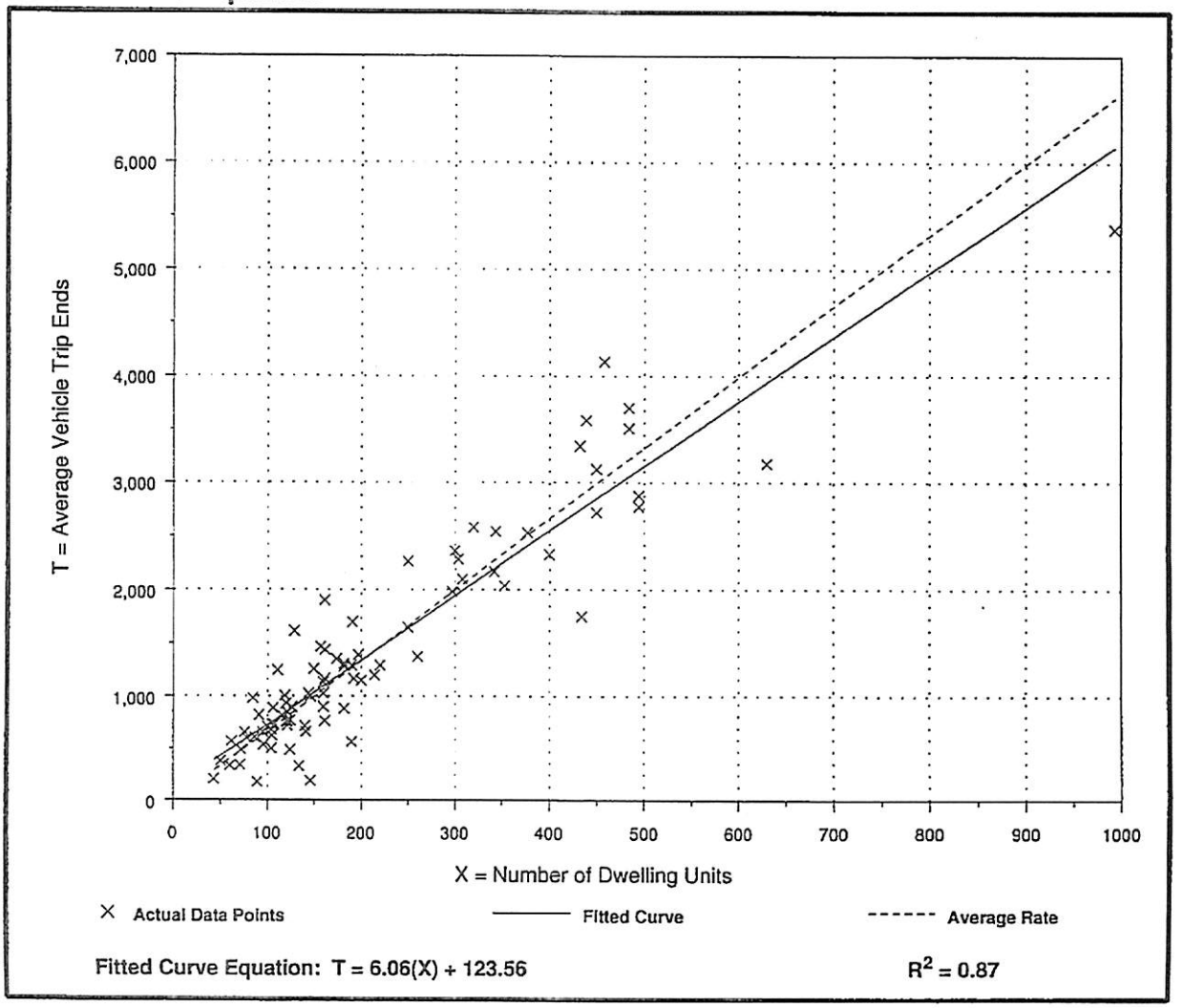
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Number of Studies: 88
Avg. Number of Dwelling Units: 210
Directional Distribution: 50% entering, 50% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.65	1.27 - 12.50	3.07

Data Plot and Equation



Fitted Curve Equation: T = 6.06(X) + 123.56

R^2 = 0.87

Church
(560)

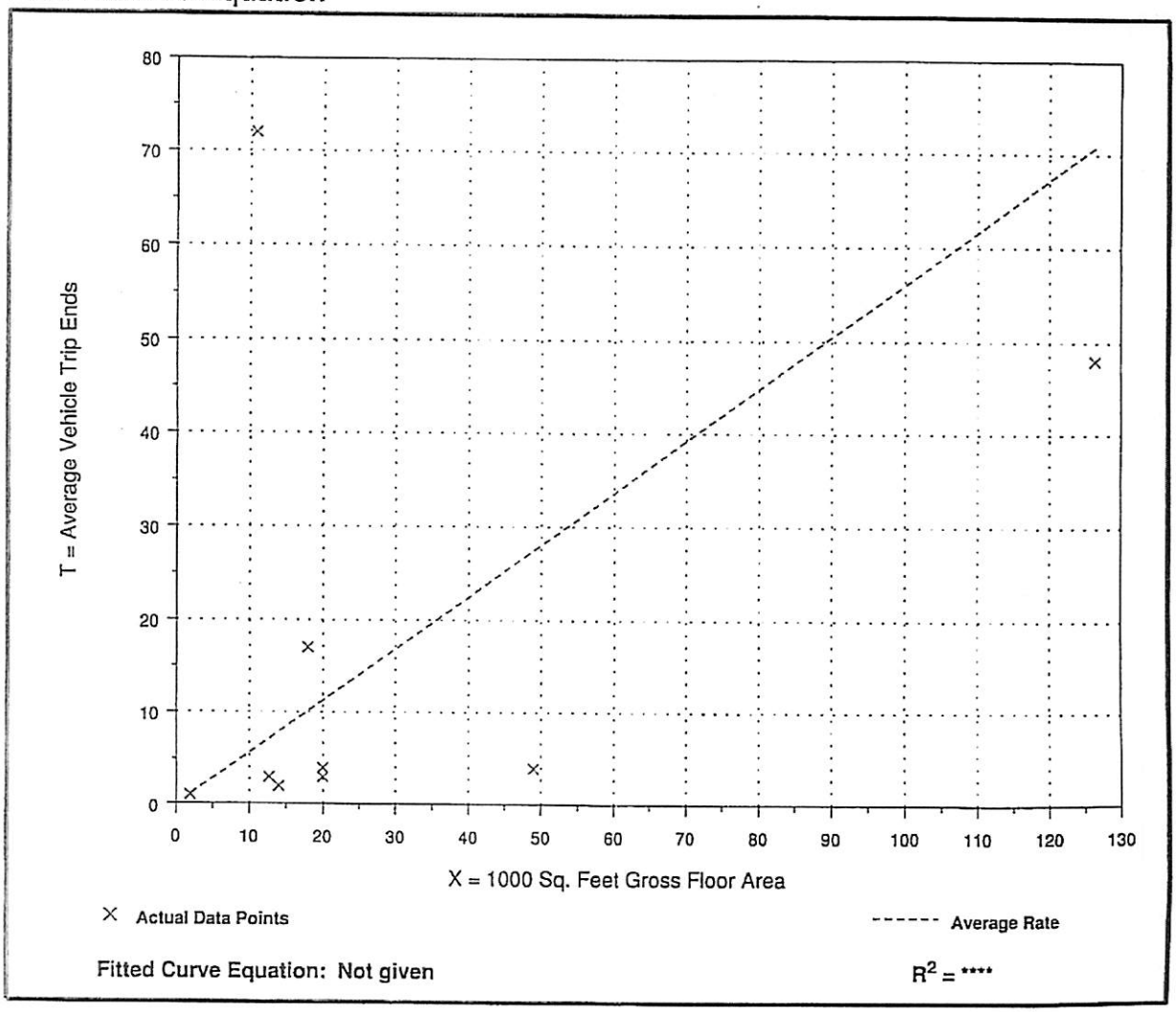
Average Vehicle Trip Ends vs: **1000 Sq. Feet Gross Floor Area**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 9
Average 1000 Sq. Feet GFA: 30
Directional Distribution: 62% entering, 38% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
0.56	0.08 - 6.61	1.45

Data Plot and Equation



Fitted Curve Equation: Not given

R^2 = ****

Church
(560)

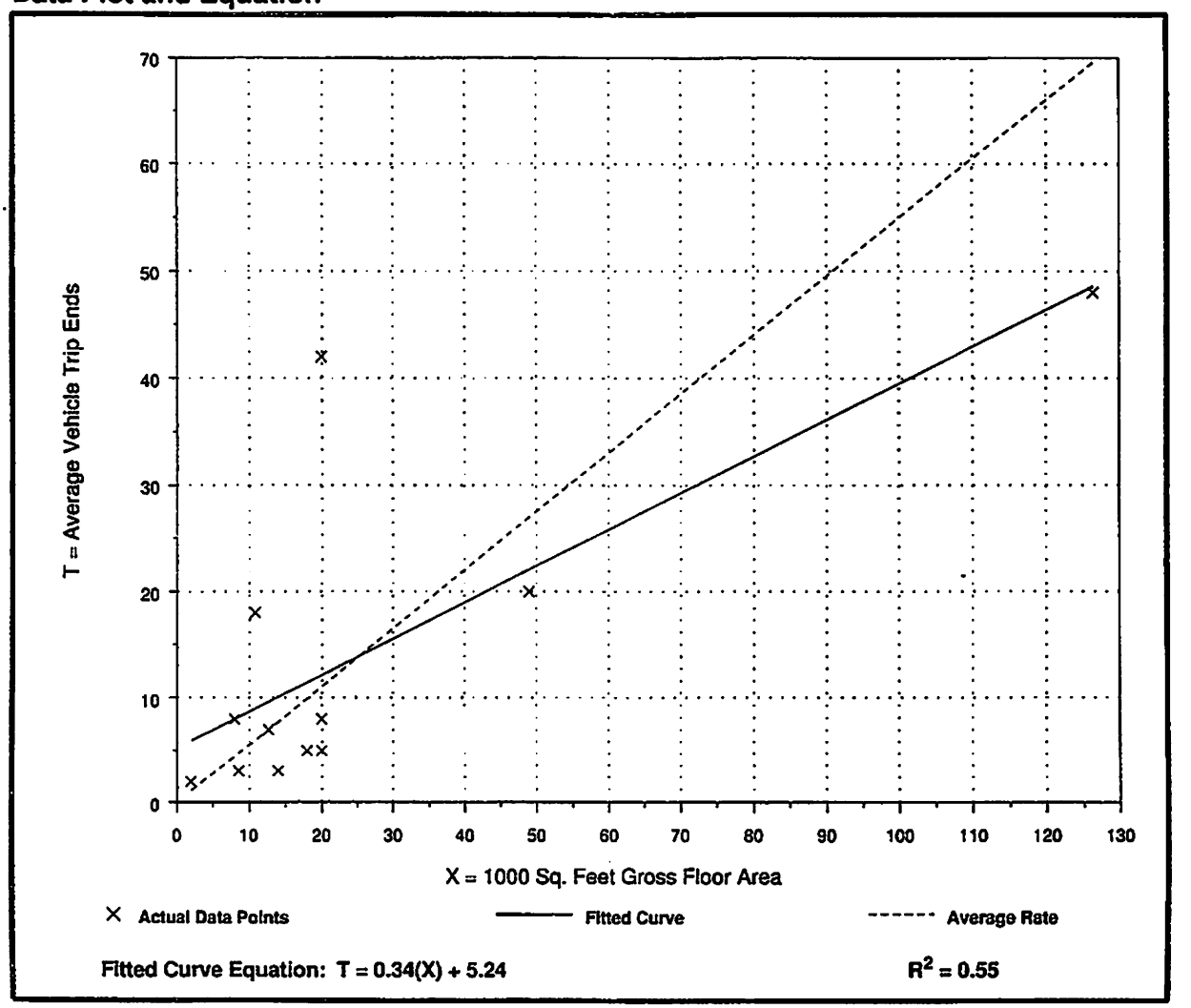
Average Vehicle Trip Ends vs: **1000 Sq. Feet Gross Floor Area**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 12
Average 1000 Sq. Feet GFA: 26
Directional Distribution: 48% entering, 52% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
0.55	0.21 - 2.10	0.87

Data Plot and Equation



Fitted Curve Equation: T = 0.34(X) + 5.24

R^2 = 0.55

Church
(560)

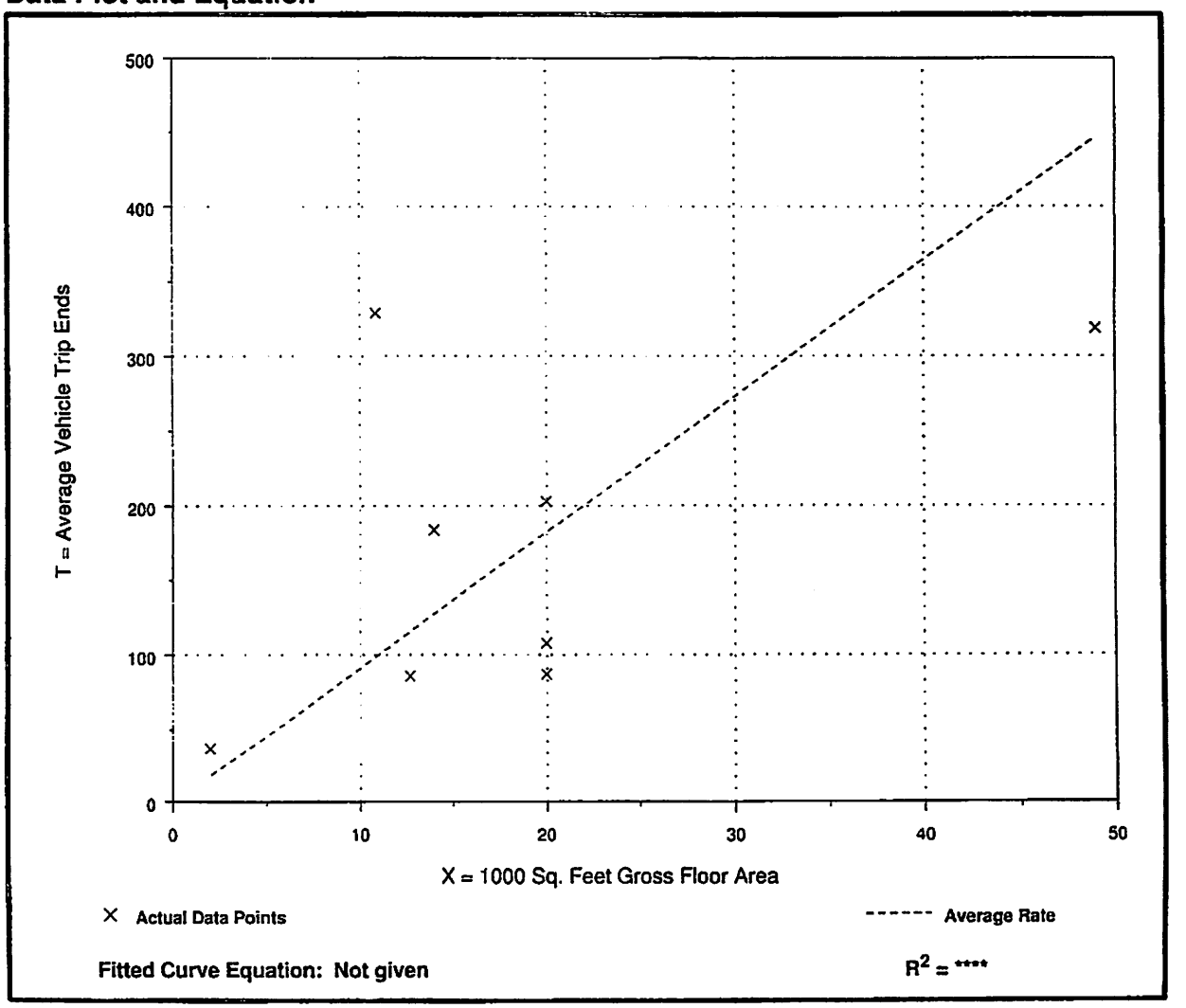
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday

Number of Studies: 8
Average 1000 Sq. Feet GFA: 19
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
9.11	4.35 - 30.20	7.20

Data Plot and Equation



Fitted Curve Equation: Not given

R^2 = ****

General Office Building
(710)

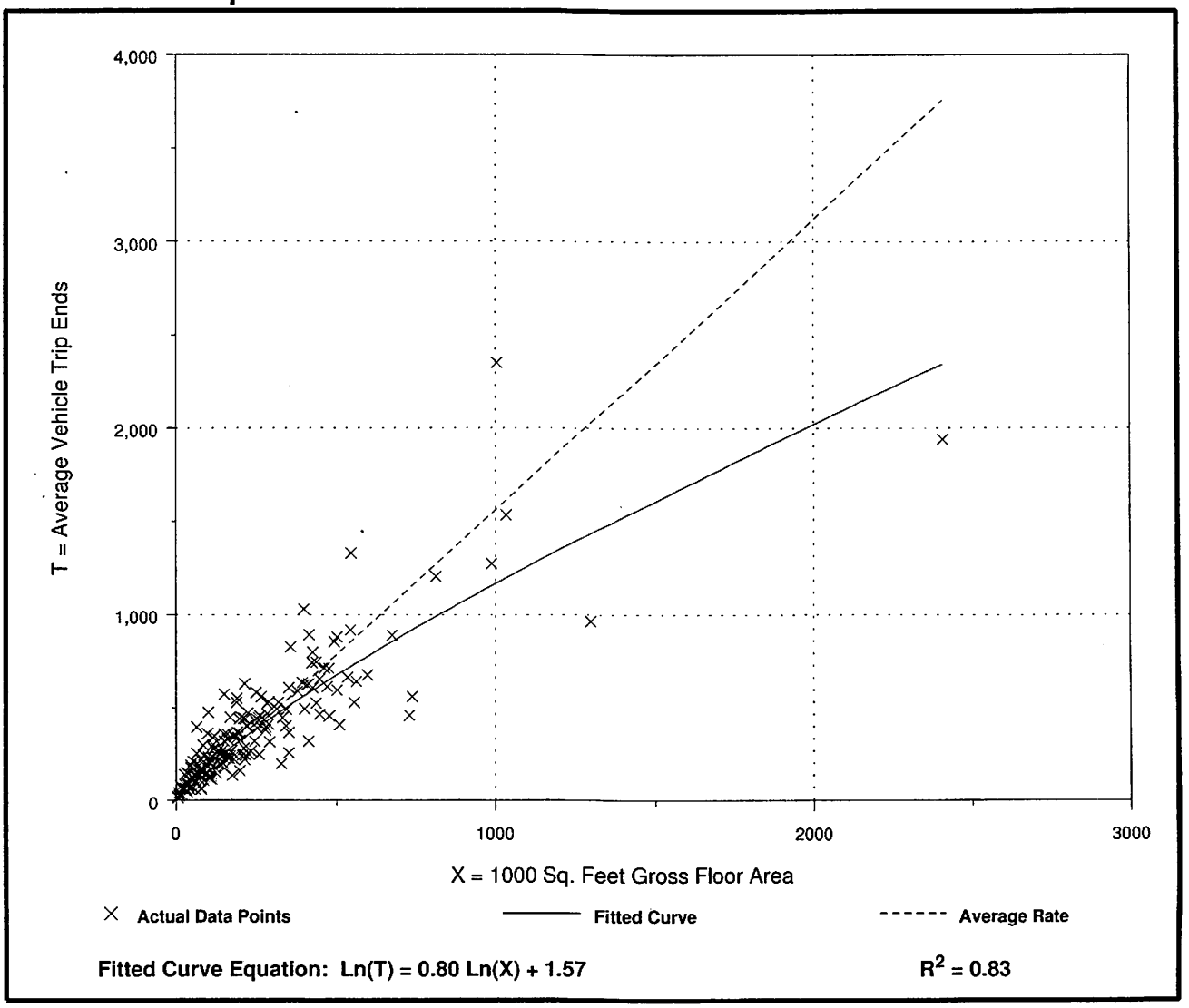
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
A.M. Peak Hour

Number of Studies: 218
Average 1000 Sq. Feet GFA: 222
Directional Distribution: 88% entering, 12% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
1.56	0.60 - 5.98	1.40

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.80 Ln(X) + 1.57

R^2 = 0.83

General Office Building
(710)

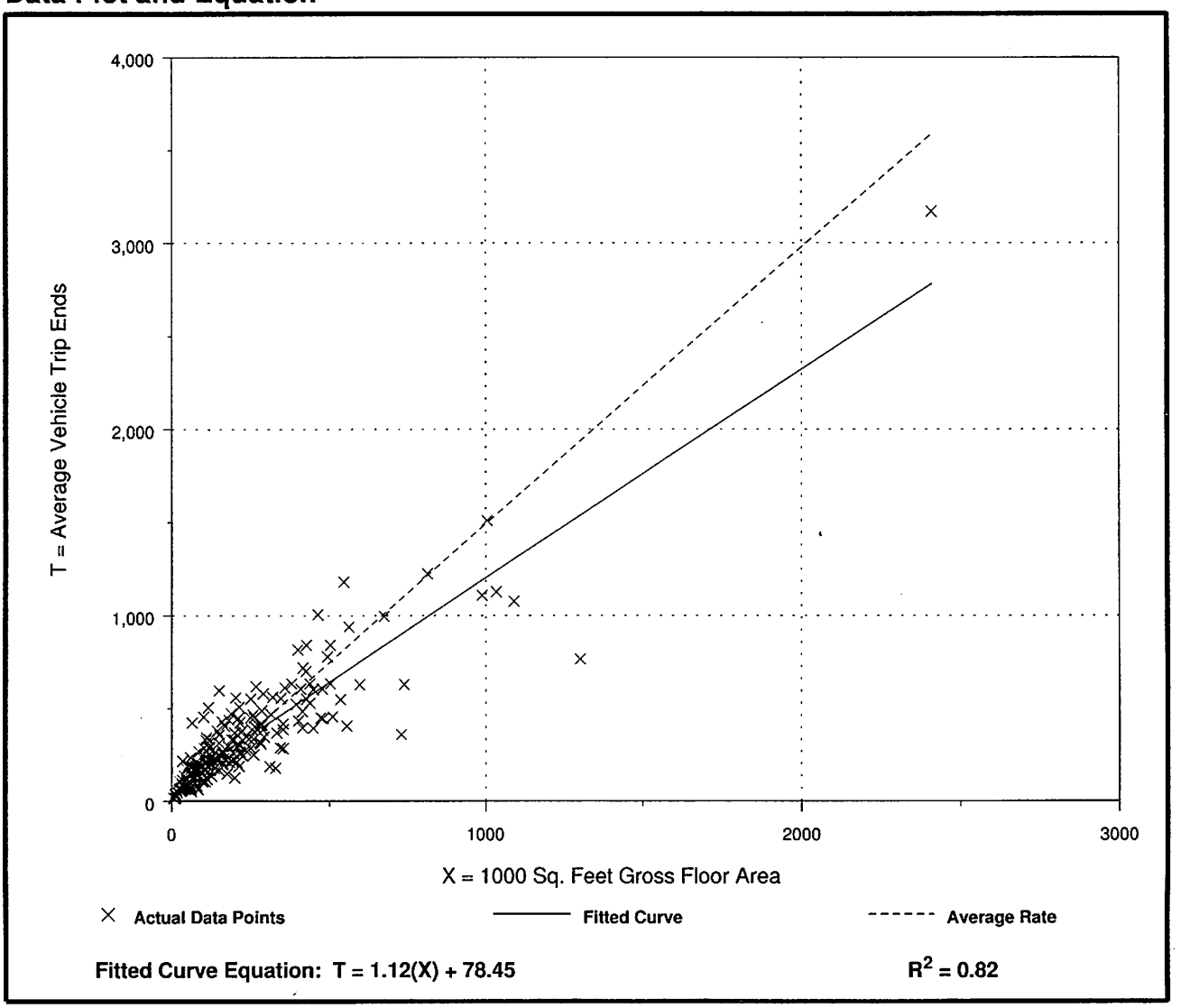
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday,
P.M. Peak Hour

Number of Studies: 236
Average 1000 Sq. Feet GFA: 215
Directional Distribution: 17% entering, 83% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
1.49	0.49 - 6.39	1.37

Data Plot and Equation



Fitted Curve Equation: T = 1.12(X) + 78.45

R^2 = 0.82

General Office Building
(710)

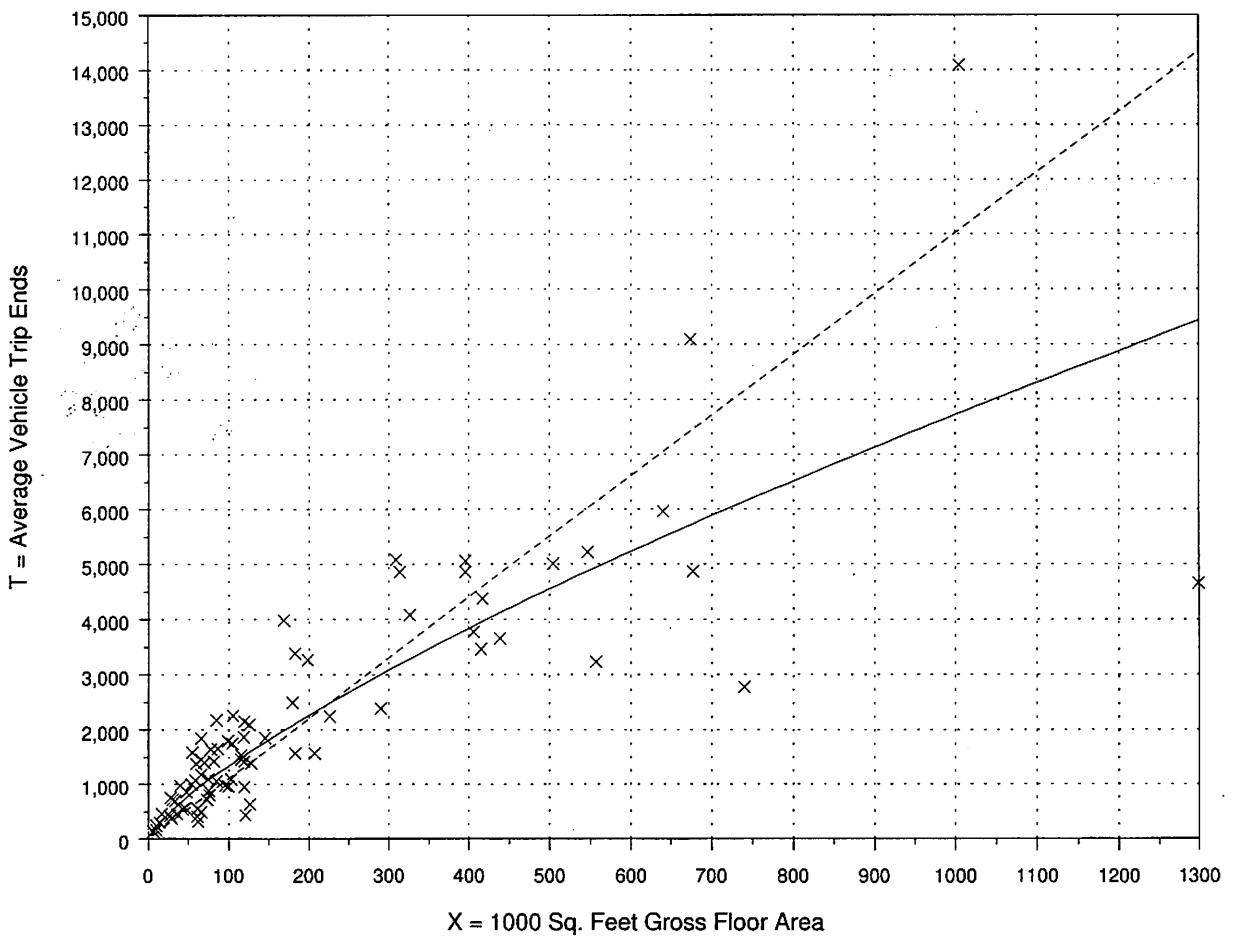
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Floor Area
On a: Weekday

Number of Studies: 79
Average 1000 Sq. Feet GFA: 197
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
11.03	3.58 - 28.80	6.15

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.76 Ln(X) + 3.68

R^2 = 0.81

Shopping Center
(820)

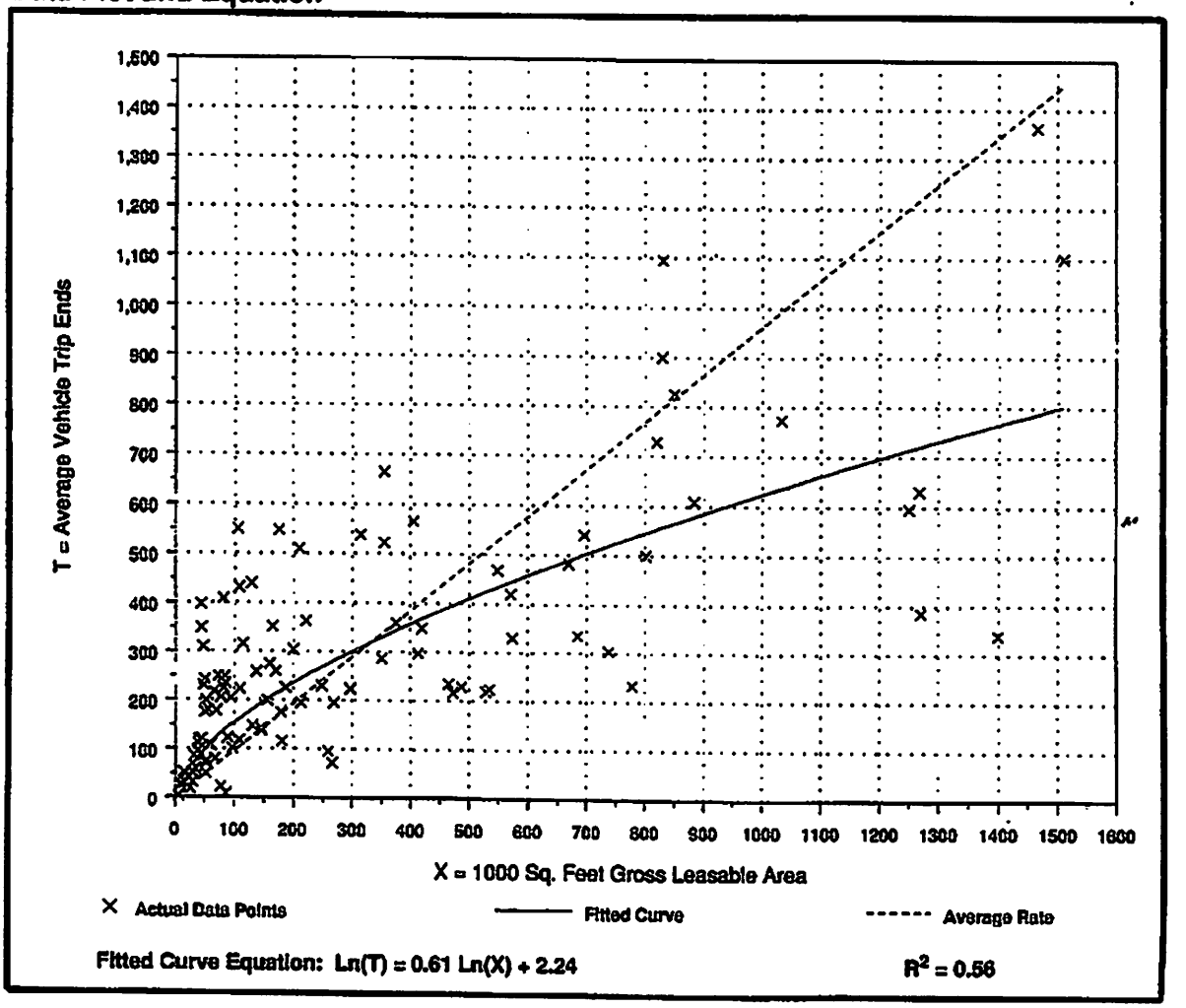
Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Leasable Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 104
Average 1000 Sq. Feet GLA: 310
Directional Distribution: 62% entering, 38% exiting

Trip Generation per 1000 Sq. Feet Gross Leasable Area

Average Rate	Range of Rates	Standard Deviation
0.96	0.10 - 9.05	1.31

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.61 Ln(X) + 2.24

$R^2 = 0.56$

Specialty Retail Center
(826)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Leasable Area
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

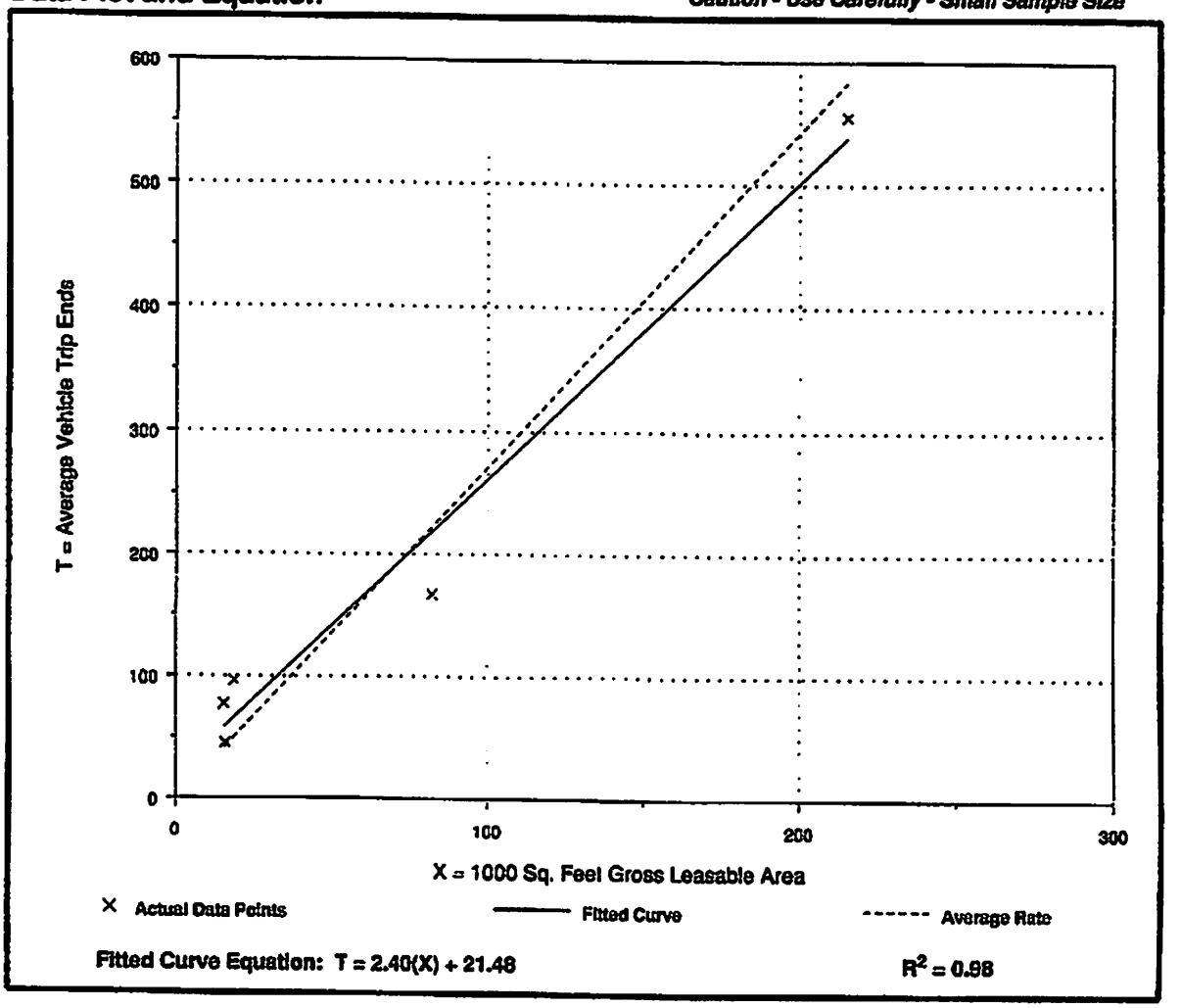
Number of Studies: 5
Average 1000 Sq. Feet GLA: 69
Directional Distribution: 44% entering, 56% exiting

Trip Generation per 1000 Sq. Feet Gross Leasable Area

Average Rate	Range of Rates	Standard Deviation
2.71	2.03 - 5.16	1.83

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Fitted Curve Equation: $T = 2.40(X) + 21.48$

$R^2 = 0.98$

Specialty Retail Center
(826)

Average Vehicle Trip Ends vs: 1000 Sq. Feet Gross Leasable Area
On a: Weekday

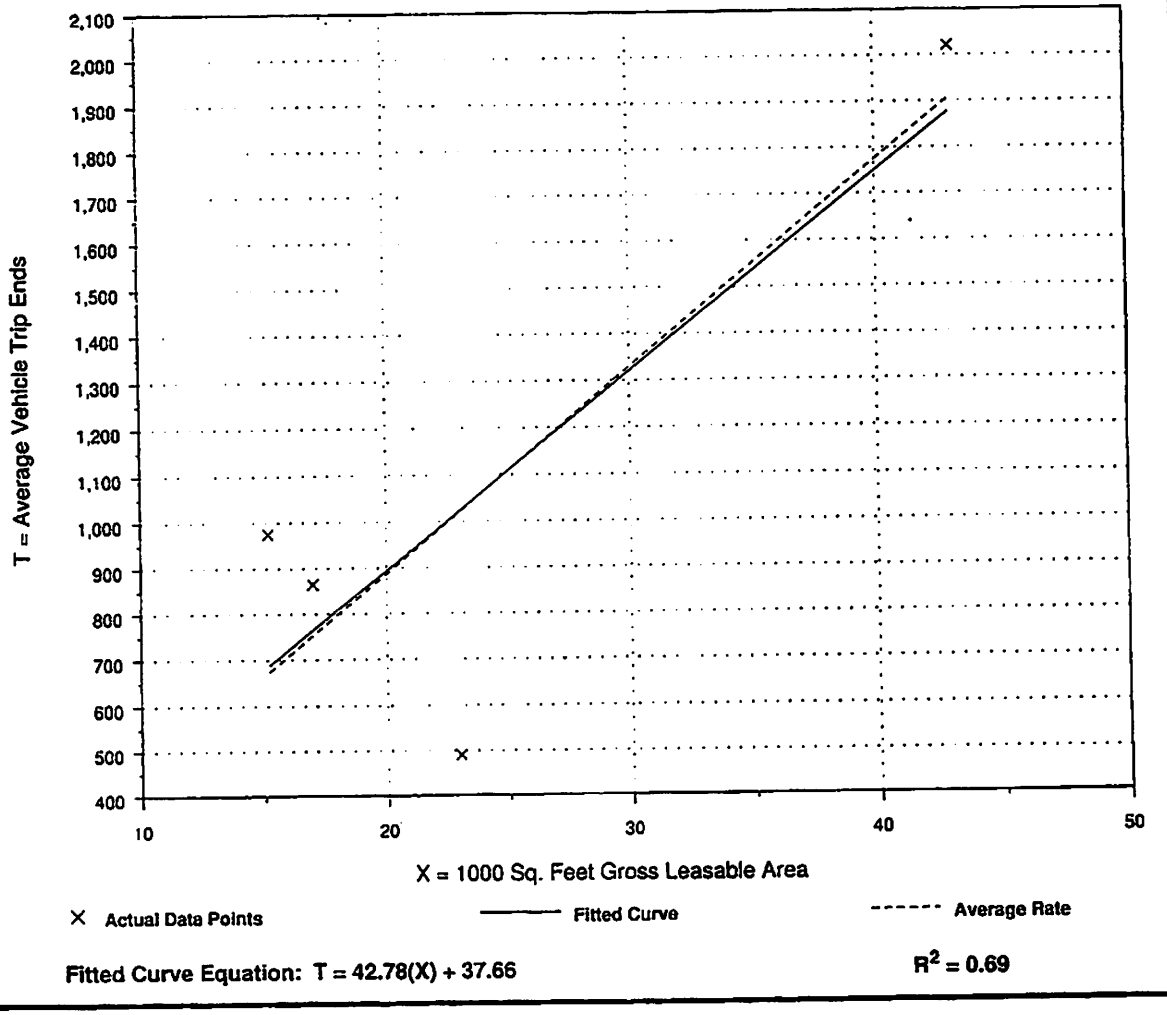
Number of Studies: 4
Average 1000 Sq. Feet GLA: 25
Directional Distribution: 50% entering, 50% exiting

Trip Generation per 1000 Sq. Feet Gross Leasable Area

Average Rate	Range of Rates	Standard Deviation
44.32	21.30 - 64.21	15.52

Data Plot and Equation

Caution - Use Carefully - Small Sample Size



Fitted Curve Equation: T = 42.78(X) + 37.66

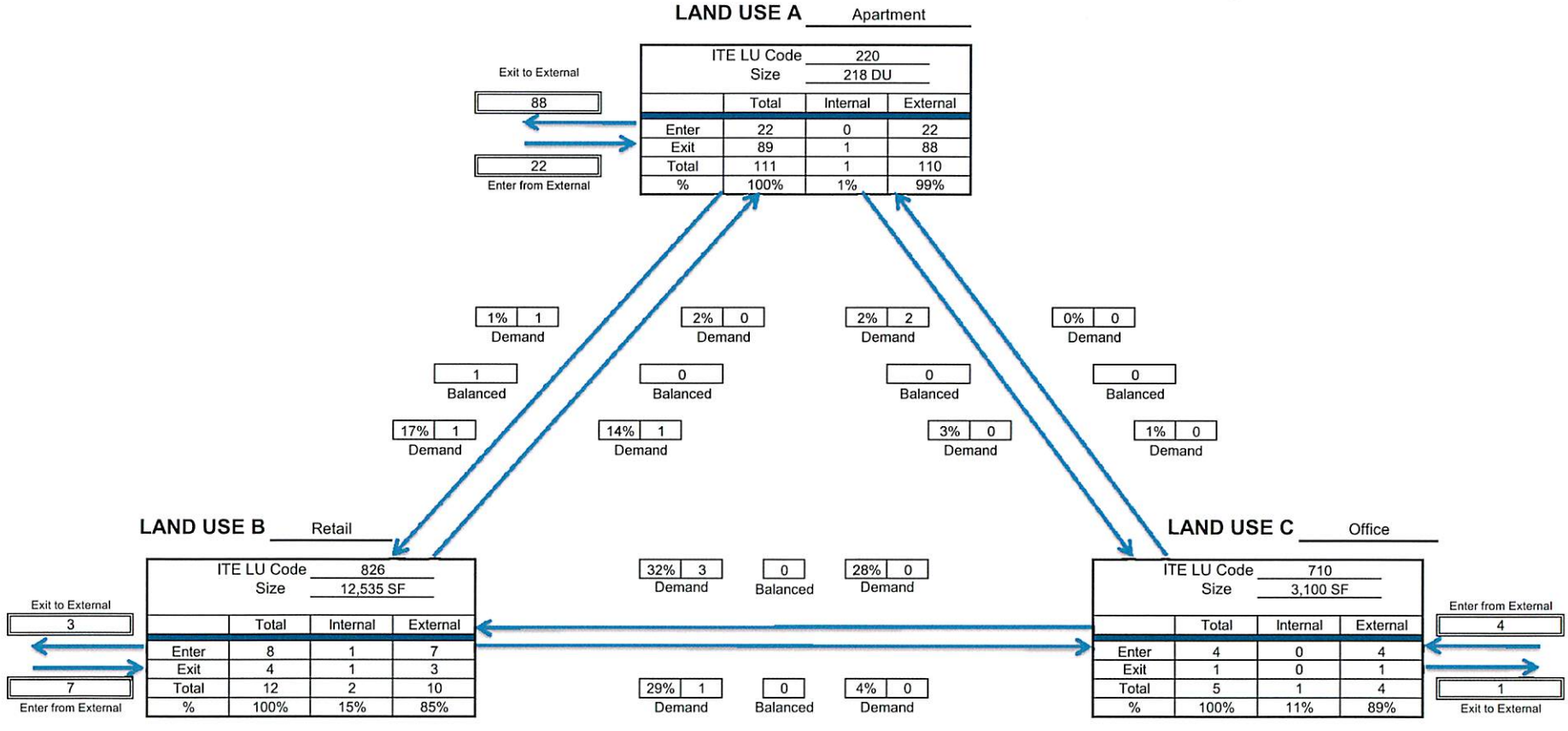
R^2 = 0.69

Analyst CV

Date 5/10/2017

MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

Time Period AM Peak Hour



Net External Trips for Multi-Use Development				
	LAND USE A	LAND USE B	LAND USE C	TOTAL
Enter	22	7	4	32
Exit	88	3	1	92
Total	110	10	4	124
Single-Use Trip Gen. Est.	111	12	5	128

INTERNAL CAPTURE

3.0%

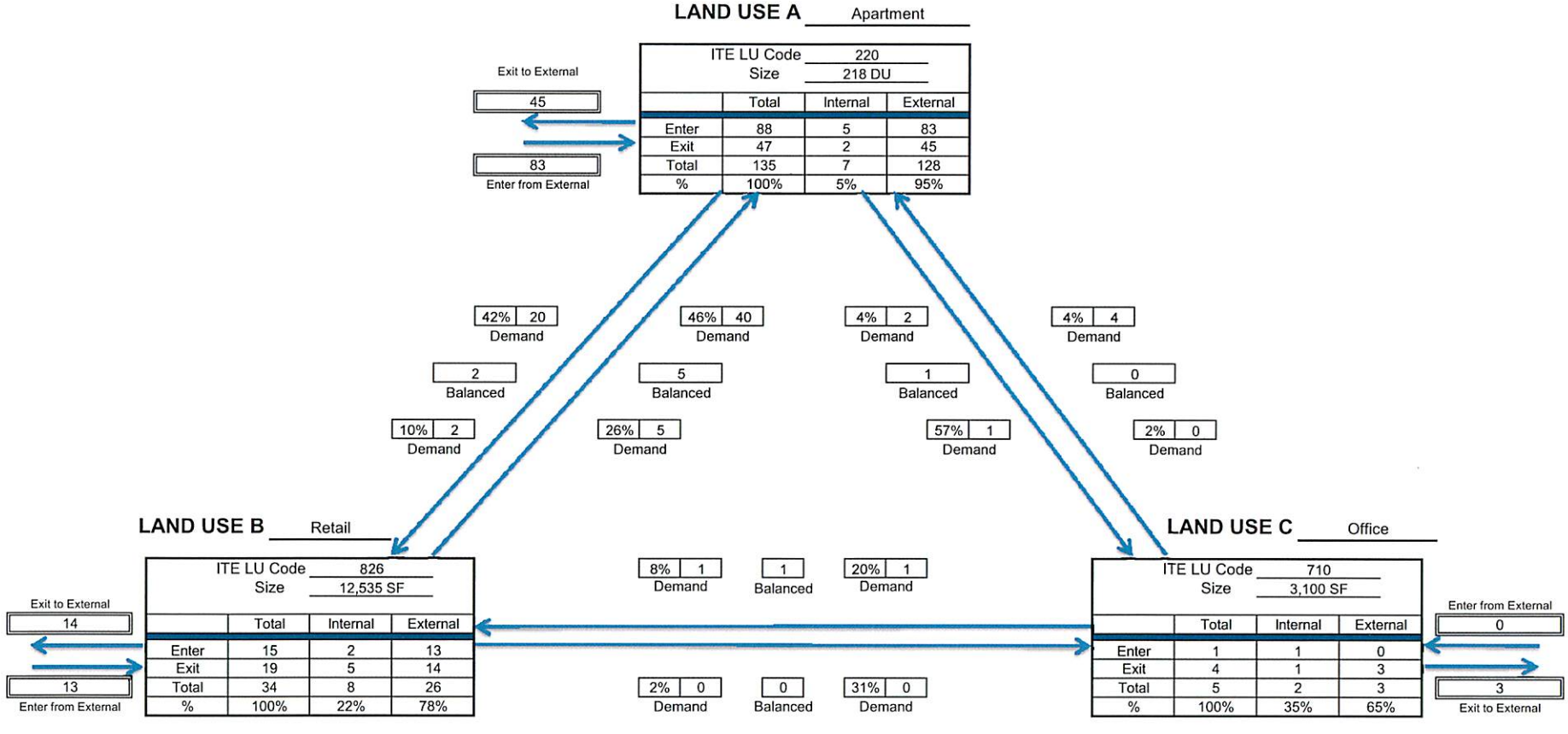
Source: Trip Generation Handbook, 3rd Edition.

Analyst CV

Date 5/10/2017

MULTI-USE DEVELOPMENT TRIP GENERATION AND INTERNAL CAPTURE SUMMARY

Time Period PM Peak Hour



Net External Trips for Multi-Use Development				
	LAND USE A	LAND USE B	LAND USE C	TOTAL
Enter	83	13	0	96
Exit	45	14	3	62
Total	128	26	3	158
Single-Use Trip Gen. Est.	135	34	5	174

INTERNAL CAPTURE
9.4%

Source: Trip Generation Handbook, 3rd Edition.

Table 6.1 Unconstrained Internal Person Trip Capture Rates for Trip Origins within a Mixed-Use Development

		WEEKDAY	
		AM Peak Hour	PM Peak Hour
From OFFICE	To Retail	28%	20%
	To Restaurant	63%	4%
	To Cinema/Entertainment	0%	0%
	To Residential	1%	2%
	To Hotel	0%	0%
From RETAIL	To Office	29%	2%
	To Restaurant	13%	29%
	To Cinema/Entertainment	0%	4%
	To Residential	14%	26%
	To Hotel	0%	5%
From RESTAURANT	To Office	31%	3%
	To Retail	14%	41%
	To Cinema/Entertainment	0%	8%
	To Residential	4%	18%
	To Hotel	3%	7%
From CINEMA/ENTERTAINMENT	To Office	0%	2%
	To Retail	0%	21%
	To Restaurant	0%	31%
	To Residential	0%	8%
	To Hotel	0%	2%
From RESIDENTIAL	To Office	2%	4%
	To Retail	1%	42%
	To Restaurant	20%	21%
	To Cinema/Entertainment	0%	0%
	To Hotel	0%	3%
From HOTEL	To Office	75%	0%
	To Retail	14%	16%
	To Restaurant	9%	68%
	To Cinema/Entertainment	0%	0%
	To Residential	0%	2%

Source: Bochner, B., K. Hooper, B. Sperry, and R. Dunphy. NCHRP Report 684: *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments.* Washington, DC: Transportation Research Board, Tables 99 and 100, 2011.

Table 6.2 Unconstrained Internal Person Trip Capture Rates for Trip Destinations within a Mixed-Use Development

		Weekday	
		AM Peak Hour	PM Peak Hour
To OFFICE	From Retail	4%	31%
	From Restaurant	14%	30%
	From Cinema/Entertainment	0%	6%
	From Residential	3%	57%
	From Hotel	3%	0%
To RETAIL	From Office	32%	8%
	From Restaurant	8%	50%
	From Cinema/Entertainment	0%	4%
	From Residential	17%	10%
	From Hotel	4%	2%
To RESTAURANT	From Office	23%	2%
	From Retail	50%	29%
	From Cinema/Entertainment	0%	3%
	From Residential	20%	14%
	From Hotel	6%	5%
To CINEMA/ENTERTAINMENT	From Office	0%	1%
	From Retail	0%	26%
	From Restaurant	0%	32%
	From Residential	0%	0%
	From Hotel	0%	0%
To RESIDENTIAL	From Office	0%	4%
	From Retail	2%	46%
	From Restaurant	5%	16%
	From Cinema/Entertainment	0%	4%
	From Hotel	0%	0%
To HOTEL	From Office	0%	0%
	From Retail	0%	17%
	From Restaurant	4%	71%
	From Cinema/Entertainment	0%	1%
	From Residential	0%	12%

Source: Bochner, B., K. Hooper, B. Sperry, and R. Dunphy. NCHRP Report 684: *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments*. Washington, DC: Transportation Research Board, Tables 101 and 102, 2011.

Appendix B: Trip Distribution / Assignment

Soleste - Bay Village

Site Traffic - AM Peak Hour



Soleste - Bay Village

Driveway Net Trips - AM Peak Hour

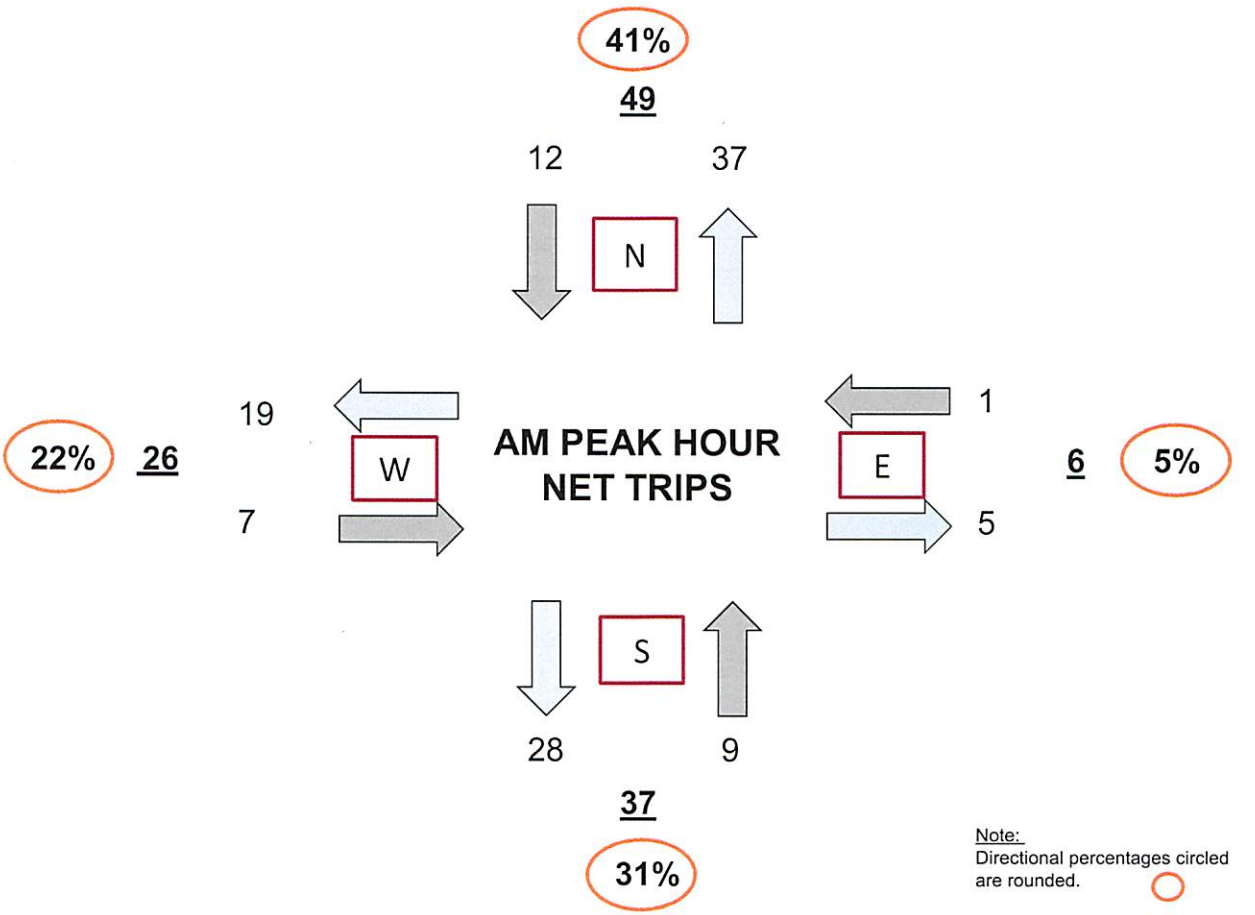


TABLE: A4

Cardinal Distribution
AM Peak Hour
Traffic Analysis Zone (TAZ) 1144

Project Name: Soleste - Bay Village

DIRECTION	DISTRIBUTION (%) DESIGN YEAR	DIRECTION	DISTRIBUTION	AM PEAK HOUR		
				IN	OUT	TOTAL
NNE	27.69	NORTH	41.44%	12	37	49
ENE	1.16					
ESE	4.12	EAST	5.28%	1	5	6
SSE	8.62					
SSW	22.63	SOUTH	31.25%	9	28	37
WSW	12.82					
WNW	9.28	WEST	22.10%	7	19	26
NNW	13.75					
TOTAL	100.00		100.00%	29	89	118



Note:
Directional percentages circled are rounded.

TABLE: A4-1

Cardinal Distribution
AM Peak Hour
Traffic Analysis Zone (TAZ) 1144

Project Name: Soleste - Bay Village

DIRECTION	DISTRIBUTION PERCENTAGES (%)			AM PEAK HOUR		
	MIAMI-DADE LRTP MODEL YEAR		DESIGN YEAR	IN	OUT	TOTAL
	2010	2040	2019			
NNE	27.90	27.20	27.69	8	25	33
ENE	0.80	2.00	1.16	0	1	1
ESE	3.70	5.10	4.12	1	4	5
SSE	8.80	8.20	8.62	2	8	10
SSW	22.30	23.40	22.63	7	20	27
WSW	14.20	9.60	12.82	4	11	15
WNW	8.80	10.40	9.28	3	8	11
NNW	13.60	14.10	13.75	4	12	16
TOTAL	100.00	100.00	100.00	29	89	118

Note:

Based on Miami-Dade Transportation Plan (to the Year 2040) Directional Trip Distribution Report, October 2014. Since the current data is only available for the model years 2010 and 2040, the eight (8) cardinal directions were interpolated to the design year of 2019.

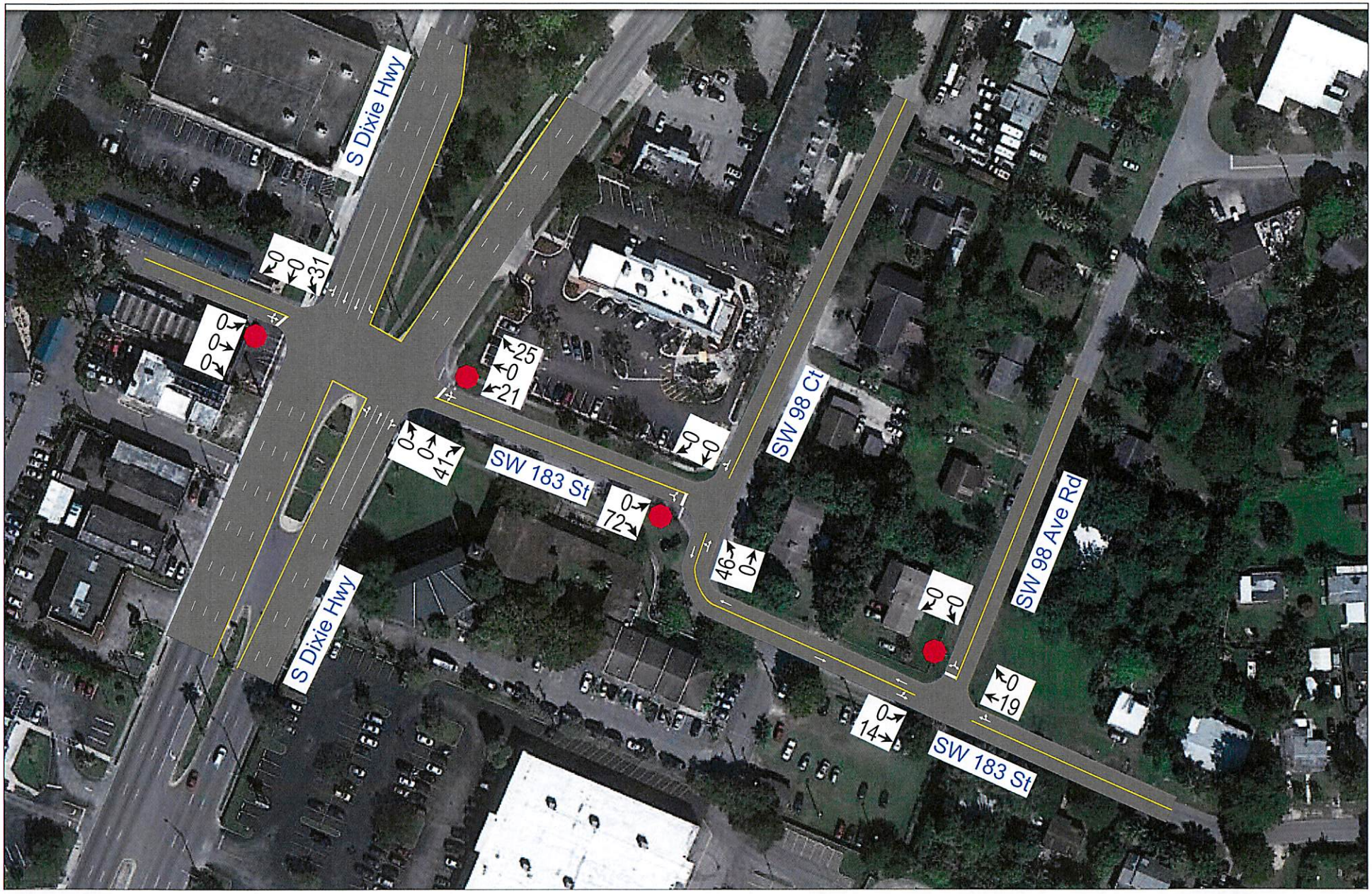
TABLE: A4-2

AM PEAK HOUR	IN	OUT	TOTAL
GROSS TRIPS:	29	89	118
PERCENT:	24.58%	75.42%	(Calculated)

DIRECTION	DISTRIBUTION %	INGRESS		EGRESS		TOTAL
		CALCULATED	USED	CALCULATED	USED	
NNE	27.69	8.030	8	24.644	25	33
ENE	1.16	0.336	0	1.032	1	1
ESE	4.12	1.195	1	3.667	4	5
SSE	8.62	2.500	2	7.672	8	10
SSW	22.63	6.563	7	20.141	20	27
WSW	12.82	3.718	4	11.410	11	15
WNW	9.28	2.691	3	8.259	8	11
NNW	13.75	3.988	4	12.238	12	16
TOTAL	100.00	29.020	29	89.062	89	118

Soleste - Bay Village

Site Traffic - PM Peak Hour



Soleste - Bay Village

Driveway Net Trips - PM Peak Hour

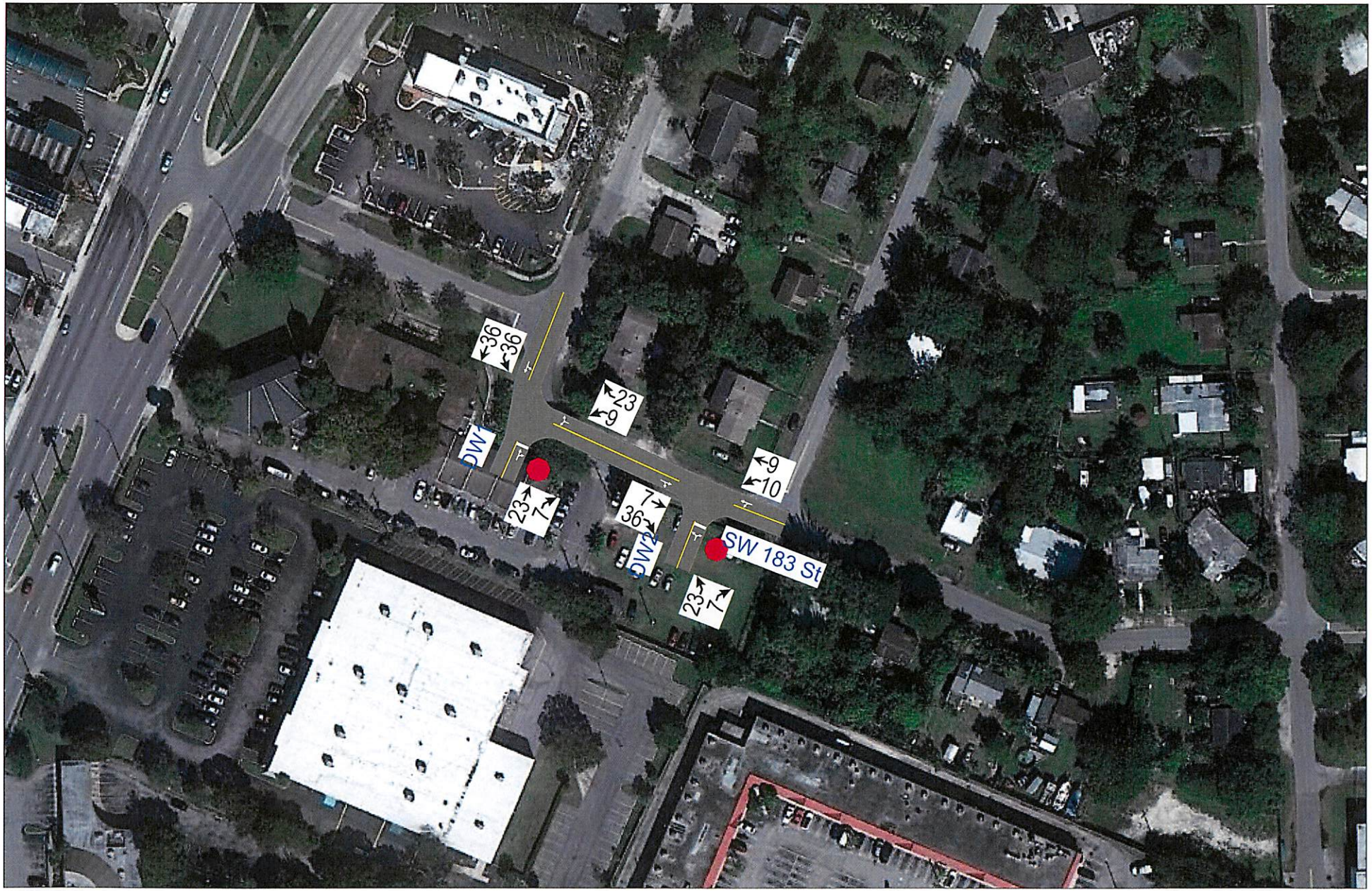
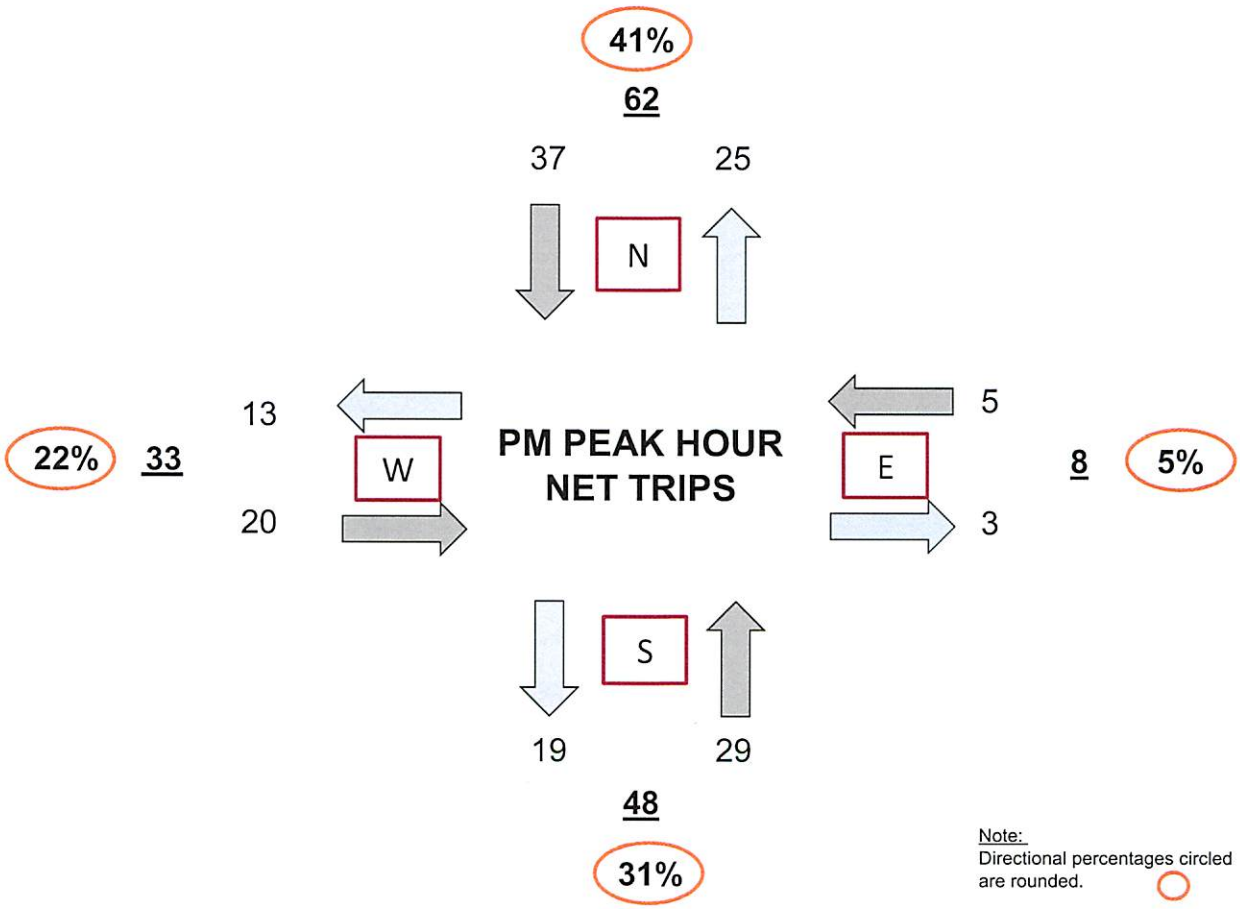


TABLE: A5

Cardinal Distribution
PM Peak Hour
Traffic Analysis Zone (TAZ) 1144

Project Name: Soleste - Bay Village

DIRECTION	DISTRIBUTION (%) DESIGN YEAR	DIRECTION	DISTRIBUTION	PM PEAK HOUR		
				IN	OUT	TOTAL
NNE	27.69	NORTH	41.44%	37	25	62
ENE	1.16					
ESE	4.12	EAST	5.28%	5	3	8
SSE	8.62					
SSW	22.63	SOUTH	31.25%	29	19	48
WSW	12.82					
WNW	9.28	WEST	22.10%	20	13	33
NNW	13.75					
TOTAL	100.00		100.00%	91	60	151



Note:
Directional percentages circled are rounded.

TABLE: A5-1

Cardinal Distribution
PM Peak Hour
Traffic Analysis Zone (TAZ) 1144

Project Name: Soleste - Bay Village

DIRECTION	DISTRIBUTION PERCENTAGES (%)			PM PEAK HOUR		
	MIAMI-DADE LRTP MODEL YEAR		DESIGN YEAR	IN	OUT	TOTAL
	2010	2040	2019			
NNE	27.90	27.20	27.69	25	17	42
ENE	0.80	2.00	1.16	1	1	2
ESE	3.70	5.10	4.12	4	2	6
SSE	8.80	8.20	8.62	8	5	13
SSW	22.30	23.40	22.63	21	14	35
WSW	14.20	9.60	12.82	12	8	20
WNW	8.80	10.40	9.28	8	5	13
NNW	13.60	14.10	13.75	12	8	20
TOTAL	100.00	100.00	100.00	91	60	151

Note:

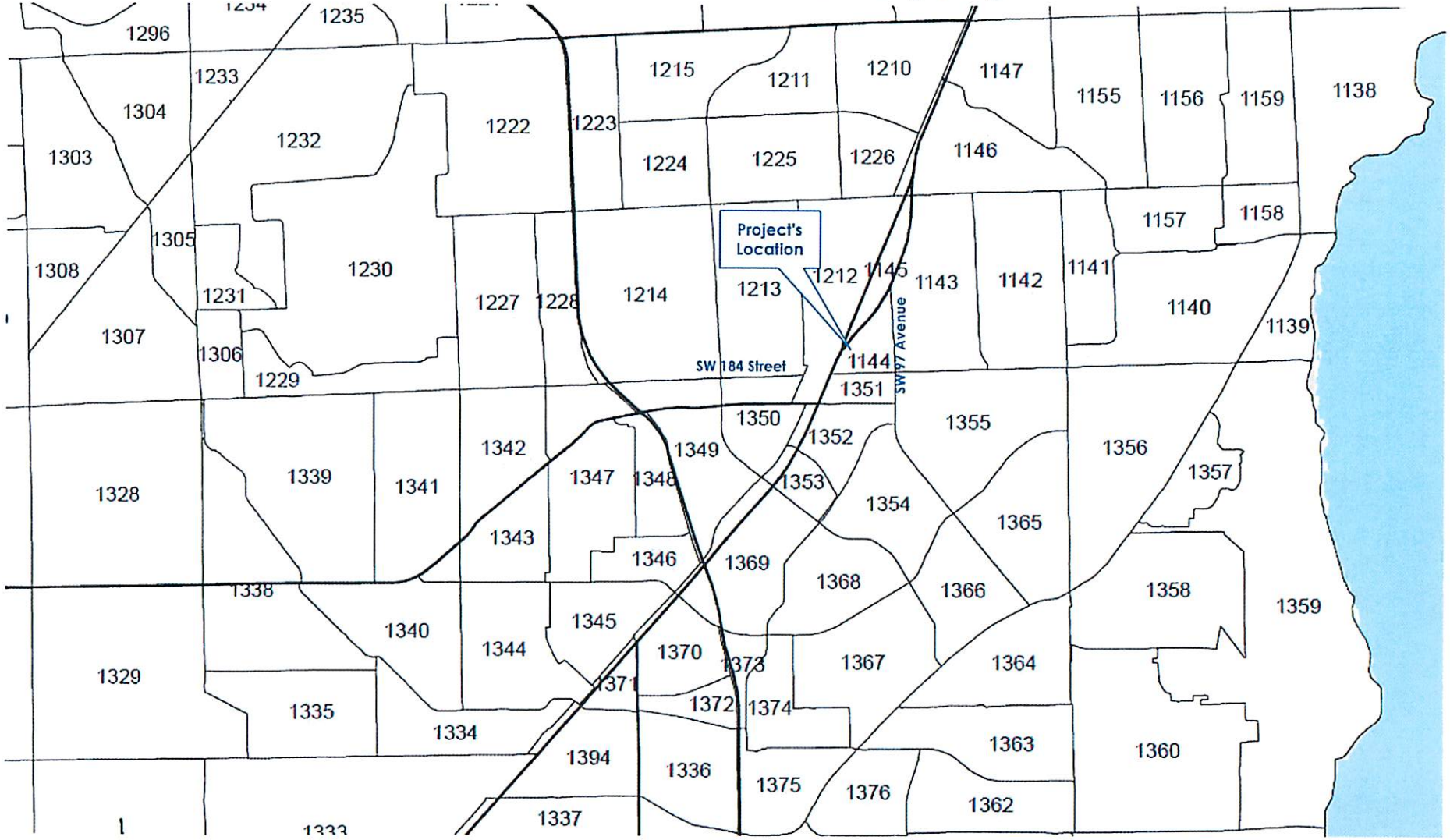
Based on Miami-Dade Transportation Plan (to the Year 2040) Directional Trip Distribution Report, October 2014. Since the current data is only available for the model years 2010 and 2040, the eight (8) cardinal directions were interpolated to the design year of 2019.

TABLE: A5-2

PM PEAK HOUR	IN	OUT	TOTAL
GROSS TRIPS:	91	60	151
PERCENT:	60.26%	39.74%	(Calculated)

DIRECTION	DISTRIBUTION %	INGRESS		EGRESS		TOTAL
		CALCULATED	USED	CALCULATED	USED	
NNE	27.69	25.198	25	16.614	17	42
ENE	1.16	1.056	1	0.696	1	2
ESE	4.12	3.749	4	2.472	2	6
SSE	8.62	7.844	8	5.172	5	13
SSW	22.63	20.593	21	13.578	14	35
WSW	12.82	11.666	12	7.692	8	20
WNW	9.28	8.445	8	5.568	5	13
NNW	13.75	12.513	12	8.250	8	20
TOTAL	100.00	91.064	91	60.042	60	151

TRAFFIC ANALYSIS ZONE (TAZ)



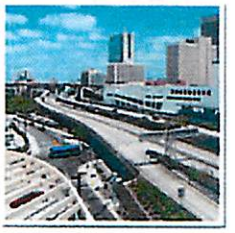
MOBILITY OPTIONS
2040 Miami-Dade Transportation Plan
EYES ON THE FUTURE

MIAMI-DADE 2040

Long Range Transportation Plan

Directional Trip Distribution Report

October 23, 2014



MIAMI-DADE METROPOLITAN
PLANNING ORGANIZATION



Miami-Dade 2010 Directional Distribution Summary

Origin TAZ			Cardinal Directions								Total
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
1128	4028	PERCENT	26.6	9.1	0.8	0.8	8.4	23.2	13.1	18.0	
1129	4029	TRIPS	642	178	178	13	212	561	313	553	2,650
1129	4029	PERCENT	24.2	6.7	6.7	0.5	8.0	21.2	11.8	20.9	
1130	4030	TRIPS	288	33	0	0	35	222	130	258	966
1130	4030	PERCENT	29.8	3.4	0.0	0.0	3.6	23.0	13.5	26.7	
1131	4031	TRIPS	1,042	43	0	0	204	683	751	901	3,624
1131	4031	PERCENT	28.8	1.2	0.0	0.0	5.6	18.9	20.7	24.9	
1132	4032	TRIPS	216	57	3	28	119	172	207	133	935
1132	4032	PERCENT	23.1	6.1	0.3	3.0	12.7	18.4	22.1	14.2	
1133	4033	TRIPS	293	10	0	0	56	165	264	266	1,054
1133	4033	PERCENT	27.8	1.0	0.0	0.0	5.3	15.7	25.1	25.2	
1134	4034	TRIPS	361	35	0	0	59	299	424	450	1,628
1134	4034	PERCENT	22.2	2.2	0.0	0.0	3.6	18.4	26.0	27.6	
1135	4035	TRIPS	2	0	0	0	0	3	1	3	9
1135	4035	PERCENT	22.2	0.0	0.0	0.0	0.0	33.3	11.1	33.3	
1136	4036	TRIPS	434	20	0	0	72	273	321	664	1,784
1136	4036	PERCENT	24.3	1.1	0.0	0.0	4.0	15.3	18.0	37.2	
1137	4037	TRIPS	151	0	0	0	42	176	118	220	707
1137	4037	PERCENT	21.4	0.0	0.0	0.0	5.9	24.9	16.7	31.1	
1138	4038	TRIPS	295	10	0	0	63	151	315	312	1,146
1138	4038	PERCENT	25.7	0.9	0.0	0.0	5.5	13.2	27.5	27.2	
1139	4039	TRIPS	115	0	0	28	109	231	260	277	1,020
1139	4039	PERCENT	11.3	0.0	0.0	2.8	10.7	22.7	25.5	27.2	
1140	4040	TRIPS	999	43	3	104	152	408	332	502	2,543
1140	4040	PERCENT	39.3	1.7	0.1	4.1	6.0	16.0	13.1	19.7	
1141	4041	TRIPS	470	25	10	36	95	131	208	367	1,342
1141	4041	PERCENT	35.0	1.9	0.8	2.7	7.1	9.8	15.5	27.4	
1142	4042	TRIPS	908	146	0	91	262	363	403	596	2,769
1142	4042	PERCENT	32.8	5.3	0.0	3.3	9.5	13.1	14.6	21.5	
1143	4043	TRIPS	1,255	115	142	254	631	401	427	768	3,993
1143	4043	PERCENT	31.4	2.9	3.6	6.4	15.8	10.0	10.7	19.2	
1144	4044	TRIPS	505	14	67	159	404	257	160	247	1,813
1144	4044	PERCENT	27.9	0.8	3.7	8.8	22.3	14.2	8.8	13.6	
1145	4045	TRIPS	1,446	175	159	550	1,577	637	558	727	5,829
1145	4045	PERCENT	24.8	3.0	2.7	9.4	27.1	10.9	9.6	12.5	
1146	4046	TRIPS	1,318	134	87	523	1,115	852	764	890	5,683
1146	4046	PERCENT	23.2	2.4	1.5	9.2	19.6	15.0	13.4	15.7	
1147	4047	TRIPS	1,202	213	130	89	721	416	506	737	4,014
1147	4047	PERCENT	30.0	5.3	3.2	2.2	18.0	10.4	12.6	18.4	
1148	4048	TRIPS	1,321	298	142	285	1,914	1,048	803	1,516	7,327
1148	4048	PERCENT	18.0	4.1	1.9	3.9	26.1	14.3	11.0	20.7	

Miami-Dade 2040 Directional Distribution Summary

Origin TAZ			Cardinal Directions								Total
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
1128	4028	PERCENT	27.9	10.0	1.1	0.5	6.4	21.0	13.0	20.1	
1129	4029	TRIPS	760	141	73	12	145	588	359	578	2,656
1129	4029	PERCENT	28.6	5.3	2.8	0.5	5.5	22.1	13.5	21.8	
1130	4030	TRIPS	307	40	0	15	74	181	151	208	976
1130	4030	PERCENT	31.5	4.1	0.0	1.5	7.6	18.6	15.5	21.3	
1131	4031	TRIPS	1,125	56	4	0	193	794	716	895	3,783
1131	4031	PERCENT	29.7	1.5	0.1	0.0	5.1	21.0	18.9	23.7	
1132	4032	TRIPS	298	110	1	23	136	185	272	246	1,271
1132	4032	PERCENT	23.5	8.7	0.1	1.8	10.7	14.6	21.4	19.4	
1133	4033	TRIPS	289	4	0	0	43	172	237	289	1,034
1133	4033	PERCENT	28.0	0.4	0.0	0.0	4.2	16.6	22.9	28.0	
1134	4034	TRIPS	336	12	0	0	92	242	279	439	1,400
1134	4034	PERCENT	24.0	0.9	0.0	0.0	6.6	17.3	19.9	31.4	
1135	4035	TRIPS	2	0	0	0	0	12	1	7	22
1135	4035	PERCENT	9.1	0.0	0.0	0.0	0.0	54.6	4.6	31.8	
1136	4036	TRIPS	547	12	0	0	144	289	465	681	2,138
1136	4036	PERCENT	25.6	0.6	0.0	0.0	6.7	13.5	21.8	31.9	
1137	4037	TRIPS	96	5	0	0	41	86	155	156	539
1137	4037	PERCENT	17.8	0.9	0.0	0.0	7.6	16.0	28.8	28.9	
1138	4038	TRIPS	291	0	0	0	104	243	357	390	1,385
1138	4038	PERCENT	21.0	0.0	0.0	0.0	7.5	17.6	25.8	28.2	
1139	4039	TRIPS	193	0	0	23	115	304	218	313	1,166
1139	4039	PERCENT	16.6	0.0	0.0	2.0	9.9	26.1	18.7	26.8	
1140	4040	TRIPS	1,002	11	8	145	339	485	449	639	3,078
1140	4040	PERCENT	32.6	0.4	0.3	4.7	11.0	15.8	14.6	20.8	
1141	4041	TRIPS	466	40	4	27	168	255	208	328	1,496
1141	4041	PERCENT	31.2	2.7	0.3	1.8	11.2	17.1	13.9	21.9	
1142	4042	TRIPS	756	107	12	114	569	458	438	694	3,148
1142	4042	PERCENT	24.0	3.4	0.4	3.6	18.1	14.6	13.9	22.1	
1143	4043	TRIPS	1,803	134	100	236	1,263	845	993	888	6,262
1143	4043	PERCENT	28.8	2.1	1.6	3.8	20.2	13.5	15.9	14.2	
1144	4044	TRIPS	821	61	155	247	706	290	313	424	3,017
1144	4044	PERCENT	27.2	2.0	5.1	8.2	23.4	9.6	10.4	14.1	
1145	4045	TRIPS	2,289	326	226	557	2,297	1,095	1,214	1,281	9,285
1145	4045	PERCENT	24.7	3.5	2.4	6.0	24.7	11.8	13.1	13.8	
1146	4046	TRIPS	1,801	216	112	502	1,485	932	927	893	6,868
1146	4046	PERCENT	26.2	3.2	1.6	7.3	21.6	13.6	13.5	13.0	
1147	4047	TRIPS	1,315	112	118	94	1,099	494	556	1,038	4,826
1147	4047	PERCENT	27.3	2.3	2.5	2.0	22.8	10.2	11.5	21.5	
1148	4048	TRIPS	1,883	360	138	326	2,336	1,142	944	1,795	8,924
1148	4048	PERCENT	21.1	4.0	1.6	3.7	26.2	12.8	10.6	20.1	

Appendix C: Growth Rate & Adjustment Factors

TABLE: A6

Growth Rate -
Based on Long Range Transportation Model 2010-2040 Trips

Project Name: Soleste - Bay Village

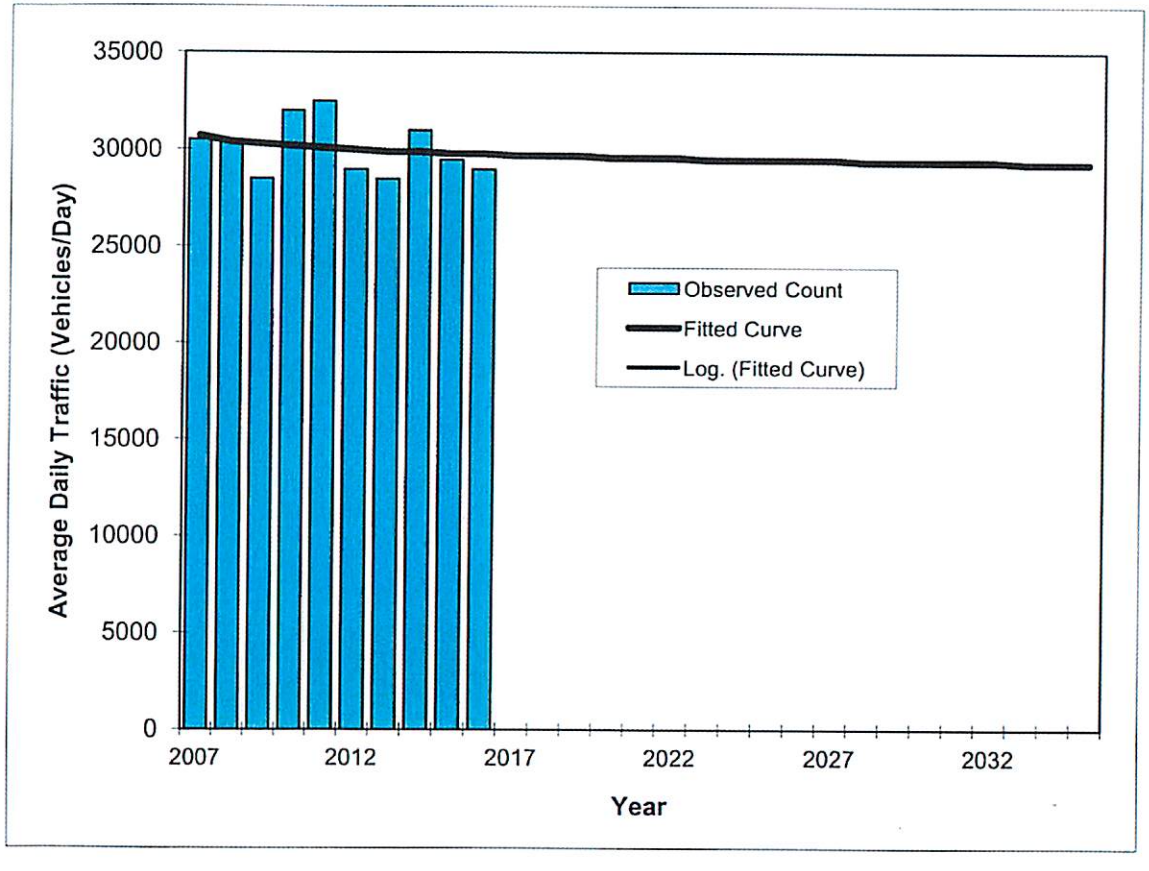
	Year	Trips	Delta Year	Growth
MPO Data (TAZ 1144)	2010	1,813	30	1.71%
	2040	3,017		

Traffic Trends - V2.0

SR 5/US 1 SOUTH DIXIE ONE WAY SB -- 300' S OF SW 174 ST

PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	2562
Highway:	SR 5/US 1 SOUTH DIXIE ONE WAY SB



Year	Traffic (ADT/AADT) Count*	Trend**
2007	30500	30700
2008	30500	30400
2009	28500	30300
2010	32000	30200
2011	32500	30100
2012	29000	30000
2013	28500	29900
2014	31000	29900
2015	29500	29800
2016	29000	29800
2017 Opening Year Trend		
2017	N/A	29700
2018 Mid-Year Trend		
2018	N/A	29700
2019 Design Year Trend		
2019	N/A	29700
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	4.71%
Compounded Annual Historic Growth Rate:	-0.33%
Compounded Growth Rate (2016 to Design Year):	-0.11%
Printed:	3-May-17

Decaying Exponential Growth Option

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2016 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 2562 - SR5/US1 S DIXIE HWY ONE WAY SB 300' S OF SW 174 ST

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2016	29000 C	S 29000	0	9.00	99.90	4.70
2015	29500 C	S 29500	0	9.00	99.90	5.20
2014	31000 C	S 31000		9.00	99.90	5.80
2013	28500 C	S 28500	0	9.00	99.90	5.40
2012	29000 C	S 29000	0	9.00	99.90	5.70
2011	32500 C	S 32500	0	9.00	99.90	6.10
2010	32000 C	S 32000	0	7.87	99.99	6.90
2009	28500 C	S 28500	0	7.98	99.99	6.30
2008	30500 C	S 30500	0	8.07	99.99	7.10
2007	30500 C	S 30500	0	7.90	99.99	8.00
2006	31000 C	S 31000	0	7.39	99.99	6.10
2005	30500 C	S 30500		7.70	99.90	5.50
2004	32500 C	S 32500	0	8.20	99.90	6.20
2003	29500 C	S 29500	0	8.10	99.90	4.80
2002	63500 C	S 32500	31000	9.20	99.90	3.40

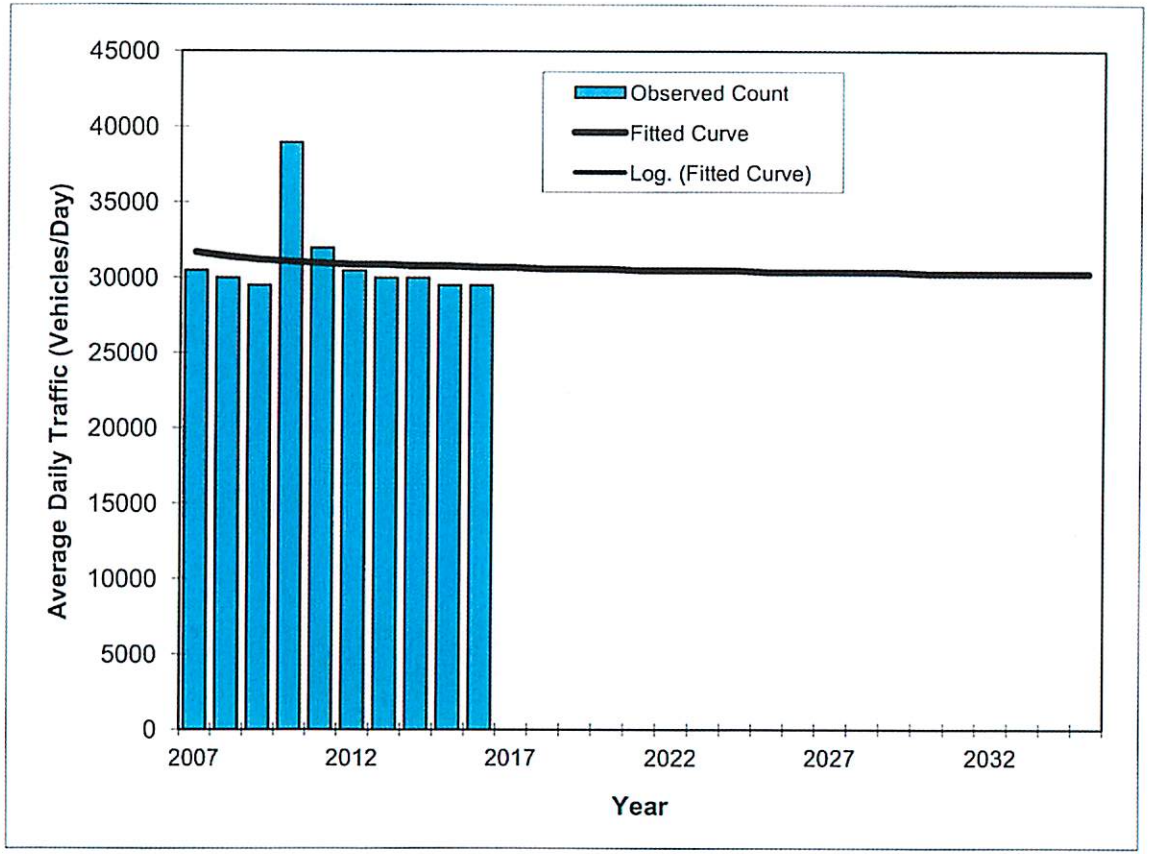
AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Traffic Trends - V2.0

SR 5/US 1 SOUTH DIXIE ONE WAY NB -- 300' S OF SW 174 ST

PIN#	973215-1
Location	1

County:	Miami (87)
Station #:	2563
Highway:	SR 5/US 1 SOUTH DIXIE ONE WAY NB



Year	Traffic (ADT/AADT) Count*	Trend**
2007	30500	31700
2008	30000	31400
2009	29500	31200
2010	39000	31100
2011	32000	31000
2012	30500	30900
2013	30000	30900
2014	30000	30800
2015	29500	30800
2016	29500	30700
2017 Opening Year Trend		
2017	N/A	30700
2018 Mid-Year Trend		
2018	N/A	30600
2019 Design Year Trend		
2019	N/A	30600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

Trend R-squared:	1.17%
Compounded Annual Historic Growth Rate:	-0.36%
Compounded Growth Rate (2016 to Design Year):	-0.11%
Printed:	3-May-17

Decaying Exponential Growth Option

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2016 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 2563 - SR5/US1 S.DIXIE HWY ONE WAY NB 300' S OF SW 174 ST

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2016	29500 C	N 29500	0	9.00	99.90	4.70
2015	29500 C	N 29500	0	9.00	99.90	5.20
2014	30000 C	N 30000		9.00	99.90	5.80
2013	30000 C	N 30000	0	9.00	99.90	5.40
2012	30500 C	N 30500	0	9.00	99.90	5.70
2011	32000 C	N 32000	0	9.00	99.90	6.10
2010	39000 C	N 39000	0	7.87	99.99	6.90
2009	29500 C	N 29500	0	7.98	99.99	6.30
2008	30000 C	N 30000	0	8.07	99.99	7.10
2007	30500 C	N 30500	0	7.90	99.99	8.00
2006	31500 C	N 31500	0	7.39	99.99	6.10
2005	31000 C	N 31000		7.70	99.90	5.50
2004	29500 C	N 29500		8.20	99.90	6.20
2003	32000 C	N 32000		8.10	99.90	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

2016 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 8701 MIAMI-DADE SOUTH

MOCF: 0.99

WEEK	DATES	SF	PSCF
1	01/01/2016 - 01/02/2016	0.99	1.00
2	01/03/2016 - 01/09/2016	1.00	1.01
3	01/10/2016 - 01/16/2016	1.02	1.03
4	01/17/2016 - 01/23/2016	1.01	1.02
5	01/24/2016 - 01/30/2016	1.01	1.02
6	01/31/2016 - 02/06/2016	1.00	1.01
7	02/07/2016 - 02/13/2016	0.99	1.00
* 8	02/14/2016 - 02/20/2016	0.99	1.00
* 9	02/21/2016 - 02/27/2016	0.99	1.00
*10	02/28/2016 - 03/05/2016	0.99	1.00
*11	03/06/2016 - 03/12/2016	0.99	1.00
*12	03/13/2016 - 03/19/2016	0.99	1.00
*13	03/20/2016 - 03/26/2016	0.99	1.00
*14	03/27/2016 - 04/02/2016	0.99	1.00
*15	04/03/2016 - 04/09/2016	0.98	0.99
*16	04/10/2016 - 04/16/2016	0.98	0.99
*17	04/17/2016 - 04/23/2016	0.98	0.99
*18	04/24/2016 - 04/30/2016	0.99	1.00
*19	05/01/2016 - 05/07/2016	0.99	1.00
*20	05/08/2016 - 05/14/2016	0.99	1.00
21	05/15/2016 - 05/21/2016	1.00	1.01
22	05/22/2016 - 05/28/2016	1.00	1.01
23	05/29/2016 - 06/04/2016	1.00	1.01
24	06/05/2016 - 06/11/2016	1.00	1.01
25	06/12/2016 - 06/18/2016	1.00	1.01
26	06/19/2016 - 06/25/2016	1.01	1.02
27	06/26/2016 - 07/02/2016	1.02	1.03
28	07/03/2016 - 07/09/2016	1.02	1.03
29	07/10/2016 - 07/16/2016	1.03	1.04
30	07/17/2016 - 07/23/2016	1.03	1.04
31	07/24/2016 - 07/30/2016	1.02	1.03
32	07/31/2016 - 08/06/2016	1.02	1.03
33	08/07/2016 - 08/13/2016	1.01	1.02
34	08/14/2016 - 08/20/2016	1.01	1.02
35	08/21/2016 - 08/27/2016	1.01	1.02
36	08/28/2016 - 09/03/2016	1.02	1.03
37	09/04/2016 - 09/10/2016	1.02	1.03
38	09/11/2016 - 09/17/2016	1.03	1.04
39	09/18/2016 - 09/24/2016	1.02	1.03
40	09/25/2016 - 10/01/2016	1.01	1.02
41	10/02/2016 - 10/08/2016	1.00	1.01
42	10/09/2016 - 10/15/2016	1.00	1.01
43	10/16/2016 - 10/22/2016	1.00	1.01
44	10/23/2016 - 10/29/2016	1.00	1.01
45	10/30/2016 - 11/05/2016	1.00	1.01
46	11/06/2016 - 11/12/2016	1.00	1.01
47	11/13/2016 - 11/19/2016	1.01	1.02
48	11/20/2016 - 11/26/2016	1.00	1.01
49	11/27/2016 - 12/03/2016	1.00	1.01
50	12/04/2016 - 12/10/2016	0.99	1.00
51	12/11/2016 - 12/17/2016	0.99	1.00
52	12/18/2016 - 12/24/2016	1.00	1.01
53	12/25/2016 - 12/31/2016	1.02	1.03

* PEAK SEASON

Appendix D: Traffic Counts (TMC's)

TABLE: A7

INTERSECTION APPROACH VOLUMES - AM PEAK HOUR

Project Name: Soleste - Bay Village

INTERSECTION NO.	1 INTERSECTION NAME	2 APPROACH	3 MOVEMENT	4 AM PEAK HR COUNT	5 DATE OF COUNT	6 PHF	7 SF	8 AM PEAK SEASONALLY ADJUSTED (EXISTING)	9 BACKGROUND GROWTH @ 1.71% FOR PROJECT BUILD-OUT OF 2019 (3 YEAR GROWTH)	10 PROPOSED FUTURE TRAFFIC W/O PROJECT (2019)	11 SITE TRAFFIC (PROJECT NET TRIPS) (VPH)	12 PROPOSED FUTURE TRAFFIC W/ PROJECT (VPH) (2019)
1	S Dixie Highway (SR 5) & SW 183 Street	SOUTHBOUND	SBR	13	Thursday, November 10, 2016	0.974	1.00	13	1	14	0	14
			SBT	1,058			1.00	1,058	55	1,113	0	1,113
			SBL	30			1.00	30	2	32	12	44
			SBU	22			1.00	22	1	23	0	23
			TOTAL	**1,123**				**1,123**	**59**	**1,182**	**12**	**1,194**
		WESTBOUND	WBR	28			1.00	28	1	29	37	66
			WBT	0			1.00	0	0	0	0	0
			WBL	19			1.00	19	1	20	23	43
			TOTAL	**47**				**47**	**2**	**49**	**60**	**109**
		NORTHBOUND	NBR	92			1.00	92	5	97	12	109
			NBT	1,893			1.00	1,893	99	1,992	0	1,992
			NBL	11			1.00	11	1	12	0	12
			NBU	5			1.00	5	0	5	0	5
			TOTAL	**2,001**				**2,001**	**104**	**2,105**	**12**	**2,117**
		EASTBOUND	EBR	11			1.00	11	1	12	0	12
			EBT	0			1.00	0	0	0	0	0
			EBL	1			1.00	1	0	1	0	1
			TOTAL	**12**				**12**	**1**	**13**	**0**	**13**
	TOTAL			***3,183***				***3,183***	***166***	***3,349***	***84***	***3,433***
2	SW 183 Street & SW 98 Court	SOUTHBOUND	SBR	7	Thursday, November 10, 2016	0.793	1.00	7	0	7	0	7
			SBT	10			1.00	10	1	11	0	11
			SBL	0			1.00	0	0	0	0	0
			TOTAL	**17**				**17**	**1**	**18**	**0**	**18**
		WESTBOUND	WBR	0			1.00	0	0	0	0	0
			WBT	0			1.00	0	0	0	0	0
			WBL	0			1.00	0	0	0	0	0
			TOTAL	**0**				**0**	**0**	**0**	**0**	**0**
		NORTHBOUND	NBR	0			1.00	0	0	0	0	0
			NBT	27			1.00	27	1	28	0	28
			NBL	41			1.00	41	2	43	60	103
			TOTAL	**68**				**68**	**4**	**72**	**60**	**132**
		EASTBOUND	EBR	44			1.00	44	2	46	24	70
			EBT	0			1.00	0	0	0	0	0
			EBL	17			1.00	17	1	18	0	18
			TOTAL	**61**				**61**	**3**	**64**	**24**	**88**
	TOTAL			***146***				***146***	***8***	***154***	***84***	***238***

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TABLE: A7

INTERSECTION APPROACH VOLUMES - AM PEAK HOUR

Project Name: Soleste - Bay Village

INTERSECTION NO.	1 INTERSECTION NAME	2 APPROACH	3 MOVEMENT	4 AM PEAK HR COUNT	5 DATE OF COUNT	6 PHF	7 SF	8 AM PEAK SEASONALLY ADJUSTED (EXISTING)	9 BACKGROUND GROWTH @ 1.71% FOR PROJECT BUILD-OUT OF 2019 (3 YEAR GROWTH)	10 PROPOSED FUTURE TRAFFIC W/O PROJECT (2019)	11 SITE TRAFFIC (PROJECT NET TRIPS) (VPH)	12 PROPOSED FUTURE TRAFFIC W/ PROJECT (VPH) (2019)
3	SW 183 Street & SW 98 Avenue Road	SOUTHBOUND	SBR	7	Thursday, November 10, 2016	0.710	1.00	7	0	7	0	7
			SBT	0			1.00	0	0	0	0	0
			SBL	11			1.00	11	1	12	0	12
			TOTAL	**18**				**18**	**1**	**19**	**0**	**19**
		WESTBOUND	WBR	4			1.00	4	0	4	0	4
			WBT	60			1.00	60	3	63	5	68
			WBL	0			1.00	0	0	0	0	0
			TOTAL	**64**				**64**	**3**	**67**	**5**	**72**
		NORTHBOUND	NBR	0			1.00	0	0	0	0	0
			NBT	0			1.00	0	0	0	0	0
			NBL	0			1.00	0	0	0	0	0
			TOTAL	**0**				**0**	**0**	**0**	**0**	**0**
		EASTBOUND	EBR	0			1.00	0	0	0	0	0
			EBT	59			1.00	59	3	62	29	91
			EBL	1			1.00	1	0	1	0	1
			TOTAL	**60**				**60**	**3**	**63**	**29**	**92**
	TOTAL			***142***				***142***	***7***	***149***	***34***	***183***

Notes:

1 Intersection Name
2 Intersection Approach
3 Intersection Approach Movement
4 TMC data provided by RGA, Inc.
5 Date of Count
6 Peak Hour Factor
7 Seasonal Factor (SF) obtained from FDOT
8 Seasonally Adjusted TMC = Count * SF (Existing Condition).
9 A 1.71 percent background growth was utilized with a project build-out of 2019.
10 Proposed Traffic w/o Project = Seasonally Adjusted TMC + Backgound
11 Project Trips.
12 Total Traffic = Net Traffic w/o Project + Site Traffic (Proposed Condition with Project)

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TABLE: A8

INTERSECTION APPROACH VOLUMES - PM PEAK HOUR

Project Name: Soleste - Bay Village

INTERSECTION NO.	1 INTERSECTION NAME	2 APPROACH	3 MOVEMENT	4 PM PEAK HR COUNT	5 DATE OF COUNT	6 PHF	7 SF	8 PM PEAK SEASONALLY ADJUSTED (EXISTING)	9 BACKGROUND GROWTH @ 1.71% FOR PROJECT BUILD-OUT OF 2019 (3 YEAR GROWTH)	10 PROPOSED FUTURE TRAFFIC W/O PROJECT (2019)	11 SITE TRAFFIC (PROJECT NET TRIPS) (VPH)	12 PROPOSED FUTURE TRAFFIC W/ PROJECT (VPH) (2019)
1	S Dixie Highway (SR 5) & SW 183 Street	SOUTHBOUND	SBR	49	Thursday, November 10, 2016	0.976	1.00	49	3	52	0	52
			SBT	1,812			1.00	1,812	95	1,907	0	1,907
			SBL	56			1.00	56	3	59	31	90
			SBU	16			1.00	16	1	17	0	17
			TOTAL	**1,933**				**1,933**	**101**	**2,034**	**31**	**2,065**
		WESTBOUND	WBR	17			1.00	17	1	18	25	43
			WBT	1			1.00	1	0	1	0	1
			WBL	13			1.00	13	1	14	21	35
			TOTAL	**31**				**31**	**2**	**33**	**46**	**79**
		NORTHBOUND	NBR	77			1.00	77	4	81	41	122
			NBT	1,424			1.00	1,424	74	1,498	0	1,498
			NBL	42			1.00	42	2	44	0	44
			NBU	3			1.00	3	0	3	0	3
			TOTAL	**1,546**				**1,546**	**81**	**1,627**	**41**	**1,668**
		EASTBOUND	EBR	45			1.00	45	2	47	0	47
			EBT	1			1.00	1	0	1	0	1
			EBL	4			1.00	4	0	4	0	4
			TOTAL	**50**				**50**	**3**	**53**	**0**	**53**
	TOTAL			***3,560***				***3,560***	***186***	***3,746***	***118***	***3,864***
2	SW 183 Street & SW 98 Court	SOUTHEASTBOUND	SBR	3	Thursday, November 10, 2016	0.859	1.00	3	0	3	0	3
			SBT	16			1.00	16	1	17	0	17
			SBL	0			1.00	0	0	0	0	0
			TOTAL	**19**				**19**	**1**	**20**	**0**	**20**
		WESTBOUND	WBR	0			1.00	0	0	0	0	0
			WBT	0			1.00	0	0	0	0	0
			WBL	0			1.00	0	0	0	0	0
			TOTAL	**0**				**0**	**0**	**0**	**0**	**0**
		NORTHBOUND	NBR	0			1.00	0	0	0	0	0
			NBT	11			1.00	11	1	12	0	12
			NBL	27			1.00	27	1	28	46	74
			TOTAL	**38**				**38**	**2**	**40**	**46**	**86**
		EASTBOUND	EBR	91			1.00	91	5	96	72	168
			EBT	0			1.00	0	0	0	0	0
			EBL	17			1.00	17	1	18	0	18
			TOTAL	**108**				**108**	**6**	**114**	**72**	**186**
	TOTAL			***165***				***165***	***9***	***174***	***118***	***292***

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TABLE: A8

INTERSECTION APPROACH VOLUMES - PM PEAK HOUR

Project Name: Soleste - Bay Village

INTERSECTION NO.	1 INTERSECTION NAME	2 APPROACH	3 MOVEMENT	4 PM PEAK HR COUNT	5 DATE OF COUNT	6 PHF	7 SF	8 PM PEAK SEASONALLY ADJUSTED (EXISTING)	9 BACKGROUND GROWTH @ 1.71% FOR PROJECT BUILD-OUT OF 2019 (3 YEAR GROWTH)	10 PROPOSED FUTURE TRAFFIC W/O PROJECT (2019)	11 SITE TRAFFIC (PROJECT NET TRIPS) (VPH)	12 PROPOSED FUTURE TRAFFIC W/ PROJECT (VPH) (2019)
3	SW 183 Street & SW 98 Avenue Road	SOUTHBOUND	SBR	7	Thursday, November 10, 2016	0.907	1.00	7	0	7	0	7
			SBT	0			1.00	0	0	0	0	0
			SBL	27			1.00	27	1	28	0	28
			TOTAL	**34**				**34**	**2**	**36**	**0**	**36**
		WESTBOUND	WBR	1			1.00	1	0	1	0	1
			WBT	34			1.00	34	2	36	19	55
			WBL	0			1.00	0	0	0	0	0
			TOTAL	**35**				**35**	**2**	**37**	**19**	**56**
		NORTHBOUND	NBR	0			1.00	0	0	0	0	0
			NBT	0			1.00	0	0	0	0	0
			NBL	0			1.00	0	0	0	0	0
			TOTAL	**0**				**0**	**0**	**0**	**0**	**0**
		EASTBOUND	EBR	0			1.00	0	0	0	0	0
			EBT	113			1.00	113	6	119	14	133
			EBL	3			1.00	3	0	3	0	3
			TOTAL	**116**				**116**	**6**	**122**	**14**	**136**
	TOTAL			***185***				***185***	***10***	***195***	***33***	***228***

Notes:

1 Intersection Name
2 Intersection Approach
3 Intersection Approach Movement
4 TMC data provided by RGA, Inc.
5 Date of Count
6 Peak Hour Factor
7 Seasonal Factor (SF) obtained from FDOT
8 Seasonally Adjusted TMC = Count * SF (Existing Condition).
9 A 1.71 percent background growth was utilized with a project build-out of 2019.
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11 Project Trips.
12 Total Traffic = Net Traffic w/o Project + Site Traffic (Proposed Condition with Project)

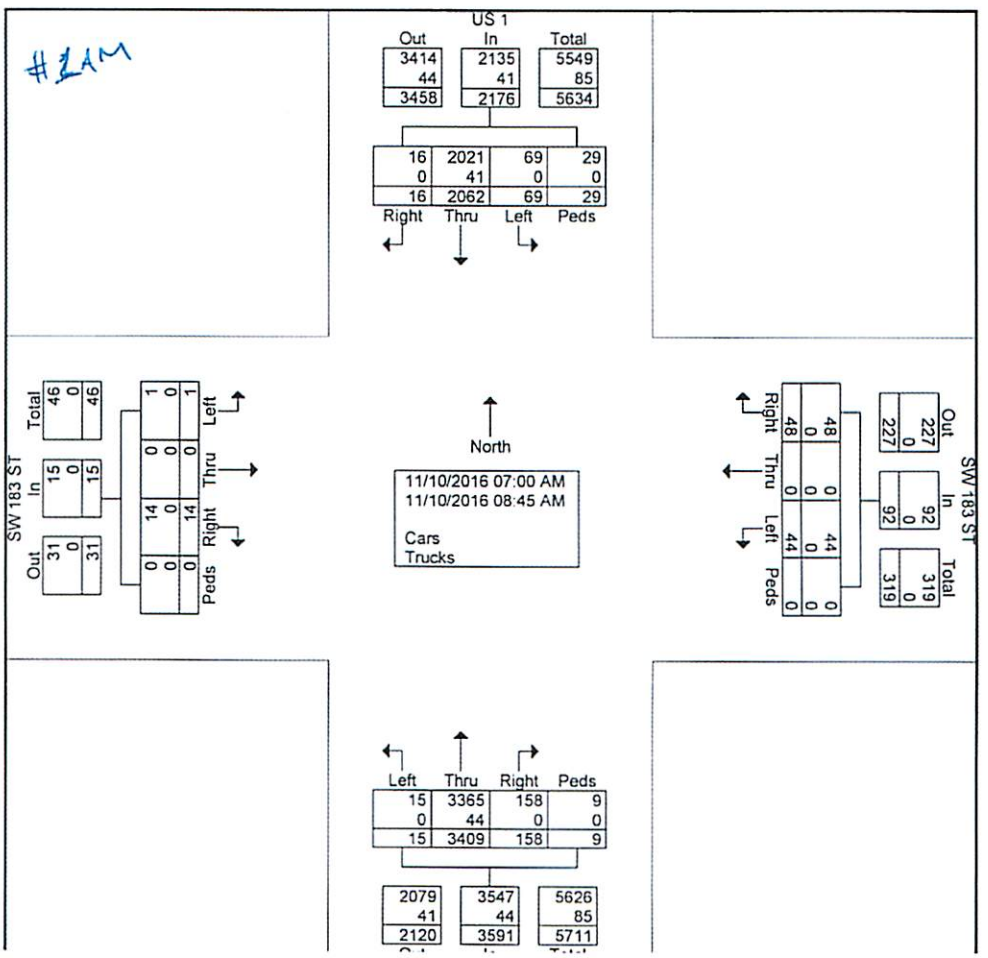
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Start Date : 11/10/2016
Page No : 1

Groups Printed- Cars - Trucks

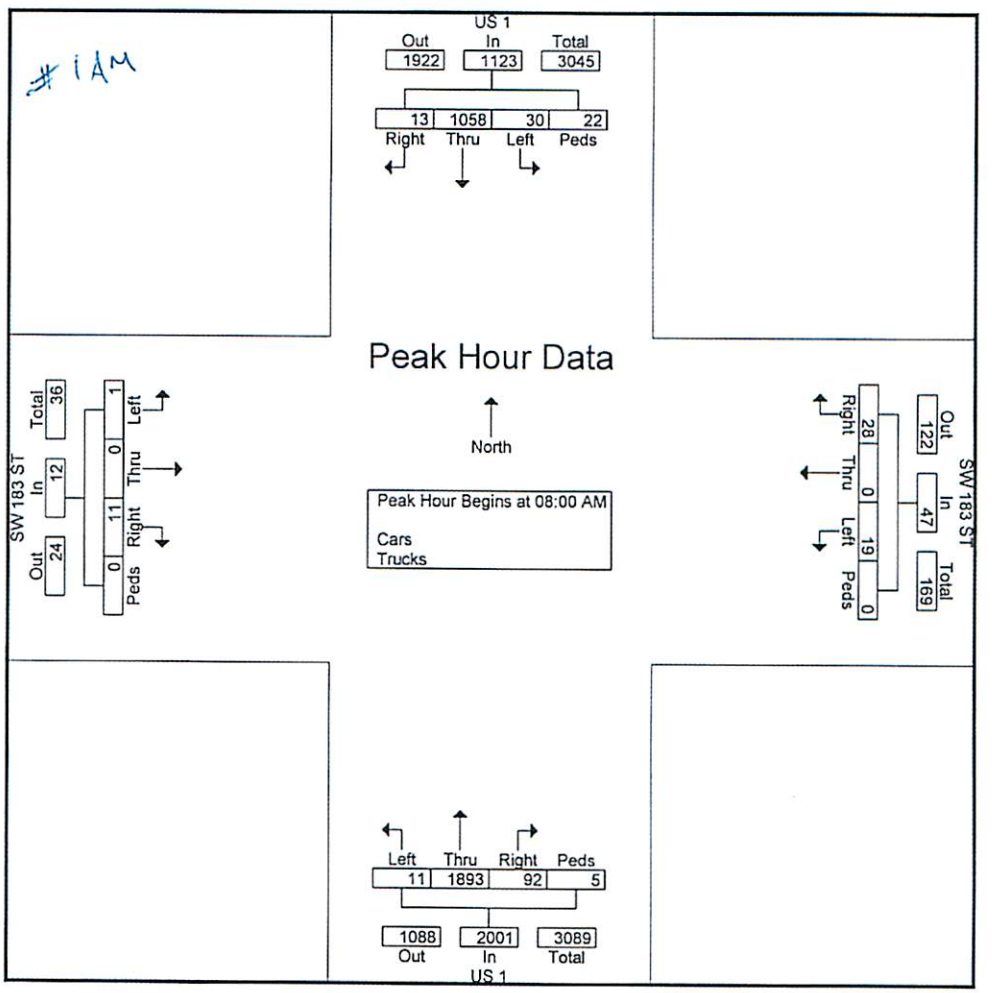
	US 1 Southbound						SW 183 ST Westbound					US 1 Northbound						SW 183 ST Eastbound					
Start Time	Right	Thru	Left	U-Turns	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turns	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	186	7	1	0	194	2	0	3	0	5	10	376	1	2	0	389	1	0	0	0	1	589
07:15 AM	1	257	10	2	0	270	3	0	4	0	7	15	382	0	0	0	397	1	0	0	0	1	675
07:30 AM	0	276	8	2	0	286	2	0	12	0	14	24	376	1	1	0	402	1	0	0	0	1	703
07:45 AM	2	285	14	2	0	303	13	0	6	0	19	17	382	2	1	0	402	0	0	0	0	0	724
Total	3	1004	39	7	0	1053	20	0	25	0	45	66	1516	4	4	0	1590	3	0	0	0	3	2691
08:00 AM	3	259	8	7	0	277	4	0	10	0	14	29	487	6	1	0	523	3	0	0	0	3	817
08:15 AM	5	265	7	6	0	283	6	0	2	0	8	23	469	1	1	0	494	5	0	1	0	6	791
08:30 AM	2	271	6	4	0	283	7	0	4	0	11	19	475	2	1	0	497	2	0	0	0	2	793
08:45 AM	3	263	9	5	0	280	11	0	3	0	14	21	462	2	2	0	487	1	0	0	0	1	782
Total	13	1058	30	22	0	1123	28	0	19	0	47	92	1893	11	5	0	2001	11	0	1	0	12	3183
Grand Total	16	2062	69	29	0	2176	48	0	44	0	92	158	3409	15	9	0	3591	14	0	1	0	15	5874
Apprch %	0.7	94.8	3.2	1.3	0		52.2	0	47.8	0		4.4	94.9	0.4	0.3	0		93.3	0	6.7	0		
Total %	0.3	35.1	1.2	0.5	0	37	0.8	0	0.7	0	1.6	2.7	58	0.3	0.2	0	61.1	0.2	0	0	0	0.3	
Cars	16	2021	69	29	0	2135	48	0	44	0	92	158	3365	15	9	0	3547	14	0	1	0	15	5789
% Cars	100	98	100	100	0	98.1	100	0	100	0	100	100	98.7	100	100	0	98.8	100	0	100	0	100	98.6
Trucks	0	41	0	0	0	41	0	0	0	0	0	0	44	0	0	0	44	0	0	0	0	0	85
% Trucks	0	2	0	0	0	1.9	0	0	0	0	0	0	1.3	0	0	0	1.2	0	0	0	0	0	1.4



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Site Code : 00000000
Start Date : 11/10/2016
Page No : 2

	US 1 Southbound						SW 183 ST Westbound					US 1 Northbound						SW 183 ST Eastbound					
Start Time	Right	Thru	Left	U-Turns	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turns	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																							
Peak Hour for Entire Intersection Begins at 08:00 AM																							
08:00 AM	3	259	8	7	0	277	4	0	10	0	14	29	487	6	1	0	523	3	0	0	0	3	817
08:15 AM	5	265	7	6	0	283	6	0	2	0	8	23	469	1	1	0	494	5	0	1	0	6	791
08:30 AM	2	271	6	4	0	283	7	0	4	0	11	19	475	2	1	0	497	2	0	0	0	2	793
08:45 AM	3	263	9	5	0	280	11	0	3	0	14	21	462	2	2	0	487	1	0	0	0	1	782
Total Volume	13	1058	30	22	0	1123	28	0	19	0	47	92	1893	11	5	0	2001	11	0	1	0	12	3183
% App. Total	1.2	94.2	2.7	2	0		59.6	0	40.4	0		4.6	94.6	0.5	0.2	0		91.7	0	8.3	0		
PHF	.650	.976	.833	.786	.000	.992	.636	.000	.475	.000	.839	.793	.972	.458	.625	.000	.957	.550	.000	.250	.000	.500	.974

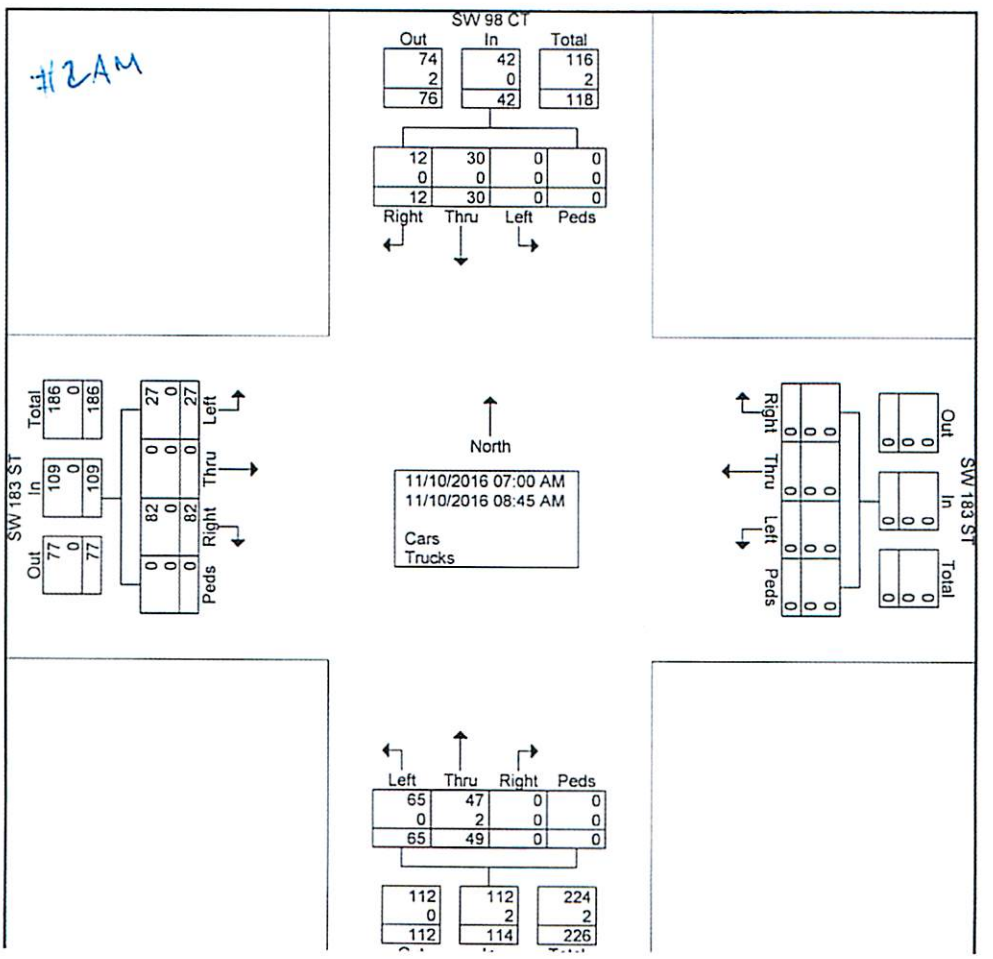


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Groups Printed- Cars - Trucks

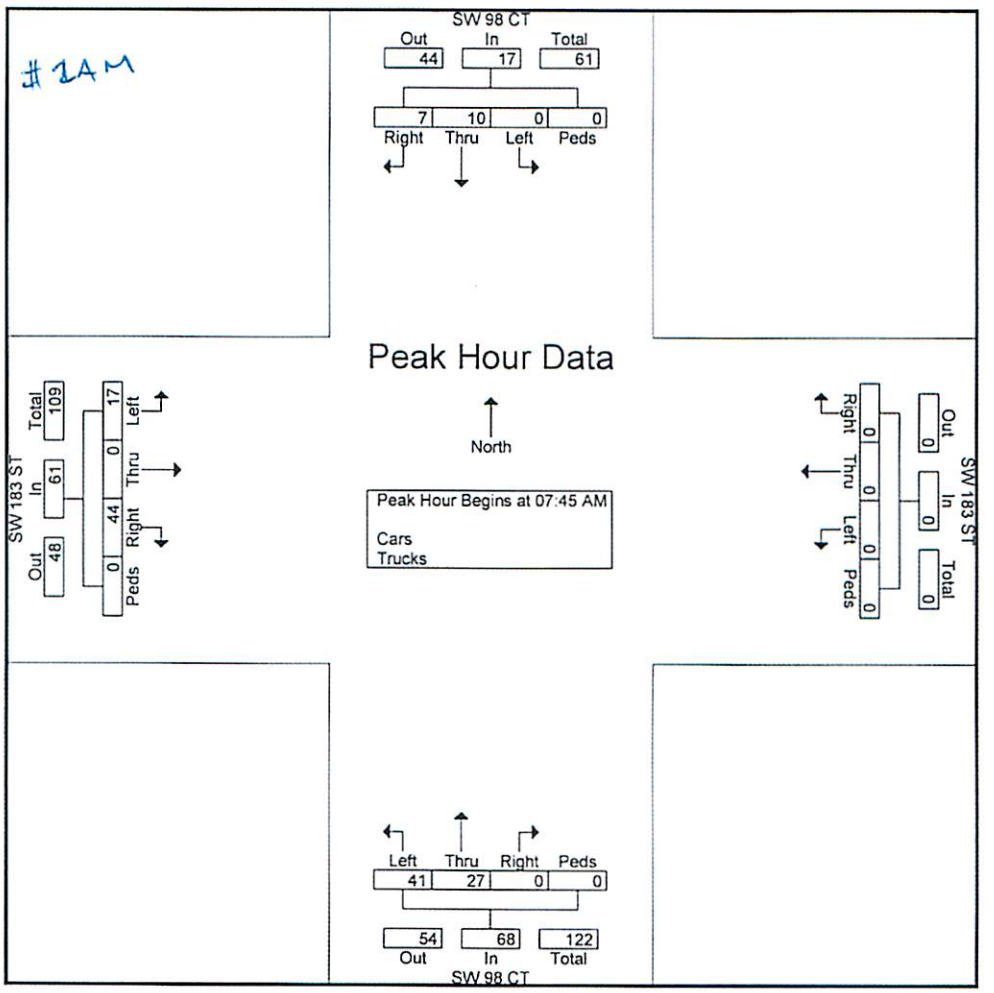
	SW 98 CT Southbound					SW 183 ST Westbound					SW 98 CT Northbound					SW 183 ST Eastbound					
Start Time	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Int. Total
07:00 AM	0	3	0	0	3	0	0	0	0	0	0	4	3	0	7	10	0	1	0	11	21
07:15 AM	0	7	0	0	7	0	0	0	0	0	0	7	5	0	12	11	0	2	0	13	32
07:30 AM	1	1	0	0	2	0	0	0	0	0	0	7	4	0	11	7	0	4	0	11	24
07:45 AM	1	3	0	0	4	0	0	0	0	0	0	8	18	0	26	9	0	7	0	16	46
Total	2	14	0	0	16	0	0	0	0	0	0	26	30	0	56	37	0	14	0	51	123
08:00 AM	3	0	0	0	3	0	0	0	0	0	0	4	4	0	8	11	0	4	0	15	26
08:15 AM	3	3	0	0	6	0	0	0	0	0	0	12	8	0	20	12	0	2	0	14	40
08:30 AM	0	4	0	0	4	0	0	0	0	0	0	3	11	0	14	12	0	4	0	16	34
08:45 AM	4	9	0	0	13	0	0	0	0	0	0	4	12	0	16	10	0	3	0	13	42
Total	10	16	0	0	26	0	0	0	0	0	0	23	35	0	58	45	0	13	0	58	142
Grand Total	12	30	0	0	42	0	0	0	0	0	0	49	65	0	114	82	0	27	0	109	265
Apprch %	28.6	71.4	0	0		0	0	0	0		0	43	57	0		75.2	0	24.8	0		
Total %	4.5	11.3	0	0	15.8	0	0	0	0	0	0	18.5	24.5	0	43	30.9	0	10.2	0	41.1	
Cars	12	30	0	0	42	0	0	0	0	0	0	47	65	0	112	82	0	27	0	109	263
% Cars	100	100	0	0	100	0	0	0	0	0	0	95.9	100	0	98.2	100	0	100	0	100	99.2
Trucks	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
% Trucks	0	0	0	0	0	0	0	0	0	0	0	4.1	0	0	1.8	0	0	0	0	0	0.8



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	SW 98 CT Southbound					SW 183 ST Westbound					SW 98 CT Northbound					SW 183 ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	1	3	0	0	4	0	0	0	0	0	0	8	18	0	26	9	0	7	0	16	46
08:00 AM	3	0	0	0	3	0	0	0	0	0	0	4	4	0	8	11	0	4	0	15	26
08:15 AM	3	3	0	0	6	0	0	0	0	0	0	12	8	0	20	12	0	2	0	14	40
08:30 AM	0	4	0	0	4	0	0	0	0	0	0	3	11	0	14	12	0	4	0	16	34
Total Volume	7	10	0	0	17	0	0	0	0	0	0	27	41	0	68	44	0	17	0	61	146
% App. Total																					
PHF	.583	.625	.000	.000	.708	.000	.000	.000	.000	.000	.000	.563	.569	.000	.654	.917	.000	.607	.000	.953	.793

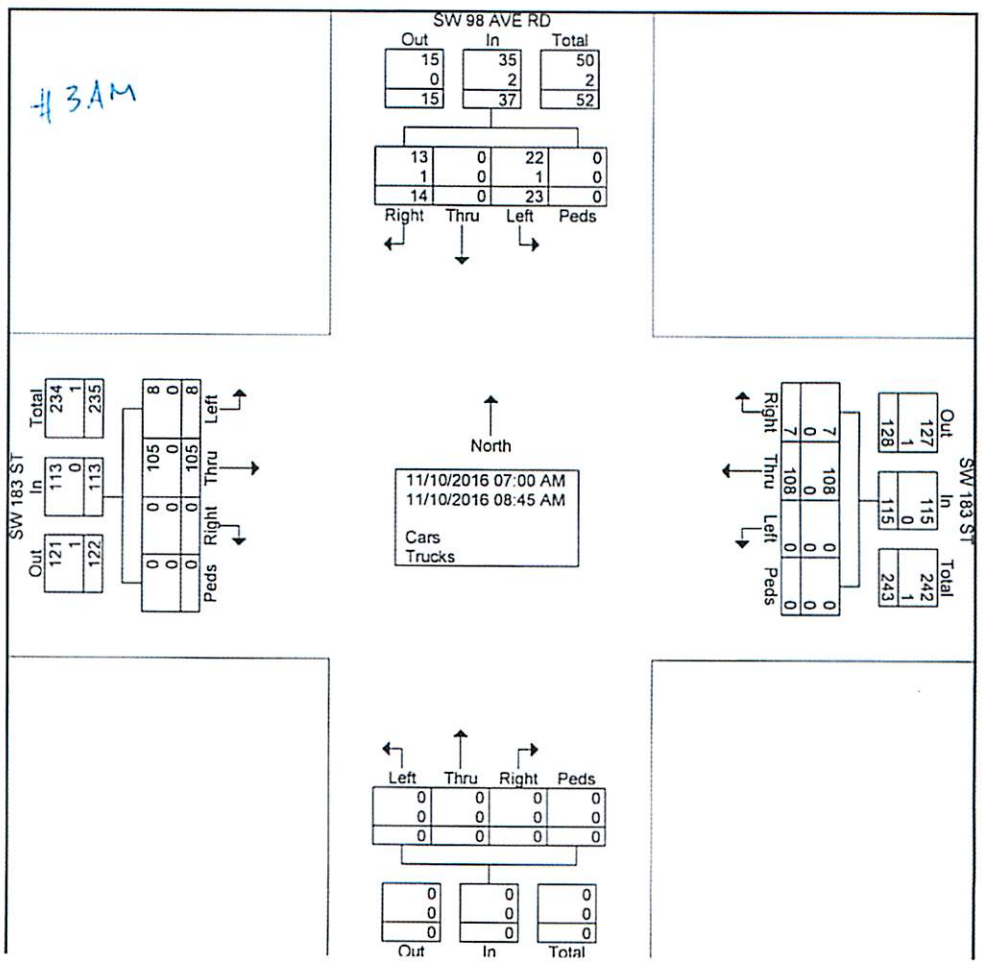


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Start Date : 11/10/2016
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Groups Printed- Cars - Trucks

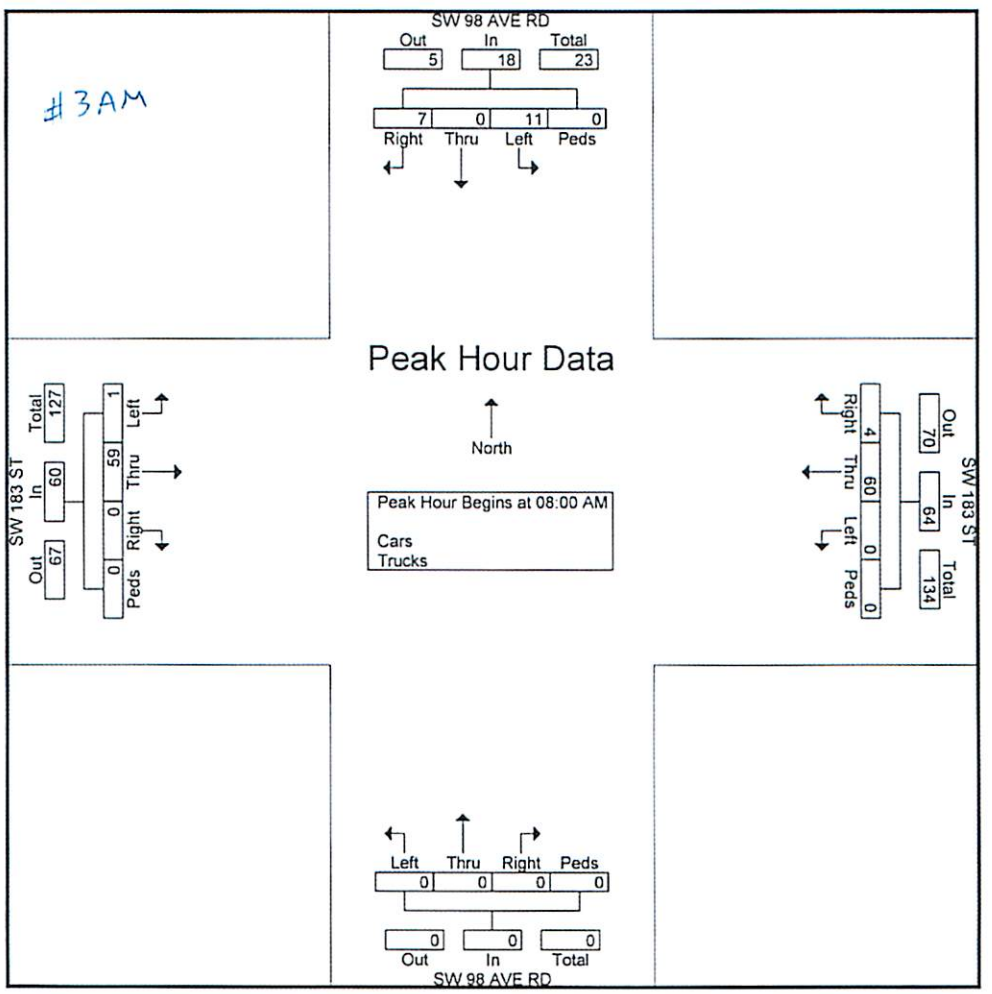
	SW 98 AVE RD Southbound					SW 183 ST Westbound					SW 98 AVE RD Northbound					SW 183 ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	0	2	0	3	0	5	0	0	5	0	0	0	0	0	0	12	1	0	13	21
07:15 AM	2	0	6	0	8	2	10	0	0	12	0	0	0	0	0	0	13	4	0	17	37
07:30 AM	2	0	1	0	3	1	9	0	0	10	0	0	0	0	0	0	11	0	0	11	24
07:45 AM	2	0	3	0	5	0	24	0	0	24	0	0	0	0	0	0	10	2	0	12	41
Total	7	0	12	0	19	3	48	0	0	51	0	0	0	0	0	0	46	7	0	53	123
08:00 AM	0	0	2	0	2	1	6	0	0	7	0	0	0	0	0	0	11	0	0	11	20
08:15 AM	4	0	1	0	5	2	25	0	0	27	0	0	0	0	0	0	12	1	0	13	45
08:30 AM	1	0	0	0	1	0	11	0	0	11	0	0	0	0	0	0	15	0	0	15	27
08:45 AM	2	0	8	0	10	1	18	0	0	19	0	0	0	0	0	0	21	0	0	21	50
Total	7	0	11	0	18	4	60	0	0	64	0	0	0	0	0	0	59	1	0	60	142
Grand Total	14	0	23	0	37	7	108	0	0	115	0	0	0	0	0	0	105	8	0	113	265
Apprch %	37.8	0	62.2	0		6.1	93.9	0	0		0	0	0	0		0	92.9	7.1	0		
Total %	5.3	0	8.7	0	14	2.6	40.8	0	0	43.4	0	0	0	0	0	0	39.6	3	0	42.6	
Cars	13	0	22	0	35	7	108	0	0	115	0	0	0	0	0	0	105	8	0	113	263
% Cars	92.9	0	95.7	0	94.6	100	100	0	0	100	0	0	0	0	0	0	100	100	0	100	99.2
Trucks	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
% Trucks	7.1	0	4.3	0	5.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8



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	SW 98 AVE RD Southbound					SW 183 ST Westbound					SW 98 AVE RD Northbound					SW 183 ST Eastbound					
Start Time	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	0	2	0	2	1	6	0	0	7	0	0	0	0	0	0	11	0	0	11	20
08:15 AM	4	0	1	0	5	2	25	0	0	27	0	0	0	0	0	0	12	1	0	13	45
08:30 AM	1	0	0	0	1	0	11	0	0	11	0	0	0	0	0	0	15	0	0	15	27
08:45 AM	2	0	8	0	10	1	18	0	0	19	0	0	0	0	0	0	21	0	0	21	50
Total Volume	7	0	11	0	18	4	60	0	0	64	0	0	0	0	0	0	59	1	0	60	142
% App. Total	38.9	0	61.1	0		6.2	93.8	0	0		0	0	0	0		0	98.3	1.7	0		
PHF	.438	.000	.344	.000	.450	.500	.600	.000	.000	.593	.000	.000	.000	.000	.000	.000	.702	.250	.000	.714	.710

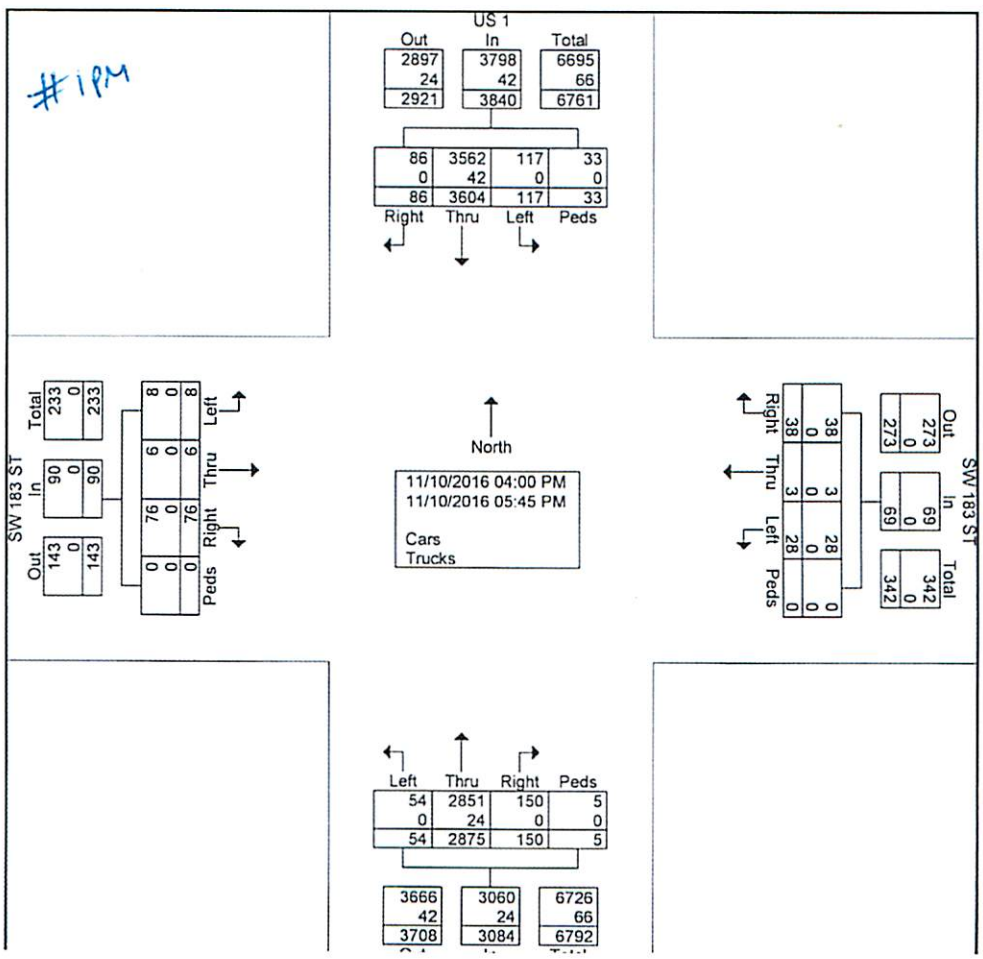


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File Name : US 1_SW 183 St_PM
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Groups Printed- Cars - Trucks

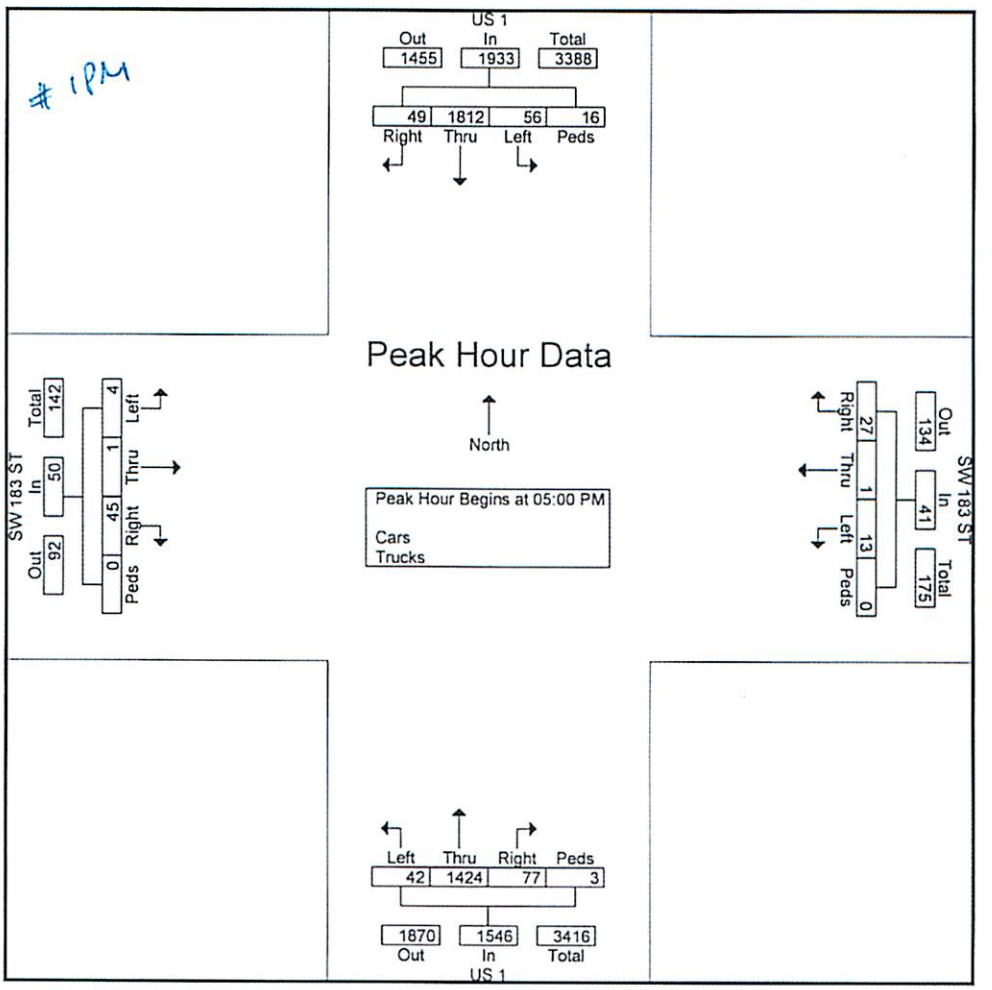
	US 1 Southbound						SW 183 ST Westbound					US 1 Northbound						SW 183 ST Eastbound					
Start Time	Right	Thru	Left	U-Turns	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turns	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	6	449	18	3	0	476	2	2	5	0	9	12	372	4	1	0	389	5	2	2	0	9	883
04:15 PM	12	450	15	7	0	484	2	0	3	0	5	21	341	2	1	0	365	8	2	0	0	10	864
04:30 PM	12	481	9	1	0	503	4	0	2	0	6	18	360	3	0	0	381	7	0	0	0	7	897
04:45 PM	7	412	19	6	0	444	3	0	5	0	8	22	378	3	0	0	403	11	1	2	0	14	869
Total	37	1792	61	17	0	1907	11	2	15	0	28	73	1451	12	2	0	1538	31	5	4	0	40	3513
05:00 PM	19	455	18	1	0	493	6	1	5	0	12	21	354	11	1	0	387	7	0	1	0	8	900
05:15 PM	8	438	12	5	0	463	7	0	1	0	8	19	348	10	0	0	377	16	0	0	0	16	864
05:30 PM	10	466	15	4	0	495	8	0	4	0	12	17	365	9	1	0	392	12	1	2	0	15	914
05:45 PM	12	453	11	6	0	482	6	0	3	0	9	20	357	12	1	0	390	10	0	1	0	11	892
Total	49	1812	56	16	0	1933	27	1	13	0	41	77	1424	42	3	0	1546	45	1	4	0	50	3570
Grand Total	86	3604	117	33	0	3840	38	3	28	0	69	150	2875	54	5	0	3084	76	6	8	0	90	7083
Apprch %	2.2	93.9	3	0.9	0		55.1	4.3	40.6	0		4.9	93.2	1.8	0.2	0		84.4	6.7	8.9	0		
Total %	1.2	50.9	1.7	0.5	0	54.2	0.5	0	0.4	0	1	2.1	40.6	0.8	0.1	0	43.5	1.1	0.1	0.1	0	1.3	
Cars	86	3562	117	33	0	3798	38	3	28	0	69	150	2851	54	5	0	3060	76	6	8	0	90	7017
% Cars	100	98.8	100	100	0	98.9	100	100	100	0	100	100	99.2	100	100	0	99.2	100	100	100	0	100	99.1
Trucks	0	42	0	0	0	42	0	0	0	0	0	0	24	0	0	0	24	0	0	0	0	0	66
% Trucks	0	1.2	0	0	0	1.1	0	0	0	0	0	0	0.8	0	0	0	0.8	0	0	0	0	0	0.9



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	US 1 Southbound						SW 183 ST Westbound					US 1 Northbound						SW 183 ST Eastbound					
Start Time	Right	Thru	Left	U-Turns	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	U-Turns	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																							
Peak Hour for Entire Intersection Begins at 05:00 PM																							
05:00 PM	19	455	18	1	0	493	6	1	5	0	12	21	354	11	1	0	387	7	0	1	0	8	900
05:15 PM	8	438	12	5	0	463	7	0	1	0	8	19	348	10	0	0	377	16	0	0	0	16	864
05:30 PM	10	466	15	4	0	495	8	0	4	0	12	17	365	9	1	0	392	12	1	2	0	15	914
05:45 PM	12	453	11	6	0	482	6	0	3	0	9	20	357	12	1	0	390	10	0	1	0	11	892
Total Volume	49	1812	56	16	0	1933	27	1	13	0	41	77	1424	42	3	0	1546	45	1	4	0	50	3570
% App. Total	2.5	93.7	2.9	0.8	0		65.9	2.4	31.7	0		5	92.1	2.7	0.2	0		90	2	8	0		
PHF	.645	.972	.778	.667	.000	.976	.844	.250	.650	.000	.854	.917	.975	.875	.750	.000	.986	.703	.250	.500	.000	.781	.976

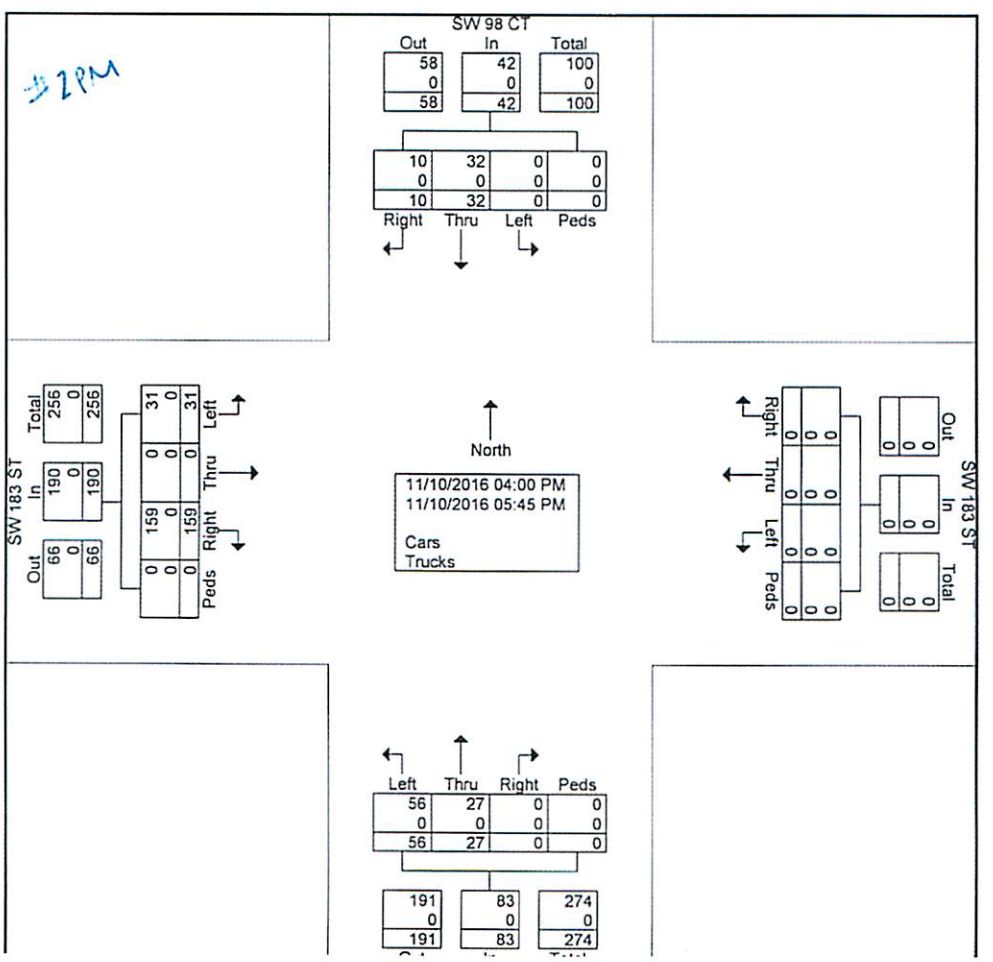


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Groups Printed- Cars - Trucks

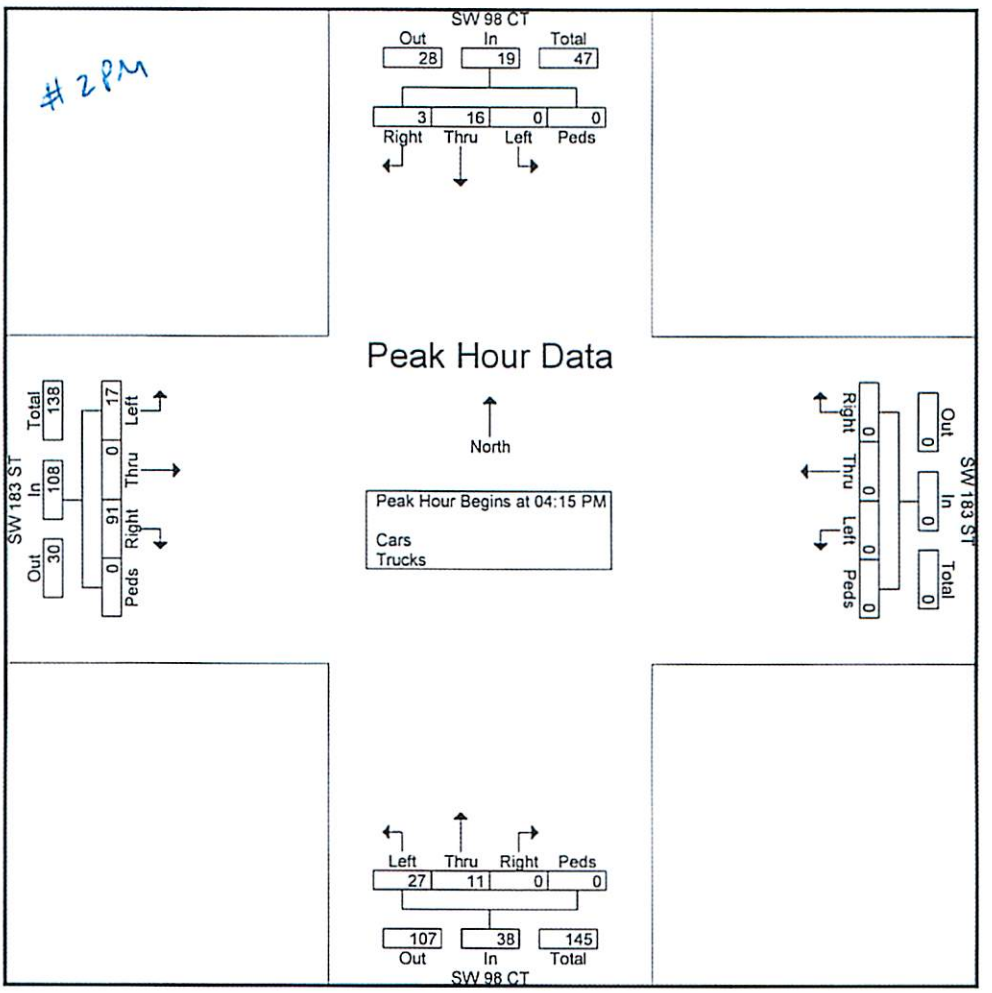
	SW 98 CT Southbound					SW 183 ST Westbound					SW 98 CT Northbound					SW 183 ST Eastbound					
Start Time	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Right	Thru	Left	Peds	App Total	Int. Total
04:00 PM	1	4	0	0	5	0	0	0	0	0	0	10	5	0	15	16	0	5	0	21	41
04:15 PM	0	6	0	0	6	0	0	0	0	0	0	2	6	0	8	30	0	4	0	34	48
04:30 PM	1	3	0	0	4	0	0	0	0	0	0	7	7	0	14	15	0	2	0	17	35
04:45 PM	0	2	0	0	2	0	0	0	0	0	0	1	5	0	6	24	0	6	0	30	38
Total	2	15	0	0	17	0	0	0	0	0	0	20	23	0	43	85	0	17	0	102	162
05:00 PM	2	5	0	0	7	0	0	0	0	0	0	1	9	0	10	22	0	5	0	27	44
05:15 PM	3	3	0	0	6	0	0	0	0	0	0	3	6	0	9	16	0	3	0	19	34
05:30 PM	2	5	0	0	7	0	0	0	0	0	0	2	10	0	12	19	0	2	0	21	40
05:45 PM	1	4	0	0	5	0	0	0	0	0	0	1	8	0	9	17	0	4	0	21	35
Total	8	17	0	0	25	0	0	0	0	0	0	7	33	0	40	74	0	14	0	88	153
Grand Total	10	32	0	0	42	0	0	0	0	0	0	27	56	0	83	159	0	31	0	190	315
Apprch %	23.8	76.2	0	0		0	0	0	0		0	32.5	67.5	0		83.7	0	16.3	0		
Total %	3.2	10.2	0	0	13.3	0	0	0	0	0	0	8.6	17.8	0	26.3	50.5	0	9.8	0	60.3	
Cars	10	32	0	0	42	0	0	0	0	0	0	27	56	0	83	159	0	31	0	190	315
% Cars	100	100	0	0	100	0	0	0	0	0	0	100	100	0	100	100	0	100	0	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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	SW 98 CT Southbound					SW 183 ST Westbound					SW 98 CT Northbound					SW 183 ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	6	0	0	6	0	0	0	0	0	0	2	6	0	8	30	0	4	0	34	48
04:30 PM	1	3	0	0	4	0	0	0	0	0	0	7	7	0	14	15	0	2	0	17	35
04:45 PM	0	2	0	0	2	0	0	0	0	0	0	1	5	0	6	24	0	6	0	30	38
05:00 PM	2	5	0	0	7	0	0	0	0	0	0	1	9	0	10	22	0	5	0	27	44
Total Volume	3	16	0	0	19	0	0	0	0	0	0	11	27	0	38	91	0	17	0	108	165
% App. Total																					
PHF	.375	.667	.000	.000	.679	.000	.000	.000	.000	.000	.000	.393	.750	.000	.679	.758	.000	.708	.000	.794	.859

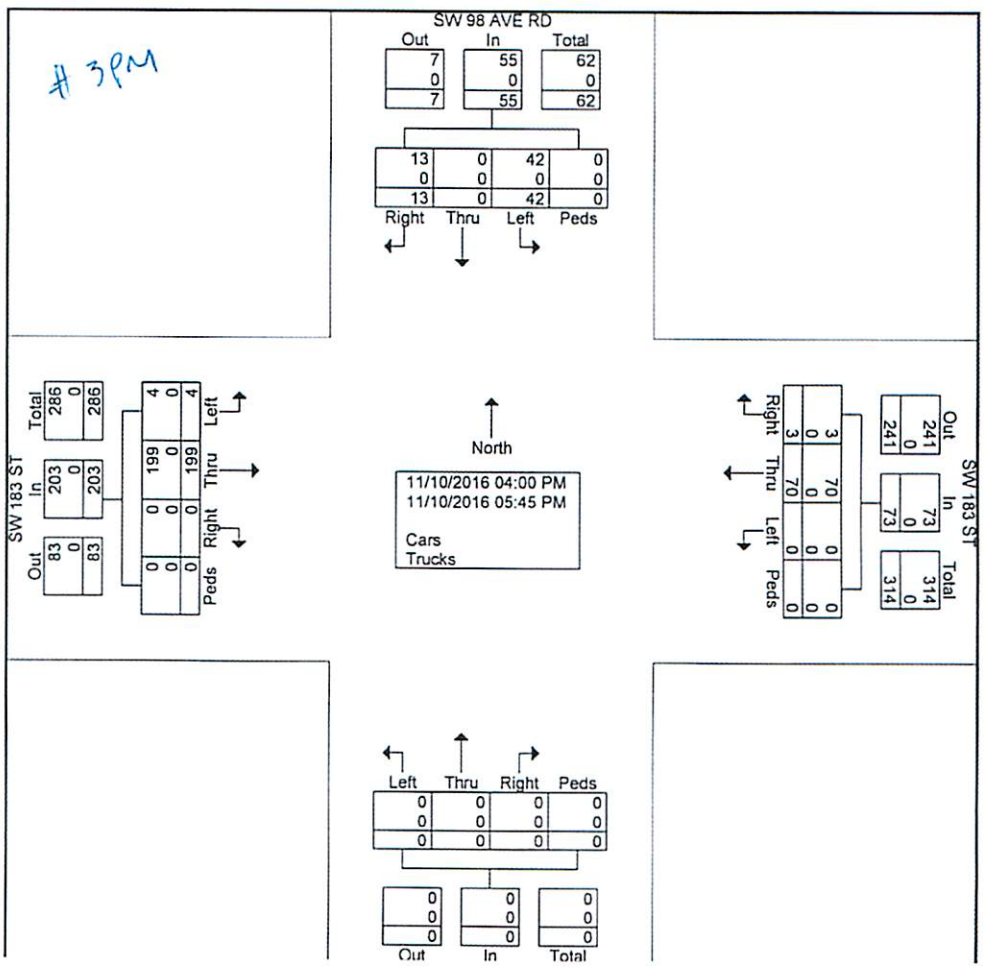


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Groups Printed- Cars - Trucks

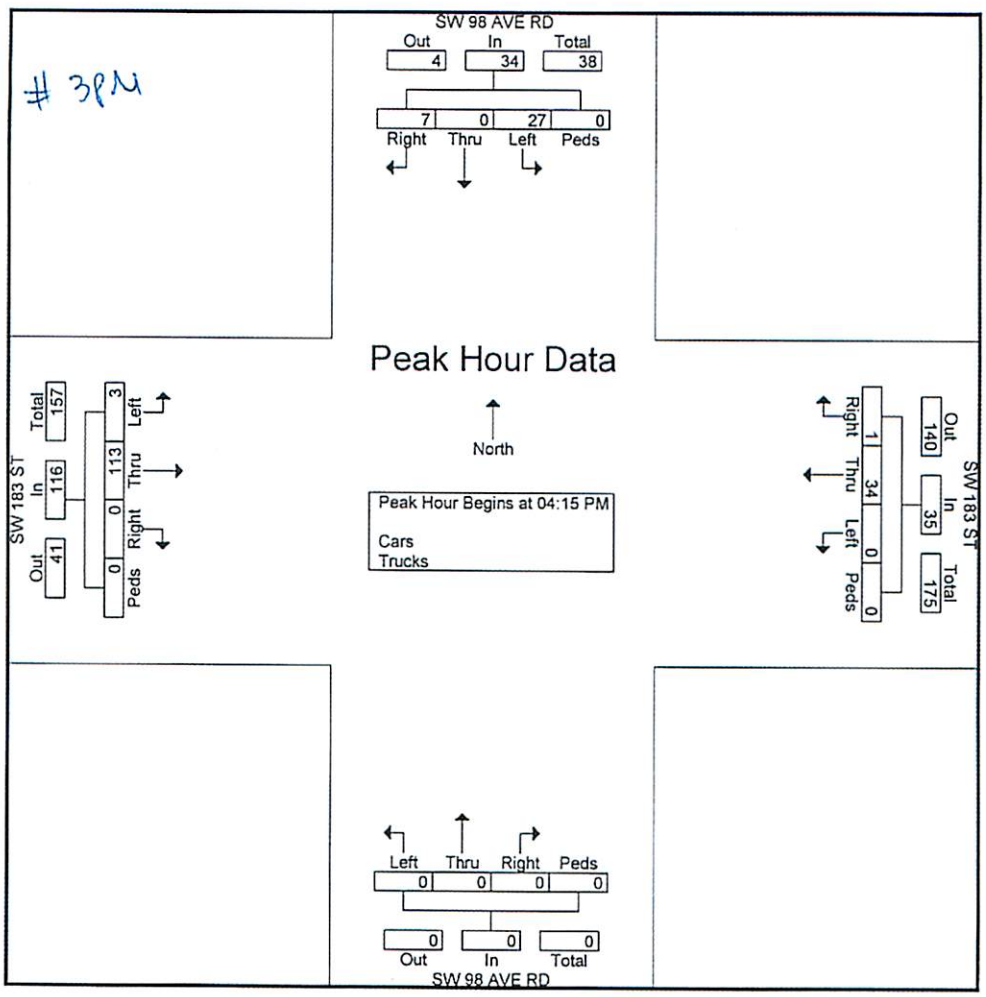
	SW 98 AVE RD Southbound					SW 183 ST Westbound					SW 98 AVE RD Northbound					SW 183 ST Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	1	0	3	0	4	0	10	0	0	10	0	0	0	0	0	0	22	0	0	22	36
04:15 PM	1	0	6	0	7	1	6	0	0	7	0	0	0	0	0	0	32	0	0	32	46
04:30 PM	2	0	4	0	6	0	15	0	0	15	0	0	0	0	0	0	27	1	0	28	49
04:45 PM	1	0	5	0	6	0	4	0	0	4	0	0	0	0	0	0	28	1	0	29	39
Total	5	0	18	0	23	1	35	0	0	36	0	0	0	0	0	0	109	2	0	111	170
05:00 PM	3	0	12	0	15	0	9	0	0	9	0	0	0	0	0	0	26	1	0	27	51
05:15 PM	2	0	3	0	5	1	8	0	0	9	0	0	0	0	0	0	20	0	0	20	34
05:30 PM	2	0	5	0	7	0	10	0	0	10	0	0	0	0	0	0	23	1	0	24	41
05:45 PM	1	0	4	0	5	1	8	0	0	9	0	0	0	0	0	0	21	0	0	21	35
Total	8	0	24	0	32	2	35	0	0	37	0	0	0	0	0	0	90	2	0	92	161
Grand Total	13	0	42	0	55	3	70	0	0	73	0	0	0	0	0	0	199	4	0	203	331
Apprch %	23.6	0	76.4	0		4.1	95.9	0	0		0	0	0	0		0	98	2	0		
Total %	3.9	0	12.7	0	16.6	0.9	21.1	0	0	22.1	0	0	0	0	0	0	60.1	1.2	0	61.3	
Cars	13	0	42	0	55	3	70	0	0	73	0	0	0	0	0	0	199	4	0	203	331
% Cars	100	0	100	0	100	100	100	0	0	100	0	0	0	0	0	0	100	100	0	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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Start Time	SW 98 AVE RD Southbound					SW 183 ST Westbound					SW 98 AVE RD Northbound					SW 183 ST Eastbound					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	1	0	6	0	7	**1**	6	0	0	7	0	0	0	0	0	0	**32**	0	0	**32**	46
04:30 PM	2	0	4	0	6	0	**15**	0	0	**15**	0	0	0	0	0	0	27	**1**	0	28	49
04:45 PM	1	0	5	0	6	0	4	0	0	4	0	0	0	0	0	0	28	1	0	29	39
05:00 PM	**3**	0	**12**	0	**15**	0	9	0	0	9	0	0	0	0	0	0	26	1	0	27	**51**
Total Volume	7	0	27	0	34	1	34	0	0	35	0	0	0	0	0	0	113	3	0	116	185
% App. Total	20.6	0	79.4	0		2.9	97.1	0	0		0	0	0	0		0	97.4	2.6	0		
PHF	.583	.000	.563	.000	.567	.250	.567	.000	.000	.583	.000	.000	.000	.000	.000	.000	.883	.750	.000	.906	.907



Appendix E: Level of Service (LOS) - Intersections & Project's Driveways

TABLE: A9

Level of Service (LOS) Summary -
AM Peak Hour & PM Peak Hour

Project Name: Soleste - Bay Village

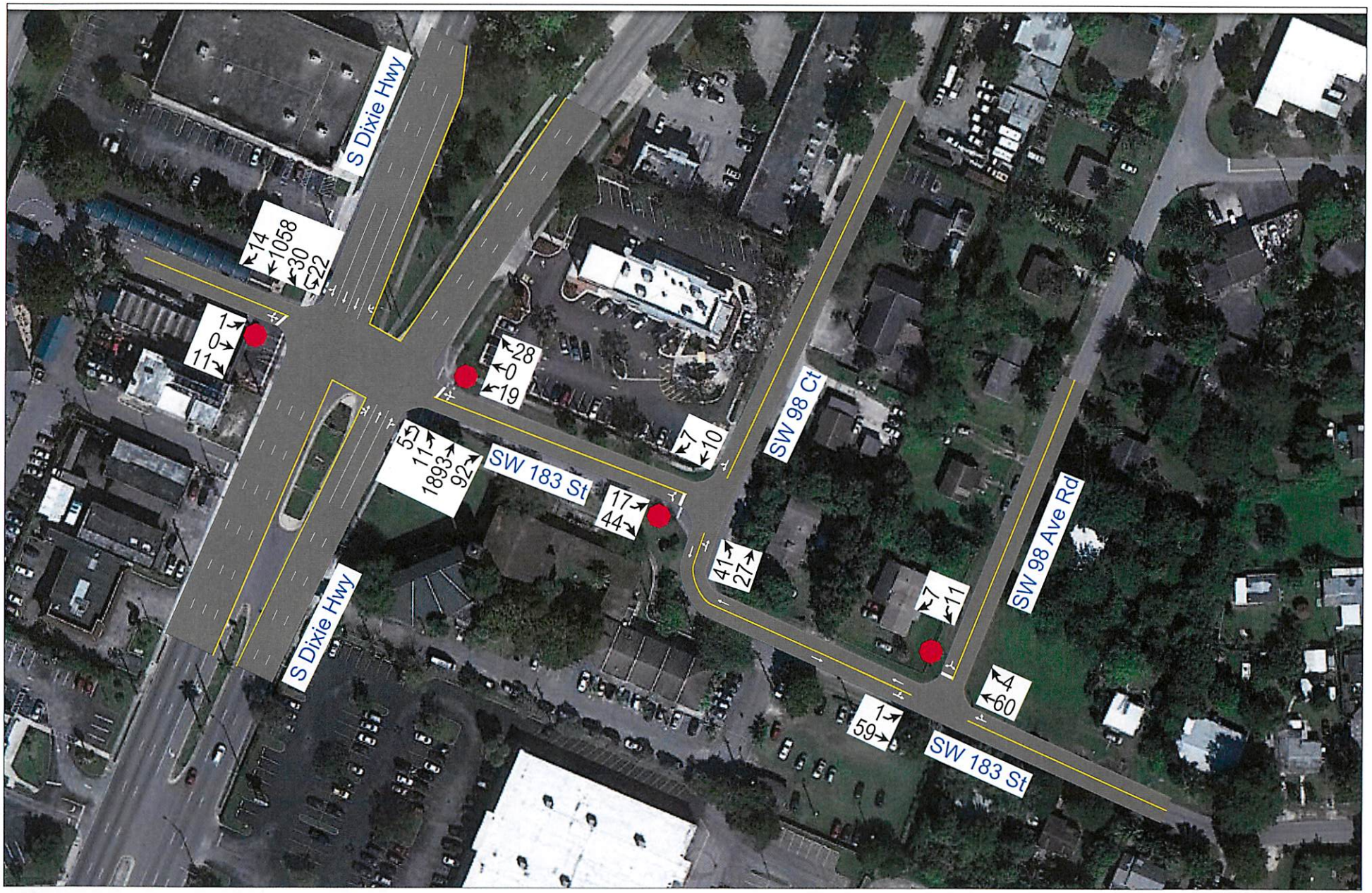
	Location	Intersection Control	Approach	Existing Condition (2016)				Future Condition with Project (2019)			
				AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
				LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)	LOS	Delay (s)
Intersections	S Dixie Highway (SR 5) & SW 183 Street	Two-Way Stop	EB	B	10.5	B	13.9	B	10.7	C	15.0
			WB	C	18.7 *	C	18.2 *	D	25.0 *	C	24.3 *
			NB	A	0.1	A	1.3	A	0.1	A	1.5
			SB	A	0.5	A	0.4	A	0.9	A	0.8
			Overall	**A**	**0.6**	**A**	**1.1**	**A**	**1.2**	**A**	**1.7**
	SW 183 Street & SW 98 Court	Two-Way Stop	EB	A	9.0 *	A	9.0 *	A	9.4 *	A	9.5 *
			WB	-	-	-	-	-	-	-	-
			NB	A	4.4	A	5.2	A	5.9	A	6.3
			SB	A	0.0	A	0.0	A	0.0	A	0.0
			Overall	**A**	**5.8**	**A**	**7.1**	**A**	**6.8**	**A**	**7.9**
	SW 183 Street & SW 98 Avenue Road	Two-Way Stop	EB	A	0.1	A	0.2	A	0.1	A	0.2
			WB	A	0.0	A	0.0	A	0.0	A	0.0
			NB	-	-	-	-	-	-	-	-
			SB	A	9.2 *	A	9.4 *	A	9.5 *	A	9.6 *
			Overall	**A**	**1.2**	**A**	**1.9**	**A**	**1.0**	**A**	**1.6**
Driveways	SW 183 Street & Driveway 1 (DW1) **	All-Way Stop	EB	-	-	-	-	-	-	-	-
			WB	-	-	-	-	A	7.1	A	7.4
			NB	-	-	-	-	A	7.3	A	7.3
			SB	-	-	-	-	A	7.9	A	8.6
			Overall	**-**	**-**	**-**	**-**	**A**	**7.4**	**A**	**8.2**
	SW 183 Street & Driveway 2 (DW2)	Two-Way Stop	EB	-	-	-	-	A	0.0	A	0.0
			WB	-	-	-	-	A	0.5	A	1.2
			NB	-	-	-	-	A	9.4 *	A	9.8 *
			SB	-	-	-	-	-	-	-	-
			Overall	**-**	**-**	**-**	**-**	**A**	**2.3**	**A**	**1.5**

* TWSC Critical Approach

** Intersection was analyzed as All-Way Stop since HCM analysis does not support intersection sign configuration.

Soleste - Bay Village

Existing Condition - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	1	0	11	19	0	28	5	11	1893	92	22	30
Future Volume (Veh/h)	1	0	11	19	0	28	5	11	1893	92	22	30
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
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
Hourly flow rate (vph)	1	0	11	20	0	29	0	11	1952	95	0	31
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									Raised			
Median storage veh)									1			
Upstream signal (ft)												
pX, platoon unblocked							0.00				0.00	
vC, conflicting volume	1862	3229	371	2458	3188	698	0	1105			0	2047
vC1, stage 1 conf vol	1160	1160		2022	2022							
vC2, stage 2 conf vol	702	2069		437	1167							
vCu, unblocked vol	1862	3229	371	2458	3188	698	0	1105			0	2047
tC, single (s)	*5.0	*5.0	*5.0	*5.0	*5.0	*5.0	0.0	4.1			0.0	4.1
tC, 2 stage (s)	4.0	4.0		4.0	4.0							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	100	100	99	89	100	95	0	98			0	89
cM capacity (veh/h)	283	132	765	190	147	558	0	628			0	271

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	12	49	499	976	583	31	436	436	232
Volume Left	1	20	11	0	0	31	0	0	0
Volume Right	11	29	0	0	95	0	0	0	14
cSH	670	311	628	1700	1700	271	1700	1700	1700
Volume to Capacity	0.02	0.16	0.02	0.57	0.34	0.11	0.26	0.26	0.14
Queue Length 95th (ft)	1	14	1	0	0	10	0	0	0
Control Delay (s)	10.5	18.7	0.5	0.0	0.0	20.0	0.0	0.0	0.0
Lane LOS	B	C	A			C			
Approach Delay (s)	10.5	18.7	0.1			0.5			
Approach LOS	B	C							

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	64.7%	ICU Level of Service		C
Analysis Period (min)	15			

* User Entered Value



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1058	14
Future Volume (Veh/h)	1058	14
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.97	0.97
Hourly flow rate (vph)	1091	14
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	Raised	
Median storage veh)	1	
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		

Direction, Lane #

Intersection	
Int Delay, s/veh	5.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	44	41	27	10	7
Future Vol, veh/h	17	44	41	27	10	7
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	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	56	52	34	13	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	156	18	22	0	-	0
Stage 1	18	-	-	-	-	-
Stage 2	138	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	840	1066	1607	-	-	-
Stage 1	1010	-	-	-	-	-
Stage 2	894	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	812	1066	1607	-	-	-
Mov Cap-2 Maneuver	812	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	894	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	4.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1607	-	981	-	-
HCM Lane V/C Ratio	0.032	-	0.079	-	-
HCM Control Delay (s)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↑		Y	
Traffic Vol, veh/h	1	59	60	4	11	7
Future Vol, veh/h	1	59	60	4	11	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	83	85	6	15	10

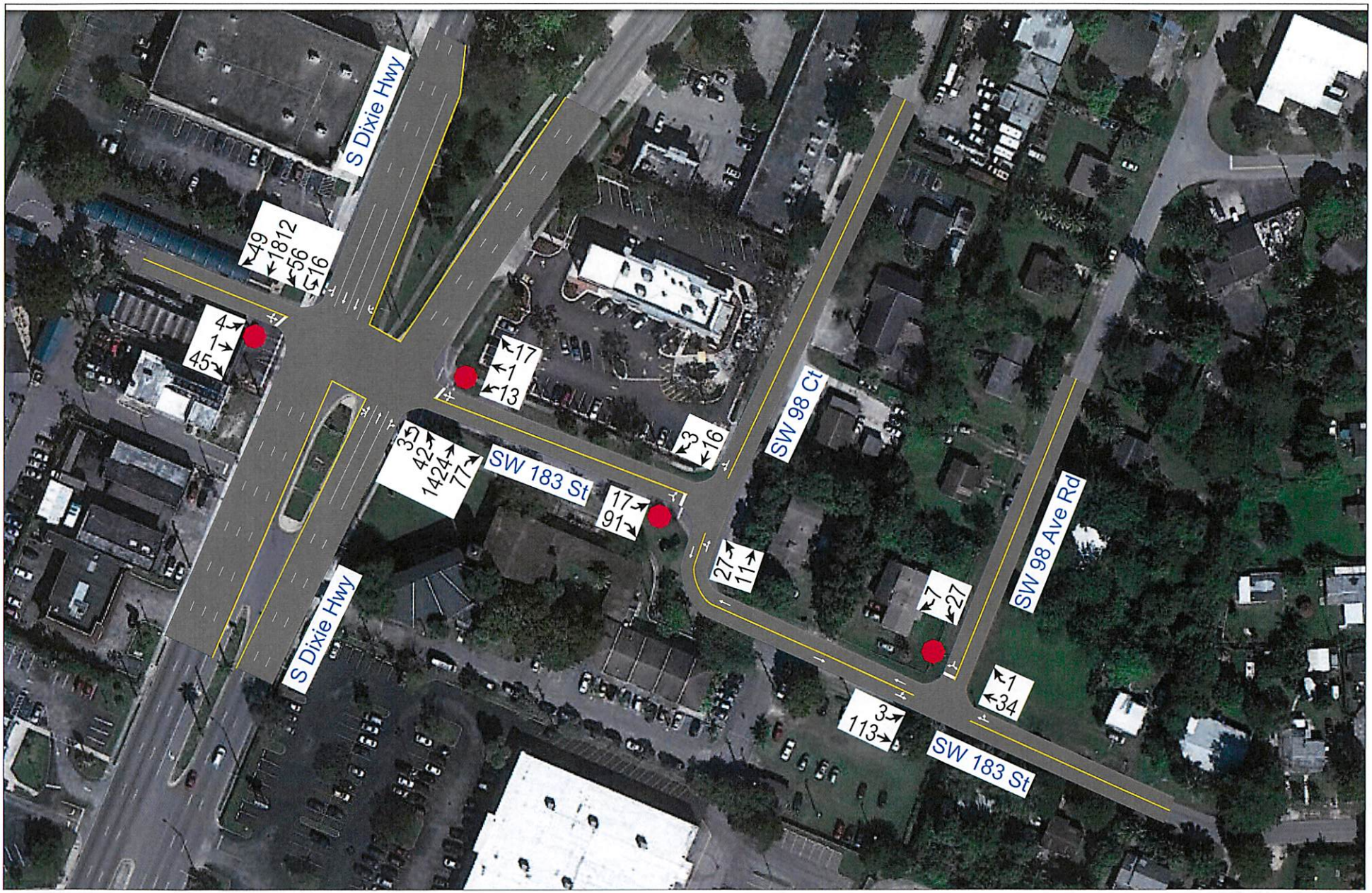
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	91	0	-	0	173	88
Stage 1	-	-	-	-	88	-
Stage 2	-	-	-	-	85	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1517	-	-	-	822	976
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	943	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1517	-	-	-	821	976
Mov Cap-2 Maneuver	-	-	-	-	821	-
Stage 1	-	-	-	-	939	-
Stage 2	-	-	-	-	943	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1517	-	-	-	875
HCM Lane V/C Ratio	0.001	-	-	-	0.029
HCM Control Delay (s)	7.4	0	-	-	9.2
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Soleste - Bay Village

Existing Condition - PM Peak Hour

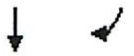


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations		↔			↔				↑↑↑			↰
Traffic Volume (veh/h)	4	1	45	13	1	17	3	42	1424	77	16	56
Future Volume (Veh/h)	4	1	45	13	1	17	3	42	1424	77	16	56
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	4	1	46	13	1	17	0	43	1453	79	0	57
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									Raised			
Median storage veh)									1			
Upstream signal (ft)												
pX, platoon unblocked							0.00				0.00	
vC, conflicting volume	2576	3606	641	2355	3592	524	0	1899			0	1532
vC1, stage 1 conf vol	1988	1988		1578	1578							
vC2, stage 2 conf vol	588	1618		777	2013							
vCu, unblocked vol	2576	3606	641	2355	3592	524	0	1899			0	1532
tC, single (s)	*5.0	*5.0	*5.0	*5.0	*5.0	*5.0	0.0	4.1			0.0	4.1
tC, 2 stage (s)	4.0	4.0		4.0	4.0							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	98	99	92	93	99	97	0	86			0	87
cM capacity (veh/h)	164	107	589	195	103	661	0	310			0	430

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	51	31	406	726	442	57	740	740	420
Volume Left	4	13	43	0	0	57	0	0	0
Volume Right	46	17	0	0	79	0	0	0	50
cSH	457	304	310	1700	1700	430	1700	1700	1700
Volume to Capacity	0.11	0.10	0.14	0.43	0.26	0.13	0.44	0.44	0.25
Queue Length 95th (ft)	9	8	12	0	0	11	0	0	0
Control Delay (s)	13.9	18.2	4.9	0.0	0.0	14.6	0.0	0.0	0.0
Lane LOS	B	C	A			B			
Approach Delay (s)	13.9	18.2	1.3			0.4			
Approach LOS	B	C							

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		

* User Entered Value



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1812	49
Future Volume (Veh/h)	1812	49
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.98	0.98
Hourly flow rate (vph)	1849	50
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	Raised	
Median storage veh)	1	
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		

Direction, Lane #

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	91	27	11	16	3
Future Vol, veh/h	17	91	27	11	16	3
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	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	20	106	31	13	19	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	96	21	22	0	-	0
Stage 1	21	-	-	-	-	-
Stage 2	75	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	908	1062	1607	-	-	-
Stage 1	1007	-	-	-	-	-
Stage 2	953	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	891	1062	1607	-	-	-
Mov Cap-2 Maneuver	891	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	953	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	5.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1607	-	1031	-	-
HCM Lane V/C Ratio	0.02	-	0.122	-	-
HCM Control Delay (s)	7.3	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰	↑		Y	
Traffic Vol, veh/h	3	113	34	1	27	7
Future Vol, veh/h	3	113	34	1	27	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	124	37	1	30	8

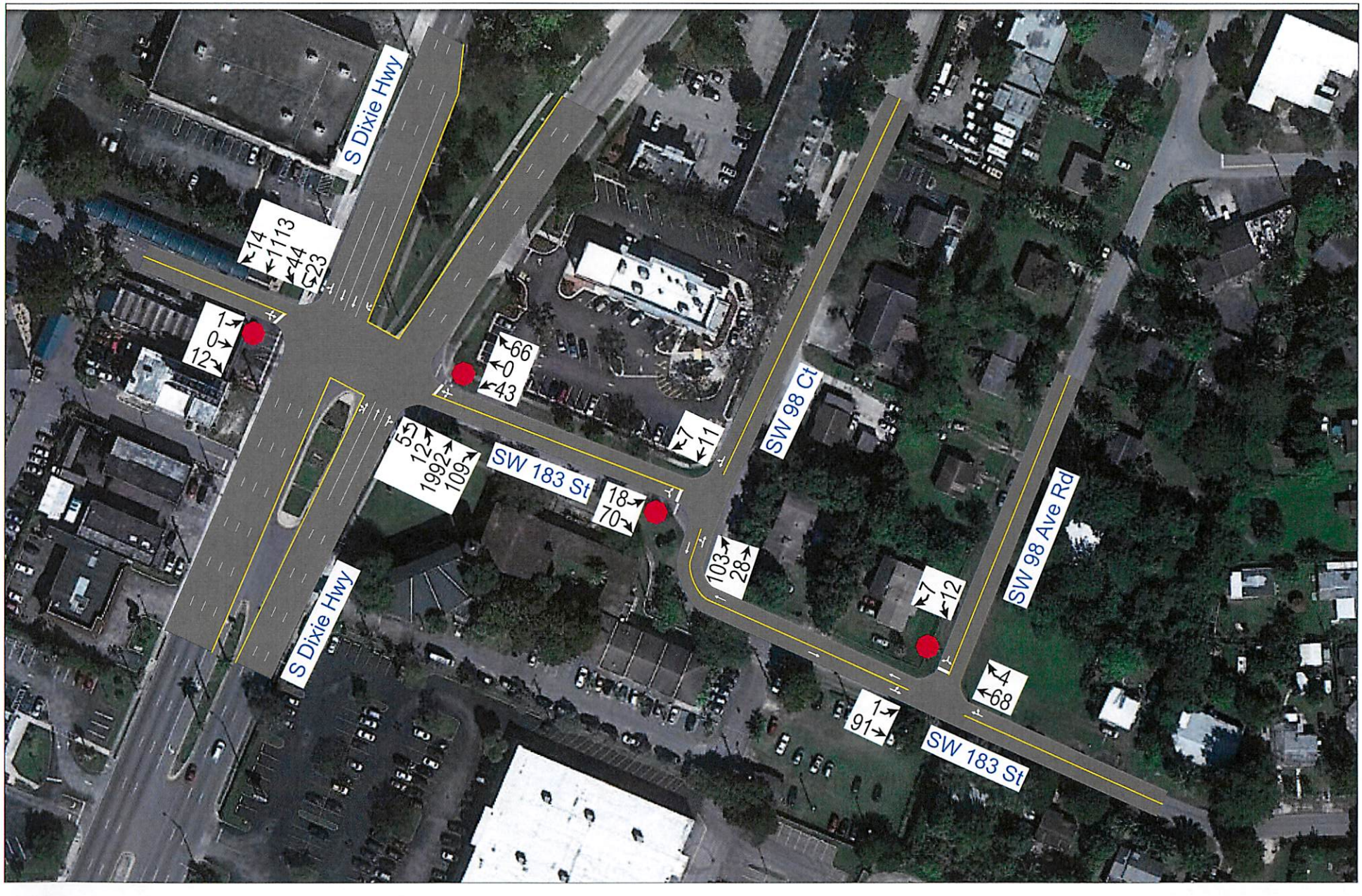
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	38	0	-	0	168	38
Stage 1	-	-	-	-	38	-
Stage 2	-	-	-	-	130	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1585	-	-	-	827	1040
Stage 1	-	-	-	-	990	-
Stage 2	-	-	-	-	901	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1585	-	-	-	825	1040
Mov Cap-2 Maneuver	-	-	-	-	825	-
Stage 1	-	-	-	-	988	-
Stage 2	-	-	-	-	901	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1585	-	-	-	862
HCM Lane V/C Ratio	0.002	-	-	-	0.043
HCM Control Delay (s)	7.3	0	-	-	9.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Soleste - Bay Village

Proposed Future Condition w/Project - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	1	0	12	43	0	66	5	12	1992	109	23	44
Future Volume (Veh/h)	1	0	12	43	0	66	5	12	1992	109	23	44
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
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
Hourly flow rate (vph)	1	0	12	44	0	68	0	12	2054	112	0	45
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									Raised			
Median storage veh)									1			
Upstream signal (ft)												
pX, platoon unblocked							0.00				0.00	
vC, conflicting volume	2021	3434	389	2618	3385	741	0	1161			0	2166
vC1, stage 1 conf vol	1244	1244		2134	2134							
vC2, stage 2 conf vol	777	2190		484	1251							
vCu, unblocked vol	2021	3434	389	2618	3385	741	0	1161			0	2166
tC, single (s)	*5.0	*5.0	*5.0	*5.0	*5.0	*5.0	0.0	4.1			0.0	4.1
tC, 2 stage (s)	4.0	4.0		4.0	4.0							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	100	100	98	74	100	87	0	98			0	82
cM capacity (veh/h)	236	109	753	170	129	536	0	603			0	247

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	13	112	526	1027	626	45	459	459	243
Volume Left	1	44	12	0	0	45	0	0	0
Volume Right	12	68	0	0	112	0	0	0	14
cSH	645	290	603	1700	1700	247	1700	1700	1700
Volume to Capacity	0.02	0.39	0.02	0.60	0.37	0.18	0.27	0.27	0.14
Queue Length 95th (ft)	2	44	2	0	0	16	0	0	0
Control Delay (s)	10.7	25.0	0.6	0.0	0.0	22.8	0.0	0.0	0.0
Lane LOS	B	D	A			C			
Approach Delay (s)	10.7	25.0	0.1			0.9			
Approach LOS	B	D							

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		

* User Entered Value



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1113	14
Future Volume (Veh/h)	1113	14
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.97	0.97
Hourly flow rate (vph)	1147	14
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	Raised	
Median storage veh)	1	
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		

Direction, Lane #

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	70	103	28	11	7
Future Vol, veh/h	18	70	103	28	11	7
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	79	79	79	79	79	79
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	23	89	130	35	14	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	314	19	23	0	-	0
Stage 1	19	-	-	-	-	-
Stage 2	295	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	683	1065	1605	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	760	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	626	1065	1605	-	-	-
Mov Cap-2 Maneuver	626	-	-	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	760	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	5.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1605	-	931	-	-
HCM Lane V/C Ratio	0.081	-	0.12	-	-
HCM Control Delay (s)	7.4	0	9.4	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	0.4	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰↑	↑↱		Y	
Traffic Vol, veh/h	1	91	68	4	12	7
Future Vol, veh/h	1	91	68	4	12	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	128	96	6	17	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	102	0	-	0	229	99
Stage 1	-	-	-	-	99	-
Stage 2	-	-	-	-	130	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1503	-	-	-	764	962
Stage 1	-	-	-	-	930	-
Stage 2	-	-	-	-	901	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1503	-	-	-	763	962
Mov Cap-2 Maneuver	-	-	-	-	763	-
Stage 1	-	-	-	-	929	-
Stage 2	-	-	-	-	901	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1503	-	-	-	826
HCM Lane V/C Ratio	0.001	-	-	-	0.032
HCM Control Delay (s)	7.4	0	-	-	9.5
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Soleste - Bay Village

Proposed Future Driveway LOS - AM Peak Hour



Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	4	101	0	30	16	0	66	15
Future Vol, veh/h	0	4	101	0	30	16	0	66	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	4	110	0	33	17	0	72	16
Number of Lanes	0	1	0	0	1	0	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.1	7.3	7.9
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	4%	81%
Vol Thru, %	65%	0%	19%
Vol Right, %	35%	96%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	46	105	81
LT Vol	0	4	66
Through Vol	30	0	15
RT Vol	16	101	0
Lane Flow Rate	50	114	88
Geometry Grp	1	1	1
Degree of Util (X)	0.055	0.114	0.106
Departure Headway (Hd)	3.992	3.599	4.335
Convergence, Y/N	Yes	Yes	Yes
Cap	891	982	825
Service Time	2.043	1.674	2.371
HCM Lane V/C Ratio	0.056	0.116	0.107
HCM Control Delay	7.3	7.1	7.9
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.2	0.4	0.4

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	73	9	5	70	30	15
Future Vol, veh/h	73	9	5	70	30	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	79	10	5	76	33	16

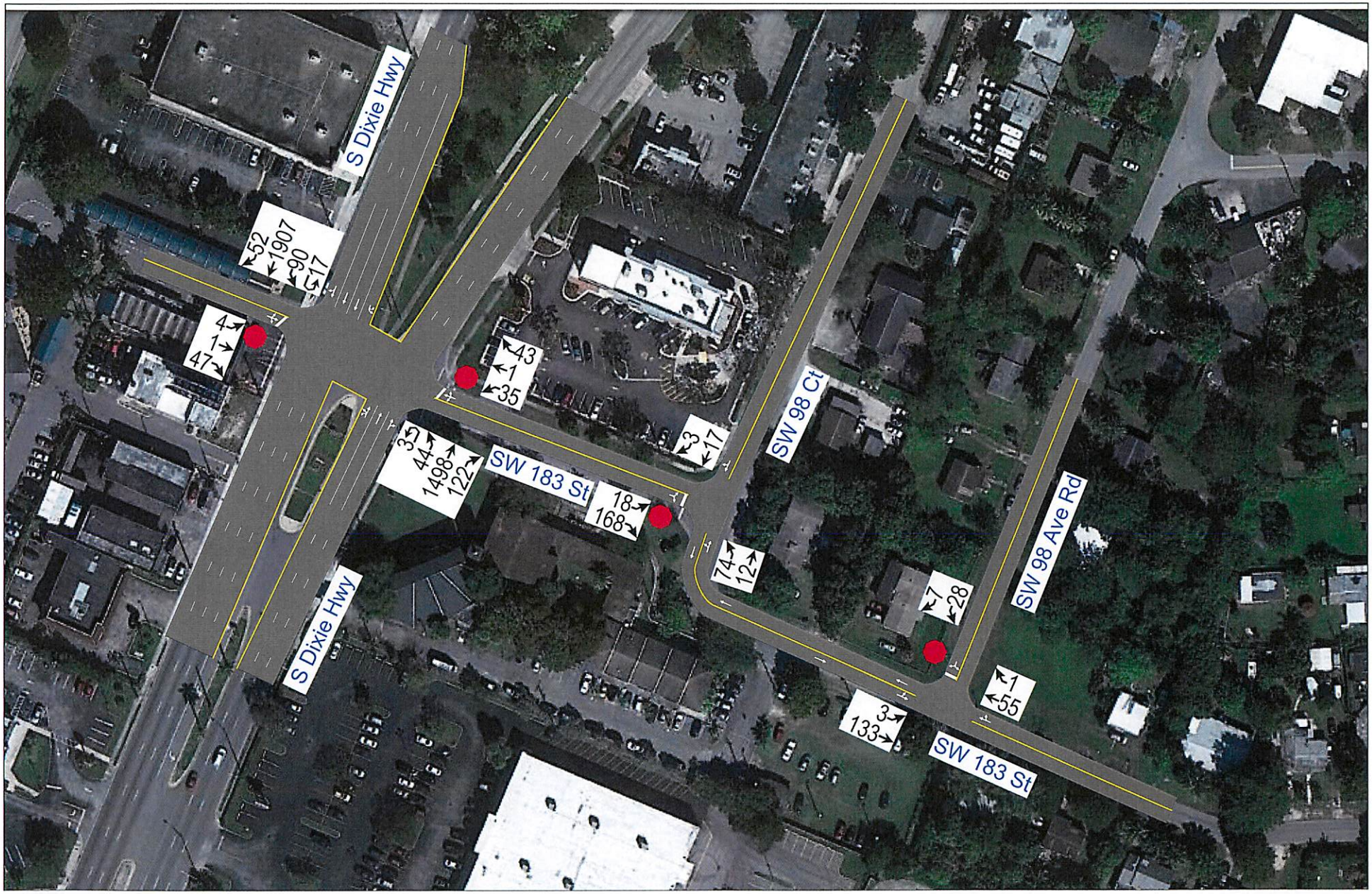
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	89	0	170	84
Stage 1	-	-	-	-	84	-
Stage 2	-	-	-	-	86	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1506	-	820	975
Stage 1	-	-	-	-	939	-
Stage 2	-	-	-	-	937	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1506	-	818	975
Mov Cap-2 Maneuver	-	-	-	-	818	-
Stage 1	-	-	-	-	936	-
Stage 2	-	-	-	-	937	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	864	-	-	1506	-
HCM Lane V/C Ratio	0.057	-	-	0.004	-
HCM Control Delay (s)	9.4	-	-	7.4	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Soleste - Bay Village

Proposed Future Condition w/Project - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	4	1	47	35	1	43	3	44	1498	122	17	90
Future Volume (Veh/h)	4	1	47	35	1	43	3	44	1498	122	17	90
Sign Control		Stop			Stop				Free			
Grade		0%			0%				0%			
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Hourly flow rate (vph)	4	1	48	36	1	44	0	45	1529	124	0	92
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									Raised			
Median storage veh)									1			
Upstream signal (ft)												
pX, platoon unblocked							0.00				0.00	
vC, conflicting volume	2801	3900	675	2562	3864	572	0	1999			0	1653
vC1, stage 1 conf vol	2156	2156		1681	1681							
vC2, stage 2 conf vol	644	1743		881	2183							
vCu, unblocked vol	2801	3900	675	2562	3864	572	0	1999			0	1653
tC, single (s)	*5.0	*5.0	*5.0	*5.0	*5.0	*5.0	0.0	4.1			0.0	4.1
tC, 2 stage (s)	4.0	4.0		4.0	4.0							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	97	99	92	78	99	93	0	84			0	76
cM capacity (veh/h)	126	78	570	163	78	631	0	283			0	386

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4
Volume Total	53	81	427	764	506	92	778	778	442
Volume Left	4	36	45	0	0	92	0	0	0
Volume Right	48	44	0	0	124	0	0	0	53
cSH	412	267	283	1700	1700	386	1700	1700	1700
Volume to Capacity	0.13	0.30	0.16	0.45	0.30	0.24	0.46	0.46	0.26
Queue Length 95th (ft)	11	31	14	0	0	23	0	0	0
Control Delay (s)	15.0	24.3	5.8	0.0	0.0	17.2	0.0	0.0	0.0
Lane LOS	C	C	A			C			
Approach Delay (s)	15.0	24.3	1.5			0.8			
Approach LOS	C	C							

Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	91.9%	ICU Level of Service		F
Analysis Period (min)	15			

* User Entered Value



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (veh/h)	1907	52
Future Volume (Veh/h)	1907	52
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.98	0.98
Hourly flow rate (vph)	1946	53
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	Raised	
Median storage veh)	1	
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		

Direction, Lane #

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	168	74	12	17	3
Future Vol, veh/h	18	168	74	12	17	3
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	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	21	195	86	14	20	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	208	22	23	0	-	0
Stage 1	22	-	-	-	-	-
Stage 2	186	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	785	1061	1605	-	-	-
Stage 1	1006	-	-	-	-	-
Stage 2	851	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	743	1061	1605	-	-	-
Mov Cap-2 Maneuver	743	-	-	-	-	-
Stage 1	952	-	-	-	-	-
Stage 2	851	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	6.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1605	-	1019	-	-
HCM Lane V/C Ratio	0.054	-	0.212	-	-
HCM Control Delay (s)	7.4	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.8	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↰↑	↑↱		Y	
Traffic Vol, veh/h	3	133	55	1	28	7
Future Vol, veh/h	3	133	55	1	28	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	146	60	1	31	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	61	0	-	0	213	61
Stage 1	-	-	-	-	61	-
Stage 2	-	-	-	-	152	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1555	-	-	-	780	1010
Stage 1	-	-	-	-	967	-
Stage 2	-	-	-	-	881	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1555	-	-	-	778	1010
Mov Cap-2 Maneuver	-	-	-	-	778	-
Stage 1	-	-	-	-	965	-
Stage 2	-	-	-	-	881	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1555	-	-	-	815
HCM Lane V/C Ratio	0.002	-	-	-	0.047
HCM Control Delay (s)	7.3	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Soleste - Bay Village

Proposed Future Driveway LOS - PM Peak Hour



Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	WBU	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations									
Traffic Vol, veh/h	0	10	62	0	24	8	0	148	37
Future Vol, veh/h	0	10	62	0	24	8	0	148	37
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	67	0	26	9	0	161	40
Number of Lanes	0	1	0	0	1	0	0	0	1

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	1	0	1
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	1	1	0
HCM Control Delay	7.4	7.3	8.6
HCM LOS	A	A	A

Lane	NBLn1	WBLn1	SBLn1
Vol Left, %	0%	14%	80%
Vol Thru, %	75%	0%	20%
Vol Right, %	25%	86%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	32	72	185
LT Vol	0	10	148
Through Vol	24	0	37
RT Vol	8	62	0
Lane Flow Rate	35	78	201
Geometry Grp	1	1	1
Degree of Util (X)	0.039	0.086	0.238
Departure Headway (Hd)	4.076	3.978	4.259
Convergence, Y/N	Yes	Yes	Yes
Cap	866	906	841
Service Time	2.16	1.978	2.298
HCM Lane V/C Ratio	0.04	0.086	0.239
HCM Control Delay	7.3	7.4	8.6
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.1	0.3	0.9

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	119	37	10	52	24	7
Future Vol, veh/h	119	37	10	52	24	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	129	40	11	57	26	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	169	0	228	149
Stage 1	-	-	-	-	149	-
Stage 2	-	-	-	-	79	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1409	-	760	898
Stage 1	-	-	-	-	879	-
Stage 2	-	-	-	-	944	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1409	-	754	898
Mov Cap-2 Maneuver	-	-	-	-	754	-
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	944	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	782	-	-	1409	-
HCM Lane V/C Ratio	0.043	-	-	0.008	-
HCM Control Delay (s)	9.8	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-