



Traffic Impact Analysis

44 Zamora Avenue
Coral Gables, Florida



Kimley»»Horn

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June 2018

Traffic Impact Analysis

**44 Zamora Avenue
Coral Gables, Florida**

Prepared for:

TWJ Zamora, LLC
Miami, Florida

Kimley»Horn

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June 2018
043557002



Ali N. Hanes, P.E.
Florida Registration Number 77731
Kimley-Horn and Associates, Inc.
600 North Pine Island Road, Suite 450
Plantation, Florida 33324

EXECUTIVE SUMMARY

TWJ Zamora, LLC is proposing a mid-rise residential development consisting of 91 units to be located on the site generally bound by Zamora Avenue, Madeira Avenue, Galiano Street, and Douglas Road/SW 37th Avenue in the City of Coral Gables. Currently, the area proposed for development is vacant. Access to the site is provided via two (2) full-access driveways: one (1) along Zamora Avenue and one (1) along Galiano Street. The project is expected to be completed and opened by the year 2020.

A traffic impact analysis was conducted to assess the project's impact on the surrounding roadway network and to determine if adequate capacity is available to support future traffic volumes. Trip generation calculations for the proposed development were performed using the Institute of Transportation Engineer's (ITE's) *Trip Generation*, 10th Edition. ITE Land Use Code (LUC) 221 (Mid-rise multifamily housing) was utilized for the development. This project is expected to generate 28 new trips during the A.M. peak hour and 36 new trips during the P.M. peak hour.

Intersection capacity analyses indicate that the study intersections are expected to operate at accepted levels of service during the A.M. and P.M. peak hours under all analysis conditions.

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INTRODUCTION

TWJ Zamora, LLC is proposing a mid-rise residential development consisting of 91 units to be located on the site generally bound by Zamora Avenue, Madeira Avenue, Galiano Street, and Douglas Road/SW 37th Avenue in the City of Coral Gables. Currently, the area proposed for development is vacant. Access to the site is provided via two (2) full-access driveways: one (1) along Zamora Avenue and one (1) along Galiano Street. The project is expected to be completed and opened by the year 2020. A project location map is included as Figure 1 and a site plan is provided in Appendix A.

The roadways within the immediate vicinity of the site include Ponce de Leon Boulevard, Zamora Avenue, Galiano Street, Madeira Avenue, Douglas Road/SW 37th Avenue, and SW 16th Street. Ponce de Leon Boulevard is a four-lane divided north-south roadway with on-street parking; Galiano Street is a two-lane undivided north-south roadway with on-street parking; Zamora Avenue, Madeira Avenue, and SW 16th Street are all two-lane undivided east-west roadways with on-street parking; and Douglas Road/SW 37th Avenue is a four-lane undivided north-south roadway.

Kimley-Horn and Associates, Inc. has completed this traffic impact analysis to assess the project's impact on the surrounding roadway network and determine if adequate capacity is available to support future traffic volumes. Methodology correspondence detailing the proposed traffic study requirements is included in Appendix B. Note that a City response on the proposed methodology was not received at the time this report was prepared. This report summarizes the data collection, project trip generation and distribution, and capacity analyses.



Figure 1
Project Location
44 Zamora Avenue
Coral Gables, Florida

PROJECT TRAFFIC

Project traffic used in this analysis is defined as the vehicle trips expected to be generated by the project and the distribution and assignment of that traffic over the study roadway network.

Existing and Proposed Land Uses

The project site is currently vacant. The proposed development will consist of a 91-unit mid-rise apartment building.

Project Access

Proposed access to the site is provided via two (2) full-access driveways: one (1) along Zamora Avenue and one (1) along Galiano Street. A site plan is provided in Appendix A.

Trip Generation

Trip generation calculations for the proposed development were performed using the Institute of Transportation Engineer's (ITE's) *Trip Generation*, 10th Edition. ITE Land Use Code (LUC) 221 (Mid-rise multifamily housing) was utilized. Table 1 summarizes the project's forecast trip generation for the weekday A.M. and weekday P.M. peak hours of adjacent street traffic. Detailed trip generation information is included in Appendix C.

Multimodal Reduction

A multimodal (public transit, bicycle, and pedestrian) factor based on U.S. Census *Means of Transportation to Work* data was reviewed for the census tract of the development. A multimodal factor of 9.45 percent (9.45%) was applied to the trip generation calculations to account for the environment in which the project site is located. It is expected that residents and guests will choose to walk or use public transit to and from the proposed development. Transit route information will be documented in the report, and the U.S. Census data is included in Appendix C.

Net New Project Trips

Net new project trips are equal to the gross project trips minus the internal capture and existing development trips. The net new project trips represent additional vehicles on the roadway network. As shown in Table 1, this project is expected to generate 28 net new trips during the A.M. peak hour and 36 net new trips during the P.M. peak hour.

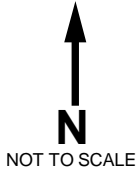
Table 1: Proposed Peak Hour Trip Generation										
Land Use	ITE Code	Scale	Gross Project Trips			Multimodal Reduction		Net New Project Trips		
			Enter	Exit	Total	%	Trips	Enter	Exit	Total
<i>Proposed Weekday A.M. Peak Hour (Proposed Weekday P.M. Peak Hour)</i>										
Mid-rise Residential	221	91 d.u.	8 (24)	23 (16)	31 (40)	9.45% (9.45%)	3 (4)	7 (22)	21 (14)	28 (36)

Trip Distribution and Assignment

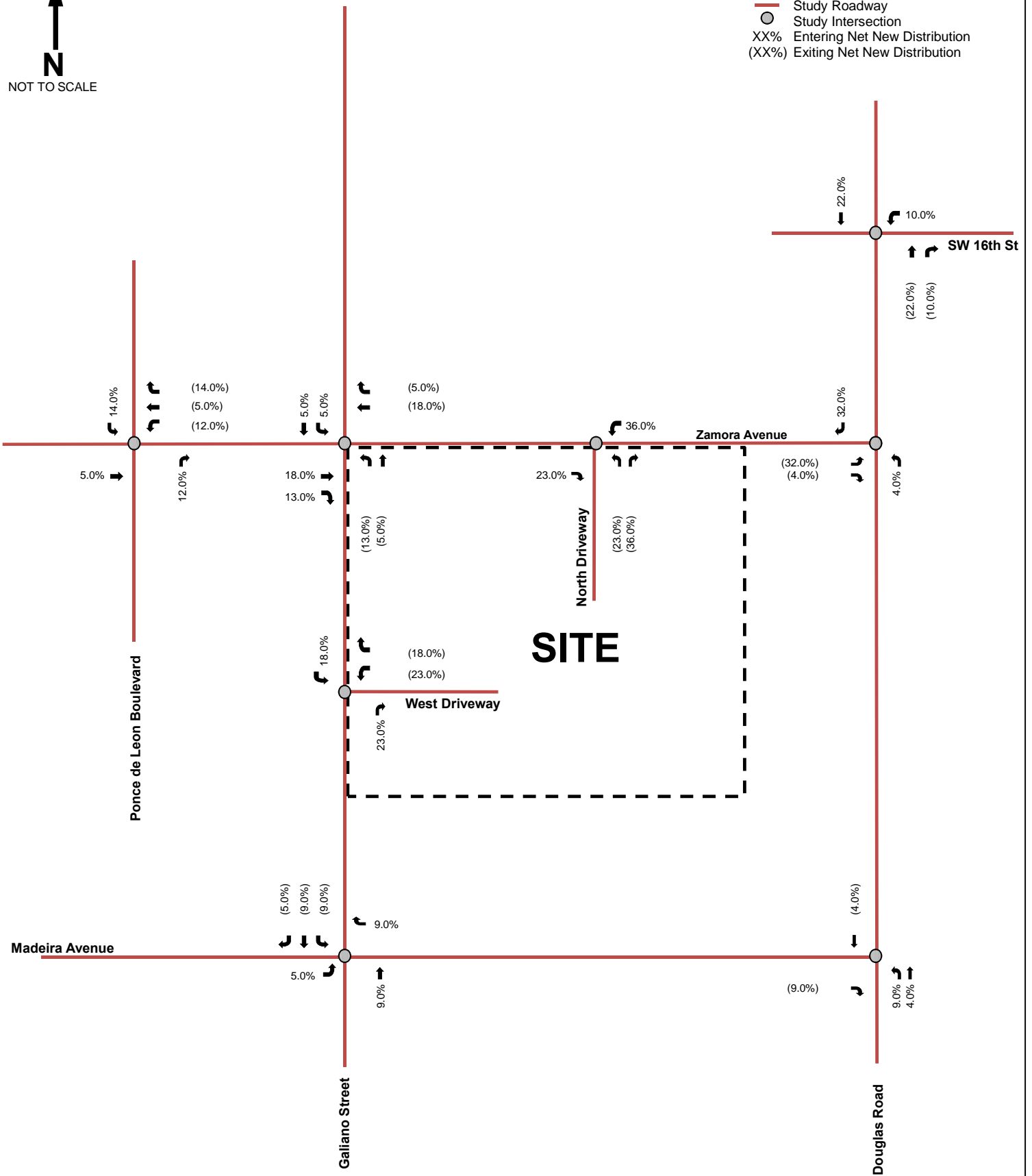
The likely distribution of project traffic was forecasted for the trips expected to be generated by the proposed development. The trip distribution was based on a cardinal trip distribution for the project site's traffic analysis zone (TAZ 1054) obtained from the *2040 Cost Feasible Plan* travel demand model developed by the Miami-Dade Metropolitan Planning Organization. The cardinal trip distribution for TAZ 1054 interpolated for the year 2020 is provided in Table 2.

Cardinal Direction	Percentage of Trips
North-Northeast	15.00%
East-Northeast	17.00%
East-Southeast	6.00%
South-Southeast	7.00%
South-Southwest	14.00%
West-Southwest	12.00%
West-Northwest	11.00%
North-Northwest	18.00%
Total	100.00%

The detailed cardinal distribution is included in Appendix D. Figure 2 presents the project's trip distribution and Figure 3 presents the project's traffic assignment for the weekday A.M. and P.M. peak hours.

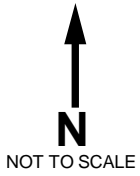


- Legend**
- Study Roadway
 - Study Intersection
 - XX% Entering Net New Distribution
 - (XX%) Exiting Net New Distribution



SITE

Figure 2
Project Trip Distribution
44 Zamora Avenue
Coral Gables, Florida



- Legend**
- Study Roadway
 - Study Intersection
 - XX AM Net New Trip Assignment
 - (XX) PM Net New Trip Assignment

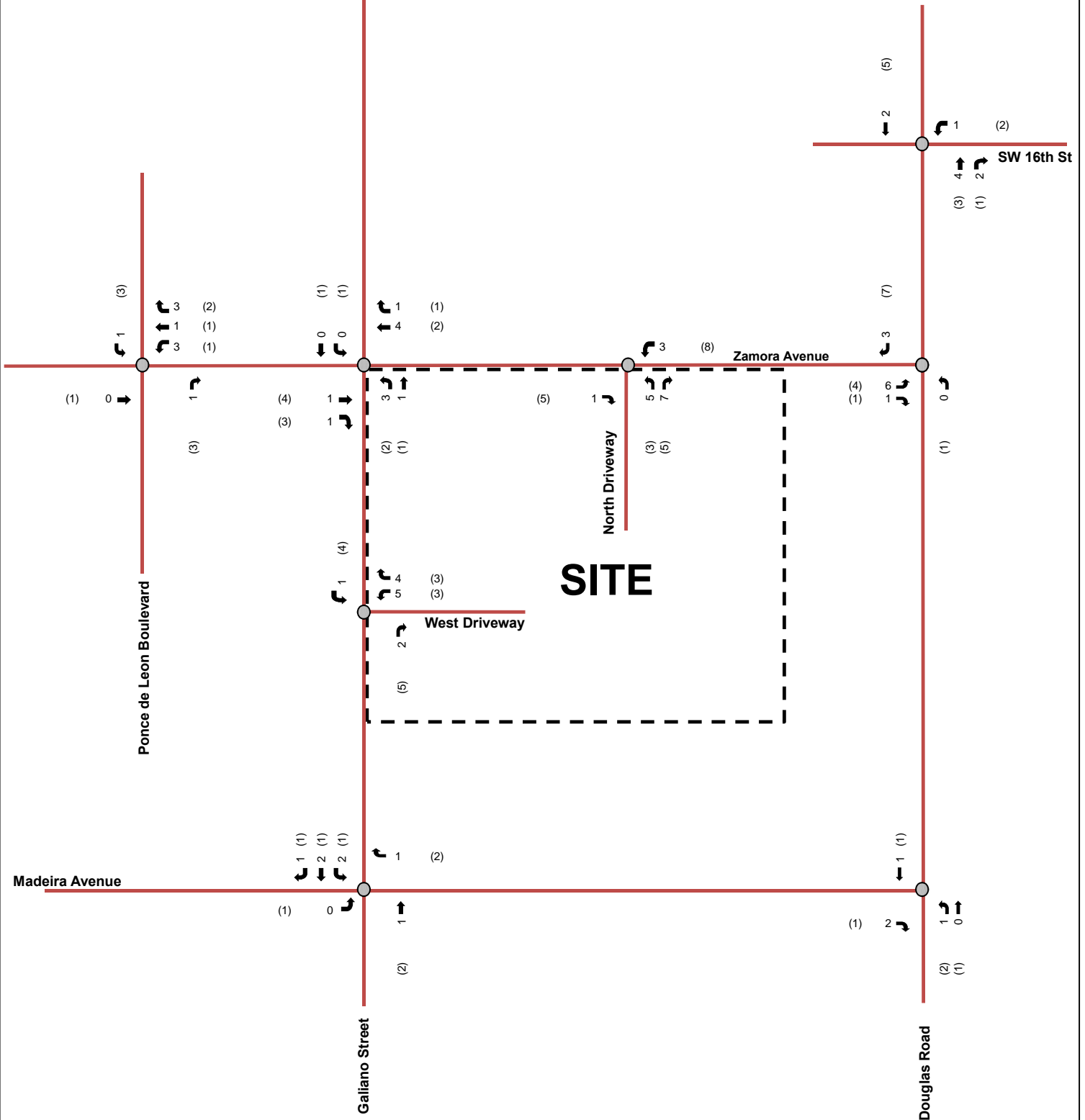


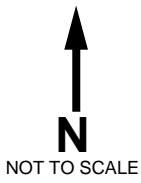
Figure 3
Project Trip Assignment
44 Zamora Avenue
Coral Gables, Florida

EXISTING TRAFFIC

A.M. peak period (7:00 to 9:00 A.M.) and P.M. peak period (4:00 to 6:00 P.M.) turning movement counts were collected on May 24, 2018 (Thursday) at the following six (6) intersections:

- Zamora Avenue and Ponce de Leon Boulevard
- Zamora Avenue and Galiano Street
- Madeira Avenue and Galiano Street
- Zamora Avenue and Douglas Road
- Madeira Avenue and Douglas Road
- Douglas Road and SW 16th Street

The volumes were collected in 15-minute intervals and the peak hour was determined for each intersection. The Florida Department of Transportation (FDOT) peak season conversion factor (PSCF) was applied to the traffic counts to adjust the traffic to peak season volumes. The appropriate peak season conversion factor for the week the counts were collected is 1.01. The turning movement counts and FDOT peak season factor category report are included in Appendix E. Figure 4 presents the existing turning movement volumes at the study intersections during the weekday A.M. and P.M. peak hours.



- Legend**
- Study Roadway
 - Study Intersection
 - XX AM Peak Hour Traffic
 - (XX) PM Peak Hour Traffic

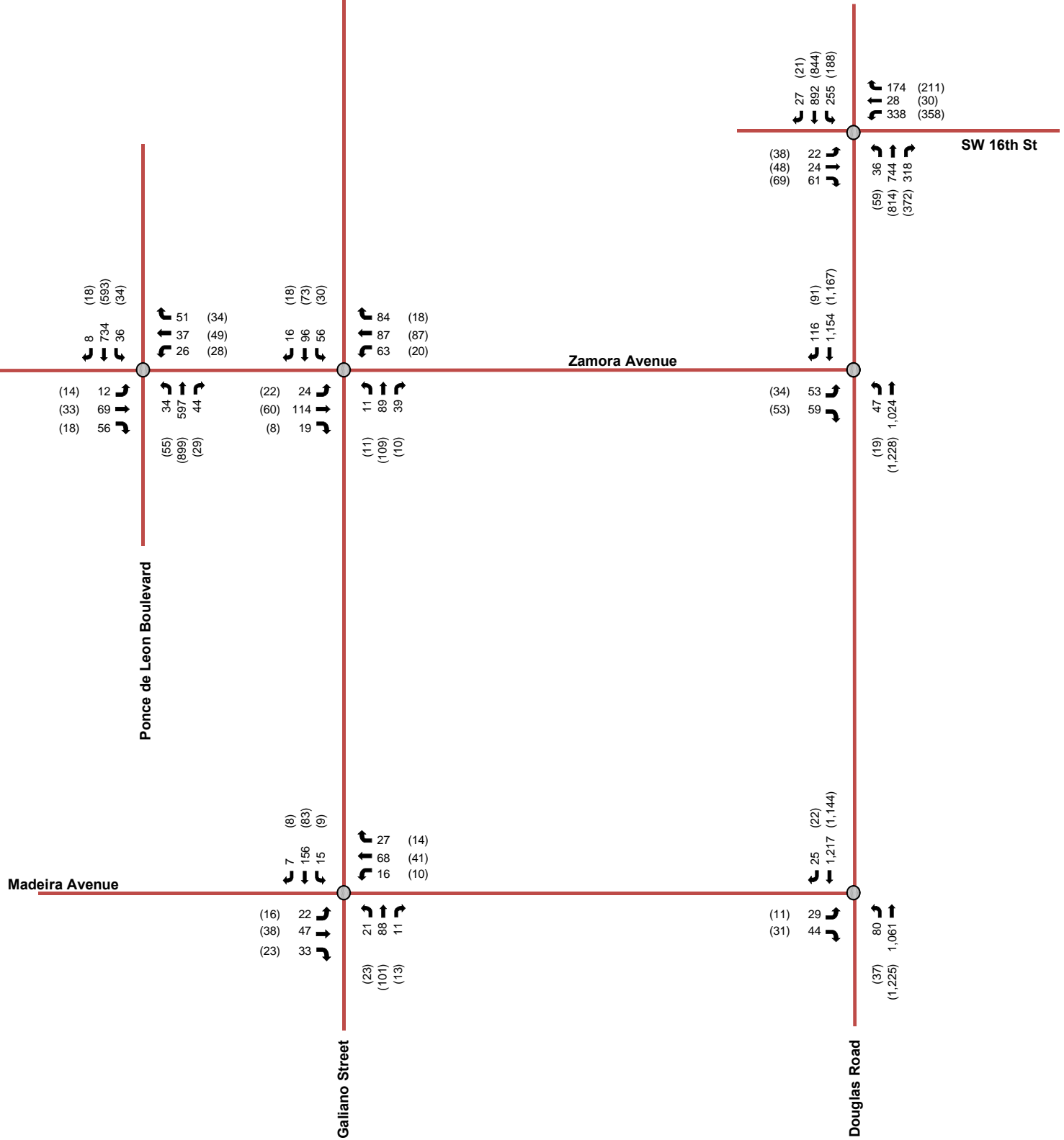


Figure 4
Existing Traffic
44 Zamora Avenue
Coral Gables, Florida

FUTURE BACKGROUND TRAFFIC

Future background traffic conditions are defined as expected traffic conditions on the roadway network in the year 2020 without the construction of the proposed project. Future background traffic volumes used in the analysis are the sum of the existing traffic and an additional amount of traffic generated by growth in the study area. Figure 5 presents the year 2020 peak hour background traffic volumes during the weekday A.M. and P.M. peak hours.

Background Area Growth

Future traffic growth on the transportation network was determined based upon historic growth trends at nearby FDOT traffic count stations and based upon the SERPM projected 2010 and 2040 model network volumes. FDOT count stations referenced in this analysis include:

- Count Station #2534 located on SR 972/Coral Way, 200' east of SW 37th Ave.
- Count Station #5117 located on SR 90/US-41/SW 8th St, 200' east of SW 37th Avenue
- Count Station #8410 located on Ponce de Leon Boulevard, 200' south of Miracle Mile

The FDOT historic growth rate analysis yielded a negative 0.99 percent (-0.99%) growth rate over the most recent five (5) year period and a negative 0.46 percent (-0.46%) growth rate over the most recent ten (10) year period.

Additionally, the SERPM 2010 and 2040 model network volumes were examined to determine the growth trend for the roadway segments near the site location. SERPM model roadway segments referenced in this analysis include:

- Douglas Road/SW 37th Avenue
- Ponce De Leon Boulevard
- Alhambra Circle
- SW 16th Street

The SERPM model growth rate analysis yielded a 0.74 percent (0.74%) growth rate.

To provide for a conservative analysis, a 1.0 percent (1.0%) growth rate was applied annually to the existing traffic volumes to attain future (2020) background traffic conditions. The worksheets used to analyze the historic growth trends are included in Appendix F.



Committed Developments

The following committed (not yet built) development was identified by the City of Coral Gables staff:

- 1505 Ponce de Leon Boulevard

The traffic projected from this committed development was added to background A.M. peak hour and P.M. peak hour traffic. The corresponding traffic assignment is included in Appendix F.

Legend

-  Study Roadway
-  Study Intersection
- XX AM Future Background Traffic
- (XX) PM Future Background Traffic

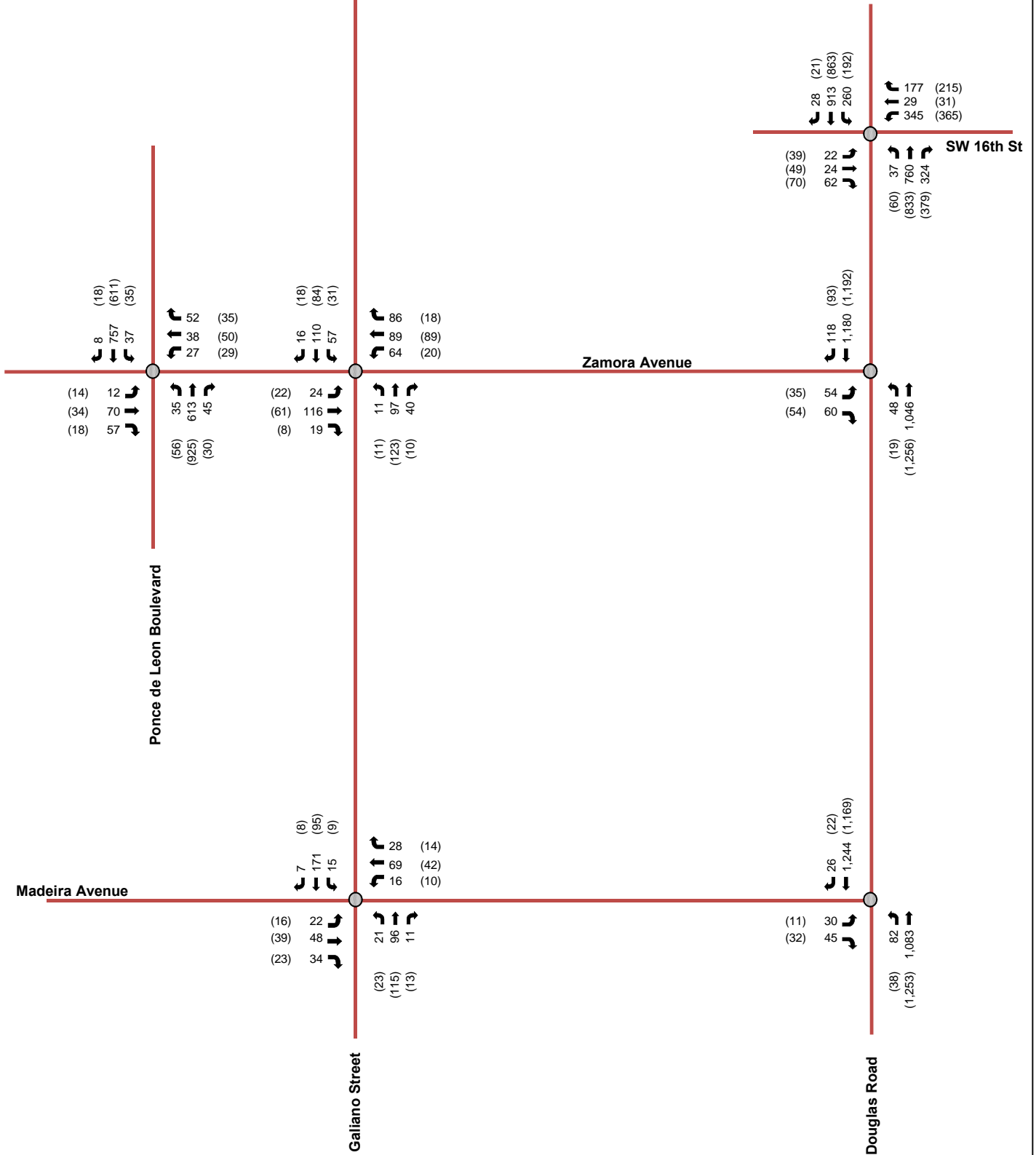
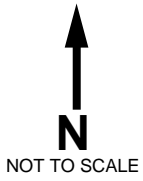
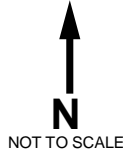


Figure 5
 Future Background Traffic
 44 Zamora Avenue
 Coral Gables, Florida

FUTURE TOTAL TRAFFIC

Future total traffic conditions are defined as the expected traffic conditions in the year 2020 after the opening of the project. Total traffic volumes considered in the analysis for this project are the sum of the year 2020 background traffic volumes and the expected project traffic volumes. Figure 6 presents the future traffic volumes for the weekday A.M. and P.M. peak hours. Volume development worksheets for the study intersections are included in Appendix G.



- Legend**
- Study Roadway
 - Study Intersection
 - XX AM Future Total Traffic
 - (XX) PM Future Total Traffic

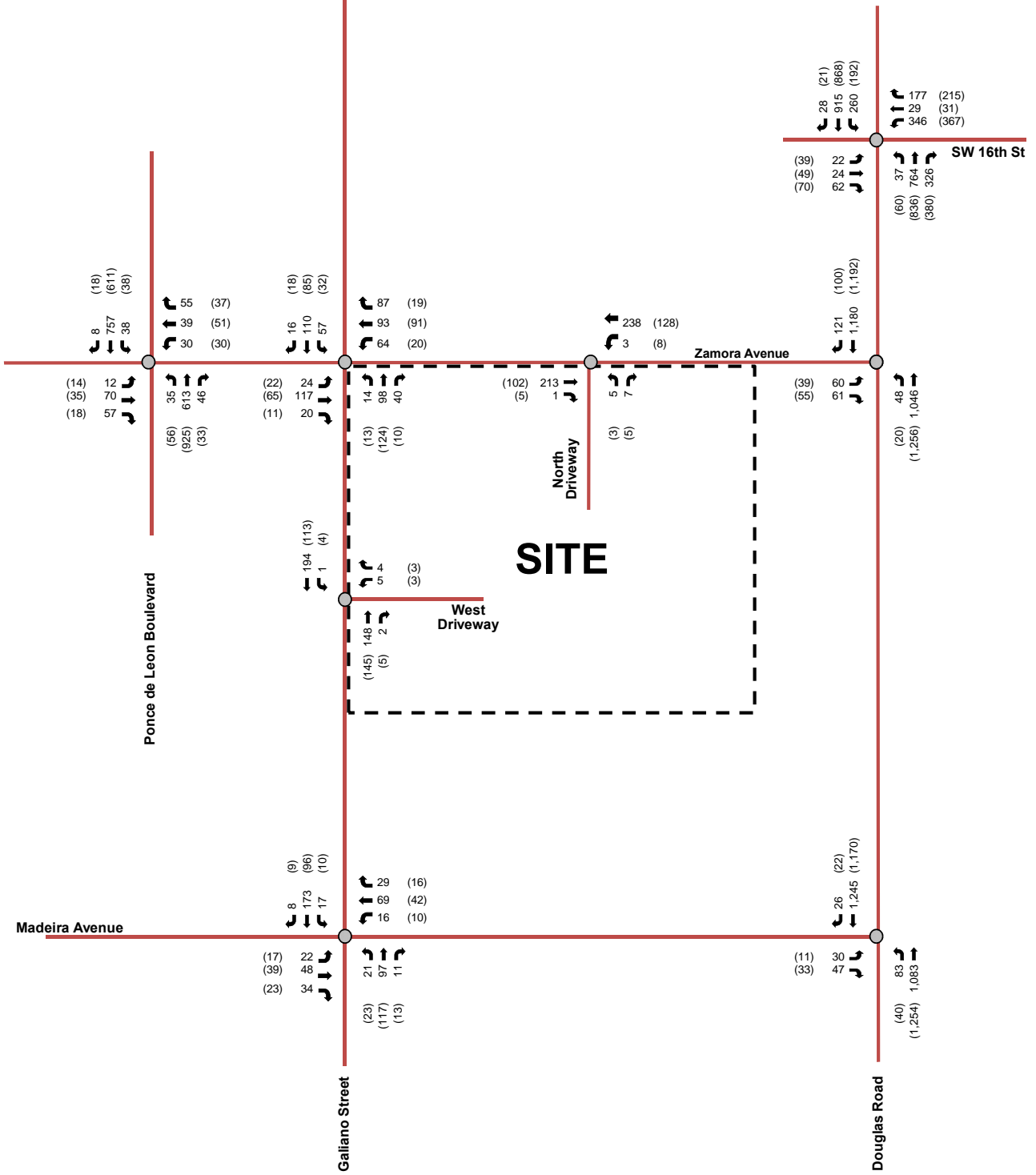


Figure 6
 Future Total Traffic
 44 Zamora Avenue
 Coral Gables, Florida

INTERSECTION CAPACITY ANALYSIS

The operating conditions were analyzed for the study intersections. Three (3) scenarios (existing conditions, future background conditions, and future total conditions) were analyzed using *Trafficware's SYNCHRO 10 Software*, which applies methodologies outlined in the *Highway Capacity Manual, 2000 and 2010 Editions*. Synchro worksheets for the study intersections are included in Appendix H. A summary of the intersection analyses for the A.M. and P.M. peak hours is presented in Table 3. As this table indicates, the study intersections are expected to operate at accepted levels of service during the A.M. and P.M. peak hours under all analysis conditions.

Table 3: Intersection Capacity Analysis						
Intersection	Traffic Control	Overall LOS/Delay	Approach LOS			
			EB	WB	NB	SB
<i>Existing Conditions (Background Conditions) [Future Total Conditions]</i>						
<i>A.M. Peak Hour</i>						
Zamora Avenue and Ponce de Leon Boulevard	Two-Way Stop-Controlled	(1)	C (C) [C]	C (C) [C]	(2)	(2)
Galiano Street and Zamora Avenue	All-Way Stop-Controlled	B/11.4 (B/11.8) [B/12.0]	B (B) [B]	B (B) [B]	B (B) [B]	B (B) [B]
Madeira Avenue and Galiano Street	All-Way Stop-Controlled	A/9.3 (A/9.5) [A/9.6]	A (A) [A]	A (A) [A]	A (A) [A]	A (B) [B]
Douglas Road and SW 16 th Street	Signalized ⁽³⁾	D/54.5 (E/57.3) [E/57.8]	E (E) [E]	E (E) [E]	C (C) [C]	E (E) [E]
Zamora Avenue and Douglas Road	Two-Way Stop-Controlled	(1)	E (E) [E]	N/A	(2)	(2)
Douglas Road and Madeira Avenue	Two-Way Stop-Controlled	(1)	D (D) [D]	N/A	(2)	(2)
Zamora Avenue and North Driveway	One-Way Stop-Controlled	(1)	(2)	(2)	[A]	[N/A]
Galiano Street and West Driveway	One-Way Stop-Controlled	(1)	[N/A]	[A]	(2)	(2)
<i>P.M. Peak Hour</i>						
Zamora Avenue and Ponce de Leon Boulevard	Two-Way Stop-Controlled	(1)	C (C) [C]	D (D) [D]	(2)	(2)
Galiano Street and Zamora Avenue	All-Way Stop-Controlled	A/8.6 (A/8.7) [A/8.8]	A (A) [A]	A (A) [A]	A (A) [A]	A (A) [A]
Madeira Avenue and Galiano Street	All-Way Stop-Controlled	A/8.1 (A/8.3) [A/8.3]	A (A) [A]	A (A) [A]	A (A) [A]	A (A) [A]
Douglas Road and SW 16 th Street	Signalized ⁽³⁾	E/70.8 (E/76.0) [E/76.5]	E (D) [D]	D (D) [D]	E (E) [E]	F (F) [F]
Zamora Avenue and Douglas Road	Two-Way Stop-Controlled	(1)	D (C) [D]	N/A	(2)	(2)
Douglas Road and Madeira Avenue	Two-Way Stop-Controlled	(1)	C (C) [C]	N/A	(2)	(2)
Zamora Avenue and North Driveway	One-Way Stop-Controlled	(1)	(2)	(2)	[A]	[N/A]
Galiano Street and West Driveway	One-Way Stop-Controlled	(1)	[N/A]	[A]	(2)	(2)

- Notes:** (1) Overall intersection LOS is not defined, as intersection operates under two-way or one-way stop-control conditions.
 (2) Approach operates under free-flow conditions. LOS is not defined.
 (3) HCM 2000 results shown as intersection's lane configuration is not compatible with HCM 2010 algorithms.

SCHOOL TRAFFIC OBSERVATIONS

School traffic observations were performed at the Coral Gables Preparatory Academy – Upper Academy located at 39 Zamora Avenue immediately adjacent (north) to the project site. The purpose of these field observations is to generally observe the school's operations including vehicular and pedestrian travel patterns to determine how the proposed development would affect operations.

The Upper Academy serves students from grades 5 through 8. All students must be on campus by 8:20 A.M. and attend classes from 8:35 A.M. to 3:05 P.M. Since the proposed development is primarily a residential project, peak traffic volumes will occur between 7:00 A.M. and 9:00 A.M. and from 4:00 P.M. to 6:00 P.M. Therefore, potential impacts from the development on school traffic would typically occur during the overlapping A.M. peak period.

Field reviews were conducted on May 22, 2018 (Tuesday) from 7:30 A.M. to 8:30 A.M. and from 2:30 P.M. to 3:30 P.M. to assess school traffic operations along Zamora Avenue and Galiano Street.

Zamora Avenue directly abuts the school property to the north and the proposed development to the south. Galiano Street directly abuts the school property and the proposed development to the east. The following operations were noted during the arrival/dismissal periods:

- The designated school drop-off/pick-up area is located along the north side of Zamora Avenue across from the proposed development.
- The majority of parents drop off and pick up students at this designated location.
- Two (2) school buses were observed dropping students off/picking students up along Zamora Avenue in the same designated area.

- Parents were also observed parking on-street and walking to the school to drop-off/pick-up students along Zamora Avenue and Galiano Street. Signs noting “No School Parking” were posted along the south side of Zamora Avenue.
- Significant school pedestrian traffic was observed crossing at the existing crosswalks at the intersection of Zamora Avenue and Galiano Street during both periods.
- Parents were observed performing illegal parking maneuvers, mid-block U-turn movements, and crossing the streets at unmarked locations.

In general, there was minimal school-related congestion along the streets adjacent to the project site during the observation periods. The most significant congestion was observed along the westbound lane of Zamora Avenue from 8:05 A.M. to 8:25 A.M. and 3:00 P.M. to 3:20 P.M. consistent with peak drop-off/pick-up periods for parents.

As previously mentioned, the proposed development is primarily residential and is not expected to generate a significant number of trips during the school dismissal period. Therefore, any project impacts would typically occur during the overlapping A.M. peak period. As indicated in the analysis, a maximum of ten (10) trips related to the proposed development are expected to travel along any portion of Zamora Avenue during the A.M. peak hour. Therefore, the project is not expected to adversely impact traffic conditions in the vicinity of the school.

The project is proposing numerous improvements to the streetscapes adjacent to the site including mid-block bulbouts along the south side of Zamora Avenue. These improvements will reduce the effective width of Zamora Avenue which would reduce the potential of midblock U-turn movements.

MULTIMODAL ANALYSIS

Multimodal level of service analyses were performed using ARTPLAN 2012 software which applies methodologies from the FDOT Quality/Level of Service Handbook. Multimodal level of service analyses were performed for the following roadways within the immediate vicinity of the project site:

- Galiano Street
- Douglas Road/SW 37th Avenue
- Zamora Avenue

A summary of the multimodal analyses for the A.M. and P.M. peak hours are presented in Tables 4 and 5. As these tables indicate, the study roadways are expected to have bicycle, pedestrian, and transit levels of service of LOS E or better overall during the A.M. and P.M. peak hours under all analysis conditions. ARTPLAN worksheets for the study roadways are included in Appendix I.

Table 4: A.M. Peak Hour Multimodal Analysis					
Roadway	From/To	Direction	Bicycle LOS	Pedestrian LOS	Transit LOS
<i>Existing Conditions (Background Conditions) [Future Total Conditions]</i>					
Galiano Street	Zamora Avenue to Madeira Avenue	NB	C (C) [C]	A (A) [A]	N/A
		SB	C (C) [C]	A (A) [A]	N/A
Douglas Road	SW 16 th Street to Madeira Avenue	NB	E (E) [E]	C (C) [C]	E (E) [E]
		SB	E (E) [E]	D (D) [D]	E (E) [E]
Zamora Avenue	Ponce de Leon Boulevard to Douglas Road	EB	D (D) [D]	A (A) [A]	N/A
		WB	D (D) [D]	A (A) [A]	N/A

Table 5: P.M. Peak Hour Multimodal Analysis					
Roadway	From/To	Direction	Bicycle LOS	Pedestrian LOS	Transit LOS
<i>Existing Conditions (Background Conditions) [Future Total Conditions]</i>					
Galiano Street	Zamora Avenue to Madeira Avenue	NB	B (C) [C]	A (A) [A]	N/A
		SB	B (B) [B]	A (A) [A]	N/A
Douglas Road	SW 16 th Street to Madeira Avenue	NB	E (E) [E]	C (C) [C]	E (E) [E]
		SB	E (E) [E]	C (C) [C]	E (E) [E]
Zamora Avenue	Ponce de Leon Boulevard to Douglas Road	EB	C (C) [C]	A (A) [A]	N/A
		WB	C (C) [C]	A (A) [A]	N/A

CONCLUSIONS

This analysis has addressed traffic-related impacts associated with the proposed 44 Zamora Avenue mixed-use project consisting of 91 mid-rise multifamily housing residential units. Based on the results of the analysis, the following is concluded:

- The project is expected to generate 28 new trips during the A.M. peak hour and 36 new trips during the P.M. peak hour.
- Intersection capacity analyses indicate that the study intersections are expected to operate at accepted levels of service during the A.M. and P.M. peak hours under all analysis conditions.
- School traffic observations were performed at the Coral Gables Preparatory Academy – Upper Academy located at 39 Zamora Avenue immediately south of the project site to determine if the proposed development would create any adverse impacts to the school's operations including vehicular and pedestrian travel patterns. A maximum of ten (10) trips related to the proposed development are expected to travel along any portion of Zamora Avenue during the A.M. peak hour. Additionally, the proposed development is primarily residential and is not expected to generate a significant number of trips during the school dismissal period. Therefore, the project is not expected to adversely impact traffic conditions in the vicinity of the school.
- A multimodal analysis was conducted for Galiano Street, Zamora Avenue, and Douglas Road/SW 37th Avenue. It was determined that the study roadways are expected to have bicycle, pedestrian, and transit levels of service LOS E or better overall during the A.M. and P.M. peak hours under all analysis conditions.

APPENDIX A:
Site Plan

ARCHITECT:



285 sevilla avenue
coral gables, florida, 33134
tel 305.447.1927 - fax 305.443.5986

CONSULTANTS:

Consultant
Address
Phone
Fax
e-mail

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THE DESIGN AND DRAWINGS FOR THIS PROJECT ARE THE
PROPERTY OF THIS ARCHITECT AND ARE PROTECTED UNDER
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ORIGINAL WORK OF THE ARCHITECT AND MAY NOT BE
REPRODUCED, DUPLICATED & OR USED WITH THE WRITTEN
CONSENT OF BELLIN & PRATT ARCHITECTS, LLC.

PROJECT NAME:
**NEW RESIDENTIAL
MULTI-FAMILY
APARTMENT**

PROPERTY ADDRESS
44 Zamora Avenue
Coral Gables, FL 33134
OWNER INFORMATION
TWJ ZAMORA LLC

**Planning & Zoning
Board**

ISSUE DATE: 08/08/2018
PROJECT No.: 2011-15
DRAWN BY: D.F.
APPROVED BY: G.P. & M.B.

REVISIONS:

No.	Description	Date
1	BOA Comments	06/14/2018

ALL DRAWINGS AND WRITTEN MATERIALS
HEREIN CONSTITUTE ORIGINAL WORK OF
THE ARCHITECT AND MAY ONLY BE
DUPLICATED WITH THEIR WRITTEN CONSENT

SEAL:
6/14/2018
2:39:27
PM

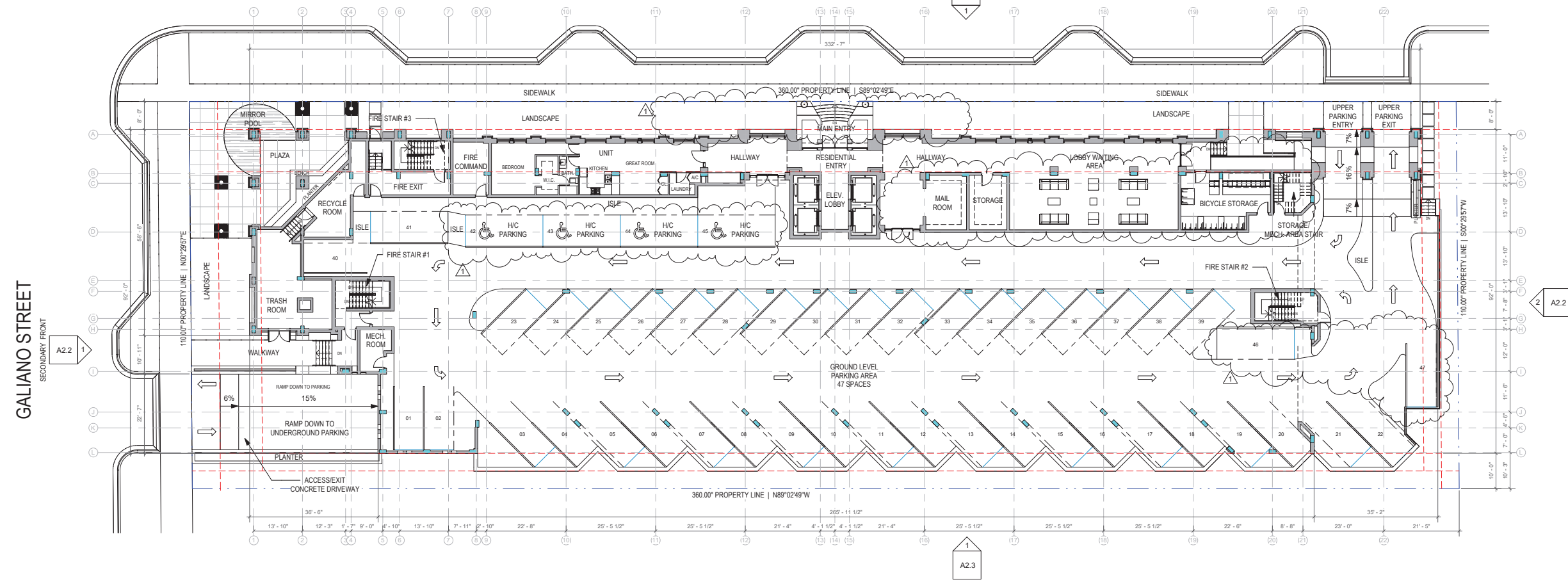
SIGNATURE:
MARSHALL BELLIN AR-5084
GLENN H PRATT, AIA, AR-9608 ARCHITECT
DAVID FUENTES AR-97043

SHEET TITLE:
**Ground Floor
Plan**

SCALE: **1/16" = 1'-0"**
SHEET No.:

A1.2

ZAMORA AVENUE
PRIMARY FRONT




1 Ground Level
1/16" = 1'-0"

6/14/2018 2:39:27 PM

APPENDIX B:
Methodology Correspondence



To: Jessica A. Keller, ENV SP
Assistant Director
Department of Public Works
Sustainable Public Infrastructure Division
City of Coral Gables

From: Ali N. Hanes, P.E. 

Date: June 1, 2018

**Subject: 44 Zamora Avenue
Traffic Impact Analysis Methodology**

This memorandum summarizes our traffic impact study methodology for the proposed residential development at 44 Zamora Avenue, as discussed at the meeting on May 15, 2018. The project site is located in the City of Coral Gables, Florida south of Zamora Avenue and between Galiano Street (west) and Douglas Road (east). The proposed development will consist of 91 mid-rise residential units. A conceptual site plan and location map are provided in Attachment A.

The following study parameters are proposed:

Data Collection

Turning movement counts will be collected during the A.M. peak period (7 A.M. to 9 A.M.) and the P.M. peak period (4 P.M. to 6 P.M.) on a typical weekday (Tuesday, Wednesday, or Thursday). Turning movement counts will be conducted at the following 6 intersections:

- Zamora Avenue and Ponce de Leon Boulevard
- Zamora Avenue and Galiano Street
- Madeira Avenue and Galiano Street
- Zamora Avenue and Douglas Road
- Madeira Avenue and Douglas Road
- Douglas Road and SW 16th Street

All traffic counts will be adjusted to account for seasonality using the appropriate FDOT seasonal factors. Signal timing information will be obtained from Miami-Dade County Public Works and Waste Management Department – Traffic Signals and Signs Division. All background documentation collected will be provided in the appendix of the traffic impact study.

Trip Generation

A trip generation analysis was conducted using the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition for the proposed development plan. The analysis assumed the following ITE Land Use Codes (LUC):

- ITE LUC 221 – Mid-Rise Residential

A multimodal (public transit, bicycle, and pedestrian) factor based on U.S. Census *Means of Transportation to Work* data was reviewed for the census tract of the development. A multimodal factor of 9.45 percent (9.45%) was applied to the trip generation calculations to account for the environment in which the project site is located. It is expected that residents and guests will choose to walk or use public transit to and from the proposed development. Transit route information will be documented in the report, and the U.S. Census data is included in Attachment B.

A portion of the trips generated by the development will be captured internally on the site. Internal capture trips were determined based upon values contained in the Institute of Transportation Engineers' (ITE), *Trip Generation Handbook*, 3rd Edition. There is no internal capture in the A.M. peak hour and P.M. peak hour.

Pass-by capture trip rates were determined based on average rates provided in the ITE's *Trip Generation Handbook*, 3rd Edition. The pass-by rate for the residential land use is 0 percent (0%) in both the A.M. peak hour and the P.M. peak hour.

The project is expected to generate 28 weekday A.M. peak hour vehicular trips and 36 weekday P.M. vehicular trips. Detailed trip generation calculations and data are included Attachment B.

Trip Distribution

Trip distribution will be determined using the cardinal distribution from the appropriate Traffic Analysis Zone (TAZ) in the Miami-Dade County's MPO *2040 Cost Feasible Plan*, traffic characteristics within the study area, and the traffic calming plan within the residential neighborhood east of the site. The appropriate TAZ for this development is 1054. The traffic impact study will include graphics of the project traffic assignment for the project's driveways and the study intersections.

Background Growth Rate/Major Committed Development

A background growth rate will be calculated based on historic growth trends at nearby Florida Department of Transportation (FDOT) traffic count stations. Additionally, growth rates based on Miami-Dade Metropolitan Planning Organization's (MPO) projected 2010 and 2040 model network volumes will be examined. Documentation will be provided in the Appendix of the traffic impact study.

The City has requested that the nearby 1505 Ponce de Leon Boulevard project be included as a committed development as part of future background conditions.

Capacity Analysis

Capacity analyses will be conducted for the A.M. and P.M. peak hours for the 6 study intersections and project driveways. Intersection analyses will be performed using *Synchro* traffic engineering analysis software which applies Highway Capacity Manual (HCM) 2010 methodology. Capacity analyses will be conducted for three (3) scenarios: existing, future without project, and future with project conditions. The build-out year will be 2020.

A multimodal (public transit, bicycle, and pedestrian) factor based on U.S. Census *Means of Transportation to Work* data was reviewed for the census tract of the development. A multimodal factor of 9.45 percent (9.45%) was applied to the trip generation calculations to account for the environment in which the project site is located. It is expected that residents and guests will choose to walk or use public transit to and from the proposed development. Transit route information will be documented in the report, and the U.S. Census data is included in Attachment B.

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The following figures will be included for the study intersections:

- Existing volumes
- Trip distribution
- Trip assignment
- Future background volumes (with growth rate and committed development traffic)
- Future total volumes (with project)

Multimodal Analyses

Multimodal improvements to improve connectivity and accessibility for alternative modes of travel to reduce the vehicular impacts of the project on the surrounding roadway network proposed by the project will be included in the study. Any proposed bicycle facilities identified in the City of Coral Gables' Bike Master Plan will be incorporated into the study.

Multimodal level of service analyses will be performed using LOSPLAN 2012 software which applies methodologies from the FDOT Quality/Level of Service Handbook. Multimodal level of service analyses will be performed for the following roadways:

- Zamora Avenue
- Galiano Street
- Douglas Road

School Traffic Observations

School traffic observations will be performed at the Coral Gables Preparatory Academy – Upper Academy located at 39 Zamora Avenue immediately south of the project site. The purpose of these field observations is to determine if the proposed development would create adverse impacts to the school's operations including vehicular and pedestrian travel patterns. The observations will be conducted during the school's arrival and dismissal periods.

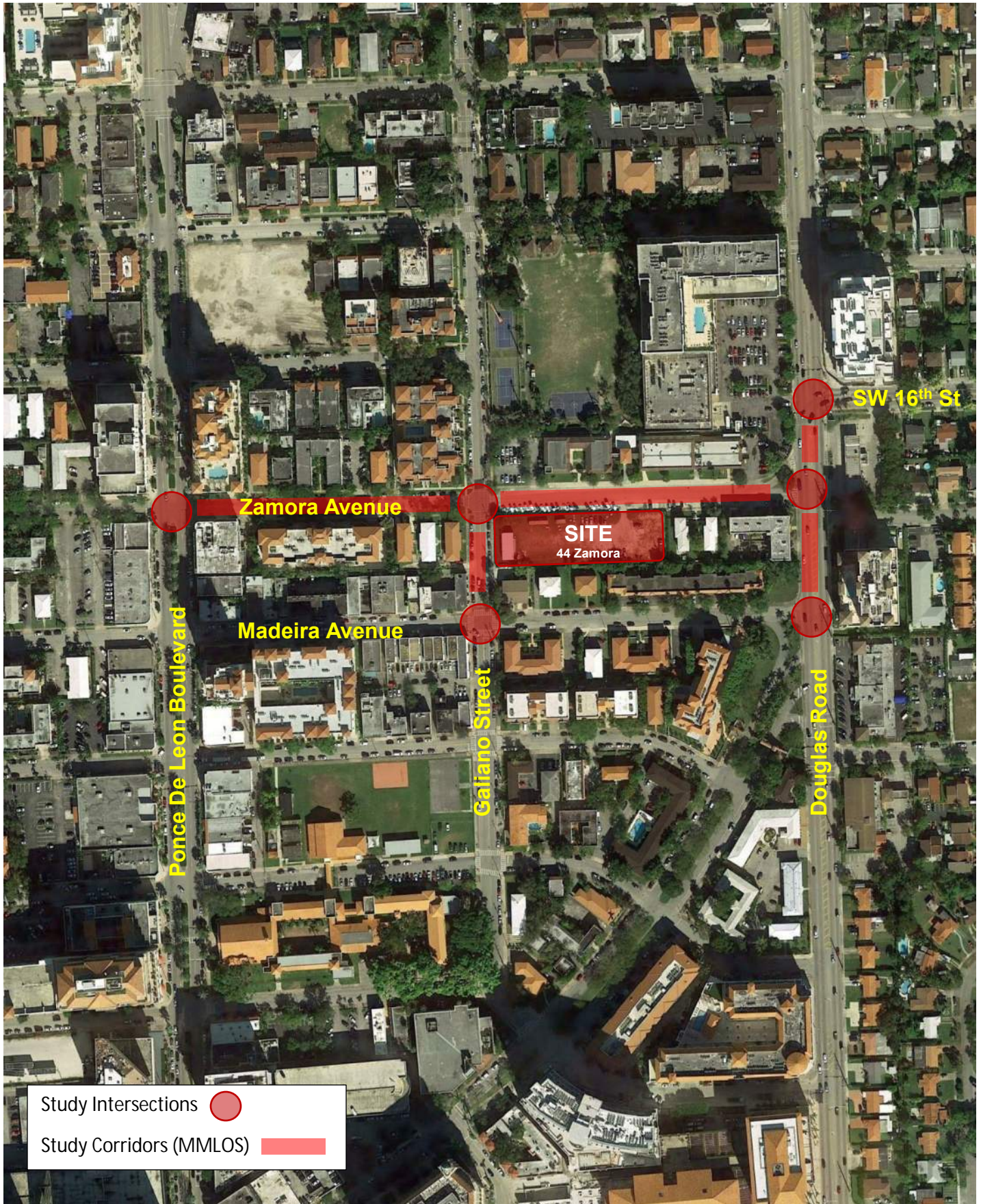
Traffic Analysis Documentation

The results of the traffic analysis will be summarized in a report. The report will include supporting documents including signal timings, lane geometry, and software output sheets. The report will also include text and graphics necessary to summarize the assumptions and analysis. If intersection capacity deficiencies are identified, strategies and improvements will be developed to attain adopted levels of service.

K:\FTL_TPTO\043557002-44 Zamora Ave\Correspondence\Methodology\44ZamoraMethodology.6.1.18.docx

Attachment A

Conceptual Site Plan and Location Map



Proposed Study Area
44 Zamora Avenue

Attachment B

Trip Generation Calculations
U.S. Census Multimodal Data

PEAK HOUR TRIP GENERATION

PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW TRIPS				
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	PB Trips	In	Out	Total		
					In	Out															
1 Multifamily Housing (Mid-Rise)	10	221	91	du	26%	74%	8	23	31	9.45%	3	7	21	28	0.0%	0	7	21	28		
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
ITE Land Use Code					Rate or Equation		Total:		8	23	31	9.5%	3	7	21	28	0.0%	0	7	21	28
221					$LN(Y) = 0.98 * LN(X) + 0.98$																

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW TRIPS				
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	PB Trips	In	Out	Total		
					In	Out															
1 Multifamily Housing (Mid-Rise)	10	221	91	du	61%	39%	24	16	40	9.45%	4	22	14	36	0.0%	0	22	14	36		
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
ITE Land Use Code					Rate or Equation		Total:		24	16	40	9.5%	4	22	14	36	0.0%	0	22	14	36
221					$LN(Y) = 0.96 * LN(X) + 0.63$																



B08301

MEANS OF TRANSPORTATION TO WORK

Universe: Workers 16 years and over

2012-2016 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

$$(168+0+68)/2,496 = 9.45\%$$

	Census Tract 62.05, Miami-Dade County, Florida	
	Estimate	Margin of Error
Total:	2,496	+/-409
Car, truck, or van:	2,076	+/-367
Drove alone	1,830	+/-342
Carpooled:	246	+/-171
In 2-person carpool	211	+/-170
In 3-person carpool	16	+/-26
In 4-person carpool	0	+/-13
In 5- or 6-person carpool	0	+/-13
In 7-or-more-person carpool	19	+/-24
Public transportation (excluding taxicab):	168	+/-101
Bus or trolley bus	150	+/-98
Streetcar or trolley car (carro publico in Puerto Rico)	0	+/-13
Subway or elevated	18	+/-29
Railroad	0	+/-13
Ferryboat	0	+/-13
Taxicab	25	+/-40
Motorcycle	0	+/-13
Bicycle	0	+/-13
Walked	68	+/-69
Other means	18	+/-29
Worked at home	141	+/-108

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

While the 2012-2016 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

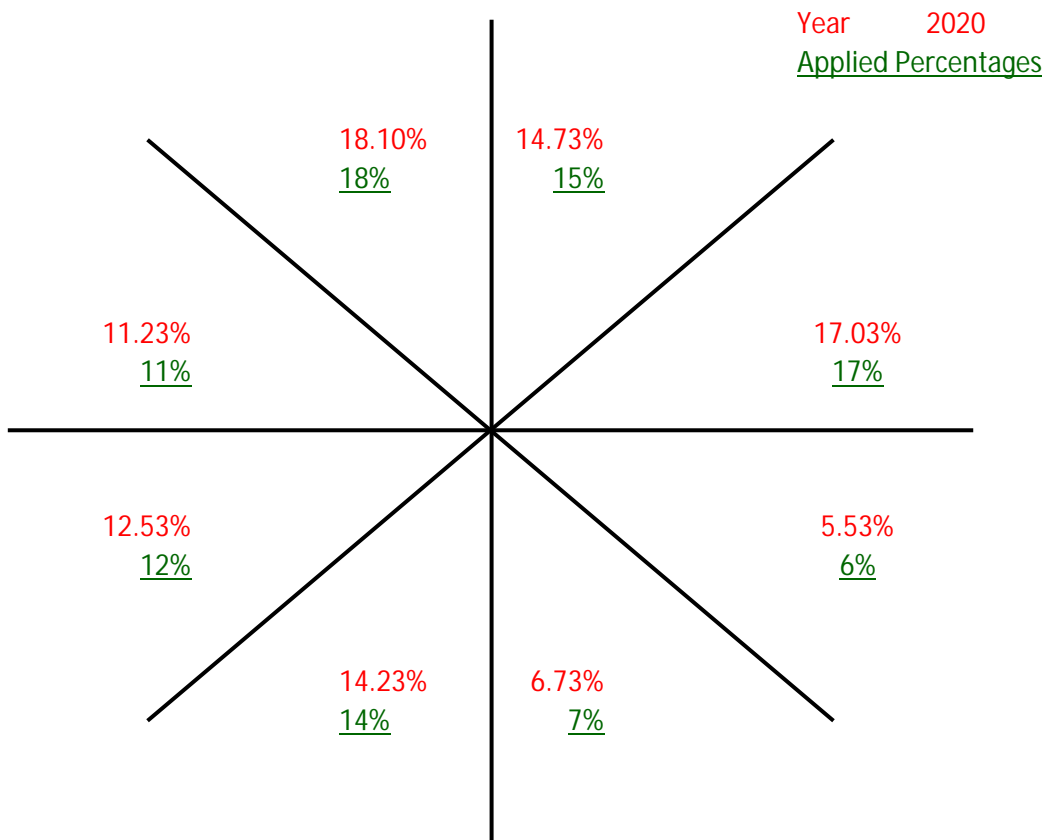
Explanation of Symbols:

1. An '***' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-1' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+1' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '****' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

Attachment C

Cardinal Trip Distribution

Cardinal Distribution for TAZ 1054



Cardinal Trip Distribution

Cardinal Direction	Percentage of Trips		2020 Interpolated	2020 Rounded
	2010	2040		
North-Northeast	14.6%	15.00%	14.73%	15.00%
East-Northeast	16.0%	19.10%	17.03%	17.00%
East-Southeast	5.5%	5.60%	5.53%	6.00%
South-Southeast	6.5%	7.20%	6.73%	7.00%
South-Southwest	14.8%	13.10%	14.23%	14.00%
West-Southwest	12.7%	12.20%	12.53%	12.00%
West-Northwest	11.1%	11.50%	11.23%	11.00%
North-Northwest	19.0%	16.30%	18.10%	18.00%
Total	100.2%	100.0%	100.13%	100.00%



Miami-Dade 2010 Directional Distribution Summary

Origin TAZ			Cardinal Directions								Total
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
1046	3946	PERCENT	13.7	18.1	9.6	7.9	8.1	16.5	12.8	13.4	
1047	3947	TRIPS	618	669	227	370	257	427	332	621	3,521
1047	3947	PERCENT	17.6	19.0	6.5	10.5	7.3	12.1	9.4	17.6	
1048	3948	TRIPS	98	108	120	30	78	56	105	89	684
1048	3948	PERCENT	14.3	15.8	17.5	4.4	11.4	8.2	15.4	13.0	
1049	3949	TRIPS	565	809	174	350	515	531	470	637	4,051
1049	3949	PERCENT	14.0	20.0	4.3	8.6	12.7	13.1	11.6	15.7	
1050	3950	TRIPS	836	769	253	330	758	959	693	1,197	5,795
1050	3950	PERCENT	14.4	13.3	4.4	5.7	13.1	16.6	12.0	20.7	
1051	3951	TRIPS	784	688	162	370	883	884	657	975	5,403
1051	3951	PERCENT	14.5	12.7	3.0	6.9	16.3	16.4	12.2	18.1	
1052	3952	TRIPS	731	808	267	442	686	820	618	1,150	5,522
1052	3952	PERCENT	13.2	14.6	4.8	8.0	12.4	14.9	11.2	20.8	
1053	3953	TRIPS	654	1,100	343	410	488	623	588	731	4,937
1053	3953	PERCENT	13.3	22.3	7.0	8.3	9.9	12.6	11.9	14.8	
1054	3954	TRIPS	1,379	1,508	522	610	1,394	1,198	1,050	1,792	9,453
1054	3954	PERCENT	14.6	16.0	5.5	6.5	14.8	12.7	11.1	19.0	
1055	3955	TRIPS	558	848	171	433	520	552	573	717	4,372
1055	3955	PERCENT	12.8	19.4	3.9	9.9	11.9	12.6	13.1	16.4	
1056	3956	TRIPS	743	660	482	366	535	764	479	855	4,884
1056	3956	PERCENT	15.2	13.5	9.9	7.5	11.0	15.6	9.8	17.5	
1057	3957	TRIPS	1,079	1,169	325	236	1,025	876	864	942	6,516
1057	3957	PERCENT	16.6	17.9	5.0	3.6	15.7	13.4	13.3	14.5	
1058	3958	TRIPS	894	1,069	428	401	706	1,085	1,109	1,139	6,831
1058	3958	PERCENT	13.1	15.7	6.3	5.9	10.3	15.9	16.2	16.7	
1059	3959	TRIPS	1,271	1,098	310	277	895	991	1,080	886	6,808
1059	3959	PERCENT	18.7	16.1	4.6	4.1	13.2	14.6	15.9	13.0	
1060	3960	TRIPS	1,026	665	147	259	661	829	677	863	5,127
1060	3960	PERCENT	20.0	13.0	2.9	5.1	12.9	16.2	13.2	16.8	
1061	3961	TRIPS	921	607	148	211	507	1,078	863	1,113	5,448
1061	3961	PERCENT	16.9	11.1	2.7	3.9	9.3	19.8	15.8	20.4	
1062	3962	TRIPS	725	1,092	215	342	665	902	890	1,287	6,118
1062	3962	PERCENT	11.9	17.9	3.5	5.6	10.9	14.7	14.6	21.0	
1063	3963	TRIPS	1,272	1,043	434	106	429	817	934	1,012	6,047
1063	3963	PERCENT	21.0	17.3	7.2	1.8	7.1	13.5	15.5	16.7	
1064	3964	TRIPS	1,320	827	109	118	382	1,189	950	884	5,779
1064	3964	PERCENT	22.8	14.3	1.9	2.0	6.6	20.6	16.4	15.3	
1065	3965	TRIPS	809	426	135	67	228	1,187	654	956	4,462
1065	3965	PERCENT	18.1	9.6	3.0	1.5	5.1	26.6	14.7	21.4	
1066	3966	TRIPS	269	120	0	40	46	243	114	144	976
1066	3966	PERCENT	27.6	12.3	0.0	4.1	4.7	24.9	11.7	14.8	



Miami-Dade 2040 Directional Distribution Summary

Origin TAZ			Cardinal Directions								Total
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
1046	3946	PERCENT	13.3	18.8	8.2	6.6	8.5	18.8	12.9	12.9	
1047	3947	TRIPS	619	765	159	328	411	392	430	683	3,787
1047	3947	PERCENT	16.4	20.2	4.2	8.7	10.9	10.4	11.4	18.0	
1048	3948	TRIPS	132	207	55	36	103	64	108	90	795
1048	3948	PERCENT	16.6	26.0	6.9	4.5	13.0	8.1	13.6	11.3	
1049	3949	TRIPS	825	1,051	284	472	554	658	672	895	5,411
1049	3949	PERCENT	15.3	19.4	5.3	8.7	10.2	12.2	12.4	16.5	
1050	3950	TRIPS	1,248	1,284	443	506	1,044	1,108	1,044	1,648	8,325
1050	3950	PERCENT	15.0	15.4	5.3	6.1	12.5	13.3	12.5	19.8	
1051	3951	TRIPS	1,082	1,136	264	622	919	880	705	1,210	6,818
1051	3951	PERCENT	15.9	16.7	3.9	9.1	13.5	12.9	10.3	17.8	
1052	3952	TRIPS	1,154	1,578	476	654	893	802	786	1,492	7,835
1052	3952	PERCENT	14.7	20.1	6.1	8.4	11.4	10.2	10.0	19.0	
1053	3953	TRIPS	865	1,235	354	511	539	718	658	890	5,770
1053	3953	PERCENT	15.0	21.4	6.1	8.9	9.3	12.4	11.4	15.4	
1054	3954	TRIPS	1,973	2,517	736	946	1,720	1,605	1,509	2,146	13,152
1054	3954	PERCENT	15.0	19.1	5.6	7.2	13.1	12.2	11.5	16.3	
1055	3955	TRIPS	1,053	1,476	328	592	1,064	838	1,193	1,368	7,912
1055	3955	PERCENT	13.3	18.7	4.2	7.5	13.5	10.6	15.1	17.3	
1056	3956	TRIPS	1,480	1,759	657	633	1,181	1,297	1,393	2,022	10,422
1056	3956	PERCENT	14.2	16.9	6.3	6.1	11.3	12.4	13.4	19.4	
1057	3957	TRIPS	1,663	1,558	334	422	1,145	1,252	1,408	1,716	9,498
1057	3957	PERCENT	17.5	16.4	3.5	4.4	12.1	13.2	14.8	18.1	
1058	3958	TRIPS	1,544	1,951	422	494	945	1,304	1,544	1,751	9,955
1058	3958	PERCENT	15.5	19.6	4.2	5.0	9.5	13.1	15.5	17.6	
1059	3959	TRIPS	1,714	1,590	409	483	979	1,385	1,580	1,420	9,560
1059	3959	PERCENT	17.9	16.6	4.3	5.1	10.2	14.5	16.5	14.9	
1060	3960	TRIPS	1,537	1,190	187	187	786	1,274	1,148	1,585	7,894
1060	3960	PERCENT	19.5	15.1	2.4	2.4	10.0	16.1	14.5	20.1	
1061	3961	TRIPS	1,199	866	241	315	564	1,335	1,188	1,212	6,920
1061	3961	PERCENT	17.3	12.5	3.5	4.6	8.2	19.3	17.2	17.5	
1062	3962	TRIPS	1,033	1,682	241	427	775	1,335	1,238	1,646	8,377
1062	3962	PERCENT	12.3	20.1	2.9	5.1	9.3	15.9	14.8	19.7	
1063	3963	TRIPS	1,399	1,360	426	171	571	1,171	1,137	1,513	7,748
1063	3963	PERCENT	18.1	17.6	5.5	2.2	7.4	15.1	14.7	19.5	
1064	3964	TRIPS	1,746	1,089	31	180	488	1,402	1,462	1,445	7,843
1064	3964	PERCENT	22.3	13.9	0.4	2.3	6.2	17.9	18.6	18.4	
1065	3965	TRIPS	1,145	714	182	74	218	1,003	965	1,248	5,549
1065	3965	PERCENT	20.6	12.9	3.3	1.3	3.9	18.1	17.4	22.5	
1066	3966	TRIPS	552	292	0	103	46	285	280	393	1,951
1066	3966	PERCENT	28.3	15.0	0.0	5.3	2.4	14.6	14.4	20.1	

APPENDIX C:
Project Trip Generation

PEAK HOUR TRIP GENERATION

PROPOSED WEEKDAY AM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW TRIPS				
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	PB Trips	In	Out	Total		
					In	Out															
1 Multifamily Housing (Mid-Rise)	10	221	91	du	26%	74%	8	23	31	9.45%	3	7	21	28	0.0%	0	7	21	28		
3																					
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ITE Land Use Code					Rate or Equation		Total:		8	23	31	9.5%	3	7	21	28	0.0%	0	7	21	28
221					$LN(Y) = 0.98 * LN(X) + 0.98$																

PROPOSED WEEKDAY PM PEAK HOUR TRIP GENERATION

ITE TRIP GENERATION CHARACTERISTICS					DIRECTIONAL DISTRIBUTION		GROSS VOLUMES			MULTIMODAL REDUCTION		EXTERNAL TRIPS			PASS-BY CAPTURE		NET NEW TRIPS				
Land Use	ITE Edition	ITE Code	Scale	ITE Units	Percent		In	Out	Total	Percent	MR Trips	In	Out	Total	Percent	PB Trips	In	Out	Total		
					In	Out															
1 Multifamily Housing (Mid-Rise)	10	221	91	du	61%	39%	24	16	40	9.45%	4	22	14	36	0.0%	0	22	14	36		
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					
ITE Land Use Code					Rate or Equation		Total:		24	16	40	9.5%	4	22	14	36	0.0%	0	22	14	36
221					$LN(Y) = 0.96 * LN(X) + 0.63$																



B08301

MEANS OF TRANSPORTATION TO WORK

Universe: Workers 16 years and over

2012-2016 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

$$(168+0+68)/2,496 = 9.45\%$$

	Census Tract 62.05, Miami-Dade County, Florida	
	Estimate	Margin of Error
Total:	2,496	+/-409
Car, truck, or van:	2,076	+/-367
Drove alone	1,830	+/-342
Carpooled:	246	+/-171
In 2-person carpool	211	+/-170
In 3-person carpool	16	+/-26
In 4-person carpool	0	+/-13
In 5- or 6-person carpool	0	+/-13
In 7-or-more-person carpool	19	+/-24
Public transportation (excluding taxicab):	168	+/-101
Bus or trolley bus	150	+/-98
Streetcar or trolley car (carro publico in Puerto Rico)	0	+/-13
Subway or elevated	18	+/-29
Railroad	0	+/-13
Ferryboat	0	+/-13
Taxicab	25	+/-40
Motorcycle	0	+/-13
Bicycle	0	+/-13
Walked	68	+/-69
Other means	18	+/-29
Worked at home	141	+/-108

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

While the 2012-2016 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

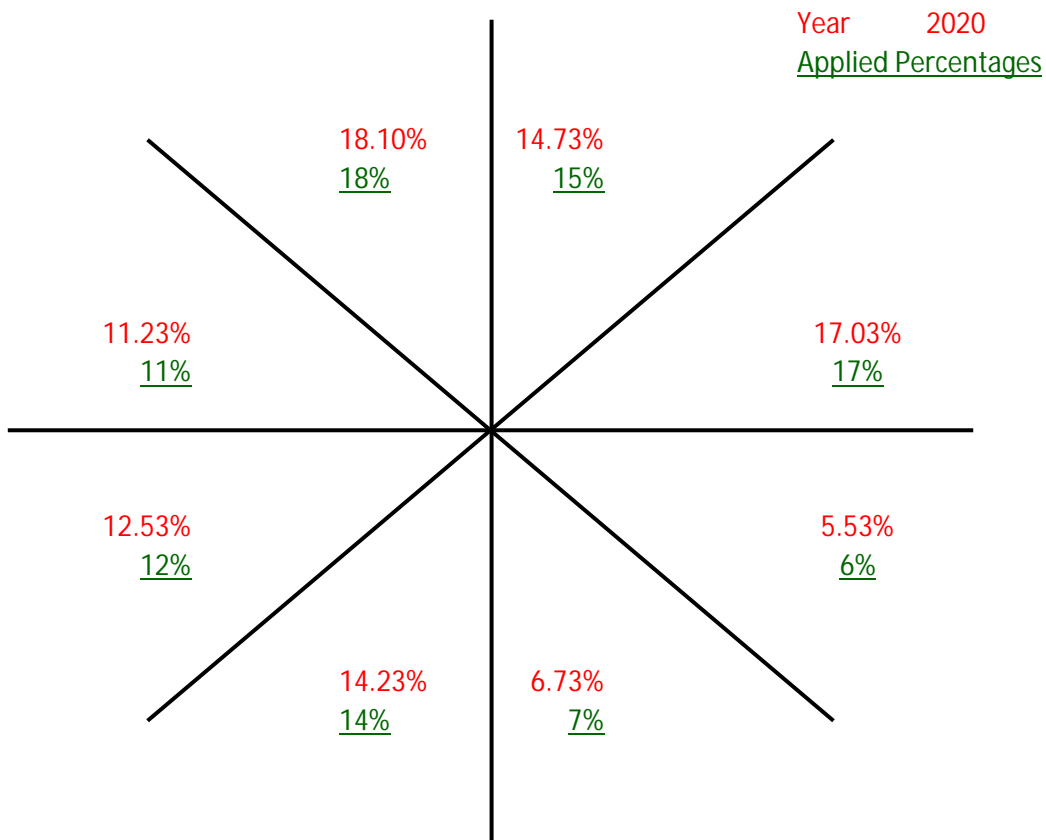
Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Explanation of Symbols:

1. An '***' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-l' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+u' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '****' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

APPENDIX D:
Cardinal Distribution

Cardinal Distribution for TAZ 1054



Cardinal Trip Distribution

Cardinal Direction	Percentage of Trips		2020 Interpolated	2020 Rounded
	2010	2040		
North-Northeast	14.6%	15.00%	14.73%	15.00%
East-Northeast	16.0%	19.10%	17.03%	17.00%
East-Southeast	5.5%	5.60%	5.53%	6.00%
South-Southeast	6.5%	7.20%	6.73%	7.00%
South-Southwest	14.8%	13.10%	14.23%	14.00%
West-Southwest	12.7%	12.20%	12.53%	12.00%
West-Northwest	11.1%	11.50%	11.23%	11.00%
North-Northwest	19.0%	16.30%	18.10%	18.00%
Total	100.2%	100.0%	100.13%	100.00%



Miami-Dade 2010 Directional Distribution Summary											
Origin TAZ			Cardinal Directions								Total
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
1046	3946	PERCENT	13.7	18.1	9.6	7.9	8.1	16.5	12.8	13.4	
1047	3947	TRIPS	618	669	227	370	257	427	332	621	3,521
1047	3947	PERCENT	17.6	19.0	6.5	10.5	7.3	12.1	9.4	17.6	
1048	3948	TRIPS	98	108	120	30	78	56	105	89	684
1048	3948	PERCENT	14.3	15.8	17.5	4.4	11.4	8.2	15.4	13.0	
1049	3949	TRIPS	565	809	174	350	515	531	470	637	4,051
1049	3949	PERCENT	14.0	20.0	4.3	8.6	12.7	13.1	11.6	15.7	
1050	3950	TRIPS	836	769	253	330	758	959	693	1,197	5,795
1050	3950	PERCENT	14.4	13.3	4.4	5.7	13.1	16.6	12.0	20.7	
1051	3951	TRIPS	784	688	162	370	883	884	657	975	5,403
1051	3951	PERCENT	14.5	12.7	3.0	6.9	16.3	16.4	12.2	18.1	
1052	3952	TRIPS	731	808	267	442	686	820	618	1,150	5,522
1052	3952	PERCENT	13.2	14.6	4.8	8.0	12.4	14.9	11.2	20.8	
1053	3953	TRIPS	654	1,100	343	410	488	623	588	731	4,937
1053	3953	PERCENT	13.3	22.3	7.0	8.3	9.9	12.6	11.9	14.8	
1054	3954	TRIPS	1,379	1,508	522	610	1,394	1,198	1,050	1,792	9,453
1054	3954	PERCENT	14.6	16.0	5.5	6.5	14.8	12.7	11.1	19.0	
1055	3955	TRIPS	558	848	171	433	520	552	573	717	4,372
1055	3955	PERCENT	12.8	19.4	3.9	9.9	11.9	12.6	13.1	16.4	
1056	3956	TRIPS	743	660	482	366	535	764	479	855	4,884
1056	3956	PERCENT	15.2	13.5	9.9	7.5	11.0	15.6	9.8	17.5	
1057	3957	TRIPS	1,079	1,169	325	236	1,025	876	864	942	6,516
1057	3957	PERCENT	16.6	17.9	5.0	3.6	15.7	13.4	13.3	14.5	
1058	3958	TRIPS	894	1,069	428	401	706	1,085	1,109	1,139	6,831
1058	3958	PERCENT	13.1	15.7	6.3	5.9	10.3	15.9	16.2	16.7	
1059	3959	TRIPS	1,271	1,098	310	277	895	991	1,080	886	6,808
1059	3959	PERCENT	18.7	16.1	4.6	4.1	13.2	14.6	15.9	13.0	
1060	3960	TRIPS	1,026	665	147	259	661	829	677	863	5,127
1060	3960	PERCENT	20.0	13.0	2.9	5.1	12.9	16.2	13.2	16.8	
1061	3961	TRIPS	921	607	148	211	507	1,078	863	1,113	5,448
1061	3961	PERCENT	16.9	11.1	2.7	3.9	9.3	19.8	15.8	20.4	
1062	3962	TRIPS	725	1,092	215	342	665	902	890	1,287	6,118
1062	3962	PERCENT	11.9	17.9	3.5	5.6	10.9	14.7	14.6	21.0	
1063	3963	TRIPS	1,272	1,043	434	106	429	817	934	1,012	6,047
1063	3963	PERCENT	21.0	17.3	7.2	1.8	7.1	13.5	15.5	16.7	
1064	3964	TRIPS	1,320	827	109	118	382	1,189	950	884	5,779
1064	3964	PERCENT	22.8	14.3	1.9	2.0	6.6	20.6	16.4	15.3	
1065	3965	TRIPS	809	426	135	67	228	1,187	654	956	4,462
1065	3965	PERCENT	18.1	9.6	3.0	1.5	5.1	26.6	14.7	21.4	
1066	3966	TRIPS	269	120	0	40	46	243	114	144	976
1066	3966	PERCENT	27.6	12.3	0.0	4.1	4.7	24.9	11.7	14.8	



Miami-Dade 2040 Directional Distribution Summary

Origin TAZ			Cardinal Directions								Total
County TAZ	Regional TAZ		NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW	
1046	3946	PERCENT	13.3	18.8	8.2	6.6	8.5	18.8	12.9	12.9	
1047	3947	TRIPS	619	765	159	328	411	392	430	683	3,787
1047	3947	PERCENT	16.4	20.2	4.2	8.7	10.9	10.4	11.4	18.0	
1048	3948	TRIPS	132	207	55	36	103	64	108	90	795
1048	3948	PERCENT	16.6	26.0	6.9	4.5	13.0	8.1	13.6	11.3	
1049	3949	TRIPS	825	1,051	284	472	554	658	672	895	5,411
1049	3949	PERCENT	15.3	19.4	5.3	8.7	10.2	12.2	12.4	16.5	
1050	3950	TRIPS	1,248	1,284	443	506	1,044	1,108	1,044	1,648	8,325
1050	3950	PERCENT	15.0	15.4	5.3	6.1	12.5	13.3	12.5	19.8	
1051	3951	TRIPS	1,082	1,136	264	622	919	880	705	1,210	6,818
1051	3951	PERCENT	15.9	16.7	3.9	9.1	13.5	12.9	10.3	17.8	
1052	3952	TRIPS	1,154	1,578	476	654	893	802	786	1,492	7,835
1052	3952	PERCENT	14.7	20.1	6.1	8.4	11.4	10.2	10.0	19.0	
1053	3953	TRIPS	865	1,235	354	511	539	718	658	890	5,770
1053	3953	PERCENT	15.0	21.4	6.1	8.9	9.3	12.4	11.4	15.4	
1054	3954	TRIPS	1,973	2,517	736	946	1,720	1,605	1,509	2,146	13,152
1054	3954	PERCENT	15.0	19.1	5.6	7.2	13.1	12.2	11.5	16.3	
1055	3955	TRIPS	1,053	1,476	328	592	1,064	838	1,193	1,368	7,912
1055	3955	PERCENT	13.3	18.7	4.2	7.5	13.5	10.6	15.1	17.3	
1056	3956	TRIPS	1,480	1,759	657	633	1,181	1,297	1,393	2,022	10,422
1056	3956	PERCENT	14.2	16.9	6.3	6.1	11.3	12.4	13.4	19.4	
1057	3957	TRIPS	1,663	1,558	334	422	1,145	1,252	1,408	1,716	9,498
1057	3957	PERCENT	17.5	16.4	3.5	4.4	12.1	13.2	14.8	18.1	
1058	3958	TRIPS	1,544	1,951	422	494	945	1,304	1,544	1,751	9,955
1058	3958	PERCENT	15.5	19.6	4.2	5.0	9.5	13.1	15.5	17.6	
1059	3959	TRIPS	1,714	1,590	409	483	979	1,385	1,580	1,420	9,560
1059	3959	PERCENT	17.9	16.6	4.3	5.1	10.2	14.5	16.5	14.9	
1060	3960	TRIPS	1,537	1,190	187	187	786	1,274	1,148	1,585	7,894
1060	3960	PERCENT	19.5	15.1	2.4	2.4	10.0	16.1	14.5	20.1	
1061	3961	TRIPS	1,199	866	241	315	564	1,335	1,188	1,212	6,920
1061	3961	PERCENT	17.3	12.5	3.5	4.6	8.2	19.3	17.2	17.5	
1062	3962	TRIPS	1,033	1,682	241	427	775	1,335	1,238	1,646	8,377
1062	3962	PERCENT	12.3	20.1	2.9	5.1	9.3	15.9	14.8	19.7	
1063	3963	TRIPS	1,399	1,360	426	171	571	1,171	1,137	1,513	7,748
1063	3963	PERCENT	18.1	17.6	5.5	2.2	7.4	15.1	14.7	19.5	
1064	3964	TRIPS	1,746	1,089	31	180	488	1,402	1,462	1,445	7,843
1064	3964	PERCENT	22.3	13.9	0.4	2.3	6.2	17.9	18.6	18.4	
1065	3965	TRIPS	1,145	714	182	74	218	1,003	965	1,248	5,549
1065	3965	PERCENT	20.6	12.9	3.3	1.3	3.9	18.1	17.4	22.5	
1066	3966	TRIPS	552	292	0	103	46	285	280	393	1,951
1066	3966	PERCENT	28.3	15.0	0.0	5.3	2.4	14.6	14.4	20.1	

APPENDIX E: Traffic Data

Peak Season Factor

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

WEEK	DATES	SF	MOCF: 0.99 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

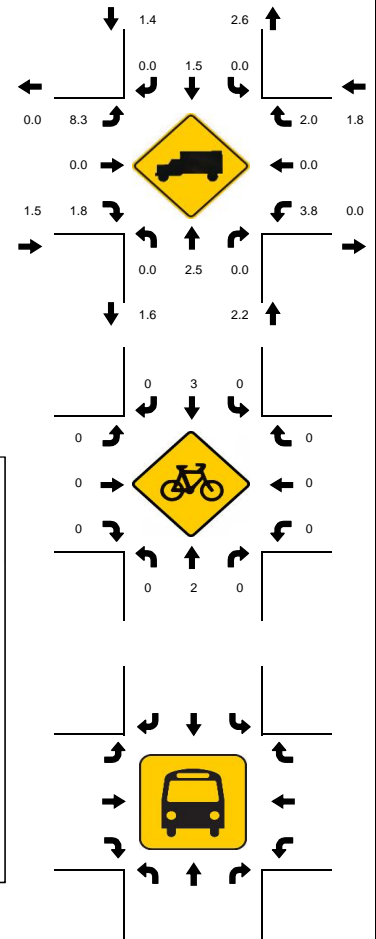
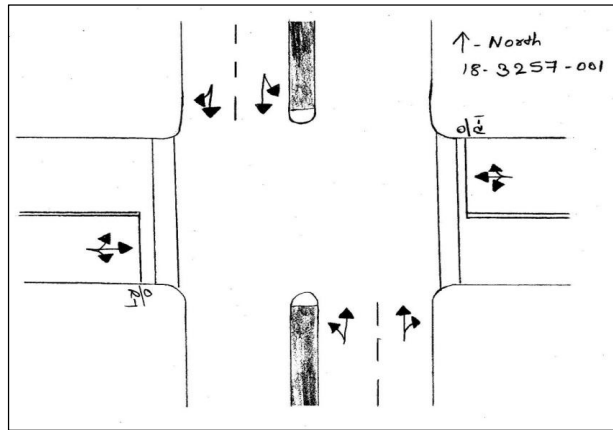
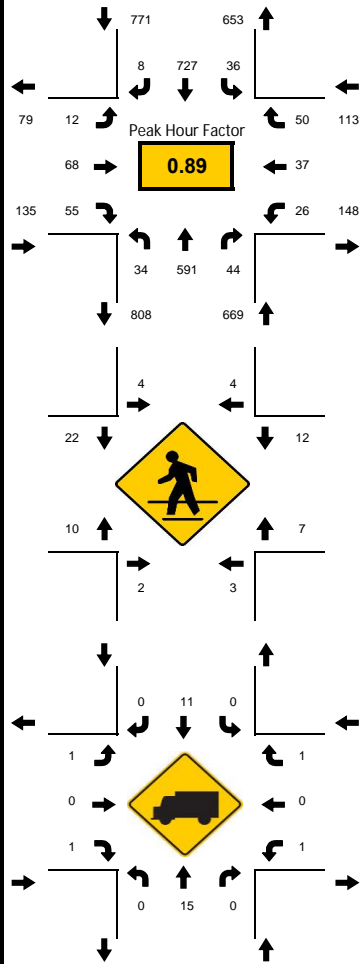
* PEAK SEASON

Turning Movement Counts

Peak-Hour: 08:00 AM - 09:00 AM
 Peak 15-Minute: 08:30 AM - 08:45 AM



National Data & Surveying Services

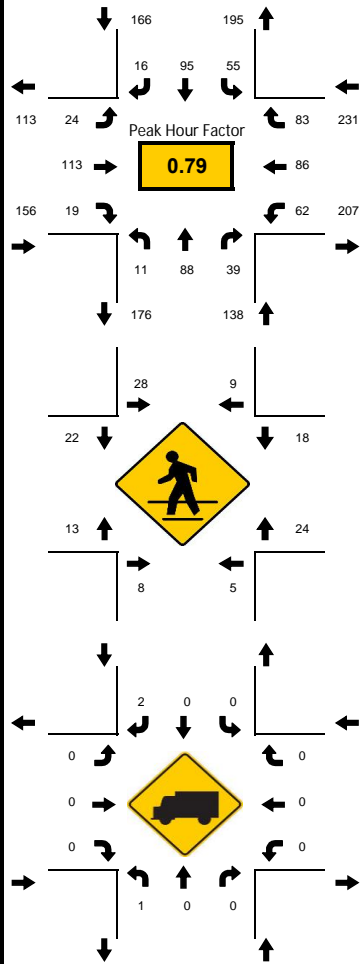


15-Min Count Period Beginning At	Ponce De Leon Blvd Northbound					Ponce De Leon Blvd Southbound					Zamora Ave Eastbound					Zamora Ave Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	1	65	3	2		2	85	1	0		0	3	2	0		3	2	0	0		169	885
07:15 AM	2	71	3	0		7	80	0	2		0	10	3	0		4	3	7	0		192	1092
07:30 AM	3	89	11	1		5	93	1	0		1	11	1	0		5	4	3	0		228	1310
07:45 AM	7	104	4	3		3	130	1	0		4	17	3	0		9	6	5	0		296	1556
08:00 AM	5	119	14	1		8	171	2	0		3	15	13	0		8	8	9	0		376	1688
08:15 AM	7	133	13	1		14	170	2	0		3	23	13	0		4	10	17	0		410	1312
08:30 AM	8	167	13	4		11	196	3	0		3	17	16	0		7	13	16	0		474	902
08:45 AM	7	172	4	1		3	190	1	0		3	13	13	0		7	6	8	0		428	428

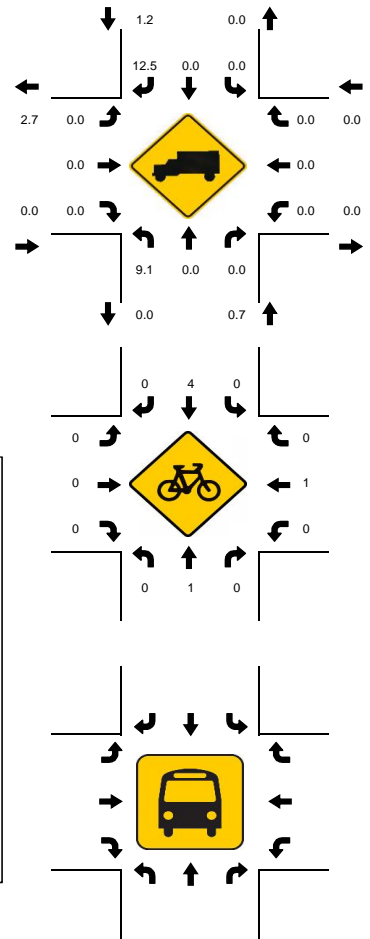
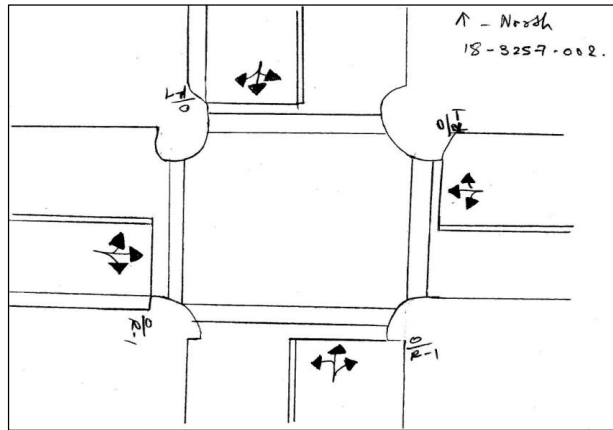
LOCATION: Galiano St & Zamora Ave
 CITY/STATE: Coral Gables, FL

PROJECT ID: 18-03257-002
 DATE: 05/24/2018

Peak-Hour: 08:00 AM - 09:00 AM
 Peak 15-Minute: 08:15 AM - 08:30 AM



National Data & Surveying Services



15-Min Count Period Beginning At	Galiano St Northbound					Galiano St Southbound					Zamora Ave Eastbound					Zamora Ave Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	0	4	1	0		2	5	2	0		1	7	1	0		0	2	1	0		26	242
07:15 AM	0	3	3	0		5	5	1	0		4	17	1	0		1	10	0	0		50	377
07:30 AM	0	5	3	0		5	6	2	0		5	20	4	0		9	8	4	0		71	545
07:45 AM	0	11	1	0		4	21	0	0		3	19	3	0		13	16	4	0		95	672
08:00 AM	2	16	6	0		13	28	1	0		4	27	2	0		24	22	16	0		161	691
08:15 AM	1	34	10	0		14	33	2	0		7	40	8	0		22	25	22	0		218	530
08:30 AM	2	21	20	0		16	20	5	0		7	29	6	0		13	29	30	0		198	312
08:45 AM	6	17	3	0		12	14	8	0		6	17	3	0		3	10	15	0		114	114

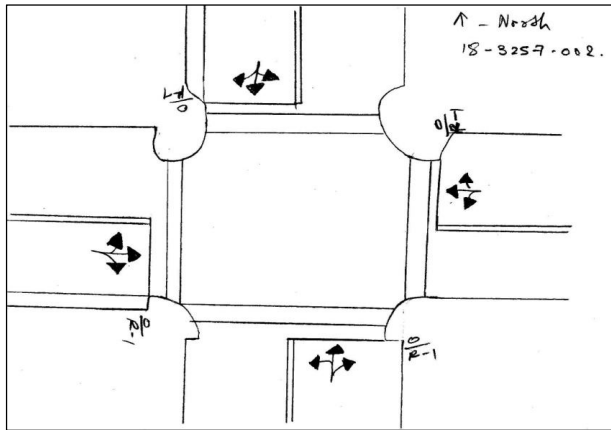
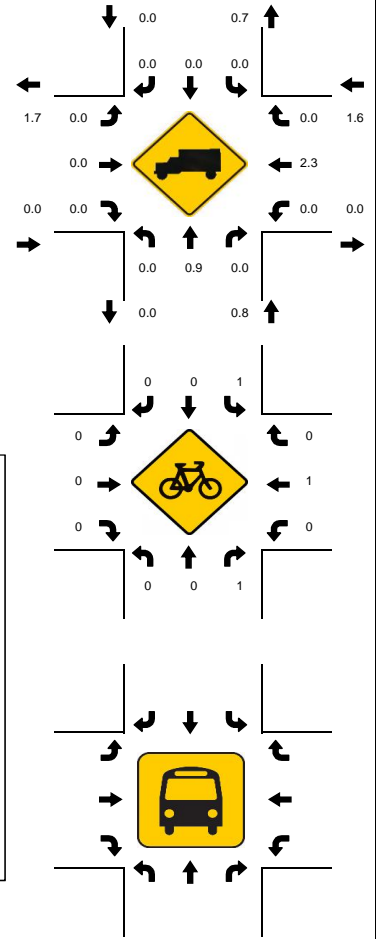
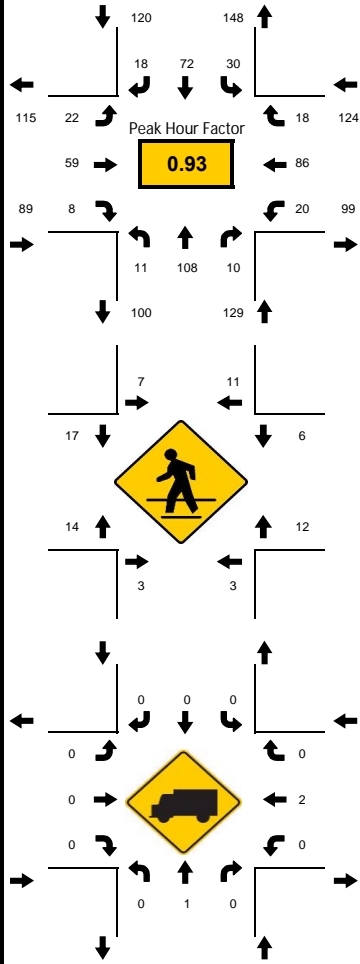
LOCATION: Galiano St & Zamora Ave
 CITY/STATE: Coral Gables, FL

PROJECT ID: 18-03257-002
 DATE: 05/24/2018

Peak-Hour: 05:00 PM - 06:00 PM
 Peak 15-Minute: 05:15 PM - 05:30 PM



National Data & Surveying Services



15-Min Count Period Beginning At	Galiano St Northbound					Galiano St Southbound					Zamora Ave Eastbound					Zamora Ave Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	2	10	1	0		5	13	2	0		3	6	3	0		2	13	3	0		63	337
04:15 PM	3	15	3	0		3	13	1	0		4	10	4	0		4	26	4	0		90	378
04:30 PM	3	20	0	0		4	12	2	0		2	13	0	0		2	19	5	0		82	412
04:45 PM	2	23	0	0		3	15	6	1		8	11	0	0		6	24	3	0		102	445
05:00 PM	3	23	0	0		9	19	4	0		5	10	2	0		7	20	2	0		104	462
05:15 PM	3	27	2	0		10	18	5	0		8	22	2	0		4	20	3	0		124	358
05:30 PM	3	29	5	0		4	12	6	0		6	11	2	0		4	28	5	0		115	234
05:45 PM	2	29	3	0		7	23	3	0		3	16	2	0		5	18	8	0		119	119

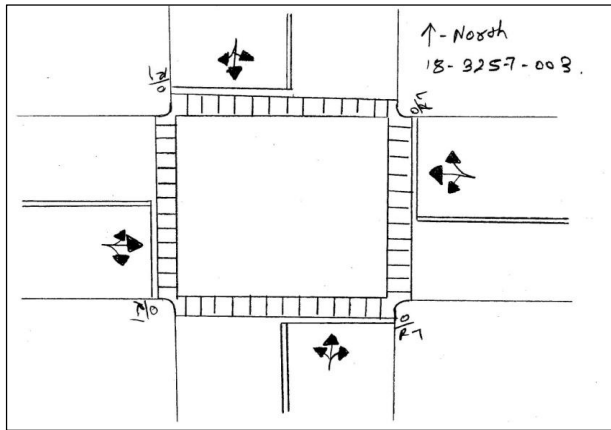
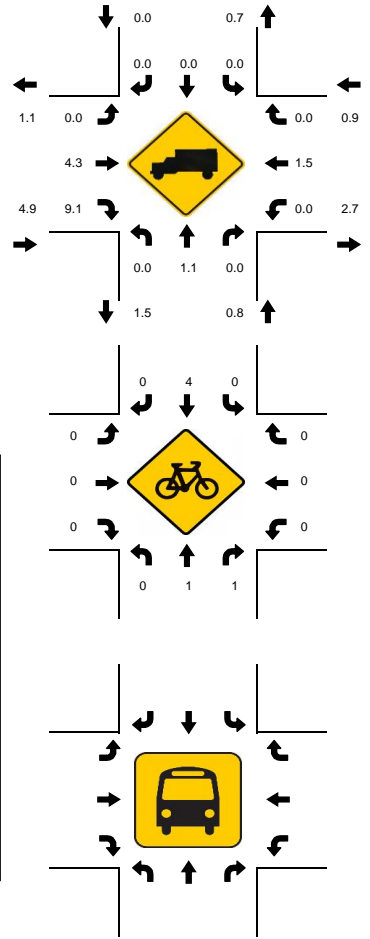
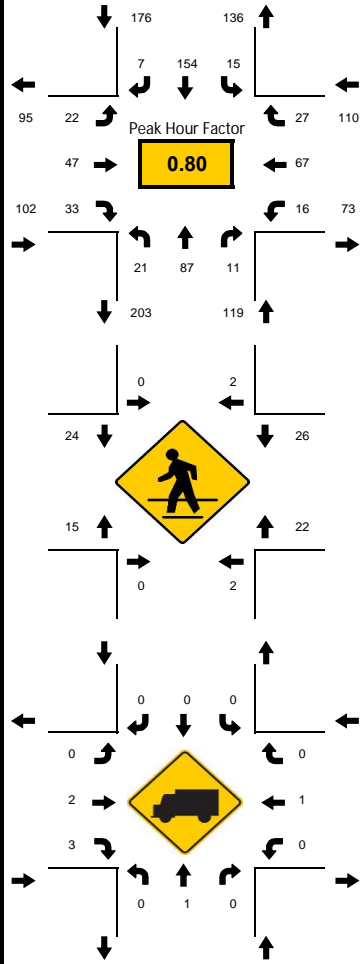
LOCATION: Galiano St & Madeira Ave
 CITY/STATE: Coral Gables, FL

PROJECT ID: 18-03257-003
 DATE: 05/24/2018

Peak-Hour: 08:00 AM - 09:00 AM
 Peak 15-Minute: 08:15 AM - 08:30 AM



National Data & Surveying Services



15-Min Count Period Beginning At	Galiano St Northbound					Galiano St Southbound					Madeira Ave Eastbound					Madeira Ave Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	0	3	0	0	0	2	5	0	0	0	1	4	0	0	0	2	4	2	0	0	23	185
07:15 AM	0	4	2	0	0	1	5	1	0	0	0	5	2	0	0	1	7	2	0	0	30	295
07:30 AM	3	4	2	0	0	0	17	1	0	0	5	6	4	0	0	2	8	0	0	0	52	424
07:45 AM	3	8	2	0	0	8	28	3	0	0	2	5	8	0	0	2	9	2	0	0	80	493
08:00 AM	4	12	4	0	0	4	51	1	0	0	6	11	10	0	0	8	16	6	0	0	133	507
08:15 AM	4	36	3	2	0	6	53	3	0	0	5	12	13	0	0	4	12	6	0	0	159	374
08:30 AM	5	26	3	0	0	4	32	1	0	0	7	11	8	0	0	2	15	7	0	0	121	215
08:45 AM	6	13	1	0	0	1	18	2	0	0	4	13	2	0	0	2	24	8	0	0	94	94

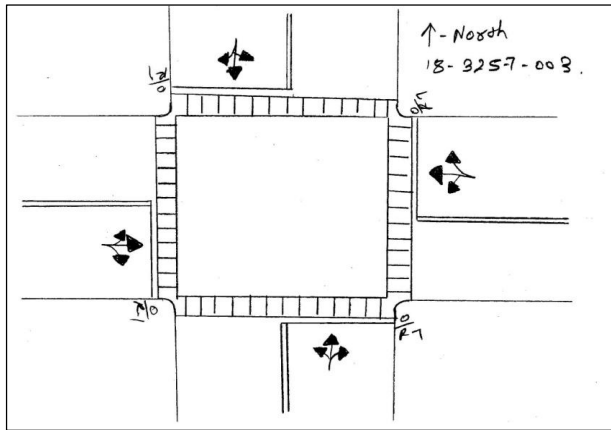
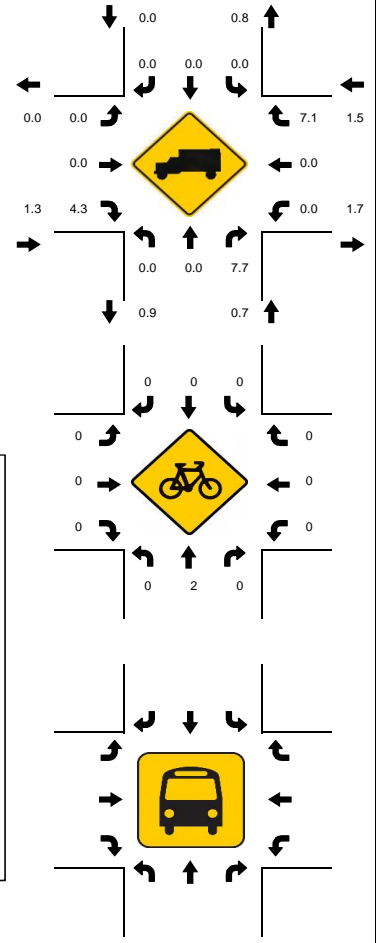
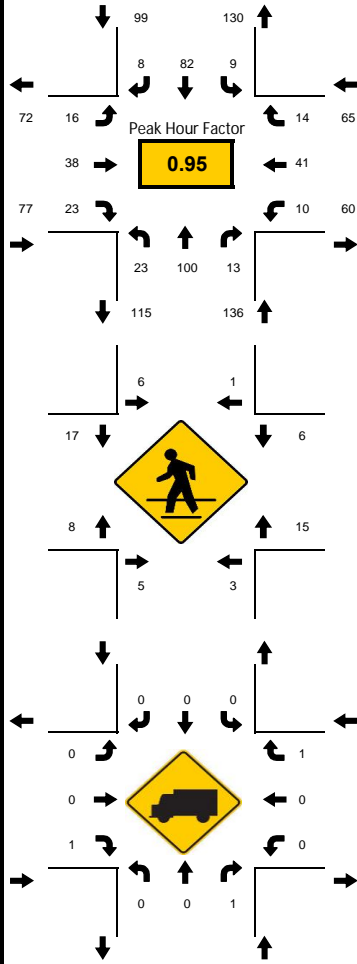
LOCATION: Galiano St & Madeira Ave
 CITY/STATE: Coral Gables, FL

PROJECT ID: 18-03257-003
 DATE: 05/24/2018

Peak-Hour: 05:00 PM - 06:00 PM
 Peak 15-Minute: 05:45 PM - 06:00 PM



National Data & Surveying Services

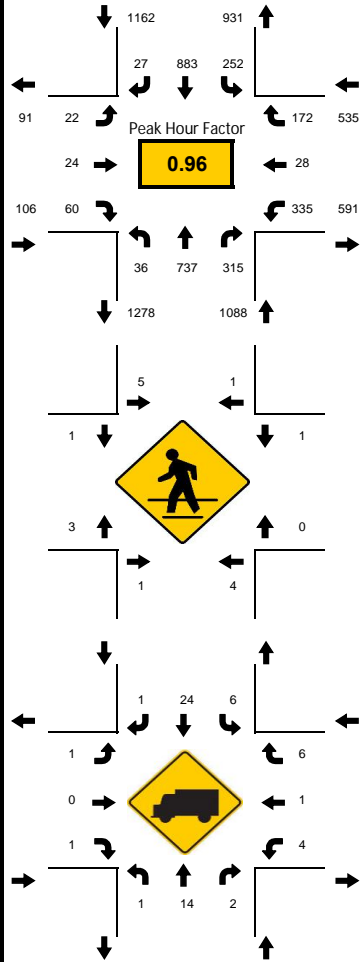


15-Min Count Period Beginning At	Galiano St Northbound					Galiano St Southbound					Madeira Ave Eastbound					Madeira Ave Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
04:00 PM	1	11	1	0	0	0	17	2	0	0	2	9	5	0	0	2	14	1	0	0	65	287
04:15 PM	4	14	3	0	0	3	11	5	0	0	4	11	4	0	0	3	7	3	0	0	72	309
04:30 PM	2	14	2	0	0	0	13	2	0	0	2	5	2	0	0	0	17	5	0	0	64	335
04:45 PM	4	12	1	0	0	1	16	4	0	0	8	9	8	0	0	2	14	7	0	0	86	364
05:00 PM	5	15	3	0	0	5	19	3	0	0	2	13	7	0	0	2	6	7	0	0	87	377
05:15 PM	8	27	5	0	0	1	20	2	0	0	5	8	6	0	0	4	11	1	0	0	98	290
05:30 PM	6	31	1	0	0	2	16	1	0	0	2	7	9	0	0	2	13	3	0	0	93	192
05:45 PM	4	27	4	0	0	1	27	2	0	0	7	10	1	0	0	2	11	3	0	0	99	99

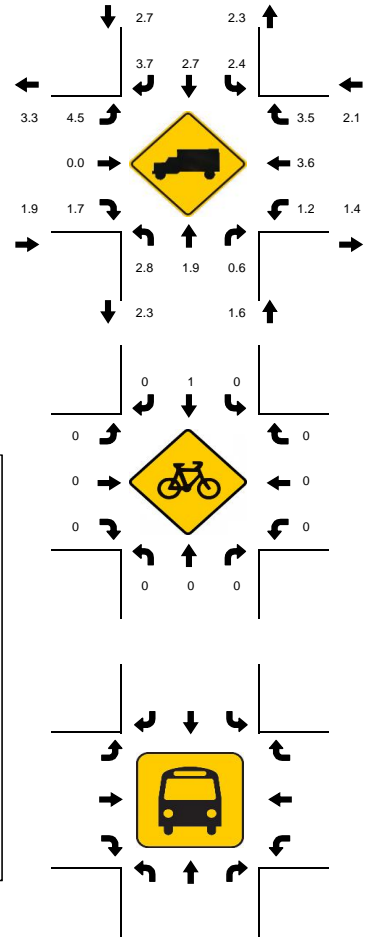
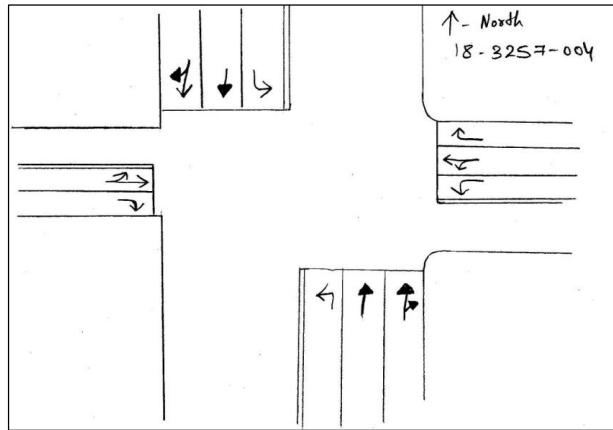
LOCATION: Douglas Rd & SW 16th St
 CITY/STATE: Coral Gables, FL

PROJECT ID: 18-03257-004
 DATE: 05/24/2018

Peak-Hour: 08:00 AM - 09:00 AM
 Peak 15-Minute: 08:00 AM - 08:15 AM



National Data & Surveying Services

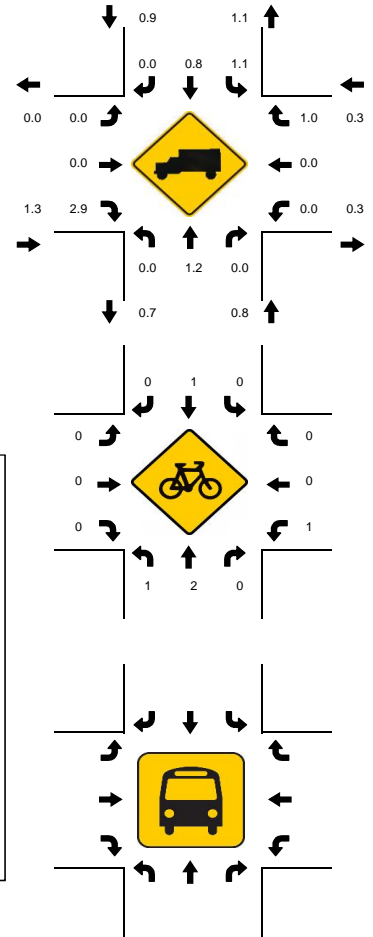
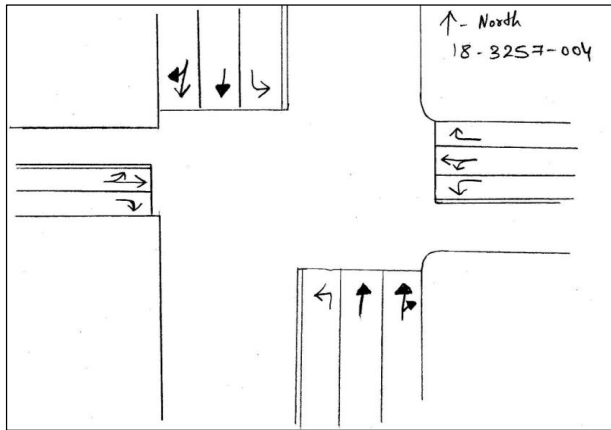
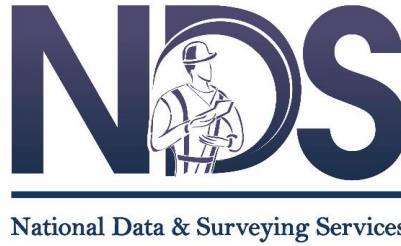
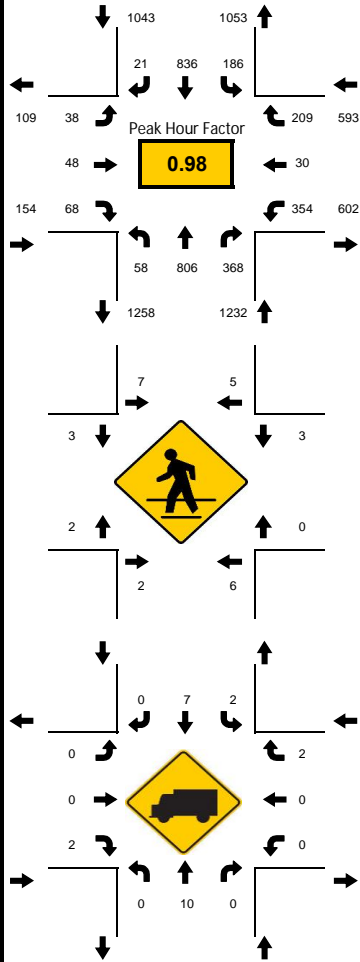


15-Min Count Period Beginning At	Douglas Rd Northbound					Douglas Rd Southbound					SW 16th St Eastbound					SW 16th St Westbound					Total	Hourly Total
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*		
07:00 AM	10	138	60	0		40	178	2	0		1	1	11	0		34	1	32	0		508	2367
07:15 AM	11	150	105	0		54	155	1	0		5	6	13	0		44	4	48	0		596	2611
07:30 AM	7	146	77	0		57	190	6	0		7	5	14	0		49	5	41	0		604	2758
07:45 AM	9	180	90	0		66	172	6	0		2	7	12	0		61	2	52	0		659	2865
08:00 AM	11	214	76	0		55	237	6	0		8	8	14	0		71	6	46	0		752	2891
08:15 AM	12	182	92	0		67	220	12	0		4	5	16	0		85	4	44	0		743	2139
08:30 AM	9	174	71	0		69	217	3	0		8	6	16	0		93	10	35	0		711	1396
08:45 AM	4	167	76	0		61	209	6	0		2	5	14	0		86	8	47	0		685	685

LOCATION: Douglas Rd & SW 16th St
 CITY/STATE: Coral Gables, FL

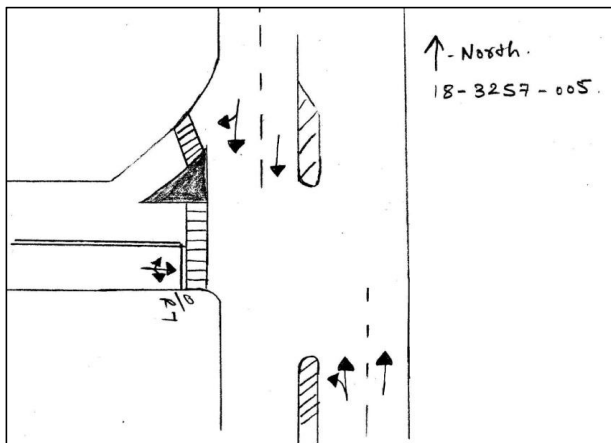
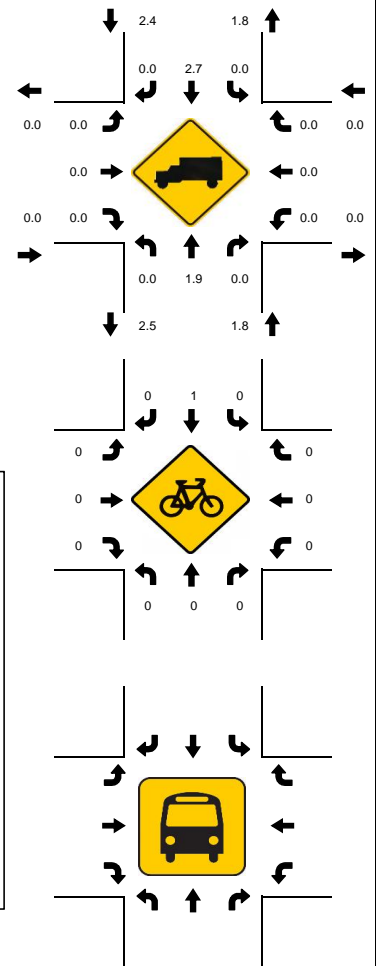
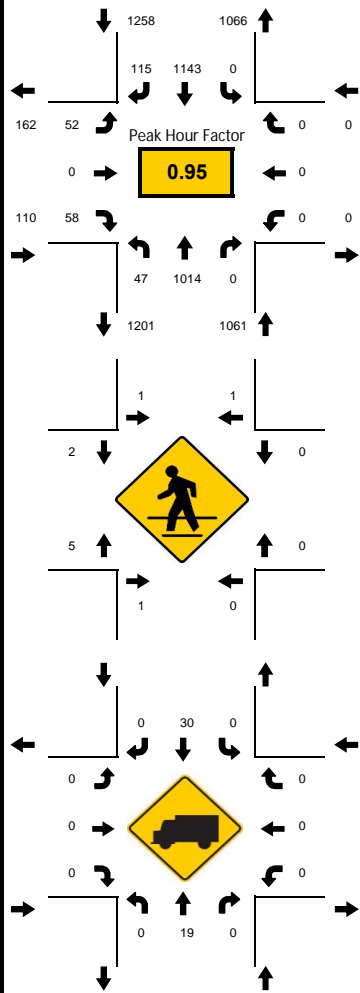
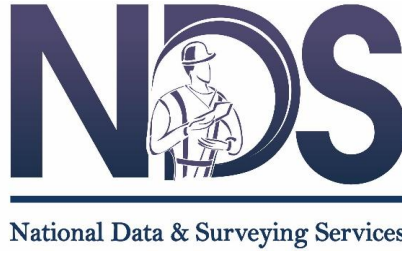
PROJECT ID: 18-03257-004
 DATE: 05/24/2018

Peak-Hour: 05:00 PM - 06:00 PM
 Peak 15-Minute: 05:45 PM - 06:00 PM



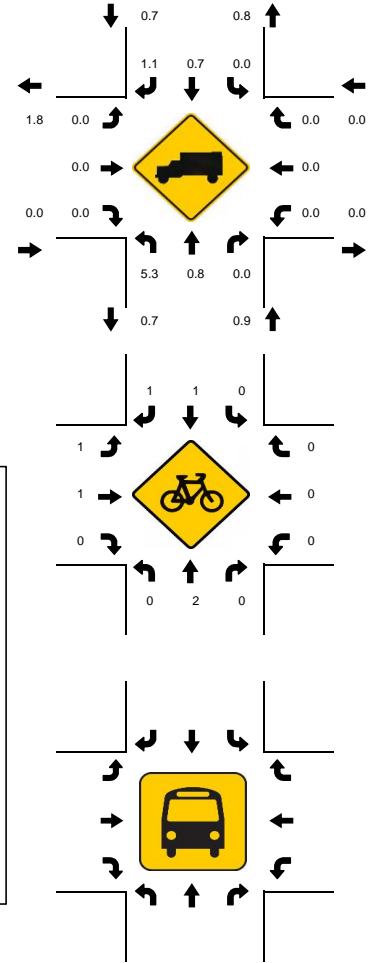
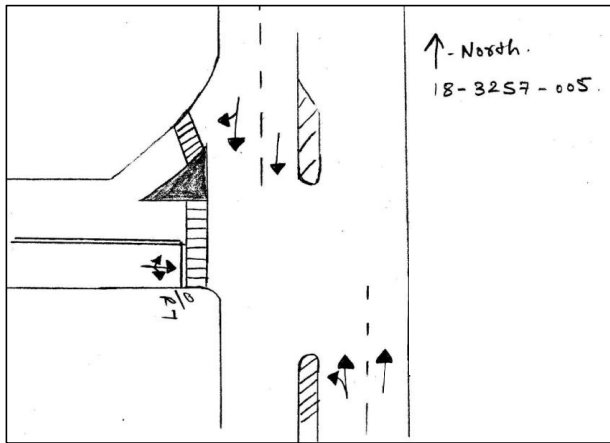
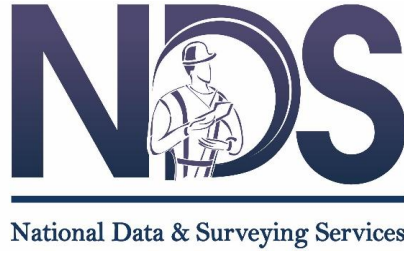
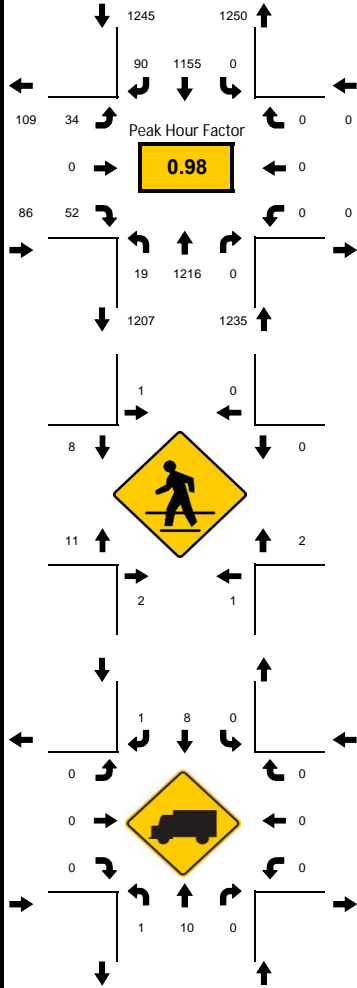
15-Min Count Period Beginning At	Douglas Rd Northbound					Douglas Rd Southbound					SW 16th St Eastbound				SW 16th St Westbound				Total	Hourly Total		
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt			U	R*
04:00 PM	5	193	86	0		50	185	5	0		8	13	12	0		86	8	54	0		705	2832
04:15 PM	6	235	65	0		51	185	10	0		6	11	14	0		64	5	49	0		701	2878
04:30 PM	11	165	72	0		50	181	7	0		5	13	19	0		91	8	65	0		687	2928
04:45 PM	13	198	72	0		37	202	9	0		7	12	18	0		112	8	51	0		739	2987
05:00 PM	20	219	82	0		49	208	5	0		9	13	14	0		75	3	54	0		751	3022
05:15 PM	15	208	86	0		47	198	9	0		11	13	15	0		88	9	52	0		751	2271
05:30 PM	10	184	95	0		47	200	4	0		11	16	19	0		90	10	60	0		746	1520
05:45 PM	13	195	105	0		43	230	3	0		7	6	20	0		101	8	43	0		774	774

Peak-Hour: 08:00 AM - 09:00 AM
 Peak 15-Minute: 08:15 AM - 08:30 AM



15-Min Count Period Beginning At	Douglas Rd Northbound				Douglas Rd Southbound				Zamora Ave Eastbound				Zamora Ave Westbound				Total	Hourly Total				
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left			Thru	Rgt	U	R*
07:00 AM	1	193	0	0	0	220	1	0	3	0	6	0	0	0	0	0	0	0	0	0	424	1950
07:15 AM	2	262	0	0	0	208	5	0	6	0	9	0	0	0	0	0	0	0	0	0	492	2160
07:30 AM	1	232	0	0	0	246	13	0	6	0	12	0	0	0	0	0	0	0	0	0	510	2306
07:45 AM	11	256	0	0	0	225	14	0	8	0	10	0	0	0	0	0	0	0	0	0	524	2411
08:00 AM	11	268	0	0	0	299	31	0	11	0	14	0	0	0	0	0	0	0	0	0	634	2429
08:15 AM	17	285	0	0	0	271	47	0	8	0	10	0	0	0	0	0	0	0	0	0	638	1795
08:30 AM	16	243	0	0	0	296	20	0	18	0	22	0	0	0	0	0	0	0	0	0	615	1157
08:45 AM	3	218	0	0	0	277	17	0	15	0	12	0	0	0	0	0	0	0	0	0	542	542

Peak-Hour: 05:00 PM - 06:00 PM
 Peak 15-Minute: 05:45 PM - 06:00 PM



15-Min Count Period Beginning At	Douglas Rd Northbound				Douglas Rd Southbound				Zamora Ave Eastbound				Zamora Ave Westbound				Total	Hourly Total				
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left			Thru	Rgt	U	R*
04:00 PM	2	280	0	0	0	253	14	0	0	5	0	9	0	0	0	0	0	0	0	0	563	2366
04:15 PM	6	307	0	1	0	254	19	0	0	9	0	7	0	0	0	0	0	0	0	0	603	2445
04:30 PM	0	274	0	0	0	277	22	0	0	7	0	7	0	0	0	0	0	0	0	0	587	2476
04:45 PM	3	261	0	0	0	301	32	0	0	7	0	9	0	0	0	0	0	0	0	0	613	2524
05:00 PM	4	327	0	0	0	280	14	0	0	3	0	14	0	0	0	0	0	0	0	0	642	2566
05:15 PM	5	312	0	0	0	272	20	0	0	13	0	12	0	0	0	0	0	0	0	0	634	1924
05:30 PM	7	287	0	0	0	296	26	0	0	10	0	9	0	0	0	0	0	0	0	0	635	1290
05:45 PM	3	290	0	0	0	307	30	0	0	8	0	17	0	0	0	0	0	0	0	0	655	655

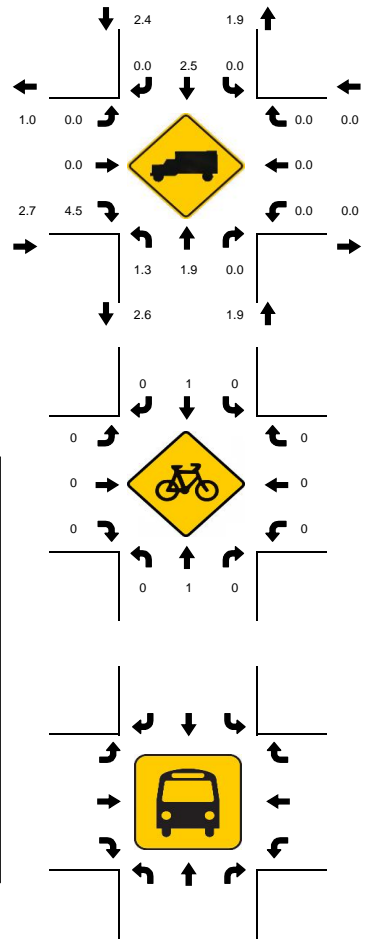
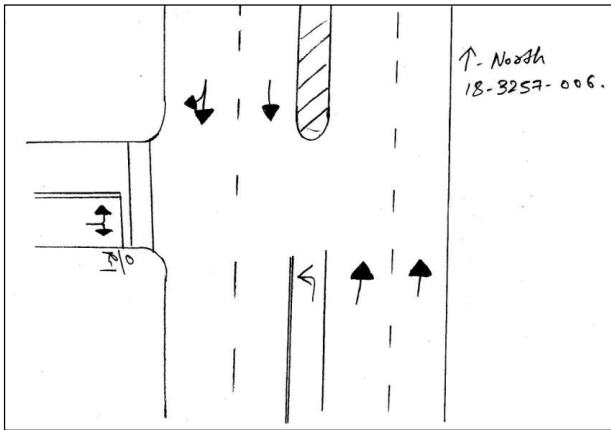
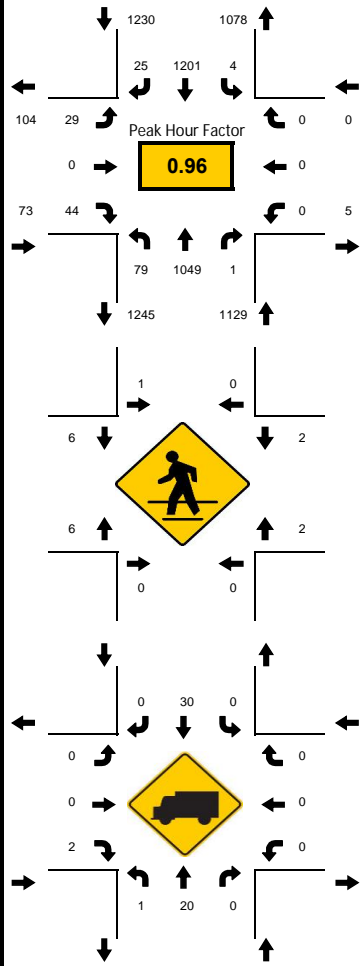
LOCATION: Douglas Rd & Madeira Ave
 CITY/STATE: Coral Gables, FL

PROJECT ID: 18-03257-006
 DATE: 05/24/2018

Peak-Hour: 08:00 AM - 09:00 AM
 Peak 15-Minute: 08:30 AM - 08:45 AM



National Data & Surveying Services



15-Min Count Period Beginning At	Douglas Rd Northbound					Douglas Rd Southbound					Madeira Ave Eastbound					Madeira Ave Westbound					Total	Hourly Total	
	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*	Left	Thru	Rgt	U	R*			
07:00 AM	4	198	2	0	0	1	219	1	0	0	0	0	7	0	0	0	0	0	0	0	0	432	1945
07:15 AM	7	259	0	0	0	0	221	0	0	0	5	0	5	0	0	0	0	1	0	0	0	498	2144
07:30 AM	7	209	0	0	0	0	241	2	0	0	7	0	5	0	0	0	0	0	0	0	0	471	2238
07:45 AM	11	261	1	0	0	0	251	2	0	0	7	0	11	0	0	0	0	0	0	0	0	544	2401
08:00 AM	23	278	1	0	0	1	303	4	1	0	7	0	13	0	0	0	0	0	0	0	0	631	2432
08:15 AM	12	278	0	0	0	0	274	7	0	0	10	0	11	0	0	0	0	0	0	0	0	592	1801
08:30 AM	16	266	0	0	0	1	325	10	0	0	6	0	10	0	0	0	0	0	0	0	0	634	1209
08:45 AM	28	227	0	0	0	1	299	4	0	0	6	0	10	0	0	0	0	0	0	0	0	575	575

APPENDIX F:
Background Area Growth

FDOT Historical Growth Rate

FDOT Growth Rate Summary			
Station Number	Location	Growth Rate	
		5-year	10-year
2534	SR 972/Coral Way, 200' east of SW 37 Avenue	-4.04%	-1.33%
5117	SR 90/US-41/SW 8 St, 200' east of SW 37 Avenue	2.42%	0.41%
8410	Ponce de Leon Boulevard, 200' south of Miracle Mile	-1.35%	
	Total	-0.99%	-0.46%

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2017 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 2534 - SR 972/CORAL WAY, 200' E SW 37 AVENUE

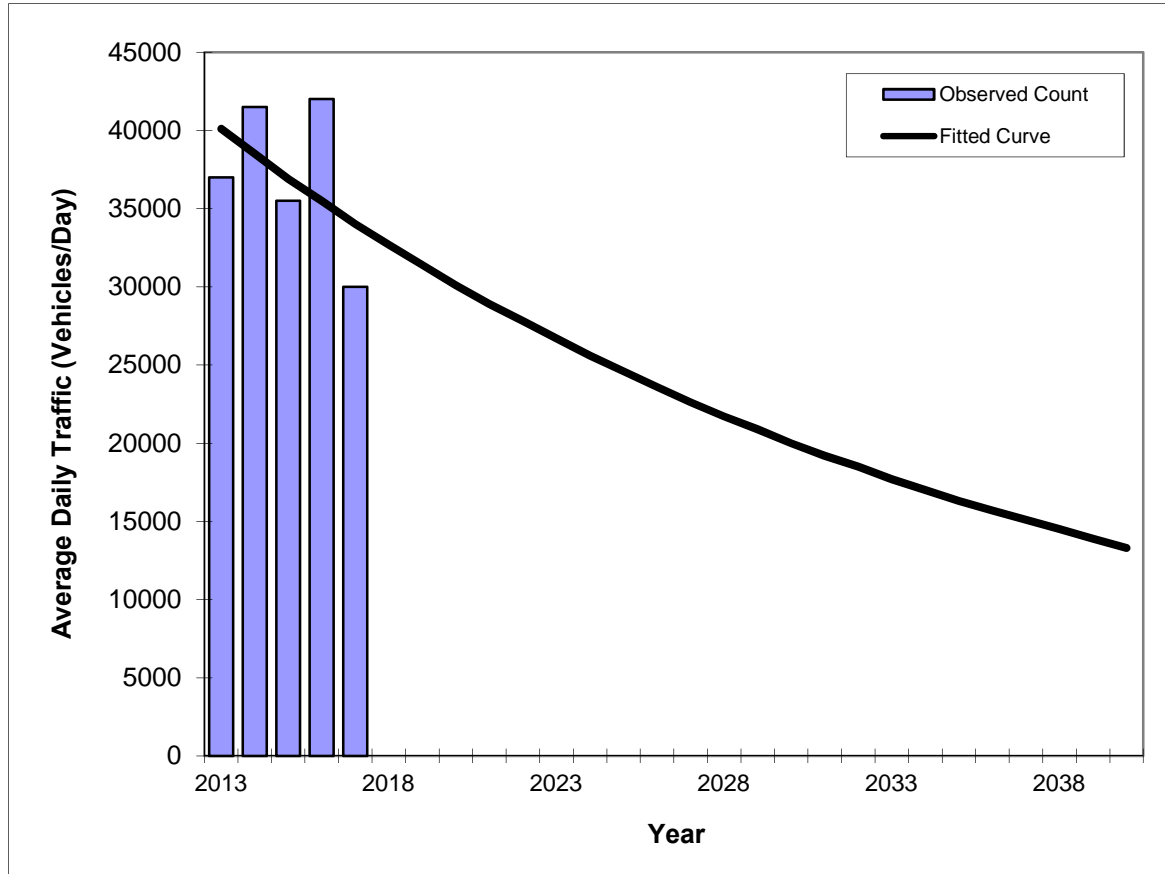
YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2017	30000 C	E 12500	W 17500	9.00	55.70	4.40
2016	42000 C	E 21000	W 21000	9.00	56.10	3.50
2015	35500 C	E 16000	W 19500	9.00	57.40	5.90
2014	41500 C	E 22000	W 19500	9.00	59.30	10.00
2013	37000 C	E 17000	W 20000	9.00	58.90	2.20
2012	36000 C	E 18000	W 18000	9.00	59.70	2.00
2011	42500 C	E 21000	W 21500	9.00	58.20	3.30
2010	43000 C	E 21000	W 22000	7.87	58.27	4.10
2009	38000 C	E 19000	W 19000	7.98	59.96	2.90
2008	37000 C	E 17500	W 19500	8.07	66.31	2.40
2007	40500 C	E 19000	W 21500	7.90	63.12	1.40
2006	40500 C	E 18500	W 22000	7.39	58.66	2.00
2005	44000 C	E 20000	W 24000	7.70	65.70	2.40
2004	43500 C	E 22500	W 21000	8.20	67.10	6.40
2003	31500 C	E 13500	W 18000	8.10	72.30	4.30
2002	36500 C	E 18000	W 18500	9.20	68.00	5.30

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

SR 972/Coral Way -- 200 feet east of SW 37 Avenue

County:	Miami (87)
Station #:	2534
Highway:	SR 972/Coral Way



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	37000	40100
2014	41500	38500
2015	35500	36900
2016	42000	35500
2017	30000	34000

Trend R-squared:	22.16%
Compounded Annual Historic Growth Rate:	-4.04%
Printed:	14-Jun-18

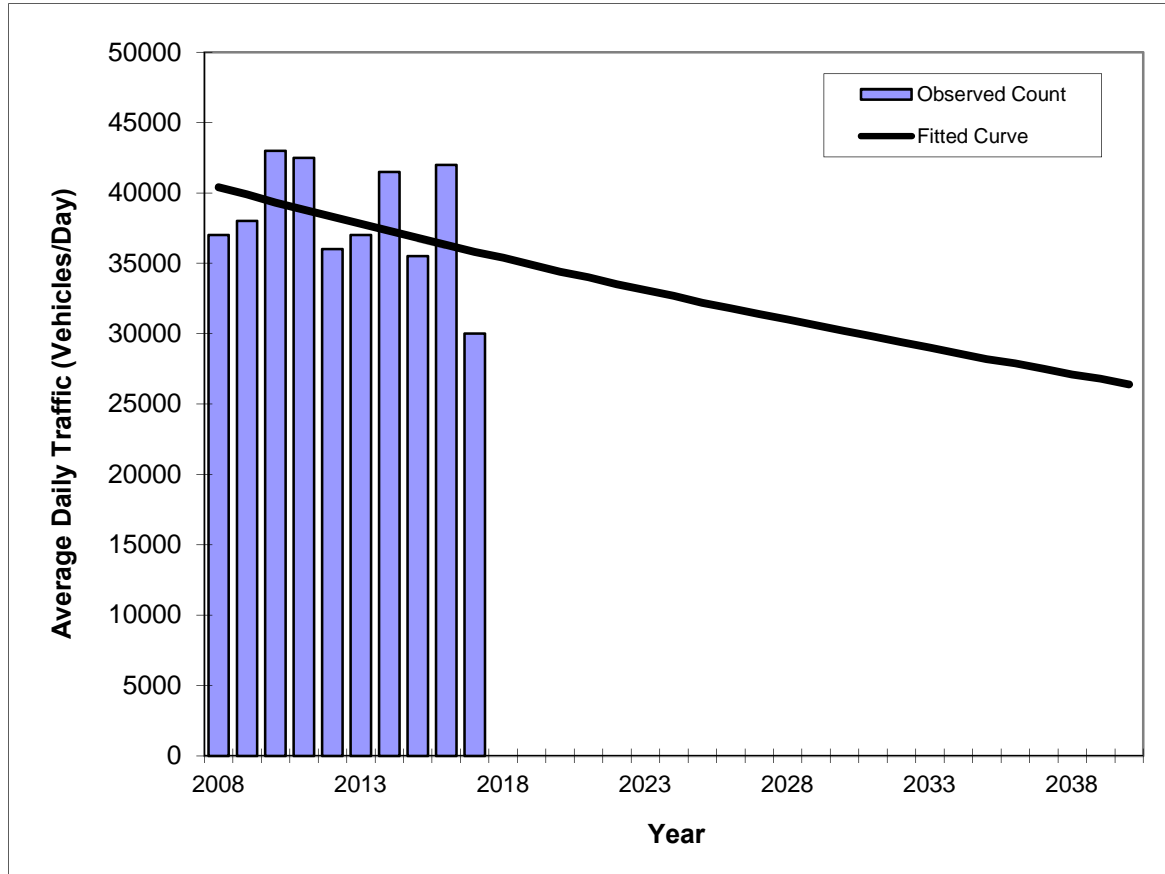
Exponential Growth Option

*Axle-Adjusted

Traffic Trends

SR 972/Coral Way -- 200 feet east of SW 37 Avenue

County:	Miami (87)
Station #:	2534
Highway:	SR 972/Coral Way



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	37000	40400
2009	38000	39900
2010	43000	39300
2011	42500	38800
2012	36000	38300
2013	37000	37800
2014	41500	37300
2015	35500	36800
2016	42000	36300
2017	30000	35800

Trend R-squared:	13.15%
Compounded Annual Historic Growth Rate:	-1.33%
Printed:	14-Jun-18
Exponential Growth Option	

*Axle-Adjusted

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2017 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 5117 - SR 90/US-41/SW 8 ST, 200' E SW 37 AV

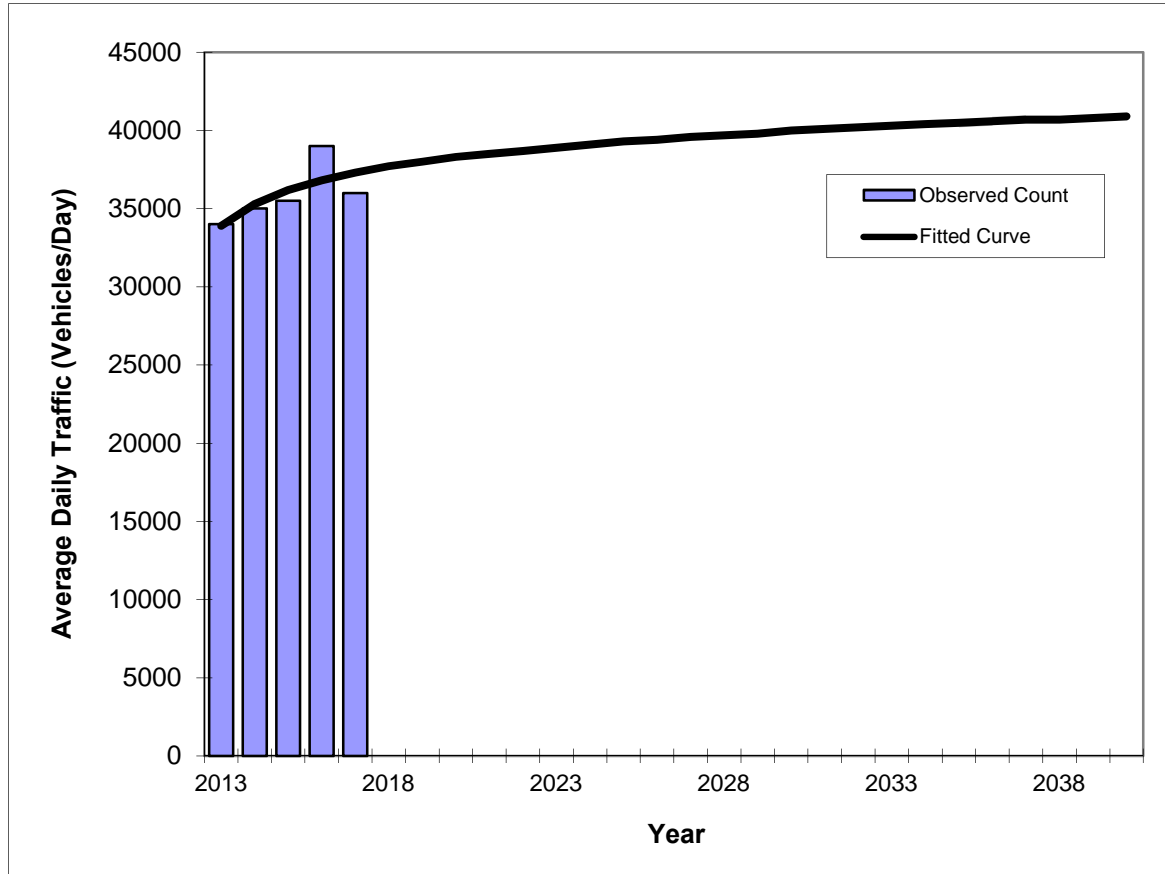
YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2017	36000 C	E 18500	W 17500	9.00	54.00	2.80
2016	39000 C	E 21500	W 17500	9.00	56.10	1.50
2015	35500 C	E 18000	W 17500	9.00	57.40	4.10
2014	35000 C	E 17500	W 17500	9.00	59.30	7.10
2013	34000 C	E 17500	W 16500	9.00	58.90	3.30
2012	35000 C	E 18000	W 17000	9.00	59.70	1.90
2011	36000 C	E 19000	W 17000	9.00	58.20	8.70
2010	34000 C	E 16500	W 17500	7.87	58.27	8.70
2009	38000 C	E 20000	W 18000	7.98	59.96	5.30
2008	34500 C	E 17500	W 17000	8.07	66.31	6.60
2007	37500 C	E 19500	W 18000	7.90	63.12	7.10
2006	40500 C	E 21000	W 19500	7.39	58.66	13.10
2005	40500 C	E 21000	W 19500	7.70	65.70	5.00
2004	40000 C	E 21500	W 18500	8.20	67.10	5.00
2003	39500 C	E 20500	W 19000	8.10	72.30	3.90
2002	34500 C	E 18000	W 16500	9.20	68.00	3.30

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

SR 90/US-41/SW 8th St -- 200 feet east of SW 37 Avenue

County:	Miami (87)
Station #:	5117
Highway:	SR 90/US-41/SW 8th St



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	34000	33900
2014	35000	35300
2015	35500	36200
2016	39000	36800
2017	36000	37300

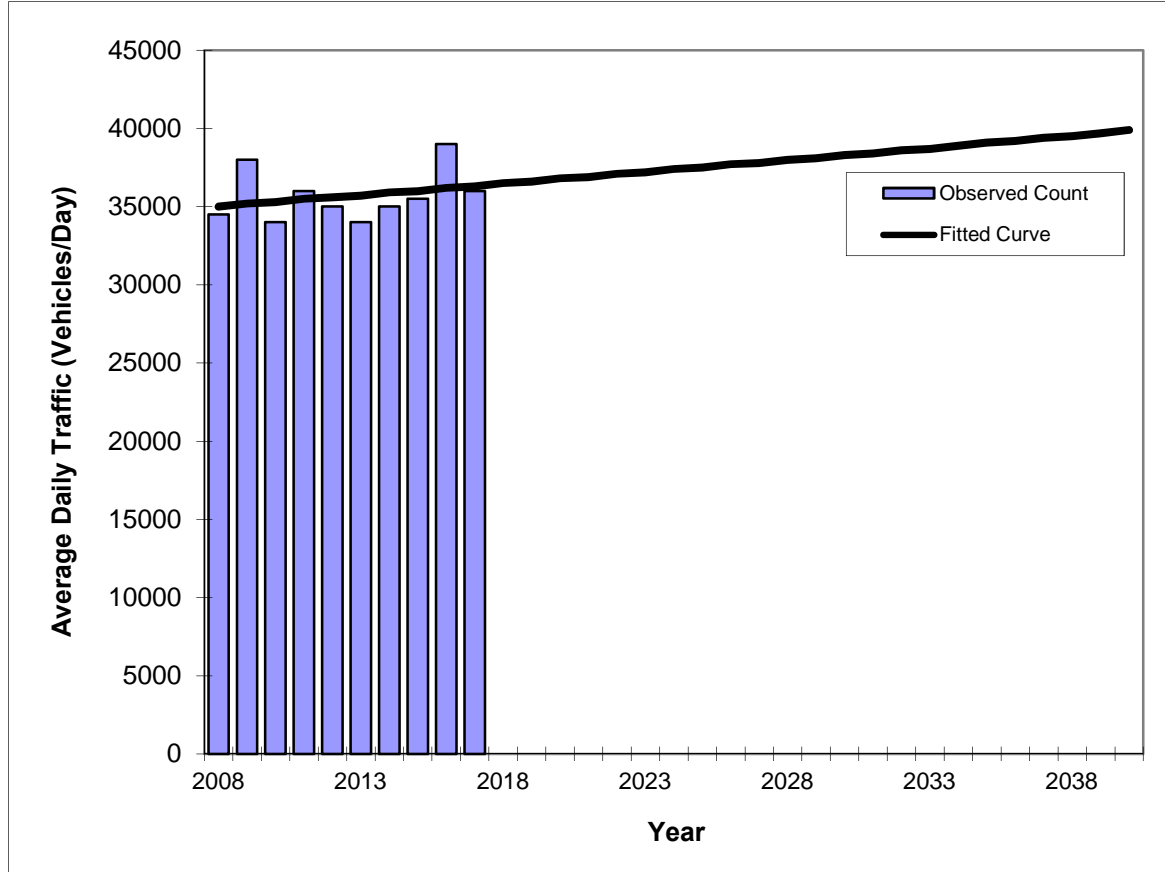
Trend R-squared:	50.25%
Compounded Annual Historic Growth Rate:	2.42%
Printed:	14-Jun-18
Decaying Exponential Growth Option	

*Axle-Adjusted

Traffic Trends

SR 90/US-41/SW 8th St -- 200 feet east of SW 37 Avenue

County:	Miami (87)
Station #:	5117
Highway:	SR 90/US-41/SW 8th St



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2008	34500	35000
2009	38000	35200
2010	34000	35300
2011	36000	35500
2012	35000	35600
2013	34000	35700
2014	35000	35900
2015	35500	36000
2016	39000	36200
2017	36000	36300

Trend R-squared:	7.26%
Compounded Annual Historic Growth Rate:	0.41%
Printed:	14-Jun-18
Exponential Growth Option	

*Axle-Adjusted

FLORIDA DEPARTMENT OF TRANSPORTATION
 TRANSPORTATION STATISTICS OFFICE
 2017 HISTORICAL AADT REPORT

COUNTY: 87 - MIAMI-DADE

SITE: 8410 - PONCE DE LEON, 200 FT S OF MIRACLE MILE (2011 OFF SYSTEM CYCLE)

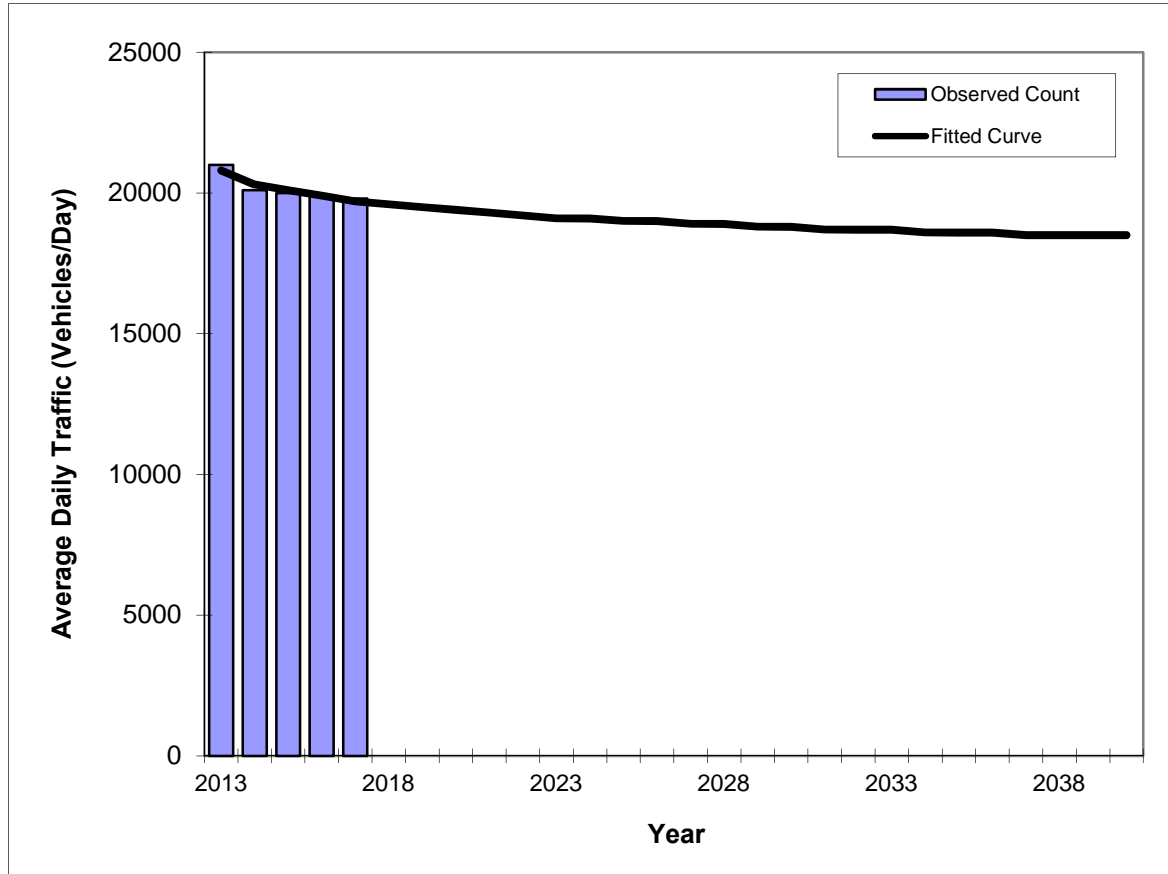
YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2017	19800 T	N 11000	S 8800	9.00	59.30	2.70
2016	19900 S	N 11000	S 8900	9.00	56.10	3.30
2015	20000 F	N 11000	S 9000	9.00	57.40	5.30
2014	20100 C	N 11000	S 9100	9.00	59.30	7.50
2013	21000 F	N 10500	S 10500	9.00	58.90	16.20
2012	21000 C	N 10500	S 10500	9.00	59.70	16.00

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

Ponce de Leon -- 200 feet south of Miracle Mile (2011 Off System Cycle)

County:	Miami (87)
Station #:	8410
Highway:	Ponce de Leon



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2013	21000	20800
2014	20100	20300
2015	20000	20100
2016	19900	19900
2017	19800	19700

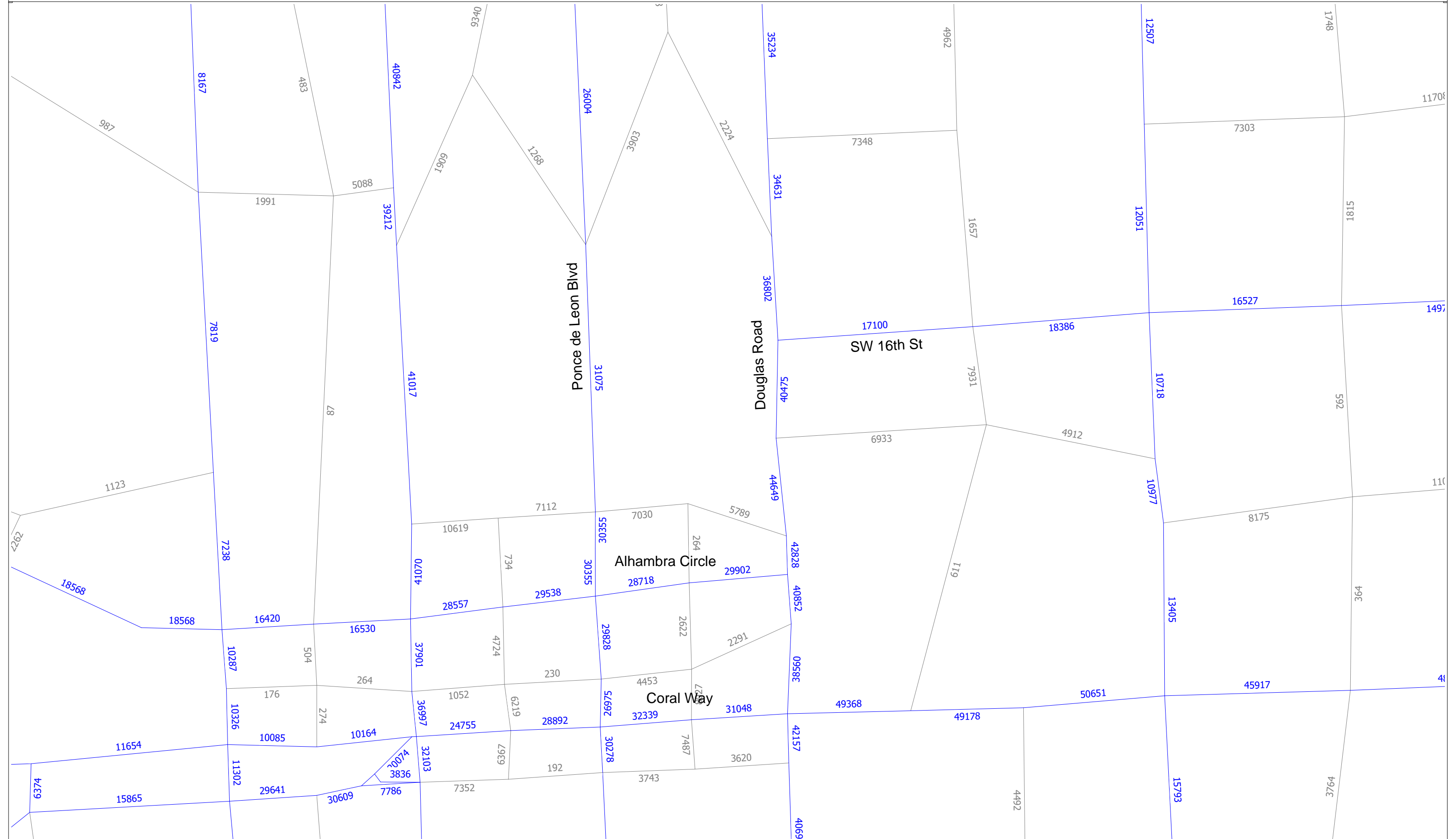
Trend R-squared:	88.94%
Compounded Annual Historic Growth Rate:	-1.35%
Printed:	14-Jun-18
Decaying Exponential Growth Option	

*Axle-Adjusted

SERPM Growth Rate

SERPM Growth Rate Summary					
Street Name	2010	2040	Difference	Growth Rate	Annual Growth Rate
Ponce de Leon Boulevard	25,841	31,075	5,234	20.25%	0.68%
	24,808	30,355	5,547	22.36%	0.75%
	23,806	29,828	6,022	25.30%	0.84%
Douglas Road	30,244	36,802	6,558	21.68%	0.72%
	36,120	40,475	4,355	12.06%	0.40%
	38,840	44,649	5,809	14.96%	0.50%
	37,519	42,828	5,309	14.15%	0.47%
	32,770	40,852	8,082	24.66%	0.82%
SW 16th Street	13,505	17,100	3,595	26.62%	0.89%
Alhambra Circle	19,966	28,718	8,752	43.83%	1.46%
	21,588	29,902	8,314	38.51%	1.28%
Total	305,007	372,584	67,577	22.16%	0.74%

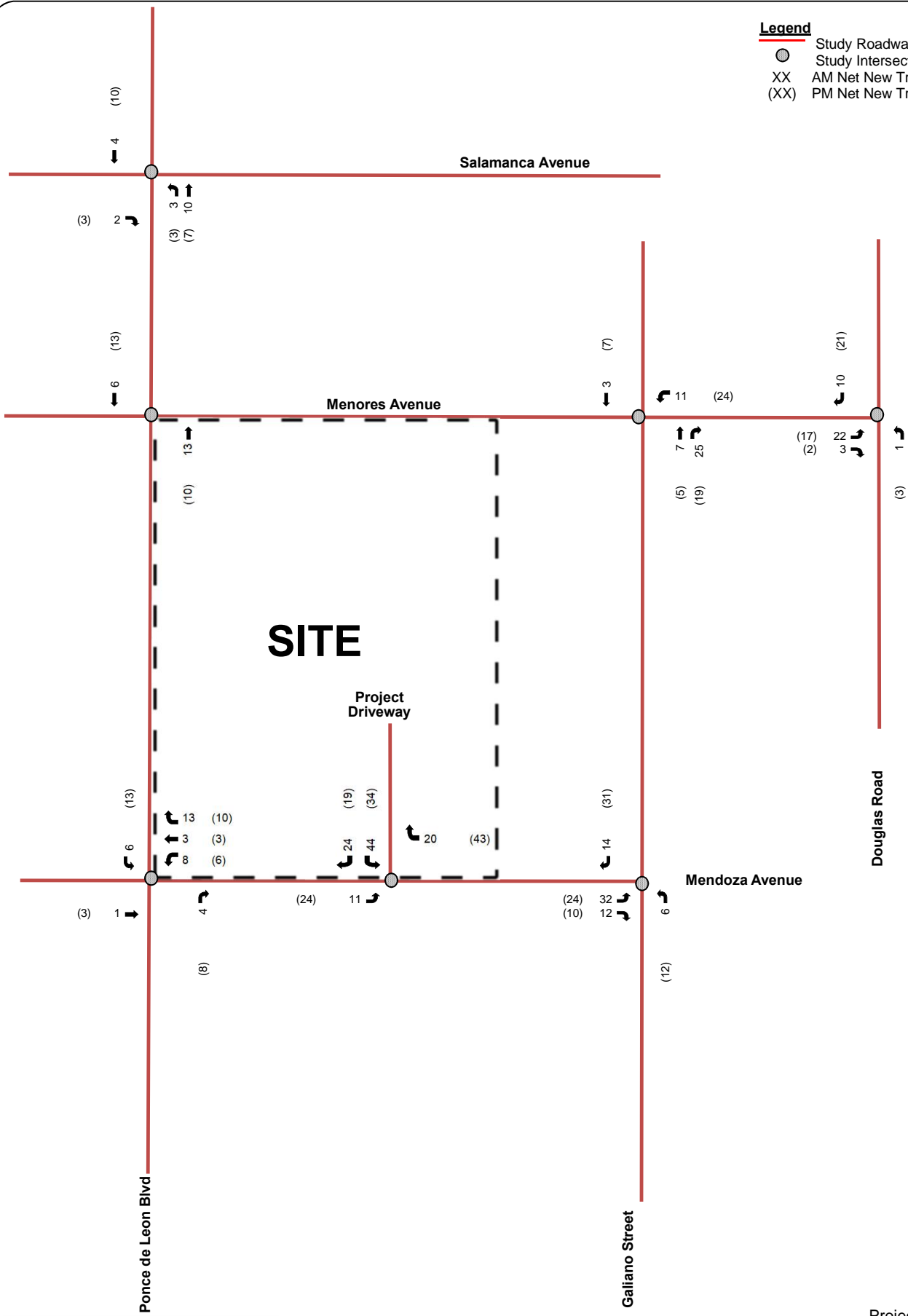
44 Zamora Avenue
CF2040 Volumes
SERPM7.071



Committed Development

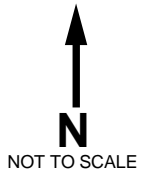
Legend

- Study Roadway
- Study Intersection
- XX AM Net New Trip Assignment
- (XX) PM Net New Trip Assignment



SITE

Project Driveway



APPENDIX G:
Volume Development Worksheets

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Ponce de Leon Boulevard and Zamora Avenue
 COUNT DATE: May 24, 2018
 AM PEAK HOUR FACTOR: 0.89
 PM PEAK HOUR FACTOR: 0.92

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
AM Raw Turning Movements		12	68	55		26	37	50		34	591	44		36	727	8		
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
AM EXISTING CONDITIONS		12	69	56		26	37	51		34	597	44		36	734	8		
"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
PM Raw Turning Movements		14	33	18		28	49	34		54	890	29		34	587	18		
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
PM EXISTING CONDITIONS		14	33	18		28	49	34		55	899	29		34	593	18		
"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard											4				8			
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	4	0		0	8	0		
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
AM BACKGROUND TRAFFIC GROWTH		0	1	1		1	1	1		1	12	1		1	15	0		
AM NON-PROJECT TRAFFIC		12	70	57		27	38	52		35	613	45		37	757	8		
"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard											8				6			
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	8	0		0	6	0		
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
PM BACKGROUND TRAFFIC GROWTH		0	1	0		1	1	1		1	18	1		1	12	0		
PM NON-PROJECT TRAFFIC		14	34	18		29	50	35		56	925	30		35	611	18		
"AM PROJECT DISTRIBUTION"	LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																	
	Exiting																	
Net New Distribution	Entering			5.0%									12.0%			14.0%		
	Exiting						12.0%	5.0%	14.0%									
"PM PROJECT DISTRIBUTION"	LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																	
	Exiting																	
Net New Distribution	Entering			5.0%									12.0%			14.0%		
	Exiting						12.0%	5.0%	14.0%									
"AM PROJECT TRAFFIC"	LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																	
	Net New			0			3	1	3					1		1		
AM TOTAL PROJECT TRAFFIC			0	0	0		3	1	3			0	0	1		1	0	0
AM TOTAL TRAFFIC			12	70	57		30	39	55			35	613	46		38	757	8
"PM PROJECT TRAFFIC"	LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																	
	Net New			1			1	1	2					3		3		
PM TOTAL PROJECT TRAFFIC				1			1	1	2					3		3		
PM TOTAL TRAFFIC			14	35	18		30	51	37			56	925	33		38	611	18

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Galiano Street and Zamora Avenue
 COUNT DATE: May 24, 2018
 AM PEAK HOUR FACTOR: 0.79
 PM PEAK HOUR FACTOR: 0.93

"AM EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
AM Raw Turning Movements			24	113	19		62	86	83		11	88	39		55	95	16		
Peak Season Correction Factor		1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
AM EXISTING CONDITIONS			24	114	19		63	87	84		11	89	39		56	96	16		
"PM EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
PM Raw Turning Movements			22	59	8		20	86	18		11	108	10		30	72	18		
Peak Season Correction Factor		1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
PM EXISTING CONDITIONS			22	60	8		20	87	18		11	109	10		30	73	18		
"AM BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard												6				12			
TOTAL "VESTED" TRAFFIC			0	0	0		0	0	0		0	6	0		0	12	0		
Years To Buildout		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
AM BACKGROUND TRAFFIC GROWTH			0	2	0		1	2	2		0	2	1		1	2	0		
AM NON-PROJECT TRAFFIC			24	116	19		64	89	86		11	97	40		57	110	16		
"PM BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard												12				10			
TOTAL "VESTED" TRAFFIC			0	0	0		0	0	0		0	12	0		0	10	0		
Years To Buildout		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
PM BACKGROUND TRAFFIC GROWTH			0	1	0		0	2	0		0	2	0		1	1	0		
PM NON-PROJECT TRAFFIC			22	61	8		20	89	18		11	123	10		31	84	18		
"AM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering			18.0%	13.0%											5.0%	5.0%		
	Exiting							18.0%	5.0%			13.0%	5.0%						
"PM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering			18.0%	13.0%											5.0%	5.0%		
	Exiting							18.0%	5.0%			13.0%	5.0%						
"AM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New			1	1					4	1			3	1			0	0
AM TOTAL PROJECT TRAFFIC				0	1	1				0	4	1		3	1	0		0	0
AM TOTAL TRAFFIC			24	117	20		64	93	87		14	98	40		57	110	16		
"PM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New			4	3					2	1			2	1			1	1
PM TOTAL PROJECT TRAFFIC				4	3					2	1			2	1			1	1
PM TOTAL TRAFFIC			22	65	11		20	91	19		13	124	10		32	85	18		

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Galiano Street and Madeira Avenue
 COUNT DATE: May 24, 2018
 AM PEAK HOUR FACTOR: 0.8
 PM PEAK HOUR FACTOR: 0.95

"AM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
AM Raw Turning Movements		22	47	33		16	67	27		21	87	11		15	154	7		
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
AM EXISTING CONDITIONS		22	47	33		16	68	27		21	88	11		15	156	7		
"PM EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
PM Raw Turning Movements		16	38	23		10	41	14		23	100	13		9	82	8		
Peak Season Correction Factor	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
PM EXISTING CONDITIONS		16	38	23		10	41	14		23	101	13		9	83	8		
"AM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard											6				12			
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	6	0		0	12	0		
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
AM BACKGROUND TRAFFIC GROWTH		0	1	1		0	1	1		0	2	0		0	3	0		
AM NON-PROJECT TRAFFIC		22	48	34		16	69	28		21	96	11		15	171	7		
"PM BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard											12				10			
TOTAL "VESTED" TRAFFIC		0	0	0		0	0	0		0	12	0		0	10	0		
Years To Buildout	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
PM BACKGROUND TRAFFIC GROWTH		0	1	0		0	1	0		0	2	0		0	2	0		
PM NON-PROJECT TRAFFIC		16	39	23		10	42	14		23	115	13		9	95	8		
"AM PROJECT DISTRIBUTION"	LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																	
	Exiting																	
Net New Distribution	Entering		5.0%						9.0%			9.0%						
	Exiting													9.0%	9.0%	5.0%		
"PM PROJECT DISTRIBUTION"	LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																	
	Exiting																	
Net New Distribution	Entering		5.0%						9.0%			9.0%						
	Exiting													9.0%	9.0%	5.0%		
"AM PROJECT TRAFFIC"	LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By								1				1			2	2	1
	Net New		0															
AM TOTAL PROJECT TRAFFIC			0	0	0		0	0	1			0	1	0		2	2	1
AM TOTAL TRAFFIC			22	48	34		16	69	29		21	97	11		17	173	8	
"PM PROJECT TRAFFIC"	LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By								2				2			1	1	1
	Net New		1															
PM TOTAL PROJECT TRAFFIC			1						2				2			1	1	1
PM TOTAL TRAFFIC			17	39	23		10	42	16		23	117	13		10	96	9	

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Douglas Road & SW 16th Street
 COUNT DATE: May 24, 2018
 AM PEAK HOUR FACTOR: 0.96
 PM PEAK HOUR FACTOR: 0.98

"AM EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
AM Raw Turning Movements			22	24	60		335	28	172		36	737	315		252	883	27		
Peak Season Correction Factor		1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
AM EXISTING CONDITIONS			22	24	61		338	28	174		36	744	318		255	892	27		
"PM EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
PM Raw Turning Movements			38	48	68		354	30	209		58	806	368		186	836	21		
Peak Season Correction Factor		1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
PM EXISTING CONDITIONS			38	48	69		358	30	211		59	814	372		188	844	21		
"AM BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard												1				3			
TOTAL "VESTED" TRAFFIC			0	0	0		0	0	0		0	1	0		0	3	0		
Years To Buildout		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
AM BACKGROUND TRAFFIC GROWTH			0	0	1		7	1	3		1	15	6		5	18	1		
AM NON-PROJECT TRAFFIC			22	24	62		345	29	177		37	760	324		260	913	28		
"PM BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard												3				2			
TOTAL "VESTED" TRAFFIC			0	0	0		0	0	0		0	3	0		0	2	0		
Years To Buildout		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
PM BACKGROUND TRAFFIC GROWTH			1	1	1		7	1	4		1	16	7		4	17	0		
PM NON-PROJECT TRAFFIC			39	49	70		365	31	215		60	833	379		192	863	21		
"AM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering							10.0%										22.0%	
	Exiting													22.0%	10.0%				
"PM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering							10.0%										22.0%	
	Exiting													22.0%	10.0%				
"AM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New							1						4	2			2	
AM TOTAL PROJECT TRAFFIC			0	0	0			1	0	0			0	4	2		0	2	0
AM TOTAL TRAFFIC			22	24	62		346	29	177		37	764	326		260	915	28		
"PM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New							2						3	1			5	
PM TOTAL PROJECT TRAFFIC								2						3	1			5	
PM TOTAL TRAFFIC			39	49	70		367	31	215		60	836	380		192	868	21		

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Douglas Road and Zamora Avenue
 COUNT DATE: May 24, 2018
 AM PEAK HOUR FACTOR: 0.95
 PM PEAK HOUR FACTOR: 0.98

"AM EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
AM Raw Turning Movements			52		58						47	1,014				1,143	115		
Peak Season Correction Factor		1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
AM EXISTING CONDITIONS			53		59						47	1,024				1,154	116		
"PM EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
PM Raw Turning Movements			34		52						19	1,216				1,155	90		
Peak Season Correction Factor		1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
PM EXISTING CONDITIONS			34		53						19	1,228				1,167	91		
"AM BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard												1				3			
TOTAL "VESTED" TRAFFIC			0		0						0	1				3	0		
Years To Buildout		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
AM BACKGROUND TRAFFIC GROWTH			1		1						1	21				23	2		
AM NON-PROJECT TRAFFIC			54		60						48	1,046				1,180	118		
"PM BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard												3				2			
TOTAL "VESTED" TRAFFIC			0		0						0	3				2	0		
Years To Buildout		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
PM BACKGROUND TRAFFIC GROWTH			1		1						0	25				23	2		
PM NON-PROJECT TRAFFIC			35		54						19	1,256				1,192	93		
"AM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering											4.0%							32.0%
	Exiting		32.0%		4.0%														
"PM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering											4.0%							32.0%
	Exiting		32.0%		4.0%														
"AM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New		6		1							0							3
AM TOTAL PROJECT TRAFFIC			6		1							0	0					0	3
AM TOTAL TRAFFIC			60		61							48	1,046					1,180	121
"PM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New		4		1							1							7
PM TOTAL PROJECT TRAFFIC			4		1							1							7
PM TOTAL TRAFFIC			39		55							20	1,256					1,192	100

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Douglas Road and Madeira Avenue
 COUNT DATE: May 24, 2018
 AM PEAK HOUR FACTOR: 0.96
 PM PEAK HOUR FACTOR: 0.95

"AM EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
AM Raw Turning Movements			29		44						79	1,050				1,205	25		
Peak Season Correction Factor		1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
AM EXISTING CONDITIONS			29		44						80	1,061				1,217	25		
"PM EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
PM Raw Turning Movements			11		31						37	1,213				1,133	22		
Peak Season Correction Factor		1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
PM EXISTING CONDITIONS			11		31						37	1,225				1,144	22		
"AM BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard												1				3			
TOTAL "VESTED" TRAFFIC			0		0						0	1				3	0		
Years To Buildout		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
AM BACKGROUND TRAFFIC GROWTH			1		1						2	21				24	1		
AM NON-PROJECT TRAFFIC			30		45						82	1,083				1,244	26		
"PM BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard												3				2			
TOTAL "VESTED" TRAFFIC			0		0						0	3				2	0		
Years To Buildout		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
PM BACKGROUND TRAFFIC GROWTH			0		1						1	25				23	0		
PM NON-PROJECT TRAFFIC			11		32						38	1,253				1,169	22		
"AM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering											9.0%	4.0%					4.0%	
	Exiting				9.0%														
"PM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering											9.0%	4.0%					4.0%	
	Exiting				9.0%														
"AM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New				2							1	0					1	
AM TOTAL PROJECT TRAFFIC			0		2							1	0					1	0
AM TOTAL TRAFFIC			30		47						83	1,083				1,245	26		
"PM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New				1							2	1					1	
PM TOTAL PROJECT TRAFFIC					1							2	1					1	
PM TOTAL TRAFFIC			11		33						40	1,254				1,170	22		

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Zamora Avenue and North Driveway
 COUNT DATE: May 24, 2018
 AM PEAK HOUR FACTOR: 0.92
 PM PEAK HOUR FACTOR: 0.92

"AM EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
AM Raw Turning Movements				207				231											
Peak Season Correction Factor		1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
AM EXISTING CONDITIONS				209				233											
"PM EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
PM Raw Turning Movements				99				124											
Peak Season Correction Factor		1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
PM EXISTING CONDITIONS				100				125											
"AM BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard																			
TOTAL "VESTED" TRAFFIC				0				0											
Years To Buildout		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
AM BACKGROUND TRAFFIC GROWTH				4				5											
AM NON-PROJECT TRAFFIC				213				238											
"PM BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard																			
TOTAL "VESTED" TRAFFIC				0				0											
Years To Buildout		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
PM BACKGROUND TRAFFIC GROWTH				2				3											
PM NON-PROJECT TRAFFIC				102				128											
"AM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering				23.0%			36.0%											
	Exiting											23.0%		36.0%					
"PM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering				23.0%			36.0%											
	Exiting											23.0%		36.0%					
"AM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New				1			3					5		7				
AM TOTAL PROJECT TRAFFIC				0	1			3	0				5		7				
AM TOTAL TRAFFIC				213	1			3	238				5		7				
"PM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New				5			8					3		5				
PM TOTAL PROJECT TRAFFIC					5			8					3		5				
PM TOTAL TRAFFIC				102	5			8	128				3		5				

TRAFFIC VOLUMES AT STUDY INTERSECTIONS

INTERSECTION: Galiano Street and West Driveway
 COUNT DATE: May 24, 2018
 AM PEAK HOUR FACTOR: 0.92
 PM PEAK HOUR FACTOR: 0.92

"AM EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
AM Raw Turning Movements												138				176			
Peak Season Correction Factor		1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
AM EXISTING CONDITIONS												139				178			
"PM EXISTING TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
PM Raw Turning Movements												129				100			
Peak Season Correction Factor		1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010		
PM EXISTING CONDITIONS												130				101			
"AM BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard												6				12			
TOTAL "VESTED" TRAFFIC												6				12			
Years To Buildout		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
AM BACKGROUND TRAFFIC GROWTH												3				4			
AM NON-PROJECT TRAFFIC												148				194			
"PM BACKGROUND TRAFFIC"		EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR		
1505 Ponce de Leon Boulevard												12				10			
TOTAL "VESTED" TRAFFIC												12				10			
Years To Buildout		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Yearly Growth Rate		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		
PM BACKGROUND TRAFFIC GROWTH												3				2			
PM NON-PROJECT TRAFFIC												145				113			
"AM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering													23.0%		18.0%			
	Exiting							23.0%		18.0%									
"PM PROJECT DISTRIBUTION"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	Entering																		
	Exiting																		
Net New Distribution	Entering													23.0%		18.0%			
	Exiting							23.0%		18.0%									
"AM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New							5		4				2		1			
AM TOTAL PROJECT TRAFFIC								5		4			0	2		1		0	
AM TOTAL TRAFFIC								5		4			148	2		1		194	
"PM PROJECT TRAFFIC"		LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	Pass - By																		
	Net New							3		3				5		4			
PM TOTAL PROJECT TRAFFIC								3		3				5		4			
PM TOTAL TRAFFIC								3		3			145	5		4		113	

APPENDIX H:
Intersection Capacity Analyses

Existing Conditions

HCM 2010 TWSC
 1: Zamora Avenue & Ponce de Leon Boulevard

Existing Conditions
 AM Peak Hour

Intersection

Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	12	69	56	26	37	51	34	597	44	36	734	8
Future Vol, veh/h	12	69	56	26	37	51	34	597	44	36	734	8
Conflicting Peds, #/hr	8	0	5	5	0	8	32	0	19	19	0	32
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	78	63	29	42	57	38	671	49	40	825	9

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1383	1757	454	1328	1737	387	866	0	0	739	0	0
Stage 1	942	942	-	791	791	-	-	-	-	-	-	-
Stage 2	441	815	-	537	946	-	-	-	-	-	-	-
Critical Hdwy	5	5	5	5	5	5	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5	5	-	5	5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5	5	-	5	5	-	-	-	-	-	-	-
Follow-up Hdwy	3	3	3	3	3	3	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	296	199	767	314	203	820	773	-	-	863	-	-
Stage 1	468	468	-	546	546	-	-	-	-	-	-	-
Stage 2	777	533	-	706	466	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	204	158	740	192	161	799	749	-	-	847	-	-
Mov Cap-2 Maneuver	307	267	-	299	265	-	-	-	-	-	-	-
Stage 1	415	414	-	490	491	-	-	-	-	-	-	-
Stage 2	599	479	-	477	412	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	21.7		18.5		0.9		0.8	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	749	-	-	367	393	847	-
HCM Lane V/C Ratio	0.051	-	-	0.419	0.326	0.048	-
HCM Control Delay (s)	10.1	0.4	-	21.7	18.5	9.5	0.4
HCM Lane LOS	B	A	-	C	C	A	A
HCM 95th %tile Q(veh)	0.2	-	-	2	1.4	0.1	-

HCM 2010 AWSC
 2: Galiano Street & Zamora Avenue

Existing Conditions
 AM Peak Hour

Intersection

Intersection Delay, s/veh 11.4
 Intersection LOS B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	24	114	19	63	87	84	11	89	39	56	96	16
Future Vol, veh/h	24	114	19	63	87	84	11	89	39	56	96	16
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	144	24	80	110	106	14	113	49	71	122	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	10.9			12.1			10.6			11.4		
HCM LOS	B			B			B			B		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	15%	27%	33%
Vol Thru, %	64%	73%	37%	57%
Vol Right, %	28%	12%	36%	10%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	139	157	234	168
LT Vol	11	24	63	56
Through Vol	89	114	87	96
RT Vol	39	19	84	16
Lane Flow Rate	176	199	296	213
Geometry Grp	1	1	1	1
Degree of Util (X)	0.268	0.301	0.427	0.329
Departure Headway (Hd)	5.488	5.456	5.192	5.577
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	653	658	693	644
Service Time	3.537	3.504	3.234	3.624
HCM Lane V/C Ratio	0.27	0.302	0.427	0.331
HCM Control Delay	10.6	10.9	12.1	11.4
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.1	1.3	2.1	1.4

HCM 2010 AWSC
3: Madeira Avenue & Galiano Street

Existing Conditions
AM Peak Hour

Intersection

Intersection Delay, s/veh 9.3
Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	22	47	33	16	68	27	21	88	11	15	156	7
Future Vol, veh/h	22	47	33	16	68	27	21	88	11	15	156	7
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	59	41	20	85	34	26	110	14	19	195	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	8.9			9.1			9.1			9.8		
HCM LOS	A			A			A			A		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	22%	14%	8%
Vol Thru, %	73%	46%	61%	88%
Vol Right, %	9%	32%	24%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	120	102	111	178
LT Vol	21	22	16	15
Through Vol	88	47	68	156
RT Vol	11	33	27	7
Lane Flow Rate	150	128	139	222
Geometry Grp	1	1	1	1
Degree of Util (X)	0.202	0.172	0.188	0.294
Departure Headway (Hd)	4.836	4.856	4.874	4.76
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	738	733	731	750
Service Time	2.897	2.921	2.937	2.817
HCM Lane V/C Ratio	0.203	0.175	0.19	0.296
HCM Control Delay	9.1	8.9	9.1	9.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.6	0.7	1.2

Timings
4: Douglas Road & SW 16th St

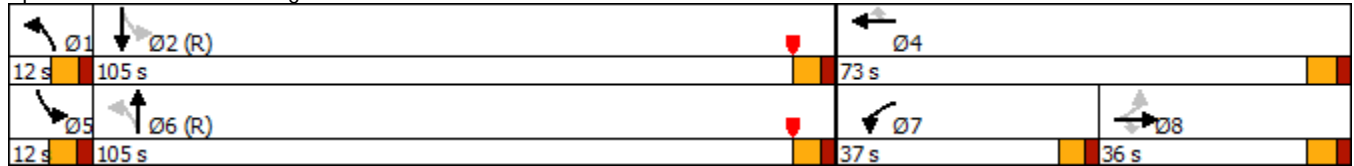
Existing Conditions
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	22	24	61	338	28	174	36	744	255	892
Future Volume (vph)	22	24	61	338	28	174	36	744	255	892
Turn Type	Perm	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		8		7	4		1	6	5	2
Permitted Phases	8		8			4	6		2	
Detector Phase	8	8	8	7	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	16.0	5.0	16.0
Minimum Split (s)	24.4	24.4	24.4	10.7	25.4	25.4	11.0	24.1	11.4	24.1
Total Split (s)	36.0	36.0	36.0	37.0	73.0	73.0	12.0	105.0	12.0	105.0
Total Split (%)	18.9%	18.9%	18.9%	19.5%	38.4%	38.4%	6.3%	55.3%	6.3%	55.3%
Yellow Time (s)	4.0	4.0	4.0	3.7	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.4	2.4	2.4	2.0	2.4	2.4	2.0	2.1	2.4	2.1
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1	6.4	6.1
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary






















Cycle Length: 190
 Actuated Cycle Length: 190
 Offset: 73 (38%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Splits and Phases: 4: Douglas Road & SW 16th St



HCM Signalized Intersection Capacity Analysis
4: Douglas Road & SW 16th St

Existing Conditions
AM Peak Hour

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	22	24	61	338	28	174	36	744	318	255	892	27	
Future Volume (vph)	22	24	61	338	28	174	36	744	318	255	892	27	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1		6.4	6.1		
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95		1.00	0.95		
Frbp, ped/bikes		1.00	0.98	1.00	1.00	0.97	1.00	0.99		1.00	1.00		
Flpb, ped/bikes		0.99	1.00	1.00	0.99	1.00	1.00	1.00		1.00	1.00		
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00		
Flt Protected		0.98	1.00	0.95	0.96	1.00	0.95	1.00		0.95	1.00		
Satd. Flow (prot)		1807	1552	1681	1687	1536	1769	3359		1770	3521		
Flt Permitted		0.80	1.00	0.95	0.62	1.00	0.22	1.00		0.16	1.00		
Satd. Flow (perm)		1478	1552	1681	1099	1536	402	3359		295	3521		
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	
Adj. Flow (vph)	23	25	64	352	29	181	38	775	331	266	929	28	
RTOR Reduction (vph)	0	0	52	0	0	118	0	25	0	0	1	0	
Lane Group Flow (vph)	0	48	12	190	191	63	38	1081	0	266	956	0	
Confl. Peds. (#/hr)	6		5	5		6	4		1	1		4	
Confl. Bikes (#/hr)												1	
Turn Type	Perm	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA		
Protected Phases		8		7	4		1	6		5	2		
Permitted Phases	8		8			4	6			2			
Actuated Green, G (s)		35.7	35.7	25.2	66.6	66.6	103.6	98.9		105.8	100.2		
Effective Green, g (s)		35.7	35.7	25.2	66.6	66.6	103.6	98.9		105.8	100.2		
Actuated g/C Ratio		0.19	0.19	0.13	0.35	0.35	0.55	0.52		0.56	0.53		
Clearance Time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1		6.4	6.1		
Vehicle Extension (s)		3.2	3.2	2.0	3.2	3.2	2.0	2.5		2.0	2.5		
Lane Grp Cap (vph)		277	291	222	463	538	253	1748		207	1856		
v/s Ratio Prot				c0.11	0.05		0.00	0.32		c0.04	0.27		
v/s Ratio Perm		0.03	0.01		c0.09	0.04	0.08			c0.68			
v/c Ratio		0.17	0.04	0.86	0.41	0.12	0.15	0.62		1.29	0.52		
Uniform Delay, d1		64.8	63.1	80.6	46.8	41.8	22.2	32.2		46.0	29.1		
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00		
Incremental Delay, d2		0.3	0.1	25.3	0.6	0.1	0.1	1.7		159.7	1.0		
Delay (s)		65.1	63.2	105.9	47.5	41.9	22.3	33.9		205.7	30.2		
Level of Service		E	E	F	D	D	C	C		F	C		
Approach Delay (s)		64.0			65.4			33.5			68.3		
Approach LOS		E			E			C			E		
Intersection Summary													
HCM 2000 Control Delay			54.5		HCM 2000 Level of Service						D		
HCM 2000 Volume to Capacity ratio			1.04										
Actuated Cycle Length (s)			190.0		Sum of lost time (s)					24.6			
Intersection Capacity Utilization			77.4%		ICU Level of Service					D			
Analysis Period (min)			15										
c Critical Lane Group													

HCM 2010 TWSC
 5: Zamora Avenue & Douglas Road

Existing Conditions
 AM Peak Hour

Intersection

Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	53	59	47	1024	1154	116
Future Vol, veh/h	53	59	47	1024	1154	116
Conflicting Peds, #/hr	2	1	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	56	62	49	1078	1215	122

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1861	616	1222	0	0
Stage 1	1222	-	-	-	-
Stage 2	639	-	-	-	-
Critical Hdwy	5	5	4.14	-	-
Critical Hdwy Stg 1	5	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-
Follow-up Hdwy	3	3	2.22	-	-
Pot Cap-1 Maneuver	178	652	566	-	0
Stage 1	350	-	-	-	0
Stage 2	637	-	-	-	0
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	137	647	562	-	-
Mov Cap-2 Maneuver	137	-	-	-	-
Stage 1	272	-	-	-	-
Stage 2	633	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	35	1.7	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT
Capacity (veh/h)	562	-	234	-
HCM Lane V/C Ratio	0.088	-	0.504	-
HCM Control Delay (s)	12	1.2	35	-
HCM Lane LOS	B	A	E	-
HCM 95th %tile Q(veh)	0.3	-	2.6	-

HCM 2010 TWSC
6: Douglas Road & Madeira Avenue

Existing Conditions
AM Peak Hour

Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑↑	↑↑	
Traffic Vol, veh/h	29	44	80	1061	1217	25
Future Vol, veh/h	29	44	80	1061	1217	25
Conflicting Peds, #/hr	1	0	12	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	46	83	1105	1268	26

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2013	659	1306	0	-	0
Stage 1	1293	-	-	-	-	-
Stage 2	720	-	-	-	-	-
Critical Hdwy	5	5	4.14	-	-	-
Critical Hdwy Stg 1	5	-	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-	-
Follow-up Hdwy	3	3	2.22	-	-	-
Pot Cap-1 Maneuver	151	624	526	-	-	-
Stage 1	325	-	-	-	-	-
Stage 2	587	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	124	617	520	-	-	-
Mov Cap-2 Maneuver	124	-	-	-	-	-
Stage 1	270	-	-	-	-	-
Stage 2	581	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	26.9	0.9	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	520	-	239	-	-
HCM Lane V/C Ratio	0.16	-	0.318	-	-
HCM Control Delay (s)	13.2	-	26.9	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.6	-	1.3	-	-

HCM 2010 TWSC
 1: Zamora Avenue & Ponce de Leon Boulevard

Existing Conditions
 PM Peak Hour

Intersection

Int Delay, s/veh	3.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	33	18	28	49	34	55	899	29	34	593	18
Future Vol, veh/h	14	33	18	28	49	34	55	899	29	34	593	18
Conflicting Peds, #/hr	1	0	12	12	0	1	21	0	33	33	0	21
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	36	20	30	53	37	60	977	32	37	645	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1386	1912	366	1573	1906	539	686	0	0	1042	0	0
Stage 1	750	750	-	1146	1146	-	-	-	-	-	-	-
Stage 2	636	1162	-	427	760	-	-	-	-	-	-	-
Critical Hdwy	5	5	5	5	5	5	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	5	5	-	5	5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5	5	-	5	5	-	-	-	-	-	-	-
Follow-up Hdwy	3	3	3	3	3	3	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	295	169	837	242	170	705	910	-	-	671	-	-
Stage 1	569	569	-	379	379	-	-	-	-	-	-	-
Stage 2	639	373	-	788	564	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	184	123	811	162	124	682	892	-	-	650	-	-
Mov Cap-2 Maneuver	276	209	-	248	221	-	-	-	-	-	-	-
Stage 1	472	507	-	310	311	-	-	-	-	-	-	-
Stage 2	423	306	-	642	503	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	22		26.1		1.1		0.9	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	892	-	-	282	289	650	-
HCM Lane V/C Ratio	0.067	-	-	0.251	0.417	0.057	-
HCM Control Delay (s)	9.3	0.6	-	22	26.1	10.9	0.4
HCM Lane LOS	A	A	-	C	D	B	A
HCM 95th %tile Q(veh)	0.2	-	-	1	2	0.2	-

HCM 2010 AWSC
 2: Zamora Avenue & Galiano Street

Existing Conditions
 PM Peak Hour

Intersection

Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	60	8	20	87	18	11	109	10	30	73	18
Future Vol, veh/h	22	60	8	20	87	18	11	109	10	30	73	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	65	9	22	94	19	12	117	11	32	78	19
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	8.5			8.6			8.7			8.6		
HCM LOS	A			A			A			A		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	24%	16%	25%
Vol Thru, %	84%	67%	70%	60%
Vol Right, %	8%	9%	14%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	90	125	121
LT Vol	11	22	20	30
Through Vol	109	60	87	73
RT Vol	10	8	18	18
Lane Flow Rate	140	97	134	130
Geometry Grp	1	1	1	1
Degree of Util (X)	0.179	0.127	0.173	0.167
Departure Headway (Hd)	4.607	4.723	4.629	4.608
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	777	758	774	777
Service Time	2.642	2.762	2.666	2.643
HCM Lane V/C Ratio	0.18	0.128	0.173	0.167
HCM Control Delay	8.7	8.5	8.6	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.4	0.6	0.6

HCM 2010 AWSC
 3: Galiano Street & Madeira Avenue

Existing Conditions
 PM Peak Hour

Intersection

Intersection Delay, s/veh 8.1
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	16	38	23	10	41	14	23	101	13	9	83	8
Future Vol, veh/h	16	38	23	10	41	14	23	101	13	9	83	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	40	24	11	43	15	24	106	14	9	87	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	8			7.9			8.3			8.1		
HCM LOS	A			A			A			A		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	21%	15%	9%
Vol Thru, %	74%	49%	63%	83%
Vol Right, %	9%	30%	22%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	137	77	65	100
LT Vol	23	16	10	9
Through Vol	101	38	41	83
RT Vol	13	23	14	8
Lane Flow Rate	144	81	68	105
Geometry Grp	1	1	1	1
Degree of Util (X)	0.175	0.1	0.085	0.129
Departure Headway (Hd)	4.369	4.44	4.493	4.403
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	823	808	798	816
Service Time	2.386	2.46	2.514	2.422
HCM Lane V/C Ratio	0.175	0.1	0.085	0.129
HCM Control Delay	8.3	8	7.9	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.6	0.3	0.3	0.4

Timings
4: Douglas Road & SW 16th St

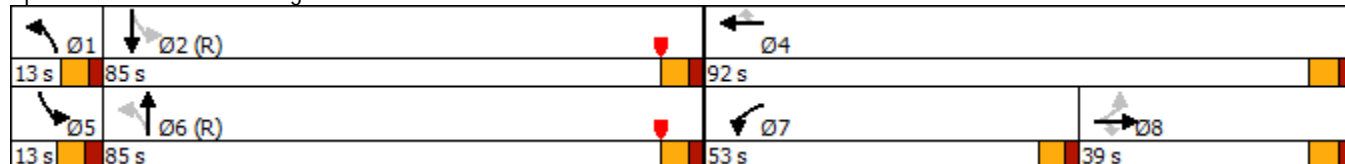
Existing Conditions
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	38	48	69	358	30	211	59	814	188	844
Future Volume (vph)	38	48	69	358	30	211	59	814	188	844
Turn Type	Perm	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		8		7	4		1	6	5	2
Permitted Phases	8		8			4	6		2	
Detector Phase	8	8	8	7	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	16.0	5.0	16.0
Minimum Split (s)	24.4	24.4	24.4	10.7	25.4	25.4	11.0	24.1	11.4	24.1
Total Split (s)	39.0	39.0	39.0	53.0	92.0	92.0	13.0	85.0	13.0	85.0
Total Split (%)	20.5%	20.5%	20.5%	27.9%	48.4%	48.4%	6.8%	44.7%	6.8%	44.7%
Yellow Time (s)	4.0	4.0	4.0	3.7	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.4	2.4	2.4	2.0	2.4	2.4	2.0	2.1	2.4	2.1
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1	6.4	6.1
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	Max	Max	Max	Max	C-Max	Max	C-Max

Intersection Summary

Cycle Length: 190
 Actuated Cycle Length: 190
 Offset: 145 (76%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated

Splits and Phases: 4: Douglas Road & SW 16th St
























HCM Signalized Intersection Capacity Analysis

4: Douglas Road & SW 16th St

Existing Conditions

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	38	48	69	358	30	211	59	814	372	188	844	21
Future Volume (vph)	38	48	69	358	30	211	59	814	372	188	844	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1		6.4	6.1	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95		1.00	0.95	
Frbp, ped/bikes		1.00	0.97	1.00	1.00	0.95	1.00	0.99		1.00	1.00	
Flpb, ped/bikes		0.99	1.00	1.00	0.99	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	1.00	
Flt Protected		0.98	1.00	0.95	0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1800	1543	1681	1685	1508	1769	3346		1770	3520	
Flt Permitted		0.77	1.00	0.95	0.56	1.00	0.19	1.00		0.07	1.00	
Satd. Flow (perm)		1425	1543	1681	990	1508	353	3346		132	3520	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	39	49	70	365	31	215	60	831	380	192	861	21
RTOR Reduction (vph)	0	0	58	0	0	84	0	28	0	0	1	0
Lane Group Flow (vph)	0	88	12	197	199	131	60	1183	0	192	881	0
Confl. Peds. (#/hr)	12		8	8		12	5		3	3		50
Confl. Bikes (#/hr)									2			1
Turn Type	Perm	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6			2		
Actuated Green, G (s)		32.6	32.6	47.3	85.6	85.6	85.9	78.9		85.5	78.9	
Effective Green, g (s)		32.6	32.6	47.3	85.6	85.6	85.9	78.9		85.5	78.9	
Actuated g/C Ratio		0.17	0.17	0.25	0.45	0.45	0.45	0.42		0.45	0.42	
Clearance Time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1		6.4	6.1	
Vehicle Extension (s)		3.2	3.2	2.0	3.2	3.2	2.0	2.5		2.0	2.5	
Lane Grp Cap (vph)		244	264	418	619	679	211	1389		116	1461	
v/s Ratio Prot				c0.12	0.08		0.01	0.35		c0.06	0.25	
v/s Ratio Perm		c0.06	0.01		0.06	0.09	0.12			c0.69		
v/c Ratio		0.36	0.05	0.47	0.32	0.19	0.28	0.85		1.66	0.60	
Uniform Delay, d1		69.5	65.7	60.7	33.5	31.4	32.6	50.3		45.7	43.3	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.0	0.1	3.8	1.4	0.6	3.4	6.8		329.9	1.9	
Delay (s)		70.5	65.8	64.5	34.9	32.0	36.0	57.0		375.6	45.2	
Level of Service		E	E	E	C	C	D	E		F	D	
Approach Delay (s)		68.4			43.4			56.0			104.3	
Approach LOS		E			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			70.8									E
HCM 2000 Volume to Capacity ratio			1.06									
Actuated Cycle Length (s)			190.0						24.6			
Intersection Capacity Utilization			78.0%									D
Analysis Period (min)			15									
c Critical Lane Group												




HCM 2010 TWSC
 5: Zamora Avenue & Douglas Road

Existing Conditions
 PM Peak Hour

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
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Lane Configurations						
Traffic Vol, veh/h	34	53	19	1228	1167	91
Future Vol, veh/h	34	53	19	1228	1167	91
Conflicting Peds, #/hr	1	3	19	0	0	19
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	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	54	19	1253	1191	93

Major/Minor	Minor2	Major1	Major2
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Conflicting Flow All	1923	664	1303	0	-	0
Stage 1	1257	-	-	-	-	-
Stage 2	666	-	-	-	-	-
Critical Hdwy	5	5	4.14	-	-	-
Critical Hdwy Stg 1	5	-	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-	-
Follow-up Hdwy	3	3	2.22	-	-	-
Pot Cap-1 Maneuver	167	621	527	-	-	-
Stage 1	338	-	-	-	-	-
Stage 2	620	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	142	608	517	-	-	-
Mov Cap-2 Maneuver	142	-	-	-	-	-
Stage 1	292	-	-	-	-	-
Stage 2	609	-	-	-	-	-

Approach	EB	NB	SB
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HCM Control Delay, s	25.2	0.9	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
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Capacity (veh/h)	517	-	266	-	-
HCM Lane V/C Ratio	0.038	-	0.334	-	-
HCM Control Delay (s)	12.2	0.7	25.2	-	-
HCM Lane LOS	B	A	D	-	-
HCM 95th %tile Q(veh)	0.1	-	1.4	-	-

HCM 2010 TWSC
6: Douglas Road & Madeira Avenue

Existing Conditions
PM Peak Hour

Intersection

Int Delay, s/veh 0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
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Lane Configurations	↘↗		↘	↑↑	↑↑	
Traffic Vol, veh/h	11	31	37	1225	1144	22
Future Vol, veh/h	11	31	37	1225	1144	22
Conflicting Peds, #/hr	0	0	19	0	0	19
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	33	39	1289	1204	23

Major/Minor	Minor2	Major1	Major2
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Conflicting Flow All	1958	633	1246	0	-	0
Stage 1	1235	-	-	-	-	-
Stage 2	723	-	-	-	-	-
Critical Hdwy	5	5	4.14	-	-	-
Critical Hdwy Stg 1	5	-	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-	-
Follow-up Hdwy	3	3	2.22	-	-	-
Pot Cap-1 Maneuver	160	641	554	-	-	-
Stage 1	346	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	143	629	544	-	-	-
Mov Cap-2 Maneuver	143	-	-	-	-	-
Stage 1	315	-	-	-	-	-
Stage 2	574	-	-	-	-	-

Approach	EB	NB	SB
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HCM Control Delay, s	17.5	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
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Capacity (veh/h)	544	-	333	-	-
HCM Lane V/C Ratio	0.072	-	0.133	-	-
HCM Control Delay (s)	12.1	-	17.5	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Future Background Conditions

HCM 2010 TWSC
 1: Zamora Avenue & Ponce de Leon Boulevard

Future Background Conditions
 AM Peak Hour

Intersection

Int Delay, s/veh	3.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	70	57	27	38	52	35	613	45	37	757	8
Future Vol, veh/h	12	70	57	27	38	52	35	613	45	37	757	8
Conflicting Peds, #/hr	8	0	5	5	0	8	32	0	19	19	0	32
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	79	64	30	43	58	39	689	51	42	851	9

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1424	1809	467	1366	1788	397	892	0	0	759	0	0
Stage 1	972	972	-	812	812	-	-	-	-	-	-	-
Stage 2	452	837	-	554	976	-	-	-	-	-	-	-
Critical Hdwy	5	5	5	5	5	5	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	5	5	-	5	5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5	5	-	5	5	-	-	-	-	-	-	-
Follow-up Hdwy	3	3	3	3	3	3	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	284	188	757	301	193	812	763	-	-	855	-	-
Stage 1	454	454	-	535	535	-	-	-	-	-	-	-
Stage 2	769	521	-	694	452	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	191	147	730	178	151	791	740	-	-	840	-	-
Mov Cap-2 Maneuver	294	254	-	284	253	-	-	-	-	-	-	-
Stage 1	400	398	-	478	478	-	-	-	-	-	-	-
Stage 2	586	466	-	457	396	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	23.1		19.6		0.9		0.8	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	740	-	-	352	376	840	-
HCM Lane V/C Ratio	0.053	-	-	0.444	0.35	0.049	-
HCM Control Delay (s)	10.1	0.4	-	23.1	19.6	9.5	0.4
HCM Lane LOS	B	A	-	C	C	A	A
HCM 95th %tile Q(veh)	0.2	-	-	2.2	1.5	0.2	-

HCM 2010 AWSC
 2: Zamora Avenue & Galiano Street

Future Background Conditions
 AM Peak Hour

Intersection

Intersection Delay, s/veh	11.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	24	116	19	64	89	86	11	97	40	57	110	16
Future Vol, veh/h	24	116	19	64	89	86	11	97	40	57	110	16
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	147	24	81	113	109	14	123	51	72	139	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	11.2			12.6			10.9			11.9		
HCM LOS	B			B			B			B		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	7%	15%	27%	31%
Vol Thru, %	66%	73%	37%	60%
Vol Right, %	27%	12%	36%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	148	159	239	183
LT Vol	11	24	64	57
Through Vol	97	116	89	110
RT Vol	40	19	86	16
Lane Flow Rate	187	201	303	232
Geometry Grp	1	1	1	1
Degree of Util (X)	0.291	0.312	0.446	0.364
Departure Headway (Hd)	5.588	5.588	5.309	5.656
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	641	640	675	635
Service Time	3.646	3.647	3.361	3.712
HCM Lane V/C Ratio	0.292	0.314	0.449	0.365
HCM Control Delay	10.9	11.2	12.6	11.9
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.2	1.3	2.3	1.7

HCM 2010 AWSC
 3: Galiano Street & Madeira Avenue

Future Background Conditions
 AM Peak Hour

Intersection

Intersection Delay, s/veh 9.5
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	22	48	34	16	69	28	21	96	11	15	171	7
Future Vol, veh/h	22	48	34	16	69	28	21	96	11	15	171	7
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	60	43	20	86	35	26	120	14	19	214	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	9.1			9.2			9.3			10.1		
HCM LOS	A			A			A			B		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	21%	14%	8%
Vol Thru, %	75%	46%	61%	89%
Vol Right, %	9%	33%	25%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	128	104	113	193
LT Vol	21	22	16	15
Through Vol	96	48	69	171
RT Vol	11	34	28	7
Lane Flow Rate	160	130	141	241
Geometry Grp	1	1	1	1
Degree of Util (X)	0.217	0.178	0.194	0.321
Departure Headway (Hd)	4.882	4.931	4.949	4.794
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	730	721	719	745
Service Time	2.951	3.005	3.021	2.856
HCM Lane V/C Ratio	0.219	0.18	0.196	0.323
HCM Control Delay	9.3	9.1	9.2	10.1
HCM Lane LOS	A	A	A	B
HCM 95th-tile Q	0.8	0.6	0.7	1.4

Timings
4: SW 16th St & Douglas Road

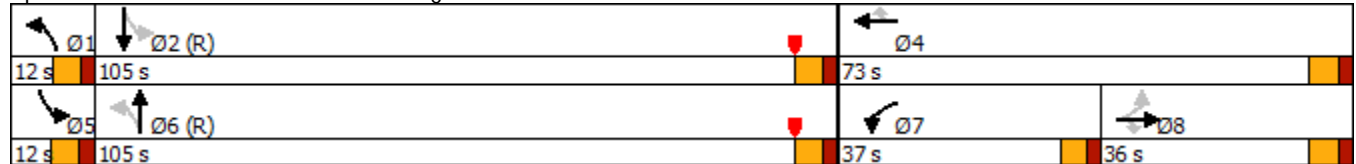
Future Background Conditions
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	22	24	62	345	29	177	37	760	260	913
Future Volume (vph)	22	24	62	345	29	177	37	760	260	913
Turn Type	Perm	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		8		7	4		1	6	5	2
Permitted Phases	8		8			4	6		2	
Detector Phase	8	8	8	7	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	16.0	5.0	16.0
Minimum Split (s)	24.4	24.4	24.4	10.7	25.4	25.4	11.0	24.1	11.4	24.1
Total Split (s)	36.0	36.0	36.0	37.0	73.0	73.0	12.0	105.0	12.0	105.0
Total Split (%)	18.9%	18.9%	18.9%	19.5%	38.4%	38.4%	6.3%	55.3%	6.3%	55.3%
Yellow Time (s)	4.0	4.0	4.0	3.7	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.4	2.4	2.4	2.0	2.4	2.4	2.0	2.1	2.4	2.1
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1	6.4	6.1
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary






















Cycle Length: 190
 Actuated Cycle Length: 190
 Offset: 73 (38%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated

Splits and Phases: 4: SW 16th St & Douglas Road



HCM Signalized Intersection Capacity Analysis
4: SW 16th St & Douglas Road

Future Background Conditions
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	24	62	345	29	177	37	760	324	260	913	28
Future Volume (vph)	22	24	62	345	29	177	37	760	324	260	913	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1		6.4	6.1	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95		1.00	0.95	
Frbp, ped/bikes		1.00	0.98	1.00	1.00	0.97	1.00	0.99		1.00	1.00	
Flpb, ped/bikes		0.99	1.00	1.00	0.99	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.98	1.00	0.95	0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1807	1552	1681	1687	1536	1769	3359		1770	3521	
Flt Permitted		0.80	1.00	0.95	0.62	1.00	0.21	1.00		0.15	1.00	
Satd. Flow (perm)		1475	1552	1681	1099	1536	387	3359		281	3521	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	23	25	65	359	30	184	39	792	338	271	951	29
RTOR Reduction (vph)	0	0	53	0	0	120	0	25	0	0	1	0
Lane Group Flow (vph)	0	48	12	194	195	64	39	1105	0	271	979	0
Confl. Peds. (#/hr)	6		5	5		6	4		1	1		4
Confl. Bikes (#/hr)												1
Turn Type	Perm	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6			2		
Actuated Green, G (s)		35.4	35.4	25.5	66.6	66.6	103.6	98.9		105.8	100.2	
Effective Green, g (s)		35.4	35.4	25.5	66.6	66.6	103.6	98.9		105.8	100.2	
Actuated g/C Ratio		0.19	0.19	0.13	0.35	0.35	0.55	0.52		0.56	0.53	
Clearance Time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1		6.4	6.1	
Vehicle Extension (s)		3.2	3.2	2.0	3.2	3.2	2.0	2.5		2.0	2.5	
Lane Grp Cap (vph)		274	289	225	464	538	245	1748		200	1856	
v/s Ratio Prot				c0.12	0.06		0.00	0.33		c0.04	0.28	
v/s Ratio Perm		0.03	0.01		c0.09	0.04	0.08			c0.71		
v/c Ratio		0.18	0.04	0.86	0.42	0.12	0.16	0.63		1.35	0.53	
Uniform Delay, d1		65.0	63.4	80.5	47.0	41.8	22.4	32.6		45.9	29.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3	0.1	26.3	0.7	0.1	0.1	1.8		188.8	1.1	
Delay (s)		65.3	63.5	106.8	47.7	41.9	22.5	34.3		234.7	30.5	
Level of Service		E	E	F	D	D	C	C		F	C	
Approach Delay (s)		64.3			65.9			33.9			74.7	
Approach LOS		E			E			C			E	
Intersection Summary												
HCM 2000 Control Delay			57.3								HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			1.09									
Actuated Cycle Length (s)			190.0							24.6		
Intersection Capacity Utilization			78.5%								ICU Level of Service	D
Analysis Period (min)			15									
c Critical Lane Group												

Intersection

Int Delay, s/veh 2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	54	60	48	1046	1180	118
Future Vol, veh/h	54	60	48	1046	1180	118
Conflicting Peds, #/hr	2	1	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	63	51	1101	1242	124

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1904	629	1249
Stage 1	1249	-	-
Stage 2	655	-	-
Critical Hdwy	5	5	4.14
Critical Hdwy Stg 1	5	-	-
Critical Hdwy Stg 2	5	-	-
Follow-up Hdwy	3	3	2.22
Pot Cap-1 Maneuver	170	644	553
Stage 1	341	-	-
Stage 2	627	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	128	639	549
Mov Cap-2 Maneuver	128	-	-
Stage 1	258	-	-
Stage 2	623	-	-

Approach	EB	NB	SB
HCM Control Delay, s	39.1	1.8	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT
Capacity (veh/h)	549	-	221	-
HCM Lane V/C Ratio	0.092	-	0.543	-
HCM Control Delay (s)	12.2	1.3	39.1	-
HCM Lane LOS	B	A	E	-
HCM 95th %tile Q(veh)	0.3	-	2.9	-

HCM 2010 TWSC
6: Madeira Avenue & Douglas Road

Future Background Conditions
AM Peak Hour

Intersection

Int Delay, s/veh 1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘↗		↘	↑↑	↑↑	
Traffic Vol, veh/h	30	45	82	1083	1244	26
Future Vol, veh/h	30	45	82	1083	1244	26
Conflicting Peds, #/hr	1	0	12	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	47	85	1128	1296	27

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2057	674	1335	0	-	0
Stage 1	1322	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Critical Hdwy	5	5	4.14	-	-	-
Critical Hdwy Stg 1	5	-	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-	-
Follow-up Hdwy	3	3	2.22	-	-	-
Pot Cap-1 Maneuver	144	615	513	-	-	-
Stage 1	316	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	117	608	507	-	-	-
Mov Cap-2 Maneuver	117	-	-	-	-	-
Stage 1	260	-	-	-	-	-
Stage 2	572	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	29	1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	507	-	227	-	-
HCM Lane V/C Ratio	0.168	-	0.344	-	-
HCM Control Delay (s)	13.5	-	29	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.6	-	1.5	-	-

HCM 2010 TWSC
 1: Zamora Avenue & Ponce de Leon Boulevard

Future Background Conditions
 PM Peak Hour

Intersection

Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	14	34	18	29	50	35	56	925	30	35	611	18
Future Vol, veh/h	14	34	18	29	50	35	56	925	30	35	611	18
Conflicting Peds, #/hr	8	0	5	5	0	8	32	0	19	19	0	32
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	37	20	32	54	38	61	1005	33	38	664	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1442	1961	379	1595	1955	546	716	0	0	1057	0	0
Stage 1	782	782	-	1163	1163	-	-	-	-	-	-	-
Stage 2	660	1179	-	432	792	-	-	-	-	-	-	-
Critical Hdwy	5	5	5	5	5	5	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	5	5	-	5	5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5	5	-	5	5	-	-	-	-	-	-	-
Follow-up Hdwy	3	3	3	3	3	3	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	278	160	827	237	161	700	887	-	-	662	-	-
Stage 1	551	551	-	373	373	-	-	-	-	-	-	-
Stage 2	624	366	-	784	546	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	165	115	798	158	115	682	860	-	-	650	-	-
Mov Cap-2 Maneuver	256	200	-	243	211	-	-	-	-	-	-	-
Stage 1	444	484	-	304	304	-	-	-	-	-	-	-
Stage 2	399	299	-	636	479	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	23.4		27.7		1.2		1	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	860	-	-	267	280	650	-
HCM Lane V/C Ratio	0.071	-	-	0.269	0.443	0.059	-
HCM Control Delay (s)	9.5	0.7	-	23.4	27.7	10.9	0.5
HCM Lane LOS	A	A	-	C	D	B	A
HCM 95th %tile Q(veh)	0.2	-	-	1.1	2.1	0.2	-

HCM 2010 AWSC
 2: Zamora Avenue & Galiano Street

Future Background Conditions
 PM Peak Hour

Intersection

Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	61	8	20	89	18	11	123	10	31	84	18
Future Vol, veh/h	22	61	8	20	89	18	11	123	10	31	84	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	66	9	22	96	19	12	132	11	33	90	19
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	8.6			8.8			8.8			8.7		
HCM LOS	A			A			A			A		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	24%	16%	23%
Vol Thru, %	85%	67%	70%	63%
Vol Right, %	7%	9%	14%	14%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	144	91	127	133
LT Vol	11	22	20	31
Through Vol	123	61	89	84
RT Vol	10	8	18	18
Lane Flow Rate	155	98	137	143
Geometry Grp	1	1	1	1
Degree of Util (X)	0.2	0.13	0.178	0.185
Departure Headway (Hd)	4.642	4.798	4.702	4.647
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	773	745	761	771
Service Time	2.678	2.843	2.744	2.685
HCM Lane V/C Ratio	0.201	0.132	0.18	0.185
HCM Control Delay	8.8	8.6	8.8	8.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.4	0.6	0.7

Intersection

Intersection Delay, s/veh 8.3
 Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	16	39	23	10	42	14	23	115	13	9	95	8
Future Vol, veh/h	16	39	23	10	42	14	23	115	13	9	95	8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	41	24	11	44	15	24	121	14	9	100	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	8.1			8			8.5			8.2		
HCM LOS	A			A			A			A		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	21%	15%	8%
Vol Thru, %	76%	50%	64%	85%
Vol Right, %	9%	29%	21%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	151	78	66	112
LT Vol	23	16	10	9
Through Vol	115	39	42	95
RT Vol	13	23	14	8
Lane Flow Rate	159	82	69	118
Geometry Grp	1	1	1	1
Degree of Util (X)	0.194	0.103	0.088	0.145
Departure Headway (Hd)	4.396	4.508	4.562	4.433
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	819	796	786	810
Service Time	2.415	2.531	2.585	2.455
HCM Lane V/C Ratio	0.194	0.103	0.088	0.146
HCM Control Delay	8.5	8.1	8	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.3	0.3	0.5

Timings
4: Douglas Road & SW 16th St

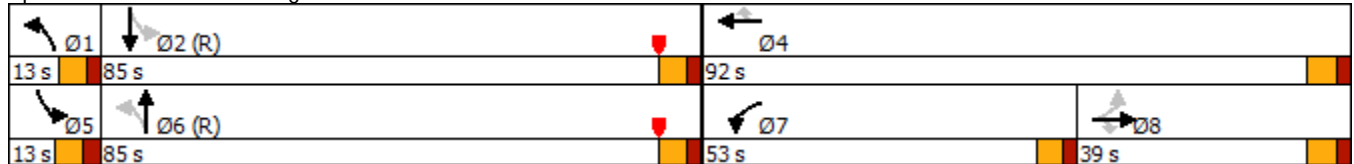
Future Background Conditions
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	39	49	70	365	31	215	60	833	192	863
Future Volume (vph)	39	49	70	365	31	215	60	833	192	863
Turn Type	Perm	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		8		7	4		1	6	5	2
Permitted Phases	8		8			4	6		2	
Detector Phase	8	8	8	7	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	16.0	5.0	16.0
Minimum Split (s)	24.4	24.4	24.4	10.7	25.4	25.4	11.0	24.1	11.4	24.1
Total Split (s)	39.0	39.0	39.0	53.0	92.0	92.0	13.0	85.0	13.0	85.0
Total Split (%)	20.5%	20.5%	20.5%	27.9%	48.4%	48.4%	6.8%	44.7%	6.8%	44.7%
Yellow Time (s)	4.0	4.0	4.0	3.7	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.4	2.4	2.4	2.0	2.4	2.4	2.0	2.1	2.4	2.1
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1	6.4	6.1
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 190
 Actuated Cycle Length: 190
 Offset: 145 (76%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated

Splits and Phases: 4: Douglas Road & SW 16th St
























HCM Signalized Intersection Capacity Analysis

Future Background Conditions

4: Douglas Road & SW 16th St

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	49	70	365	31	215	60	833	379	192	863	21
Future Volume (vph)	39	49	70	365	31	215	60	833	379	192	863	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1		6.4	6.1	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95		1.00	0.95	
Frbp, ped/bikes		1.00	0.98	1.00	1.00	0.97	1.00	0.99		1.00	1.00	
Flpb, ped/bikes		0.99	1.00	1.00	0.99	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	1.00	
Flt Protected		0.98	1.00	0.95	0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1811	1556	1681	1689	1536	1769	3351		1770	3525	
Flt Permitted		0.79	1.00	0.95	0.62	1.00	0.18	1.00		0.06	1.00	
Satd. Flow (perm)		1460	1556	1681	1091	1536	340	3351		117	3525	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	40	50	71	372	32	219	61	850	387	196	881	21
RTOR Reduction (vph)	0	0	51	0	0	82	0	28	0	0	1	0
Lane Group Flow (vph)	0	90	20	201	203	137	61	1209	0	196	901	0
Confl. Peds. (#/hr)	6		5	5		6	4		1	1		4
Confl. Bikes (#/hr)												1
Turn Type	Perm	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6			2		
Actuated Green, G (s)		52.6	52.6	27.3	85.6	85.6	85.6	78.9		85.8	79.2	
Effective Green, g (s)		52.6	52.6	27.3	85.6	85.6	85.6	78.9		85.8	79.2	
Actuated g/C Ratio		0.28	0.28	0.14	0.45	0.45	0.45	0.42		0.45	0.42	
Clearance Time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1		6.4	6.1	
Vehicle Extension (s)		3.2	3.2	2.0	3.2	3.2	2.0	2.5		2.0	2.5	
Lane Grp Cap (vph)		404	430	241	577	692	203	1391		110	1469	
v/s Ratio Prot				c0.12	0.05		0.01	0.36		c0.06	0.26	
v/s Ratio Perm		0.06	0.01		c0.11	0.09	0.12			c0.74		
v/c Ratio		0.22	0.05	0.83	0.35	0.20	0.30	0.87		1.78	0.61	
Uniform Delay, d1		52.9	50.3	79.1	34.1	31.5	33.0	50.8		44.0	43.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3	0.0	20.4	0.4	0.2	0.3	7.6		385.8	1.9	
Delay (s)		53.2	50.4	99.6	34.5	31.6	33.3	58.4		429.8	45.3	
Level of Service		D	D	F	C	C	C	E		F	D	
Approach Delay (s)		52.0			54.5			57.3			114.0	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			76.0									E
HCM 2000 Volume to Capacity ratio			1.18									
Actuated Cycle Length (s)			190.0						24.6			
Intersection Capacity Utilization			79.2%									D
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 TWSC
 5: Zamora Avenue & Douglas Road

Future Background Conditions
 PM Peak Hour

Intersection

Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	35	54	19	1256	1192	93
Future Vol, veh/h	35	54	19	1256	1192	93
Conflicting Peds, #/hr	2	1	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	55	19	1282	1216	95

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1904	616	1223	0	0
Stage 1	1223	-	-	-	-
Stage 2	681	-	-	-	-
Critical Hdwy	5	5	4.14	-	-
Critical Hdwy Stg 1	5	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-
Follow-up Hdwy	3	3	2.22	-	-
Pot Cap-1 Maneuver	170	652	566	-	0
Stage 1	350	-	-	-	0
Stage 2	611	-	-	-	0
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	148	647	562	-	-
Mov Cap-2 Maneuver	148	-	-	-	-
Stage 1	307	-	-	-	-
Stage 2	607	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.1	0.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT
Capacity (veh/h)	562	-	278	-
HCM Lane V/C Ratio	0.034	-	0.327	-
HCM Control Delay (s)	11.6	0.7	24.1	-
HCM Lane LOS	B	A	C	-
HCM 95th %tile Q(veh)	0.1	-	1.4	-

HCM 2010 TWSC
6: Douglas Road & Madeira Avenue

Future Background Conditions
PM Peak Hour

Intersection

Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	32	38	1253	1169	22
Future Vol, veh/h	11	32	38	1253	1169	22
Conflicting Peds, #/hr	1	0	12	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	34	40	1319	1231	23

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1996	639	1266	0	0
Stage 1	1255	-	-	-	-
Stage 2	741	-	-	-	-
Critical Hdwy	5	5	4.14	-	-
Critical Hdwy Stg 1	5	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-
Follow-up Hdwy	3	3	2.22	-	-
Pot Cap-1 Maneuver	154	637	545	-	-
Stage 1	339	-	-	-	-
Stage 2	575	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	140	630	539	-	-
Mov Cap-2 Maneuver	140	-	-	-	-
Stage 1	311	-	-	-	-
Stage 2	569	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.5	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	539	-	332	-	-
HCM Lane V/C Ratio	0.074	-	0.136	-	-
HCM Control Delay (s)	12.2	-	17.5	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	-	-

Future Total Conditions

HCM 2010 TWSC
 1: Zamora Avenue & Ponce de Leon Boulevard

Future Total Conditions
 AM Peak Hour

Intersection

Int Delay, s/veh	4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	70	57	30	39	55	35	613	46	38	757	8
Future Vol, veh/h	12	70	57	30	39	55	35	613	46	38	757	8
Conflicting Peds, #/hr	8	0	5	5	0	8	32	0	19	19	0	32
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	79	64	34	44	62	39	689	52	43	851	9

Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1427	1812	467	1368	1790	398	892	0	0	760	0	0
Stage 1	974	974	-	812	812	-	-	-	-	-	-	-
Stage 2	453	838	-	556	978	-	-	-	-	-	-	-
Critical Hdwy	5	5	5	5	5	5	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5	5	-	5	5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5	5	-	5	5	-	-	-	-	-	-	-
Follow-up Hdwy	3	3	3	3	3	3	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	283	188	757	301	192	811	756	-	-	848	-	-
Stage 1	453	453	-	535	535	-	-	-	-	-	-	-
Stage 2	768	521	-	693	451	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	188	147	730	177	150	790	733	-	-	833	-	-
Mov Cap-2 Maneuver	292	253	-	283	252	-	-	-	-	-	-	-
Stage 1	399	396	-	478	478	-	-	-	-	-	-	-
Stage 2	580	465	-	454	394	-	-	-	-	-	-	-

Approach	EB		WB			NB			SB		
HCM Control Delay, s	23.2		20.2			0.9			0.8		
HCM LOS	C		C								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	733	-	-	351	375	833	-
HCM Lane V/C Ratio	0.054	-	-	0.445	0.372	0.051	-
HCM Control Delay (s)	10.2	0.4	-	23.2	20.2	9.6	0.4
HCM Lane LOS	B	A	-	C	C	A	A
HCM 95th %tile Q(veh)	0.2	-	-	2.2	1.7	0.2	-

HCM 2010 AWSC
 2: Zamora Avenue & Galiano Street

Future Total Conditions
 AM Peak Hour

Intersection

Intersection Delay, s/veh	12
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	117	20	64	93	87	14	98	40	57	110	16
Future Vol, veh/h	24	117	20	64	93	87	14	98	40	57	110	16
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	30	148	25	81	118	110	18	124	51	72	139	20
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	11.3			12.9			11.1			12.1		
HCM LOS	B			B			B			B		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	15%	26%	31%
Vol Thru, %	64%	73%	38%	60%
Vol Right, %	26%	12%	36%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	152	161	244	183
LT Vol	14	24	64	57
Through Vol	98	117	93	110
RT Vol	40	20	87	16
Lane Flow Rate	192	204	309	232
Geometry Grp	1	1	1	1
Degree of Util (X)	0.301	0.318	0.458	0.367
Departure Headway (Hd)	5.631	5.623	5.339	5.7
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	635	636	673	628
Service Time	3.694	3.686	3.395	3.76
HCM Lane V/C Ratio	0.302	0.321	0.459	0.369
HCM Control Delay	11.1	11.3	12.9	12.1
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	1.3	1.4	2.4	1.7

HCM 2010 AWSC
3: Galiano Street & Madeira Avenue

Future Total Conditions
AM Peak Hour

Intersection

Intersection Delay, s/veh 9.6
Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	22	48	34	16	69	29	21	97	11	17	173	8
Future Vol, veh/h	22	48	34	16	69	29	21	97	11	17	173	8
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	60	43	20	86	36	26	121	14	21	216	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	9.1			9.3			9.4			10.2		
HCM LOS	A			A			A			B		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	16%	21%	14%	9%
Vol Thru, %	75%	46%	61%	87%
Vol Right, %	9%	33%	25%	4%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	129	104	114	198
LT Vol	21	22	16	17
Through Vol	97	48	69	173
RT Vol	11	34	29	8
Lane Flow Rate	161	130	142	248
Geometry Grp	1	1	1	1
Degree of Util (X)	0.219	0.179	0.196	0.33
Departure Headway (Hd)	4.894	4.953	4.963	4.799
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	727	718	717	745
Service Time	2.966	3.029	3.039	2.863
HCM Lane V/C Ratio	0.221	0.181	0.198	0.333
HCM Control Delay	9.4	9.1	9.3	10.2
HCM Lane LOS	A	A	A	B
HCM 95th-tile Q	0.8	0.6	0.7	1.4

Timings
4: SW 16th St & Douglas Road

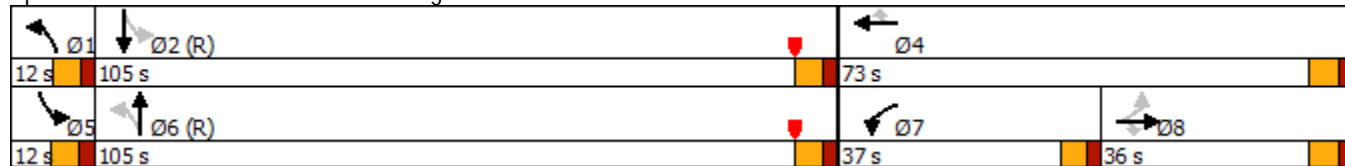
Future Total Conditions
AM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	22	24	62	346	29	177	37	764	260	915
Future Volume (vph)	22	24	62	346	29	177	37	764	260	915
Turn Type	Perm	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		8		7	4		1	6	5	2
Permitted Phases	8		8			4	6		2	
Detector Phase	8	8	8	7	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	16.0	5.0	16.0
Minimum Split (s)	24.4	24.4	24.4	10.7	25.4	25.4	11.0	24.1	11.4	24.1
Total Split (s)	36.0	36.0	36.0	37.0	73.0	73.0	12.0	105.0	12.0	105.0
Total Split (%)	18.9%	18.9%	18.9%	19.5%	38.4%	38.4%	6.3%	55.3%	6.3%	55.3%
Yellow Time (s)	4.0	4.0	4.0	3.7	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.4	2.4	2.4	2.0	2.4	2.4	2.0	2.1	2.4	2.1
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1	6.4	6.1
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 190
 Actuated Cycle Length: 190
 Offset: 73 (38%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated






















Splits and Phases: 4: SW 16th St & Douglas Road



HCM Signalized Intersection Capacity Analysis

4: SW 16th St & Douglas Road

Future Total Conditions
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	24	62	346	29	177	37	764	326	260	915	28
Future Volume (vph)	22	24	62	346	29	177	37	764	326	260	915	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1		6.4	6.1	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95		1.00	0.95	
Frbp, ped/bikes		1.00	0.98	1.00	1.00	0.97	1.00	0.99		1.00	1.00	
Flpb, ped/bikes		0.99	1.00	1.00	0.99	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	
Flt Protected		0.98	1.00	0.95	0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1807	1552	1681	1687	1536	1769	3359		1770	3521	
Flt Permitted		0.80	1.00	0.95	0.62	1.00	0.21	1.00		0.15	1.00	
Satd. Flow (perm)		1474	1552	1681	1098	1536	385	3359		278	3521	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	23	25	65	360	30	184	39	796	340	271	953	29
RTOR Reduction (vph)	0	0	53	0	0	120	0	25	0	0	1	0
Lane Group Flow (vph)	0	48	12	194	196	64	39	1111	0	271	981	0
Confl. Peds. (#/hr)	6		5	5		6	4		1	1		4
Confl. Bikes (#/hr)												1
Turn Type	Perm	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6			2		
Actuated Green, G (s)		35.4	35.4	25.5	66.6	66.6	103.6	98.9		105.8	100.2	
Effective Green, g (s)		35.4	35.4	25.5	66.6	66.6	103.6	98.9		105.8	100.2	
Actuated g/C Ratio		0.19	0.19	0.13	0.35	0.35	0.55	0.52		0.56	0.53	
Clearance Time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1		6.4	6.1	
Vehicle Extension (s)		3.2	3.2	2.0	3.2	3.2	2.0	2.5		2.0	2.5	
Lane Grp Cap (vph)		274	289	225	463	538	244	1748		198	1856	
v/s Ratio Prot				c0.12	0.06		0.00	0.33		c0.04	0.28	
v/s Ratio Perm		0.03	0.01		c0.09	0.04	0.08			c0.72		
v/c Ratio		0.18	0.04	0.86	0.42	0.12	0.16	0.64		1.37	0.53	
Uniform Delay, d1		65.0	63.4	80.5	47.1	41.8	22.4	32.6		45.8	29.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3	0.1	26.3	0.7	0.1	0.1	1.8		194.7	1.1	
Delay (s)		65.3	63.5	106.8	47.7	41.9	22.5	34.4		240.5	30.5	
Level of Service		E	E	F	D	D	C	C		F	C	
Approach Delay (s)		64.3			65.8			34.0			75.9	
Approach LOS		E			E			C			E	
Intersection Summary												
HCM 2000 Control Delay			57.8									E
HCM 2000 Volume to Capacity ratio			1.10									
Actuated Cycle Length (s)			190.0							24.6		
Intersection Capacity Utilization			78.7%									D
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 TWSC
5: Douglas Road & Zamora Avenue

Future Total Conditions
AM Peak Hour

Intersection

Int Delay, s/veh 3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	60	61	48	1046	1180	121
Future Vol, veh/h	60	61	48	1046	1180	121
Conflicting Peds, #/hr	2	1	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	64	51	1101	1242	127

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1904	629	1249
Stage 1	1249	-	-
Stage 2	655	-	-
Critical Hdwy	5	5	4.14
Critical Hdwy Stg 1	5	-	-
Critical Hdwy Stg 2	5	-	-
Follow-up Hdwy	3	3	2.22
Pot Cap-1 Maneuver	170	644	553
Stage 1	341	-	-
Stage 2	627	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	128	639	549
Mov Cap-2 Maneuver	128	-	-
Stage 1	258	-	-
Stage 2	623	-	-

Approach	EB	NB	SB
HCM Control Delay, s	43.9	1.8	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT
Capacity (veh/h)	549	-	214	-
HCM Lane V/C Ratio	0.092	-	0.595	-
HCM Control Delay (s)	12.2	1.3	43.9	-
HCM Lane LOS	B	A	E	-
HCM 95th %tile Q(veh)	0.3	-	3.4	-

HCM 2010 TWSC
6: Madeira Avenue & Douglas Road

Future Total Conditions
AM Peak Hour

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		W	↑↑	↑↑	
Traffic Vol, veh/h	30	47	83	1083	1245	26
Future Vol, veh/h	30	47	83	1083	1245	26
Conflicting Peds, #/hr	1	0	12	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	49	86	1128	1297	27

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	2060	674	1336	0	0
Stage 1	1323	-	-	-	-
Stage 2	737	-	-	-	-
Critical Hdwy	5	5	4.14	-	-
Critical Hdwy Stg 1	5	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-
Follow-up Hdwy	3	3	2.22	-	-
Pot Cap-1 Maneuver	144	615	512	-	-
Stage 1	315	-	-	-	-
Stage 2	577	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	117	608	506	-	-
Mov Cap-2 Maneuver	117	-	-	-	-
Stage 1	259	-	-	-	-
Stage 2	571	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.7	1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	506	-	231	-	-
HCM Lane V/C Ratio	0.171	-	0.347	-	-
HCM Control Delay (s)	13.6	-	28.7	-	-
HCM Lane LOS	B	-	D	-	-
HCM 95th %tile Q(veh)	0.6	-	1.5	-	-

HCM 2010 TWSC
7: North Driveway & Zamora Avenue

Future Total Conditions
AM Peak Hour

Intersection

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	213	1	3	238	5	7
Future Vol, veh/h	213	1	3	238	5	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	232	1	3	259	5	8

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	233
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1335
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	1335
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	847	-	-	1335	-
HCM Lane V/C Ratio	0.015	-	-	0.002	-
HCM Control Delay (s)	9.3	-	-	7.7	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 2010 TWSC
8: Galiano Street & West Driveway

Future Total Conditions
AM Peak Hour

Intersection

Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	5	4	148	2	1	194
Future Vol, veh/h	5	4	148	2	1	194
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	4	161	2	1	211

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	375	162	0	0	163
Stage 1	162	-	-	-	-
Stage 2	213	-	-	-	-
Critical Hdwy	5	5	-	-	4.12
Critical Hdwy Stg 1	5	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-
Follow-up Hdwy	3	3	-	-	2.218
Pot Cap-1 Maneuver	830	1024	-	-	1416
Stage 1	1024	-	-	-	-
Stage 2	974	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	829	1024	-	-	1416
Mov Cap-2 Maneuver	829	-	-	-	-
Stage 1	1023	-	-	-	-
Stage 2	974	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	906	1416
HCM Lane V/C Ratio	-	-	0.011	0.001
HCM Control Delay (s)	-	-	9	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 2010 TWSC
 1: Zamora Avenue & Ponce de Leon Boulevard

Future Total Conditions
 PM Peak Hour

Intersection

Int Delay, s/veh	3.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	35	18	30	51	37	56	925	33	38	611	18
Future Vol, veh/h	14	35	18	30	51	37	56	925	33	38	611	18
Conflicting Peds, #/hr	8	0	5	5	0	8	32	0	19	19	0	32
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	38	20	33	55	40	61	1005	36	41	664	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1448	1970	379	1602	1962	548	716	0	0	1060	0	0
Stage 1	788	788	-	1164	1164	-	-	-	-	-	-	-
Stage 2	660	1182	-	438	798	-	-	-	-	-	-	-
Critical Hdwy	5	5	5	5	5	5	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	5	5	-	5	5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5	5	-	5	5	-	-	-	-	-	-	-
Follow-up Hdwy	3	3	3	3	3	3	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	277	158	827	235	160	698	887	-	-	661	-	-
Stage 1	548	548	-	372	372	-	-	-	-	-	-	-
Stage 2	624	365	-	780	542	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	162	112	798	154	114	680	860	-	-	649	-	-
Mov Cap-2 Maneuver	252	197	-	241	209	-	-	-	-	-	-	-
Stage 1	441	477	-	303	303	-	-	-	-	-	-	-
Stage 2	395	297	-	626	472	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	23.9		28.4		1.2		1.1	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	860	-	-	262	279	649	-
HCM Lane V/C Ratio	0.071	-	-	0.278	0.46	0.064	-
HCM Control Delay (s)	9.5	0.7	-	23.9	28.4	10.9	0.5
HCM Lane LOS	A	A	-	C	D	B	A
HCM 95th %tile Q(veh)	0.2	-	-	1.1	2.3	0.2	-

HCM 2010 AWSC
 2: Galiano Street & Zamora Avenue

Future Total Conditions
 PM Peak Hour

Intersection

Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	22	65	11	20	91	19	13	124	10	32	85	18
Future Vol, veh/h	22	65	11	20	91	19	13	124	10	32	85	18
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	70	12	22	98	20	14	133	11	34	91	19
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	8.6			8.8			8.9			8.8		
HCM LOS	A			A			A			A		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	22%	15%	24%
Vol Thru, %	84%	66%	70%	63%
Vol Right, %	7%	11%	15%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	147	98	130	135
LT Vol	13	22	20	32
Through Vol	124	65	91	85
RT Vol	10	11	19	18
Lane Flow Rate	158	105	140	145
Geometry Grp	1	1	1	1
Degree of Util (X)	0.205	0.141	0.183	0.189
Departure Headway (Hd)	4.675	4.802	4.725	4.68
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	765	744	758	765
Service Time	2.717	2.848	2.769	2.723
HCM Lane V/C Ratio	0.207	0.141	0.185	0.19
HCM Control Delay	8.9	8.6	8.8	8.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.5	0.7	0.7

Intersection

Intersection Delay, s/veh 8.3
Intersection LOS A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	17	39	23	10	42	16	23	117	13	10	96	9
Future Vol, veh/h	17	39	23	10	42	16	23	117	13	10	96	9
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	41	24	11	44	17	24	123	14	11	101	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
Approach	EB			WB			NB			SB		
Opposing Approach	WB			EB			SB			NB		
Opposing Lanes	1			1			1			1		
Conflicting Approach Left	SB			NB			EB			WB		
Conflicting Lanes Left	1			1			1			1		
Conflicting Approach Right	NB			SB			WB			EB		
Conflicting Lanes Right	1			1			1			1		
HCM Control Delay	8.1			8			8.5			8.2		
HCM LOS	A			A			A			A		

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	22%	15%	9%
Vol Thru, %	76%	49%	62%	83%
Vol Right, %	8%	29%	24%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	153	79	68	115
LT Vol	23	17	10	10
Through Vol	117	39	42	96
RT Vol	13	23	16	9
Lane Flow Rate	161	83	72	121
Geometry Grp	1	1	1	1
Degree of Util (X)	0.197	0.105	0.091	0.149
Departure Headway (Hd)	4.407	4.529	4.562	4.441
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	815	792	786	809
Service Time	2.429	2.552	2.586	2.465
HCM Lane V/C Ratio	0.198	0.105	0.092	0.15
HCM Control Delay	8.5	8.1	8	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.7	0.4	0.3	0.5

Timings
4: SW 16th St & Douglas Road

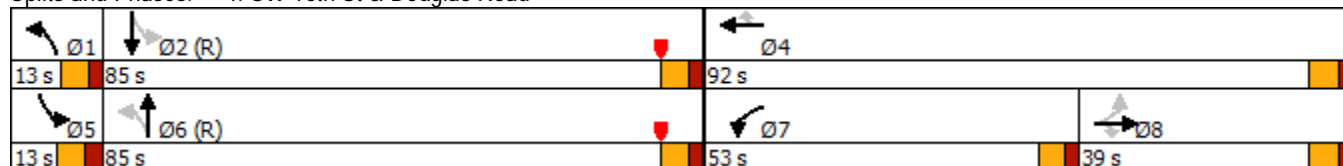
Future Total Conditions
PM Peak Hour

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	39	49	70	367	31	215	60	836	192	868
Future Volume (vph)	39	49	70	367	31	215	60	836	192	868
Turn Type	Perm	NA	Perm	Prot	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		8		7	4		1	6	5	2
Permitted Phases	8		8			4	6		2	
Detector Phase	8	8	8	7	4	4	1	6	5	2
Switch Phase										
Minimum Initial (s)	7.0	7.0	7.0	5.0	7.0	7.0	5.0	16.0	5.0	16.0
Minimum Split (s)	24.4	24.4	24.4	10.7	25.4	25.4	11.0	24.1	11.4	24.1
Total Split (s)	39.0	39.0	39.0	53.0	92.0	92.0	13.0	85.0	13.0	85.0
Total Split (%)	20.5%	20.5%	20.5%	27.9%	48.4%	48.4%	6.8%	44.7%	6.8%	44.7%
Yellow Time (s)	4.0	4.0	4.0	3.7	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.4	2.4	2.4	2.0	2.4	2.4	2.0	2.1	2.4	2.1
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1	6.4	6.1
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max

Intersection Summary

Cycle Length: 190
 Actuated Cycle Length: 190
 Offset: 145 (76%), Referenced to phase 2:SBTL and 6:NBTL, Start of Yellow
 Natural Cycle: 100
 Control Type: Actuated-Coordinated






















Splits and Phases: 4: SW 16th St & Douglas Road



HCM Signalized Intersection Capacity Analysis

4: SW 16th St & Douglas Road

Future Total Conditions
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	49	70	367	31	215	60	836	380	192	868	21
Future Volume (vph)	39	49	70	367	31	215	60	836	380	192	868	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1		6.4	6.1	
Lane Util. Factor		1.00	1.00	0.95	0.95	1.00	1.00	0.95		1.00	0.95	
Frbp, ped/bikes		1.00	0.98	1.00	1.00	0.97	1.00	0.99		1.00	1.00	
Flpb, ped/bikes		0.99	1.00	1.00	0.99	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85	1.00	1.00	0.85	1.00	0.95		1.00	1.00	
Flt Protected		0.98	1.00	0.95	0.96	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1811	1556	1681	1689	1536	1769	3351		1770	3525	
Flt Permitted		0.79	1.00	0.95	0.62	1.00	0.18	1.00		0.06	1.00	
Satd. Flow (perm)		1460	1556	1681	1090	1536	336	3351		115	3525	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	40	50	71	374	32	219	61	853	388	196	886	21
RTOR Reduction (vph)	0	0	51	0	0	82	0	27	0	0	1	0
Lane Group Flow (vph)	0	90	20	202	204	137	61	1214	0	196	906	0
Confl. Peds. (#/hr)	6		5	5		6	4		1	1		4
Confl. Bikes (#/hr)												1
Turn Type	Perm	NA	Perm	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		8		7	4		1	6		5	2	
Permitted Phases	8		8			4	6			2		
Actuated Green, G (s)		52.5	52.5	27.4	85.6	85.6	85.6	78.9		85.8	79.2	
Effective Green, g (s)		52.5	52.5	27.4	85.6	85.6	85.6	78.9		85.8	79.2	
Actuated g/C Ratio		0.28	0.28	0.14	0.45	0.45	0.45	0.42		0.45	0.42	
Clearance Time (s)		6.4	6.4	5.7	6.4	6.4	6.0	6.1		6.4	6.1	
Vehicle Extension (s)		3.2	3.2	2.0	3.2	3.2	2.0	2.5		2.0	2.5	
Lane Grp Cap (vph)		403	429	242	577	692	201	1391		109	1469	
v/s Ratio Prot				c0.12	0.05		0.01	0.36		c0.06	0.26	
v/s Ratio Perm		0.06	0.01		c0.11	0.09	0.13			c0.75		
v/c Ratio		0.22	0.05	0.83	0.35	0.20	0.30	0.87		1.80	0.62	
Uniform Delay, d1		53.0	50.4	79.1	34.1	31.5	33.0	50.9		43.7	43.5	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3	0.0	20.4	0.4	0.2	0.3	7.8		393.2	2.0	
Delay (s)		53.3	50.4	99.5	34.5	31.6	33.3	58.7		436.9	45.4	
Level of Service		D	D	F	C	C	C	E		F	D	
Approach Delay (s)		52.1			54.5			57.5			115.0	
Approach LOS		D			D			E			F	
Intersection Summary												
HCM 2000 Control Delay			76.5									E
HCM 2000 Volume to Capacity ratio			1.18									
Actuated Cycle Length (s)			190.0							24.6		
Intersection Capacity Utilization			79.3%									D
Analysis Period (min)			15									
c Critical Lane Group												

HCM 2010 TWSC
5: Douglas Road & Zamora Avenue

Future Total Conditions
PM Peak Hour

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			↑↑	↑↑	
Traffic Vol, veh/h	39	55	20	1256	1192	100
Future Vol, veh/h	39	55	20	1256	1192	100
Conflicting Peds, #/hr	2	1	7	0	0	7
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	Free
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	56	20	1282	1216	102

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1906	616	1223	0	-	0
Stage 1	1223	-	-	-	-	-
Stage 2	683	-	-	-	-	-
Critical Hdwy	5	5	4.14	-	-	-
Critical Hdwy Stg 1	5	-	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-	-
Follow-up Hdwy	3	3	2.22	-	-	-
Pot Cap-1 Maneuver	170	652	566	-	-	0
Stage 1	350	-	-	-	-	0
Stage 2	609	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	147	647	562	-	-	-
Mov Cap-2 Maneuver	147	-	-	-	-	-
Stage 1	305	-	-	-	-	-
Stage 2	605	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25.7	0.9	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT
Capacity (veh/h)	562	-	268	-
HCM Lane V/C Ratio	0.036	-	0.358	-
HCM Control Delay (s)	11.6	0.7	25.7	-
HCM Lane LOS	B	A	D	-
HCM 95th %tile Q(veh)	0.1	-	1.6	-

HCM 2010 TWSC
6: Madeira Avenue & Douglas Road

Future Total Conditions
PM Peak Hour

Intersection

Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	TT		T	TT	TT	
Traffic Vol, veh/h	11	33	40	1254	1170	22
Future Vol, veh/h	11	33	40	1254	1170	22
Conflicting Peds, #/hr	1	0	12	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	50	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	35	42	1320	1232	23

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	2001	640	1267	0	0
Stage 1	1256	-	-	-	-
Stage 2	745	-	-	-	-
Critical Hdwy	5	5	4.14	-	-
Critical Hdwy Stg 1	5	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-
Follow-up Hdwy	3	3	2.22	-	-
Pot Cap-1 Maneuver	153	637	544	-	-
Stage 1	338	-	-	-	-
Stage 2	572	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	138	630	538	-	-
Mov Cap-2 Maneuver	138	-	-	-	-
Stage 1	308	-	-	-	-
Stage 2	566	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.6	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	538	-	333	-	-
HCM Lane V/C Ratio	0.078	-	0.139	-	-
HCM Control Delay (s)	12.3	-	17.6	-	-
HCM Lane LOS	B	-	C	-	-
HCM 95th %tile Q(veh)	0.3	-	0.5	-	-

HCM 2010 TWSC
7: North Driveway & Zamora Avenue

Future Total Conditions
PM Peak Hour

Intersection

Int Delay, s/veh 0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	102	5	8	128	3	5
Future Vol, veh/h	102	5	8	128	3	5
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	111	5	9	139	3	5

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	116	0	271
Stage 1	-	-	-	-	114
Stage 2	-	-	-	-	157
Critical Hdwy	-	-	4.12	-	5
Critical Hdwy Stg 1	-	-	-	-	5
Critical Hdwy Stg 2	-	-	-	-	5
Follow-up Hdwy	-	-	2.218	-	3
Pot Cap-1 Maneuver	-	-	1473	-	920
Stage 1	-	-	-	-	1074
Stage 2	-	-	-	-	1029
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1473	-	914
Mov Cap-2 Maneuver	-	-	-	-	914
Stage 1	-	-	-	-	1066
Stage 2	-	-	-	-	1029

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1008	-	-	1473	-
HCM Lane V/C Ratio	0.009	-	-	0.006	-
HCM Control Delay (s)	8.6	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

HCM 2010 TWSC
8: West Driveway & Galiano Street

Future Total Conditions
PM Peak Hour

Intersection

Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	3	3	145	5	4	113
Future Vol, veh/h	3	3	145	5	4	113
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	3	158	5	4	123

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	292	161	0	0	163
Stage 1	161	-	-	-	-
Stage 2	131	-	-	-	-
Critical Hdwy	5	5	-	-	4.12
Critical Hdwy Stg 1	5	-	-	-	-
Critical Hdwy Stg 2	5	-	-	-	-
Follow-up Hdwy	3	3	-	-	2.218
Pot Cap-1 Maneuver	901	1025	-	-	1416
Stage 1	1025	-	-	-	-
Stage 2	1056	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	898	1025	-	-	1416
Mov Cap-2 Maneuver	898	-	-	-	-
Stage 1	1022	-	-	-	-
Stage 2	1056	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	957	1416
HCM Lane V/C Ratio	-	-	0.007	0.003
HCM Control Delay (s)	-	-	8.8	7.5
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

APPENDIX I:
Multimodal Analysis

Existing Conditions

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Galiano Street	Study Period	Standard K
Date Prepared	6/18/2018 3:34:47 PM	From	Zamora Avenue	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Existing\Galiano NB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	250	2750	139	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Madeira Avenue)	3.11	C	N/A	N/A				1.15	A			
	Bicycle LOS	3.11	C					Pedestrian LOS	1.15	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Galiano Street	Study Period	Standard K
Date Prepared	6/18/2018 3:34:47 PM	From	Zamora Avenue	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Southbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Existing\Galiano SB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	250	3520	178	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Douglas Road	Study Period	Standard K
Date Prepared	6/18/2018 4:43:50 PM	From	SW 16th Street	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Existing\Douglas NB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	450	22600	1098	2	40	45	None	No	N/A

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	11	Typical	No	No	N/A	Yes	Adjacent	No	2	1	Poor	Typical

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus			
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS		
1 (to Madeira Avenue)	4.26	E	N/A	N/A				3.28	C	1.26	E		
	Bicycle LOS	4.26	E					Pedestrian LOS	3.28	C	Bus LOS	1.26	E

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Douglas Road	Study Period	Standard K
Date Prepared	6/18/2018 4:43:50 PM	From	SW 16th Street	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Southbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Existing\Douglas SB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	450	26570	1291	2	40	45	None	No	N/A

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	11	Typical	No	No	N/A	Yes	Adjacent	No	2	1	Poor	Typical

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus			
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS		
1 (to Madeira Avenue)	4.35	E	N/A	N/A				3.50	D	1.20	E		
	Bicycle LOS	4.35	E					Pedestrian LOS	3.50	D	Bus LOS	1.20	E

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Zamora Avenue	Study Period	Standard K
Date Prepared	6/18/2018 3:54:53 PM	From	Ponce de Leon Blvd	Modal Analysis	Multimodal
Agency		To	Douglas Road	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Eastbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Existing\Zamora EB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Douglas Road)	1320	4400	209	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Douglas Road)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Douglas Road)	3.85	D	N/A	N/A				1.55	A			
	Bicycle LOS	3.85	D					Pedestrian LOS	1.55	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Zamora Avenue	Study Period	Standard K
Date Prepared	6/18/2018 3:54:53 PM	From	Ponce de Leon Blvd	Modal Analysis	Multimodal
Agency		To	Douglas Road	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Westbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Existing\Zamora WB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Douglas Road)	1320	4930	234	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Douglas Road)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Douglas Road)	3.92	D	N/A	N/A				1.61	A			
	Bicycle LOS	3.92	D					Pedestrian LOS	1.61	A	Bus LOS	N/A

MultiModal Service Volume Tables
Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Galiano Street	Study Period	Standard K
Date Prepared	6/18/2018 3:34:47 PM	From	Zamora Avenue	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Existing\Galiano NB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	250	2570	131	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Madeira Avenue)	2.71	B	N/A	N/A				1.02	A			
	Bicycle LOS	2.71	B					Pedestrian LOS	1.02	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Galiano Street	Study Period	Standard K
Date Prepared	6/18/2018 3:34:47 PM	From	Zamora Avenue	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Southbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Existing\Galiano SB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	250	2000	101	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Madeira Avenue)	2.38	B	N/A	N/A				0.92	A			
	Bicycle LOS	2.38	B					Pedestrian LOS	0.92	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Douglas Road	Study Period	Standard K
Date Prepared	6/18/2018 4:43:50 PM	From	SW 16th Street	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Existing\Douglas NB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	450	27770	1262	2	40	45	None	No	N/A

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	11	Typical	No	No	N/A	Yes	Adjacent	No	2	1	Poor	Typical

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus			
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS		
1 (to Madeira Avenue)	4.34	E	N/A	N/A				3.45	C	1.26	E		
	Bicycle LOS	4.34	E					Pedestrian LOS	3.45	C	Bus LOS	1.26	E

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Douglas Road	Study Period	Standard K
Date Prepared	6/18/2018 4:43:50 PM	From	SW 16th Street	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Southbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Existing\Douglas SB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	450	27970	1271	2	40	45	None	No	N/A

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	11	Typical	No	No	N/A	Yes	Adjacent	No	2	1	Poor	Typical

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus			
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS		
1 (to Madeira Avenue)	4.34	E	N/A	N/A				3.46	C	1.26	E		
	Bicycle LOS	4.34	E					Pedestrian LOS	3.46	C	Bus LOS	1.26	E

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Zamora Avenue	Study Period	Standard K
Date Prepared	6/18/2018 3:54:53 PM	From	Ponce de Leon Blvd	Modal Analysis	Multimodal
Agency		To	Douglas Road	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Eastbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Existing\Zamora EB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Douglas Road)	1320	2000	100	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Douglas Road)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Douglas Road)	2.89	C	N/A	N/A				1.18	A			
	Bicycle LOS	2.89	C					Pedestrian LOS	1.18	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Zamora Avenue	Study Period	Standard K
Date Prepared	6/18/2018 3:54:53 PM	From	Ponce de Leon Blvd	Modal Analysis	Multimodal
Agency		To	Douglas Road	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Westbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Existing\Zamora WB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Douglas Road)	1320	2500	125	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Douglas Road)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Douglas Road)	3.18	C	N/A	N/A				1.26	A			
	Bicycle LOS	3.18	C					Pedestrian LOS	1.26	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

Future Background Conditions

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Galiano Street	Study Period	Standard K
Date Prepared	6/18/2018 3:34:47 PM	From	Zamora Avenue	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Background\Galiano NB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	250	2900	148	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Madeira Avenue)	3.15	C	N/A	N/A				1.17	A			
	Bicycle LOS	3.15	C					Pedestrian LOS	1.17	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Galiano Street	Study Period	Standard K
Date Prepared	6/18/2018 3:34:47 PM	From	Zamora Avenue	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Southbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Cals\MMLOS\Future Background\Galiano SB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	250	3780	193	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Madeira Avenue)	3.29	C	N/A	N/A				1.30	A			
	Bicycle LOS	3.29	C					Pedestrian LOS	1.30	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Douglas Road	Study Period	Standard K
Date Prepared	6/18/2018 4:43:50 PM	From	SW 16th Street	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Background\Douglas NB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	450	23450	1121	2	40	45	None	No	N/A

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	11	Typical	No	No	N/A	Yes	Adjacent	No	2	1	Poor	Typical

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus				
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS			
1 (to Madeira Avenue)	4.28	E	N/A	N/A				3.30	C	1.26	E			
	Bicycle LOS	4.28	E					Pedestrian LOS	3.30	C		Bus LOS	1.26	E

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Douglas Road	Study Period	Standard K
Date Prepared	6/18/2018 4:43:50 PM	From	SW 16th Street	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Southbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Background\Douglas SB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	450	27630	1320	2	40	45	None	No	N/A

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	11	Typical	No	No	N/A	Yes	Adjacent	No	2	1	Poor	Typical

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus			
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS		
1 (to Madeira Avenue)	4.36	E	N/A	N/A				3.54	D	1.20	E		
	Bicycle LOS	4.36	E					Pedestrian LOS	3.54	D	Bus LOS	1.20	E

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Zamora Avenue	Study Period	Standard K
Date Prepared	6/18/2018 3:54:53 PM	From	Ponce de Leon Blvd	Modal Analysis	Multimodal
Agency		To	Douglas Road	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Eastbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Background\Zamora EB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Douglas Road)	1320	4480	213	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Douglas Road)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Douglas Road)	3.86	D	N/A	N/A				1.56	A			
	Bicycle LOS	3.86	D					Pedestrian LOS	1.56	A	Bus LOS	N/A

MultiModal Service Volume Tables
Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Zamora Avenue	Study Period	Standard K
Date Prepared	6/18/2018 3:54:53 PM	From	Ponce de Leon Blvd	Modal Analysis	Multimodal
Agency		To	Douglas Road	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Westbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Background\Zamora WB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Douglas Road)	1320	5030	239	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Douglas Road)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Douglas Road)	3.93	D	N/A	N/A				1.63	A			
	Bicycle LOS	3.93	D					Pedestrian LOS	1.63	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Galiano Street	Study Period	Standard K
Date Prepared	6/18/2018 3:34:47 PM	From	Zamora Avenue	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Background\Galiano NB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	250	2850	145	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Madeira Avenue)	2.84	C	N/A	N/A				1.06	A			
	Bicycle LOS	2.84	C					Pedestrian LOS	1.06	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Galiano Street	Study Period	Standard K
Date Prepared	6/18/2018 3:34:47 PM	From	Zamora Avenue	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Southbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Background\Galiano SB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	250	2200	112	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Madeira Avenue)	2.51	B	N/A	N/A				0.96	A			
	Bicycle LOS	2.51	B					Pedestrian LOS	0.96	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Douglas Road	Study Period	Standard K
Date Prepared	6/18/2018 4:43:50 PM	From	SW 16th Street	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Background\Douglas NB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	450	28630	1291	2	40	45	None	No	N/A

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	11	Typical	No	No	N/A	Yes	Adjacent	No	2	1	Poor	Typical

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus				
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS			
1 (to Madeira Avenue)	4.35	E	N/A	N/A				3.48	C	1.26	E			
	Bicycle LOS	4.35	E					Pedestrian LOS	3.48	C		Bus LOS	1.26	E

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Douglas Road	Study Period	Standard K
Date Prepared	6/18/2018 4:43:50 PM	From	SW 16th Street	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Southbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Background\Douglas SB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	450	28790	1298	2	40	45	None	No	N/A

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	11	Typical	No	No	N/A	Yes	Adjacent	No	2	1	Poor	Typical

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus				
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS			
1 (to Madeira Avenue)	4.35	E	N/A	N/A				3.49	C	1.26	E			
	Bicycle LOS	4.35	E					Pedestrian LOS	3.49	C		Bus LOS	1.26	E

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Zamora Avenue	Study Period	Standard K
Date Prepared	6/18/2018 3:54:53 PM	From	Ponce de Leon Blvd	Modal Analysis	Multimodal
Agency		To	Douglas Road	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Eastbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Background\Zamora EB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Douglas Road)	1320	2050	102	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Douglas Road)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Douglas Road)	2.92	C	N/A	N/A				1.19	A			
	Bicycle LOS	2.92	C					Pedestrian LOS	1.19	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Zamora Avenue	Study Period	Standard K
Date Prepared	6/18/2018 3:54:53 PM	From	Ponce de Leon Blvd	Modal Analysis	Multimodal
Agency		To	Douglas Road	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Westbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Background\Zamora WB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Douglas Road)	1320	2540	127	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Douglas Road)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Douglas Road)	3.20	C	N/A	N/A				1.27	A			
	Bicycle LOS	3.20	C					Pedestrian LOS	1.27	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

Future Total Conditions

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Galiano Street	Study Period	Standard K
Date Prepared	6/18/2018 3:34:47 PM	From	Zamora Avenue	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Total\Galiano NB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	250	2970	152	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Madeira Avenue)	3.16	C	N/A	N/A				1.18	A			
	Bicycle LOS	3.16	C					Pedestrian LOS	1.18	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Galiano Street	Study Period	Standard K
Date Prepared	6/18/2018 3:34:47 PM	From	Zamora Avenue	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Southbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Total\Galiano SB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	250	3900	199	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Madeira Avenue)	3.30	C	N/A	N/A				1.32	A			
	Bicycle LOS	3.30	C					Pedestrian LOS	1.32	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Douglas Road	Study Period	Standard K
Date Prepared	6/18/2018 4:43:50 PM	From	SW 16th Street	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Total\Douglas NB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	450	23180	1127	2	40	45	None	No	N/A

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	11	Typical	No	No	N/A	Yes	Adjacent	No	2	1	Poor	Typical

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus			
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS		
1 (to Madeira Avenue)	4.28	E	N/A	N/A				3.31	C	1.26	E		
	Bicycle LOS	4.28	E					Pedestrian LOS	3.31	C	Bus LOS	1.26	E

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Douglas Road	Study Period	Standard K
Date Prepared	6/18/2018 4:43:50 PM	From	SW 16th Street	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Southbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Total\Douglas SB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	450	27225	1323	2	40	45	None	No	N/A

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	11	Typical	No	No	N/A	Yes	Adjacent	No	2	1	Poor	Typical

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus			
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS		
1 (to Madeira Avenue)	4.37	E	N/A	N/A				3.54	D	1.20	E		
	Bicycle LOS	4.37	E					Pedestrian LOS	3.54	D	Bus LOS	1.20	E

MultiModal Service Volume Tables
Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Zamora Avenue	Study Period	Standard K
Date Prepared	6/18/2018 3:54:53 PM	From	Ponce de Leon Blvd	Modal Analysis	Multimodal
Agency		To	Douglas Road	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Eastbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Total\Zamora EB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Douglas Road)	1320	4640	220	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Douglas Road)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Douglas Road)	3.88	D	N/A	N/A				1.58	A			
	Bicycle LOS	3.88	D					Pedestrian LOS	1.58	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Zamora Avenue	Study Period	Standard K
Date Prepared	6/18/2018 3:54:53 PM	From	Ponce de Leon Blvd	Modal Analysis	Multimodal
Agency		To	Douglas Road	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Westbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Total\Zamora WB AM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Douglas Road)	1320	5160	244	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Douglas Road)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Douglas Road)	3.95	D	N/A	N/A				1.64	A			
	Bicycle LOS	3.95	D					Pedestrian LOS	1.64	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Galiano Street	Study Period	Standard K
Date Prepared	6/18/2018 3:34:47 PM	From	Zamora Avenue	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Total\Galiano NB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	250	2970	150	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Madeira Avenue)	2.88	C	N/A	N/A				1.08	A			
	Bicycle LOS	2.88	C					Pedestrian LOS	1.08	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Galiano Street	Study Period	Standard K
Date Prepared	6/18/2018 3:34:47 PM	From	Zamora Avenue	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Southbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Total\Galiano SB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	250	2310	117	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Madeira Avenue)	2.56	B	N/A	N/A				0.97	A			
	Bicycle LOS	2.56	B					Pedestrian LOS	0.97	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Douglas Road	Study Period	Standard K
Date Prepared	6/18/2018 4:43:50 PM	From	SW 16th Street	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Northbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Total\Douglas NB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	450	28670	1295	2	40	45	None	No	N/A

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	11	Typical	No	No	N/A	Yes	Adjacent	No	2	1	Poor	Typical

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus			
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS		
1 (to Madeira Avenue)	4.35	E	N/A	N/A				3.48	C	1.26	E		
	Bicycle LOS	4.35	E					Pedestrian LOS	3.48	C	Bus LOS	1.26	E

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Douglas Road	Study Period	Standard K
Date Prepared	6/18/2018 4:43:50 PM	From	SW 16th Street	Modal Analysis	Multimodal
Agency		To	Madeira Avenue	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Southbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Total\Douglas SB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Madeira Avenue)	450	28890	1305	2	40	45	None	No	N/A

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr /Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Madeira Avenue)	11	Typical	No	No	N/A	Yes	Adjacent	No	2	1	Poor	Typical

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus			
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS		
1 (to Madeira Avenue)	4.35	E	N/A	N/A				3.50	C	1.26	E		
	Bicycle LOS	4.35	E					Pedestrian LOS	3.50	C	Bus LOS	1.26	E

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Zamora Avenue	Study Period	Standard K
Date Prepared	6/18/2018 3:54:53 PM	From	Ponce de Leon Blvd	Modal Analysis	Multimodal
Agency		To	Douglas Road	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Eastbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Total\Zamora EB PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Douglas Road)	1320	2130	107	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Douglas Road)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus	
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS
1 (to Douglas Road)	2.98	C	N/A	N/A				1.20	A		
	Bicycle LOS	2.98	C		Pedestrian LOS	1.20	A		Bus LOS		N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst		Arterial Name	Zamora Avenue	Study Period	Standard K
Date Prepared	6/18/2018 3:54:53 PM	From	Ponce de Leon Blvd	Modal Analysis	Multimodal
Agency		To	Douglas Road	Program	ARTPLAN 2012
Area Type	Large Urbanized	Peak Direction	Westbound	Version Date	12/12/2012
Arterial Class	1				
File Name	K:\FTL_TPTO\043557002-44 Zamora Ave\Calcs\MMLOS\Future Total\Zamora WM PM.xap				
User Notes					

Arterial Data

Not Applicable

Automobile Intersection Data

Not Applicable

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Douglas Road)	1320	2700	136	1	30	35	None	Yes	Medium

Automobile LOS

Not Applicable

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

Not Applicable

Multimodal Segment Data

Segment #	Outside Lane Width	Pave Cond	Pave Shldr / Bike Lane	Side Path	Side Path Separation	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Bus Freq	Passenger Load Factor	Amenities	Bus Stop Type
1 (to Douglas Road)	10	Typical	No	No	N/A	Yes	Wide	Yes	0	0	Poor	None

Pedestrian SubSegment Data

Not Applicable

Multimodal LOS

Link #	Bicycle Street		Bicycle Sidepath		Pedestrian					Bus		
	Score	LOS	Score	LOS	1	2	3	Score	LOS	Adj. Buses	LOS	
1 (to Douglas Road)	3.29	C	N/A	N/A				1.29	A			
	Bicycle LOS	3.29	C					Pedestrian LOS	1.29	A	Bus LOS	N/A

MultiModal Service Volume Tables

Bicycle

Not Applicable