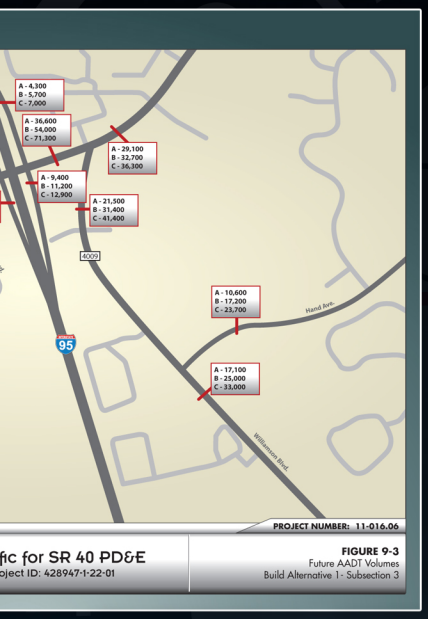
DECEMBER 2011



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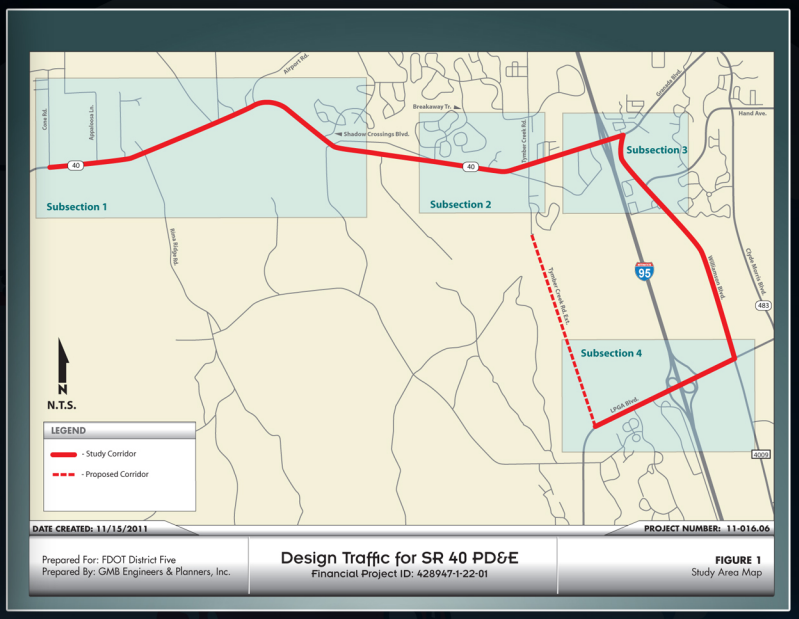
oject ID: 428947-1-22-01

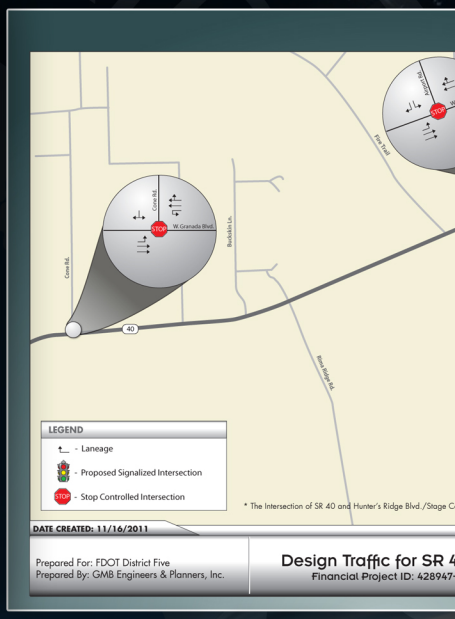
FIGURE 9-3
Future AADT Volumes
Build Alternative 1 - Subsection 3



Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E
Financial Project ID: 428947-1-22-01

FIGURE 1
Study Area Map



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Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 4
Financial Project ID: 428947-

FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT FIVE

SR 40 DESIGN TRAFFIC TECHNICAL MEMORANDUM

FINAL

PREPARED FOR FDOT DISTRICT 5 • PREPARED BY GMB ENGINEERS & PLANNERS, INC. • FINANCIAL PROJECT ID: 428947-1-22-01

GMB ENGINEERS & PLANNERS, INC.

STATE OF FLORIDA • DEPARTMENT OF TRANSPORTATION

FINAL

Design Traffic Technical Memorandum

For SR 40 Project Development & Environment (PD&E) Study

From Cone Road to Williamson Boulevard

Volusia County, Fl

Financial Project ID: 428947-1-22-01

Prepared by:

GMB Engineers & Planners, Inc.

Orlando, Florida

December 2011

Prepared for:

Florida Department of Transportation

District Five - Deland

CERTIFICATION

BY

FLORIDA DEPARTMENT OF TRANSPORTATION - DISTRICT FIVE

Financial Project ID: 428947-1-22-01

"I have reviewed the Traffic Forecasting Procedure adopted by the Florida Department of Transportation and have arrived at the projected design traffic volumes. I have found these to be consistent with the historical data and other available information."

Terry Rains

Terry W. Rains

Project Manager – Design Traffic
Florida Department of Transportation

01/03/2012

Date

CERTIFICATION

BY

GMB ENGINEERS & PLANNERS, INC.

Financial Project ID: 428947-1-22-01

I, Babuji Ambikapathy, Florida P.E. Number 50689, have prepared and reviewed the Design Traffic for the above referenced Florida Department of Transportation project. I have specifically followed the "Design Traffic Procedure" as adopted by the Florida Department of Transportation. Based on traffic count information, general data sources, and other pertinent information, the Design Traffic has been prepared using current traffic engineering, transportation planning, and Florida Department of Transportation practices and procedures.

Babuji Ambikapathy, P.E. # 50689

GMB Engineers & Planners, Inc.

12/30/21

Date

FINAL

SR 40 Design Traffic Technical Memorandum

This Design Traffic Technical Memorandum is prepared in support of the six-laning of SR 40 between the proposed Hunters Ridge Boulevard/Stage Coach Road, located just east of Shadow Crossing Boulevard and Williamson Boulevard. Phase I of the technical memorandum includes the development of existing traffic volumes, evaluation of existing operating conditions and development of design traffic characteristics. Phase II of the study entails the development of future traffic forecasts for No-Build and two (2) Build Alternatives, including any proposed new intersections.

Prepared by:

GMB Engineers & Planners, Inc.
Orlando, Florida

2602 E Livingston St,

Prepared for:

FDOT District 5

12/29/2011

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1. Introduction

The Florida Department of Transportation (FDOT) District Five is conducting a Project Development and Environment (PD&E) study to evaluate possible improvements to the SR 40 corridor from Cone Road to Williamson Boulevard and Tymber Creek Road Extension from SR 40 to LPGA Boulevard in Volusia County, Florida. GMB's role is to perform the Design Traffic Analysis to determine the impacts and assess the need for future capacity improvements on SR 40, Williamson Boulevard, LPGA Boulevard and Tymber Creek Rd Extension.

The Design Traffic Process for this study is divided into two phases. They are:

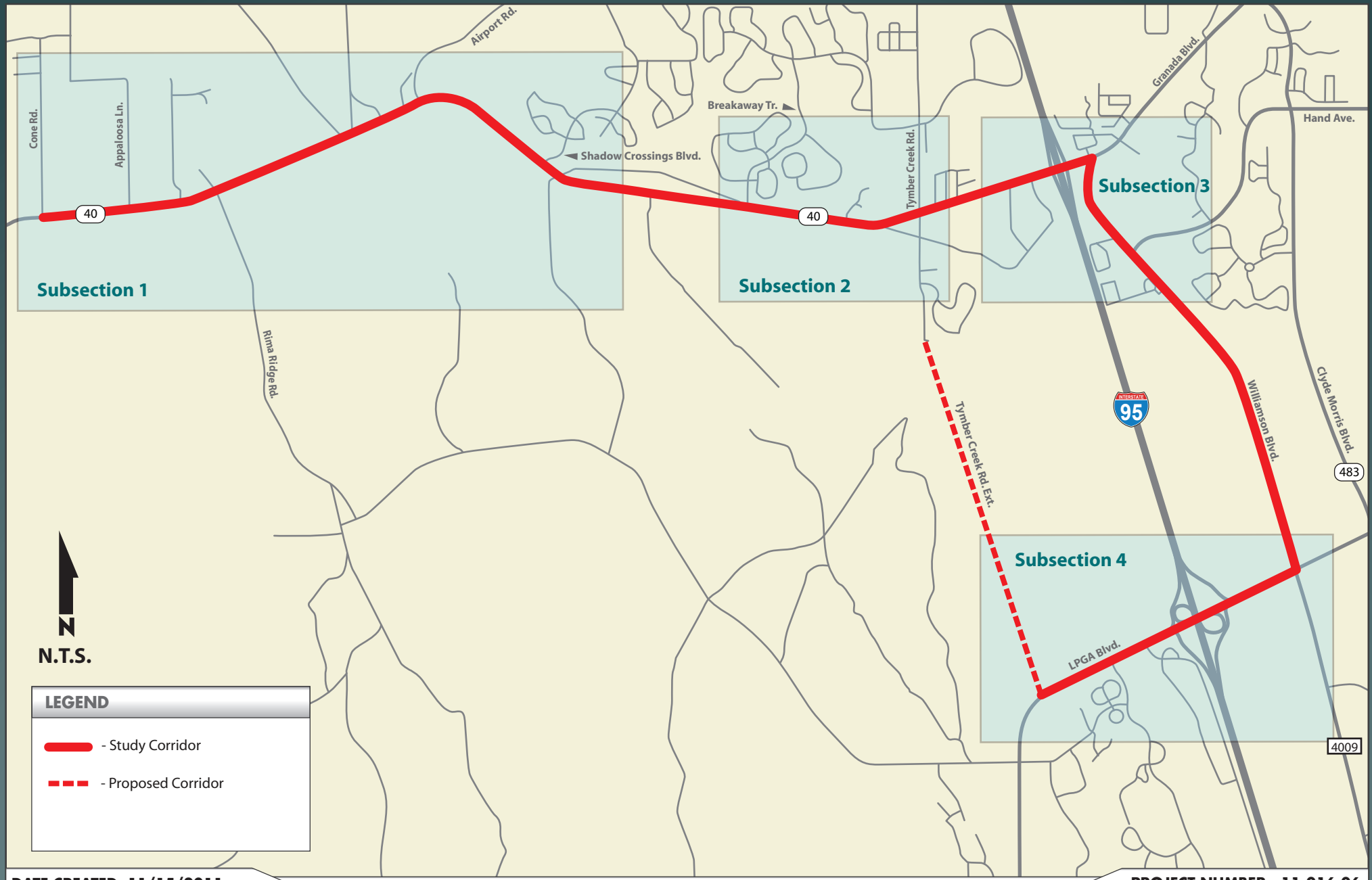
- **Phase One** – This phase of the study entails the development of existing traffic volumes, design characteristics and evaluation of existing operating conditions.
- **Phase Two** – This phase of the study entails the development of future traffic forecasts for No-Build and two Build Alternatives, including any proposed new intersections. In addition, this study includes an evaluation of the characteristics and operating conditions of the corridor and local facilities as appropriate during the service life of the proposed roadway project.

The current document is prepared in support of the above-mentioned two phases of the Design Traffic Analysis. The study area map is shown in **Figure 1**.

1.1 Background

Initially, GMB was tasked by the FDOT to perform the Design Traffic Analysis for the SR 40 study corridor between Breakaway Trail and Williamson Boulevard, Williamson Boulevard from SR 40 to LPGA Boulevard, LPGA Boulevard from Williamson Boulevard to the proposed Tymber Creek Road Extension, Tymber Creek Road Extension from SR 40 south to LPGA Boulevard and Hand Avenue Extension from Williamson Boulevard west to the proposed Tymber Creek Road Extension. The draft Design Traffic Memorandum in support of the above effort was submitted in June 2011.

Different combinations of the proposed SR 40 corridor improvements and proposed Tymber Creek Road and Hand Avenue Extensions were evaluated to help decide the best alternative that would relieve the SR 40 corridor in the future years.



DATE CREATED: 11/15/2011 **PROJECT NUMBER: 11-016.06**

Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 1
Study Area Map

In that effort, based on a preliminary screening process of seven Build Alternatives and input from the FDOT, Volusia County, Cities of Daytona Beach and Ormond Beach staff and PD&E Consultant for SR 40, the following final three Build Alternatives were selected.

- **Build Alternative 1:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes)
- **Build Alternative 5:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Boulevard.
- **Build Alternative 7:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6lanes), Hand Avenue Extension (2 lanes) from Williamson Boulevard to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Boulevard.

However, based on the recent developments regarding the study limits and six-laning portion on SR 40 and input from Volusia County regarding the practicality of Hand Avenue Extension construction, the following modifications were included in the new (current) study.

- The western study limit on SR 40 was extended to Cone Road from the original Breakaway Trail.
- The widening of SR 40 in the west was extended to the proposed Hunters Ridge Boulevard/Stage Coach Road from the original Breakaway Trail.
- Build Alternative 7 which included the extension of Hand Avenue west of Williamson Boulevard till the proposed Tymber Creek Road Extension was eliminated from the current study.

The draft report for the current study was submitted in November 2011. This Final report addresses the comments received on the draft reports submitted in June and November of 2011. The technical memorandum developed in support of the study limits change is provided in **Appendix A** of this report. The responses to the comments on the draft SR 40 Design Traffic Reports are also provided in **Appendix A** of this report.

1.2 Description of Project

The SR 40 corridor is primarily an east/west facility, which in its entirety, extends from a western terminus at US 41 in Marion County to an eastern terminus at SR A1A in Volusia County. The SR 40 corridor from Cone Road to I-95 Ramps is part of the Emerging Strategic Intermodal System (SIS), which is a statewide network of highways, railways, waterways and transportation hubs that handle the bulk of Florida's passenger and freight traffic. SR 40 west of I-95 is also classified as a Scenic Byway. Widening of SR 40 corridor between Breakaway Trail and I-95 Ramps as a six-lane section is included as a planned-

improvement in the Volusia Transportation Planning Organization's (TPO) 2035 Long Range Transportation Plan (LRTP) that was adopted on September 28, 2010.

The proposed widening of Williamson Boulevard from Hand Avenue to LPGA Boulevard and extensions of Tymber Creek Road and Hand Avenue were also identified as planned improvements in the 2035 LRTP. Specifically, the LRTP notes the widening of Williamson Boulevard from Hand Avenue to LPGA Boulevard as a four-lane section and Tymber Creek Rd Extension from its current northern terminus to LPGA Boulevard as planned improvements for the period between 2020 and 2025. In the case of Hand Avenue Extension, the LRTP notes it as a planned improvement for the period between 2025 and 2030. Both these Extensions were planned as two-lane roadways. However, it should be noted that the evaluation of extension of Hand Avenue west of Williamson Boulevard was eliminated from the current study based on the recent direction from Volusia County.

This PD&E study will evaluate SR 40 improvements as a means of providing additional capacity, reducing congestion along the corridor, and operate as an improved emergency evacuation route in conjunction with other feasible new roadway Extensions (Tymber Creek Road) and improvements to Williamson Boulevard and LPGA Boulevard.

1.3 Objective

The objective of this Technical Memorandum is to provide the FDOT District Five with the existing and future traffic forecasts for the No-Build and Build Alternatives, and an evaluation of the roadway characteristics and operational conditions for the roadway segments and intersections along SR 40 from Cone Road to Williamson Boulevard, Williamson Boulevard from SR 40 to LPGA Boulevard and LPGA Boulevard from Williamson Boulevard to the proposed Tymber Creek Road Extension during the service life of the roadway improvement.

This report entails the development of base year 2011 AADT, Peak Hour Volumes, intersection and roadway Level of Service (LOS) for the base year 2011. This report involves the development of the design traffic characteristics including Standard K Factor, Design Hour Directional Demand (D_{30}), and percentage of trucks for both the design hour and daily demand (T_{peak}, T_{daily}) for use in the operational analysis of future conditions.

This report also involves the development of AADT, Directional Design Hour Volumes (DDHV), intersection and roadway Level of Service (LOS) for the opening year 2015, mid-design year 2025 and design year 2035 for the No Build and Build Alternatives. In addition to the AADT and DDHV volumes, intersection and roadway levels of service (LOS), and signal warrant analysis for unsignalized intersections for the study corridors were evaluated for the same future time periods.

1.4 Methodology

The methodology used for the development of this report and as illustrated in **Figure 2** includes:

- Collect available traffic count information from the FDOT's and County's historical traffic count records and from actual field count data. Review previous studies, traffic characteristics and other relevant data for the study corridors.
- Use the collected year 2011 peak hour turning movement counts for performing intersection and roadway segments LOS analyses for the project corridors.
- Evaluate the existing traffic volumes based on capacity to determine if the roadway is currently operating under constrained or unconstrained conditions.
- Based on the data collection process, estimate the travel roadway characteristics of the corridor. These characteristics include Standard K Factor, Directional Design Hour factor (D_{30}), and Daily Truck factor (T_{daily}).
- Perform a sub-area travel demand model validation of the study area for the base year 2010 traffic conditions and perform model refinements for the year 2035.
- Develop future year traffic volume forecasts for the corridor based on trends analysis of historical traffic counts, and/or travel demand models (FSUTMS), previous studies, and BEBR population projections.
- Develop the design hour turning movement volumes for the opening year and design year for the No Build and Build alternatives by applying the design characteristics including Standard K and D_{30} to the future year AADTs using TURNS5 program.
- Provide LOS analysis for the intersections and roadway segments along the applicable study corridors for the No Build and Build alternatives for the opening, mid-design and design year design hour conditions.
- Based on the level of service analysis, provide recommendations for improvements to accommodate the anticipated travel demand.

Figure 2: SR 40 Design Traffic Technical Memorandum Methodology

2. Project Information

2.1 Project Location, Limits and Field Inventory

2.1.1 SR 40 from Breakaway Trail to Williamson Boulevard

Within the project limits, SR 40 is an east-west, four-lane urban other principal arterial serving both local and regional traffic. SR 40 from Cone Road to I-95 Ramps is an Emerging SIS facility. The existing roadway characteristics that are relevant to this study are shown in **Table 1**. Straight Line Diagrams (SLDs) and the relevant Roadway Characteristics Inventory data (RCI) were only available for SR 40 corridor. The SR 40 SLDs and RCI data are provided in **Appendix B** of this report.

Table 1: Roadway Characteristics of SR 40 Corridor

Characteristic	Observation
Limits	Cone Road (MP 20.186) - Williamson Boulevard (MP 26.504)
Location	MP 20.186 - MP 21.347: Volusia County MP 21.347 - MP 26.504: Inside Ormond Beach, Volusia County
FDOT Roadway ID	79100-000
Roadway Maintaining Agency	FDOT
Functional Classification	Four lane divided Urban Other Principal Arterial
Speed Limits	Cone Road - West of Breakaway Trail: 60 MPH West of Breakaway Trail - West of Interchange Boulevard: 50 MPH West of Interchange Boulevard - Williamson Boulevard: 45 MPH
Roadway Designation & Adopted LOS	SR 40 from Cone Road to East of I-95 (MP 26.399) is an Emerging SIS Facility. Since SR 40 from MP 24.523 to MP 26.399 is an Emerging SIS facility, the adopted LOS is "C". The section from MP 26.399 to MP 26.504, a length of approximately 500 feet has an adopted LOS "D". Volusia County & City of Ormond Beach also has the same LOS standard on SR 40 as the FDOT.
Signalized Intersections from West to East	1) Breakaway Trail (MP 24.523) 2) Tymber Creek Road (26.022) 3) Booth Road (26.149) 4) I-95 SB Ramps (26.286) 5) I-95 NB Ramps (26.351) 6) Williamson Boulevard (26.504)
Land Uses	Predominantly vacant lands and residential between Cone Road and Booth Road. Clustered private business establishments in the vicinity of the I-95 Diamond Interchange.
Pavement Width	12 foot wide travel lanes
Sidewalks	1) West of Breakaway Trail to Tymber Creek Road on the northside of SR 40 2) From Williamson Boulevard to just west of I-95 SB Ramps.
Parallel Parking	None
Bike Lanes	No designated bike lanes

2.1.2 Williamson Boulevard from SR 40 to LPGA Boulevard

Within the project limits, Williamson Boulevard (C.R. 4009) is a north-south, urban other principal arterial. The existing roadway characteristics is shown in **Table 2**. The field visits revealed that the signalized intersection of Williamson Boulevard and LPGA Boulevard was recently improved with turn lane additions.

Table 2: Roadway Characteristics of Williamson Boulevard Corridor

Characteristic	Observation
Limits	SR 40 - LPGA Boulevard
Location	Ormond Beach and Daytona Beach, Volusia County
Roadway ID	7924-0500
Roadway Maintaining Agency	County
Functional Classification	Four lane divided Urban Other Principal Arterial from SR 40 till Hand Avenue Two-lane undivided Urban Other Principal Arterial from Hand Avenue to LPGA Boulevard
Speed Limits	SR 40 to Hand Avenue: 40 MPH Hand Avenue to LPGA Boulevard: 50 MPH
Roadway Designation & Adopted LOS	Williamson Boulevard within the study limits is a County Facility. Volusia County has an adopted LOS "E" for this facility.
Signalized Intersections from North to South	1) SR 40 2) Ormond Towne Square 3) Hand Avenue 4) Florida Hospital Ormond Memorial Entrance 5) LPGA Boulevard
Land Uses	Predominantly commercial between SR 40 and Hand Avenue. Predominantly vacant lands between Hand Avenue and LPGA Boulevard, with the exception of Florida Hospital located south of Hand Avenue.
Pavement Width	12 foot wide travel lanes
Sidewalks	Between SR 40 and South of Hand Avenue with a few gaps
Parallel Parking	None
Bike Lanes	None

2.1.3 LPGA Boulevard from Williamson Boulevard to Tomoka Farms Road

Within the project limits, LPGA Boulevard (C.R. 4019) is an east-west, four-lane divided urban minor arterial. The existing roadway characteristics is shown in **Table 3**.

Table 3: Roadway Characteristics of LPGA Boulevard Corridor

Characteristic	Observation
Limits	Williamson Boulevard - Tomoka Farms Road
Location	Daytona Beach, Volusia County
Roadway ID	7900-0078
Roadway Maintaining Agency	County
Functional Classification	Four lane divided Urban Minor Arterial
Speed Limits	45 MPH
Roadway Designation & Adopted LOS	LPGA Boulevard within the study limits is a County Facility. Volusia County has an adopted LOS "E" for this facility.
Signalized Intersections from West to East	1) I-95 SB Ramps 2) I-95 NB Ramps 3) Williamson Boulevard
Land Uses	Predominantly commercial within the project limits.
Pavement Width	12 foot wide travel lanes
Sidewalks	None
Parallel Parking	None
Bike Lanes	None

2.2 Existing Transit Service

VOTRAN is the Volusia County's Public Transit System. VOTRAN provides transportation to all urban areas of the county with a fleet of 55 revenue-producing fixed route buses, 4 trackless trolleys and 44 paratransit vehicles. Additional service is provided through contracts. VOTRAN has regular bus route #'s 6, 18, and 19, which mainly use Williamson Boulevard within the project limits between SR 40 and LPGA Boulevard. SR 40 and LPGA Boulevard within the project limits do not have any existing transit routes.

- **Bus route #6** uses portion of Williamson Boulevard between SR 40 and Hand Avenue with stops at Wal-Mart Super Center, Ormond Towne Square, San Marco Drive and Hand Avenue. This route typically has 60-minute headways during morning and afternoon peak periods.

- **Bus route #18** uses Williamson Boulevard between SR 40 and LPGA Boulevard with stops at Wal-Mart Super Center, Ormond Towne Square, Hand Avenue, Florida Hospital Ormond Memorial, Strickland Range Road, Advanced Technology College and LPGA Boulevard. This route typically has 60-minute headways during morning and afternoon peak periods.
- **Bus route #19** uses Williamson Boulevard between SR 40 and LPGA Boulevard with stops at Wal-Mart Super Center, Ormond Towne Square, San Marco Drive, Hand Avenue, Florida Hospital Ormond Memorial, Strickland Range Road, Advanced Technology College and LPGA Boulevard. This route typically has 60-minute headways during morning and afternoon peak periods.

The bus schedules and route maps obtained from the VOTRAN website are provided in **Appendix C** of this report.

3. Existing Conditions

This section describes the analysis of traffic flow operating conditions for the base year 2011 at the major intersections and roadway segments along the project corridors.

In analyzing the year 2011 operating conditions of the intersections and roadway segments, traffic counts collected from the field during January, February and October of 2011 were used along with the existing roadway and intersection geometry. The actual turning movement volumes collected in the field were balanced, when required and used for the year 2011 level of service (LOS) analysis for the intersections and roadway segments.

The year 2011 conditions intersection LOS analysis was performed using the actual signal timing data provided by the county. The existing conditions intersection and roadway LOS analyses were performed using the Synchro Software (version 8.0). The following sub-sections describe the overall process.

3.1 Traffic Count Information

Figures 3-1 through 3-4 provide the location of traffic counts and type of traffic count data collected for the study. All existing traffic count data was collected during January, February and October of 2011. The data collected included:

- 48-Hour bi-directional volume counts (33 locations)
- 48-Hour classification counts (5 locations)
- 4-Hour intersection turning movement counts for a.m. and p.m. peak hours (15 intersections)

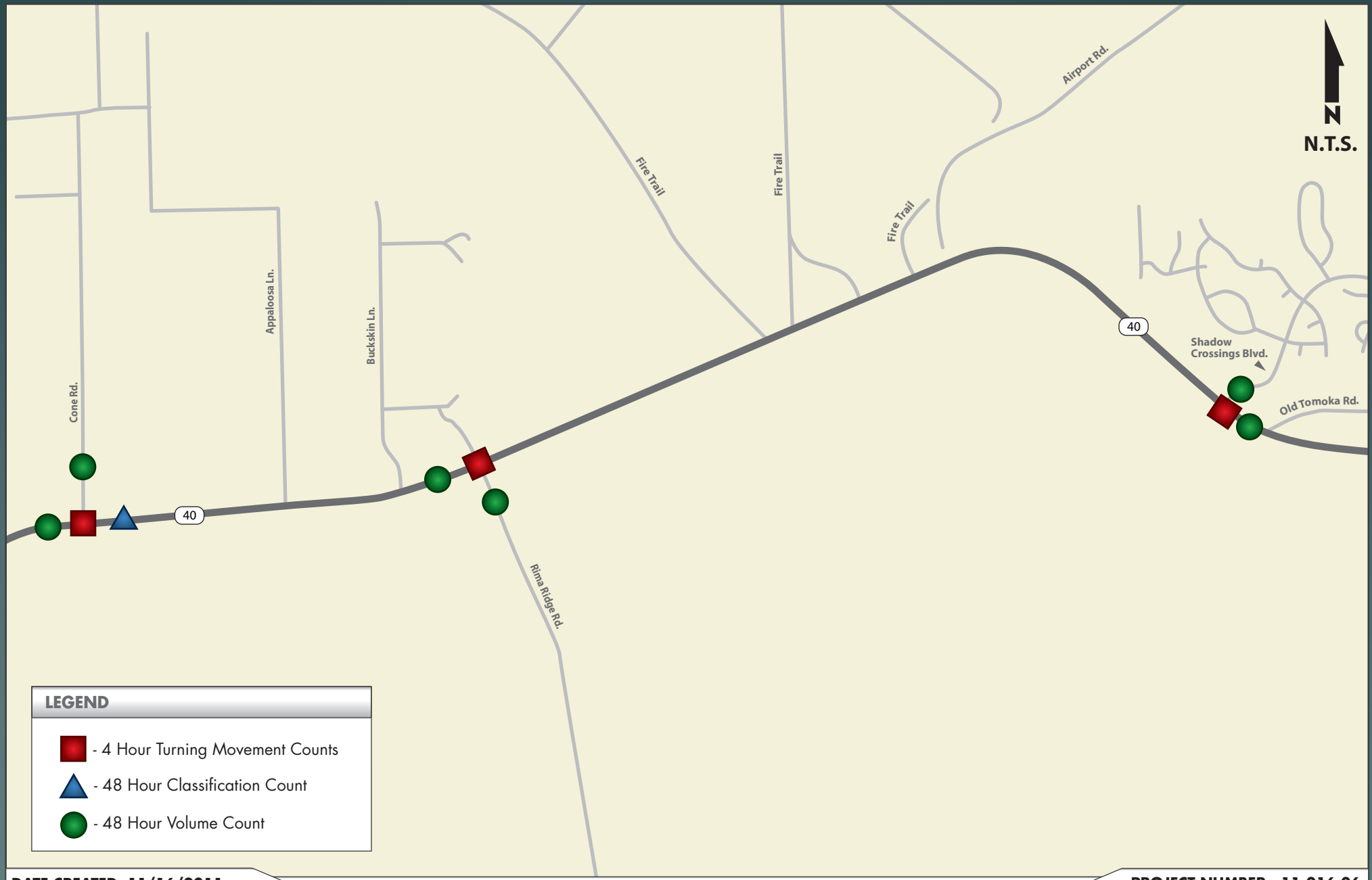
The weekday turning movement counts were collected for the intersections between the peak hours of 7:00-9:00 a.m. and 4:00-6:00 p.m. The 48-Hour bidirectional volume counts on Williamson Boulevard, north and south of LPGA Boulevard were not conducted in the field because of construction when the original SR 40 Study was conducted. Instead, for the purposes of this study, the 2010 Volusia County traffic counts were utilized for these locations.

The traffic count data (48-Hour volume and classification) collected were seasonally adjusted utilizing the FDOT axle and seasonal adjustment factors for Volusia County to provide 2011 annual average conditions.

As part of the traffic count program for this project, two locations along SR 40 were utilized in this study as vehicle classification counts. Vehicle composition for the classification count was broken into three primary vehicle types:

- Passenger Vehicles – Motorcycles, Cars, Vans, and Pickups;
- Medium Truck – Buses and 2 axle Single Unit Trucks;
- Heavy Trucks – (3 or 4 axles) Single Unit Trucks, 2 axle Tractors (with 1 or 2 axle Trailer), 3 axle Trailers (2 or 3 axle Trailers), and (5, 6 and 7 axle) Multi-trailers.

Based on these categories, percentages for overall trucks (medium and heavy) were determined for peak and daily traffic conditions. Copies of all traffic count data are provided in **Appendix D**. FDOT axle and seasonal adjustment factors for Volusia County are provided in **Appendix E**.



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Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 3-1
Traffic Count Locations By Type
Subsection 1

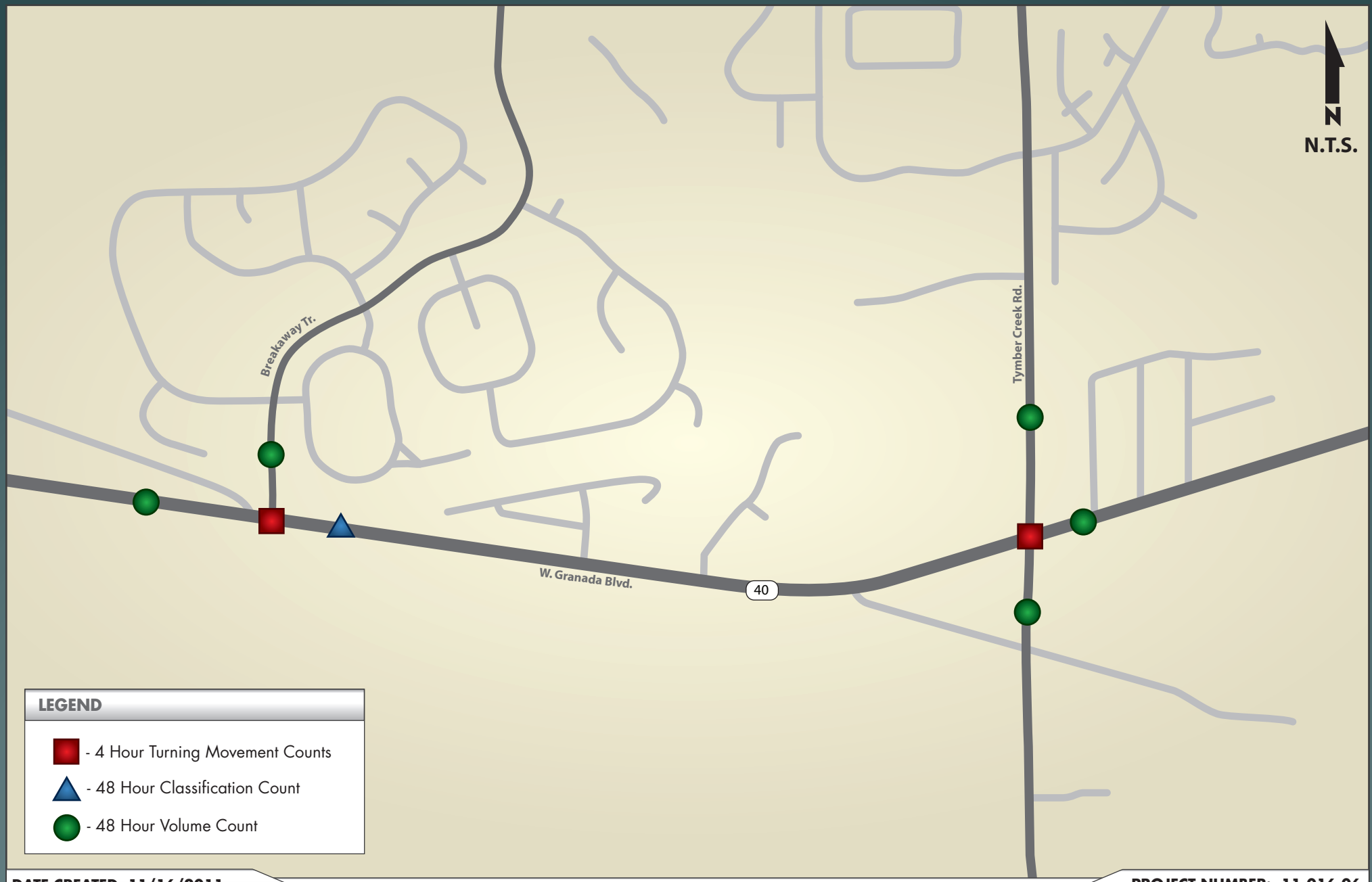

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FIGURE 3-2
Traffic Count Locations By Type
Subsection 2

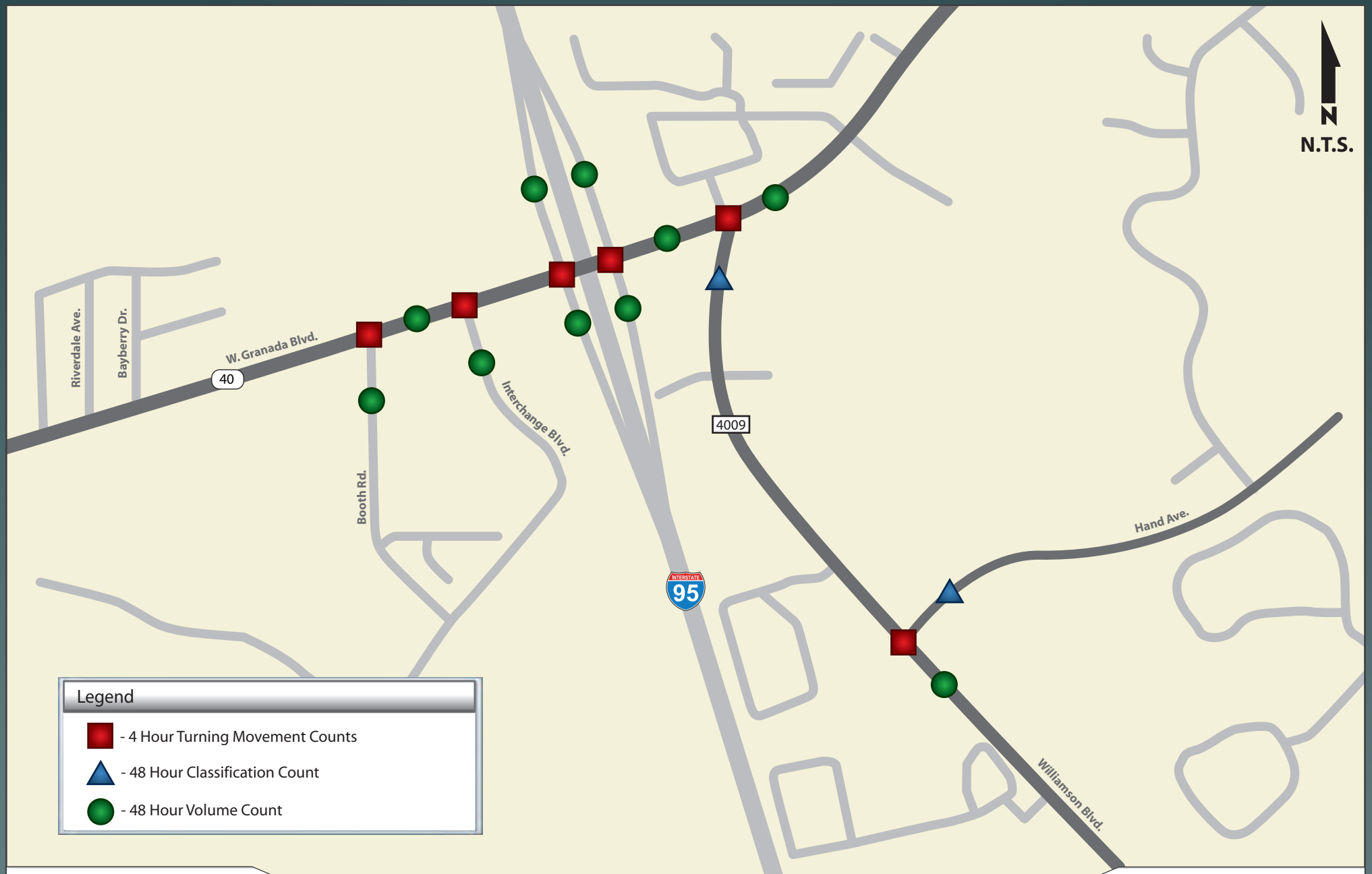

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FIGURE 3-3
Traffic Count Locations By Type
Subsection 3

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Design Traffic for SR 40 PD&E

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FIGURE 3-4
Traffic Count Locations By Type
Subsection 4

3.2 Existing Geometry

Figures 4-1 through 4-4 provide the year 2011 intersection geometry for all the intersections to be evaluated in this study. The year 2011 intersection geometry information was obtained and verified based on field visits and aerial photographs. The following intersections were evaluated as part of the existing conditions in this study.

3.2.1 SR 40 Corridor

- SR 40 @ Cone Road (unsignalized)
- SR 40 @ Shadow Crossing Boulevard (unsignalized)
- SR 40 @ Breakaway Trail (signalized)
- SR 40 @ Tymber Creek Road (signalized)
- SR 40 @ Booth Road (signalized)
- SR 40 @ Interchange Boulevard (unsignalized)
- SR 40 @ I-95 SB Ramps (signalized)
- SR 40 @ I-95 NB Ramps (signalized)
- SR 40 @ Williamson Boulevard (signalized)

It should be noted that the intersection of SR 40 and Rima Ridge Road was not evaluated due to the insignificant daily traffic volume (Average Daily Traffic - 50) on Rima Ridge Road. The morning and evening peak hour turning movement volumes revealed that only 2 vehicles were accessing Rima Ridge Road from/to SR 40. The Airport Road connection to SR 40 does not exist at the time when this study was prepared. However, Airport Road is considered in the future analysis starting from the opening year 2015.

3.2.2 Williamson Boulevard Corridor

- Williamson Boulevard @ Hand Avenue (signalized)
- Williamson Boulevard @ SR 40 (signalized)

3.2.3 LPGA Boulevard Corridor

- LPGA Boulevard @ Tomoka Farms Road (unsignalized)
- LPGA Boulevard @ I-95 SB Ramps (signalized)
- LPGA Boulevard @ I-95 NB Ramps (signalized)

The intersection geometry information was collected during the traffic count data collection phase. The existing geometry plays a vital role in assessing the intersection LOS. LOS is a qualitative measure of how efficient a roadway or intersection operates. LOS A represents the highest traffic flow quality, while LOS E represents traffic flow at capacity. LOS F represents forced flow congested conditions. LOS B, C and D represent a gradual degradation in traffic flow quality before reaching capacity.

The existing geometry will be considered as one of the factors in determining potential intersection improvements to accommodate the travel demand.

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FIGURE 4-1
Year 2011 Existing Geometry
Subsection 1

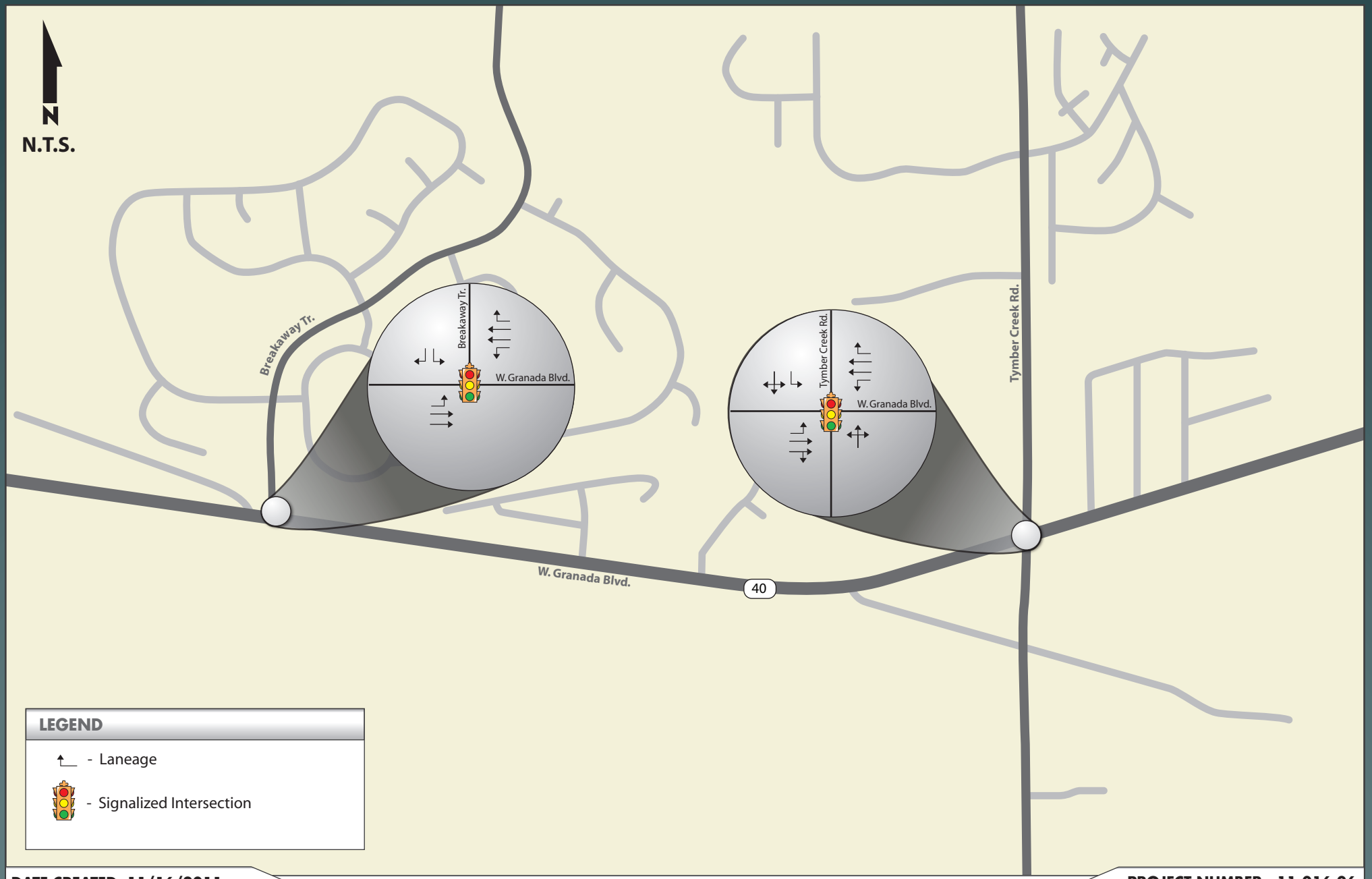

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FIGURE 4-2
Year 2011 Existing Geometry
Subsection 2

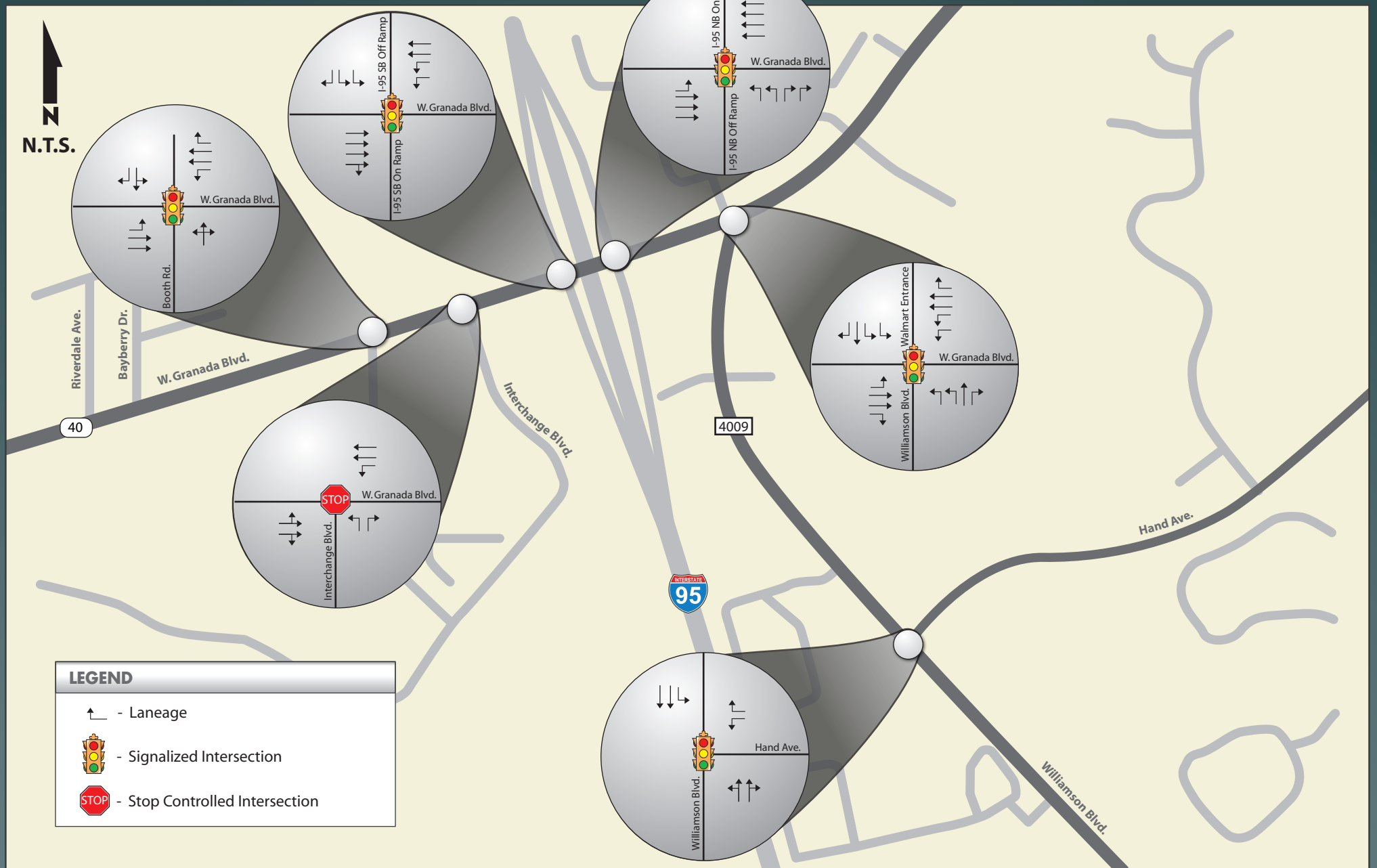

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FIGURE 4-3
Year 2011 Existing Geometry
Subsection 3

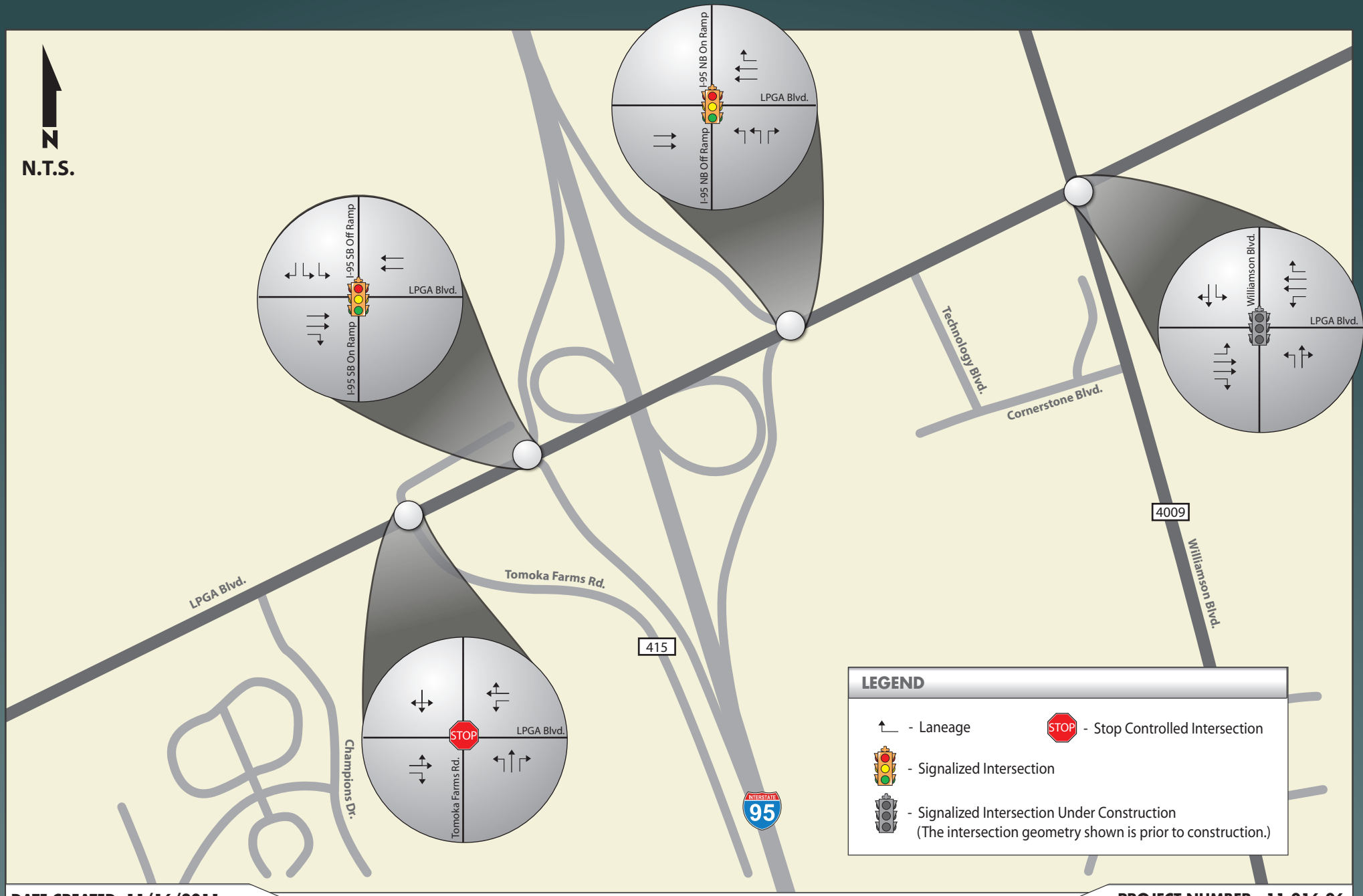

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FIGURE 4-4
Year 2011 Existing Geometry
Subsection 4

3.3 Existing Traffic Volumes

Traffic count information as collected was used to develop existing traffic characteristics for the project corridors and the intersecting side streets. The truck factor for the peak condition was used in the existing intersection analysis.

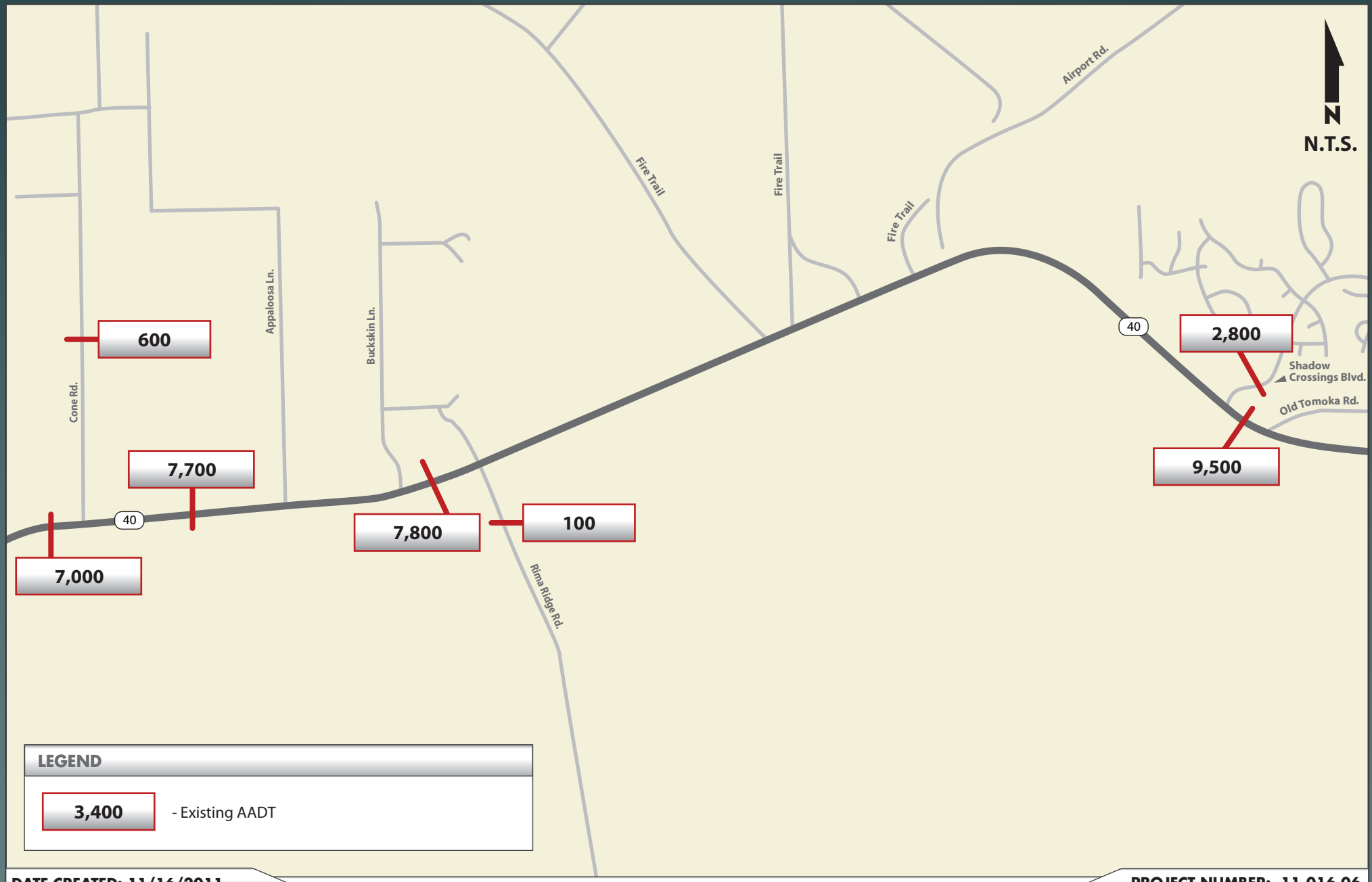
Based on the 48-Hour volume counts and 48-Hour classification counts, peak hour traffic flow (K measured) and, directional split (D measured) for the roadways in the study area were derived. The adjusted Annual Average Daily Traffic (AADT) volumes for the individual roadway segments are provided in **Table 4**. **Figures 5-1 through 5-4** provide the existing AADT's and the corresponding peak hour peak directional volumes for the project corridors and the side streets.

Table 4: Year 2011 Existing Traffic Volumes

Roadway / Segment	Date of Count	Type of Count	Measured Characteristics ADT	Peak Hr.	NB/EB	SB/WB	Peak Time	"K"	"D"	"TDaily"	Axle Adj.[2]	Seasonal Adj.[1]	Adjusted AADT[3]
Mainline Characteristics													
SR 40													
West of Cone Road	10/11/2011	48-Hour Volume	7,701	659	397	262	5:15-6:15 PM	8.6%	60.2%		0.92	0.99	7,000
East of Cone Road	10/11/2011	48-Hour Classification	7,820	688	257	420	5:15-6:15 PM	8.8%	61.0%	11.0%	1.00	0.99	7,700
West of Rima Ridge Road	10/11/2011	48-Hour Volume	8,524	738	290	448	5:15-6:15 PM	8.7%	60.7%		0.92	0.99	7,800
East of Shadow Crossings Boulevard	10/11/2011	48-Hour Volume	10,390	903	357	546	5:15-6:15 PM	8.7%	60.5%		0.92	0.99	9,500
West of Breakaway Trail	1/25/2011	48-Hour Volume	10,774	973	327	646	4:30-5:30 PM	9.0%	66.4%		0.92	0.97	9,600
East of Breakaway Trail	1/25/2011	48-Hour Classification	12,180	1,103	355	748	5:00-6:00 PM	9.1%	67.8%	10.3%	1.00	0.97	11,800
East of Tymber Creek Road	1/25/2011	48-Hour Volume	26,249	2,373	849	1524	5:00-6:00 PM	9.0%	64.2%		0.92	0.97	23,400
West of Interchange Boulevad	1/25/2011	48-Hour Volume	26,675	2,397	854	1543	5:00-6:00 PM	9.0%	64.4%		0.92	0.97	23,800
West of Williamson Boulevard	1/25/2011	48-Hour Volume	33,230	2,883	1130	1753	4:45-:5:45 PM	8.7%	60.8%		0.92	0.97	29,700
East of Williamson Boulevard	1/25/2011	48-Hour Volume	31,064	2,634	1291	1343	3:00-4:00 PM	8.5%	51.0%		0.92	0.97	27,700
Williamson Boulevard													
South of SR 40	2/15/2011	48-Hour Classification	19,004	1,594	994	600	4:45-5:45 PM	8.4%	62.4%	7.6%	1.00	0.92	17,500
South of Hand Avenue	1/25/2011	48-Hour Volume	14,474	1,292	746	546	3:30-4:30 PM	8.9%	57.7%		0.99	0.97	13,900
North of LPGA Boulevard[4]	4/12/2010	-	-	-	-	-	-				-	-	13,000
South of LPGA Boulevard[4]	4/12/2010	-	-	-	-	-	-				-	-	14,700
LPGA Boulevard													
West of Champions Drive	2/1/2011	48-Hour Classification	10,779	1,132	595	537	7:15-8:15 AM	10.5%	52.6%	5.2%	1.00	0.95	10,200
West of Tomoka Farms Road	2/1/2011	48-Hour Volume	11,374	1,207	647	560	7:15-8:15 AM	10.6%	53.6%		0.99	0.95	10,700
East of Tomoka Farms Road	2/1/2011	48-Hour Volume	14,549	1,407	672	735	8:15-9:15 AM	9.7%	52.2%		0.99	0.95	13,700
West of Williamson Boulevard	2/1/2011	48-Hour Volume	27,625	2,781	2066	715	7:30-8:30 AM	10.1%	74.3%		0.99	0.95	26,000
East of Williamson Boulevard	2/1/2011	48-Hour Volume	21,208	1,993	1222	771	7:30-8:30 AM	9.4%	61.3%		0.99	0.95	19,900
Side Street Characteristics													
Cone Road													
North of SR 40	10/11/2011	48-Hour Volume	612	68	42	26	5:00-6:00 PM	11.1%	61.8%		0.99	0.99	600
Rima Ridge Road													
South of SR 40	10/11/2011	48-Hour Volume	55	8	3	5	9:45-10:45 AM	14.5%	62.5%		0.99	0.99	100
Shadow Crossings Boulevard													
North of SR 40	10/11/2011	48-Hour Volume	2,836	306	189	117	5:15-6:15 PM	10.8%	61.8%		0.99	0.99	2,800
Breakaway Trail													
North of SR 40	1/25/2011	48-Hour Volume	3,576	336	256	80	5:15-6:15 PM	9.4%	76.2%		0.99	0.97	3,400
Tymber Creek Road													
North of SR 40	1/25/2011	48-Hour Volume	13,121	1,295	422	873	7:30-8:30 AM	9.9%	67.4%		0.99	0.97	12,600
South of SR 40	1/25/2011	48-Hour Volume	593	64	33	31	4:00-5:00 PM	10.8%	51.6%		0.99	0.97	600
Booth Road													
North of SR 40	2/15/2011	48-Hour Volume	1,229	225	4	221	8:45-9:45 AM	18.3%	98.2%		0.99	0.92	1,100
South of SR 40	2/15/2011	48-Hour Volume	876	99	50	49	4:45-5:45 PM	11.3%	50.5%		0.99	0.92	800
Interchange Boulevard													
South of SR 40	2/15/2011	48-Hour Volume	8,590	641	357	284	5:15-6:15 PM	7.5%	55.7%		0.99	0.92	7,800
I-95 & SR 40 Ramps													
SB On Ramp	1/25/2011	48-Hour Volume	9,810	1,099	0	1099	7:15:8:15 AM	11.2%	100.0%		0.92	0.97	8,800
SB Off Ramp	1/25/2011	48-Hour Volume	4,002	398	0	398	7:45-8:45 AM	9.9%	100.0%		0.92	0.97	3,600
NB On Ramp	1/25/2011	48-Hour Volume	4,216	454	454	0	4:45-5:45 PM	10.8%	100.0%		0.92	0.97	3,800
NB Off Ramp	1/25/2011	48-Hour Volume	9,777	906	906	0	4:45-5:45 PM	9.3%	100.0%		0.92	0.97	8,700
Hand Avenue													
East of Williamson Boulevard	1/25/2011	48-Hour Classification	8,290	777	400	377	3:30-4:30 PM	9.4%	51.5%	3.0%	1.00	0.97	8,000
Tomoka Farms Road													
South of LPGA Boulevard	2/15/2011	48-Hour Volume	4,167	368	165	203	12:30-1:30 PM	8.8%	55.2%		0.99	0.92	3,800
I-95 & LPGA Ramps													
SB On Ramp	2/1/2011	48-Hour Volume	635	74	0	74	5:00-6:00 PM	11.7%	100.0%		0.99	0.95	600
SB Off Ramp	2/1/2011	48-Hour Volume	7,457	1,150	0	1150	7:15-8:15 AM	15.4%	100.0%		0.99	0.95	7,000
SB On Loop Ramp	2/1/2011	48-Hour Volume	3,264	429	0	429	4:45-5:45 PM	13.1%	100.0%		0.99	0.95	3,100
NB On Ramp	2/1/2011	48-Hour Volume	4,766	619	619	0	4:45-5:45 PM	13.0%	100.0%		0.99	0.95	4,500
NB Off Ramp	2/1/2011	48-Hour Volume	5,091	704	704	0	7:45-8:45 AM	13.8%	100.0%		0.99	0.95	4,800
NB On Loop Ramp	2/1/2011	48-Hour Volume	1,823	198	198	0	5:00-6:00 PM	10.9%	100.0%		0.99	0.95	1,700

Notes:

1. Most Recent Seasonal Adjustment factors were obtained from FDOT 2009 and 2010 (for counts collected in October 2011) Traffic Count CDs.
2. Axle Adjustment factors were obtained from FDOT 2009 and 2010 (for counts collected in October 2011) Traffic Count CDs.
3. Measured ADT * Axle Adjustment * Seasonal Adjustment = Adjusted AADT
4. Year 2010 Volusia County Counts were used for these locations because of the ongoing construction during February 2011.



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Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 5-1
Year 2011 Existing AADT - Subsection 1

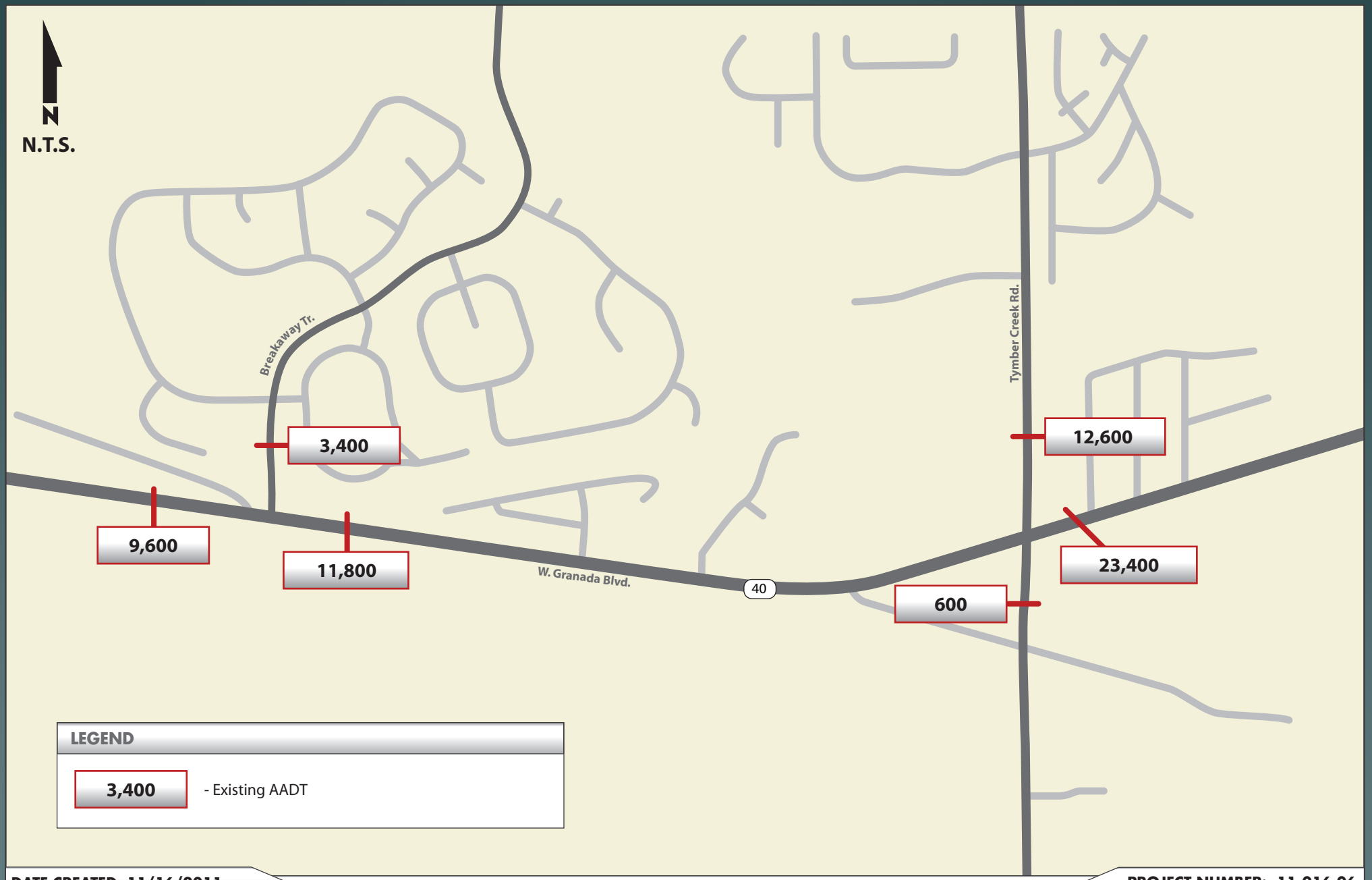

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FIGURE 5-2
Year 2011 Existing AADT - Subsection 2

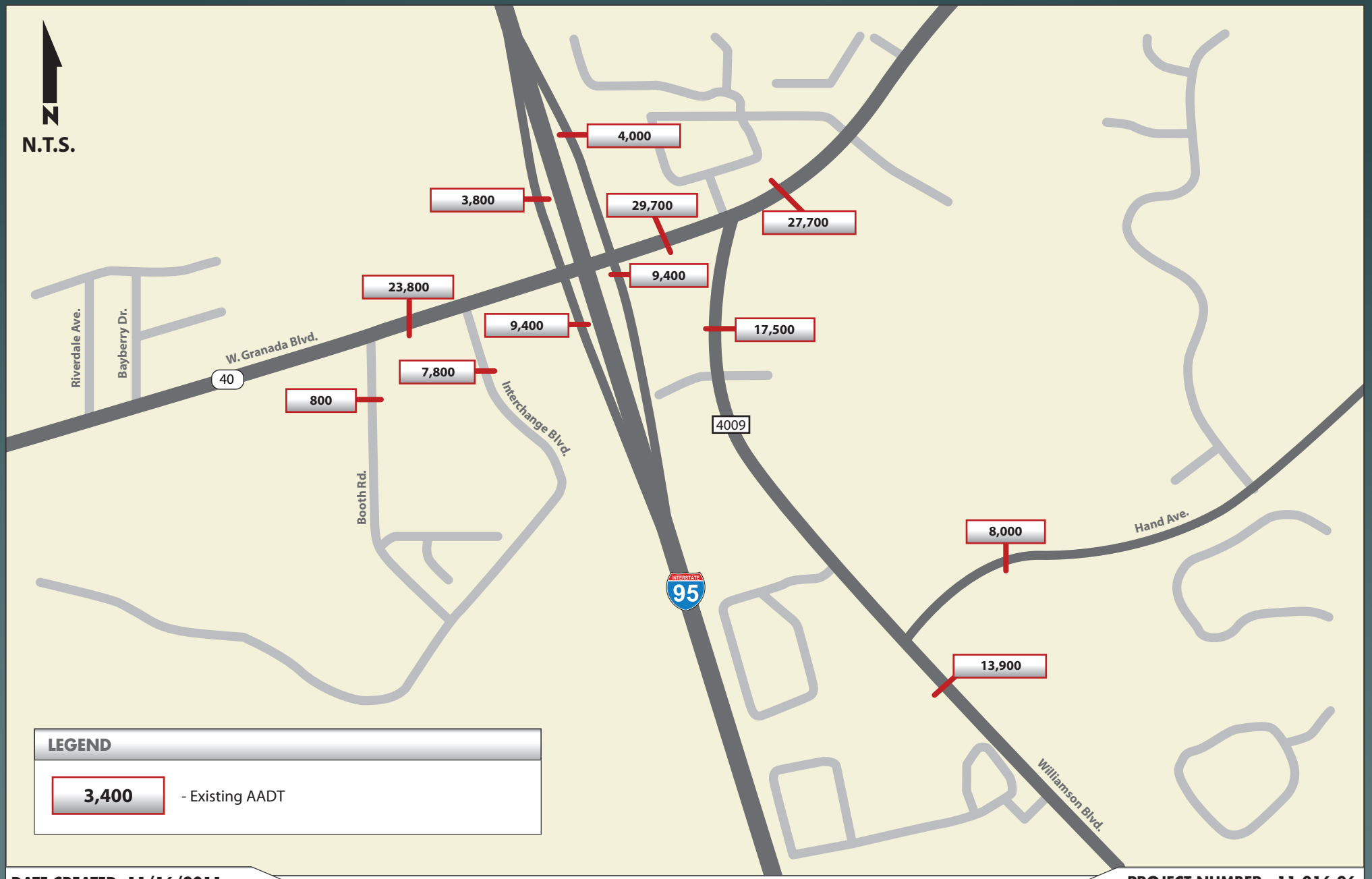

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FIGURE 5-3
Year 2011 Existing AADT - Subsection 3

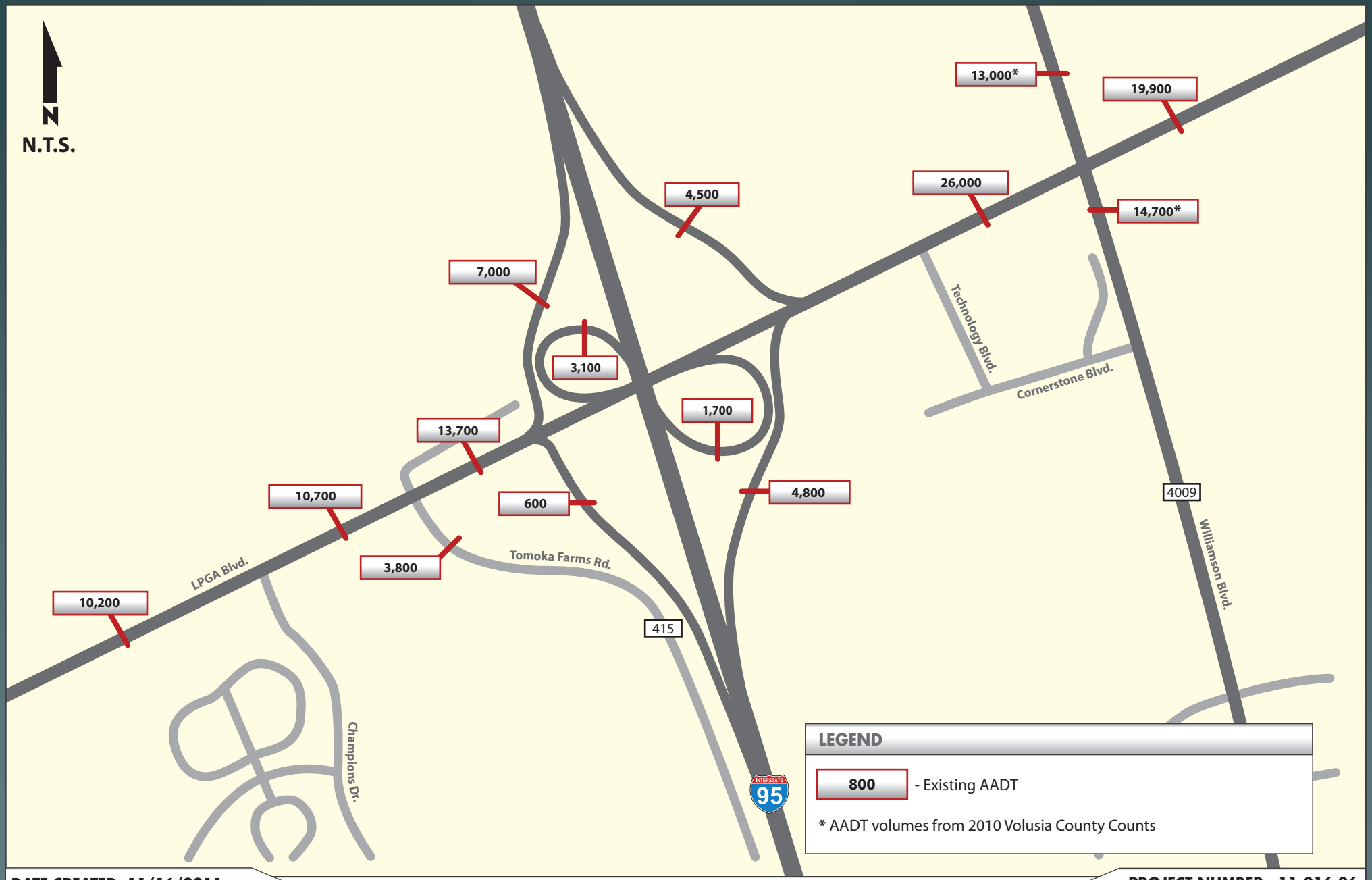

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FIGURE 5-4
Year 2011 Existing AADT - Subsection 4

3.4 Year 2011 Turning Movement Counts

Turning movement counts were obtained for the a.m. and p.m. peak hour conditions for the above mentioned intersections. The actual (original) year 2011 a.m., and p.m. peak hour turning movement volumes collected at the study intersections are shown in **Appendix D**. For the purposes of this study, the original year 2011 a.m., and p.m. peak hour turning movement volumes shown in Appendix D were assessed for reasonableness and then balanced for capacity analysis. The balanced year 2011 a.m., and p.m. peak hour turning movement volumes for the study corridor are shown in **Figures 6-1 through 6-4 and Figures 7-1 through 7-4**, respectively. The a.m. and p.m. turning movement counts were collected at the intersection of LPGA Boulevard and Williamson Boulevard even though the intersection was under construction, since all the of movements were still open for traffic.

3.5 Year 2011 Automobile LOS Analysis

Automobile levels of service for the study corridors were determined using HCS+ Multilane Analysis software and Synchro software version 8.0. Specific analysis techniques utilized in the study include the signalized, unsignalized intersections and arterial analyses. The outputs from Synchro were presented as results for the intersection LOS analysis. Roadway LOS from the HCS+ output reports were reported for the uninterrupted portion on SR 40 between Cone Road and Breakaway Trail. The average speeds from Synchro 8 arterial reports in conjunction with Exhibit 15-2 of Highway Capacity Manual 2000 were used to calculate the LOS for the remaining roadway segments.

According to Exhibit 16-2 (page 16-2) of Highway Capacity Manual (HCM 2000), an average control delay per vehicle from 55 seconds up to 80 seconds is considered LOS E condition and beyond 80 seconds is considered LOS F condition at a signalized intersection.

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FIGURE 6-1
Year 2011 AM Peak Hour Turning Movement Counts - Subsection 1

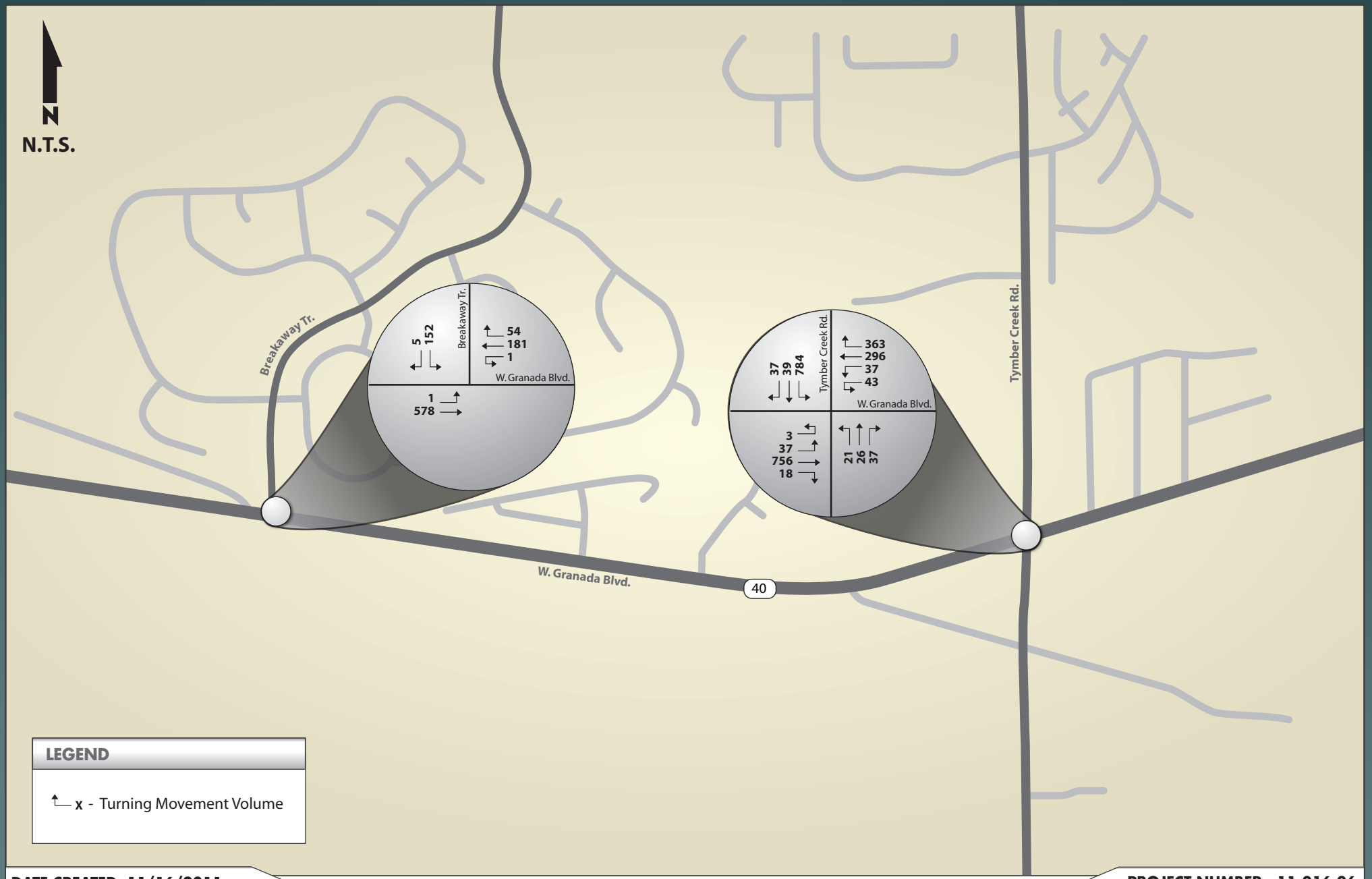

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FIGURE 6-2
Year 2011 AM Peak Hour Turning Movement Counts - Subsection 2

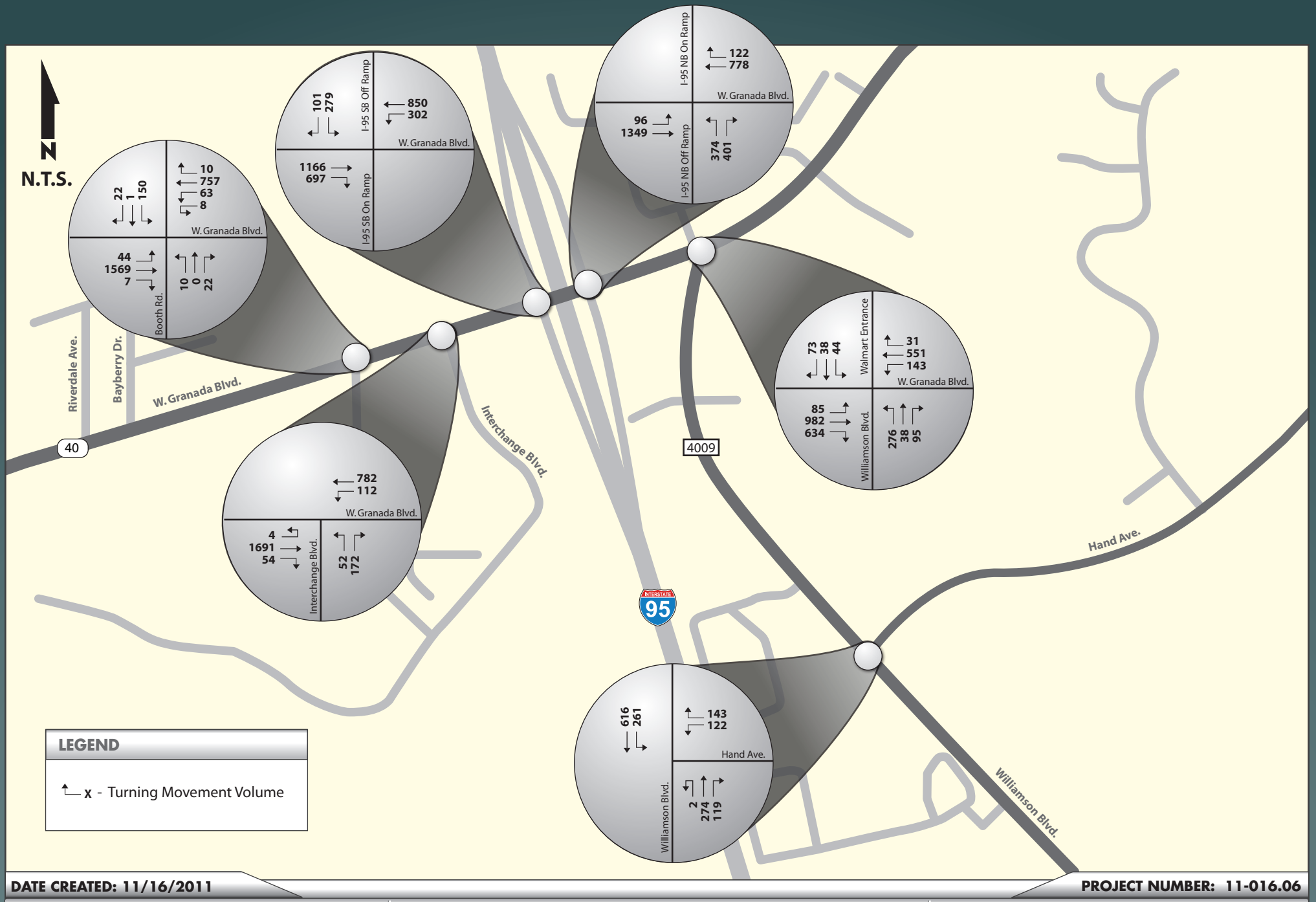

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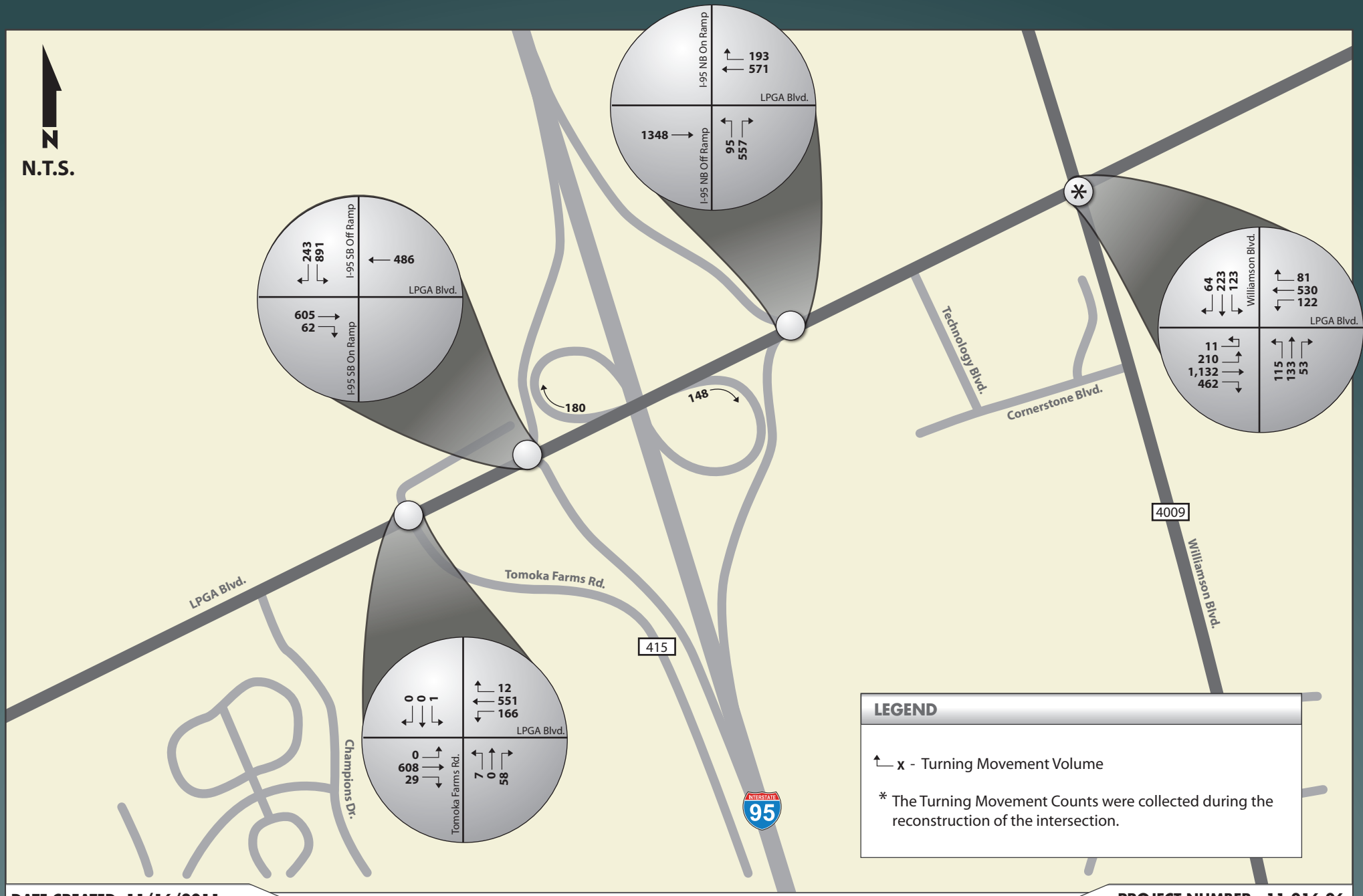
FIGURE 6-3
Year 2011 AM Peak Hour Turning Movement Counts - Subsection 3



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Financial Project ID: 428947-1-22-01

FIGURE 6-4
Year 2011 AM Peak Hour Turning Movement Counts - Subsection 4

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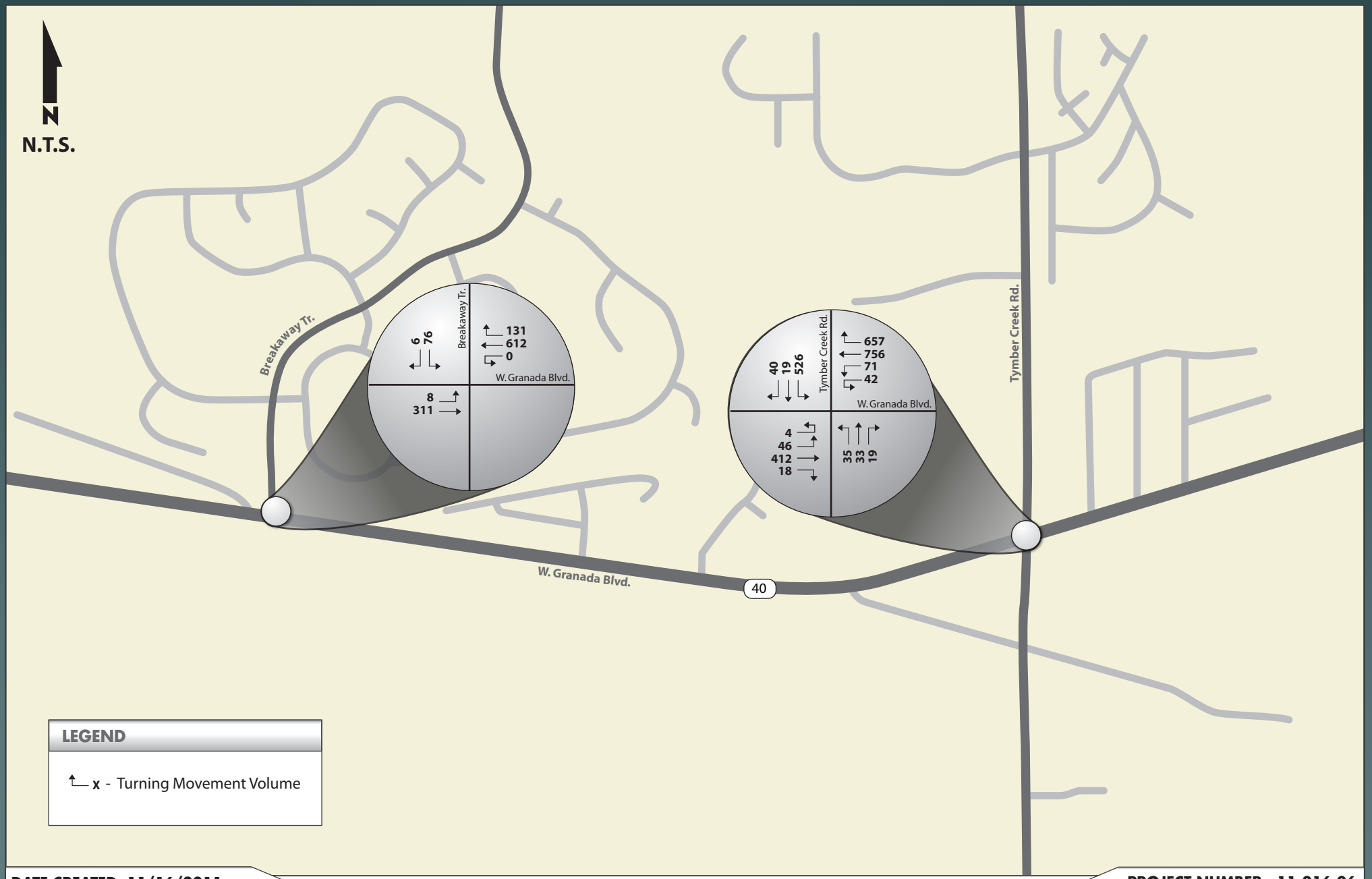
Financial Project ID: 428947-1-22-01

FIGURE 7-1
Year 2011 PM Peak Hour Turning Movement Counts - Subsection 1



DATE CREATED: 11/16/2011

PROJECT NUMBER: 11-016.06

Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 7-2
Year 2011 PM Peak Hour Turning Movement Counts - Subsection 2

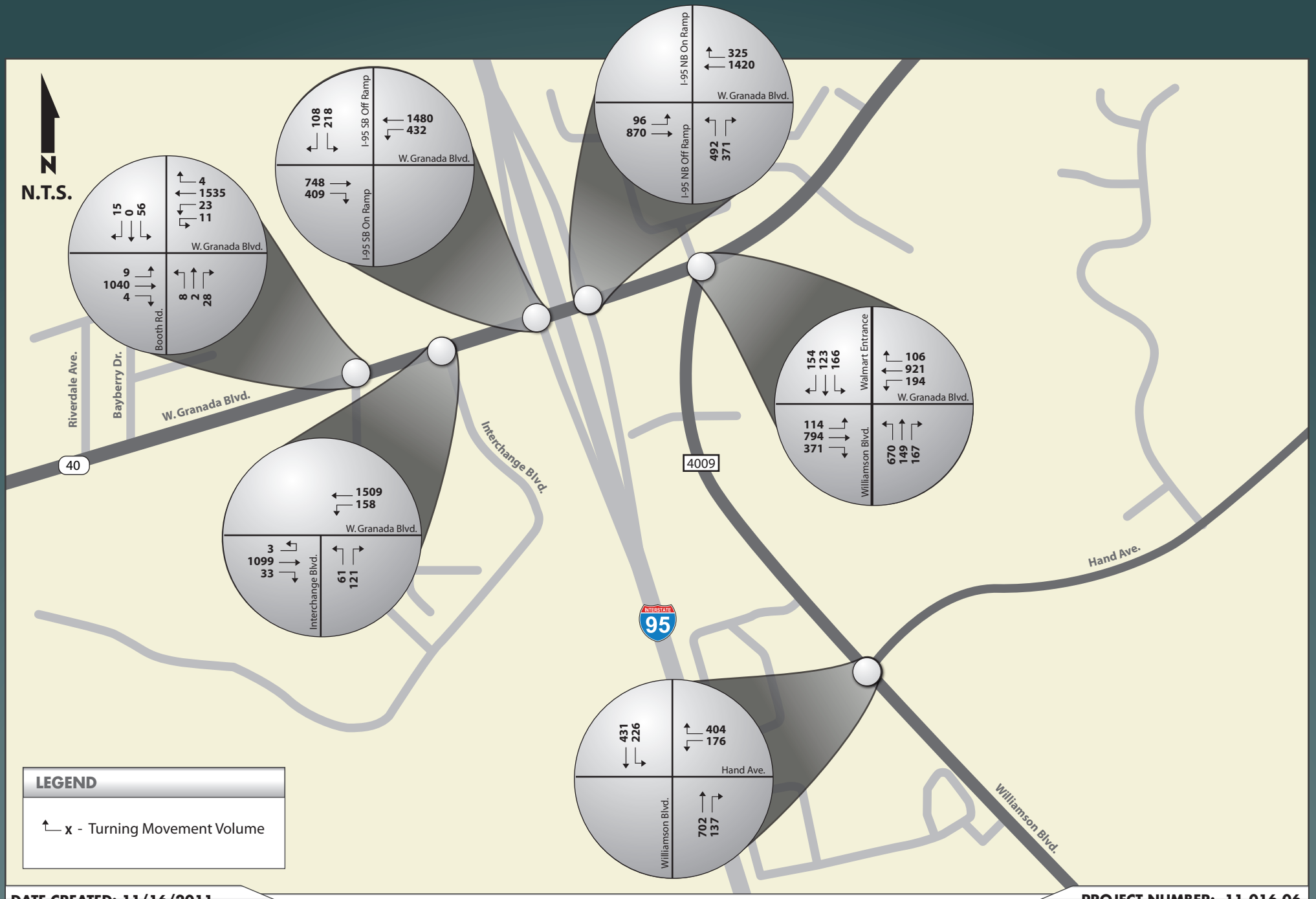


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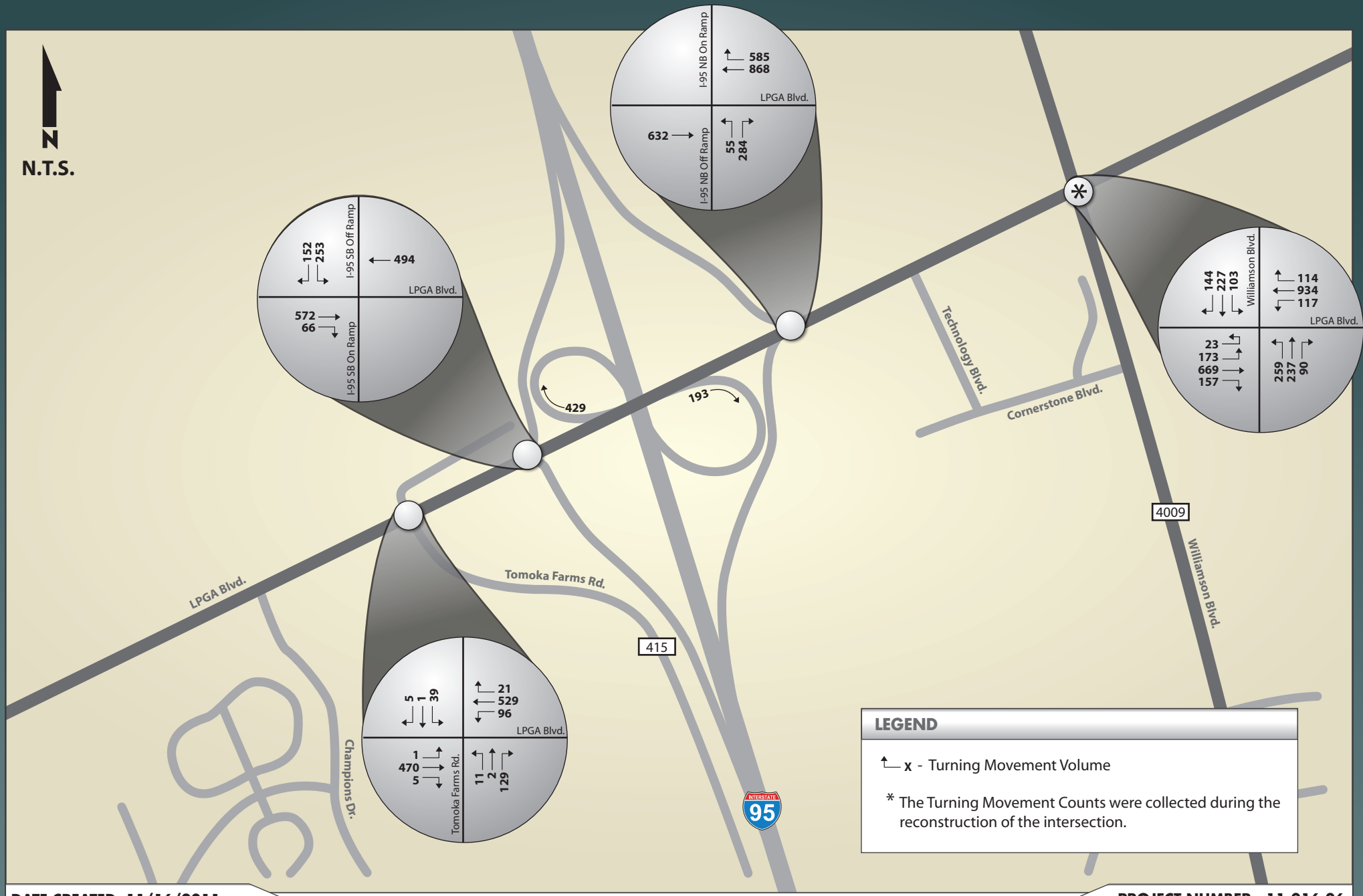
FIGURE 7-3
Year 2011 PM Peak Hour Turning Movement Counts - Subsection 3



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Design Traffic for SR 40 PD&E

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FIGURE 7-4
Year 2011 PM Peak Hour Turning Movement Counts - Subsection 4

3.5.1 Year 2011 Intersection LOS Analysis

The year 2011 a.m. and p.m. peak hour balanced turning movement volumes along with the year 2011 intersection geometry were used in the intersection LOS analysis. The actual signal timing data provided by the county was used in the intersection LOS analysis for signalized intersections. The four signals along SR 40 corridor from Booth Road to Williamson Boulevard operate under actuated-coordinated mode with 110 second and 130 second cycle lengths in the a.m. and p.m. peak periods, respectively. The signal phases for SR 40 (east-west approaches) at these four intersections are coordinated.

A summary of LOS analysis for the study intersections is included in **Table 5**.

Table 5: Base Year 2011 Existing Intersection LOS Analysis Summary

Stuyd Intersection	Traffic Control	Adopted LOS	AM Peak Hour		PM Peak Hour	
			Delay (sec/vehicle)	LOS	Delay (sec/vehicle)	LOS
SR 40 @						
Cone Road	Stop	C	7.5/10.3	A/B	8.2/11.0	A/B
Shadow Crossing Boulevard	Stop	C	7.6/11.6	A/B	8.5/11.9	A/B
Breakaway Trail	Signal	C	7.6	A	4.8	A
Tymber Creek Road	Signal	C	**42.5**	**D**	32.3	C
Booth Road	Signal	C	24.9	C	7.0	A
Interchange Boulevard	Stop	C	20.2/**62.6**	C/**F**	12.6/**43.9**	B/**E**
I-95 SB Ramps	Signal	C	17.8	B	18.4	B
I-95 NB Ramps	Signal	C	20.8	C	20.5	C
Williamson Boulevard	Signal	D	23.6	C	39.4	D
Williamson Boulevard @						
Hand Avenue	Signal	E	8.5	A	14.0	B
LPGA Boulevard	Signal	E	30.3	C	41.5	D
LPGA Boulevard @						
Tomoka Farms Road	Stop	E	10.1/**94.3**	A/**F**	8.9/**142.5**	A/**F**
I-95 SB Ramps	Signal	E	19.0	B	9.8	A
I-95 NB Ramps	Signal	E	5.8	A	4.5	A

Notes:

1. Synchro based outputs are presented in this table for both the signalized and unsignalized intersections
2. Overall intersection delay and LOS results are reported for signalized intersections
3. In case of unsignalized intersections, major street/minor street worst case results (delay and LOS) are reported.
4. Result shown in red color exceeds the adopted LOS standard

As shown in Table 5, during the year 2011 a.m. and p.m. peak hour conditions, all the signalized intersections along the project corridors were found to operate at or above the adopted LOS standard with the exception of the signalized intersection of SR 40 and Tymber Creek Road operating at LOS D during the a.m. peak hour.

During the base year 2011 a.m. and p.m. peak hour conditions, the LOS at the unsignalized intersection of SR 40 and Interchange Boulevard was found to exceed the adopted LOS "C" for the minor approach. The base year 2011 a.m. and p.m. peak hour LOS analysis also indicated that the minor approach LOS exceeds the adopted LOS "E" at the intersection of LPGA Boulevard and Tomoka Farms Road.

The base year 2011 a.m. and p.m. peak hour Synchro intersection analysis output along with the signal timing data are included in **Appendix F**.

3.5.2 Year 2011 Arterial LOS Analysis

The roadway segments level of service analysis was performed for the year 2011 a.m. and p.m. peak hour conditions using HCS+ Multilane Analysis software and Synchro software version 8.0. Roadway LOS from the HCS+ output reports were reported for the uninterrupted portion on SR 40 between Cone Road and Breakaway Trail. Synchro software computes the arterial level of service based on the arterial speed between signalized intersections.

The year 2011 a.m. and p.m. peak hour roadway link level of service are shown in Table 6. Based on the input from the PD&E Consultant, the roadway LOS is not reported for SR 40 between I-95 SB Ramps and Williamson Boulevard because of the closely spaced signals in this segment. The overall roadway LOS is reported for LPGA Boulevard between Tomoka Farms Road and Williamson Boulevard based on the same logic. The roadway LOS for Williamson Boulevard is reported from SR 40 to Hand Avenue and from Hand Avenue to LPGA Boulevard.

As shown in Table 6, all of the study roadway segments were found to operate within the adopted LOS standard during both the year 2011 a.m. and p.m. peak hour conditions. The year 2011 a.m. and p.m. peak hour arterial analysis outputs are included in **Appendix G**. Exhibit 15-2 from the HCM 2010 is also included in **Appendix G.**

Table 6: Base Year 2011 Existing Arterial LOS Analysis Summary

Roadway Segment	Roadway Class	Adopted LOS	AM Peak Hour		PM Peak Hour	
			EB/NB	WB/SB	EB/NB	WB/SB
SR 40 Corridor						
Cone Road to Breakaway Trail	1	C	A	A	A	A
Breakaway Trail to Tymber Creek Road	1	C	C	A	B	A
Tymber Creek Road to I-95 SB Ramps	2	C	C	C	B	C
Williamson Boulevard Corridor						
LPGA Boulevard to Hand Avenue	1	E	A	B	A	C
Hand Avenue to SR 40	2	E	C	A	C	A
LPGA Boulevard Corridor						
Tomoka Farms Road to Williamson Boulevard	2	E	C	C	C	C

Notes:

1. Arterial LOS is based on HCS+ Multi-lane Analysis for SR 40 between Cone Road & Breakaway Trail.

2. Arterial LOS is based on Synchro arterial speed and exhibit 15-2 of HCM 2000 for the remaining study segments.

3.6 Multimodal LOS Analysis

The levels of service for the other modes of travel (pedestrian, bicycle and bus) were determined using the FDOT's latest ARTPLAN software package. ARTPLAN, which was specifically developed for arterial planning and preliminary engineering applications, is multimodal in structure. The methodology used in the ARTPLAN and as specified in the FDOT Quality/Level of Service (Q/LOS) Handbook links and simultaneously calculates LOS for automobiles, pedestrians, bicycles and buses. The multimodal methodology links the presence of bicycle lanes and sidewalks with the motorized vehicles volume and speed in determining the bicycle and pedestrian LOS. As noted in the FDOT Q/LOS Handbook, the bus LOS is primarily determined by bus frequency, but is also affected by pedestrian LOS.

The levels of service for the pedestrian, bicycle and bus modes were determined when facilities to facilitate such modes exist on the study roadway segments. The lack of pedestrian, bicycle and bus facilities automatically translate to LOS condition "E/F" according to the FDOT Q/LOS Handbook. The reader is encouraged to refer to **Page 15**, **Figure 1-2** for more information on the examples of LOS by mode of travel.

The following **Table 7** shows the study roadway corridors for which the pedestrian, bicycle and bus LOS analyses were performed. For the multi-modal analysis purposes, shoulders were considered as bike facilities. **Table 8** illustrates the pedestrian and bus LOS analysis results for the applicable study corridors. As shown in **Table 8**, segments on SR 40 and Williamson Boulevard, where sidewalks are present, operate at pedestrian LOS D or better . Bike LOS is "C" on SR 40 and Williamson Boulevard segments, where shoulders exist. Bus LOS is "D" on Williamson Boulevard between SR 40 and Hand Avenue during the morning and afternoon peak hours. LOS D can be assumed as not having adverse LOS conditions.

The study segments, that does not have either the pedestrian, bike or bus facilities, reported LOS E or worse conditions. The multimodal LOS results are provided in **Appendix H** of this report.

Table 7: List of Study Corridors for Multimodal LOS Analysis

Roadway Segment	Pedestrian LOS	Bicycle LOS	Bus LOS
SR 40 Corridor			
Breakaway Trail to Tymber Creek Road	✓	✓	X
Tymber Creek Road to Booth Road	X	✓	X
Booth Road to I-95 SB Ramps	X	✓	X
I-95 SB Ramps to I-95 NB Ramps	✓	X	X
I-95 NB Ramps to Williamson Boulevard	✓	X	X
Williamson Boulevard Corridor			
LPGA Boulevard to Hand Avenue	X	X	✓
Hand Avenue to SR 40	✓	✓	✓
LPGA Boulevard Corridor			
Tomoka Farms Road to I-95 SB Ramps	X	X	X
I-95 SB Ramps to I-95 NB Ramps	X	X	X
I-95 NB Ramps to Williamson Boulevard	X	X	X

Notes:
1. LOSPLAN Multimodal Analysis is applicable between signalized intersections only.
2. Sidewalks are not present on SR 40 between I-95 SB Ramps and Tymber Creek Road
2. Bike lanes/Shoulders are not present on SR 40 between Breakaway Trail and I-95 SB Ramps
3. Bus Service is not present on SR 40 between Breakaway Trail and Williamson Boulevard
4. Sidewalks are not present on Williamson Boulevard between Hand Avenue and LPGA Boulevard
5. Bike lanes/Shoulders are not present on Williamson Boulevard between Hand and LPGA Boulevard.
6. Sidewalks, bike lanes and bus service are not present on LPGA Boulevard between Williamson Boulevard and Tomoka Farms Road

Table 8: Pedestrian and Bus LOS Analysis Results

Roadway Segment	Peak Directional Pedestrian LOS		Peak Directional Bike LOS		Peak Directional Bus LOS	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
SR 40 Corridor	**EB**	**WB**				
Breakaway Trail to Tymber Creek Road	C	C	C	C	-	-
Tymber Creek Road to Booth Road	E	E	C	C	-	-
Booth Road to I-95 SB Ramps	F	E	C	C	-	-
I-95 SB Ramps to I-95 NB Ramps	D	D	-	-	-	-
I-95 NB Ramps to Williamson Boulevard	C	D	-	-	-	-
Williamson Boulevard Corridor	**SB**	**NB**	**SB**	**NB**	**SB**	**NB**
Hand Ave to SR 40	C	D	C	C	D	D

Notes:
1. Pedestrian & Bus LOS analysis results is based on the latest (12/12/2010) version of the FDOT's ARTPLAN Software.
2. There are no bike lanes/paved shoulders between I-95 SB Ramps and Williamson Boulevard on SR 40.
2. Bus service is not present for the SR 40 corridor between I-95 SB Ramps and Williamson Boulevard.

4. Development of Design Characteristics

The design traffic characteristics established in this section were used in developing design hour volumes (DHV's) for the intersections and directional design hour volumes (DDHV's) for the roadway segments for the future conditions. These characteristics are determined based on the procedures outlined in the FDOT's Design Traffic Handbook, dated October 2002.

4.1 Standard K Factor

Based on the recent direction from the FDOT District Office, a Standard K Factor of 9.0% for urban areas was used for all of the major study corridors and side streets.

4.2 D_{30} Factor

The D_{30} factor represents the directional factor occurring in the traffic flow during the 30th highest hour. In determining this factor for SR 40, Williamson Boulevard, LPGA Boulevard and the side streets that intersection these main roadway corridors, state-wide and national guidelines were compared to the field collected project traffic counts and traffic information contained in the Florida Traffic Information (FTI) CD.

The measured D for the study area roadways are shown in **Table 4.** The average of the measured D factors for SR 40 corridor within the study limits is 61.7%. The average of the estimated D_{30} factors for Williamson Boulevard corridor is 60.0%. The average of the measured D factors for LPGA Boulevard corridor is 52.7%. The measured D factors for the side streets are well within the FDOT recommended range of D_{30} values, with the exception of Breakaway Trail that had a measured D factor of 76.2%. This is expected as Breakaway Trail mainly serves residential communities that tend to have a very directional traffic during the peak hours.

Table 9 illustrates the historical D_{30} factors from two sites (790523 & 790499) on SR 40, three sites (797087, 797088 & 797089) on Williamson Boulevard and one site (797025) on LPGA Boulevard. All these count sites have the same D_{30} factors for any individual year within the project area. The factors were obtained for six years between 2005 and 2010. However, only SR 40 count sites have information for all the six years. Williamson Boulevard has information only for 2009 and 2010 and LPGA Boulevard has information for 2008, 2009 and 2010. The average, minimum and maximum D_{30} factors over the five years for SR 40 corridor are 61.9%, 57.2% and 64.8%, respectively.

Table 10 provides the current recommended range of D_{30} values from the FDOT Project Traffic Forecasting Handbook (2002) and the Highway Capacity Manual (HCM 2000) for an urban arterial.

Table 9: Historical FTI Data - D_{30} Values

Year	All Count Locations		
	SR 40	Williamson Boulevard	LPGA Boulevard
2005	57.20%	NA	NA
2006	60.08%	NA	NA
2007	64.64%	NA	NA
2008	64.83%	NA	64.83%
2009	62.19%	62.19%	62.19%
2010	62.46%	62.46%	62.46%
Average	61.90%	62.33%	63.16%
Minimum	57.20%	62.19%	62.19%
Maximum	64.83%	62.46%	64.83%

Table 10: Recommended Range of D_{30} Values

Area & Highway Type	Values	Source	
		FDOT[1]	HCM[2]
Urban Arterial	Low	50.8%	52.0%
	Average	57.9%	54.5%
	High	67.1%	57.0%

Notes:
1) FDOT Project Traffic Forecasting Handbook, October 2002, Figure 3.10
2) FDOT Project Traffic Forecasting Handbook, October 2002, Figure 3.11

4.2.1 SR 40 Corridor

The average measured D from the 2011 traffic counts is 61.7%, while the average of the historical K_{30} factors is 61.9%. Therefore, being conservative without overestimating future design traffic volumes, **a D_{30} factor of 62.0% is recommended for the SR 40 corridor.**

4.2.2 Williamson Boulevard Corridor

The average measured D from the 2011 traffic counts is 60.0%, while the average of the historical D_{30} factor is 62.3%. Therefore, being conservative without overestimating future design traffic volumes, **a D_{30} factor of 60.0% (average of the measured values) is recommended for the Williamson Boulevard corridor.**

4.2.3 LPGA Boulevard Corridor

The average measured D from the 2011 traffic counts is 52.7%, while the average of the two available historical D_{30} factors is 63.2%. The historical average is approximately 20% more than the measured average. Therefore, being conservative without overestimating future design traffic volumes, **a D_{30} factor of 54.5%** (average suggested in HCM 2000) **is recommended for the LPGA Boulevard corridor.**

4.2.4 Side Streets

For the purposes of this study, the measured D values from the 2011 traffic counts will be used for all the side streets (including Hand Avenue and Tymber Creek Road) as the recommended D_{30} factors. However, the recommended D_{30} factors will be restricted to the upper FDOT accepted limit for an urban arterial as shown in **Table 10**.

4.3 T_{daily} & T_{peak} Factors

The daily truck factor, T_{daily} represents the percentage composition of medium sized and heavy trucks occurring in the traffic stream for a 24-hour period. The peak hour truck factor, T_{peak}, is the percentage of truck traffic during the peak hour and is recommended as one-half of the T_{daily} factor in the Project Traffic Forecasting Handbook. The truck factor for the daily condition will be used in determining Equivalent Single Axle Loadings (ESAL) for the project corridor.

The year 2011 measured T_{daily} factors for the study area roadways are shown in **Table 4.** T_{daily} factors of 10.7%, 7.6% and 5.2% were measured for the SR 40, Williamson Boulevard and LPGA Boulevard corridors, respectively.

Table 11 contains the historical T_{daily} factors from the FTI CD for years 2005 through 2010. For Williamson Boulevard, the historical data was available only for 2009 and 2010 and for LPGA Boulevard, it was available for 2008, 2009 and 2010.

Table 11: Historical FTI Data - T_{daily} Values

Corridor/Site	Year					
	2005	2006	2007	2008	2009	2010
SR 40						
790523	8.20%	14.70%	10.90%	10.0%	8.90%	8.22%
790499	4.80%	14.70%	13.10%	10.9%	8.90%	9.73%
Average			**10.29%**			
Minimum			**4.80%**			
Maximum			**14.70%**			
Williamson Blvd						
797089					14.80%	15.10%
797088					2.80%	3.90%
797087					1.00%	2.20%
Average			**6.63%**			
Minimum			**1.00%**			
Maximum			**15.10%**			
LPGA Blvd						
797025				7.00%	7.10%	6.36%
Average			**6.82%**			
Minimum			**6.36%**			
Maximum			**7.10%**			

4.3.1 SR 40 Corridor

The average measured T_{daily} from the 2011 traffic counts is 10.7%, while the average of the historical T_{daily} factors is 10.3%. **A T_{daily} factor of 10.5% is recommended for the SR 40 corridor, based on the average of the measured and historical factors. Based on the Project Traffic Forecasting Handbook, a T_{peak} factor of 5.3% is recommended for the SR 40 corridor.**

4.3.2 Williamson Boulevard Corridor

The measured T_{daily} from the 2011 traffic counts is 7.6%, while the average of the historical T_{daily} factors is 6.6%. It should be noted the count site 797089 on Williamson Boulevard has very high truck factor compared to other sites. Being conservative, **a T_{daily} factor of 7.6% is recommended for the Williamson Boulevard corridor. Based on the Project Traffic Forecasting Handbook, a T_{peak} factor of 3.8% is recommended for the Williamson Boulevard corridor.**

4.3.3 LPGA Boulevard Corridor

The measured T_{daily} from the 2011 traffic counts is 5.2%, while the average of the historical T_{daily} factors is 6.8%. Therefore, being conservative, **a T_{daily} factor of 7.1% is recommended for the LPGA corridor. Based on the Project Traffic Forecasting Handbook, a T_{peak} factor of 3.6% is recommended for the LPGA corridor.**

4.3.4 Side Streets

Truck factors were not measured for the side streets, with the exception of Hand Avenue. Historical data from the FTI CD is also not available for the side streets, with the exception of Tymber Creek Road. Therefore, for the purposes of this study, a **T_{daily} factor of 2.0% and a T_{peak} factor of 1.0% are recommended for all the side streets, with the exception of Hand Avenue and Tymber Creek Road. The measured T_{daily} factor of 3.0% and a T_{peak} factor of 1.5% are recommended for Hand Avenue. The T_{daily} factor of 14.8% (as reported in the 2009 FTI CD) and a T_{peak} factor of 6.4% are recommended for Tymber Creek Road.**

4.4 Recommended Design Traffic Characteristics

Based on the afore-mentioned discussions, the following **Table 12** provides a summary of the recommended design traffic characteristics for this study.

Table 12: Recommended Design Traffic Characteristics

Roadway / Segment	Recommended Design Characteristics			
	"K_{30}" Factor	"D_{30}" Factor	"Tdaily" Factor	"Tpeak" Factor
Mainline Characteristics				
SR 40	9.0%	62.0%	10.5%	5.3%
Williamson Boulevard	9.0%	60.0%	7.6%	3.8%
LPGA Boulevard	9.0%	54.5%	7.1%	3.6%
Side Street Characteristics				
Cone Road	9.0%	62.0%	2.0%	1.0%
Shadow Crossing Boulevard	9.0%	62.0%	2.0%	1.0%
Tymber Creek Road	9.0%	59.5%	14.8%	6.4%
Booth Road	9.0%	50.5%	2.0%	1.0%
Breakaway Trail	9.0%	67.1%	2.0%	1.0%
Interchange Boulevard	9.0%	55.7%	2.0%	1.0%
SR 40 & I-95 Ramps	9.0%	55.0%	10.5%	5.3%
Hand Avenue	9.0%	51.5%	3.0%	1.5%
Tomoka Farms Road	9.0%	55.2%	2.0%	1.0%

5. Development of Future Traffic Forecasts

The development of traffic projections for the study corridors (SR40, Williamson Boulevard and LPGA Boulevard) requires the examination of historical growth, proposed development levels within the corridor vicinity, and a basic understanding of local traffic circulation patterns and travel characteristics of the corridor.

The traffic model applied for this study was based on the latest Central Florida Regional Planning Model, Version 5.0 (CFRPM V5.0) released in 2010. The CFRPM V5.0 is the tool that the Regional Transportation Analysis uses in forecasting future travel demand. This model represents the latest adopted Long Range Transportation Plan (LRTP) project lists in FDOT District 5 including Orange, Seminole, Volusia, Lake, Brevard, Osceola ,Marion, Flagler, and Sumter Counties.

5.1 Design Period

Based on the information provided by District Five, the following design periods were used to provide the future traffic forecasts and roadway and intersection operation analysis for the study corridor.

- Opening Year – 2015
- Mid-design Year – 2025
- Design Year - 2035

5.2 Programmed and Planned Improvements

The following programmed / planned improvements are scheduled for the study area based on reviewing the latest Volusia County Five Year Road Program, Volusia TPO 2035 LRTP, and based on discussions with staff from Volusia County, City of Daytona Beach and City of Ormond Beach.

5.2.1 Programmed Improvements

The following programmed improvements are scheduled for the study corridors in the next five years, based on the adopted Volusia County Transportation Improvement Program (Fiscal Year [FY] 2011/12 - FY 2015/2016).

- **Tymber Creek Road from Peruvian Lane to SR 40:** This section of Tymber Creek Road is scheduled to be widened to a four-lane roadway.

- **Williamson Boulevard from Dunn Avenue to LPGA Boulevard:** This section of Williamson Boulevard is currently being widened (under construction) to a four-lane roadway. This project also includes intersection improvements at Williamson Boulevard and LPGA Boulevard.
- **LPGA Boulevard from Jimmy Ann Drive to Old Kings Road:** This section of LPGA Boulevard has ROW funding (FY 11/12) for four-lane widening based on the latest Volusia County Five Year Road Program (FY 10/11 – FY 14/15).

5.2.2 Planned Improvements

The following planned improvements are scheduled for the study corridors between the years 2015 and 2035 based on the adopted year 2035 Volusia County LRTP.

FY 2014/15 - 2019/20

- **SR 40 from Breakaway Trail to Tymber Creek Road**: This section is shown as a six-lane roadway in the 2035 LRTP for Volusia County.
- **Tymber Creek Road from Peruvian Lane to Airport Road:** This section is shown as a four-lane roadway in the 2035 LRTP for Volusia County.
- **Hand Avenue from Williamson Boulevard to Nova Road:** This section is shown as a four-lane roadway in the 2035 LRTP for Volusia County.

FY 2020/21 - 2024/25

- **Williamson Boulevard from LPGA Boulevard to Hand Avenue**: This section is shown as a four-lane roadway in the 2035 LRTP for Volusia County.
- **Tymber Creek Road Extension from SR 40 to LPGA Boulevard:** This section is shown as a new two-lane roadway in the 2035 LRTP for Volusia County.

FY 2025/26 - 2029/30

- **Hand Avenue Extension from Williamson Boulevard to Proposed Tymber Creek Road Extension:** This section is shown as a new two-lane roadway in the 2035 LRTP for Volusia County. However, based on the recent discussions with Volusia County, this planned improvement is no longer considered in the current study.

In addition to the afore-mentioned planned improvements list, the following new roadways were included in the year 2035 model based on discussions with the Cities of Daytona Beach and Ormond Beach.

- **Stage Coach Road** as a new two lane roadway between SR 40 and Tymber Creek Road.
- **Hunters Ridge Boulevard** as a new two lane roadway from Airport Road Extension to SR 40 where Stage Coach Road connects to SR 40.

5.3 Sub-Area Model Validation

The model was validated for the SR 40 study area for the year 2010. Traffic counts collected by GMB and from the FDOT and Volusia County were utilized for the validation of the travel demand model. The memo developed documenting the overall 2010 model validation (dated April 1, 2011) is provided in **Appendix I** of this report.

5.4 Year 2035 Model Refinements

To ensure the validity of future traffic projections along the study corridors, it was necessary to review and adjust the related land use data and include all the applicable programmed/planned improvements for the study corridors. In order to ensure that the latest land use information was used in the development of the traffic volumes to be used in the analysis of SR 40, Williamson Boulevard and LPGA Boulevard, the original land use datasets included in 2035 model were reviewed to help refine the 2035 land use data.

Given the current growth patterns and based on the discussions with staff from the Cities of Ormond Beach and Daytona Beach, latest approved land use data for the DRIs obtained from the development orders and annual reports from East Central Florida Regional Planning Council (ECFRPC), discussions with the project staff from the FDOT District 5 and PD&E Study Team, it was decided to modify the Zone Data for the following DRIs/CPAs.

- **Ormond Crossings CPA:** Changes were made based on the information that was available for the latest Ordinance # 2010-07. The information was provided by the City of Ormond Beach.
- **National Gardens DRI:** Changes were made based on the latest approved land uses obtained from the ECFRPC.
- **Hunters Ridge DRI:** Changes were made based on the latest approved land uses obtained from the ECFRPC and the latest Development order from Flagler County.

- **Consolidated Tomoka Landing CPA:** Based on the discussion with the City of Daytona Beach and keeping in mind the current growth trends, it was decided to restrict Single Family Units to 1,000 units and commercial land use to 653,400 sq. feet for parcel A (4,318 acres). Similarly, for Parcel B (84 acres located south of US 92 and north of I-4) it was decided to restrict the future development to 75% of the approved development.

The memo developed documenting the year 2035 model refinement process (dated April 19, 2011) is provided in **Appendix J** of this report.

5.5 Analysis Scenarios/Year 2035 Roadway Alternatives

Traffic projections were developed for the No Build Alternative and two Build Alternatives. However, seven (7) Build Alternatives were initially selected as part of the preliminary screening process intended to pick three (3) final Build Alternatives, which would provide the greatest benefits in terms of relieving the SR 40 study corridor. The memorandum developed in support of the preliminary screening process of the seven Build Alternatives (dated May 17, 2011) is provided in **Appendix K** of this report.

Based on the preliminary screening process of the seven (7) Build Alternatives and input from the FDOT, Volusia County, Cities of Daytona Beach and Ormond Beach staff and PD&E Consultant for SR 40, the following final three (3) Build Alternatives were selected.

- **Build Alternative 1:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes)
- **Build Alternative 5:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Boulevard.
- **Build Alternative 7:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes), Hand Avenue Extension (2 lanes) from Williamson Boulevard to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Boulevard.

However, based on recent developments regarding the study limits and six-laning portion on SR 40 and input from Volusia County regarding the practicality of Hand Avenue Extension construction, the following modifications were included in the new (current) study.

- The western study limit on SR 40 was extended to Cone Road from the original Breakaway Trail.
- The widening of SR 40 in the west was extended to the proposed Hunters Ridge Boulevard/Stage Coach Road from the original Breakaway Trail.
- Build Alternative 7 which included the extension of Hand Avenue west of Williamson Boulevard till the proposed Tymber Creek Road Extension was eliminated from the current study.

5.6 Future Travel Demand

The development of traffic forecasts for study corridors is not complete without a review of the historical traffic growth, population estimates along the corridor, and a review of the future year model forecasts. Due to the specific conditions associated with any roadway, it is necessary to utilize the various methods in projecting future traffic forecasts (such as trends analysis, population estimates and Travel Demand Models) for comparison purposes. The following sections discuss the various methodologies used in developing future travel demand in the study.

5.6.1 Historical Traffic Growth

Based on the historic count information provided by the FDOT, trends analyses were performed for the previously listed FDOT count stations. These count stations, provided historic counts ranging from 2000 to 2010. Based on this historical data, future growth trends were established by a least square linear regression of the historic counts. These trend analysis sheets are shown in **Appendix L**. However, none of the trend R-squared values that give the goodness of fit of the model were greater than the required 80% for the models to trust. Therefore, the historical growths produced by trends analyses were not used in this study.

5.6.2 Volusia County Population Projections

In addition to the Trends Analysis, population projection data obtained from the BEBR published by the University of Florida were used for comparison purposes. **Table 13** shows the year 2008 population data and the high and medium population estimates for the Year 2035 along with the corresponding growth rate. Based on Table 16, the high and medium population estimates obtained from BEBR reported an annual growth rate of 2.1% and 1.0% per year, respectively. The BEBR population projection data are enclosed in **Appendix M**.

Table 13: Population Analysis – BEBR Estimates

Project Type	2008	2035	Annual Growth Rate
Volusia - Medium Projection	510,750	645,300	1.0%
Volusia - High Projection	510,750	804,100	2.1%

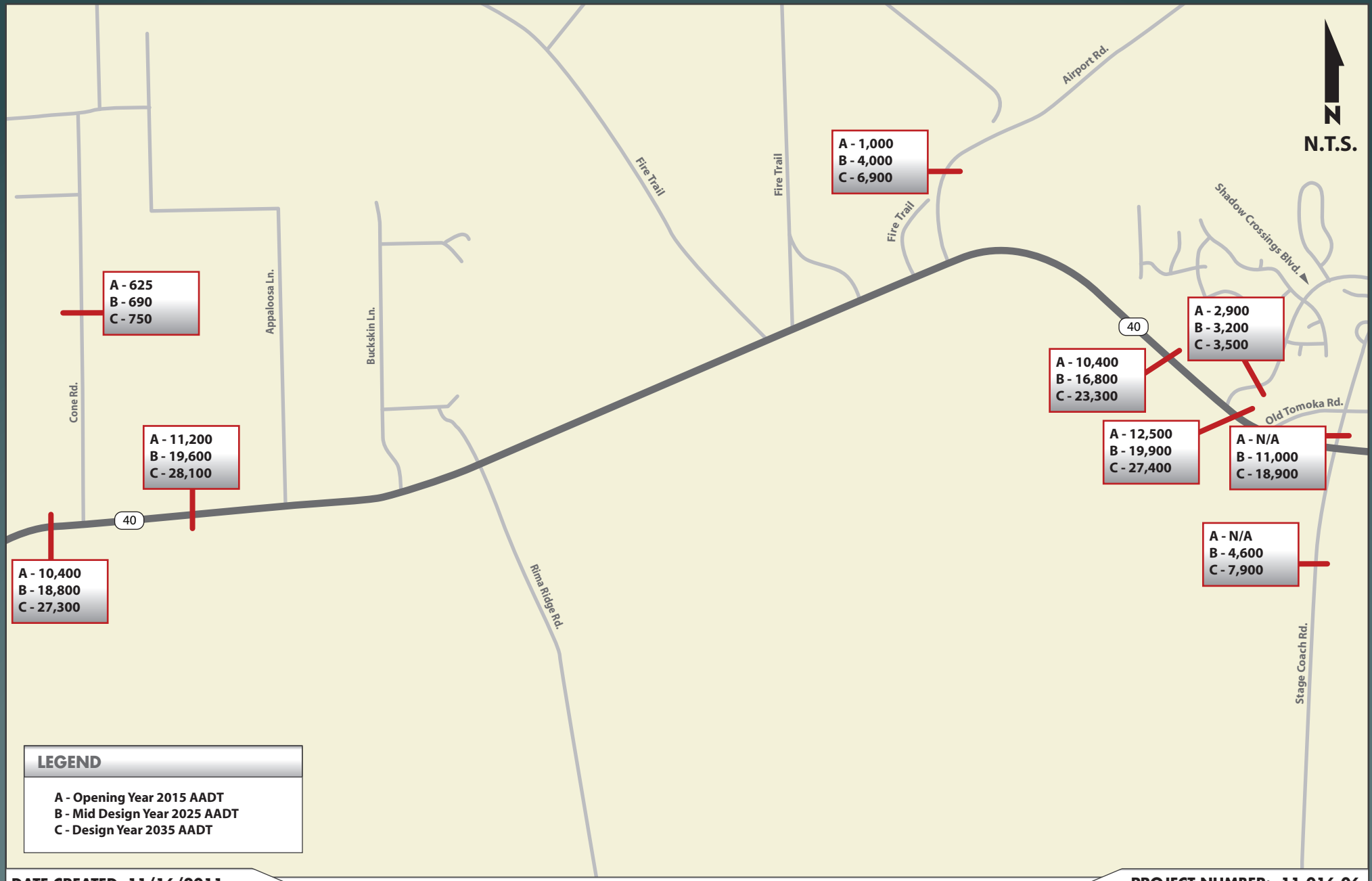
5.6.3 Travel Demand Model

The model based traffic projections for the No Build and two Build Alternatives were assessed for their reasonableness. Before accepting the model results as appropriate for use in the design traffic report, the results of the CFRPM transportation model for the study area were reviewed closely to determine the accuracy of the traffic forecasts. Due to the characteristics of the study area, diversity of land uses located along the study corridors and the projected development/new roadway extensions expected to occur, future traffic volumes for the study were developed from the forecasts obtained from the CFRPM model. **The revised model plots for the No Build Alternative, and Build Alternatives 1 and 5 are provided in Appendix N of this report.**

5.7 No-Build & Build Projected AADT Volumes

Using the year 2035 CFRPM travel demand model which includes the modified 2035 socio-economic data and the modified transportation network, the 2035 AADT volumes for the No-Build & Build Alternatives were developed. The year 2010 Volusia countywide Model Conversion Output Factor (MOCF) of 0.95 was used to convert the Peak Season Weekday Average Daily Traffic (PSWADT) obtained from the model to AADTs. The opening year 2015 and mid-design year 2025 traffic volumes were derived using interpolation of traffic volumes between 2011 and 2035.

The future year AADT volumes for the No-Build Alternative are shown in Figures 8-1 through 8-4. The future year AADT volumes are shown in Figures 9-1 through 9-4 for the Build Alternative 1 and in Figures 10-1 through 10-4 for the Build Alternative 5.



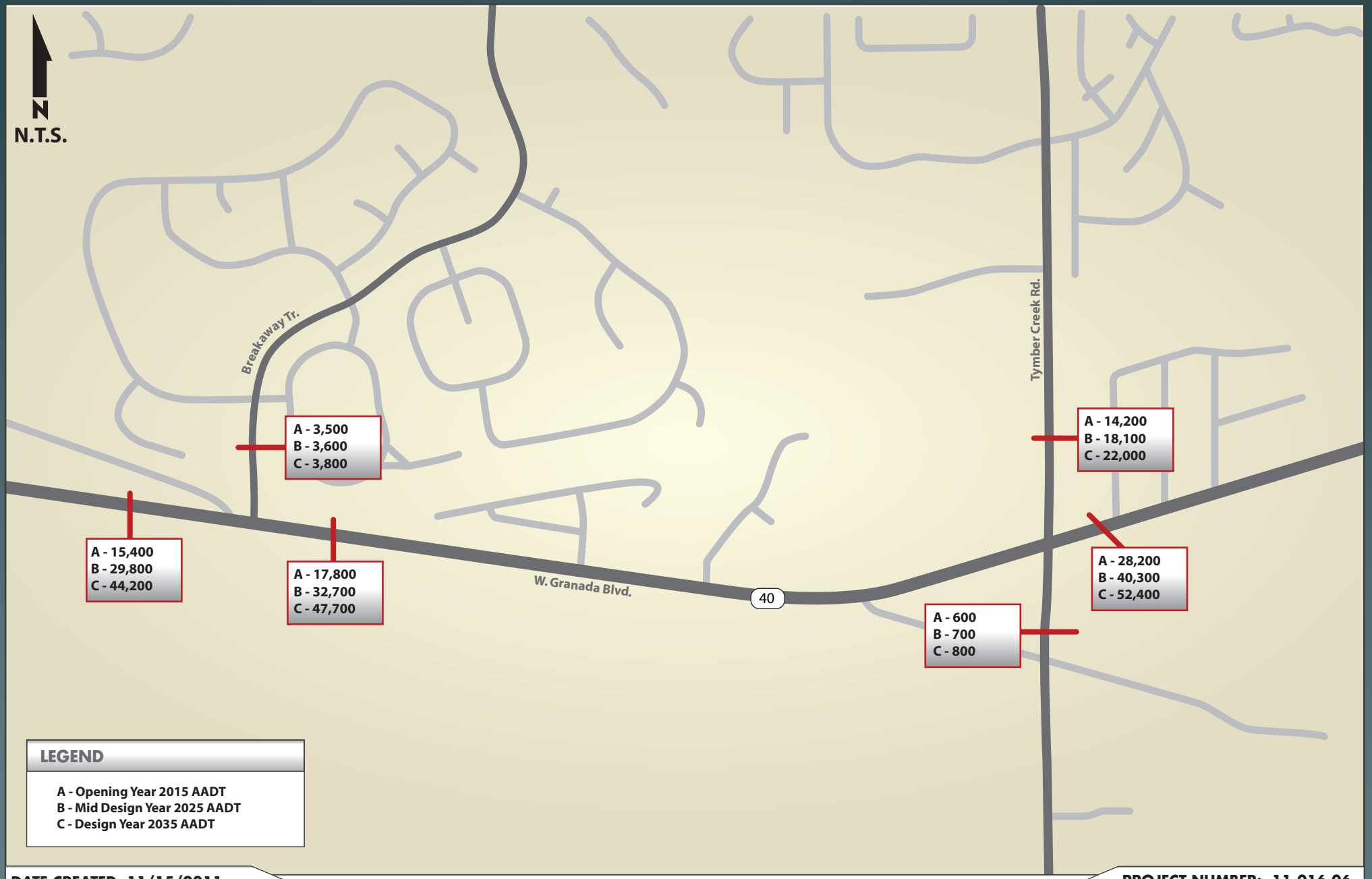
DATE CREATED: 11/16/2011 **PROJECT NUMBER: 11-016.06**

Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 8-1
Future AADT Volumes
No Build Alternative - Subsection 1



DATE CREATED: 11/15/2011

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FIGURE 8-2
Future AADT Volumes
No Build Alternative - Subsection 2

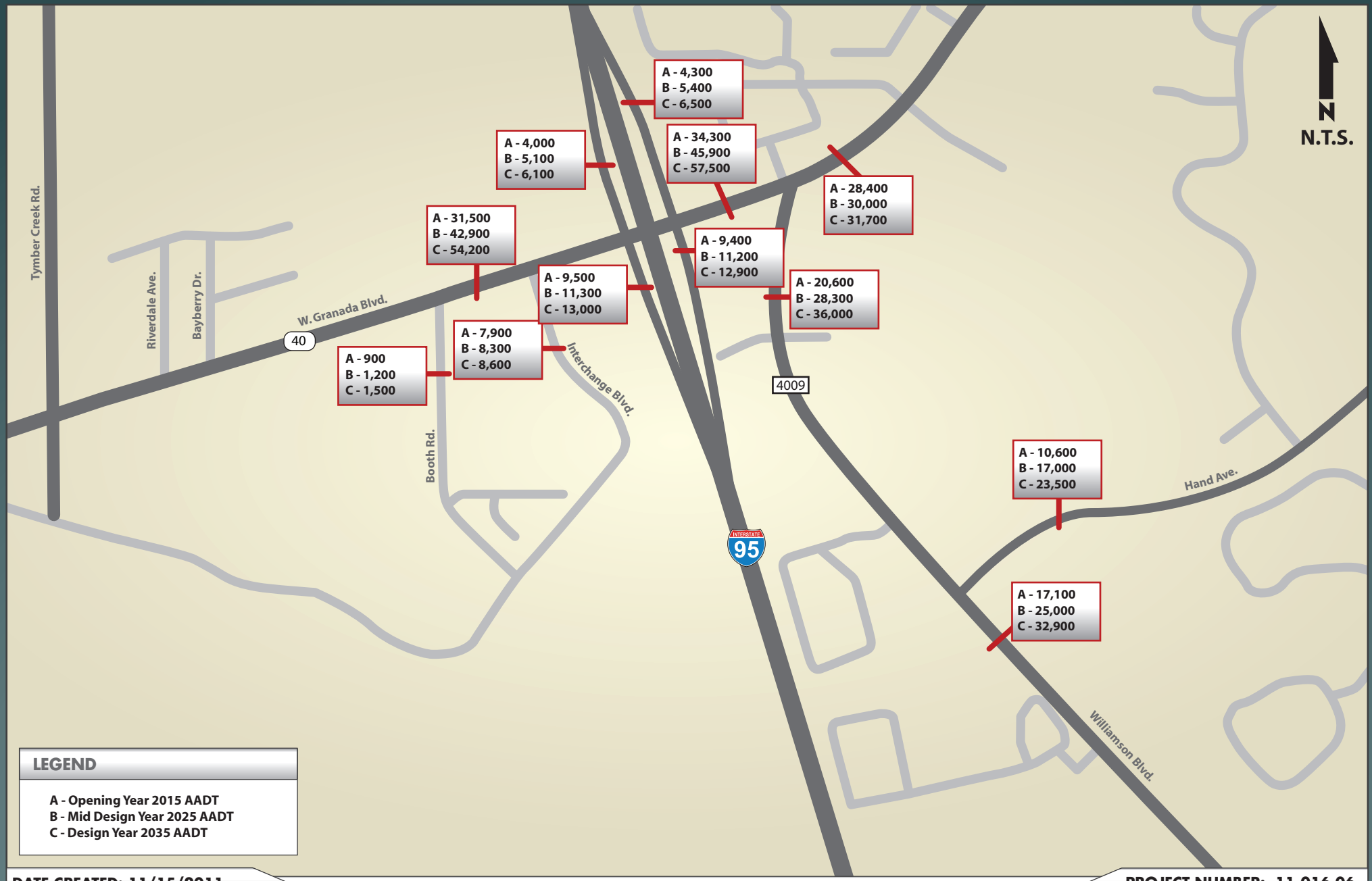

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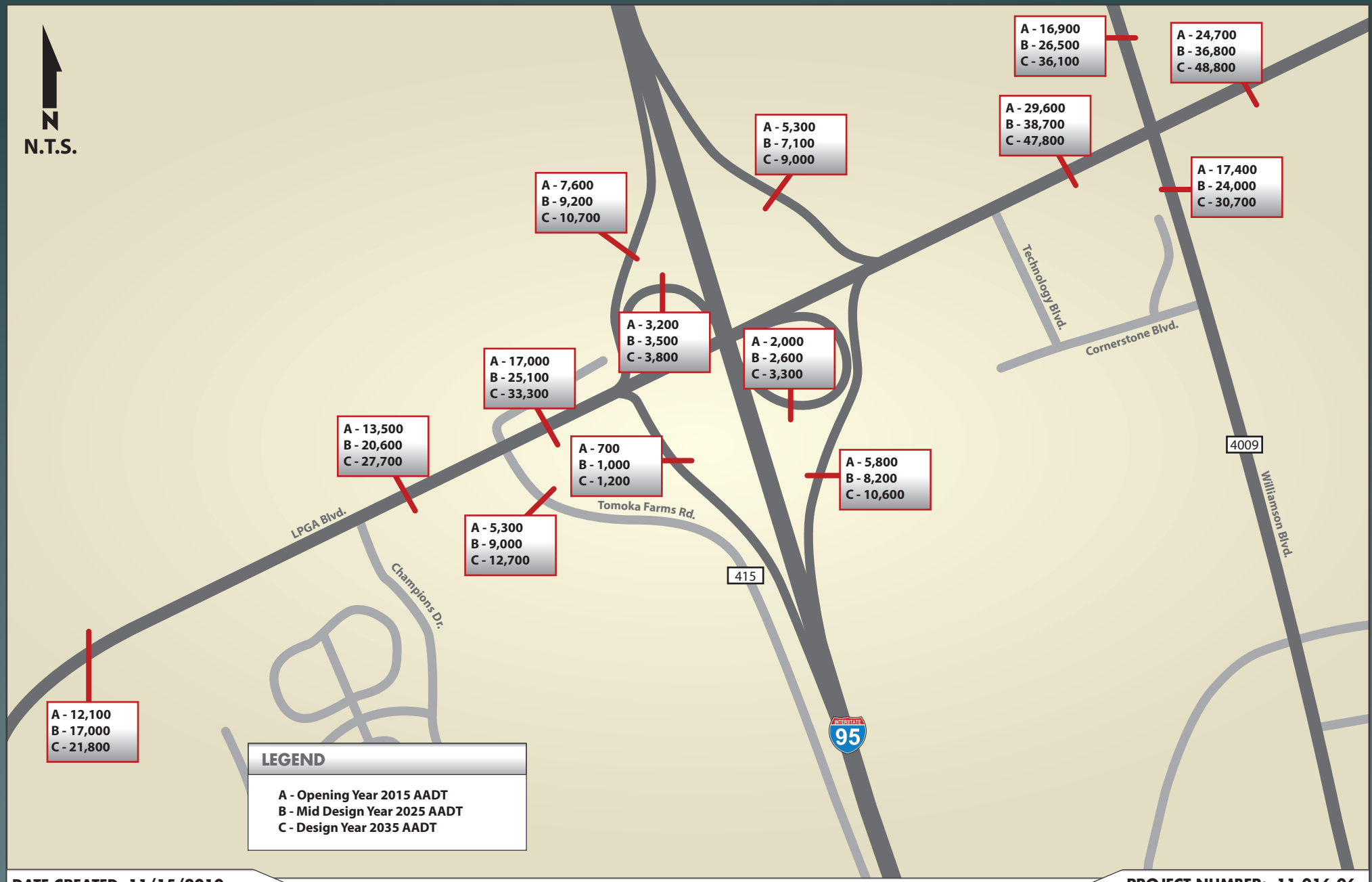
FIGURE 8-3
Future AADT Volumes
No Build Alternative - Subsection 3



DATE CREATED: 11/15/2010 **PROJECT NUMBER: 11-016.06**

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Prepared By: GMB Engineers & Planners, Inc.

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FIGURE 8-4
Future AADT Volumes
No Build Alternative - Subsection 4

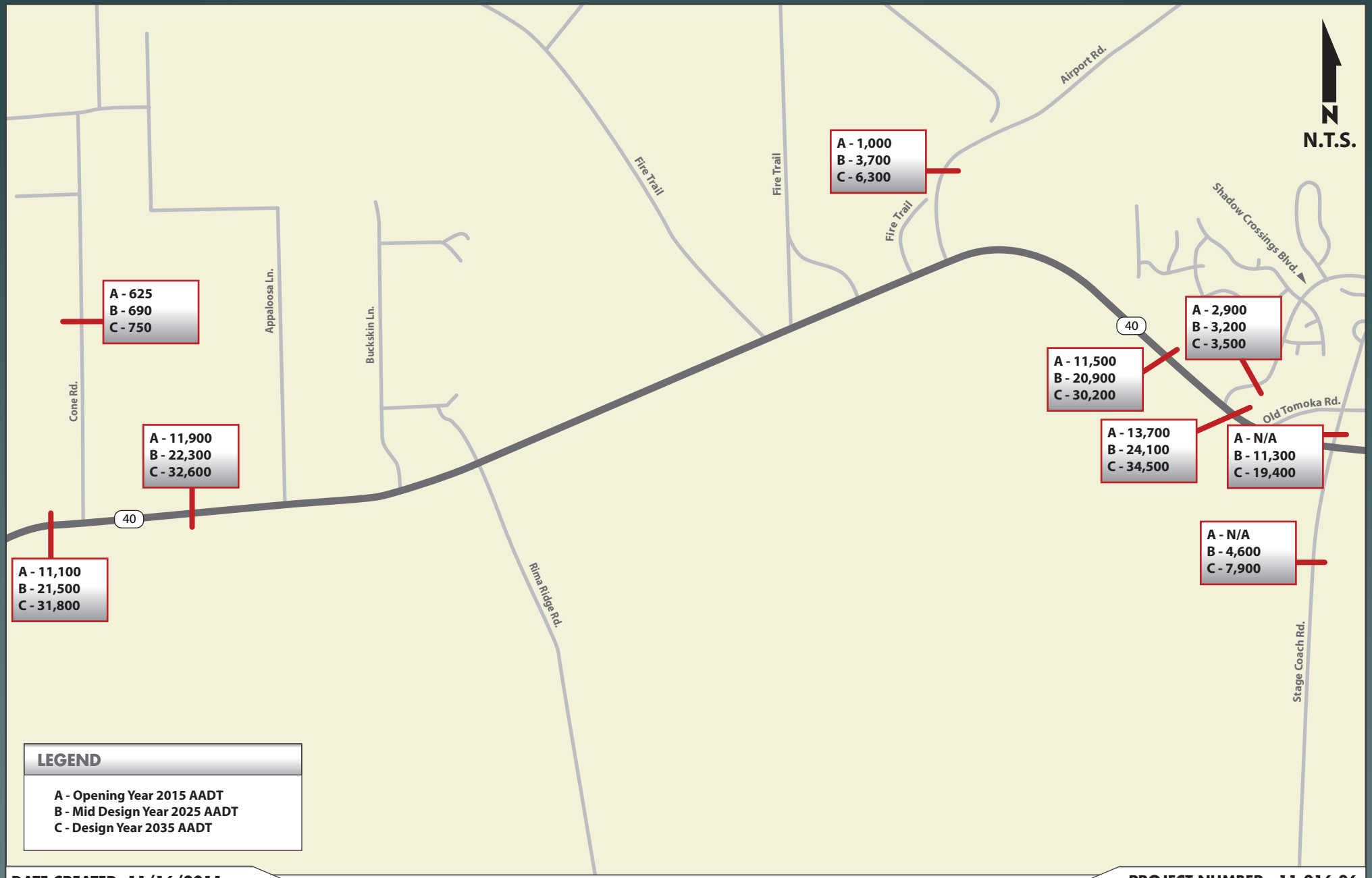

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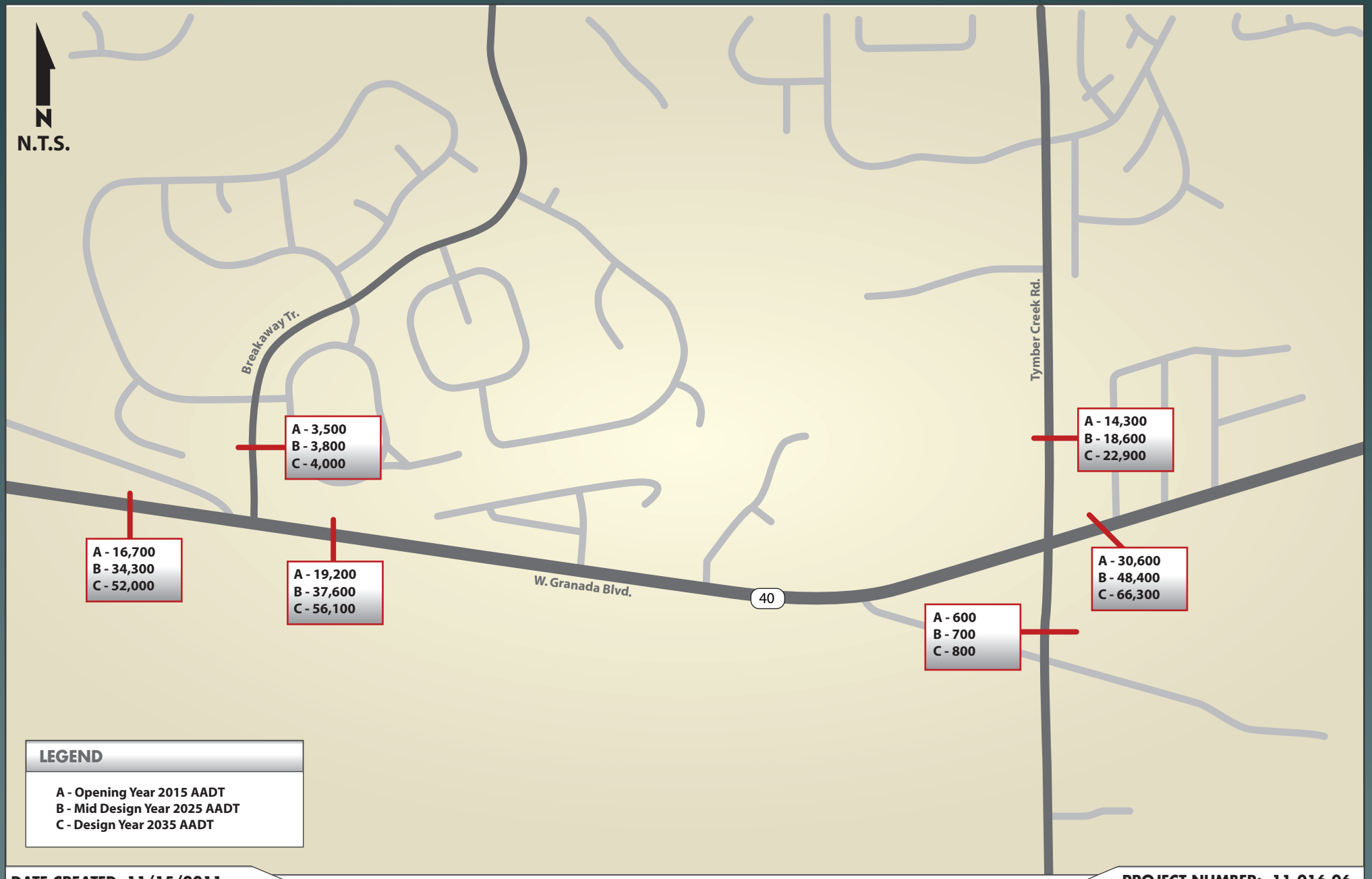
FIGURE 9-1
Future AADT Volumes
Build Alternative 1- Subsection 1



DATE CREATED: 11/15/2011 **PROJECT NUMBER: 11-016.06**

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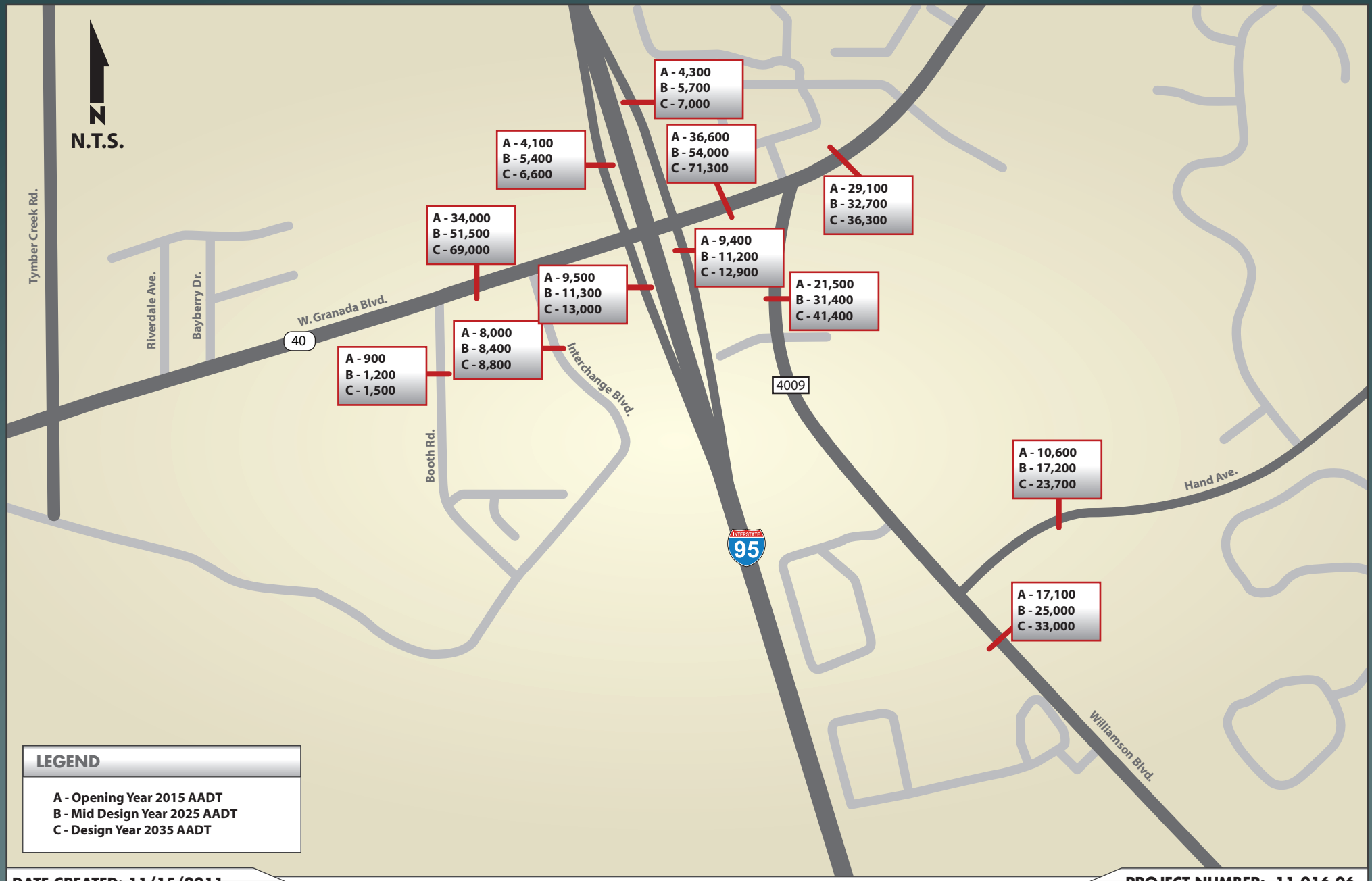
Financial Project ID: 428947-1-22-01

FIGURE 9-2
Future AADT Volumes
Build Alternative 1- Subsection 2



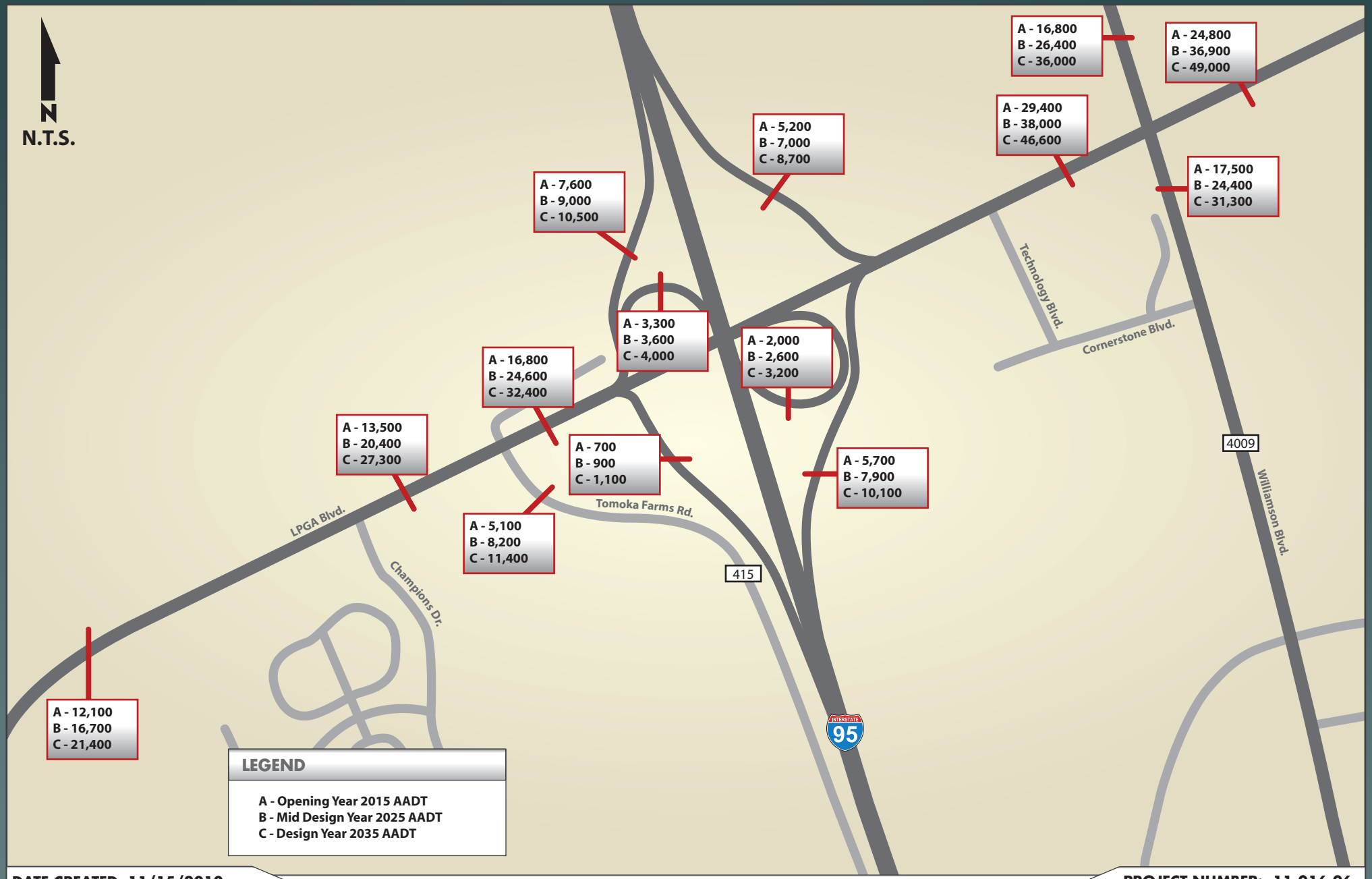
DATE CREATED: 11/15/2011 **PROJECT NUMBER: 11-016.06**

Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 9-3
Future AADT Volumes
Build Alternative 1- Subsection 3



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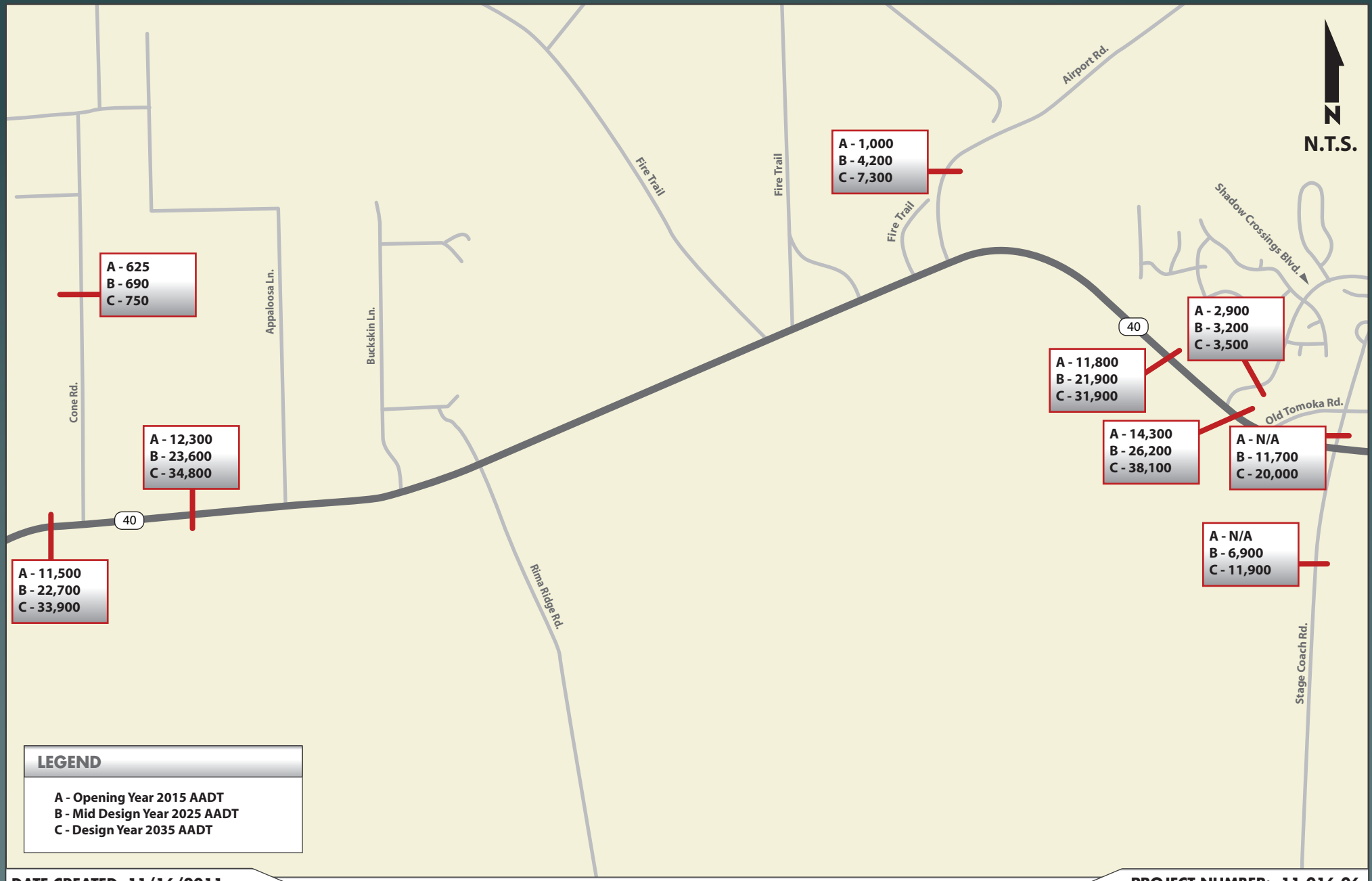
Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 9-4
Future AADT Volumes
Build Alternative 1- Subsection 4



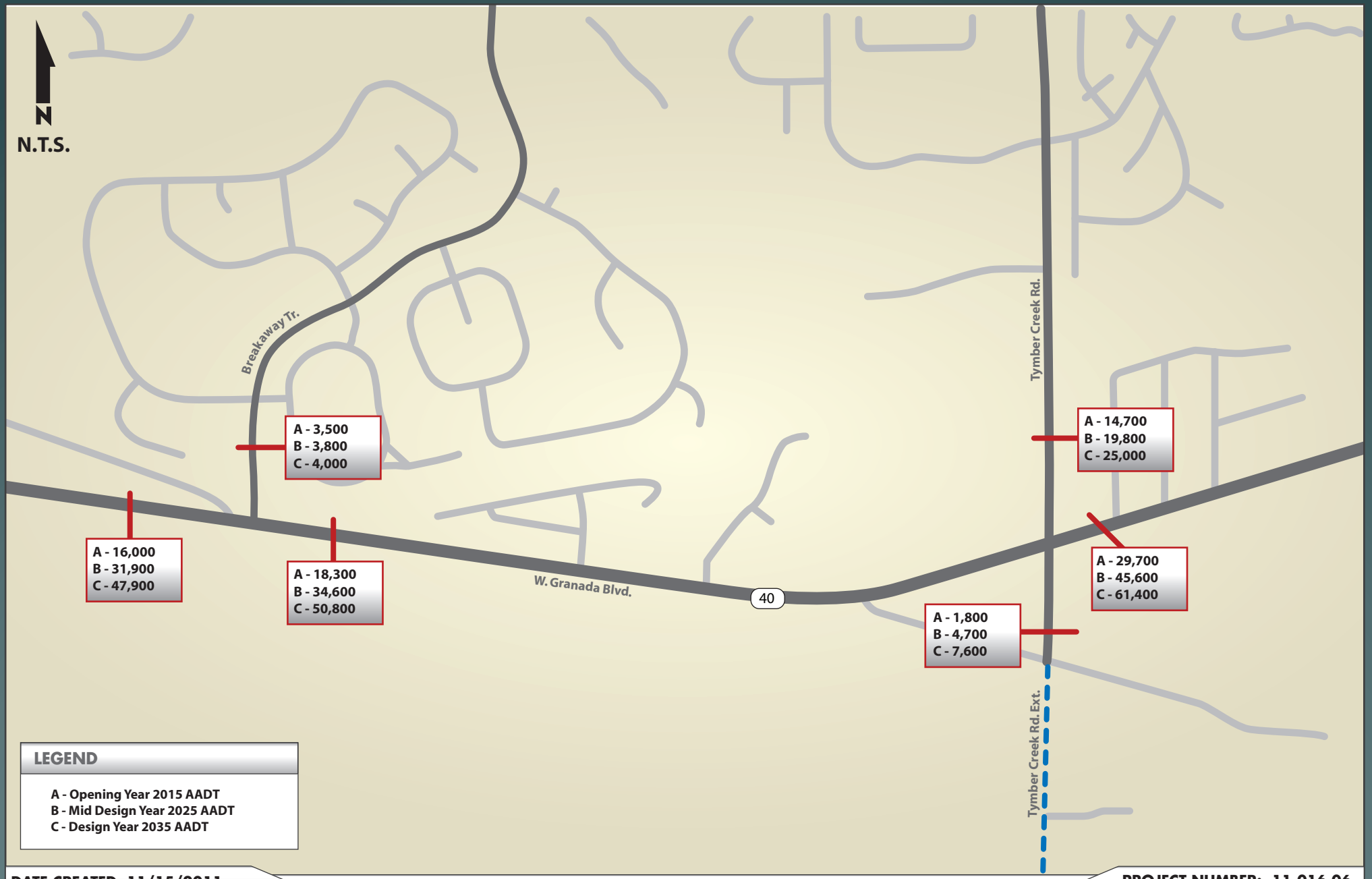
DATE CREATED: 11/16/2011 **PROJECT NUMBER: 11-016.06**

Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 10-1
Future AADT Volumes
Build Alternative 5 - Subsection 1



DATE CREATED: 11/15/2011

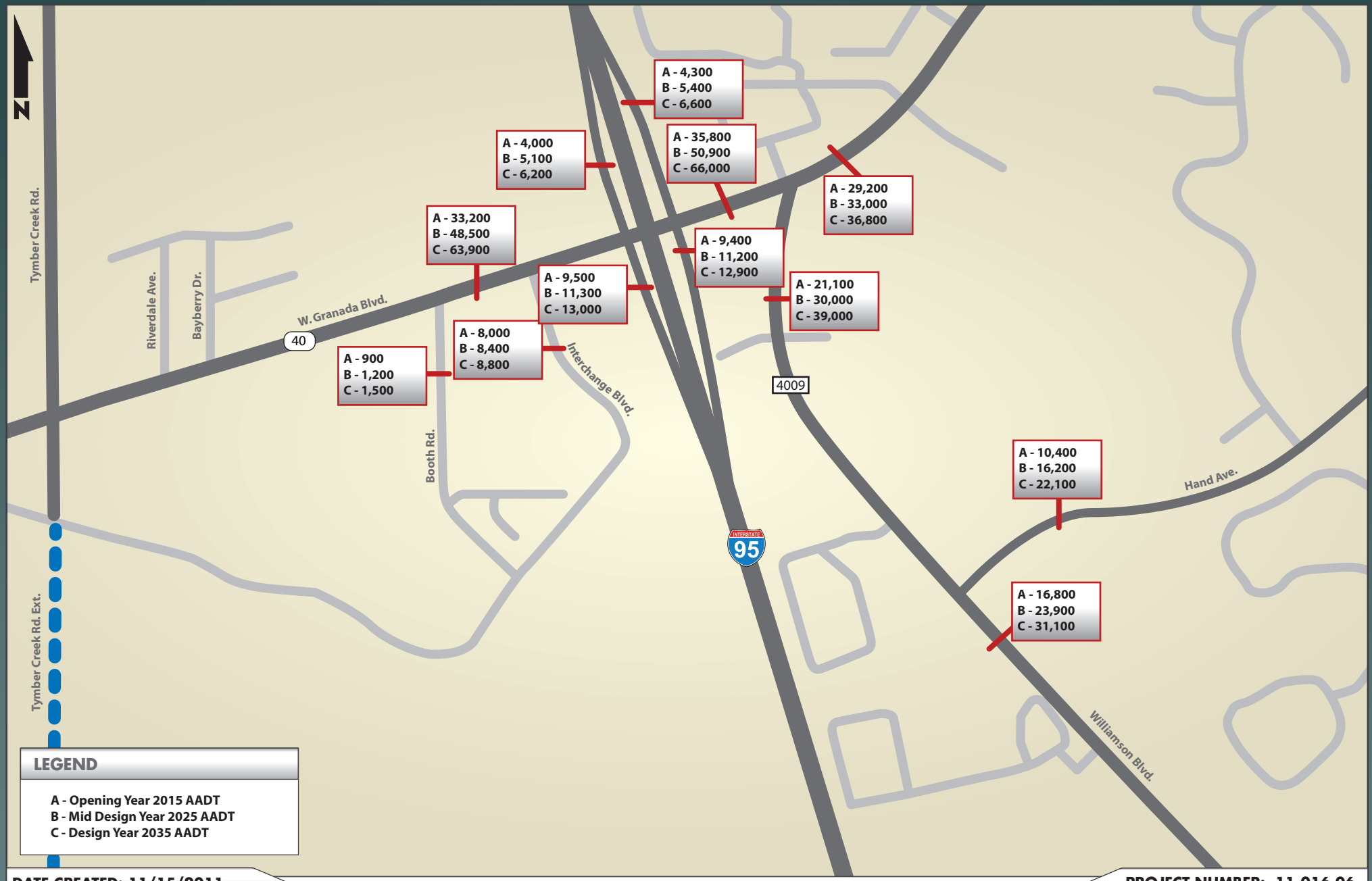
PROJECT NUMBER: 11-016.06

Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 10-2
Future AADT Volumes
Build Alternative 5 - Subsection 2



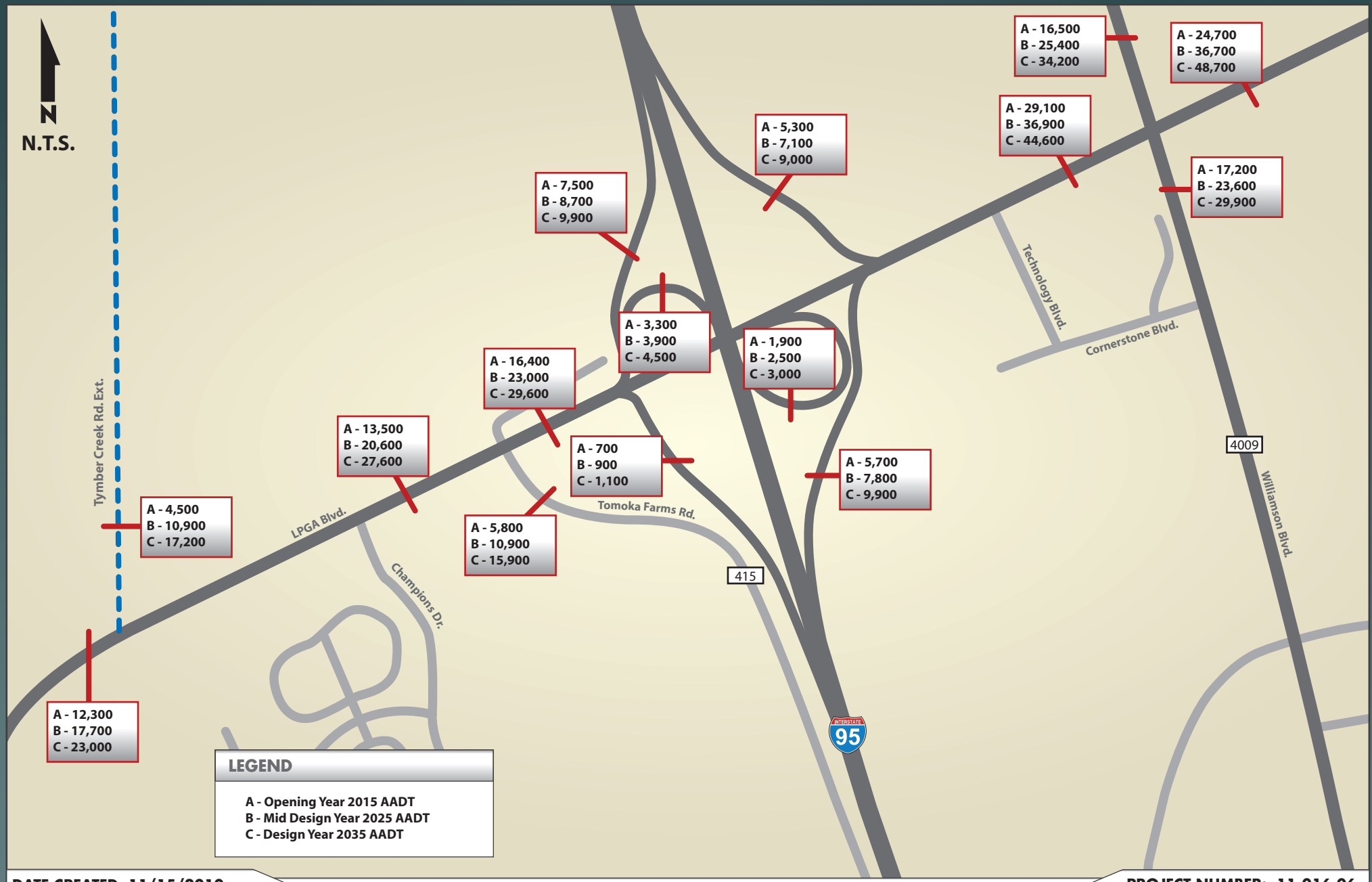
DATE CREATED: 11/15/2011 **PROJECT NUMBER: 11-016.06**

Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 10-3
Future AADT Volumes
Build Alternative 5 - Subsection 3



DATE CREATED: 11/15/2010 **PROJECT NUMBER: 11-016.06**

Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 10-4
Future AADT Volumes
Build Alternative 5 - Subsection 4

5.8 Intersection Design Hour Volumes

The existing and future year AADT's for the No Build and Build Alternatives along with the recommended traffic characteristics were used to develop the design hour volumes (DHVs) for both the a.m. and p.m. design hours at the intersections for the opening, mid-design and design years.

The DHV's for the intersections were developed using the TURNS5 spreadsheet, which balances AADT's and calculates DHV's based on Standard K and D_{30} factors used as input into the program. The estimated design hour volumes for the a.m. and p.m. design hours from TURNS5 spreadsheet were assessed for reasonableness. Adjustments were made and are reported in the TURNS5 output sheets included in **Appendix O**. In general, it was made sure that the year 2015, 2025 and 2035 design hour volumes were higher than the existing peak hour volumes. These adjustments are necessary because accepting an estimated volume that is unrealistically large may lead to over design and accepting an estimated volume that is too small may result in an inadequate design.

The future year a.m. and p.m. design hour volumes for the No-Build Alternative are shown in **Figures 11-1 through 11-4, Figures 12-1 through 12-4 and Figures 13-1 through 13-4** for the years 2015, 2025 and 2035, respectively. The future year a.m. and p.m. design hour volumes for the Build Alternative 1 are shown in **Figures 14-1 through 14-4, Figures 15-1 through 15-4 and Figures 16-1 through 16-4** for years 2015, 2025 and 2035, respectively. The future year a.m. and p.m. design hour volumes for the Build Alternative 5 are shown in **Figures 17-1 through 17-4, Figures 18-1 through 18-4 and Figures 19-1 through 19-4** for years 2015, 2025 and 2035, respectively.

DATE CREATED: 11/16/2011

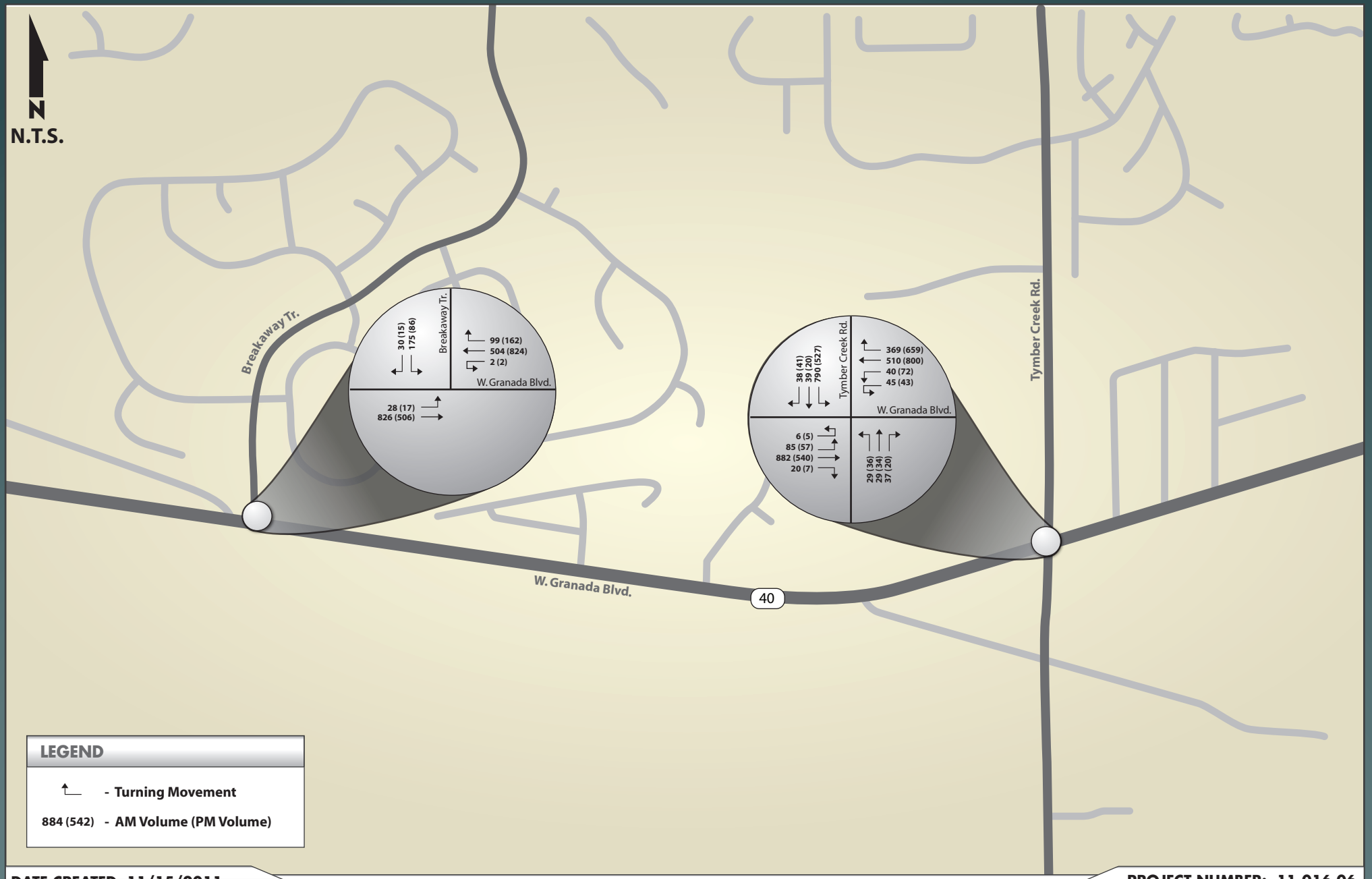
PROJECT NUMBER: 11-016.06

Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 11-1
Year 2015 Design Hour
Turning Movement Volumes
No Build - Subsection 1



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Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 11-2
Year 2015 Design Hour
Turning Movement Volumes
No Build - Subsection 2

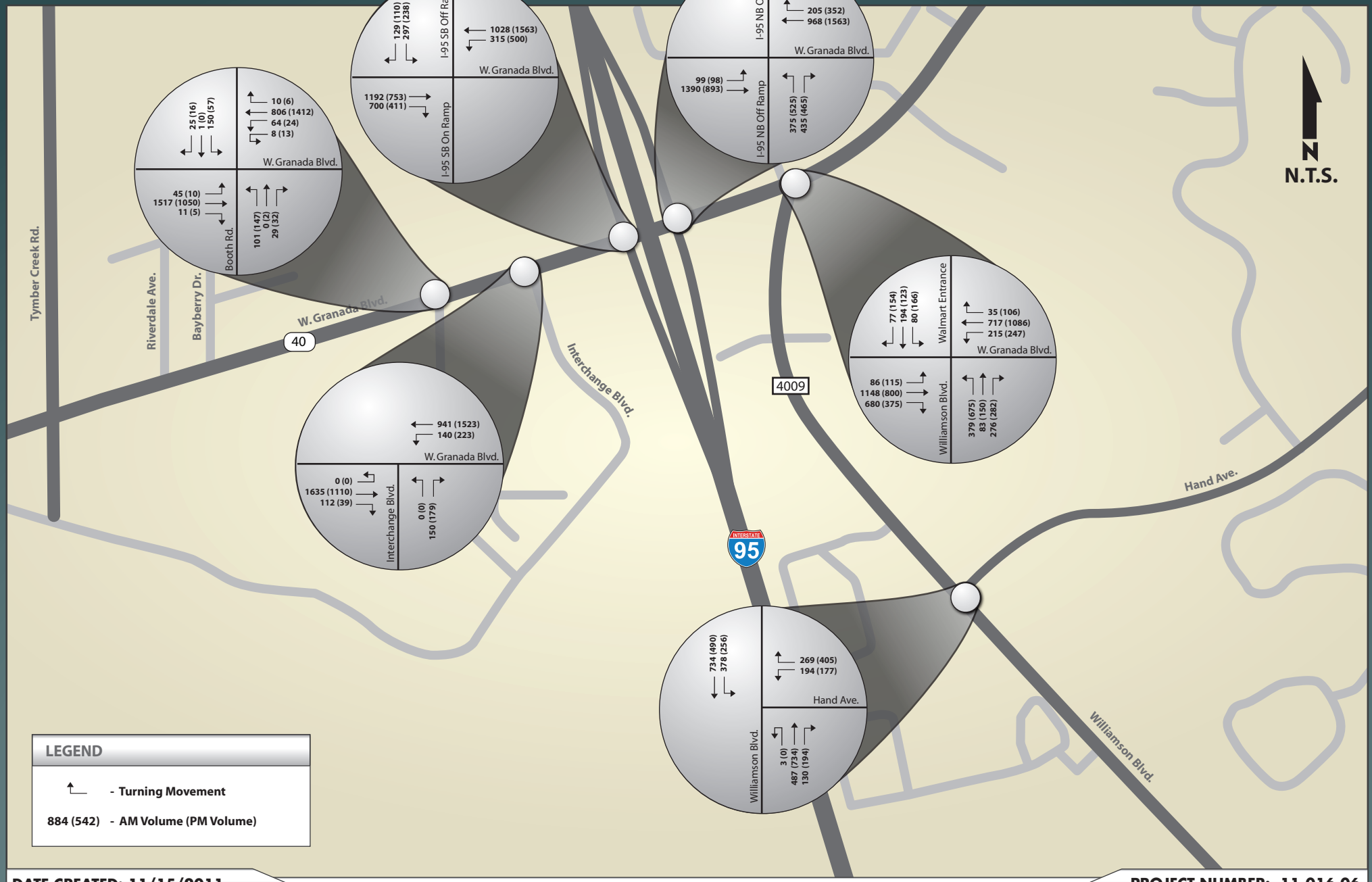

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FIGURE 11-3
Year 2015 Design Hour
Turning Movement Volumes
No Build - Subsection 3

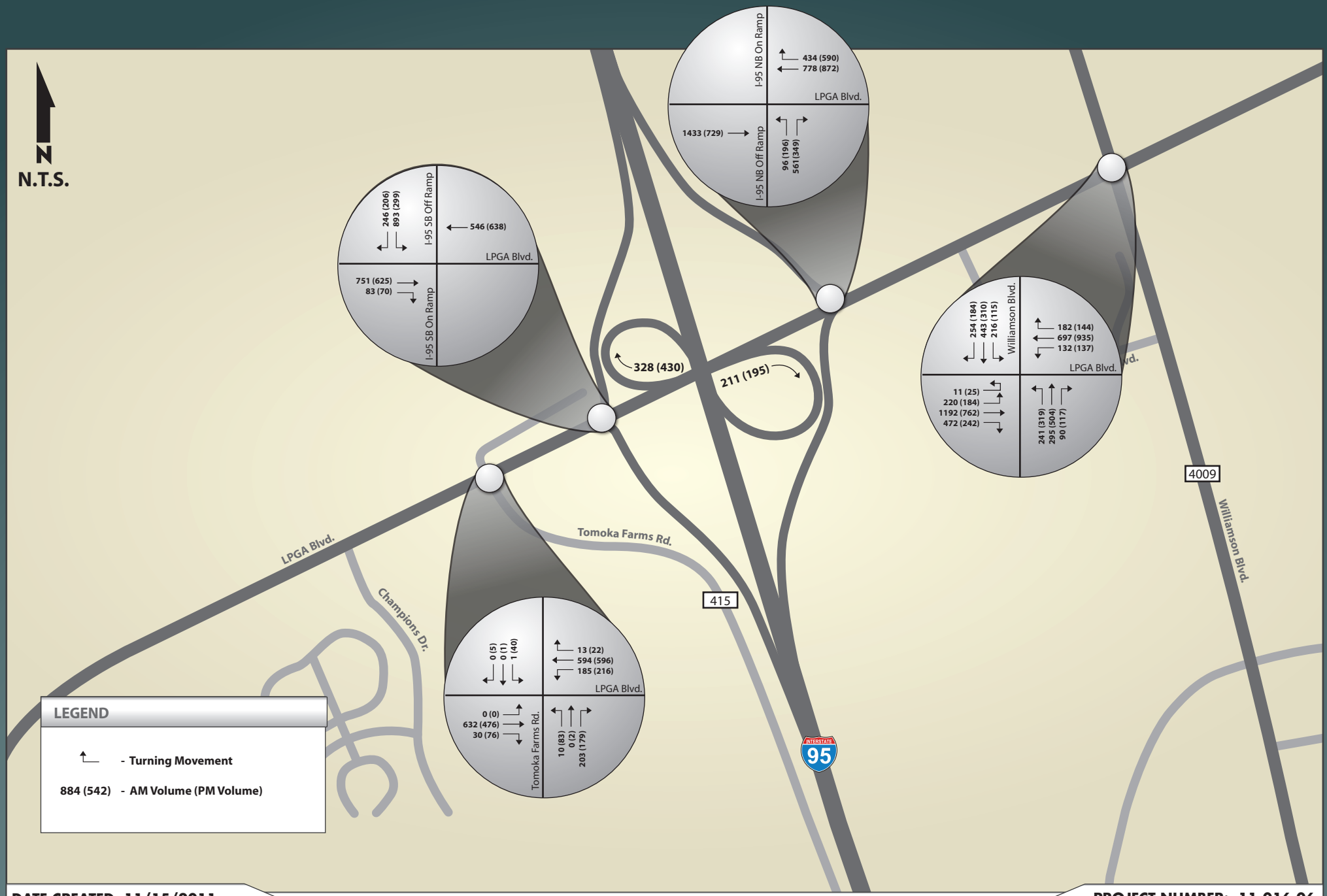

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FIGURE 11-4
Year 2015 Design Hour
Turning Movement Volumes
No Build - Subsection 4

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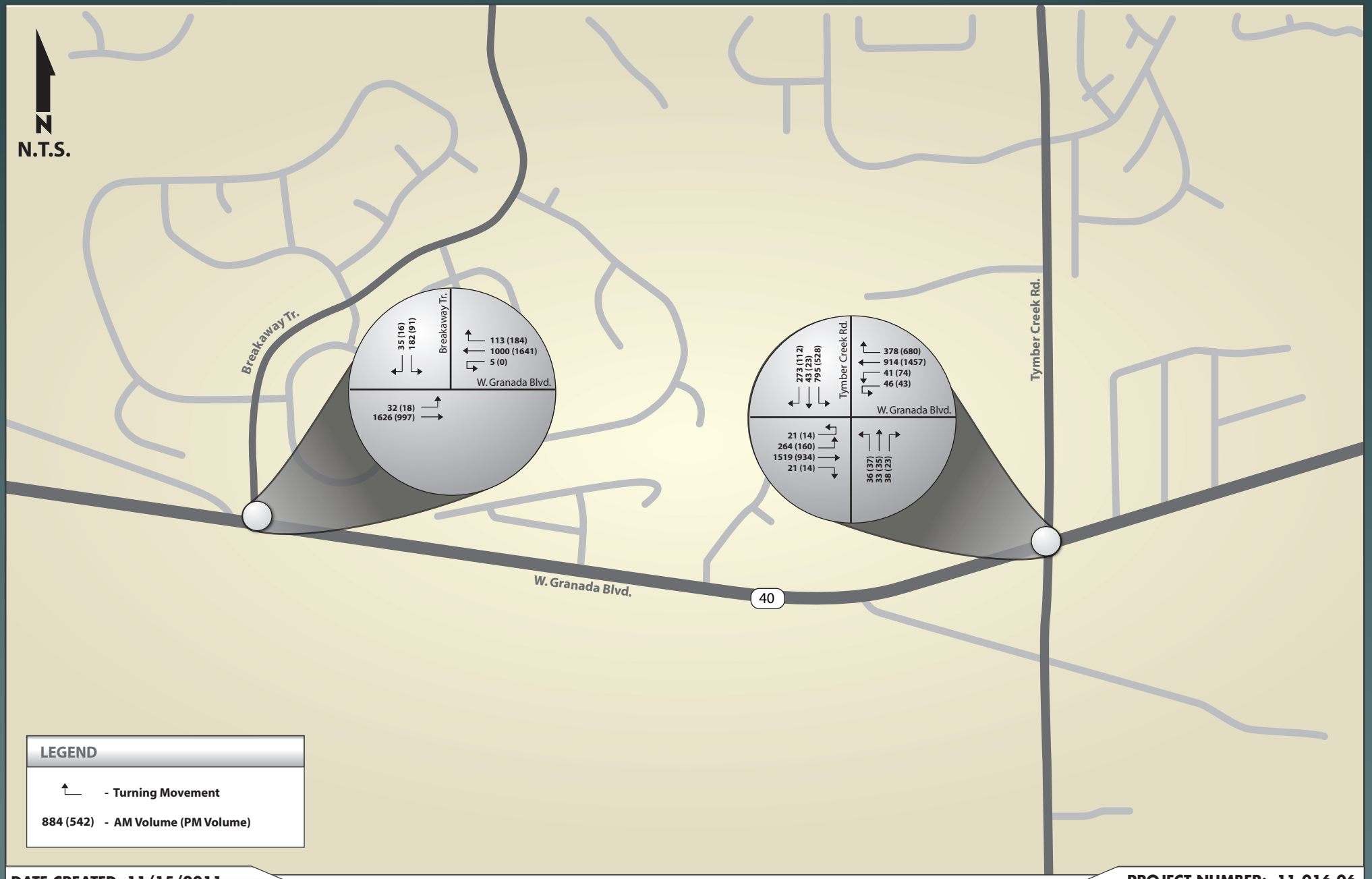
FIGURE 12-1
Year 2025 Design Hour
Turning Movement Volumes
No Build - Subsection 1



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PROJECT NUMBER: 11-016.06

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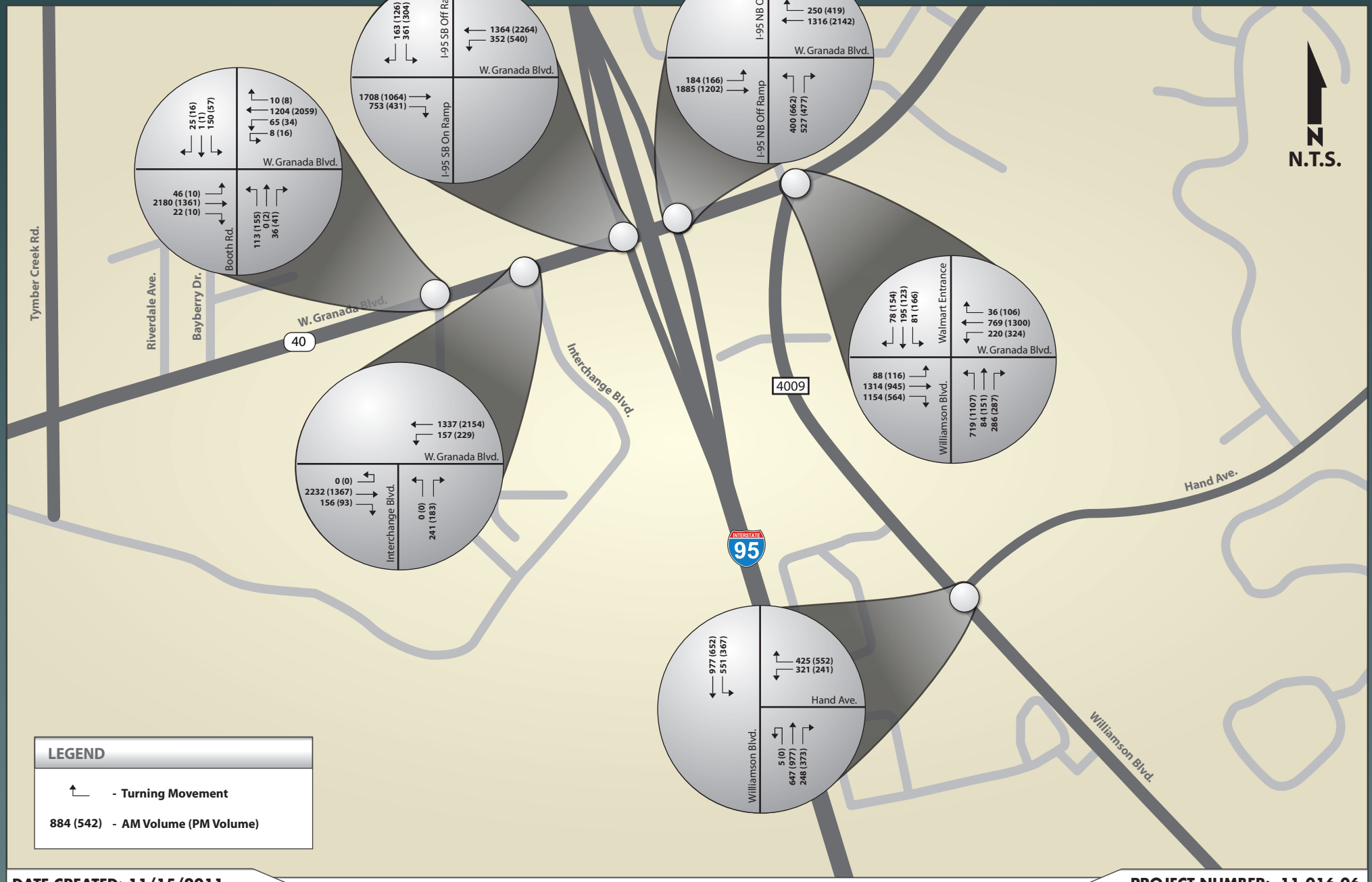
Financial Project ID: 428947-1-22-01

FIGURE 12-2
Year 2025 Design Hour
Turning Movement Volumes
No Build - Subsection 2



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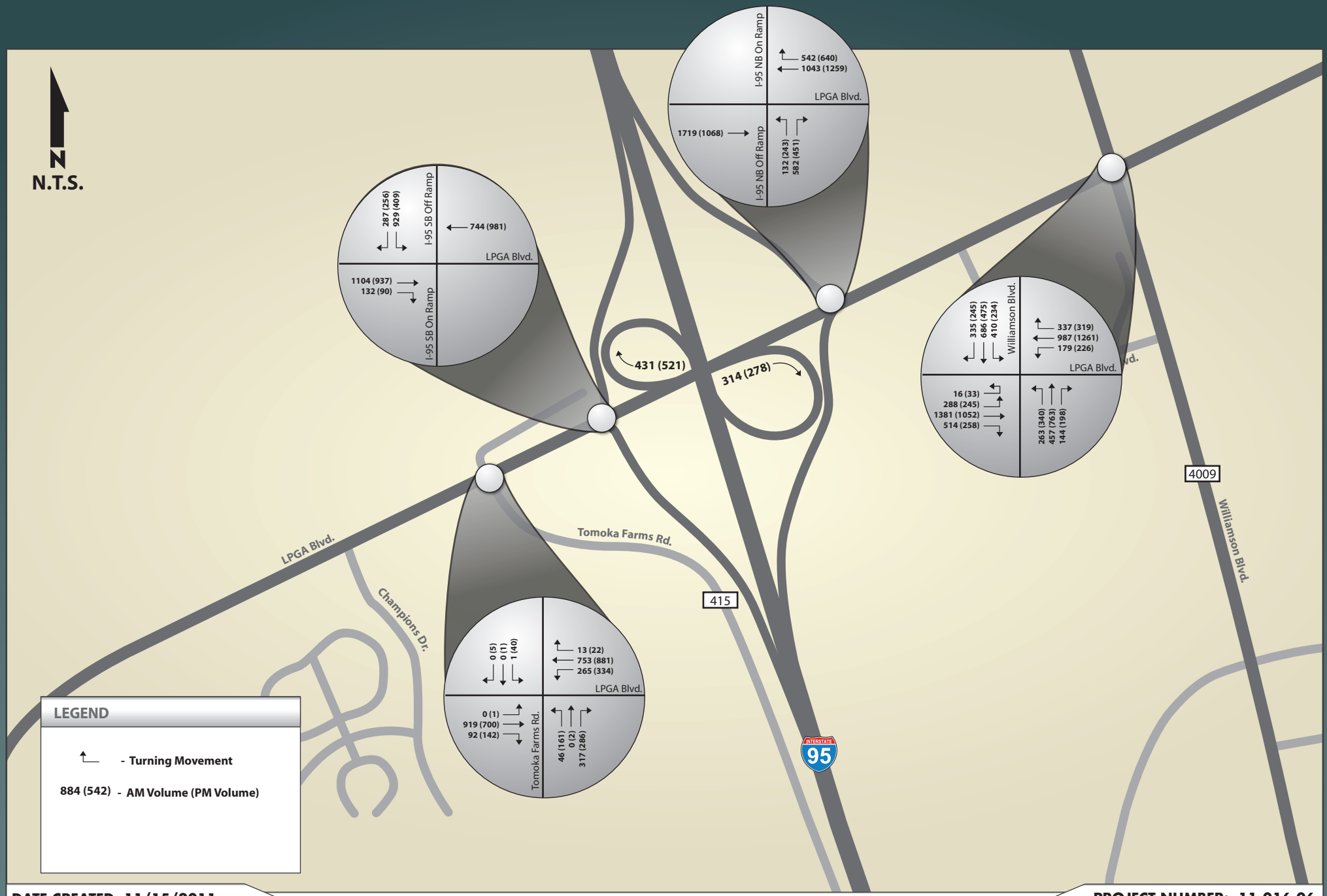
Financial Project ID: 428947-1-22-01

FIGURE 12-3
Year 2025 Design Hour
Turning Movement Volumes
No Build - Subsection 3



DATE CREATED: 11/15/2011

PROJECT NUMBER: 11-016.06

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FIGURE 12-4
Year 2025 Design Hour
Turning Movement Volumes
No Build - Subsection 4

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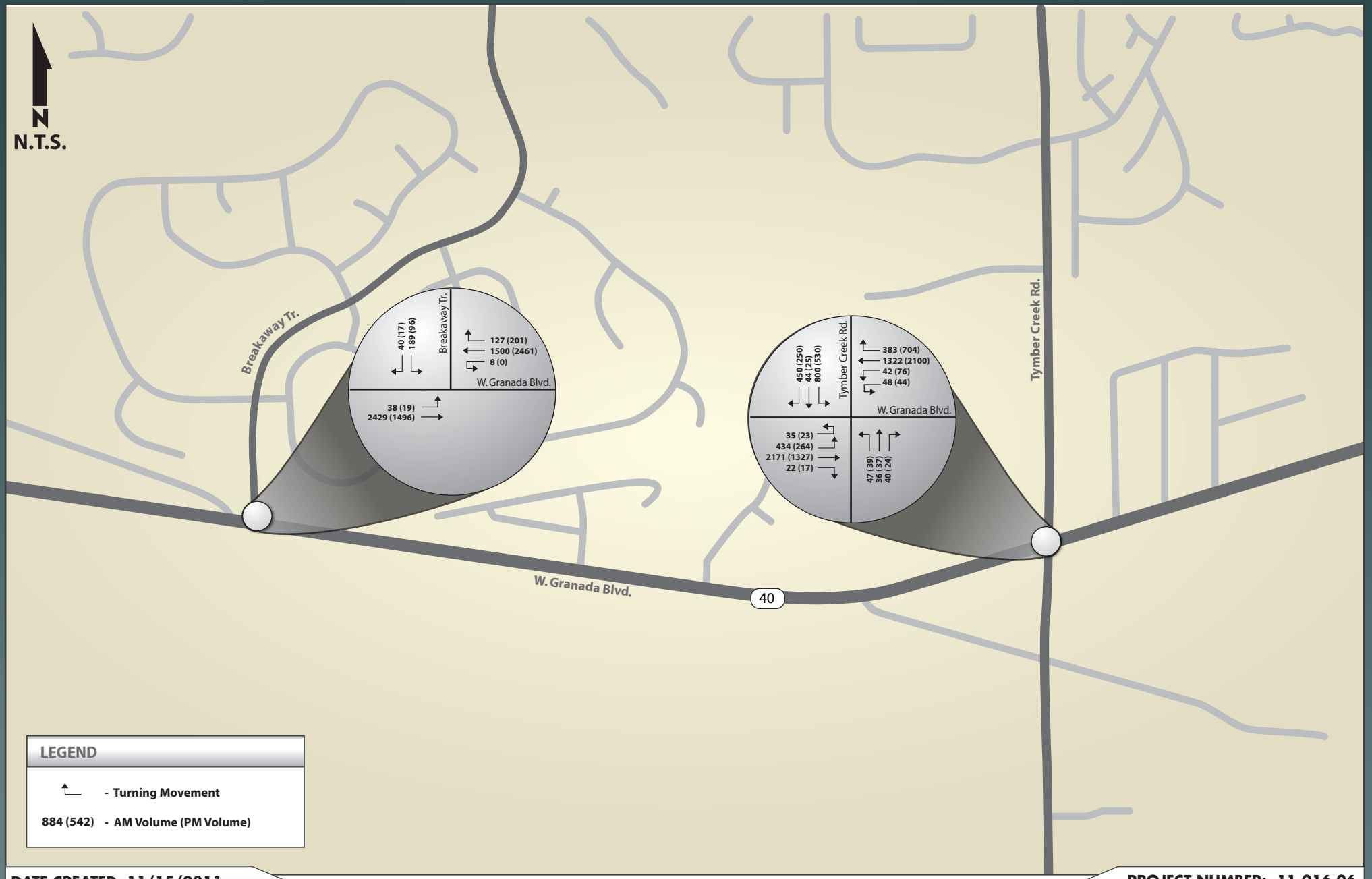
Financial Project ID: 428947-1-22-01

FIGURE 13-1
Year 2035 Design Hour
Turning Movement Volumes
No Build - Subsection 1



DATE CREATED: 11/15/2011

PROJECT NUMBER: 11-016.06

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Financial Project ID: 428947-1-22-01

FIGURE 13-2
Year 2035 Design Hour
Turning Movement Volumes
No Build - Subsection 2

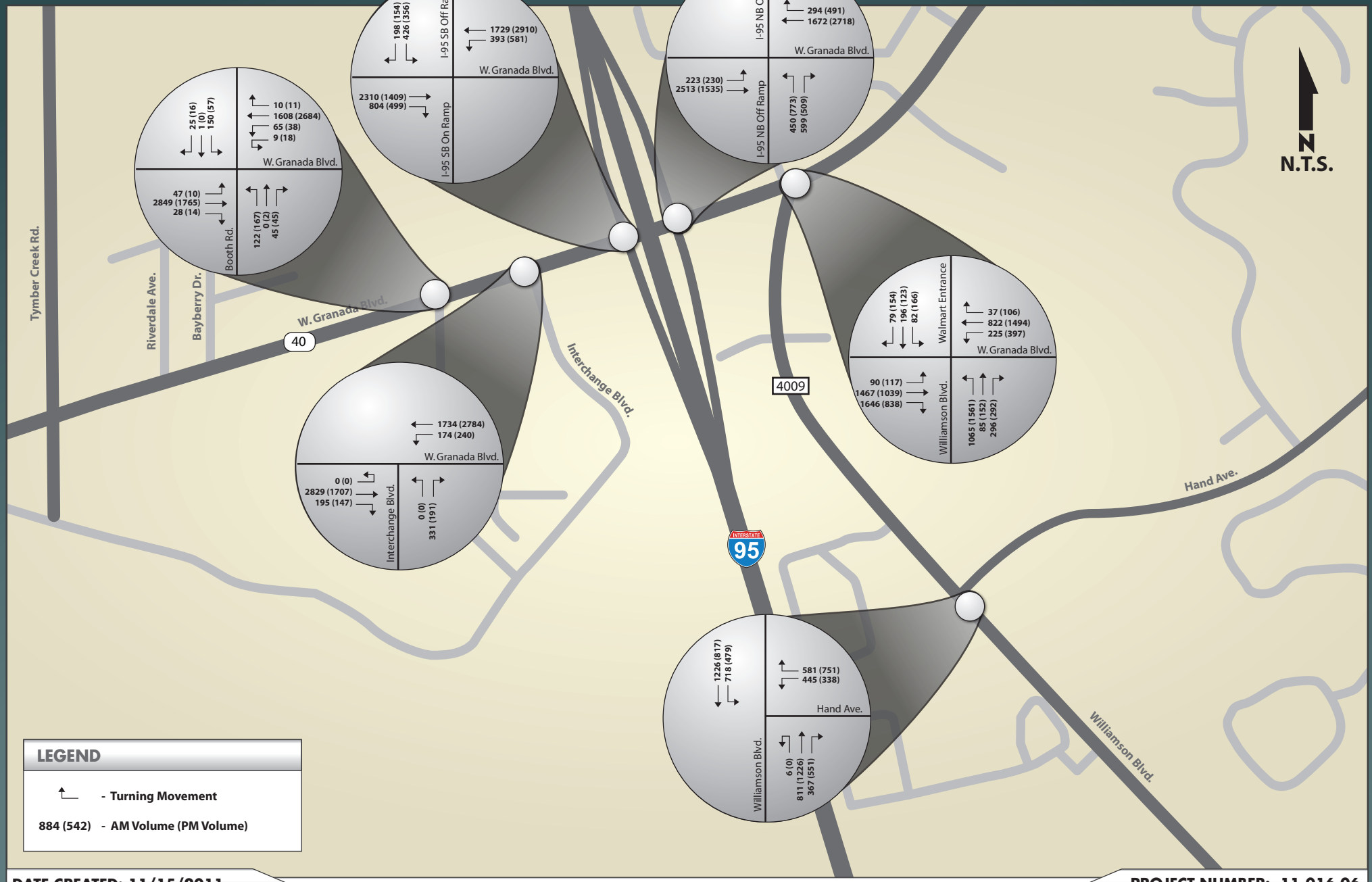

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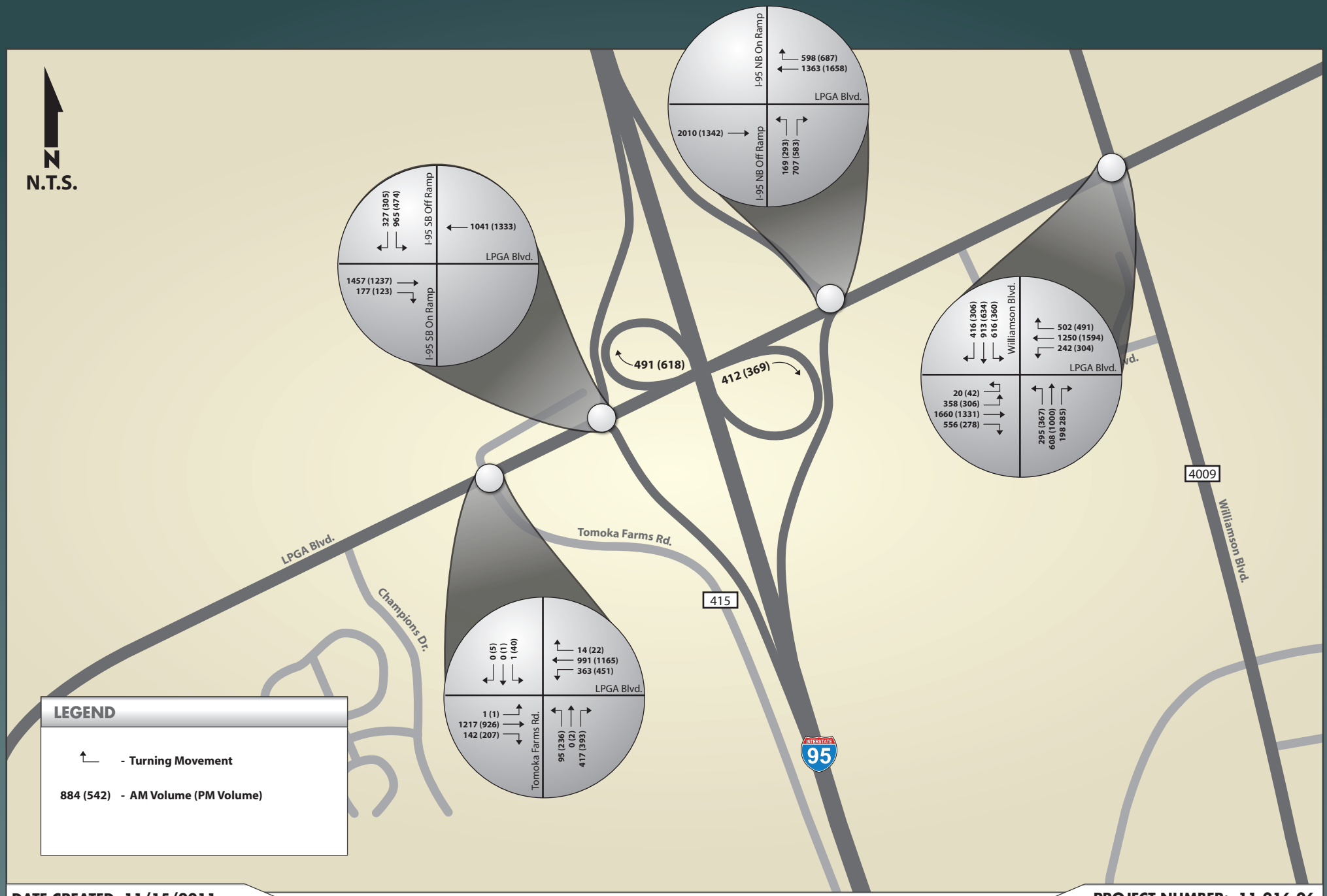
FIGURE 13-3
Year 2035 Design Hour
Turning Movement Volumes
No Build - Subsection 3



DATE CREATED: 11/15/2011

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FIGURE 13-4
Year 2035 Design Hour
Turning Movement Volumes
No Build - Subsection 4

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FIGURE 14-1
Year 2015 Design Hour
Turning Movement Volumes
Build Alternative 1 - Subsection 1

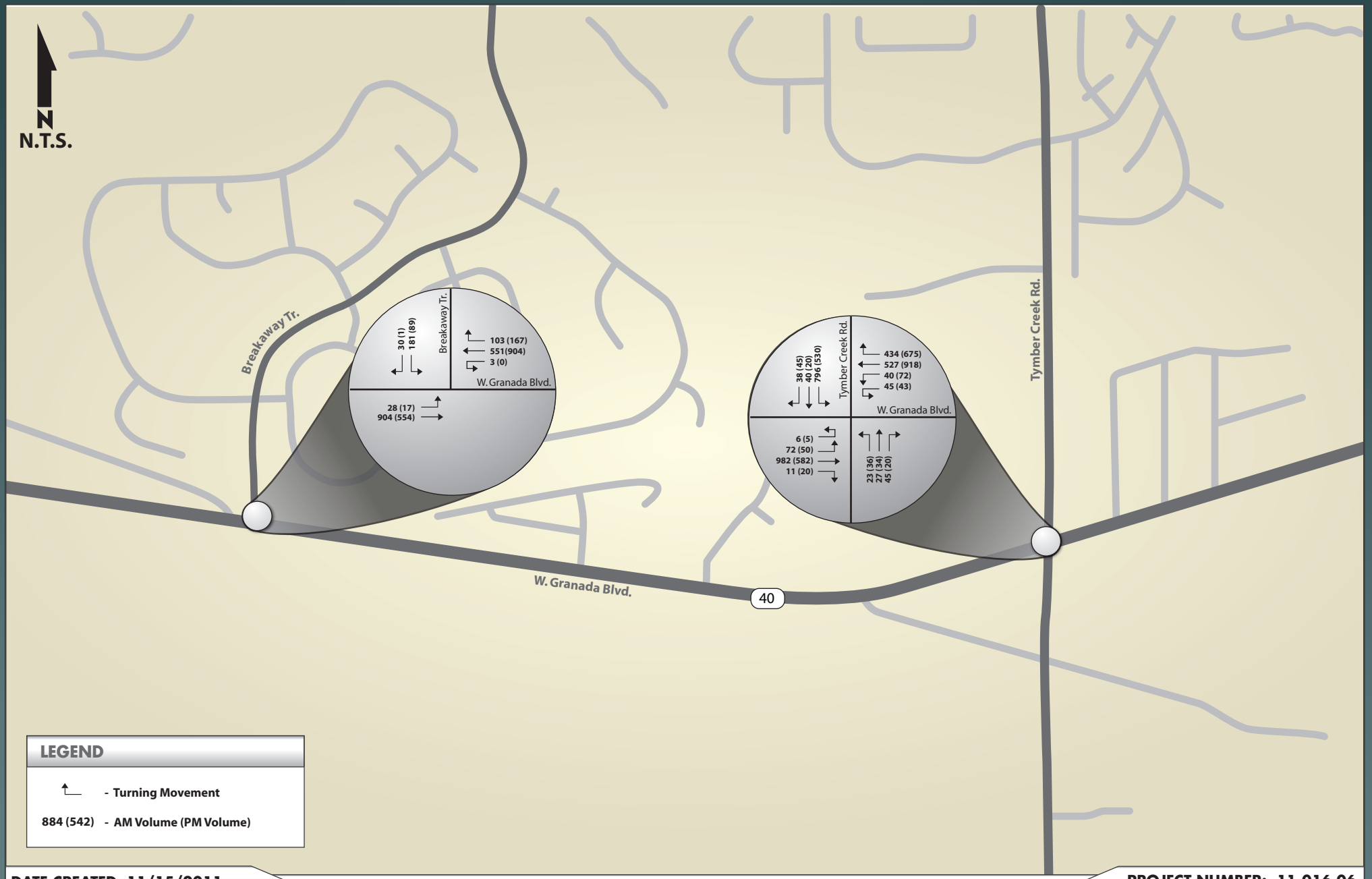

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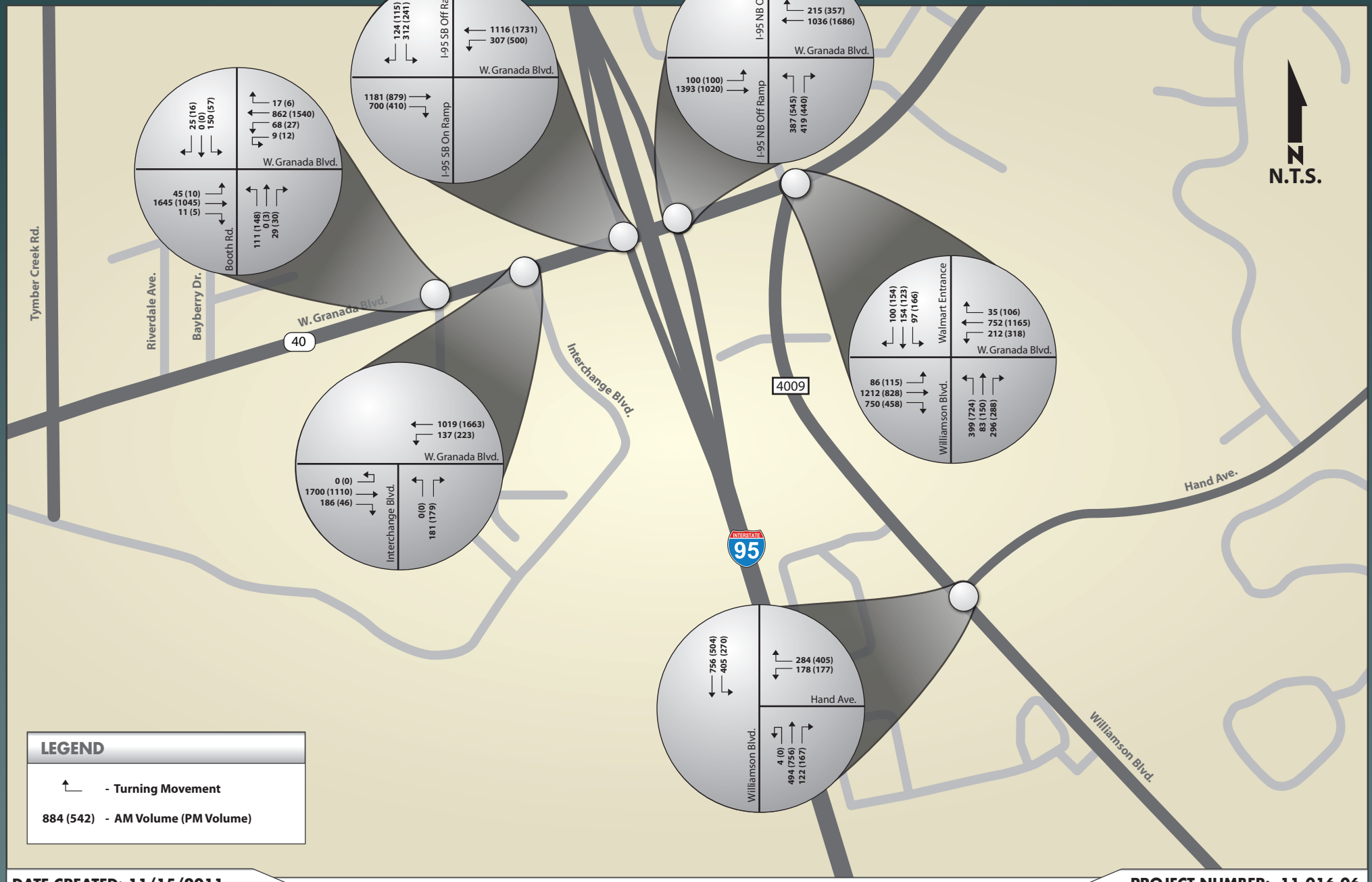
FIGURE 14-2
Year 2015 Design Hour
Turning Movement Volumes
Build Alternative 1 - Subsection 2



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Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 14-3
Year 2015 Design Hour
Turning Movement Volumes
Build Alternative 1 - Subsection 3

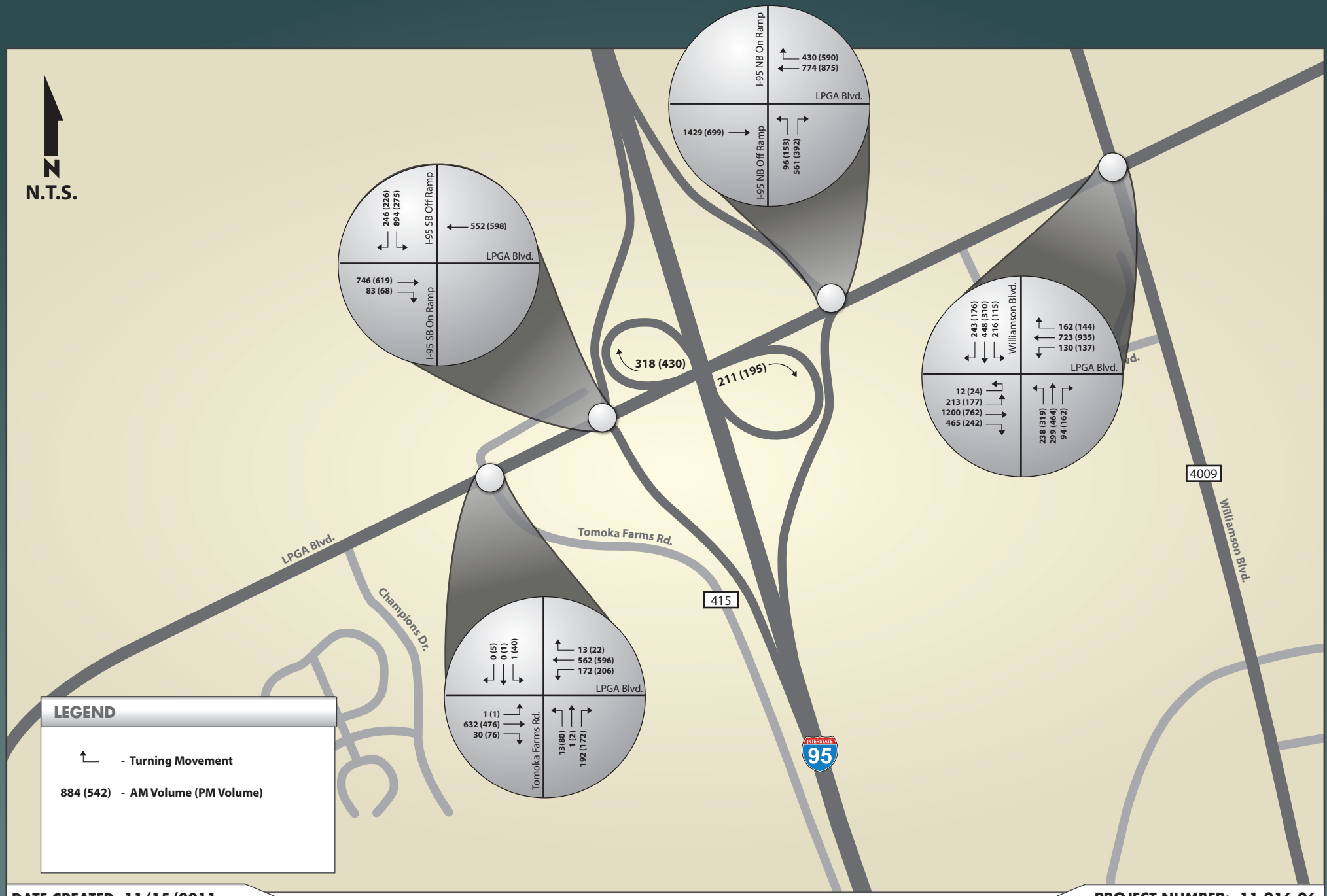

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FIGURE 14-4
Year 2015 Design Hour
Turning Movement Volumes
Build Alternative 1 - Subsection 4

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Design Traffic for SR 40 PD&E

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FIGURE 15-1
Year 2025 Design Hour
Turning Movement Volumes
Build Alternative 1 - Subsection 1

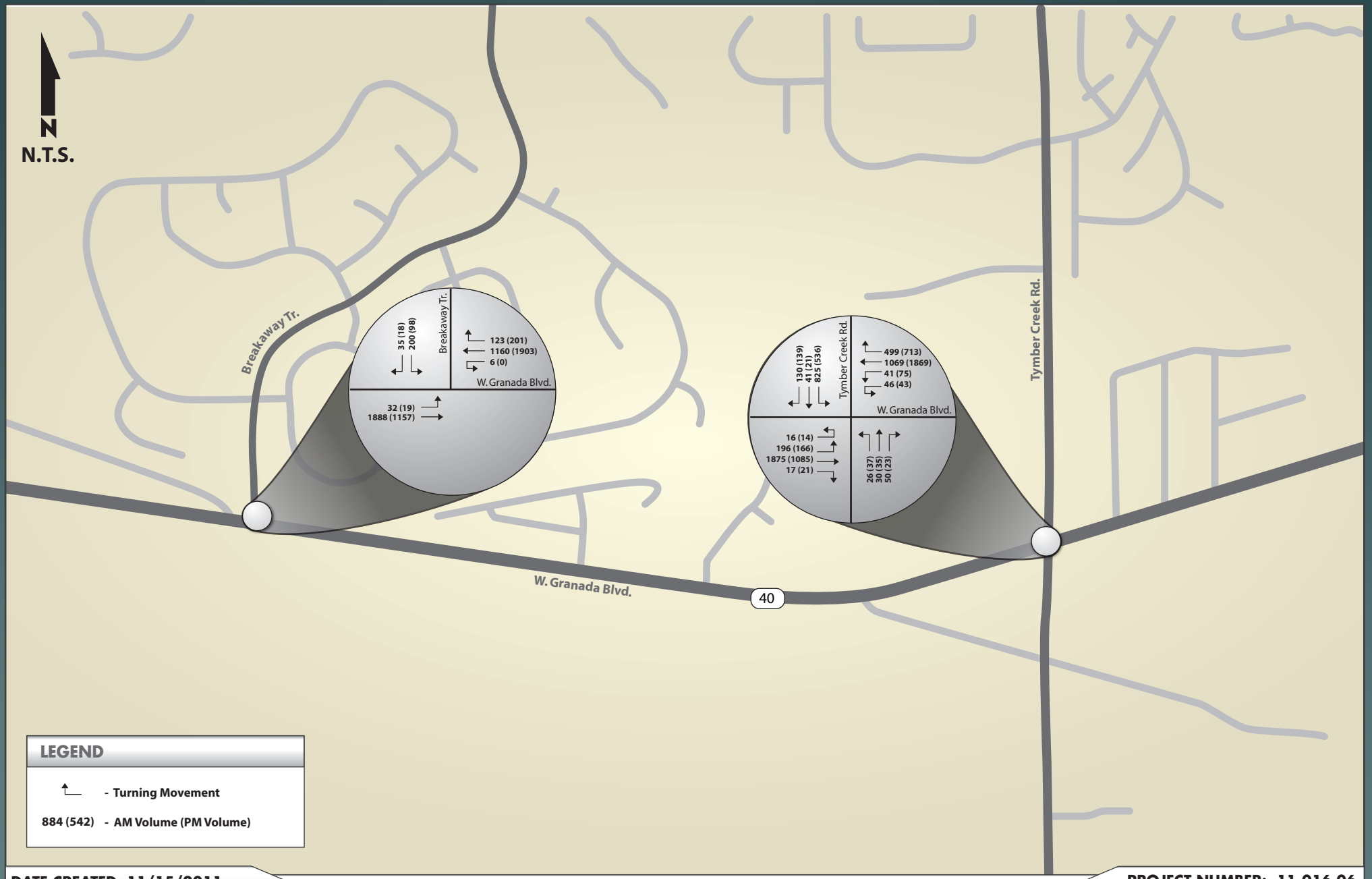

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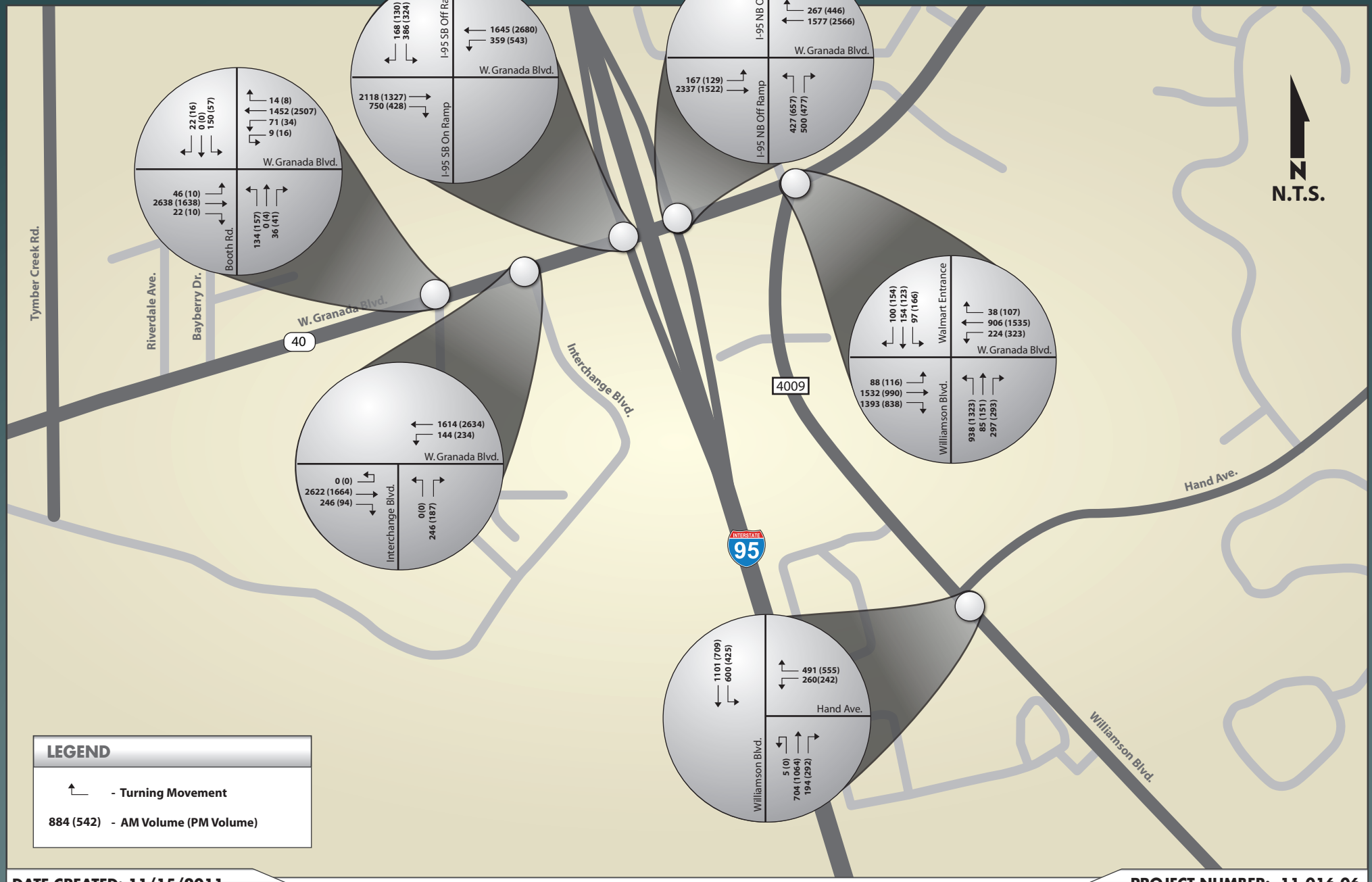
FIGURE 15-2
Year 2025 Design Hour
Turning Movement Volumes
Build Alternative 1 - Subsection 2



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Financial Project ID: 428947-1-22-01

FIGURE 15-3
Year 2025 Design Hour
Turning Movement Volumes
Build Alternative 1 - Subsection 3

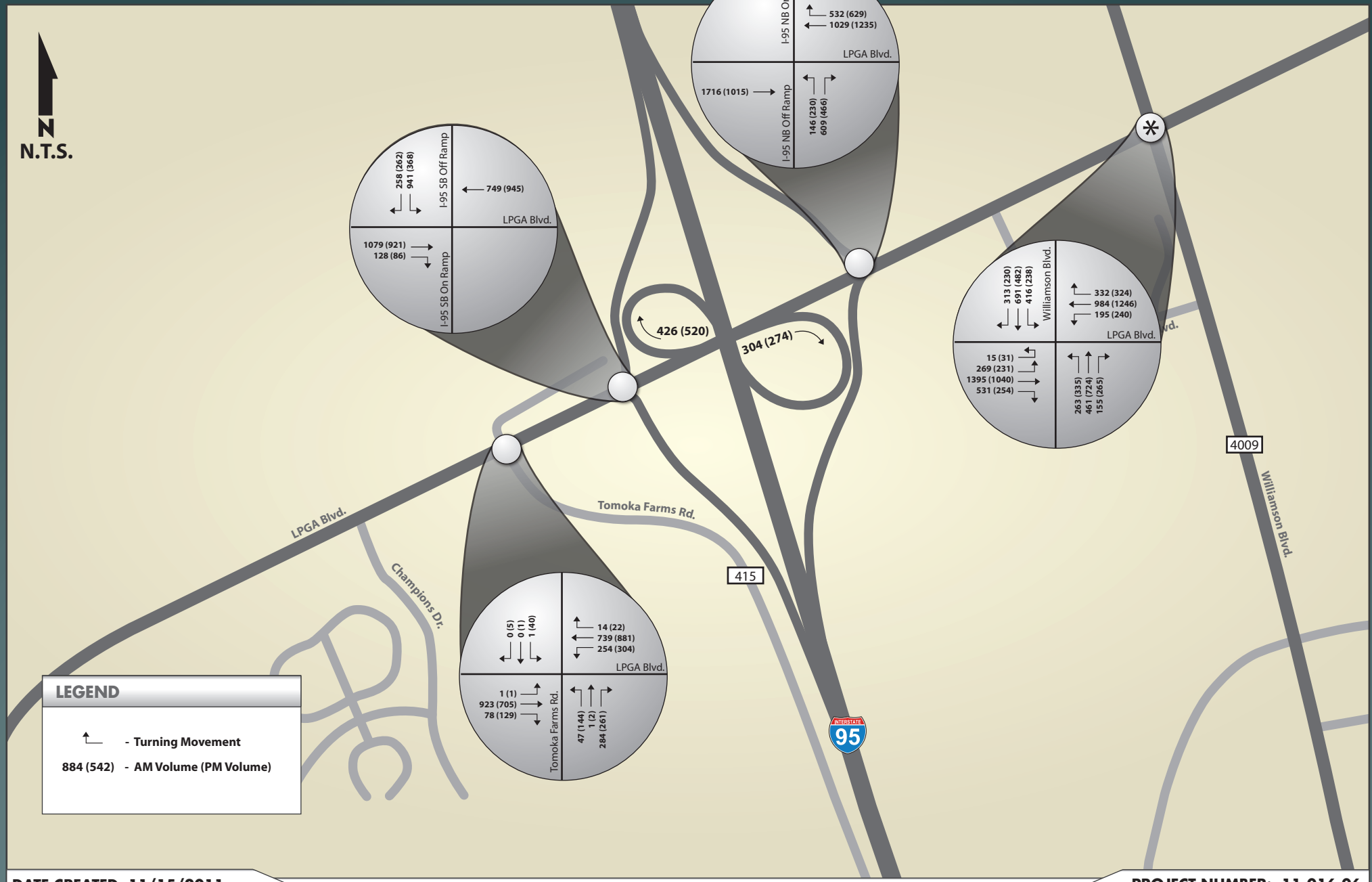

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FIGURE 15-4
Year 2025 Design Hour
Turning Movement Volumes
Build Alternative 1 - Subsection 4

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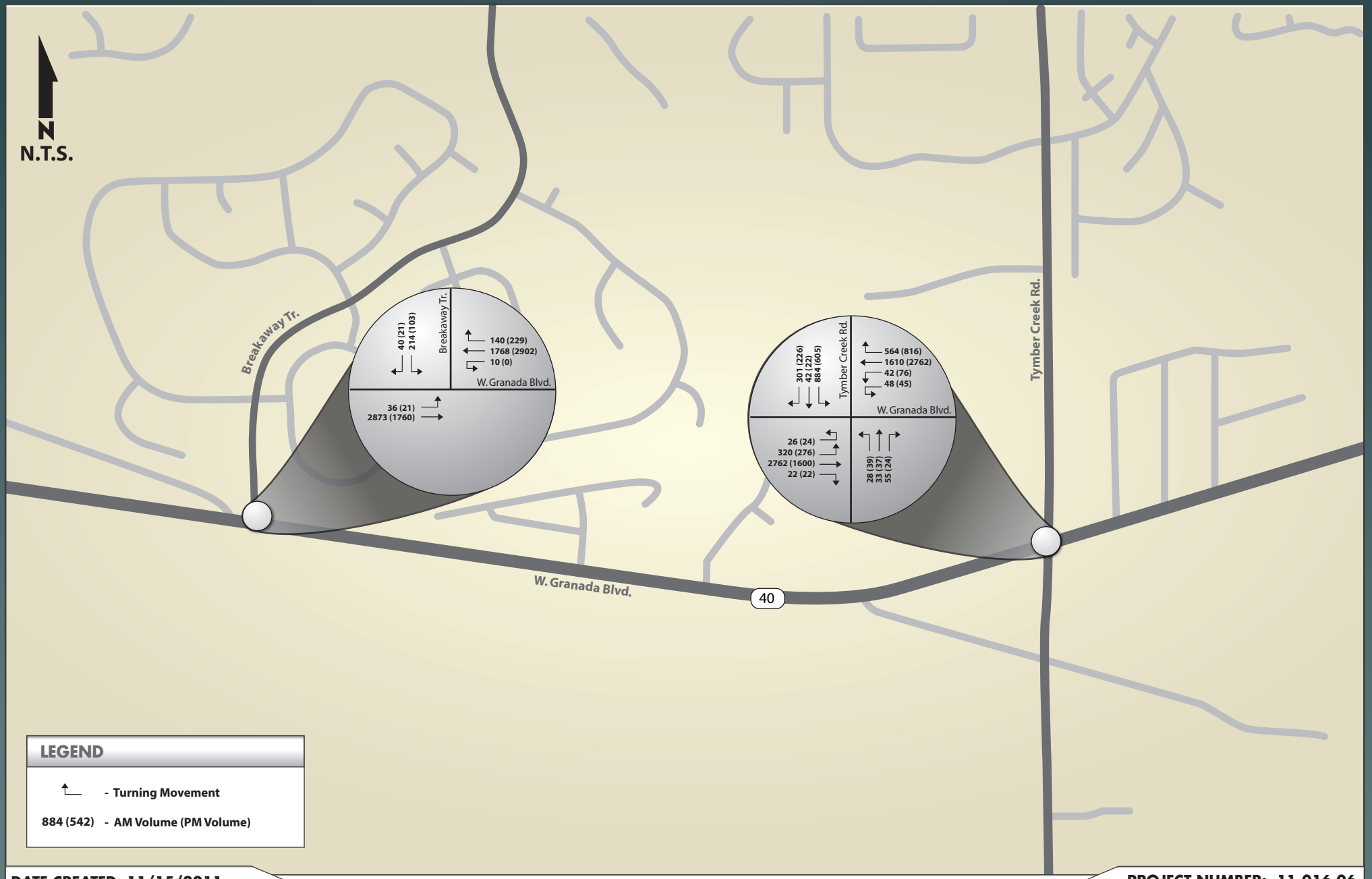
FIGURE 16-1
Year 2035 Design Hour
Turning Movement Volumes
Build Alternative 1 - Subsection 1



DATE CREATED: 11/15/2011

PROJECT NUMBER: 11-016.06

Prepared For: FDOT District Five
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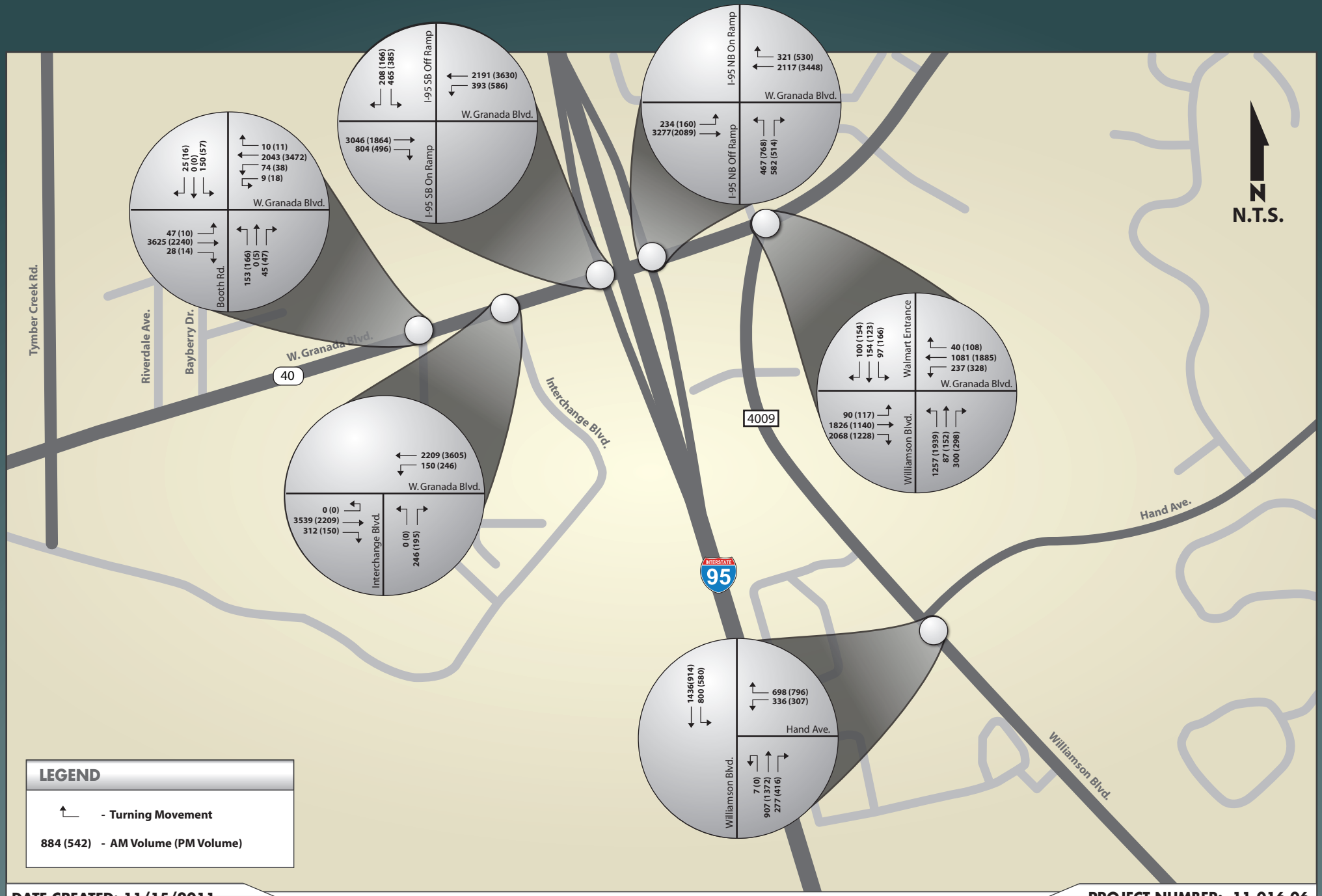
Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 16-2
Year 2035 Design Hour
Turning Movement Volumes
Build Alternative 1 - Subsection 2



DATE CREATED: 11/15/2011

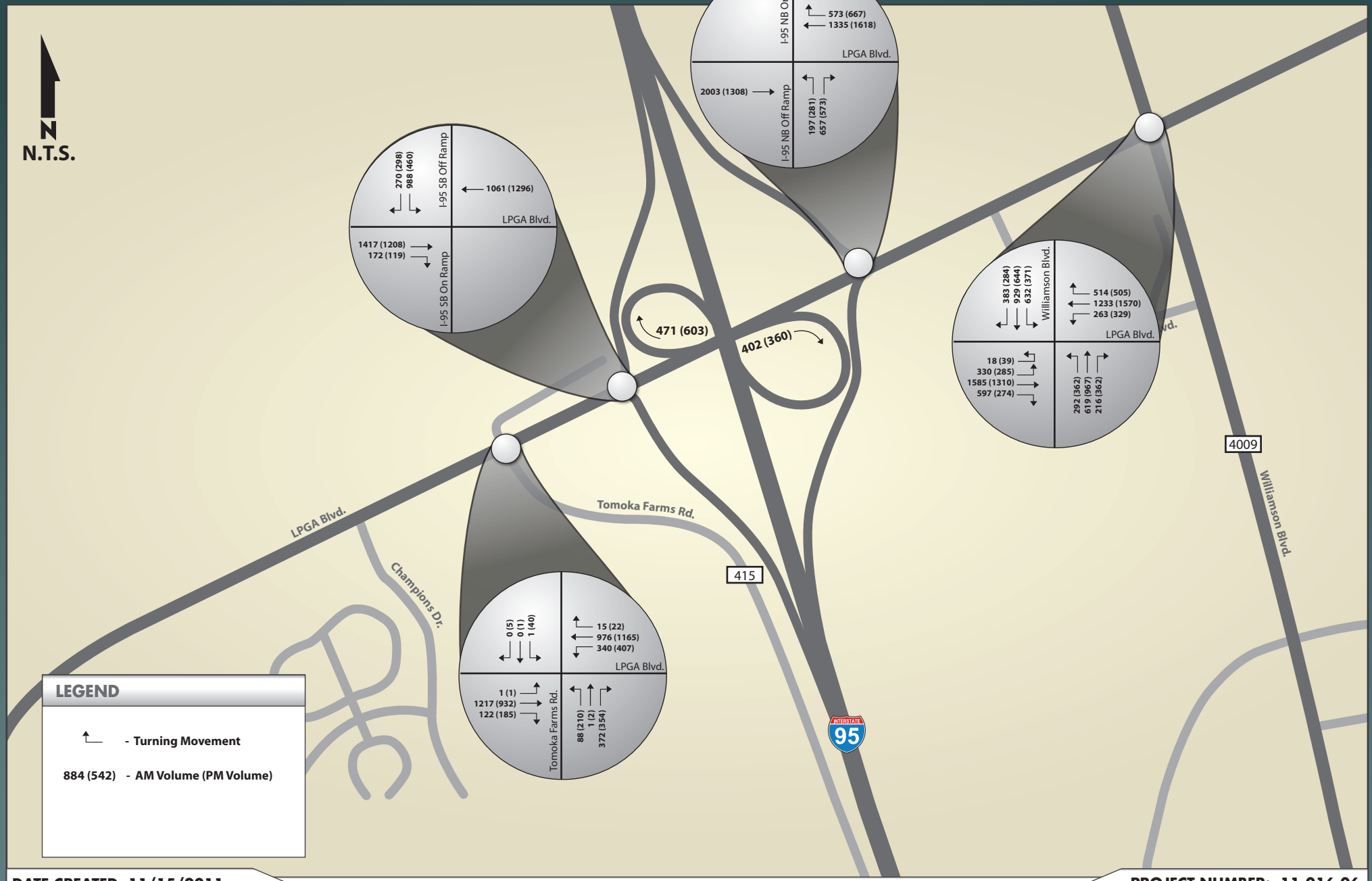
PROJECT NUMBER: 11-016.06

Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 16-3
Year 2035 Design Hour
Turning Movement Volumes
Build Alternative 1 - Subsection 3



DATE CREATED: 11/15/2011

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FIGURE 16-4
Year 2035 Design Hour
Turning Movement Volumes
Build Alternative 1 - Subsection 4

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FIGURE 17-1
Year 2015 Design Hour
Turning Movement Volumes
Build Alternative 5 - Subsection 1

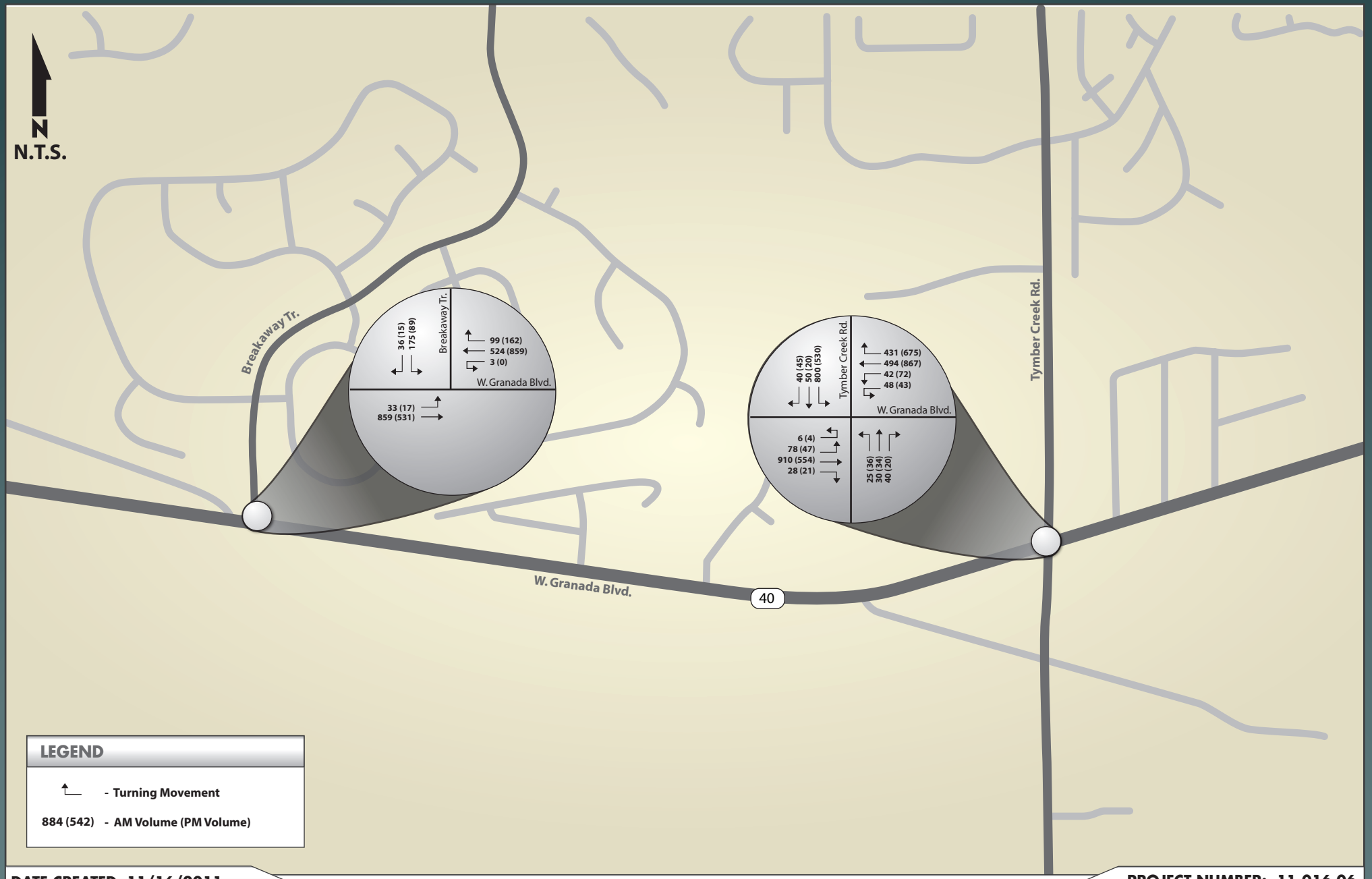

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FIGURE 17-2
Year 2015 Design Hour
Turning Movement Volumes
Build Alternative 5 - Subsection 2

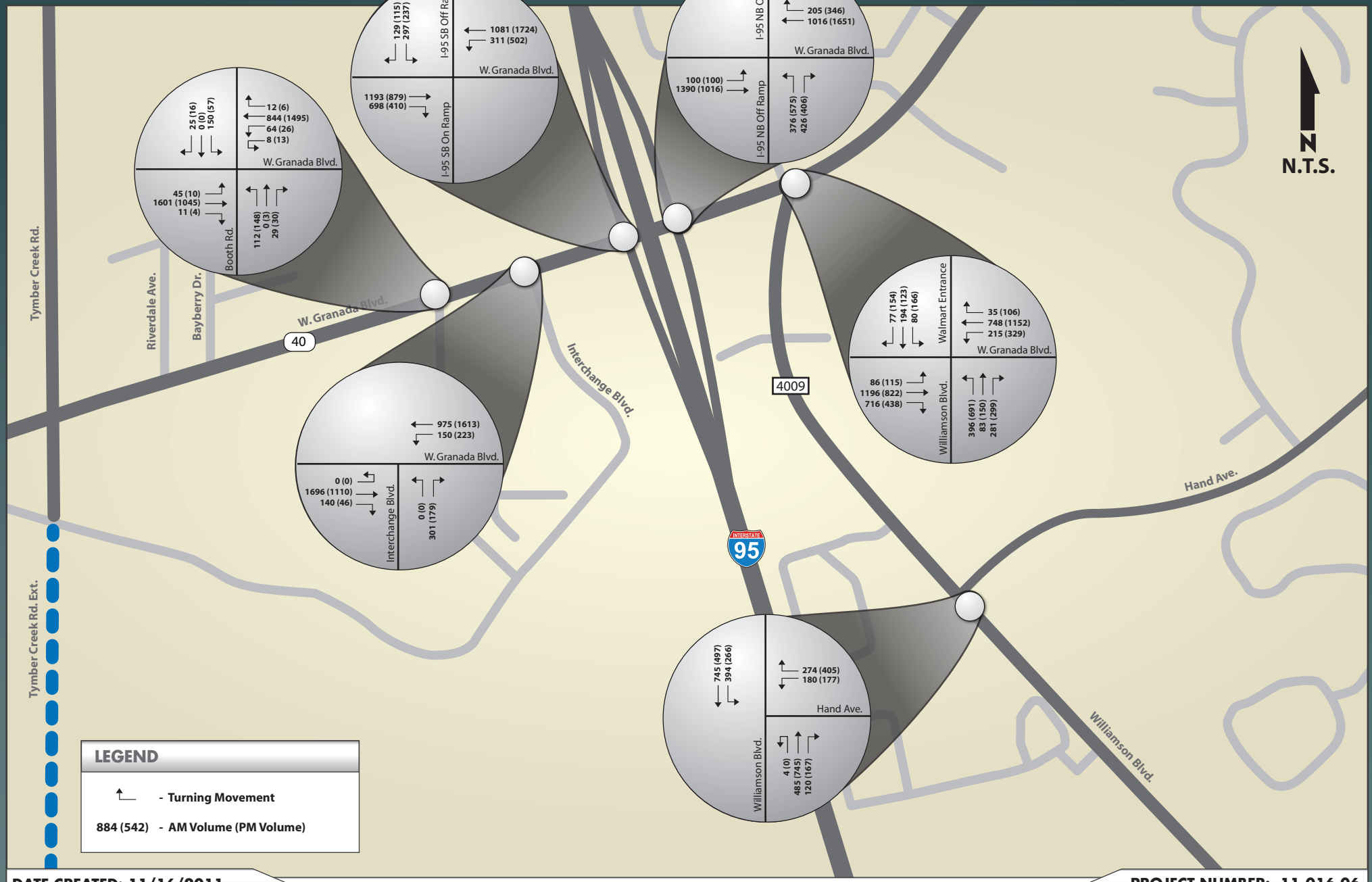

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FIGURE 17-3
Year 2015 Design Hour
Turning Movement Volumes
Build Alternative 5 - Subsection 3

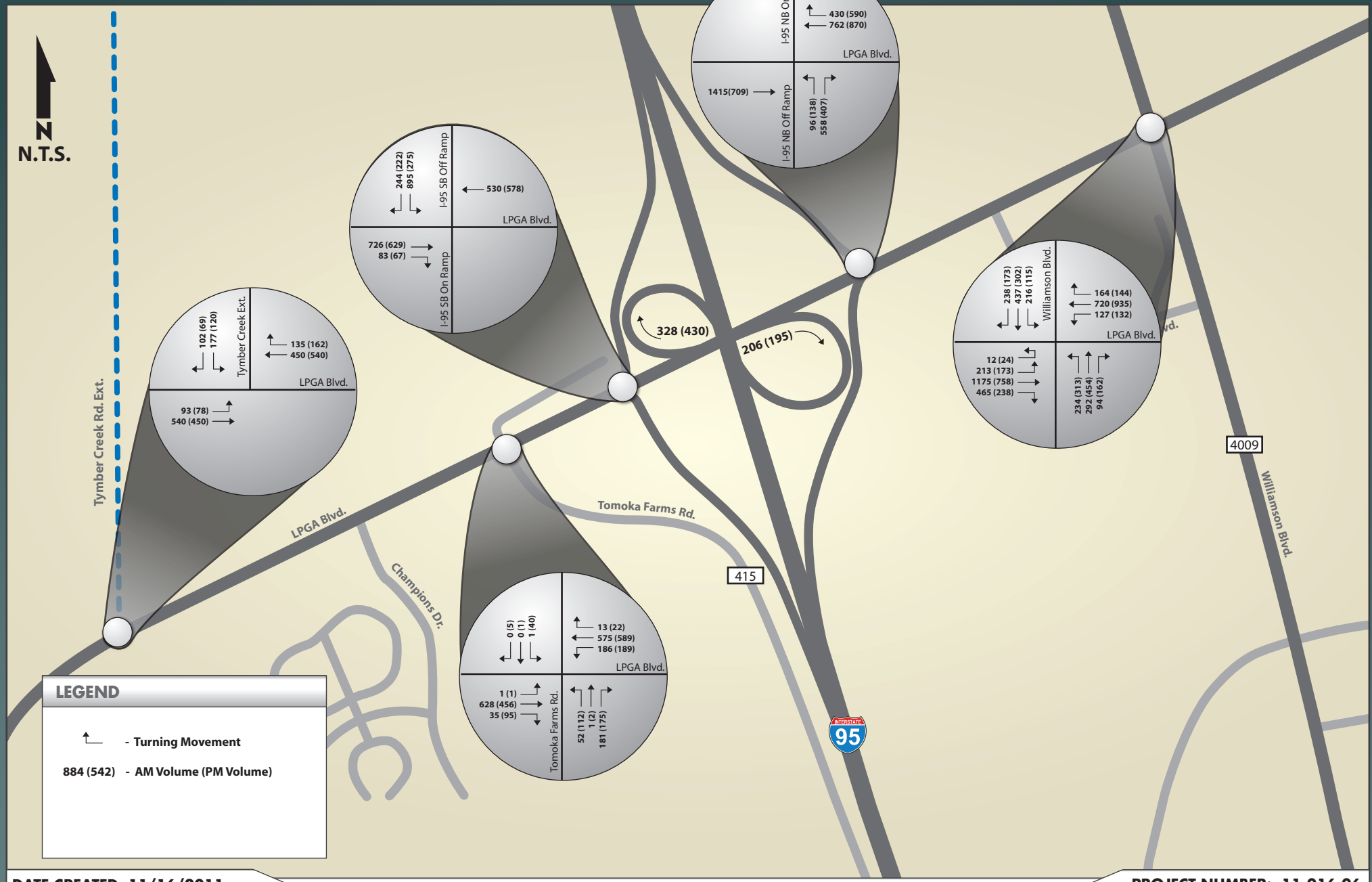

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FIGURE 17-4
Year 2015 Design Hour
Turning Movement Volumes
Build Alternative 5 - Subsection 4

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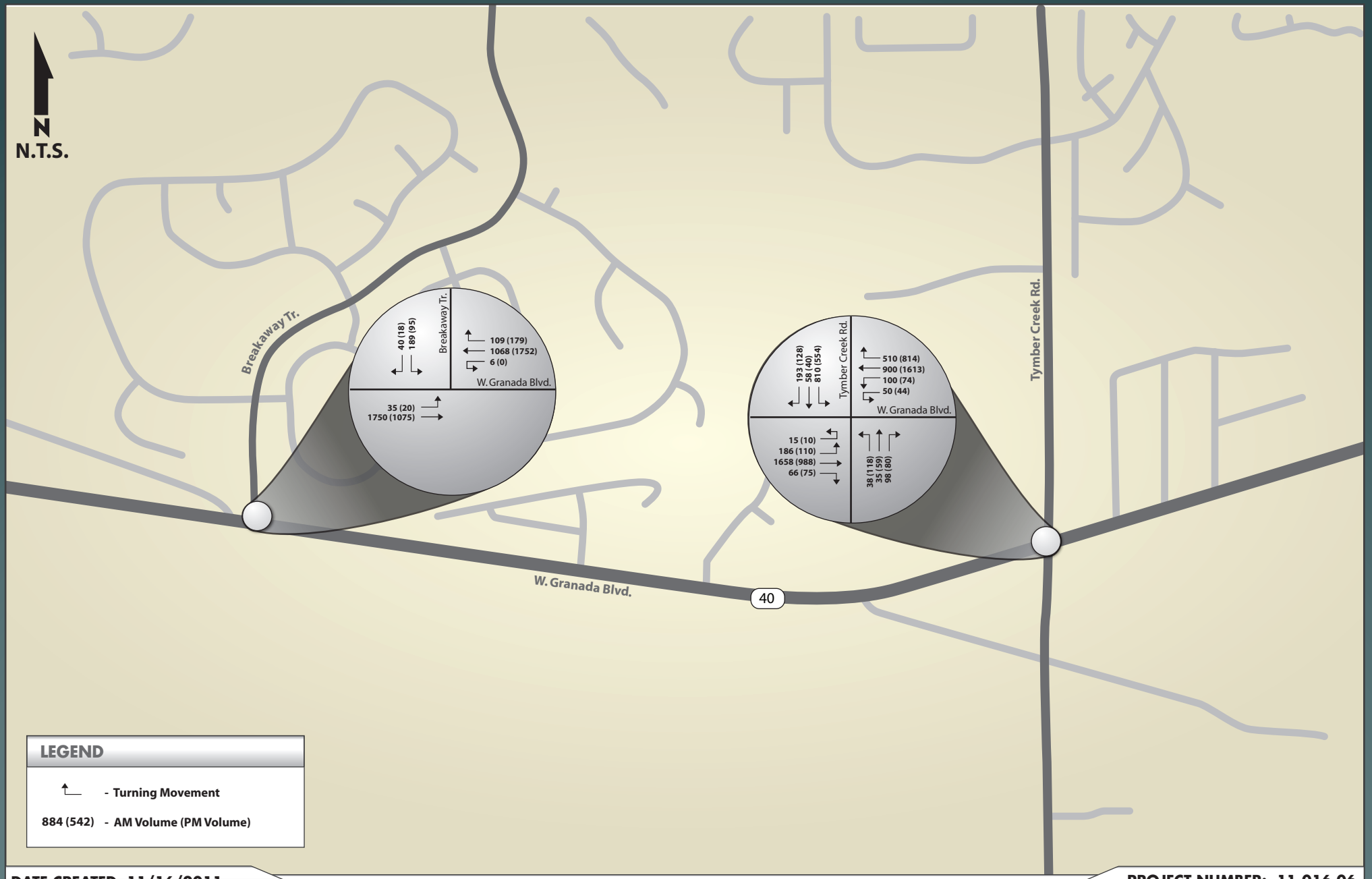
FIGURE 18-1
Year 2025 Design Hour
Turning Movement Volumes
Build Alternative 5 - Subsection 1



DATE CREATED: 11/16/2011

PROJECT NUMBER: 11-016.06

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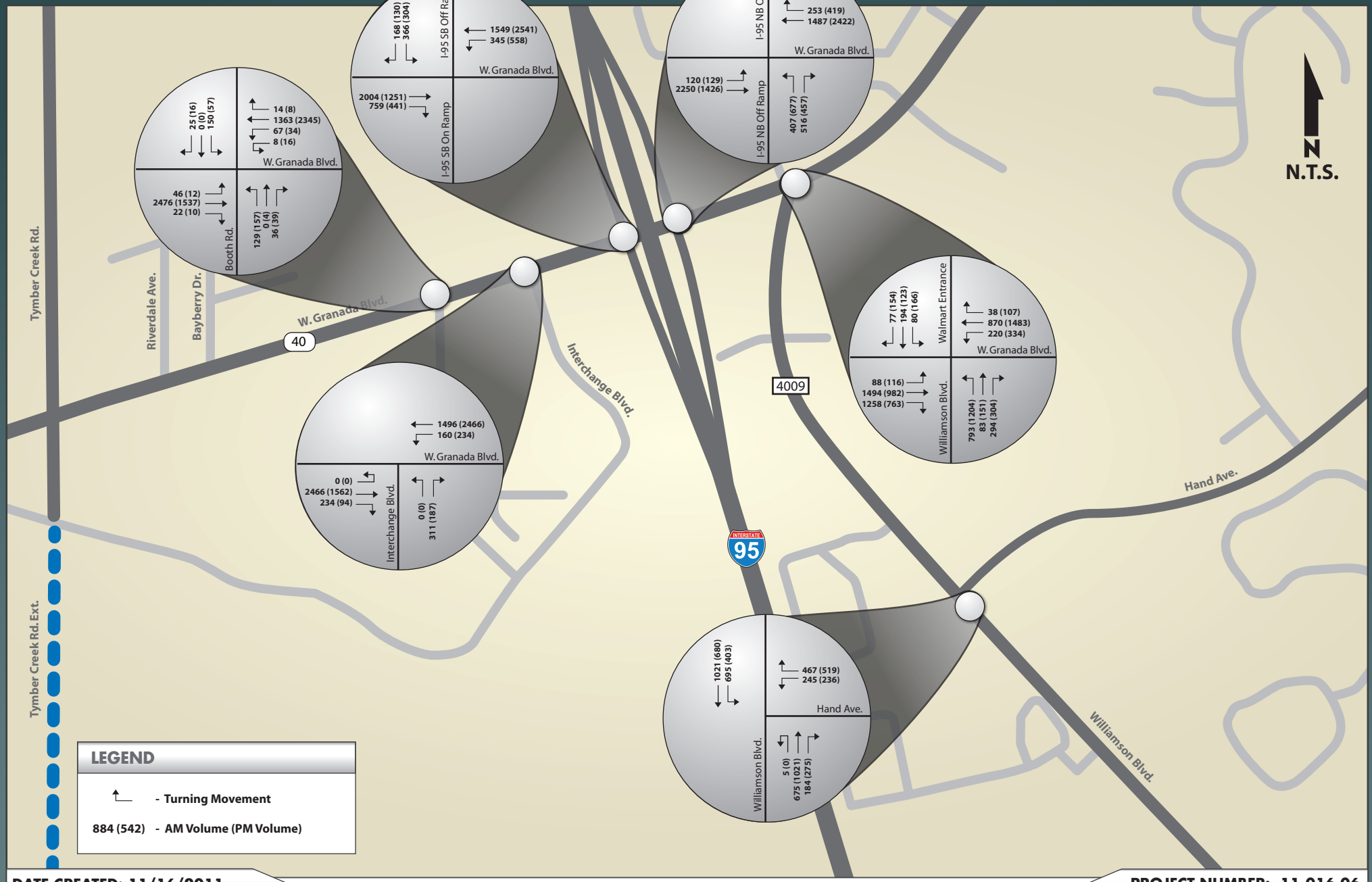
Financial Project ID: 428947-1-22-01

FIGURE 18-2
Year 2025 Design Hour
Turning Movement Volumes
Build Alternative 5 - Subsection 2



DATE CREATED: 11/16/2011

PROJECT NUMBER: 11-016.06

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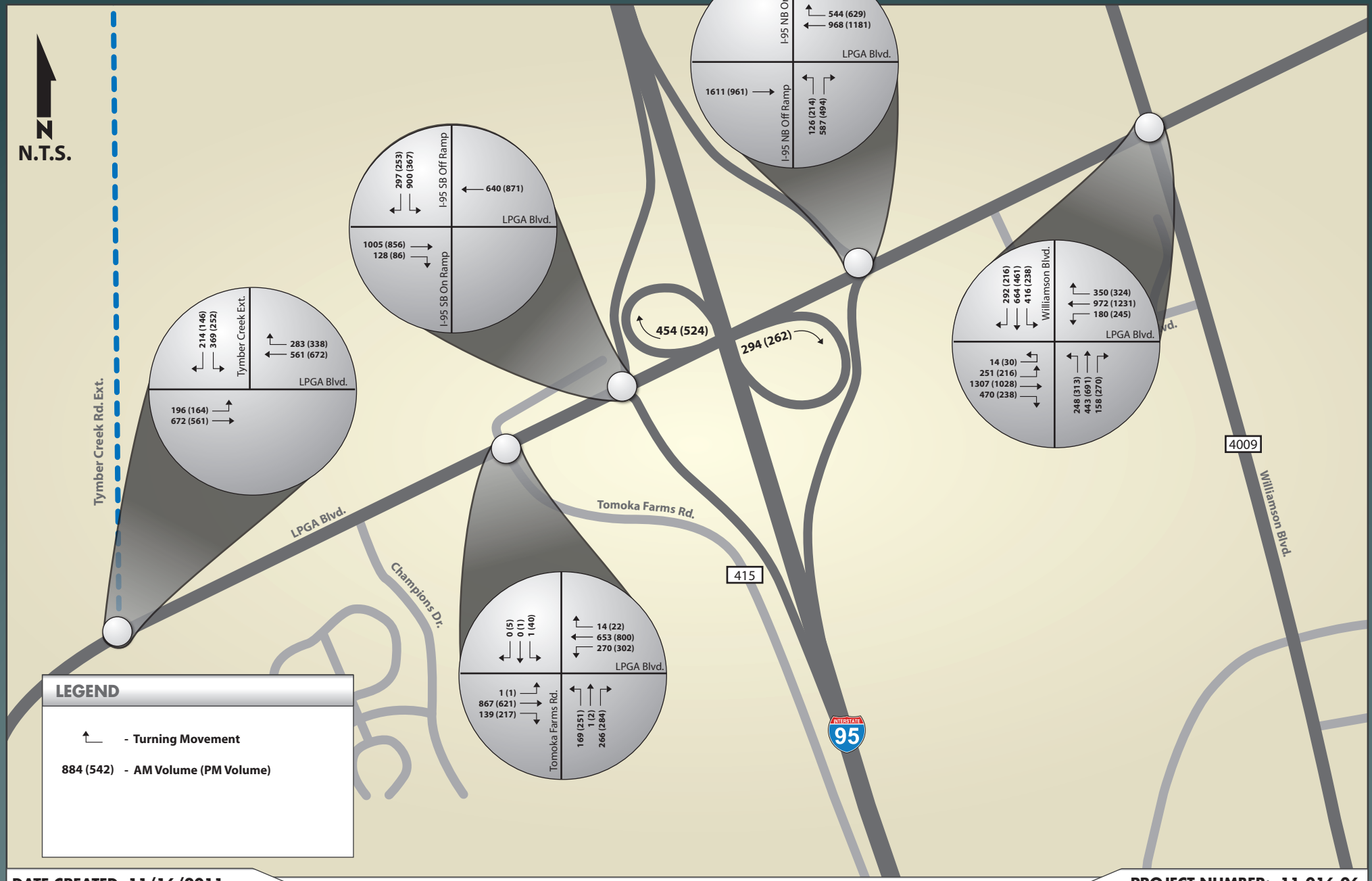
Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 18-3
Year 2025 Design Hour
Turning Movement Volumes
Build Alternative 5 - Subsection 3



DATE CREATED: 11/16/2011

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FIGURE 18-4
Year 2025 Design Hour
Turning Movement Volumes
Build Alternative 5 - Subsection 4

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PROJECT NUMBER: 11-016.06

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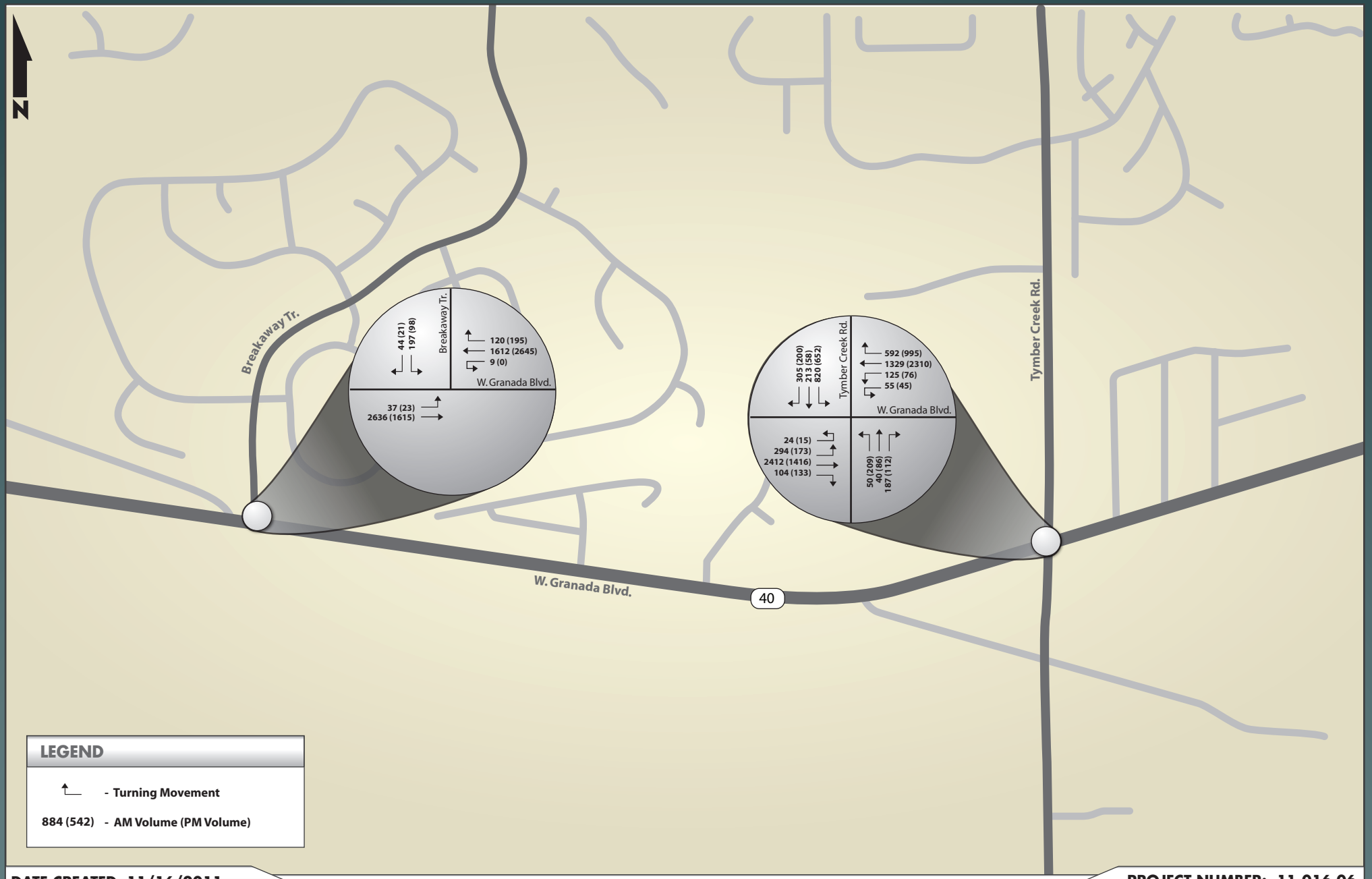
Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 19-1
Year 2035 Design Hour
Turning Movement Volumes
Build Alternative 5 - Subsection 1



DATE CREATED: 11/16/2011

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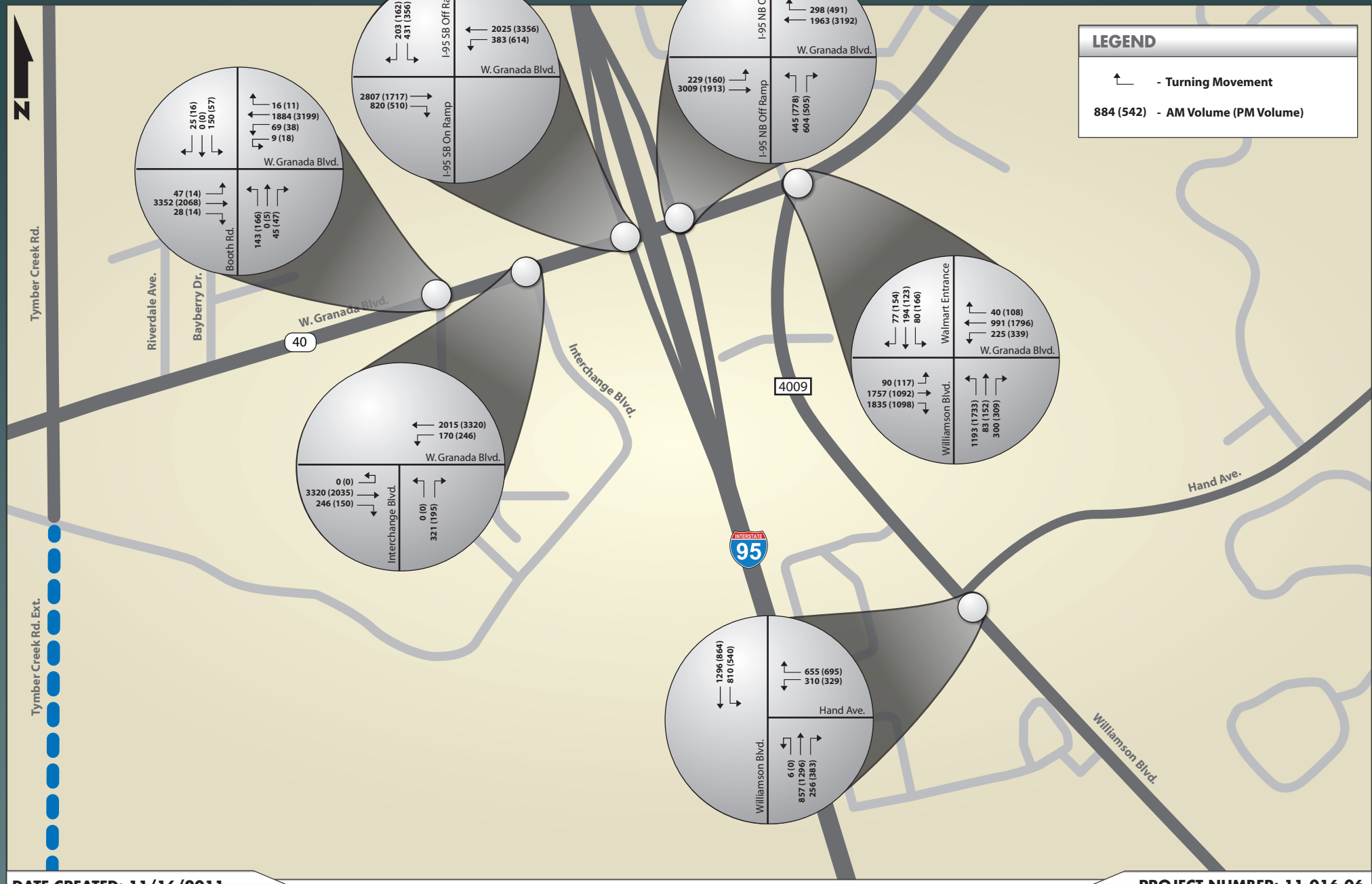
Financial Project ID: 428947-1-22-01

FIGURE 19-2
Year 2035 Design Hour
Turning Movement Volumes
Build Alternative 5 - Subsection 2



DATE CREATED: 11/16/2011 **PROJECT NUMBER: 11-016.06**

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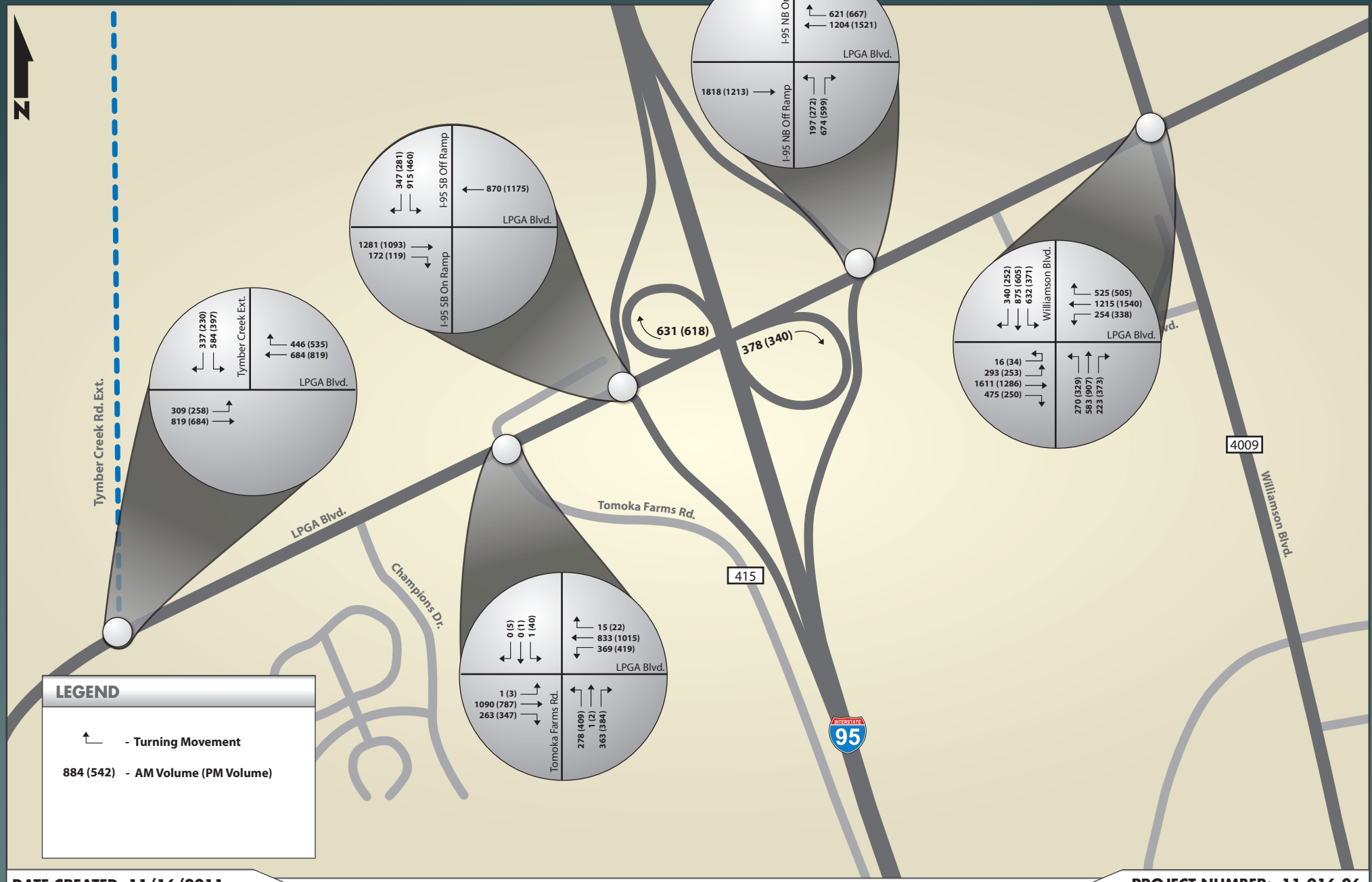
Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 19-3
Year 2035 Design Hour
Turning Movement Volumes
Build Alternative 5 - Subsection 3



DATE CREATED: 11/16/2011

PROJECT NUMBER: 11-016.06

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Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 19-4
Year 2035 Design Hour
Turning Movement Volumes
Build Alternative 5 - Subsection 4

6. Future Automobile Operational Analysis

This section presents the results of the LOS operational analysis for the No Build and Build Alternatives. The Build Alternatives were designed to examine how the widening of SR 40 and other roadways in the study area and different geometric improvements at the study intersections would affect the traffic flow. Automobile levels of service for the study corridors were determined using HCS+ Multilane Analysis software and Synchro software version 8.0. Specific analysis techniques utilized in the study include the signalized, unsignalized intersections and arterial analyses. The outputs from Synchro 8 were presented as results for the intersection LOS analysis. Roadway LOS from the HCS+ output reports were reported for the uninterrupted portion on SR 40 between Cone Road and Breakaway Trail. The average speeds from Synchro 8 arterial reports in conjunction with Exhibit 15-2 of Highway Capacity Manual 2000 were used to calculate the LOS for the remaining roadway segments.

6.1 No Build Alternative Operational Analysis

6.1.1 No Build Geometry

The No Build intersection geometry starting from the opening year 2015 as illustrated in **Figures 20-1 through 20-4** has been updated to include the following improvements.

- New intersection configurations were included at Tymber Creek Road and SR 40 and at Williamson Boulevard and LPGA Boulevard. The reconstruction project at SR 40 and Tymber Creek Road is expected to be completed in 2012, while the one at Williamson Boulevard and LPGA Boulevard is already completed.
- The intersection geometry of Hand Avenue and Williamson Boulevard (for the mid-design year 2025) reflects intersection improvements assumed to be part of the planned widening of Williamson Boulevard from Hand Avenue to LPGA Boulevard and the planned widening of Hand Avenue from Williamson Boulevard to Nova Road by mid design year 2025.
- The proposed plus intersection at SR 40 formed by the new Stage Coach Road from the south and Hunters Ridge Boulevard Extension from the north, was assumed be in place by the mid-design year 2025. This intersection was assumed to be signalized starting from the year 2025, because of the heavy southbound volumes.
- Based on the input from the PD&E Consultant, the existing northbound left turn movement was eliminated at the intersection of SR 40 and Interchange Boulevard starting from the opening year 2015. The westbound left turn, eastbound right turn and northbound right turn movements are allowed at this intersection.

The unsignalized intersection at LPGA Boulevard and Tomoka Farms Road was evaluated for future signal requirements. The need for future signal requirements at this location was evaluated using Signal Warrants 1A as specified in the Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition. Signal Warrant 1A is the Minimum Vehicle Volumes warrant. The future AADT volumes at this intersection were segregated using the same hourly percentages from the existing 24-hour tube counts to obtain the eight highest hourly volumes. Since, the northbound left turning traffic is not significant on Tomoka Farms Road, the significant westbound left turning movement was considered as the side street instead. If volumes for an intersection meet the 70% criteria for signal warrants 1A then that intersection was analyzed under signal control.

Based on the signal warrant analyses, the unsignalized intersection at LPGA Boulevard and Tomoka Farms Road did not meet 70% volume criteria for four hours for the side street volumes during the opening year 2015, but met the same criteria for all the required eight hours by the mid-design year 2025. Therefore, the intersection at LPGA Boulevard and Tomoka Farms Road was analyzed as a signal starting from the year 2025 for the No Build Alternative. The same assumption was carried over to all of the Build Alternatives.

The methodology used for signal warrant analysis for the LPGA Boulevard and Tomoka Farms Road intersection was also used for evaluating the need for signals along SR 40 at Cone Road and at Shadow Crossing Boulevard. The signal warrant analyses indicated that by the design year 2035, both these intersections do not warrant a signal. The analyses was performed for the Build Alternative 5, which had the highest 2035 traffic volumes among the No Build and Build Alternatives. By logic, these intersections would not need a signal by the design year 2035 for the No Build and Build Alternative 1.

The 24 hour percentages for intersection at SR 40 and Airport Road were not available when this report was prepared. Nevertheless, the study made the logical assumption that the majority of the turning movements on southbound Airport Road would comprise of right turning vehicles and thus this intersection would not need a signal by the design year 2035 for all the future alternatives. Even the analysis for the No Build and Build Alternatives reveal that the side street delay is not excessive at this intersection.

However, all the unsignalized intersections along the study corridor have to be revisited in the future to determine if any of signal warrants were to be satisfied. The actual determination of when these locations will be signalized shall be based on actual traffic counts and other pertinent data required for signal warrant analysis. The signal warrant sheets are provided in **Appendix P** of this report.

* The Intersection of SR 40 and Hunter's Ridge Blvd./Stage Coach Rd. is assumed to be in place starting from year 2025.

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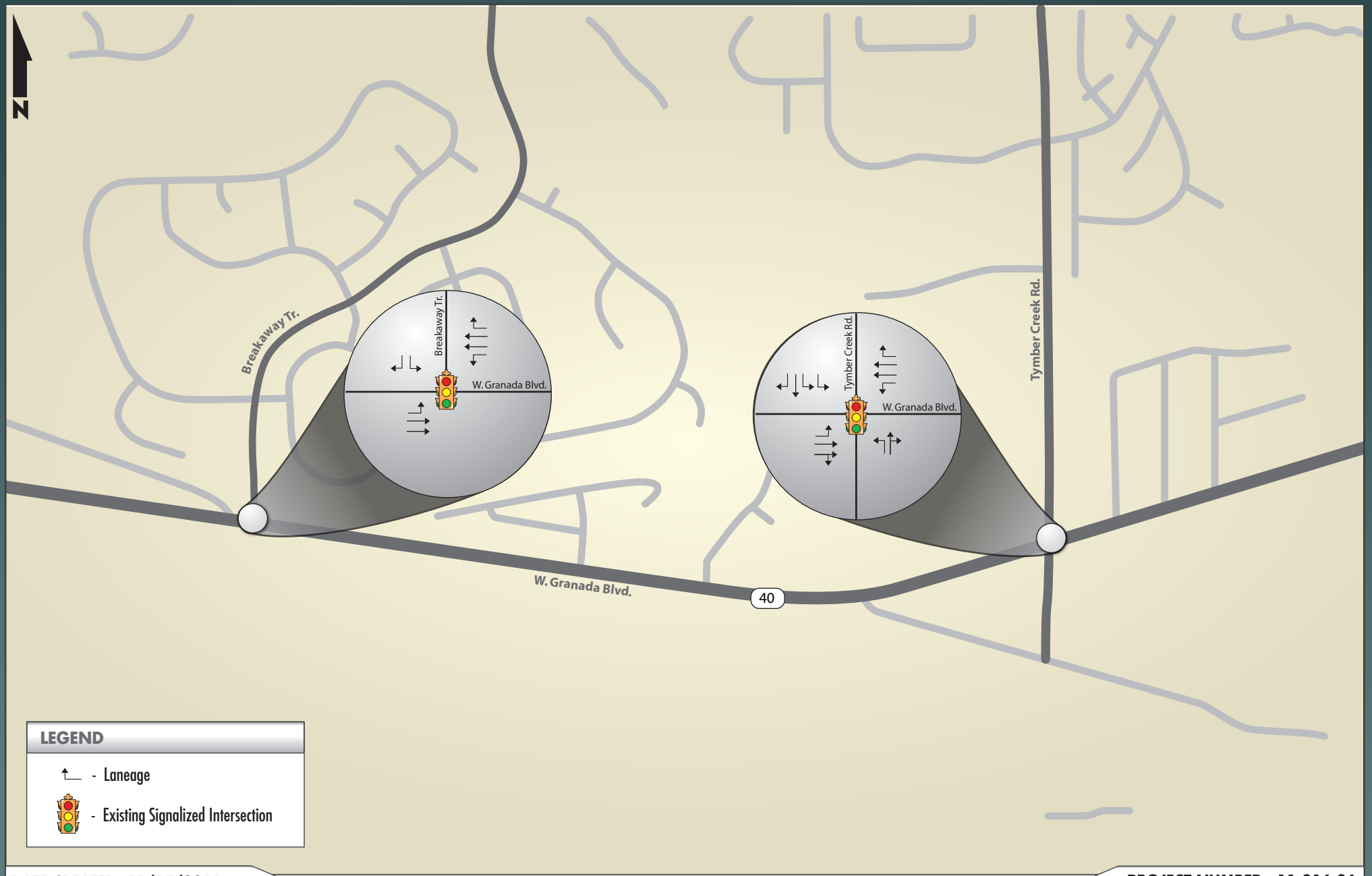
Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 20-1
No Build Geometry
Subsection 1



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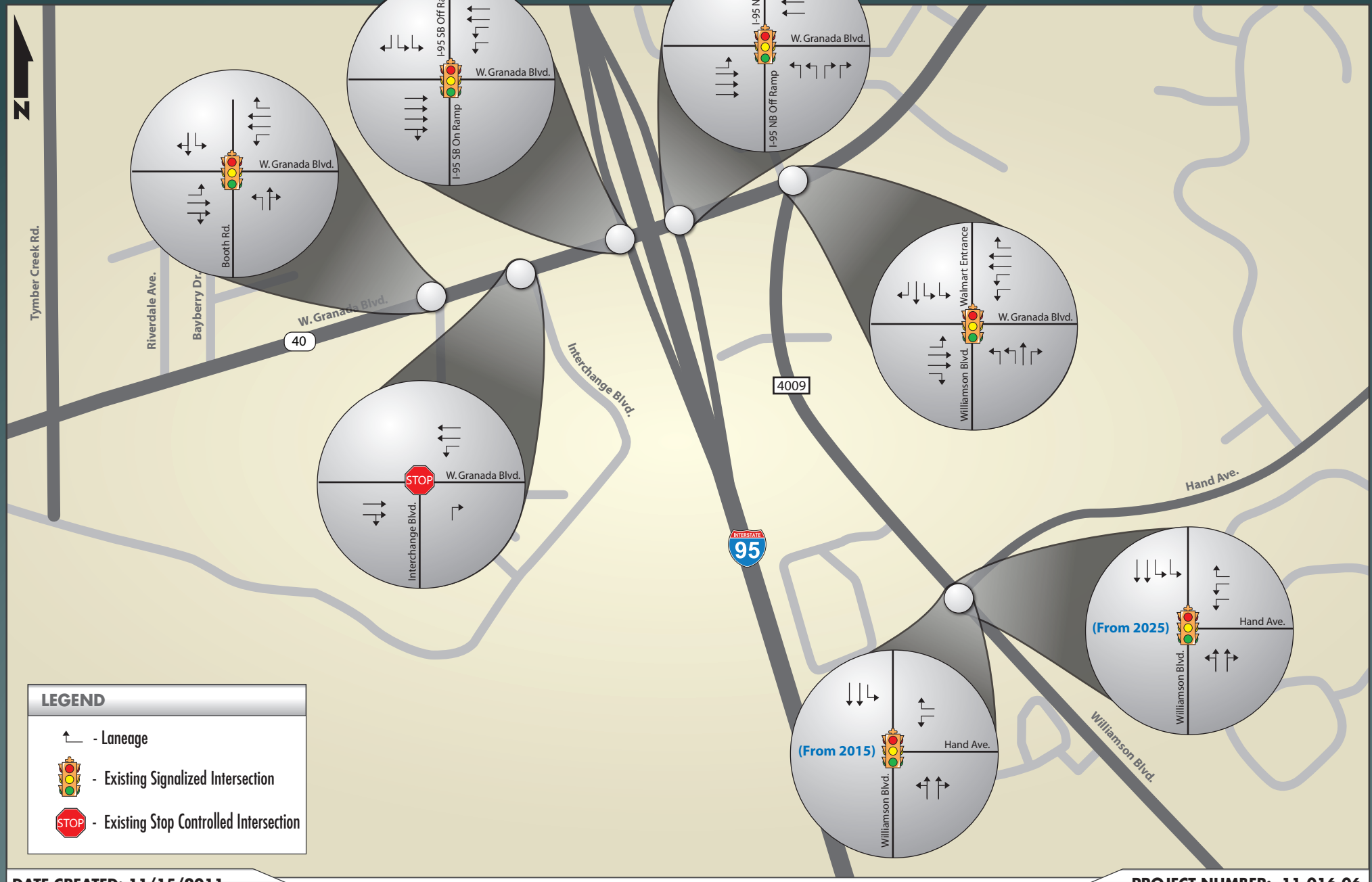
Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 20-2
No Build Geometry
Subsection 2



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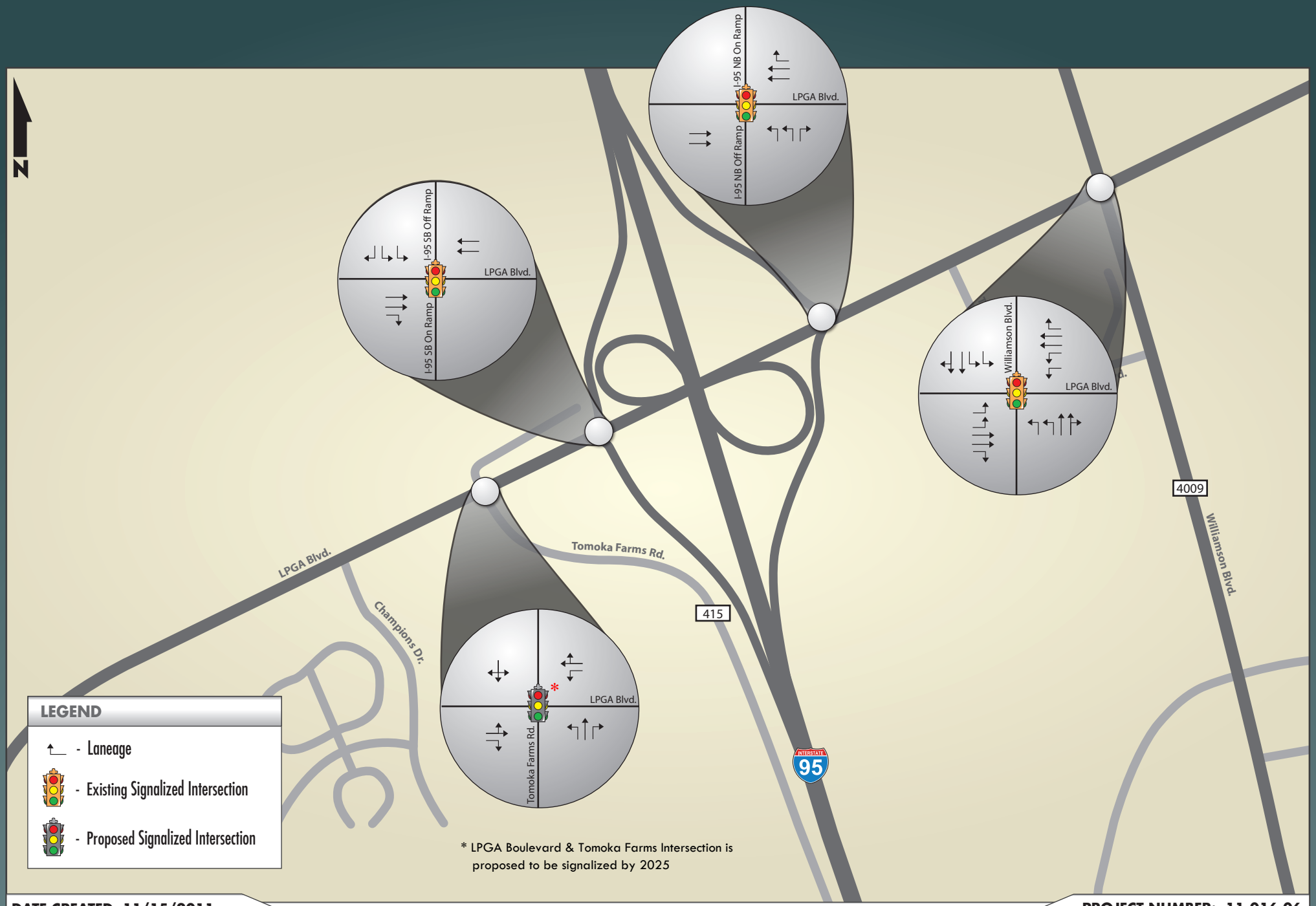
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 20-3
No Build Geometry
Subsection 3



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Design Traffic for SR 40 PD&E

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FIGURE 20-4
No Build Geometry
Subsection 4

6.1.2 Intersection Operational Analysis

Intersection operational analyses were performed for the opening, mid-design and design years for the No Build Alternative for the a.m. and p.m. design hours. The results of the intersection analysis are summarized in **Table 14**. It should be noted that LOS results for SR 40 and Interchange Boulevard intersection are not shown in Table 14, since the northbound left turn movement from the side street was removed as part of the study analysis.

Opening Year 2015 - AM & PM Design Hours

As shown in Table 14, under the No Build Alternative, the following intersections are projected to operate below the adopted LOS standard during the 2015 traffic conditions.

- SR 40 and Tymber Creek Road (a.m. design hour)
- The minor street approach at LPGA Boulevard and Tomoka Farms Road (a.m. and p.m. design hour)

Mid-design Year 2025 - AM & PM Design Hours

As shown in Table 14, under the No Build Alternative, the following intersections are projected to operate below the adopted LOS standard during the 2025 a.m. design hour.

- SR 40 and Hunters Ridge Boulevard
- SR 40 and Tymber Creek Road

The following intersections are projected to operate below the adopted LOS standard during the 2025 p.m. design hour.

- SR 40 @ Tymber Creek Road
- SR 40 @ Williamson Boulevard

Table 14: Future Intersection LOS Summary - No Build Alternative

Stuyd Intersection	Traffic Control	Adopted LOS	AM Design Hour			PM Design Hour		
			2015	2025	2035	2015	2025	2035
			Delay/LOS			Delay/LOS		
SR 40 @								
Cone Road	Stop	C	8.1/11.7 A/B	9.1/15.8 A/C	10.5/22.7 B/C	8.9/12.5 A/B	11.0/18.9 B/C	14.6/32.6 B/D
Airport Road	Stop	C	8.3/11.2 A/B	9.8/15.8 A/C	13.1/50.7 B/F	9.8/13.2 A/B	12.5/18.1 B/C	18.7/32.6 C/D
Shadow Crossing Boulevard	Stop	C	8.2/14.0 A/B	9.0/21.1 A/C	10.1/39.2 B/E	9.0/13.7 A/B	10.8/22.5 B/C	13.5/52.4 B/F
Hunters Ridge Boulevard	Signal	C	NA	41.0/D	55.8/E	NA	18.6/B	35.8/D
Breakaway Trail	Signal	C	8.3/A	8.6/A	15.2/B	4.9/A	5.6/A	10.1/B
Tymber Creek Road	Signal	C	35.8/D	57.4/E	103.2/F	29.8/C	53.0/D	80.4/F
Booth Road	Signal	C	23.3/C	28.2/C	64.0/E	19.4/B	19.9/B	40.7/D
I-95 SB Ramps	Signal	C	15.4/B	19.0/B	21.7/C	18.8/B	25.7/C	63.8/E
I-95 NB Ramps	Signal	C	15.6/B	20.4/C	21.2/C	20.8/C	23.6/C	55.4/E
Williamson Boulevard	Signal	D	36.2/D	46.6/D	70.8/E	39.6/D	56.1/E	92.2/F
Williamson Boulevard @								
Hand Avenue	Signal	E	14.4/B	15.4/B	21.4/C	15.8/B	21.7/C	34.8/C
LPGA Boulevard	Signal	E	44.4/D	61.9/E	116.7/F	41.1/D	58.9/E	119.4/F
LPGA Boulevard @								
I-95 NB Ramps	Signal	E	5.8/A	6.0/A	6.2/A	7.8/A	8.9/A	10.2/B
I-95 SB Ramps	Signal	E	17.7/B	25.4/C	28.1/C	10.4/B	18.4/B	20.2/C
Tomoka Farms Road N	Signal	E	10.2/96.2 B/F	18.5/B	59.3/E	9.8/439.9 A/F	19.2/B	54.7/D

Notes:

1. Synchro based outputs are presented in this table for both the signalized and unsignalized intersections
2. Overall intersection delay and LOS results are reported for signalized intersections
3. In case of unsignalized intersections, major street/minor street worst case results (delay and LOS) are reported.
4. Result shown in red color exceeds the adopted LOS standard

Design Year 2035 - AM & PM Design Hours

As shown in Table 14, under the No Build Alternative, the following intersections are projected to operate below the adopted LOS standard during the 2035 a.m. design hour.

- The minor street approach at SR 40 and Airport Road
- The minor street approach at SR 40 and Shadow Crossing Boulevard
- SR 40 and Hunters Ridge Boulevard
- SR 40 @ Tymber Creek Road
- SR 40 @ Booth Road
- SR 40 @ Williamson Boulevard
- Williamson Boulevard @ LPGA Boulevard

The following intersections are projected to operate below the adopted LOS standard during the 2035 p.m. design hour.

- The minor street approach at SR 40 and Cone Road
- The minor street approach at SR 40 and Airport Road
- The minor street approach at SR 40 and Shadow Crossing Boulevard
- SR 40 and Hunters Ridge Boulevard
- SR 40 @ Tymber Creek Road
- SR 40 @ Booth Road
- SR 40 I-95 SB Ramps
- SR 40 I-95 NB Ramps
- SR 40 @ Williamson Boulevard
- Williamson Boulevard @ LPGA Boulevard

In conclusion, all of the intersections on SR 40 study corridor are projected to operate below the adopted LOS standard with the exception of the intersection at SR 40 and Breakaway Trail by the year 2035.

6.1.3 Roadway Operational Analysis

The roadway segments level of service analysis was performed for the No Build Alternative using HCS+ Multilane Analysis software and Synchro software version 8.0. Roadway LOS from the HCS+ output reports were reported for the uninterrupted portion on SR 40 between Cone Road and the proposed Hunters Ridge Boulevard/Stage Coach Road. It should be noted that the HCS+ multilane analysis was conducted for the uninterrupted portion on SR 40 between Cone Road and Breakaway Trail in 2015, since the proposed Hunters Ridge Boulevard/Stage Coach Road were assumed to be in place by 2025.

Synchro software computes the arterial level of service based on the arterial speed between signalized intersections and was used to analyze the remaining study roadway segments.

The No Build Alternative design hour roadway link levels of service are shown in **Table 15**. As mentioned in the Existing Conditions Section of this report, based on the input from the PD&E Consultant, the roadway LOS is not reported for SR 40 between I-95 SB Ramps and Williamson Boulevard because of the closely spaced signals in this segment. Instead, the intersection LOS was used to determine the traffic flow efficiency on SR 40 between I-95 SB Ramps and Williamson Boulevard. Based on the same logic, the overall roadway LOS is reported for LPGA Boulevard between Tomoka Farms Road and Williamson Boulevard. The roadway LOS for Williamson Boulevard is reported from SR 40 to Hand Avenue and from Hand Avenue to LPGA Boulevard.

As shown in Table 15, SR 40 roadway segments between Hunters Ridge Boulevard and I-95 SB Ramps are projected to operate below the adopted LOS standard "C" during 2035 a.m. design traffic conditions. The SR 40 roadway segments between Tymber Creek Road and I-95 SB Ramps are estimated to operate below the LOS standard "C" during 2025 and 2035 p.m. design hour traffic conditions.

All of the roadway segments along Williamson Boulevard and LPGA Boulevard are projected to operate at LOS E (adopted LOS standard) or better through the design year 2035. The Synchro analysis sheets (intersection & roadway analysis) for the No Build Alternative are provided in **Appendix Q** of this report.

Table 15: Future Arterial LOS Summary - No Build Alternative

Roadway Segment	Roadway Class	Adopted LOS	AM Design Hour						PM Design Hour					
			EB/NB	WB/SB	EB/NB	WB/SB	EB/NB	WB/SB	EB/NB	WB/SB	EB/NB	WB/SB	EB/NB	WB/SB
			2015		2025		2035		2015		2025		2035	
SR 40 Corridor														
Cone Road to Hunters Ridge Boulevard	1	C	A	A	A	A	B	B	A	A	A	A	A	B
Hunters Ridge Boulevard to Tymber Creek Road	1	C	B	A	B	B	D	B	C	A	B	A	B	B
Tymber Creek Road to I-95 SB Ramps	2	C	B	C	B	C	D	D	B	C	B	E	B	F
Williamson Boulevard Corridor														
LPGA Boulevard to Hand Avenue	1	E	A	B	A	C	B	D	A	B	B	B	B	C
Hand Avenue to SR 40	2	E	C	A	C	A	C	B	C	A	C	B	C	A
LPGA Boulevard Corridor														
Tomoka Farms Road to Williamson Boulevard	2	E	B	C	C	C	E	D	B	C	C	C	D	E

6.2 Build Alternative 1 Operational Analysis

6.2.1 Build Alternative 1 Geometry

Build Alternative 1 addresses the option of SR 40 widening from the proposed Hunters Ridge Boulevard/Stage Coach Road to Williamson Boulevard (from 4 to 6 lanes). The proposed intersection geometry for this alternative as illustrated in **Figures 21-1 through 21-4** at a minimum consists of the improvements that were included in the No Build Alternative. In addition, intersection improvements as needed to support the future traffic demand were considered for this alternative.

6.2.2 Intersection Operational Analysis

Intersection operational analyses were performed for the opening, mid-design, and design years for the Build Alternative 1 for the a.m. and p.m. design hours. The results of the intersection analysis are summarized in **Table 16**.

Opening Year 2015 - AM & PM Design Hours

As shown in Table 16, under the Build Alternative 1, the following intersection is projected to operate below the adopted LOS standard "C" during both the 2015 a.m. and p.m. design hours.

- The minor street approach at LPGA Boulevard and Tomoka Farms Road (a.m. and p.m. design hours)

Mid-design Year 2025 - AM & PM Design Hours

As shown in Table 16, under the Build Alternative 1, the following intersections are projected to operate below the adopted LOS standard "C" during the 2025 a.m. design hour.

- The minor street approach at SR 40 and Shadow Crossing Boulevard

The following intersections are projected to operate below the adopted LOS standard during the 2025 p.m. design hour.

- The minor street approach at SR 40 and Airport Road
- The minor street approach at SR 40 and Shadow Crossing Boulevard

* The Intersection of SR 40 and Hunter's Ridge Blvd./Stage Coach Rd. is assumed to be in place starting from year 2025.

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Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

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FIGURE 21-1
Build Alternative 1 Geometry
Subsection 1

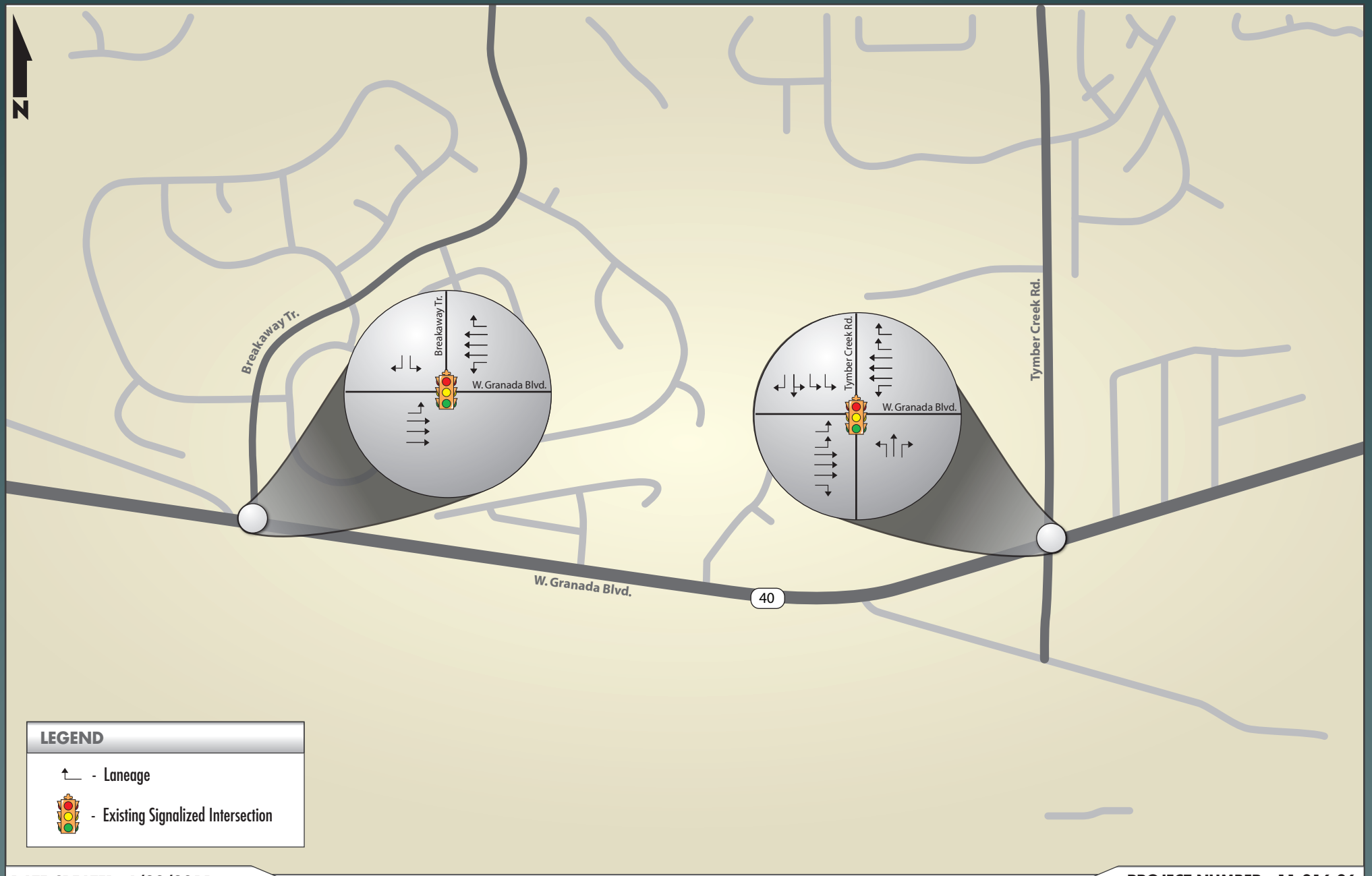

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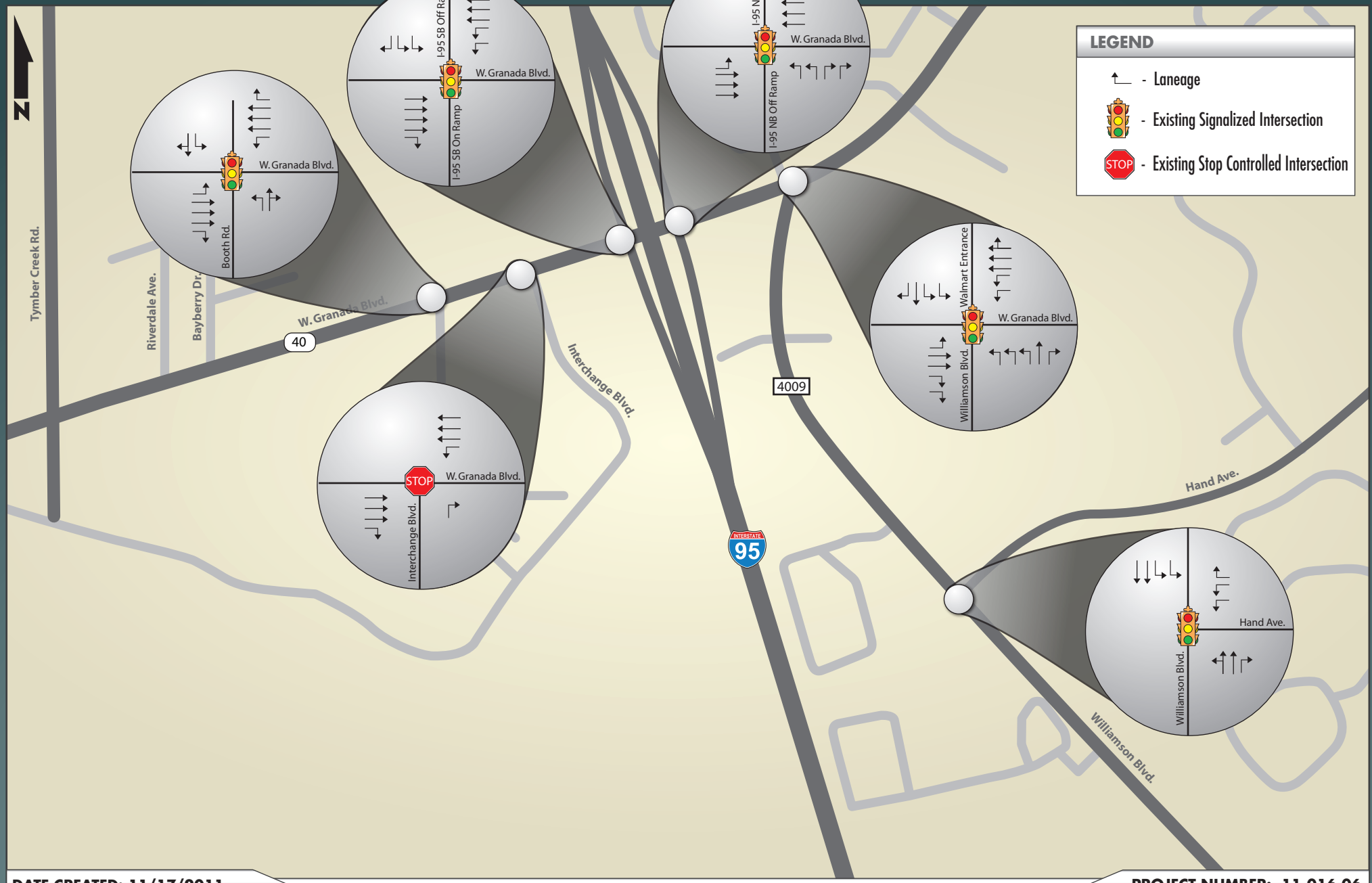
FIGURE 21-2
Build Alternative 1 Geometry
Subsection 2



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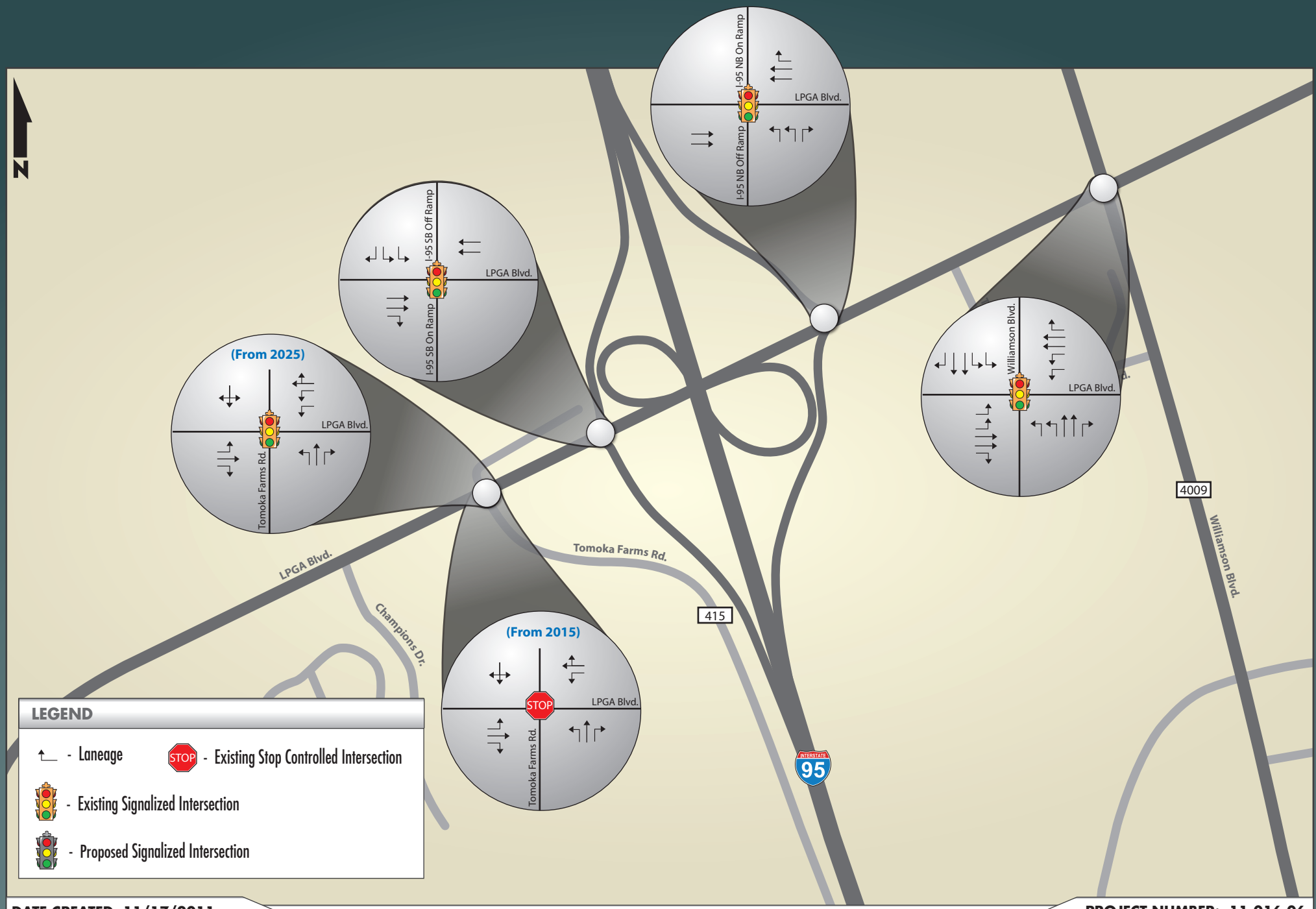
Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

Design Traffic for SR 40 PD&E

Financial Project ID: 428947-1-22-01

FIGURE 21-3
Build Alternative 1 Geometry
Subsection 3



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Design Traffic for SR 40 PD&E

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FIGURE 21-4
Build Alternative 1 Geometry
Subsection 4

Design Year 2035 - AM & PM Design Hours

As shown in Table 16, under the Build Alternative 1, the following intersections are projected to operate below the adopted LOS standard during the 2035 a.m. design hour.

- The minor street approach at SR 40 and Cone Road
- The minor street approach at SR 40 and Airport Road
- The minor street approach at SR 40 and Shadow Crossing Boulevard
- SR 40 and Hunters Ridge Boulevard
- SR 40 and Tymber Creek Road
- SR 40 and Booth Road
- SR 40 and I-95 NB Ramps
- SR 40 and Williamson Boulevard

Under the Build Alternative 1, the following intersections are projected to operate below the adopted LOS standard during the 2035 p.m. design hour.

- The minor street approach at SR 40 and Cone Road
- The minor street approach at SR 40 and Shadow Crossing Boulevard
- The minor street approach at SR 40 and Airport Road
- SR 40 and Tymber Creek Road
- SR 40 and Williamson Boulevard

In conclusion, all of the intersections on SR 40 study corridor are projected to operate at LOS D or E (below the adopted LOS standard) with the exception of SR 40 at Breakaway Trail and SR 40 at I-95 SB Ramps by the year 2035. However, the intersections are projected to operate better compared to the No Build Alternative.

Table 16: Future Intersection LOS Summary - Build Alternative 1

Stuyd Intersection	Traffic Control	Adopted LOS	AM Design Hour			PM Design Hour		
			2015	2025	2035	2015	2025	2035
			Delay/LOS			Delay/LOS		
SR 40 @								
Cone Road	Stop	C	8.2/12.1 A/B	9.5/17.4 A/C	11.4/28.2 B/D	9.0/12.9 A/B	11.9/25.4 B/C	17.3/47.2 C/E
Airport Road	Stop	C	8.4/11.1 A/B	10.2/17.4 B/C	14.3/79.0 B/F	10.3/15.3 B/C	14.2/34.3 B/D	25.0/104.1 C/F
Shadow Crossing Boulevard	Stop	C	8.3/14.6 A/B	9.7/27.0 A/D	11.8/82.5 B/F	9.2/14.6 A/B	12.3/42.4 B/E	17.7/170.5 C/F
Hunters Ridge Boulevard	Signal	C	NA	24.1/C	37.2/D	NA	21.0/C	33.1/C
Breakaway Trail	Signal	C	8.6/A	10.9/B	18.1/B	5.6/A	6.1/A	10.1/B
Tymber Creek Road	Signal	C	24.3/C	34.6/C	50.2/D	19.7/B	32.7/C	47.0/D
Booth Road	Signal	C	19.7/B	22.7/C	40.8/D	11.3/B	15.6/B	17.7/B
I-95 SB Ramps	Signal	C	14.5/B	17.7/B	21.7/C	19.5/B	23.5/C	32.2/C
I-95 NB Ramps	Signal	C	17.5/B	22.3/C	43.9/D	22.6/C	23.3/C	30.3/C
Williamson Boulevard	Signal	D	30.9/C	39.1/D	59.0/E	37.1/D	49.2/D	69.1/E
Williamson Boulevard @								
Hand Avenue	Signal	E	11.9/B	15.7/B	26.5/C	12.7/B	17.9/B	57.6/E
LPGA Boulevard	Signal	E	35.1/D	48.5/D	73.9/E	32.5/C	45.1/D	78.1/E
LPGA Boulevard @								
I-95 NB Ramps	Signal	E	5.8/A	6.3/A	7.3/A	7.2/A	8.7/A	9.9/A
I-95 SB Ramps	Signal	E	17.3/B	25.7/C	27.4/C	10.2/B	16.9/B	18.9/B
Tomoka Farms Road N	Signal	E	10.1/87.0 B/F	18.8/B	39.1/D	9.7/365.9 A/F	21.9/C	36.8/D

Notes:

1. Synchro based outputs are presented in this table for both the signalized and unsignalized intersections
2. Overall intersection delay and LOS results are reported for signalized intersections
3. In case of unsignalized intersections, major street/minor street worst case results (delay and LOS) are reported.
4. Result shown in red color exceeds the adopted LOS standard

6.2.3 Roadway Operational Analysis

The roadway segments level of service analysis for the Build Alternative 1 was performed using the same methodology that was used for the No Build Alternative.

As shown in Table 17, SR 40 roadway segments between Tymber Creek Road and I-95 SB Ramps are estimated to operate below the LOS standard "C" during 2035 a.m. and p.m. design hour traffic conditions.

All of the roadway segments along Williamson Boulevard and LPGA Boulevard are projected to operate at LOS D or better through the design year 2035. The Synchro analysis sheets (intersection and roadway) for the Build Alternative 1 are provided in **Appendix R** of this report.

Table 17: Future Arterial LOS Summary - Build Alternative 1

Roadway Segment	Roadway Class	Adopted LOS	AM Design Hour						PM Design Hour					
			EB/NB	WB/SB	EB/NB	WB/SB	EB/NB	WB/SB	EB/NB	WB/SB	EB/NB	WB/SB	EB/NB	WB/SB
			2015		2025		2035		2015		2025		2035	
SR 40 Corridor														
Cone Road to Hunters Ridge Boulevard	1	C	A	A	B	A	B	A	A	A	A	B	A	B
Hunters Ridge Boulevard to Tymber Creek Road	1	C	B	A	B	A	C	B	B	A	B	A	B	B
Tymber Creek Road to I-95 SB Ramps	2	C	B	B	B	B	D	C	B	B	B	B	B	D
Williamson Boulevard Corridor														
LPGA Boulevard to Hand Avenue	1	E	A	B	B	B	B	C	A	B	B	B	C	B
Hand Avenue to SR 40	2	E	D	A	C	A	C	B	C	A	C	A	C	A
LPGA Boulevard Corridor														
Tomoka Farms Road to Williamson Boulevard	2	E	B	C	C	C	D	C	B	C	B	C	C	D

6.3 Build Alternative 5 Operational Analysis

6.3.1 Build Alternative 5 Geometry

Build Alternative 5 addresses the option of SR 40 widening from the proposed Hunters Ridge Boulevard/Stage Coach Road to Williamson Boulevard (from 4 to 6 lanes) and extending Tymber Creek Road (2 lanes) from the existing southern terminus to LPGA Boulevard. This proposed extension of Tymber Creek Road will form a "T" intersection with LPGA Boulevard. The new intersection at LPGA Boulevard and Tymber Creek Road Extension was analyzed as a signalized intersection starting from 2015, since this intersection was found to fail (LOS F) as a stop controlled intersection (stop control on Tymber Creek Road Extension) with high delay time for the southbound left turn movement on Tymber Creek Road Extension. It should be noted that a detailed signal warrant analysis was not conducted for this proposed intersection, since the 8-hour turning movement percentages were not available.

The proposed intersection geometry for this alternative as illustrated in **Figures 22-1 through 22-4** at a minimum consists of the improvements that were included in the No Build Alternative. In addition, intersection improvements as needed to support the future traffic demand were considered for this alternative.

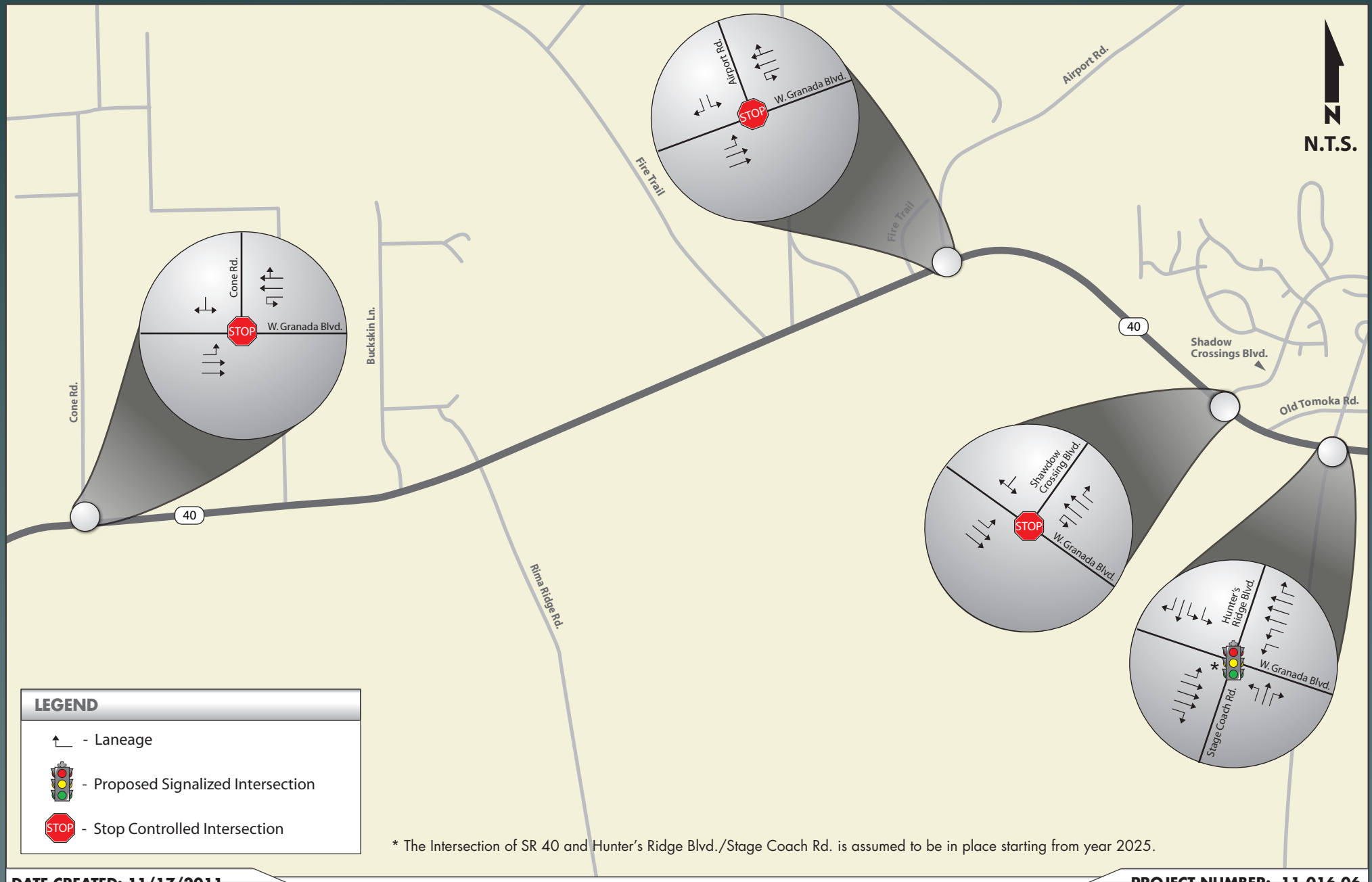
6.3.2 Intersection Operational Analysis

Intersection operational analyses were performed for the opening, mid-design, and design years for the Build Alternative 5 for the a.m. and p.m. design hours. The results of the intersection analysis are summarized in **Table 18**.

Opening Year 2015 - AM & PM Design Hours

As shown in Table 18, under the Build Alternative 5, the following intersection is projected to operate below the adopted LOS standard during both the 2015 a.m. and p.m. design hours.

- The minor street approach at LPGA Boulevard and Tomoka Farms Road



* The Intersection of SR 40 and Hunter's Ridge Blvd./Stage Coach Rd. is assumed to be in place starting from year 2025.

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FIGURE 22-1
Build Alternative 5 Geometry
Subsection 1

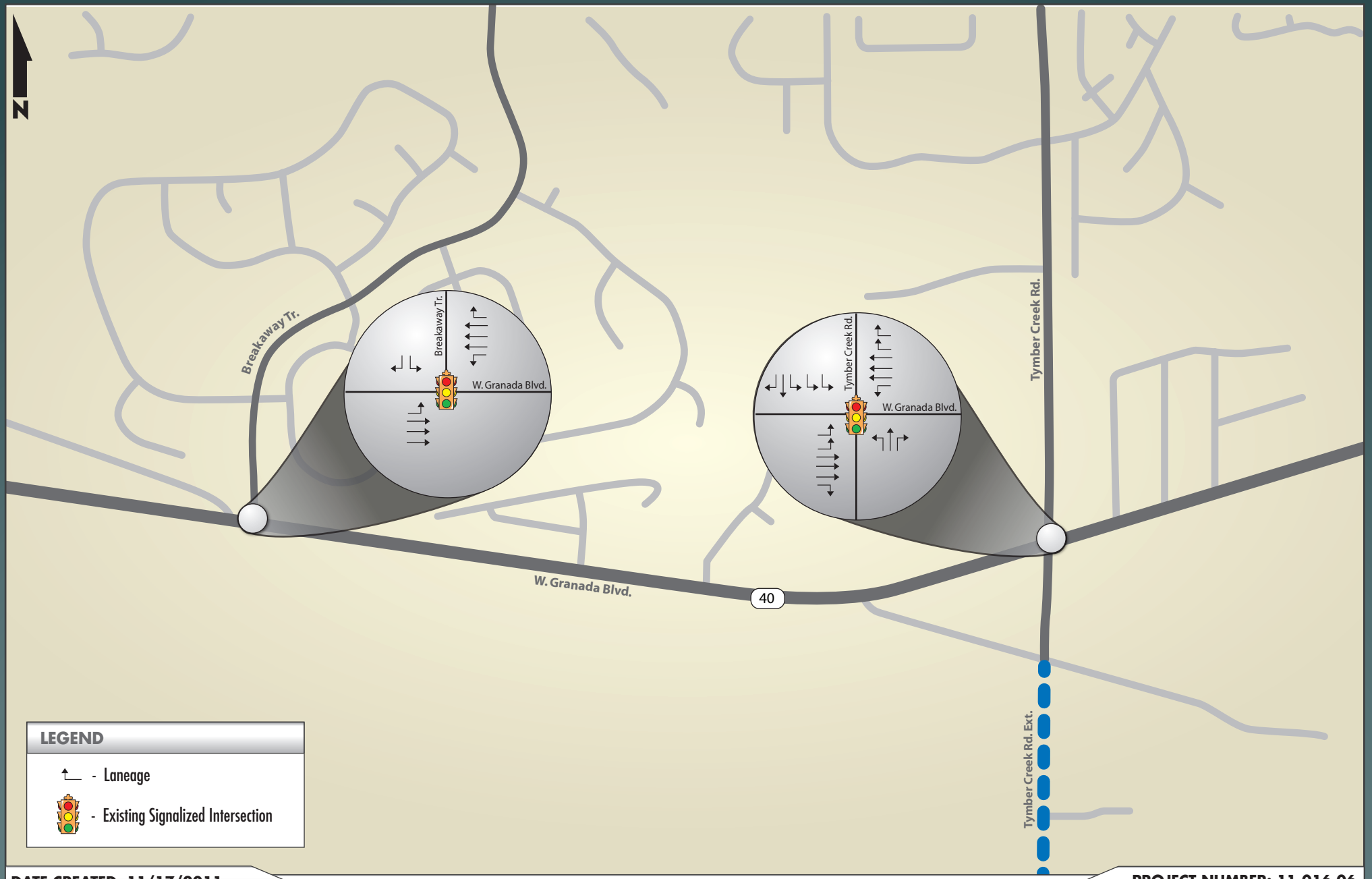

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FIGURE 22-2
Build Alternative 5 Geometry
Subsection 2

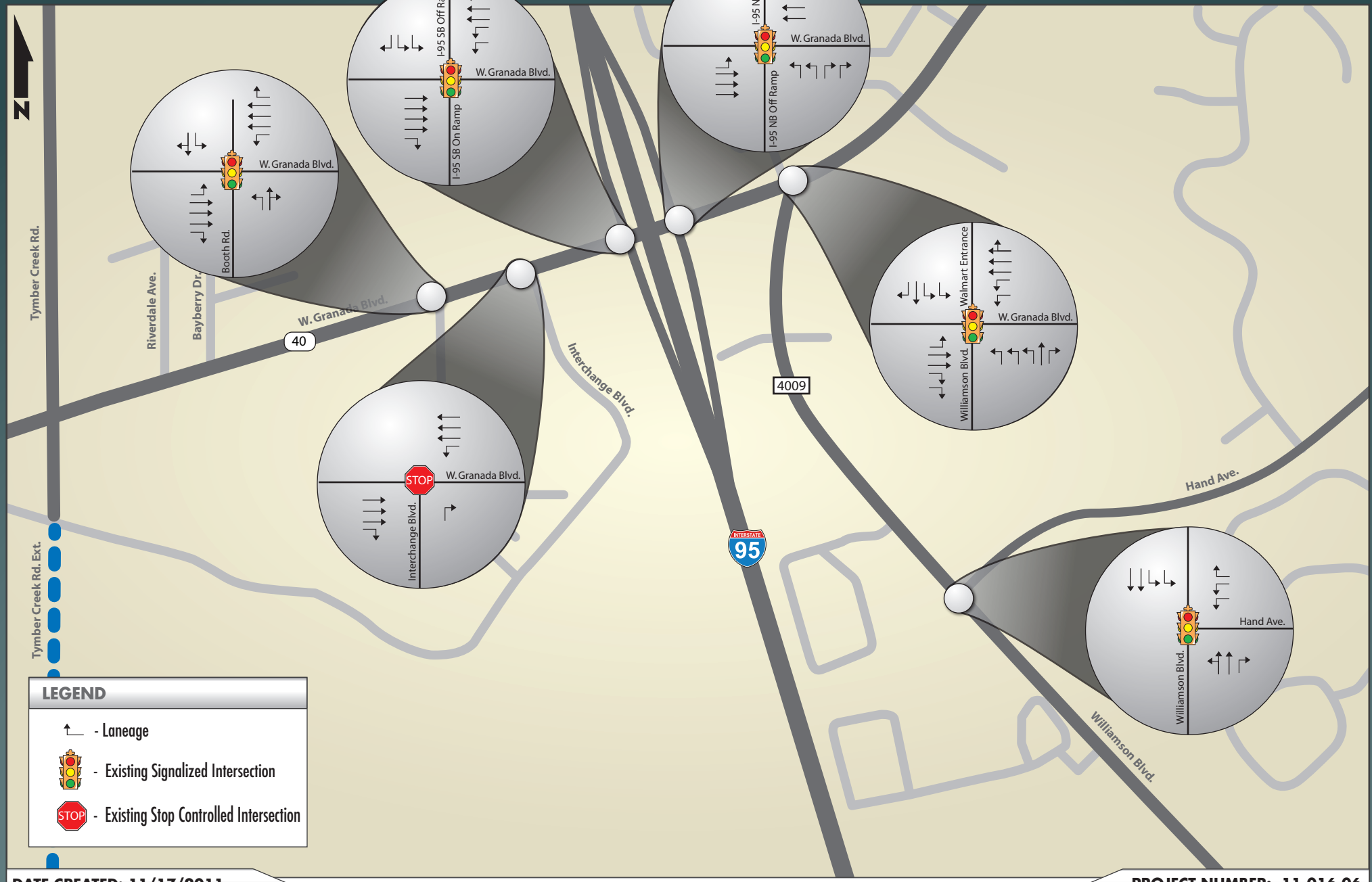

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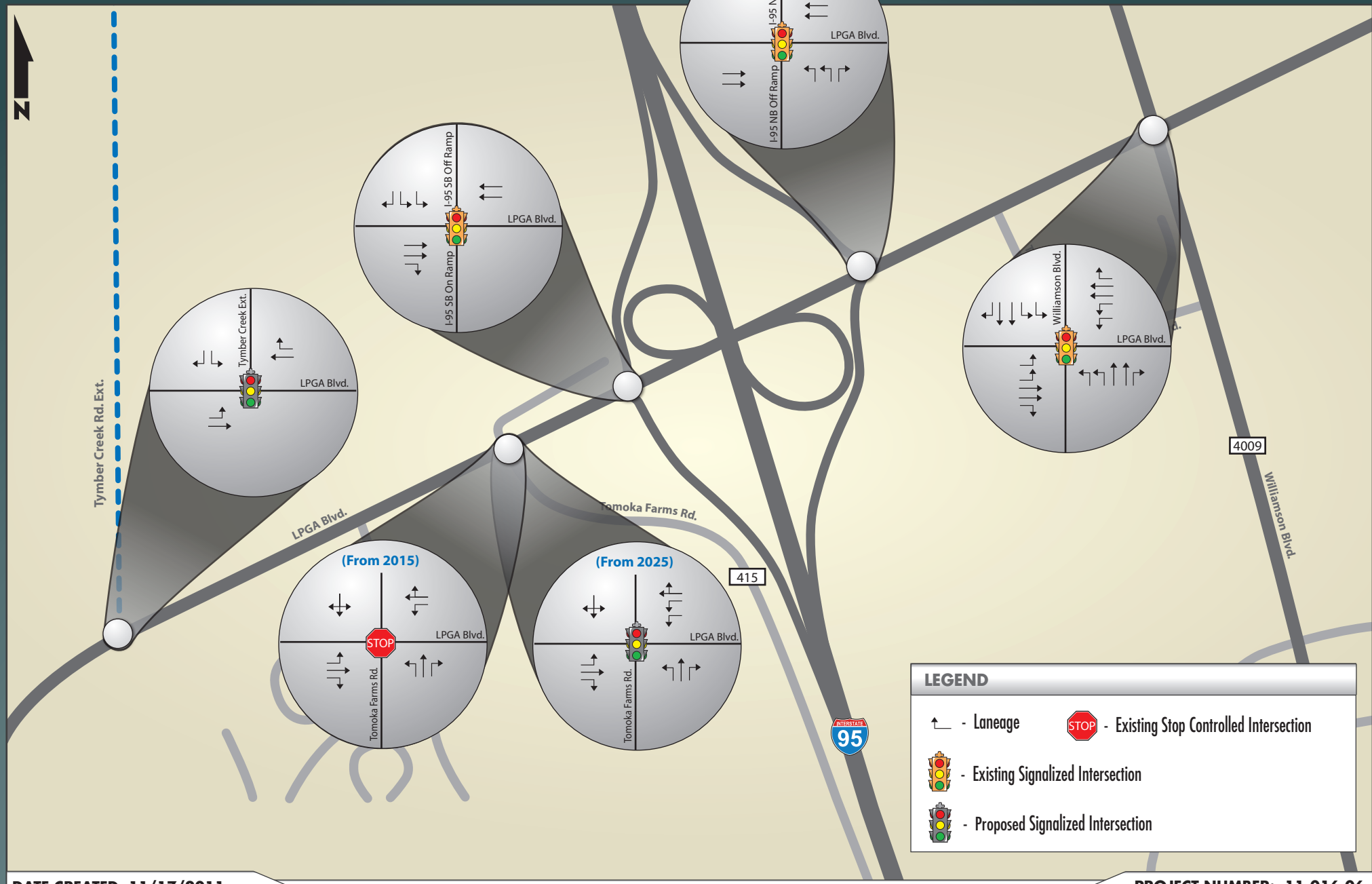
FIGURE 22-3
Build Alternative 5 Geometry
Subsection 3



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Design Traffic for SR 40 PD&E

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FIGURE 22-4
Build Alternative 5 Geometry
Subsection 4

Table 18: Future Intersection LOS Summary - Build Alternative 5

Stuyd Intersection	Traffic Control	Adopted LOS	AM Design Hour			PM Design Hour		
			2015	2025	2035	2015	2025	2035
			Delay/LOS			Delay/LOS		
SR 40 @								
Cone Road	Stop	C	8.3/12.2 A/B	9.7/18.2 A/C	11.8/31.5 B/D	9.1/13.1 A/B	12.4/23.7 B/C	18.9/57.6 C/F
Airport Road	Stop	C	8.4/10.9 A/B	10.6/18 B/C	16.8/131.6 C/F	10.3/14 B/B	15.2/26.1 C/D	33.0/126.5 D/F
Shadow Crossing Boulevard	Stop	C	8.4/15.2 A/C	9.8/27.8 A/D	12/92.4 B/F	9.3/14.6 A/B	12.5/32.1 B/D	18.7/177.8 C/F
Hunters Ridge Boulevard	Signal	C	NA	23.9/C	34.8/C	NA	22.8/C	33.8/C
Breakaway Trail	Signal	C	9.0/A	10.3/B	14.5/B	6.3/A	6.9/A	9.3/A
Tymber Creek Road	Signal	C	23.0/C	32.0/C	49.1/D	23.1/C	28.0/C	36.6/D
Booth Road	Signal	C	19.7/B	20.1/C	28.2/C	10.4/B	14.7/B	15.1/B
I-95 SB Ramps	Signal	C	14.8/B	19.0/B	21.4/C	14.3/B	16.5/B	26.6/C
I-95 NB Ramps	Signal	C	17.3/B	20.9/C	31/C	18.8/B	18.7/B	25.2/C
Williamson Boulevard	Signal	D	32.8/C	40.9/D	50.8/D	35.1/D	41.2/D	54.5/D
Williamson Boulevard @								
Hand Avenue	Signal	E	11.7/B	15.3/B	23.8/C	19.6/B	20.7/C	39.4/D
LPGA Boulevard	Signal	E	30.3/C	45.1/D	69.9/E	30.5/C	41.0/D	70.3/E
LPGA Boulevard @								
I-95 NB Ramps	Signal	E	5.8/A	6.0/A	7.1/A	6.5/A	8.3/A	9.7/A
I-95 SB Ramps	Signal	E	17.1/B	23.8/C	25.2/C	15.3/B	16.5/B	18.4/B
Tomoka Farms Road N	Signal	E	10.2/268.6 B/F	26.3/C	53.5/D	9.6/386.4 A/F	26.2/C	48.5/D
Tymber Creek Road Ext	Signal	E	12.4/B	20.9/C	44.5/D	9.5/A	16.9/B	32.1/C

Notes:

1. Synchro based outputs are presented in this table for both the signalized and unsignalized intersections
2. Overall intersection delay and LOS results are reported for signalized intersections
3. In case of unsignalized intersections, major street/minor street worst case results (delay and LOS) are reported.
4. Result shown in red color exceeds the adopted LOS standard

Mid-design Year 2025 - AM & PM Design Hours

As shown in Table 18, under the Build Alternative 5, the following intersections are projected to operate below the adopted LOS standard during the 2025 traffic conditions.

- The minor street approach at SR 40 and Airport Road (p.m. design hour)
- The minor street approach at SR 40 and Shadow Crossing Boulevard (a.m. and p.m. design hours)

Design Year 2035 - AM & PM Design Hours

As shown in Table 18, under the Build Alternative 5, the following intersections are projected to operate below the adopted LOS standard during both the 2035 a.m. and p.m. design hours.

- The minor street approach at SR 40 and Cone Road
- The major street left turn movement and the minor street approach at SR 40 and Airport Road
- The minor street approach at SR 40 and Shadow Crossing Boulevard
- SR 40 and Tymber Creek Road

In conclusion, with the exception of the intersection at SR 40 and Tymber Creek Road which is projected to operate at LOS D, all the other intersections are projected to operate within the adopted LOS standard criteria by year 2035.

6.3.3 Roadway Operational Analysis

The roadway segments level of service analysis for the Build Alternative 5 was performed using the same methodology that was used for the No Build and Build 1 Alternatives.

As shown in Table 19, all of the SR 40 roadway segments between Cone Road and I-95 SB Ramps are estimated to operate at LOS C or better through the year 2035 a.m. and p.m. design hour traffic conditions.

All of the roadway segments along Williamson Boulevard and LPGA Boulevard are projected to operate at LOS D or better through the design year 2035. The Synchro analysis sheets for the Build Alternative 5 are provided in **Appendix S** of this report.

Table 19: Future Arterial LOS Summary - Build Alternative 5

Roadway Segment	Roadway Class	Adopted LOS	AM Design Hour						PM Design Hour					
			EB/NB	WB/SB	EB/NB	WB/SB	EB/NB	WB/SB	EB/NB	WB/SB	EB/NB	WB/SB	EB/NB	WB/SB
			2015		2025		2035		2015		2025		2035	
SR 40 Corridor														
Cone Road to Hunters Ridge Boulevard	1	C	A	A	B	A	B	B	A	A	A	B	A	B
Breakaway Trail to Tymber Creek Road	1	C	B	A	B	A	C	B	B	A	B	A	B	B
Tymber Creek Road to I-95 SB Ramps	2	C	B	B	B	B	C	B	A	B	C	B	C	C
Williamson Boulevard Corridor														
LPGA Boulevard to Hand Avenue	1	E	A	B	A	B	B	C	A	B	B	B	B	B
Hand Avenue to SR 40	2	E	D	A	C	A	C	B	C	A	C	A	C	B
LPGA Boulevard Corridor														
Tymber Creek Road Ext. to Williamson Boulevard	2	E	B	B	C	C	D	D	B	B	C	C	D	D

7. Future Multimodal Operational Analysis

The levels of service for the other modes of travel (pedestrian, bicycle and bus) for the future Build conditions were determined using the FDOT's latest ARTPLAN software package as was performed for the existing conditions. Since, the all the three Build Alternatives that were evaluated as part of this study are the same with respect to the other modes, the LOS analysis for the other modes was conducted only one Build Alternative (Alternative 5). Furthermore, the LOS analysis was conducted only for the design year 2035 traffic conditions.

The following improvements to the pedestrian/bike/bus facilities were considered in the multimodal LOS analysis.

- Five foot continuous sidewalks and designated bike lanes were assumed in both directions on SR 40 between 1) Cone Road and Williamson Boulevard and on 2) Williamson Boulevard between SR 40 and LPGA Boulevard.
- Typical sidewalk/roadway separation (> 3 feet) is assumed on SR 40 in both directions between Cone Road and I-95 SB Ramps. Adjacent sidewalk/roadway separation (<= 3 feet) is assumed on SR 40 in both directions between I-95 SB Ramps and Williamson Boulevard.
- Typical sidewalk/roadway separation (> 3 feet) is assumed on Williamson Boulevard in both directions between LPGA Boulevard and Hand Avenue. Adjacent sidewalk/roadway separation (<= 3 feet) is assumed on Williamson Boulevard in both directions between Hand Avenue and SR 40.
- Based on the long range Transit Development Plan developed for VOTRAN, no new bus routes were proposed for the SR 40 study corridor. For the Williamson Boulevard corridor between SR 40 and LPGA Boulevard, no new bus routes were planned. However, the bus headway was increased to 30 minutes from the existing 60 minutes.
- No new roadway improvements including lane widening or providing transit facilities are planned for the LPGA Boulevard corridor between Williamson Boulevard and Tomoka Farms Road.

The multimodal methodology links the presence of bicycle lanes and sidewalks with the motorized vehicles volume and speed in determining the bicycle and pedestrian LOS. As noted in the FDOT Q/LOS Handbook, the bus LOS is primarily determined by bus frequency, but is also affected by pedestrian LOS. **Table 20** illustrates the pedestrian, bicycle and bus LOS analysis results for the SR 40 study corridor. All of the segments on SR 40 operate at pedestrian LOS E worse during the year 2035 a.m. and p.m. design hours, with the exception of the segment between Booth Road and I-95 SB Ramps (LOS "D") in the EB-

direction. The projected bicycle LOS is D on the SR 40 study corridor during the year 2035 a.m. and p.m. design hours.

Table 20: Pedestrian, Bicycle and Bus LOS Summary - Year 2035 - Build Alternative 5

Roadway Segment	Peak Directional Pedestrian LOS		Peak Directional Bicycle LOS		Peak Directional Bus LOS	
	AM	PM	AM	PM	AM	PM
SR 40 Corridor	***EB***	***WB***	***EB***	***WB***	***EB***	***WB***
Hunters Ridge Boulevard to Breakaway Trail	E	E	D	D	NA	NA
Breakaway Trail to Tymber Creek Road	E	E	D	D	NA	NA
Tymber Creek Road to Booth Road	E	E	D	D	NA	NA
Booth Rd to I-95 SB Ramps	D	E	D	D	NA	NA
I-95 SB Ramps to I-95 NB Ramps	E	E	D	D	NA	NA
I-95 NB Ramps to Williamson Boulevard	F	E	D	D	NA	NA
Williamson Boulevard Corridor	***SB***	***NB***	***SB***	***NB***	***SB***	***NB***
SR 40 to Hand Avenue	E	E	C	C	B	B
Hand Avenue to LPGA Boulevard	E	D	C	C	C	C

Notes:
1. LOSPLAN Multimodal Analysis is applicable between signalized intersections only.
2. Pedestrian & Bus LOS analysis results is based on the latest (12/12/2010) version of the FDOT's ARTPLAN Software.

The segment on Williamson Boulevard between SR 40 and Hand Avenue is projected to operate at pedestrian LOS E during the year 2035 a.m. and p.m. design hours. The segment on Williamson Boulevard between Hand Avenue and LPGA Boulevard is also projected to operate at pedestrian LOS E during the year 2035 a.m. design hour, while the same segment is projected to operate at LOS D during the p.m. design hour. Bus LOS is C or better on the Williamson Boulevard study corridor between SR 40 and LPGA Boulevard during the morning and afternoon design hours. Since sidewalks, bike lanes and bus service are not planned for the LPGA Boulevard corridor between Williamson Boulevard and Tomoka Farms Road, the pedestrian, bicycle and bus LOS is E or worse for these segments.

In conclusion, the bicycle traffic during the year 2035 design hour traffic conditions seem to operate at better than LOS E conditions. The pedestrian LOS is projected at "E" for the majority of the study segments on SR 40 and Williamson Boulevard. Nonetheless, it is important to note that these pedestrian LOS projections are based on the study assumptions, which could be modified to achieve better pedestrian LOS. For instance, physical separations between the roadway and sidewalk (like trees or wide gaps) could be incorporated into the planned improvements to improve the pedestrian LOS. The pedestrian, bicycle and bus LOS results are provided in **Appendix T** of this report.

8. Summary and Recommendations

This design traffic technical memorandum was prepared as part of the PD&E study for SR 40 from Cone Road to Williamson Boulevard in Volusia County. Traffic data was collected for the year 2011 and existing conditions were evaluated including levels of service (a.m. and p.m. peak hours) for the auto and other modes of travel. The signalized intersections on SR 40 were found to operate at an acceptable LOS for the year 2011 traffic conditions, with the exception of SR 40 and Tymber Creek Road intersection which was observed to operate at LOS D. The roadway segments on SR 40 between Cone Road and I-95 SB Ramps were found to operate at or above the LOS standard identified for those segments. Since the signalized intersections on SR 40 between I-95 SB Ramps and Williamson Boulevard are closely spaced, the roadway link LOS were not reported. Instead, the intersection LOS was taken as the measure of traffic flow efficiency.

A base year 2010 sub-area model validation was conducted to match the year 2010 traffic volumes within the study area. Then the year 2035 CFRPM (version 5) model was refined to include the programmed and planned improvements within the study area and the modified socio-economic data.

As the next step, a preliminary capacity analysis was conducted using the projected model volumes for seven (7) Build Alternatives to select three (3) Build Alternatives. These three (3) Build Alternatives (Build Alternatives 1, 5 and 7) included six laning of SR 40 between Breakaway Trail and Williamson Boulevard as the common improvement. However, based on new developments and input from FDOT and the County, the western study limit was extended till Cone Road from the original Breakaway Trail and the six laning portion was extended till the proposed Hunters Ridge Boulevard/Stage Coach Road. In addition, Build Alternative 7 which included the Hand Avenue Extension was not considered for further analysis. The CFRPM 5.0 models were rerun with the revised limits for the No Build and Build Alternatives 1 and 5.

Based on the evaluation of the intersection and roadway operating conditions for the year 2035 No Build and two Build Alternatives, this study identified Build Alternative 5 to adequately accommodate the forecasted volumes through the design year 2035 compared to the No Build Alternative and Build Alternative 1.

The Build Alternative 5 (with the proposed extension of Tymber Creek Road) proposed intersection geometry is illustrated in **Figures 22-1 through 22-4**. The recommended geometry shown for Build Alternative 5 represents the maximum efficient geometry to sustain through traffic flow within the SR 40 study corridor through the design year 2035.

In addition to the above improvements, this study used the red time formula (source: ITE Traffic Engineering Manual, 5th Edition) to develop the queue length requirements at signalized intersections for the Build Alternatives 1 and 5.

Tables provided in **Appendix U** of this report show the recommended queue lengths for turn lanes and through lanes (on SR 40) based on the red time formula for the design year 2035 a.m. and p.m. design hour conditions for Build Alternatives 1 and 5. The recommended queue lengths are shown in yellow shade and bold letters. The recommended queue lengths for the turn lanes are also shown in **Tables 21 and 22.**

Table 21: Recommended Queue Lengths of Turn Lanes at Signalized Intersections - Year 2035 Build Alternative 1

Intersection	Turn Lane Queue Length (feet)							
	EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
SR 40 & Hunters Ridge Boulevard/Stage Coach Road	100	100	150	525	100	300	300	100
SR 40 & Breakaway Trail	100	-	100	100	-	-	125	100
SR 40 & Tymber Creek Road	225	100	150	250	100	100	450	350
SR 40 & Booth Road	100	100	125	100	200	-	-	-
SR 40 & I-95 SB Off Ramp	-	475	325	-	-	-	275	250
SR 40 & I-95 NB Off Ramp	275	-	-	350	400	325	-	-
SR 40 & Williamson Boulevard	150	350	225	-	575	-	125	200
Williamson Boulevard & Hand Avenue	-	-	125	500	-	225	250	-
Williamson Boulevard & LPGA Boulevard	200	450	175	425	200	325	350	375
LPGA Boulevard & I-95 NB Off Ramp	-	-	-	-	150	-	-	-
LPGA Boulevard & I-95 SB Off Ramp	-	-	-	-	-	-	350	250
LPGA Boulevard & Tomoka Farms Road N	100	100	200	-	200	325	-	-

Note:
1. Recommended queue lengths are based on red time formula and are the higher values between the a.m. and pm. design hour conditions

Table 22: Recommended Queue Lengths of Turn Lanes at Signalized Intersections - Year 2035 Build Alternative 5

Intersection	Turn Lane Queue Length (feet)							
	EBL	EBR	WBL	WBR	NBL	NBR	SBL	SBR
SR 40 & Hunters Ridge Boulevard/Stage Coach Road	150	100	175	450	150	325	250	150
SR 40 & Breakaway Trail	100	-	100	100	-	-	150	100
SR 40 & Tymber Creek Road	150	100	200	275	100	200	250	300
SR 40 & Booth Road	100	100	125	100	200	-	-	-
SR 40 & I-95 SB Off Ramp	-	475	325	-	-	-	250	250
SR 40 & I-95 NB Off Ramp	275	-	-	325	400	325	-	-
SR 40 & Williamson Boulevard	150	300	225	-	525	-	125	200
Williamson Boulevard & Hand Avenue	-	-	100	425	-	200	250	-
Williamson Boulevard & LPGA Boulevard	200	350	175	425	175	300	350	350
LPGA Boulevard & I-95 NB Off Ramp	-	-	-	-	150	-	-	-
LPGA Boulevard & I-95 SB Off Ramp	-	-	-	-	-	-	350	250
LPGA Boulevard & Tomoka Farms Road N	100	200	200	-	325	350	-	-
LPGA Boulevard & Tymber Creek Road Ext.	150	-	-	300	-	-	400	250

Note:
1. Recommended queue lengths are based on red time formula and are the higher values between the a.m. and pm. design hour conditions

It should be noted that the specific lengths do not include the taper or deceleration distance (refer to FDOT index 301 to determine the appropriate specific taper and deceleration length). These storage lengths are recommended at locations where these lengths can be achieved. Actual design and implementation of these storage length requirements will be a function of design and the physical practicality of their construction.

In addition, Equivalent Single Axle Load (ESAL) calculations were performed for three different sections along the SR 40 study corridor for the design year for 2035 Build Alternatives 1 and 5. The three sections include:

- SR 40 between Cone Road and Hunters Ridge Boulevard/Stage Coach Road
- SR 40 between Hunters Ridge Boulevard/Stage Coach Road and Tymber Creek Road, and
- SR 40 between Tymber Creek Road and Williamson Boulevard

The ESAL calculations are provided in **Appendix V** of this report.

9. Appendices

Appendix A - Supplemental to SR 40 Design Traffic Technical Memorandum; Responses to Comments

Appendix B – Straight Line Diagrams & RCI Data for SR 40 Corridor

Appendix C – Bus Schedules & Route Maps for Bus Route #'s 6, 18 & 19

Appendix D – Raw Traffic Counts

Appendix E – FDOT Counts and Seasonal & Axle Factors

Appendix F – Signal Timings & SYNCHRO Intersection Analysis Outputs for Year 2011

Appendix G – SYNCHRO Roadway Analysis Outputs for Year 2011 & HCM 2010 Exhibit 15-2

Appendix H – ARTPLAN Multi-Modal LOS Outputs for Year 2011

Appendix I – Year 2010 sub-area Model Validation Memorandum

Appendix J – Year 2035 Model Refinements Memorandum

Appendix K – Year 2035 Roadway Alternatives Analysis Memorandum

Appendix L – Trends Analysis Sheets

Appendix M – BEBR Population Projections for Volusia County

Appendix N – Year 2035 CFRPM 5.0 Model Plots

Appendix O – TURNS 5 Sheets

Appendix P – Signal Warrant Analysis Sheets

Appendix Q – Synchro Output Sheets (Intersection & Roadway Analysis) - No Build Alternative

Appendix R – Synchro Output Sheets (Intersection & Roadway Analysis) - Build Alternative 1

Appendix S – Synchro Output Sheets (Intersection & Roadway Analysis) - Build Alternative 5

Appendix T – ARTPLAN Multi-Modal LOS Outputs for Year 2035

Appendix U – Queue Length Calculation Sheets for Year 2035 AM & PM Design Hours - Alternatives 1 and 5

Appendix V – ESAL Sheets

Appendix A

Supplemental to SR 40 Design Traffic Technical Memorandum; Responses to Comments

SUPPLEMENTAL TO SR 40 DESIGN TRAFFIC TECHNICAL MEMORANDUM

9/15/2011

Year 2035 Roadway Analysis for SR 40 West of Breakaway Trail

GMB ENGINEERS & PLANNERS, INC.

MEMORANDUM

Prepared For:	Florida Department of Transportation, District Five
To:	**Terry Rains**
Prepared By:	Babuji Ambikapathy, P.E., AICP, GMB Engineers & Planners, Inc.
Date:	September 15, 2011
Subject:	**Supplemental to SR 40 Design Traffic Technical Memorandum (DTTM), dated June 2011** – Revised Year 2035 Roadway Analysis for SR 40 West of Breakaway Trail

Introduction

The Florida Department of Transportation (FDOT) District Five is conducting a Project Development and Environment (PD&E) study to evaluate possible alternative improvements to the SR 40 corridor from Breakaway Trail to Williamson Boulevard, including the proposed extension of Hand Avenue from Williamson Boulevard to Tymber Creek Road Extension and Tymber Creek Road Extension from SR 40 to LPGA Boulevard in Volusia County, Florida. GMB Engineers & Planners, Inc. (GMB) has been retained by the FDOT to perform the Design Traffic Analysis to determine the impacts and assess the need for future capacity improvements on SR 40, Williamson Boulevard, LPGA Boulevard, Hand Avenue Extension and Tymber Creek Road Extension.

The current study provided as a supplemental to the "SR 40 Design Traffic Technical Memorandum, dated June 2011" (original study), is updated to reflect the comments received from Kittelson & Associates, Inc. (KAI) on September 7, 2011 for the original supplemental study (submitted on August 29, 2011). The responses to the KAI comments are provided in **Appendix A** of this memorandum.

The key goals of this study are to determine the following.

1) Whether the proposed six-laning of SR 40 should be extended west of the current western study limit (Breakaway Trail) and
2) The extent SR 40 should be extended west of Breakaway Trail.

This study, in particular has determined whether the western study limit (or the six lane section) should be extended till the proposed connection of Hunters Ridge Boulevard/Stage Coach Road on SR 40 or west of this proposed connection on SR 40. To achieve the purpose, this study has performed the following tasks.

Travel Demand Modeling

The site specific version of the Central Florida Regional Planning Model (CFRPM) 5.0 Model earlier developed for the SR 40 DTTM was used to determine the need for six-laning west of Breakaway Trail. This determination was performed for the following two different potential scenarios.

Scenario 1 (Alternative 7A): Alternative 7 {*which includes SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes), Hand Avenue Extension (2 lanes) from Williamson Boulevard to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Boulevard*} was modified by extending the six lanes along SR 40 west of Breakaway Trail to the potential plus connection of Stagecoach Road and Hunters Ridge Boulevard. The schematic illustrating Alternative 7A is shown in **Figure 1**.

Scenario 2 (Alternative 7B): Alternative 7 {*which includes SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes), Hand Avenue Extension (2 lanes) from Williamson Boulevard to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Boulevard*} was modified by extending the six lanes along SR 40 west of Breakaway Trail to Shadow Crossings Boulevard (the current access into Hunters Ridge). This scenario would have the access to Hunters Ridge Boulevard and Stagecoach Road as “T” intersections along SR 40. The schematic illustrating Alternative 7B is shown in **Figure 2**.

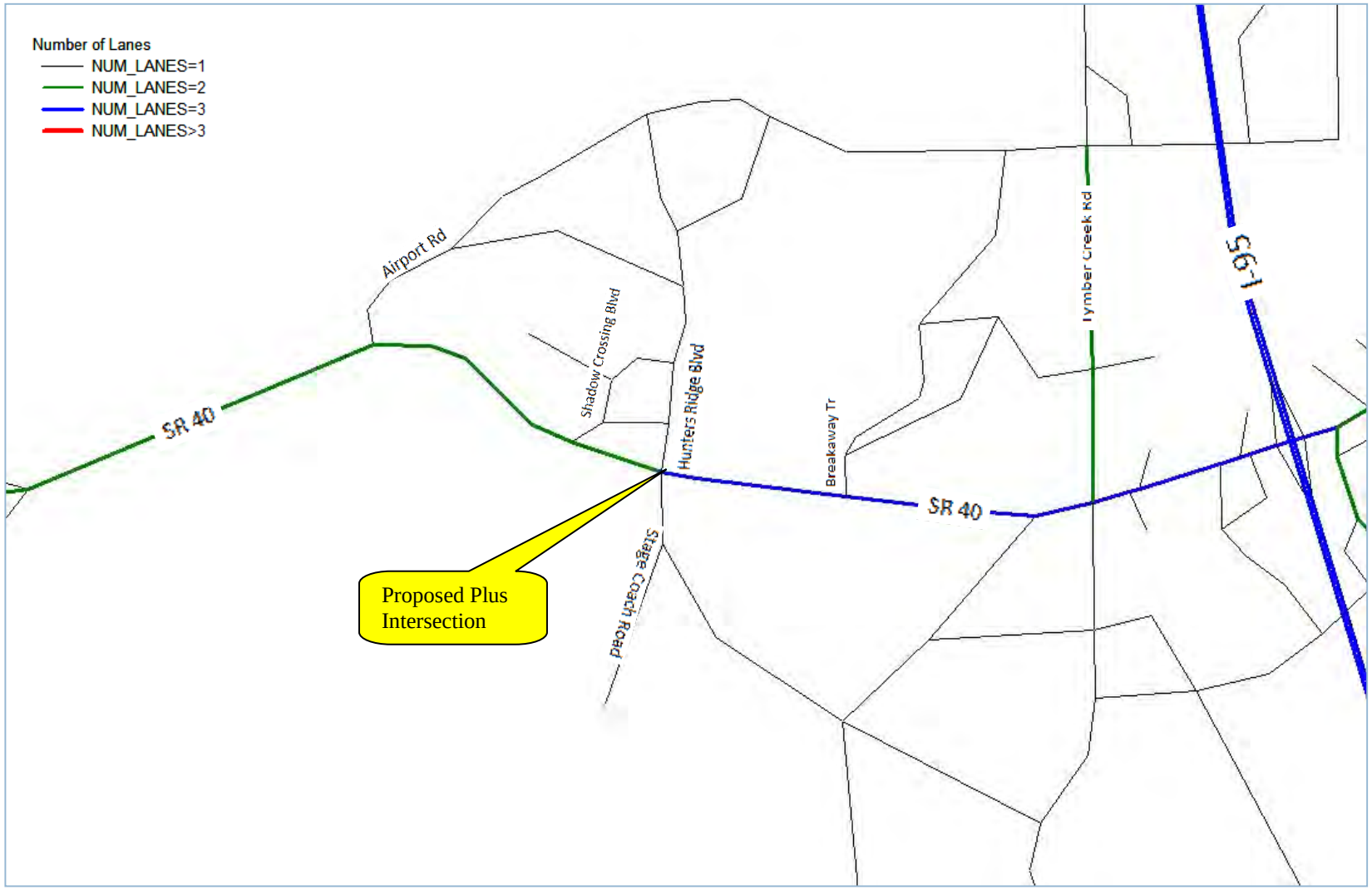

Figure 1: Alternative 7A illustrating the proposed Plus Intersection of SR 40 & Stage Coach Road/Hunters Ridge Boulevard

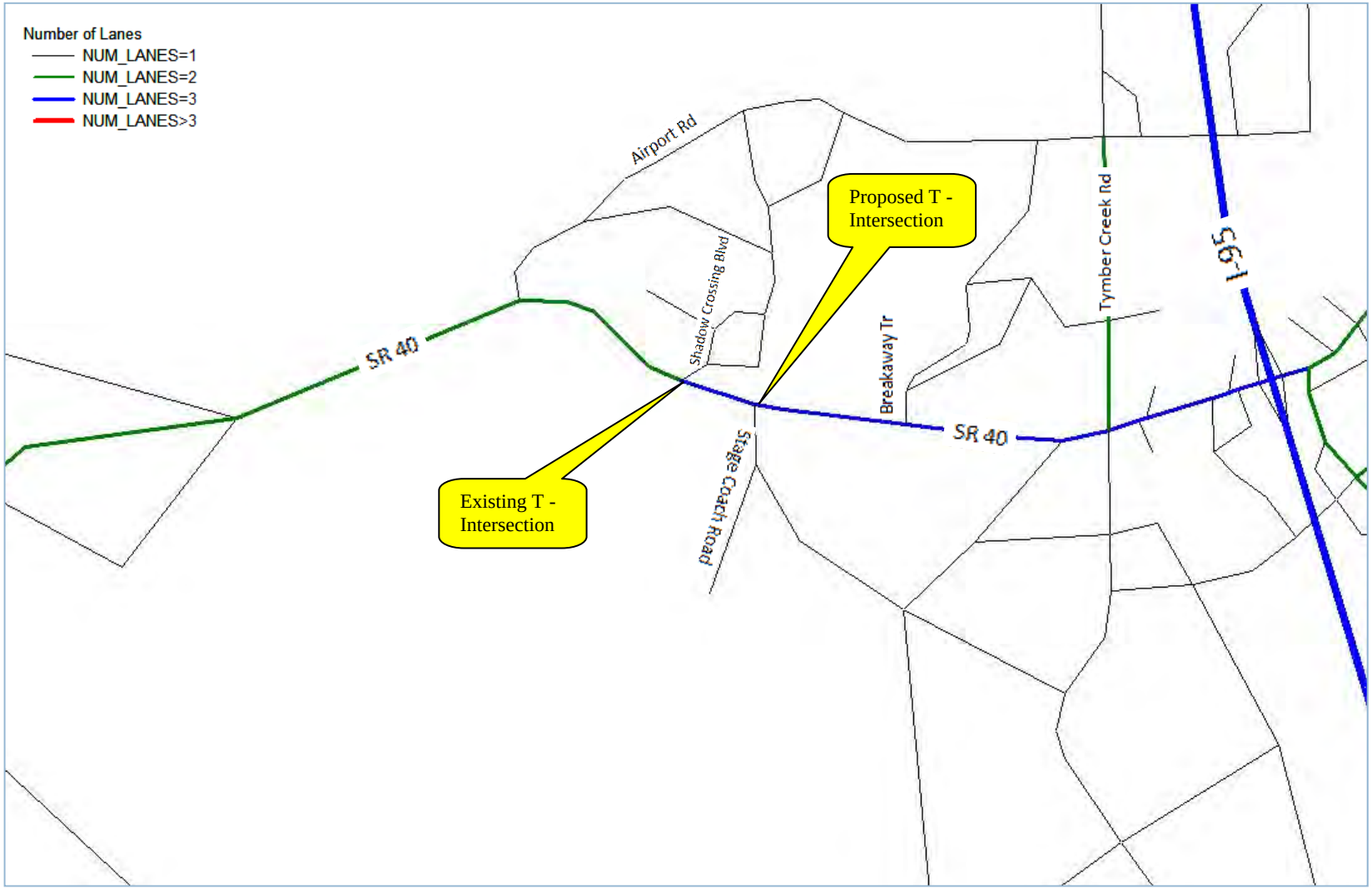

Figure 2: Alternative 7B illustrating the proposed T-intersections of SR 40 at Shadow Crossings Boulevard & SR 40 at Stage Coach Road

Year 2035 Roadway Analysis

The daily model volumes on SR 40 west of Breakaway Trail for Alternatives 7A and 7B were converted to the Annual Average Daily Traffic (AADT) volumes. A MOCF (Model Output Conversion Factor) value of 0.95 (source: 2010 FDOT Traffic CD) was utilized to convert the model volumes (Peak Season Weekday Average Daily Traffic - PSWADT) to AADT volumes. The year 2035 CFRPM Model Plots illustrating the roadway network and total two-way volumes for the two alternatives are provided in **Appendix B** of this memorandum.

Then, these AADT volumes were compared against the generalized service volumes (at adopted LOS for SR 40) from the 2009 FDOT Q/LOS Handbook in order to determine the need for six-laning on SR 40 west of Breakaway Trail.

The following **Table 1** summarizes the comparison of the model AADTs and the generalized service volumes at LOS Standard "C" for SR 40 west of Breakaway Trail. The last column in Table 1 shows whether the future AADT volumes exceed the capacity.

Conclusions

Based on the comparison shown in Table 1, a four-lane section on SR 40, west of Hunters Ridge Boulevard/Stage Coach Road (in Alternative 7A) or west of Shadow Crossings Boulevard (in Alternative 7B), is anticipated to meet the future capacity needs on SR 40. **However, a four-lane section capacity on SR 40 between Hunters Ridge Boulevard/Stage Coach Road in Alternative 7A (or Shadow Crossings Boulevard in Alternative 7B) and Breakaway Trail was found not to meet the future traffic demand and therefore, has to be widened to six-lanes.**

Table 1: Year 2035 Roadway Capacity Analysis

Roadway	Limits	Existing Lanes	2035 Lanes	Facility Type	Adopted LOS Standard	2035 Capacity	Model Volume	AADT	% of Capacity
Alternative 7A									
SR 40	West of Airport Road to Airport Road	4	4	Urbanized Uninterrupted	C	49,600	39,441	37,500	76%
	Airport Road to Shadow Crossings Boulevard (existing ent. To Hunters Ridge)	4	4	Urbanized Uninterrupted	C	49,600	43,059	40,900	82%
	Shadow Crossings Boulevard to Hunters Ridge Boulevard/Stage Coach Road	4	4	Urbanized Uninterrupted	C	49,600	47,583	45,200	91%
	Hunters Ridge Boulevard/Stage Coach Road to Breakaway Trail	4	6	Urbanized Class I Arterial	C	56,390	54,539	51,800	92%
Alternative 7B									
SR 40	West of Airport Road to Airport Road	4	4	Urbanized Uninterrupted	C	49,600	38,854	36,900	74%
	Airport Road to Shadow Crossings Boulevard	4	4	Urbanized Uninterrupted	C	49,600	42,663	40,500	82%
	Shadow Crossings Boulevard to Stage Coach Road	4	6	Urbanized Uninterrupted	C	56,390	58,265	55,400	98%
	Stage Coach Road to Breakaway Trail	4	6	Urbanized Class I Arterial	C	56,390	54,121	51,400	91%

Notes:

1. Alternative 7A- SR 40 widening from the proposed plus connection of Hunters Ridge Boulevard/Stage Coach Road to Williamson Boulevard (from 4 to 6 lanes), Hand Avenue Extension (2 lanes) from Williamson Blvd to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Blvd.
2. Alternative 7B- SR 40 widening from Shadow Crossing Boulevard (the exisitng exntrance to Hunters Ridge) to Williamson Boulevard (from 4 to 6 lanes), Hand Avenue Extension (2 lanes) from Williamson Blvd to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Blvd.
3. AADT = Model Volume * MOCF. A MOCF of 0.95 from the 2010 FDOT Traffic CD was used.
4. Year 2035 capacities at the Adopted LOS Standard were obtained from the 2009 FDOT Q/LOS Handbook.
5. SR 40 between the current 4-lane section end and the proposed Hunters Ridge Boulevard/Stage Coach Road is considered as an Uniterrupted Flow Highway.
6. SR 40 between the proposed Hunters Ridge Boulevard/Stage Coach Road connection and Breakaway Trail is considered as a Class I Arterial because of the existing signal at Breakaway Trail.
7. SR 40 between the current 4-lane section end and Breakaway Trail is categorized as an Urban segment in the latest District 5 LOS_ALL Spreadsheet and in the Roadway Characteristics Inventory (RCI) Database

Appendix A

Responses to Comments

GMB ENGINEERS & PLANNERS, INC.

September 15, 2011

Mr. Terry Rains

Project Manager – Design Traffic

FDOT District 5 / Mailstop PL 4-548

719 S. Woodland Blvd.

DeLand, FL 32720

RE: Supplemental to SR 40 DTTM - Year 2035 Roadway Analysis for SR 40 West of Breakaway Trail" Memorandum, dated June 29, 2011

Responses to Comments from Kittelson & Associates, Inc. (KAI), dated September 7, 2011

GMB Engineers & Planners, Inc. offers the following responses to the comments provided by KAI on the Supplemental to SR 40 DTTM.

Comment #1: *It is unclear why the network to/from Hunter's Ridge changes for the two scenarios. Additionally, there is a TAZ located on the northside of SR 40 that carries 7,324 trips under Alternative 7A that likely represents a portion of the Hunter's Ridge development. Yet this TAZ is not connected to the Stagecoach Road/Hunter's Ridge Boulevard link. It is recommended that this network be examined further.*

Comment #2: *When comparing the two alternatives, the model volume on SR 40 immediately east of the Airport Road extension increases by nearly 5000 daily trips in 7B. This volume change does not seem logical and appears to be a result of eliminating the Stagecoach extension link immediately north of SR 40. Please evaluate this discrepancy further and provide further explanation to validate this volume change.*

Response to Comments 1 & 2: The revised roadway network for both the Alternatives 7A & 7B now includes the same TAZ connections. The TAZ (#1789) that carried 7,324 trips (in the previous model) is now connected to the Hunters Ridge Boulevard link. With the revised roadway network, the model volumes for the two alternatives are comparable.

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Comment #3: *For Table 1 it is recommended that SR 40 be broken out into 4 segments to fully understand where the 4-lane section will meet the LOS standard: From west of Airport to Airport, Airport to Hunter's Ridge existing entrance, Hunter's Ridge to Stagecoach, and Stagecoach to Breakaway Trail.*

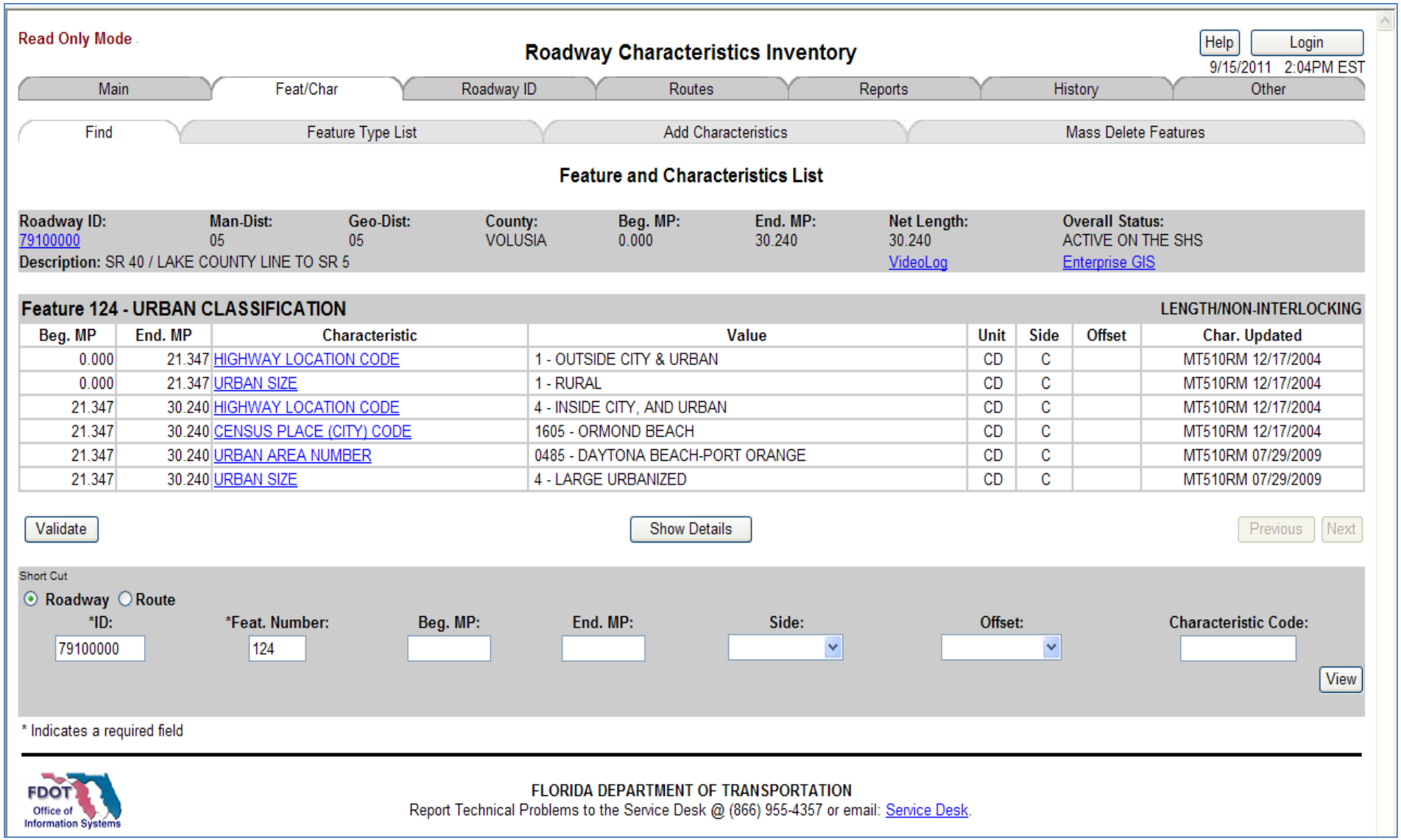
Comment #4: Please check that the footnotes are correct.

Response to Comments 3 & 4: The required changes were incorporated into Table 1 provided in the revised memorandum.

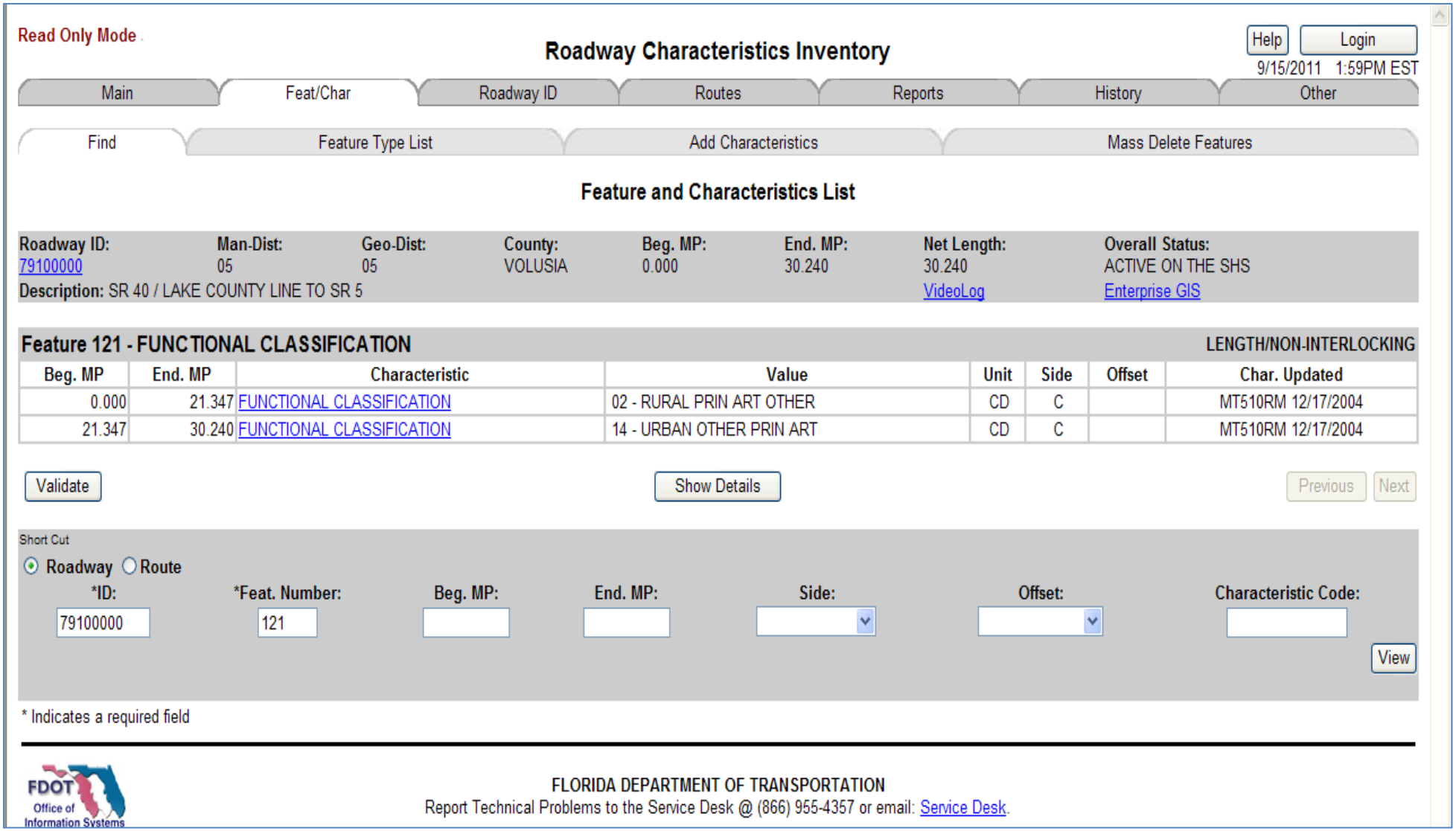
Comment #5: *Both the LOS standard and the generalized service volumes are based on an urbanized area type. Currently, the roadway section is rural with a posted speed of 60 mph. Additionally, most of this area, which is undeveloped, is likely outside the urbanized boundary. For emerging SIS facilities (4-lane), the FDOT LOS standard is B in rural conditions. Please provide justification why the use of urban service volumes and LOS standards is appropriate.*

Response: The area type and LOS standard for SR 40 west of Breakaway Trail (till Rima Ridge Road) were obtained from the latest FDOT LOS_ALL spreadsheet. The urban area type for this section on SR 40 is documented in the Roadway Characteristics Inventory (RCI) Database and supported by the Volusia County AADT and Historical Counts Sheet and the Year 2025 Comprehensive Plan for the City of Ormond Beach. The LOS standard "C" for SR 40 west of Breakaway Trail (till Rima Ridge Road) is consistent with the Volusia County and City of Ormond Beach Comprehensive Plans. Also, it should be noted that the roadway capacities considered in this study are for the year 2035 and it is safe to assume an urban area type for the subject SR 40 segment. The Urban Classification and Functional Classification features for SR 40 in Volusia County are provided at the end of Memorandum.

SR 40 Area Type, West of Breakaway Tr
(source: RCI Database)



*** Note: The Milepost 21.347 is just east of Rima Ridge Road (MP 21.190) and approximately 2 miles west of Shadow Crossings Blvd.**

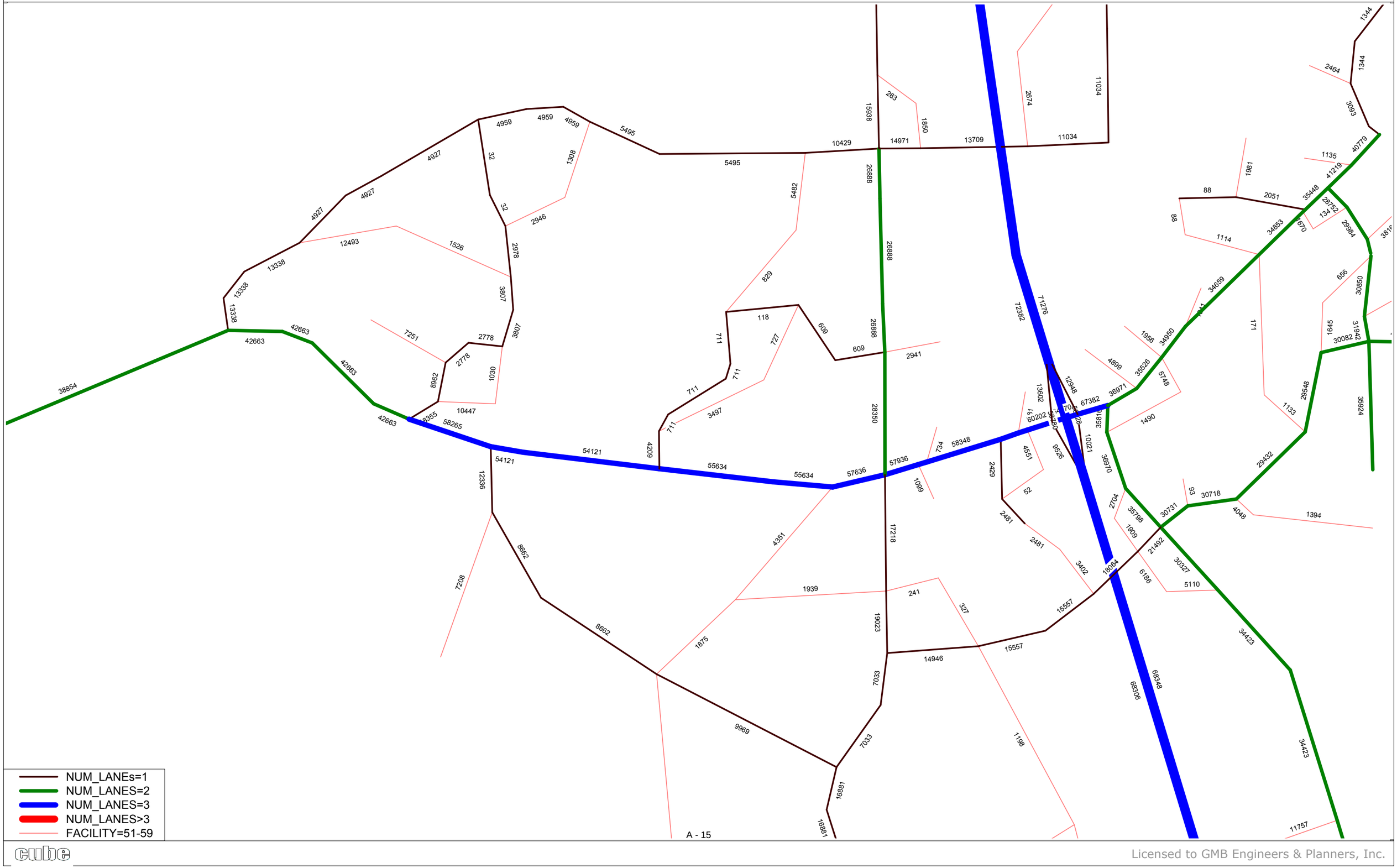


*** Note: The Milepost 21.347 is just east of Rima Ridge Road (MP 21.190) and approximately 2 miles west of Shadow Crossings Blvd.**

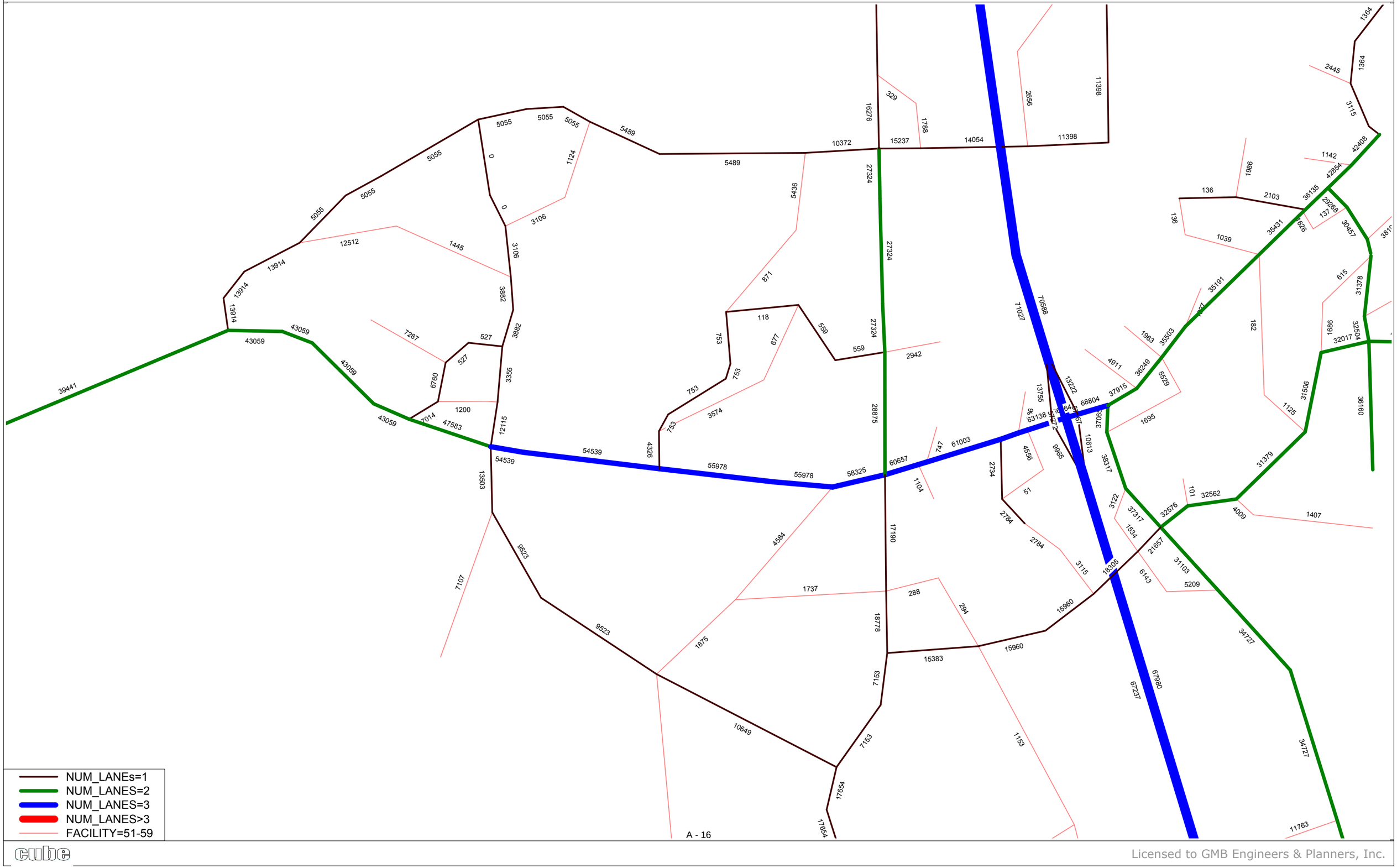
Appendix B

Year 2035 Model Plots

Year 2035 CFRPM 5.0 Model - Alternative 7B
Traffic Volumes & Number of Lanes Plot



Year 2035 CFRPM 5.0 Model - Alternative 7A
Traffic Volumes & Number of Lanes Plot



GMB ENGINEERS & PLANNERS, INC.

November 21, 2011

Terry Rains, Project Manager – Design Traffic
FDOT District 5
719 S. Woodland Blvd.
Deland, FL 32720

RE: **Response to Comments**
URS Corporation Comments (July 25, 2011) on Draft SR 40 Design Traffic Technical Memorandum (June 2011)
GMB Project No.: 11-016.06

Comment A. Please verify that the volume reduction along Tymber Creek Rd after the introduction of Hand Avenue extension in Alternative 7. Figure 10-3- Alt 5 shows AADTs of 6,200, 12,100, and 18,000 in 2015, 2025, and 2035 respectively. Figure 11-2 – Alt 7 shows and AADT of 3,100, 9,500, and 15,800 in 2015, 2025, and 2035 respectively

Response: Alternative 7 was removed as part of the new Study.

Comment B. Please report the HCM Synchro outputs for both signalized and unsignalized intersections to show other factors and parameters (PHF, truck %...).

Response: The study provided Synchro Outputs, since the SR 40 study corridor has closely spaced intersections. However, the outputs are revised to include the relevant factors as mentioned in this comment.

Comment C. Figure 24-3 shows the intersection of LPGA and Tomoka Farms Rd is signalized, however the Synchro analysis for the intersection is shown as unsignalized in the 2015 No-Build condition. Please revise.

Response: This comment is noted. The relevant Figure is updated accordingly.

Comment D. Please verify southbound turning movements at Williamson Blvd/ SR 40 intersection. Volumes are identical for all years 2015, 2025, and 2035 for all alternatives as shown in their associated Figures (15-2, 16-2, 17-2, 18-2, 19-2, 20-2, 21-2, 22-2, 23-2).

Response: The southbound turning movement volumes at Williamson Blvd/SR 40 are assumed identical since this approach is an egress from the Wal-Mart Superstore. Also, based on the input from the PD&E Consultant, the alternative access to Wal-Mart at Bermuda Estates is being considered for a signal, which could attract a portion of the traffic from the

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Williamson Blvd/SR 40 intersection. In any case, the future volume projections for this intersection are conservative.

Comment E. Please consider an exclusive eastbound right turn lane at the intersection of SR 40 and I-95 southbound off ramp due to the high demand of this movement. A shared through- right will not accommodate this demand.

Response: This comment is noted. The relevant analysis and the report are updated accordingly.

Comment F. Please correct the 2015 Alt-1 PM design hour Synchro analysis for the intersection of Williamson Blvd and Hand Ave. Southbound left turn lanes shall be dual left turn lanes as shown in Figure 25-2.

Response: This comment is noted. The relevant analysis and the report are updated accordingly.

Comment G. Arterial Synchro analyses show that SR 40 is Arterial Class I, however the Future Arterial LOS Summary tables for the No-Build and Alternatives 1, 5, and 7 show SR 40 as Arterial Class II. Please verify.

Response: The arterial class assumed by Synchro is Class I, which is not the case for the segment between Tymber Creek Road and Williamson Blvd (because of the signal density in this section of SR 40). Furthermore, District LOS_ALL Spreadsheet also shows this segment on SR 40 as Class II. Therefore, the study calculated the LOS based on the travel times from Synchro and Class II assumption.

Comment H. Please consider signalizing the failing unsignalized intersections in the future years since delay is very high and safety should be considered at those intersections, especially along SR 40.

Response: In the revised study, the westbound left turn movement is eliminated at SR 40 and Interchange Blvd. The remaining stop controlled intersections on SR 40 at Cone Road, Airport Road and Shadow Crossing Blvd did not report very high delays in any of the future years.

GMB ENGINEERS & PLANNERS, INC.

November 21, 2011

Terry Rains, Project Manager – Design Traffic
FDOT District 5
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RE: **Response to Comments**
Kittelson & Associates, Inc. Comments (July 27, 2011) on Draft SR 40 Design Traffic Technical Memorandum (June 2011)
GMB Project No.: 11-016.06

1. Table 1:

a. Please update project location to indicate "Ormond Beach, Volusia County" not "West Ormond Beach, Volusia County".

Response: This comment is noted. Table 1 is updated accordingly.

b. Relative to the LOS standard, please verify that the entire corridor is located within the City of Ormond Beach. If not, please identify what portion is not located within the City of Ormond Beach and identify the LOS standard for that section which would thus be based on either the City of Daytona Beach or Volusia County.

Response: Based on the change in study limits, Table 1 is updated accordingly.

c. The table indicates that a shared-use path is on the north side of SR 40 from Breakaway Trail to Tymber Creek Road. Based on the construction plans, this facility is actually an 8-foot wide sidewalk. Please update the table accordingly.

Response: This comment is noted. Table 1 is updated accordingly.

d. The posted speed limit actually changes from 45 mph to 50 mph between Booth Road and Interchange Boulevard, not at Booth Road.

Response: This comment is noted. Table 1 is updated accordingly.

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e. The table indicates no bike lanes along SR 40, but there are shoulders west of Interchange Boulevard. Do those qualify as bike lanes?

Response: It should be noted that Table 1 indicated absence of designated bike lanes and not shoulders used as bike lanes. However, the revised Multi-modal analysis considered shoulders as bike facilities.

2. Table 4: For the I-95/SR 40 ramps, an axle adjustment factor of 0.99 is used. However, the axle adjustment factor for I-95 is 0.92 while the axle adjustment factor for SR 40 is 0.92. Thus, the axle adjustment factor for the ramps should be revised accordingly.

Response: Based on both the 2009 and 2010 FTI CDs, the axle adjustment factor for I-95 is not 0.92. However, based on the axle adjustment factor of 0.92 (2009 FTI CD) for SR 40, the traffic counts for the I-95/SR 40 Ramps were revised.

3. Figures 6-1 through 7-3: Please ensure that these figures reflect all u-turns. For example, per the Synchro printout, the westbound u-turn volume during the AM peak hour at the SR 40/Tymber Creek Road intersection is 43 vehicles while Figure 6-2 only shows a left-turn volume of 80 vehicles. This comment also applies to all future conditions volume projections and analyses.

Response: This comment is noted. All of the figures, volume projections and analyses are revised accordingly.

4. During the public meeting and from the comment forms received, there have been multiple questions regarding modifications to unsignalized subdivision access points. These are for the subdivisions of Il Villaggio, Indian Springs and Twin Rivers. They are requesting right-turn deceleration lanes and have questions about departing their subdivision to head east. Any existing count information for these subdivision entrances will be useful in the discussions with these home owners. We simply want the count data to be added to the existing count figures. Analysis is not needed.

Response: The study scope does not include collecting existing traffic counts for subdivisions mentioned in this comment.

5. Table 5: For the unsignalized intersections, please identify the movement with which the delay and level of service relate.

Response: This comment is noted. Delay and LOS for the worst case major and minor street movements are included in the LOS Tables.

6. Consideration should be given to evaluating the level of service (LOS) for SR 40 for two separate corridors. First, between Breakaway Trail and the I-95 interchange southbound ramps, the LOS should be based on the overall LOS between these two points. Thus, the segment LOS between each intersection should be eliminated. East of I-95 should then be evaluated separately. Given that the study does not evaluate additional intersections on SR 40 further east of Williamson Boulevard, consideration should thus be given to eliminating the arterial LOS analysis from the I-95 southbound ramps to Williamson Boulevard. Rather, the intersection levels of service and queuing should dictate the overall LOS for this section.

Response: This comment is noted. LOS Tables and the report are revised accordingly.

7. For the SR 40/Williamson Boulevard intersection, please ensure that the free-flow eastbound right-turn and northbound right-turn movements are coded appropriately for both the existing conditions and future conditions analyses.

Response: The eastbound right-turn movement is already coded as free in the analysis. The existing and future LOS analyses are revised to include the free flow northbound right-turn movement.

8. Table 7 – As previously mentioned in comment #1c, there is an eight-foot sidewalk on the north side of SR 40 from Tymber Creek Road extending past Breakaway Trail. Also, there are paved shoulders beginning just west of the I-95 SB ramps. While there is no pavement markings for bike lanes through the signalized intersections, the paved shoulders are bike facilities. Please update the multi-modal LOS analyses accordingly.

Response: This comment is noted. The multi-modal LOS analyses and the report are revised accordingly.

9. Please verify that all Synchro printouts are the HCM printouts.

Response: All of the LOS Tables clearly states that the results are from Synchro Output Reports. The study used Synchro results, because the majority of the study intersections are closely spaced and HCM analysis is not suited for these conditions.

10. Table 9:

a. For SR 40, consideration should be given to calculating and applying the average "D" factor for west of Interchange Boulevard and east of Interchange Boulevard as directionality clearly increases west of I-95. A similar consideration should be given to the "K" factors as well. This comment also applied to Table 15.

Response: The revised study now used Standard K factor for an urban area, based on the recent directive from FDOT District 5 regarding the use of Standard K factors in Design Traffic Studies. As such, a standard K factor of 9.0% was used for the entire study corridor.

We believe that the recommended "D_{30}" factor of 62.0% is justified for the study area in a Design Traffic Projections sense. Since the study area is anticipated to grow denser within the next 25 years, we feel that the recommended "D_{30}" factor depicts the future traffic conditions without overestimating or underestimating the volumes. Also, the based on the existing traffic counts, it is evident that except for the locations east and west Breakaway Trail, all of the other count locations had a "D" factor close to 62.0%.

b. The SR 40/I-95 ramps need to be added to the table.

Response: This comment is noted. Table 9 is revised accordingly.

11. Tables 10 and 12 – Are the historical K30 and D30 factors specific to each roadway or are they a county-wide average? Given that the values are identical for each of the roadways, they appear to be some sort of average value. If they are not facility specific, please provide a more thorough explanation regarding the source of the factors and whether or not they applicable and why. Additionally, only one year of historical data is identified for Williamson Boulevard and two years for LPGA Boulevard. These values are identical to the SR 40 values. Is there a reason why values for the other years are not simply the same as SR 40?

Response: Tables 10 and 12 clearly state that the historical K30 and D30 factors were extracted from the FTI CD. The text in Section 4 of the report also states the same. These factors were directly taken from the FTI CD and shown in the report for comparison purposes. As mentioned in Section 4 of the report, only two years of data was available for Williamson Boulevard and only three years of data was available for LPGA Boulevard.

12. Page 43 - It is understood how the adjustment factor for converting measured K values to K30 was calculated. However, please identify the source of this methodology. Additionally, was this factor calculated based on the 2009 or 2010 peak season factor category reports. When justifying the application of lower K30 factors, it would seem appropriate to indicate that the application of this adjustment factor is likely conservative given that the existing AADTs were actually conducted during the peak season. It is also unclear as to why data from portable stations would be inaccurate.

Response: The revised study now used Standard K factor for an urban area, based on the recent directive from FDOT District 5 regarding the use of Standard K factors in Design Traffic Studies. As such, a standard K factor of 9.0% was used for the entire study area.

13. Page 44 – The second paragraph indicates that Booth Road had a measured D factor of 76.2%. This actually pertains to Breakaway Trail. Additionally, Booth Road had a measured "D" of 50.5 which is less than the FDOT minimum acceptable value of 50.8.

Response: This comment is noted. The report is revised accordingly. Moreover, Booth Road is a local road and "D" factor for a local road could be slightly lower than the FDOT minimum acceptable value for urban arterials.

14. Please include the I-95/SR 40 ramps in Table 15.

Response: This comment is noted. Table 15 is revised accordingly.

15. The truck factors for the peak hour is taken as half of the measured daily truck factors. However, the 48-hour classification counts have truck factors for the peak hour. How does these factors compare to half of the daily truck factor? Might the use of the measured factors be more appropriate?

Response: The truck factors for the peak hour were taken as half of the recommended daily truck factors and not exactly half of the measured daily truck factors. This derivation of the design truck factors was based on the procedure listed in page 2-39 of the "Project Traffic Forecasting Handbook". We also feel that the use of truck factors for the peak hour from a short term class count would overestimate the number of trucks for the future conditions.

16. Section 5.4, Page 52 – It is recognized that the appendix includes the memorandums relating to the land use refinements and modeling. However, please include within the body of the report a brief summary of the land use refinements that were made to the 2035 land use data sets from the previously approved data sets in CFRPM V5.0 for 2035.

Response: This comment is noted. The report is revised accordingly.

17. It is recommended to provide a table in the appendix summarizing how the future year AADTs, as included in Figures 8-1 through 11-3, were calculated.

Response: As mentioned in the body of the report, the design year 2035 volumes (AADTs) for the No Build and Build Alternatives were obtained from the respective CFRPM Models. The 2015 and 2025 AADTs were interpolated values between the existing year AADTs and the design year AADTs.

18. Several questions were received during the public meeting regarding the timing and impact of the Tymber Creek Road extension and Hand Avenue extension. Thus, it is important for the PD&E team to fully understand the implications of these two roadways. Please provide an overview of the affects these extensions have on the AADT volume projections. It would also be helpful to provide supporting figures that quantify the volume differences on various roadway segments. These same figures will be helpful and reviewing the relative changes in the turning movement projections between alternatives.

Response: It should be noted that the alternative with Hand Avenue Extension is removed from the revised scope. The future AADT figures clearly show the implications (the reduction of traffic volume on SR 40 east of Tymber Creek Road) of Tymber Creek Road Extension on the SR 40 study corridor. As such, the study also identifies at various stages and at the end of the report that Build Alternative 5 (with the Tymber Creek Road Extension) operates with better intersection and arterial LOS, which implies the advantage of Tymber Creek Road Extension.

19. Figures 8-1 through 11-3:

a. When comparing the no-build versus Alternative 1, there is a significant volume difference on SR 40 adjacent to Tymber Creek Road. It is assumed that the only difference between the two analyses is that SR 40 goes from four lanes to six lanes. With I-95 restricting access between the east and west sides, it would seem that the demand in the model would be accommodated by SR 40. Please review the model results to determine that the 13,000 daily-volume differential in Figures 8-1 and 9-1, just east of Tymber Creek Road, is reasonable. It is recommended that a screenline analysis be done for I-95 from LPGA Blvd to the south to US 1 to the north for movements across I-95 using 2035 volumes for all four scenarios (No-build and Build Alternatives 1, 5 & 7). Additionally, please provide justification for this differential as the PD&E consultant will be responsible to explain this to the public if it is correct.

Response: The difference in model volumes, especially between No-Build and Alternative 1 arise from the six laning on SR 40. The addition of a third through lane attracts traffic onto SR 40 study corridor from 1) west of Shadow Crossing Blvd, 2) east of Williamson Blvd, 3) south of SR 40 & Williamson Blvd intersection and 4) I-95 south and north of SR 40. In addition, the following Table 1 shows a screenline analysis for the east-west cut lines across I-95. It can be clearly seen from the Table 1 that demand remains the same for the two east-west screenlines between No-Build and Alternatives 1 and 5.

b. Recently we have learned that FDOT's Traffic Operations department is conducting a design project to modify the Interchange Boulevard intersection median opening. This will close the full median opening to become WB directional only. Northbound left turns at this intersection need to be reassigned in the network to either Booth Road or as a u-turn movement elsewhere to the east.

Response: This comment is noted. The report and the analyses are revised accordingly.

Table 1: Screenline Analysis for the Study Alternatives

	Cut Line Number	Roadway Name	Location	No Build	Alternative 1	Alternative 5
East / West Cut Lines						
	Cut Line 4	Tymber Creek Road	south of Airport Road	22,430	22,964	25,079
		I95	North of SR 40	144,332	143,746	143,381
		Nova Road	South of US 1	29,296	26,780	25,366
		US1	South of Nova Road	25,986	26,451	**26,670**
	Total Cut Line 4			**222,044**	**219,941**	**220,496**
	Cut Line 5	I95	South of SR 40	140,825	140,372	136,094
		Willamson Boulevard	South of Hand Avenue	34,371	34,480	32,485
		Clyde Morris Boulevard	South of Hand Avenue	41,880	41,788	37,416
		Nova Road	South of Hand Avenue	49,879	51,348	**49,736**
	Total Cut Line 5			**266,955**	**267,988**	**255,731**

c. Please provide clarification regarding how the AADT volumes were developed for Tymber Creek Road south of SR 40, Interchange Boulevard south of SR 40, and for the I-95/SR 40 ramps. The AADT for Tymber Creek Road south of SR 40 does not show a volume increase between Alternatives 1 and 5 which does not seem logical given that this roadway is extended to LPGA Boulevard in Alternative 5.

Response: This comment is noted. The report and the analyses are revised accordingly.

20. Please provide a general overview of the adjustments (balancing) that were made to the Turns5 results.

Response: This comment is noted. The report is revised accordingly.

21. The projected turning movement volumes onto and off of the south leg of the SR 40/Booth Road intersection are inconsistent between alternatives. For example, in Figure 14-2 the eastbound right-turn volume is 76 in the PM peak hour. Figure 17-2 shows a PM peak- hour volume of 147 for this same movement. Please check these differences and verify they are appropriate. If they are correct, please provide justification for the differences.

Response: This comment is noted. The report and the analyses are revised accordingly.

22. Figures 25-1 and 25-2:

a. Will the westbound right-turn movement at the SR 40/Tymber Creek Road intersection require dual right turn lanes with 900 right-turns? A free-flow right- turn lane may not be desirable given potential weave concerns north of SR 40 for the purposes of accessing future driveways to development.

Response: This comment is noted. The analyses are revised accordingly with dual westbound right turn lanes at SR40/Tymber Creek Road.

b. At the SR 40/Booth Road intersection, will a combined northbound thru/left-turn lane be adequate with the elimination of the northbound left-turn at the Interchange Boulevard intersection as discussed in comment #18b.

Response: This comment is noted. The analyses are revised accordingly with a separate northbound left turn lane at the SR 40/Booth Road intersection.

c. Per comment #18b, please remove the northbound north-bound left-turn movement at Interchange Boulevard.

Response: This comment is noted. The report and the analyses are revised accordingly.

d. The eastbound right-turn volume at the SR 40/I-95 southbound ramps intersection is 860 vph during the AM peak hour (Figure 17-2). We have received numerous comments from the public regarding the current delays associated with not having a right-turn lane for this movement. Please consider a separate right-turn lane or provide very strong justification in the report of why it is not needed.

Response: This comment is noted. The analyses are revised accordingly with an exclusive eastbound right turn lane. at SR 40/I-95 SB Ramps.

e. The eastbound approach to the SR 40/Williamson Boulevard intersection shows three through lanes and a separate right-turn lane. The future volumes shown in Figure 17-2 show, in the AM peak hour, the distribution between these movements to be nearly equal with 1950 vph thru and 1979 vph turning right. To the east of Williamson Boulevard, the City of Ormond Beach has an approved mobility plan restricting SR 40 to four lanes. Please consider reevaluating this approach with two thru lanes and two right-turn lanes. Also, please evaluate the two right turn lanes for the eastbound approach for Build Alternatives 5 and 7.

Response: This comment is noted. The analyses are revised accordingly with two through and two right turn lanes for the eastbound approach at SR 40/Williamson Boulevard.

f. Please evaluate providing a combined thru/right-turn lane for the westbound approach at the SR 40/Williamson Boulevard intersection. We have limited right- of-way in this area and the right-turn volume is about 100 vph. There is an alternative access to Wal-Mart at Bermuda Estates Drive and we understand that Wal-Mart is considering a sign at this location which could attract a portion of the existing westbound right-turn volume at the SR 40/Williamson Boulevard intersection.

Response: This comment is noted. The analyses are revised accordingly with a shared through-right lane for the westbound approach at the SR 40/Williamson Boulevard intersection.

23. Table 23 - The LOS standard for SR 40 to the west of I-95 is "C". The intersection of Tymber Creek Road and SR 40 is shown to be operating at LOS "E" in the AM peak hour and LOS "D" in the PM peak hour. This is the alternative that is intended to meet the LOS standard. Please consider the improvements needed to have this intersection operate at LOS "C" for both peak-hour periods.

Response: This comment is noted. The revised analysis indicated that the intersection of SR 40/Tymber Creek Road is projected to operate at LOS "D" or better through the design year 2035 traffic conditions (Alt 1 and 5) with the maximum feasible intersection improvements. LOS "D" is anticipated to be acceptable for SR 40 between Cone Road and I-95 SB Ramps, since FDOT is moving towards adopting LOS "D" for all the State Highways including SIS facilities in urban areas.

24. Tables 19, 21 and 23 – It is recommend to delete the SR 40/Interchange Boulevard intersection from the tables since the northbound left-turn movement will be removed under the near-term FDOT Traffic Operations project.

Response: This comment is noted. The report and the analyses are revised accordingly.

25. Table 24 – There are several segments of SR 40 between Breakaway Trail and the I-95 SB Ramps that are showing LOS "D". What improvements need to be incorporated into the design to improve the LOS to "C"? When addressing this comment, please take into consideration the recommendations per comment #6. Please verify that the 2035 LOS results in the PM Design Hour for Booth Road to I-95 SB Ramps are correct as they appear to be reversed.

Response: This comment is noted. The report and the analyses are revised accordingly. Also, please refer to Response to Comment # 23.

26. Within the body of the report, please provide the calculated queue storage length for the design of left and right-turn lanes as already included in the appendix. It is also helpful to have the through lane queue lengths such that consideration can be given to how those queues may block the turn lanes. Then, for each alternative, please provide a summary

showing the maximum queue for each turn lane, whether it be the AM or PM peak hour. This will greatly assist the PD&E team with quickly assessing the turn lane length needs. This information can be provided a tabular format and is needed for all three alternatives.

Response: This comment is noted. The report is revised accordingly.

GMB ENGINEERS & PLANNERS, INC.

December 29, 2011

Mr. Terry Rains
Project Manager – Design Traffic
FDOT District 5
719 S. Woodland Blvd.
Deland, FL 32720

RE: **Responses to Comments** from Kittelson & Associates, Inc. (December 19, 2011) on the SR 40 Design Traffic Technical Memorandum (November 2011)

GMB Project No.: 11-016.06

Comment 1. *Please provide further explanation regarding how future AADTs were calculated at the following locations as they are not directly calculated by applying the MOCF to the model volumes:*

1) *Shadow Crossings Blvd*
2) *Stage Coach Road*
3) *Booth Road*
4) *Interchange Blvd*
5) *All I-95/SR 40 Ramps*
6) *SR 40 between I-95 and Williamson Blvd.*

Additionally, it appears that there may have been some reassignment between Shadow Crossings/Stage Coach as well as Booth/Interchange. If reassignment occurred, did volumes on SR 40 between these segments get adjusted accordingly to account for the reassignment?

Response: Since SR 40 at Hunters Ridge Blvd/Stage Coach Road is proposed to be a signal in the future, it was assumed that this intersection would attract more traffic. As such, an annual linear growth rate of 1% was assumed for Shadow Crossings Blvd and the remaining volume was added to Hunters Ridge Blvd. Accordingly, the volumes on SR 40 were also reassigned to account for this modification.

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The 2035 model reported lower volume (compared to 2011) for Interchange Blvd and higher volume (compared to 2011) for Booth Road. As such, given the current characteristics of Booth Road and Interchange Blvd, an AADT of 1,500 was assumed for Booth Road and the remaining volume was reassigned to Interchange Blvd. Here too, the volumes on SR 40 were also adjusted to account for this modification.

In the case of I-95/SR 40 Ramps, 2035 model volumes for the ramps were not reasonable for the NB on and SB off ramps. For the purposes of the DTTM, a growth rate derived using overall 2035 and 2011 ramp volumes was used for the SB off and NB on ramps and a annual growth rate of 2% was assumed for the NB off and SB on ramps.

For SR 40 between I-95 and Williamson Blvd, the model volume was used.

Comment 2. *In Figure 16-3, the eastbound left-turn volume at I-95 northbound ramps/SR 40 is shown as 1601. This is just an entry error, but the value should be 160.*

Response: This comment is acknowledged. Figure 16-3 is revised accordingly.

Comment 3. *At the SR 40/Williamson Blvd intersection, please provide an alternative analysis which includes the northbound approach having a shared through/right turn lane instead of a separate through and separate right-turn lane. Given the limited right-of-way, this may be more appropriate.*

Response: We assume that this comment is related to Build Alternative 5. With the current recommended configuration (3 left, 1 through and 1 right on the NB approach), the LOS is "D" with an overall intersection delay of 54.5 seconds/vehicle during the critical PM design hour. The threshold for LOS "E" is 55.0 seconds/vehicle and the intersection would not operate at the adopted LOS "D" with a shared through/right turn lane on the NB approach. Also, it should be noted that the NB right turn movement cannot be free with a shared lane.

To confirm the above conclusion, the subject intersection was evaluated with a shared NB through-right lane for the year 2035 PM design hour conditions. This evaluation reported an overall intersection delay of 56.5 seconds/vehicle and LOS "E". The Synchro output is attached with this document.

Comment 4. *Please provide clarification how the arterial levels of service were calculated for the signalized section of the corridor west of I-95 SB ramps as those levels of service stated in the text are not provided in the summary tables.*

Response: For the signalized sections on SR 40 west of I-95 SB Ramps, Synchro was used to compute the arterial LOS. Synchro computes the LOS based on the arterial speed between signalized intersections. Since, Synchro was inaccurately depicting the SR 40 section between Tymber Creek Road and I-95 SB Ramps as Class I (FDOT has this section as Class II arterial based on the signal density), Synchro calculated speeds and speed based LOS criteria from the HCM 2000 (Exhibit 15-2) were used to derive the arterial LOS reported in the study.

The following example clarifies the procedure that was used to calculate the arterial LOS.

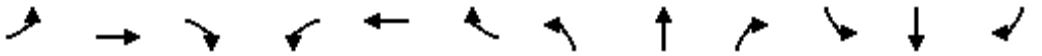
Year 2015 AM Design Hour for SR 40 b/w Tymber Creek Road & I-95 SB Ramps

Steps

1) Arterial Class is II for this segment based on signal density.
2) Total Travel time from Synchro = 53.1+33.7 = 86.8 seconds.
3) Total Distance = 4,171 feet.
4) Average Speed = (4,171/86.8)*(3,600/5,280) = 32.8 miles per hour.
5) Therefore, based on Exhibit 15-2 of the 2000 HCM, the corresponding LOS is "B". Based on Exhibit 15-2, LOS "A" speed threshold is 35.0 miles per hour and LOS "B" threshold is 28.0 miles per hour.

Attachments

Year 2035 PM design hour Synchro output for SR 40 & Williamson Blvd with a shared through-right turn lane on the NB approach.

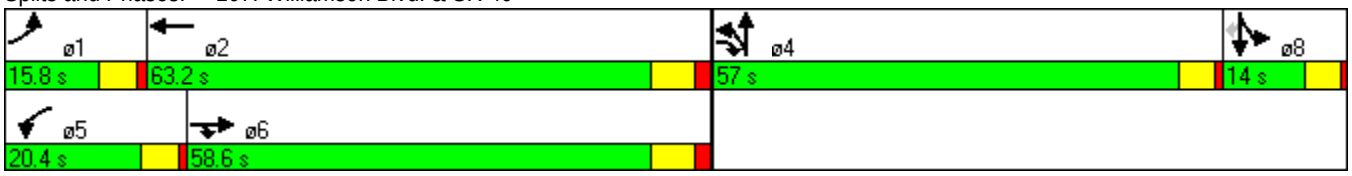


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	1092	1098	339	1796	108	1733	152	309	166	123	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		0	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4896	0	4894	1644	0	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4896	0	4894	1644	0	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			90		7			75				102
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	1103	1109	342	1923	0	1751	466	0	168	124	156
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA		Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases												8
Total Split (s)	15.8	58.6		20.4	63.2		57.0	57.0		14.0	14.0	14.0
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Act Effct Green (s)	11.8	54.6	111.6	16.4	59.2		53.0	53.0		10.0	10.0	10.0
Actuated g/C Ratio	0.08	0.36	0.74	0.11	0.39		0.35	0.35		0.07	0.07	0.07
v/c Ratio	0.87	0.88	0.54	0.94	0.99		1.01	0.74		0.75	1.02	0.78
Control Delay	114.1	43.3	3.4	99.1	63.5		72.5	43.6		89.1	152.7	51.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	114.1	43.3	3.4	99.1	63.5		72.5	43.6		89.1	152.7	51.5
LOS	F	D	A	F	E		E	D		F	F	D
Approach Delay		27.9			68.9			66.4			93.6	
Approach LOS		C			E			E			F	

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 124 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 56.5	Intersection LOS: E

Intersection Capacity Utilization 96.5% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Appendix B

Straight Line Diagrams & RCI Data for SR 40 Corridor

	5 YR INV	SLD REV
DATE	12/27/07	02/05/08
BY	DP	URS

INTERIM REVISIONS

BMP	EMP	INV		SLD REV	
000.000	030.240	11/13/09	DP	11/30/09	MR
000.000	030.240	07/29/09	MR	08/03/09	MR
000.000	030.240	12/11/08	DP	12/17/08	MR

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

FLORIDA DEPARTMENT OF TRANSPORTATION

INT. or US ROUTE NO	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO.:
	SR 40	VOLUSIA	5	79 100 000	3 OF 5

18 19 20

ROADWAY FEATURES

LANE WIDTHS ARE AVERAGED

INVENTORY DIRECTION ↕

PINE WOODS RD 18.155 A
CONIFER LN 18.471 O
PALMETTO PINES RD 18.718 A
MIDDLE HAW CREEK
40
LITTLE HAW CREEK
RODEO RD 19.422 A
COUNTRY ACRES BLVD 19.635 A
PINTO LN 19.941 A

18.066: 44.0' - 24.0' | 2 - 12.0' RDWY | 2 - 4.0' PVD/WD SHLD1 | 2 - 6.0' LWN SHLD2
18.066: 56.0' - 24.0' | 2 - 12.0' RDWY | 12.0' PVD MED | 2 - 4.0' PVD/WD SHLD1 | 2 - 6.0' LWN SHLD2
18.375: 44.0' - 24.0' | 2 - 12.0' RDWY | 2 - 4.0' PVD/WD SHLD1 | 2 - 6.0' LWN SHLD2
19.544: 84.0' - 48.0' | 4 - 12.0' RDWY | 12.0' PVD MED | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
19.703: 102.0' - 48.0' | 4 - 12.0' RDWY | 30.0' LWN MED | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
19.823: 102.0' - 48.0' | 4 - 12.0' RDWY | 30.0' LWN MED | 4.0' PVD INSHLD1 - LT | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
19.809: 94.0' - 48.0' | 4 - 12.0' RDWY | 22.0' LWN MED | 4.0' PVD INSHLD1 - LT | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT

ROADWAY COMPOSITION

28/FC-2 | 18.066 | 28/FC-2 | 18.377 | 28/FC-2 | 19.544 | 28/FC-5

HORIZONTAL ALIGNMENT

CURVE DATA IS NOT FIELD VERIFIED

Δ=8°44'30" D=1°00'00.00 PC=18.060 PI=18.143 PT=18.216
B=N88°47'22"E
Δ=40°02'00" D=3°00'00.00 PC=18.559 PI=18.691 PT=18.812
B=N48°45'22"E
PC=19.899 PI=20.016 PT=20.125 D=3°03'00.00 Δ=36°20'20"
B=N48°46'35"E

STRUCTURE DESCRIPTION

18.106 2-30" X 84' CC
18.802 0019 121' BR 18.825
19.130 0020 163' BR 19.161
19.809 1-18" X 60' CC

DISTRICT USE

SIS: EMERGING SIS HIGHWAY FACILITY

FUN CLASS: RURAL PRINCIPAL ARTERIAL – OTHER

20 21 22

ROADWAY FEATURES

LANE WIDTHS ARE AVERAGED

INVENTORY DIRECTION ↕

CONE RD 20.186 A
APPALOOSA LN 20.683 A
BUCKSKIN LN 20.974 A
21.347 INSIDE CITY & URBAN ORMOND BEACH, DAYTONA BEACH-PORT ORANGE
40
RIMA RIDGE RD 21.190 O
WILDLIFE XING CROSSING

20.060: 104.0' - 48.0' | 4 - 12.0' RDWY | 32.0' LWN MED | 4.0' PVD INSHLD1 - LT | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
20.163: 97.0' - 48.0' | 4 - 12.0' RDWY | 25.0' LWN MED | 4.0' PVD INSHLD1 - LT | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
20.261: 95.0' - 48.0' | 4 - 12.0' RDWY | 23.0' LWN MED | 4.0' PVD INSHLD1 - LT | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
20.393: 107.0' - 48.0' | 4 - 12.0' RDWY | 35.0' LWN MED | 4.0' PVD INSHLD1 - LT | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
20.795: 97.0' - 48.0' | 4 - 12.0' RDWY | 25.0' LWN MED | 4.0' PVD INSHLD1 - LT | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
20.901: 94.0' - 48.0' | 4 - 12.0' RDWY | 22.0' LWN MED | 2 - 4.0' PVD INSHLD1 | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
21.201: 102.0' - 48.0' | 4 - 12.0' RDWY | 30.0' LWN MED | 2 - 4.0' PVD INSHLD1 | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
21.226: 102.0' - 48.0' | 4 - 12.0' RDWY | 30.0' LWN MED | 2 - 4.0' PVD INSHLD1 | 2 - 5.0' PVD SHLD1 | 2 - 7.0' LWN SHLD2
21.249: 102.0' - 48.0' | 4 - 12.0' RDWY | 30.0' LWN MED | 4.0' PVD INSHLD1 - LT | 2 - 5.0' PVD SHLD1 | 2 - 7.0' LWN SHLD2
21.382: 94.0' - 48.0' | 4 - 12.0' RDWY | 22.0' LWN MED | 4.0' PVD INSHLD1 - LT | 2 - 5.0' PVD SHLD1 | 2 - 7.0' LWN SHLD2
21.608: 94.0' - 48.0' | 4 - 12.0' RDWY | 22.0' LWN MED | 4.0' PVD INSHLD1 - LT | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
21.615: 107.0' - 48.0' | 4 - 12.0' RDWY | 35.0' LWN MED | 4.0' PVD INSHLD1 - LT | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
21.805: 102.0' - 48.0' | 4 - 12.0' RDWY | 30.0' LWN MED | 4.0' PVD INSHLD1 - LT | 5.0' PVD INSHLD1 - RT | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT
21.964: 107.0' - 48.0' | 4 - 12.0' RDWY | 35.0' LWN MED | 4.0' PVD INSHLD1 - LT | 5.0' PVD INSHLD1 - RT | 4.0' PVD SHLD1 - LT | 8.0' LWN SHLD2 - LT | 5.0' PVD SHLD1 - RT | 7.0' LWN SHLD2 - RT

ROADWAY COMPOSITION

28/FC-5

HORIZONTAL ALIGNMENT

CURVE DATA IS NOT FIELD VERIFIED

Δ=85°55'44" PI=20.198 B=N85°06'55"E
Δ=86°06'28" PI=20.696
Δ=19°09'49" D=1°58'00.00 PC=20.908 PI=20.996 PT=21.082
Δ=83°32'40" PI=20.988
B=N66°57'06"E

STRUCTURE DESCRIPTION

20.020 1-18" X 60' CC
20.112 3-30" X 169' CM
20.329 1-18" X 66' CM
20.447 1-36" X 378' CC
20.545 1-18" X 63' CM
20.610 1-8" X 9" X 155' CBC
20.698 1-23" X 14" X 54' CM
20.853 1-23" X 14" X 61' CM
20.961 2-24" X 164' CM
21.035 1-18" X 65' CM
21.264 1-18" X 64' CM
21.274 1-23" X 14" X 24' CM
21.336 1-18" X 66' CM
21.428 1-18" X 40' CM
21.647 1-30" X 75' CM
21.737 1-30" X 19" X 61' CM
21.852 0194 36' BR 21.889
21.852 0195 36' BR 21.889
21.574 2-30" X 146' CM

DISTRICT USE

SIS: EMERGING SIS HIGHWAY FACILITY

FUN CLASS: RURAL PRINCIPAL ARTERIAL – OTHER (21.347) | URBAN OTHER PRINCIPAL ARTERIAL

H:\DeLand\UserData\MT50RMYOGN\sv7900-2009.dgn
PRINTED: 11/30/2009 3:03:34 PM

INTERIM REVISIONS									
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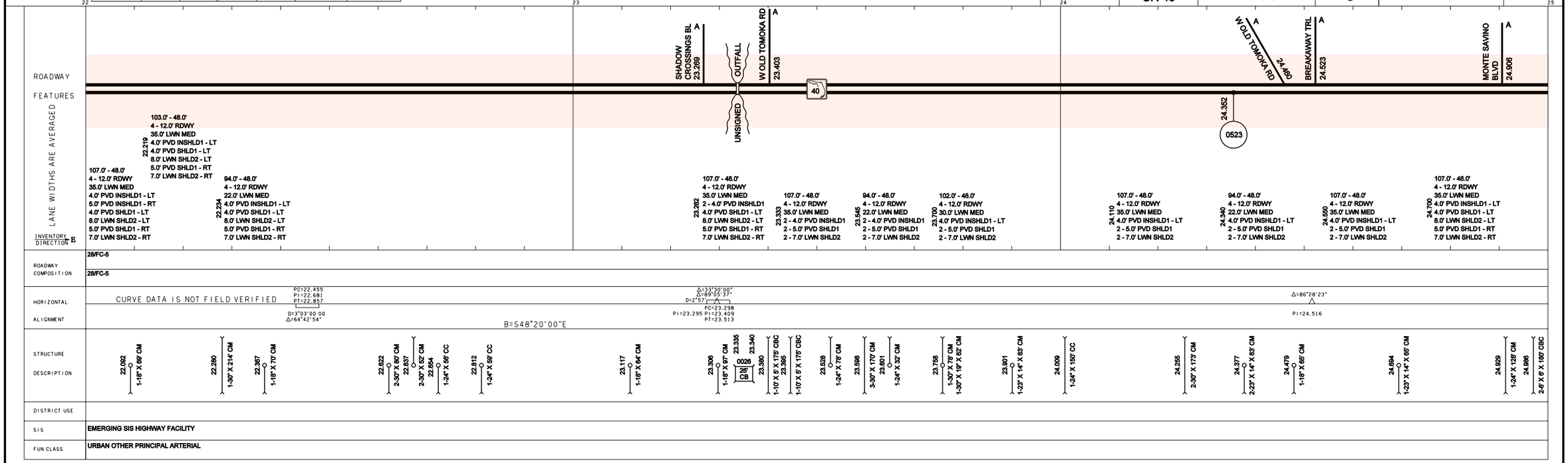
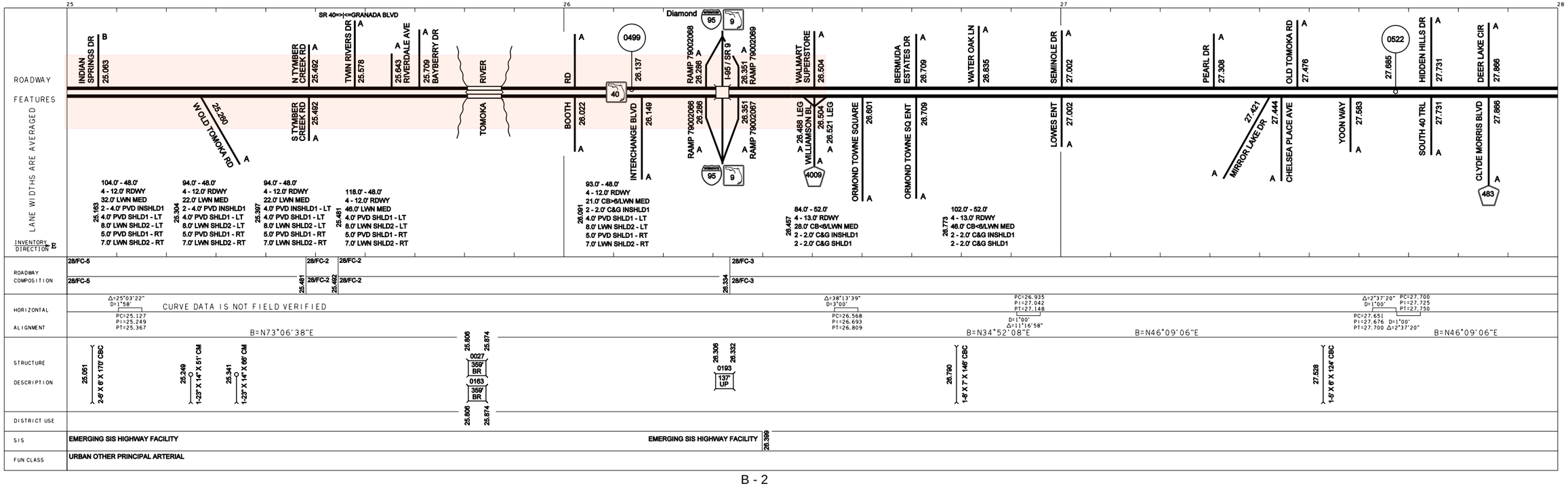
DATE	12/27/07	02/05/08	026.521	026.521	03/17/10	MR	03/30/10	MR
BY	DP	URS	000.000	030.240	11/13/09	DP	11/30/09	MR
			000.000	030.240	07/29/09	MR	08/03/09	MR

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

FLORIDA DEPARTMENT OF TRANSPORTATION

INT. or US ROUTE NO	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO.:
	SR 40	VOLUSIA	5	79 100 000	4 OF 5





U:\OGNs\79100-2010.dgn
PRINTED: 3/30/200 7:51:39 AM

Roadway ID:	Man-Dist:	Geo-Dist:	County:	Beg. MP:	End. MP:	Net Length:	Overall Status:
79100000	05	05	VOLUSIA	0.000	30.240	30.240	ACTIVE ON THE SHS

Description: SR 40 / LAKE COUNTY LINE TO SR 5 VideoLog Enterprise GIS

Feature 121 - FUNCTIONAL CLASSIFICATION							LENGTH/NON-INTERLOCKING
Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
0.000	21.347	FUNCTIONAL CLASSIFICATION	02 - RURAL PRIN ART OTHER	CD	C		MT510RM 12/17/2004
21.347	30.240	FUNCTIONAL CLASSIFICATION	14 - URBAN OTHER PRIN ART	CD	C		MT510RM 12/17/2004

Feature 212 - THRU LANES							LENGTH/INTERLOCKING
Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
18.375	19.544	NUMBER OF ROADWAY LANES	2	EA	C		RCICNVRT 06/12/2003
		PAVEMENT SURFACE WIDTH	24	FT	C		RCICNVRT 06/12/2003
19.544	26.457	NUMBER OF ROADWAY LANES	2	EA	L		RCICNVRT 06/12/1998
		PAVEMENT SURFACE WIDTH	24	FT	L		RCICNVRT 06/12/1998
19.544	26.457	NUMBER OF ROADWAY LANES	2	EA	R		RCICNVRT 06/12/1998
		PAVEMENT SURFACE WIDTH	24	FT	R		RCICNVRT 06/12/1998
26.457	28.810	NUMBER OF ROADWAY LANES	2	EA	L		RCICNVRT 05/23/1990
		PAVEMENT SURFACE WIDTH	26	FT	L		RCICNVRT 05/23/1990
26.457	28.810	NUMBER OF ROADWAY LANES	2	EA	R		MT591PD 04/19/2007
		PAVEMENT SURFACE WIDTH	26	FT	R		RCICNVRT 05/23/1990
28.810	30.240	NUMBER OF ROADWAY LANES	2	EA	L		RCICNVRT 05/23/1990
		PAVEMENT SURFACE WIDTH	24	FT	L		RCICNVRT 05/23/1990
28.810	30.240	NUMBER OF ROADWAY LANES	2	EA	R		RCICNVRT 05/24/1990
		PAVEMENT SURFACE WIDTH	24	FT	R		RCICNVRT 05/24/1990

Feature 216 - BIKE LANES/PED SIDEWALK							LENGTH/INTERLOCKING
Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
20.347	26.457	BICYCLE LANE	0 - UNDESIGNATED	CD	L		MT591PD 01/08/2008
20.347	26.457	BICYCLE LANE	0 - UNDESIGNATED	CD	R		MT591PD 01/08/2008
23.276	23.361	BICYCLE SLOT	0 - UNDESIGNATED	CD	L		MT591PD 01/08/2008
24.506	24.584	BICYCLE SLOT	0 - UNDESIGNATED	CD	L		MT591PD 01/08/2008
26.286	26.508	SIDEWALK WIDTH AND SEP.	8	FT	L	L	MT591PD 10/27/2010
26.386	26.507	SIDEWALK BARRIER CODE	0 - NO BARRIER	CD	L		MT591PD 01/28/2011
26.386	26.507	SIDEWALK BARRIER CODE	0 - NO BARRIER	CD	R		MT591PD 01/28/2011
		SIDEWALK WIDTH AND SEP.	8	FT	R	R	MT591PD 10/27/2010
26.507	26.508	SIDEWALK BARRIER CODE	0 - NO BARRIER	CD	L		MT591PD 01/28/2011
		SIDEWALK WIDTH AND SEP.	8	FT	L	L	MT591PD 10/28/2010
26.507	26.508	SIDEWALK BARRIER CODE	0 - NO BARRIER	CD	R		MT591PD 01/28/2011
		SIDEWALK WIDTH AND SEP.	8	FT	R	R	MT591PD 10/27/2010
26.508	26.826	SIDEWALK BARRIER CODE	0 - NO BARRIER	CD	R		MT591PD 01/28/2011
		SIDEWALK WIDTH AND SEP.	5	FT	R	R	MT591PD 10/27/2010
26.508	26.836	SIDEWALK BARRIER CODE	0 - NO BARRIER	CD	L		MT591PD 01/28/2011
		SIDEWALK WIDTH AND SEP.	8	FT	L	L	MT591PD 10/28/2010
26.836	26.847	SIDEWALK BARRIER CODE	0 - NO BARRIER	CD	L		MT591PD 01/28/2011
		SIDEWALK WIDTH AND SEP.	8	FT	L	L	MT591PD 10/27/2010
26.836	26.847	SIDEWALK BARRIER CODE	0 - NO BARRIER	CD	R		MT591PD 01/28/2011
		SIDEWALK WIDTH AND SEP.	5	FT	R	R	MT591PD 10/27/2010
26.847	27.000	SIDEWALK BARRIER CODE	0 - NO BARRIER	CD	L		MT591PD 01/28/2011
		SIDEWALK WIDTH AND SEP.	5	FT	L	L	MT591PD 10/27/2010
26.847	27.000	SIDEWALK BARRIER CODE	0 - NO BARRIER	CD	R		MT591PD 01/28/2011

Feature 217 - SIDEWALKS							LENGTH/NON-INTERLOCKING
Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
26.386	27.000	SIDEWALK WIDTH	8	FT	L	L	MT591PD 01/11/2008
26.386	27.000	SIDEWALK WIDTH	8	FT	R	R	MT591PD 01/11/2008
27.000	28.000	SIDEWALK WIDTH	8	FT	L	L	MT591PD 01/11/2008
27.000	28.000	SIDEWALK WIDTH	8	FT	R	R	MT591PD 01/11/2008
28.000	29.000	SIDEWALK WIDTH	8	FT	L	L	MT591PD 01/11/2008
28.000	29.000	SIDEWALK WIDTH	8	FT	R	R	MT591PD 01/11/2008
29.000	29.063	SIDEWALK WIDTH	6	FT	L	R	MT591PD 01/11/2008
29.000	30.000	SIDEWALK WIDTH	5	FT	R	R	MT591PD 01/11/2008
29.063	29.341	SIDEWALK WIDTH	5	FT	L	R	MT591PD 01/11/2008
29.341	29.343	SIDEWALK WIDTH	9	FT	L	R	MT591PD 01/11/2008
29.343	29.387	SIDEWALK WIDTH	5	FT	L	R	MT591PD 01/11/2008
29.403	29.813	SIDEWALK WIDTH	6	FT	L	R	MT591PD 01/11/2008
29.813	30.000	SIDEWALK WIDTH	5	FT	L	R	MT591PD 01/11/2008
30.000	30.240	SIDEWALK WIDTH	5	FT	L	R	MT591PD 01/11/2008
30.000	30.240	SIDEWALK WIDTH	5	FT	R	R	MT591PD 01/11/2008

Feature 251 - INTERSECTION					POINT/INTERLOCKING		
Beg. MP	End. MP	Characteristic	Value	Unit	Side	Offset	Char. Updated
20.186		90 DEGREES LEFT	CONE RD	ID	C		RCICNVRT 12/18/1985
		INTERSECTION SURFACE TYPE2	A - ASPHALT	CD	C		RCICNVRT 12/18/1985
20.683		90 DEGREES LEFT	APPALOOSA LN	ID	C		RCICNVRT 10/08/1990
		INTERSECTION SURFACE TYPE2	A - ASPHALT	CD	C		RCICNVRT 12/18/1985
20.974		90 DEGREES LEFT	BUCKSKIN LN	ID	C		RCICNVRT 10/08/1990
		INTERSECTION SURFACE TYPE2	A - ASPHALT	CD	C		RCICNVRT 12/18/1985
21.190		90 DEGREES RIGHT	RIMA RIDGE RD	ID	C		RCICNVRT 04/15/2002
		INTERSECTION SURFACE TYPE5	O - OTHER	CD	C		RCICNVRT 04/15/2002
23.269		90 DEGREES LEFT	SHADOW CROSSINGS BL	ID	C		RCICNVRT 06/11/2003
		INTERSECTION SURFACE TYPE2	A - ASPHALT	CD	C		RCICNVRT 12/18/1985
23.403		90 DEGREES LEFT	W OLD TOMOKA RD	ID	C		MT591EM 04/23/2009
		INTERSECTION SURFACE TYPE2	A - ASPHALT	CD	C		MT591PD 01/10/2008
24.460		135 DEGREES LEFT	W OLD TOMOKA RD	ID	C		MT591EM 04/23/2009
		INTERSECTION SURFACE TYPE1	O - OTHER	CD	C		MT591EM 04/23/2009
24.523		90 DEGREES LEFT	BREAKAWAY TRL	ID	C		MT591EM 04/23/2009
		INTERSECTION SURFACE TYPE2	A - ASPHALT	CD	C		RCICNVRT 10/08/1990
24.906		90 DEGREES LEFT	MONTE SAVINO BLVD	ID	C		MT591PD 01/10/2008
		INTERSECTION SURFACE TYPE2	A - ASPHALT	CD	C		MT591PD 01/10/2008
25.063		90 DEGREES LEFT	INDIAN SPRINGS DR	ID	C		RCICNVRT 05/14/2002
		INTERSECTION SURFACE TYPE2	B - BRICK/BLOCK	CD	C		RCICNVRT 05/14/2002
25.260		45 DEGREES RIGHT	W OLD TOMOKA RD	ID	C		MT591EM 04/23/2009
		INTERSECTION SURFACE TYPE4	A - ASPHALT	CD	C		MT591PD 01/10/2008
25.492		90 DEGREES LEFT	N TYMBER CREEK RD	ID	C		MT591PD 04/27/2009
		90 DEGREES RIGHT	S TYMBER CREEK RD	ID	C		MT591PD 04/27/2009
		INTERSECTION SURFACE TYPE8	A - ASPHALT	CD	C		MT591PD 04/27/2009
25.578		90 DEGREES LEFT	TWIN RIVERS DR	ID	C		MT591EM 04/23/2009
		INTERSECTION SURFACE TYPE2	A - ASPHALT	CD	C		MT591EM 04/23/2009
25.643		90 DEGREES LEFT	RIVERDALE AVE	ID	C		MT591EM 04/23/2009
		INTERSECTION SURFACE TYPE2	A - ASPHALT	CD	C		RCICNVRT 12/18/1985
25.709		90 DEGREES LEFT	BAYBERRY DR	ID	C		MT591EM 04/23/2009
		INTERSECTION SURFACE TYPE2	A - ASPHALT	CD	C		RCICNVRT 12/18/1985

26.022		90 DEGREES L. & 90 DEGREES R.	BOOTH RD	ID	C		RCICNVRT 06/12/1998
		INTERSECTION SURFACE TYPE8	A - ASPHALT	CD	C		RCICNVRT 06/12/1998
26.149		90 DEGREES RIGHT	INTERCHANGE BLVD	ID	C		RCICNVRT 02/20/1998
		INTERSECTION SURFACE TYPE5	A - ASPHALT	CD	C		RCICNVRT 02/20/1998
26.286		90 DEGREES LEFT	RAMP 79002068	ID	C		MT510RM 09/23/2008
		90 DEGREES RIGHT	RAMP 79002066	ID	C		MT510RM 09/23/2008
		INTERSECTION SURFACE TYPE2	A - ASPHALT	CD	C		MT591PD 01/10/2008
		INTERSECTION SURFACE TYPE5	A - ASPHALT	CD	C		MT591PD 01/10/2008
26.351		90 DEGREES LEFT	RAMP 79002069	ID	C		MT510RM 09/23/2008
		90 DEGREES RIGHT	RAMP 79002067	ID	C		MT510RM 09/23/2008
		INTERSECTION SURFACE TYPE2	A - ASPHALT	CD	C		MT510RM 02/04/2008
		INTERSECTION SURFACE TYPE5	A - ASPHALT	CD	C		MT591DD 01/10/2007
26.488		45 DEGREES RIGHT	LEG	ID	C		MT591EM 04/23/2009
		INTERSECTION SURFACE TYPE4	A - ASPHALT	CD	C		MT591EM 04/23/2009
26.504		90 DEGREES LEFT	WALMART SUPERSTORE	ID	C		MT510RM 09/23/2008
		90 DEGREES RIGHT	CR4009/WILLIAMSON BL	ID	C		MT591EM 04/23/2009
		INTERSECTION SURFACE TYPE8	A - ASPHALT	CD	C		RCICNVRT 03/20/1995

Feature 311 - SPEED ZONE							**LENGTH/INTERLOCKING**
Beg. MP	**End. MP**	**Characteristic**	**Value**	**Unit**	**Side**	**Offset**	**Char. Updated**
19.871	24.239	DATE SPEED ZONE APPROVED	07/09/2007	DA	C		TO562JG 10/09/2007
		MAXIMUM SPEED LIMIT	60	MH	C		TO562JG 10/09/2007
24.239	24.390	DATE SPEED ZONE APPROVED	06/17/2010	DA	C		TO562JG 06/23/2010
		MAXIMUM SPEED LIMIT	60	MH	C		TO562JG 10/09/2007
24.390	24.953	DATE SPEED ZONE APPROVED	06/17/2010	DA	C		TO562JG 06/23/2010
		MAXIMUM SPEED LIMIT	50	MH	C		TO562JG 06/23/2010
24.953	25.063	DATE SPEED ZONE APPROVED	05/14/2010	DA	C		TO562JG 05/19/2010
		MAXIMUM SPEED LIMIT	50	MH	C		TO562JG 05/19/2010
25.063	25.429	DATE SPEED ZONE APPROVED	07/09/2007	DA	C		TO562JG 10/09/2007
		MAXIMUM SPEED LIMIT	50	MH	C		TO562JG 10/09/2007
25.429	26.206	DATE SPEED ZONE APPROVED	05/29/1998	DA	C		TO562JG 10/09/2007
		MAXIMUM SPEED LIMIT	50	MH	C		TO562JG 10/09/2007
26.206	26.735	DATE SPEED ZONE	04/22/2005	DA	C		TO562JG 10/09/2007

		APPROVED					
		MAXIMUM SPEED LIMIT	50	MH	C		TO562JG 10/09/2007
26.735	28.470	DATE SPEED ZONE APPROVED	04/22/2005	DA	C		TO562JG 05/12/2005
		MAXIMUM SPEED LIMIT	45	MH	C		TO562JG 10/01/2008
28.470	29.143	DATE SPEED ZONE APPROVED	12/08/1995	DA	C		RCICNVRT 10/11/1982
		MAXIMUM SPEED LIMIT	45	MH	C		RCICNVRT 12/14/1995
29.143	29.719	DATE SPEED ZONE APPROVED	03/27/1975	DA	C		RCICNVRT 02/17/1980
		MAXIMUM SPEED LIMIT	45	MH	C		RCICNVRT 02/17/1980
29.719	30.240	DATE SPEED ZONE APPROVED	03/27/1975	DA	C		RCICNVRT 02/17/1980
		MAXIMUM SPEED LIMIT	35	MH	C		RCICNVRT 02/17/1980

Appendix C

Bus Schedules & Route Maps for Bus Route #'s 6, 18 & 19

East Volusia County Bus Service Map

Legend

1A	A1A North		Direction of route
3	North Ridgewood		Limited service – see schedule
4	South Ridgewood		Place of interest
5	Center Street		Public place
6	North Nova		Hospital
7	South Nova		Library
8	Halifax		City hall
10	Medical Center		Courthouse
11	Mason Ave		Museum
12	Clyde Morris		Ruins
15	Orange Avenue		Theatre/Arts center
17A	South Atlantic - Ponce Inlet		College/University
17B	South Atlantic - Dunlawton		School
18	International Speedway		Post office
19	Granada		Shopping center
40	Port Orange		Market
60	East - West connector		Marina
	Transit centers		Park/Golf course
			Airport

APPROXIMATE SCALE OF MAP
0 ½ 1 Mi
0 ½ 1 Km

Produced by CHK America www.mapsusa.com

Votran Volusia County's Public Transit System

Routes | Stops

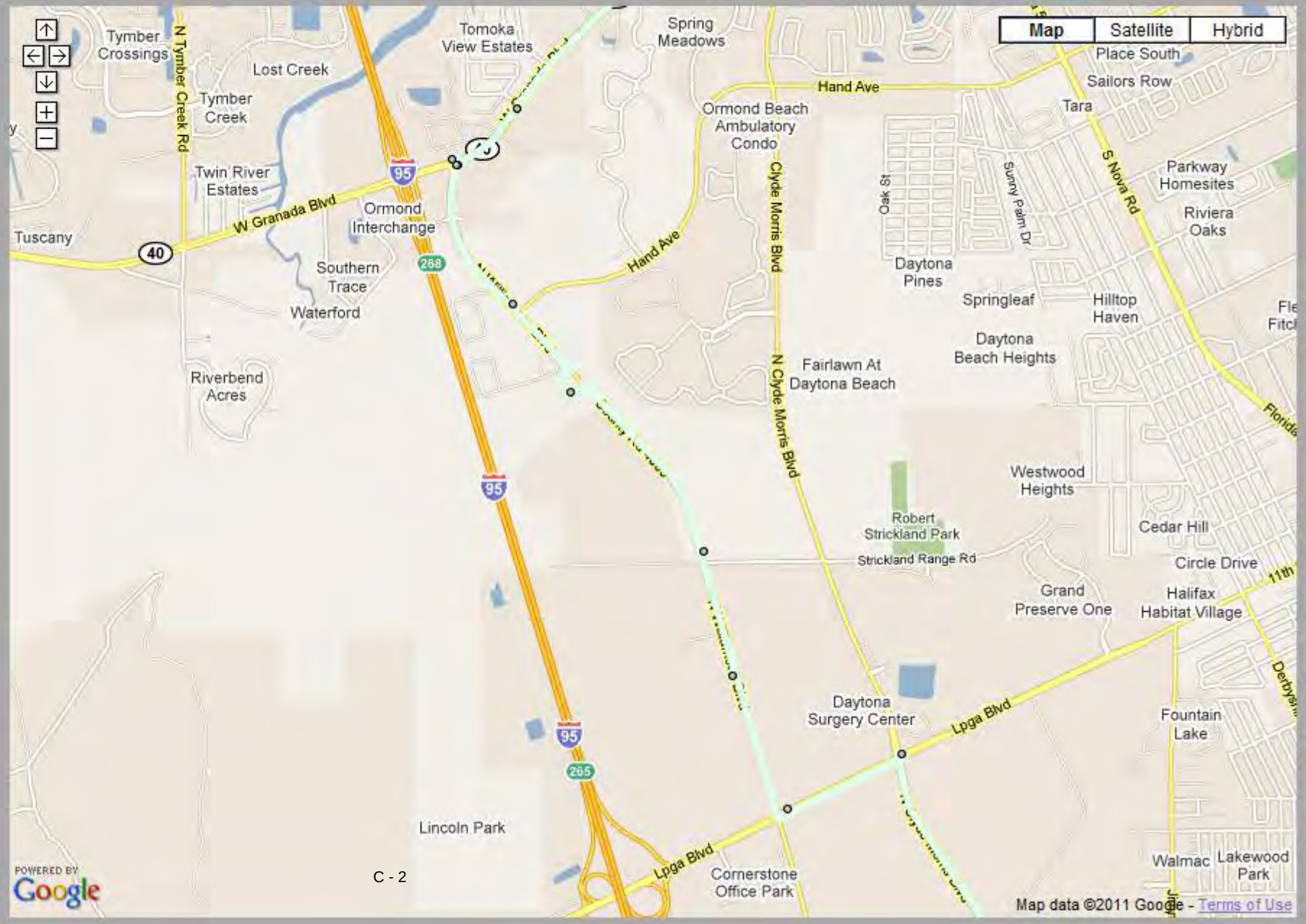
Click on a stop for more info:

18 INTL SPEEDWAY

1021 N. ATLANTIC IB
1055 N. ATLANTIC IB
1500 WOOD OB
165 N. BEACH ST. IB
2458 N. ATLANTIC IB
2862 N A1A IB
294 W. GRANADA IB
355 BILL FRANCE OB
362 W. GRANADA IB
456 BILL FRANCE OB
49 A1A
500 W. GRANADA IB
5TH AV. & A1A
686 S. ATLANTIC IB
735 NORTH ATLANTIC IB
759 BILL FRANCE OB
990 S A1A IB
ADVANCED TECHNOLOGY COLLEGE
ARLINGTON & N. ATLANTIC IB
BEACH/3RD ST. IB
BELLAIR PLAZA WS
BETHUNE & BEACH IB

Public Messages

There are currently no messages.



Votran Volusia County's Public Transit System

Routes | Stops

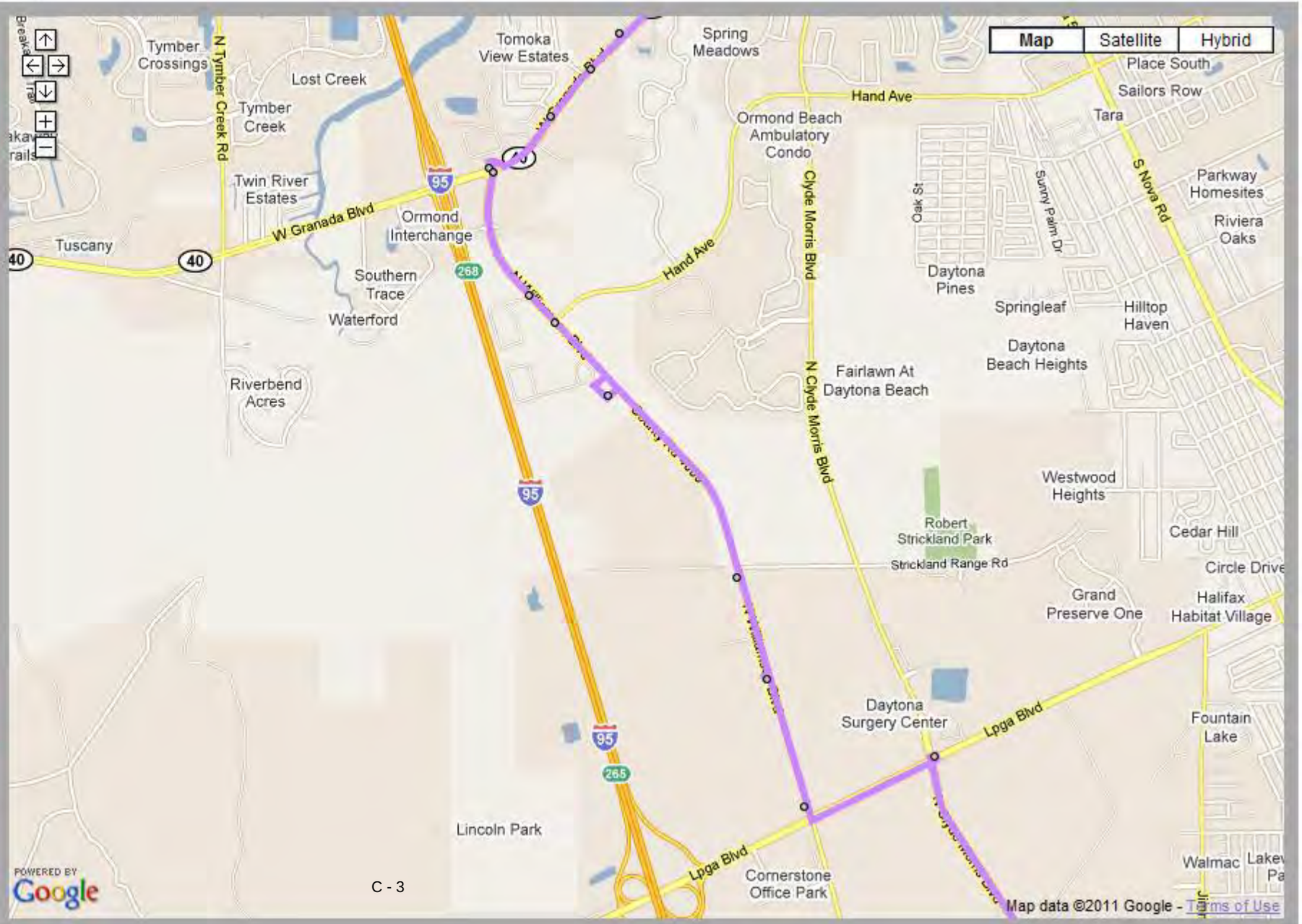
Click on a stop for more info:

19 GRANADA

1018 N. A1A OB
1078 N. ATLANTIC OB
1089 GRANADA AVE. OB
121 E. GRANADA OB
1454 N. ATLANTIC OB
174 S. BEACH OB
1812 N. ATLANTIC OB
220 BILL FRANCE IB
2599 N. ATLANTIC OB
2700 N. ATLANTIC OB
2873 N. ATLANTIC OB
3072 N. ATLANTIC OB
346 BILL FRANCE IB
361 W. GRANADA WB
371 NORTH ATLANTIC OB
3RD ST. & PALMETTO IB
434 BILL FRANCE IB
555 W. GRANADA WB
715 S. ATLANTIC OB
764 BILL FRANCE IB
A1A & BROOKLINE AVE OB
A1A & BYRON ELLINOR OB

Public Messages

There are currently no messages.



Votran Volusia County's Public Transit System

Routes | Stops

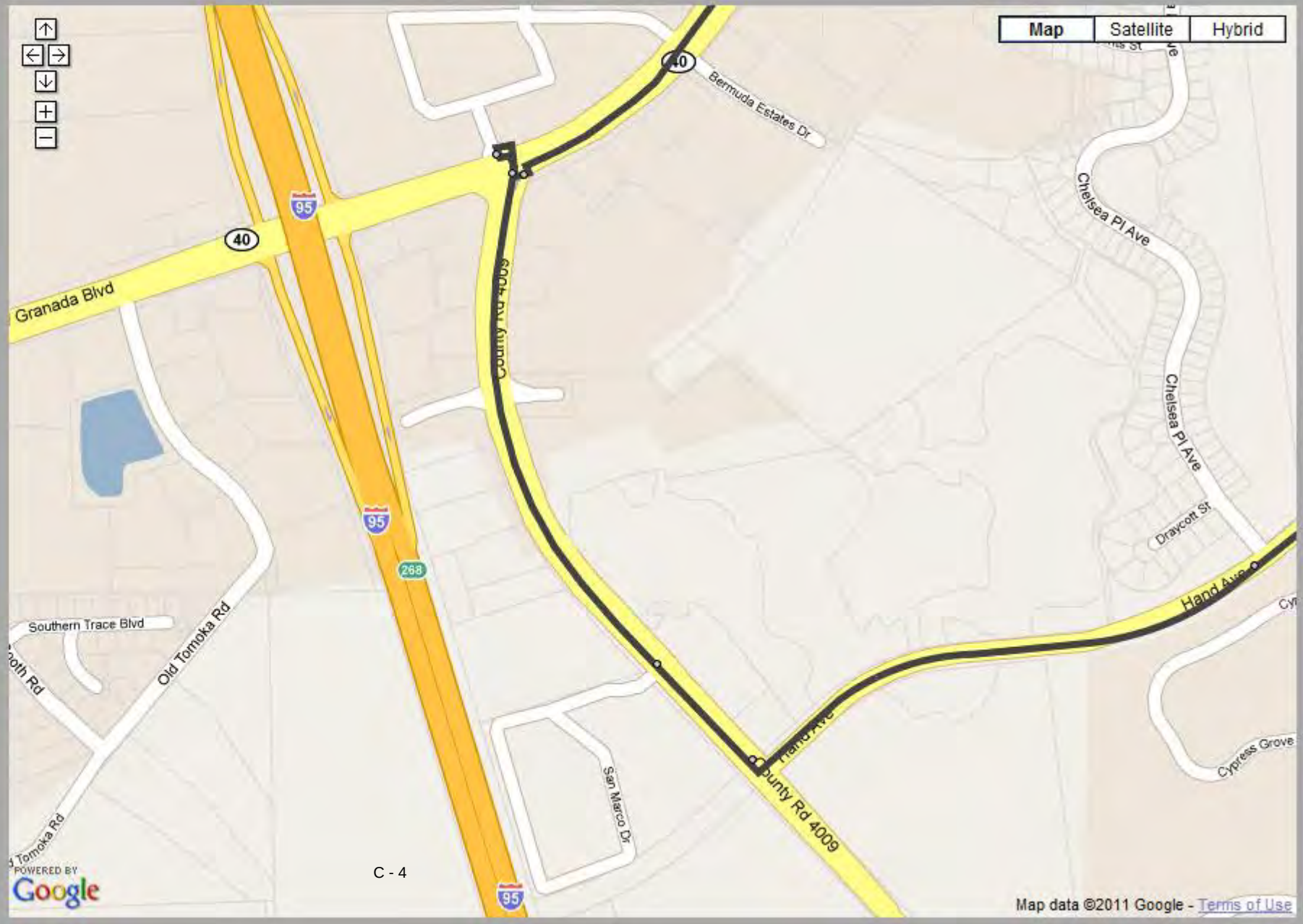
Click on a stop for more info:

6 NORTH NOVA

- 13TH ST. & DERBYSHIRE IB
- 361 W. GRANADA WB
- 3RD ST. & DERBYSHIRE IB
- 3RD ST. & HOLLY OB
- 555 W. GRANADA WB
- 6TH ST. & COQUINA OB
- 6TH ST. & HOLLY ST. OB
- 6TH ST. & NOVA IB
- 6TH ST. & WILLIAMSBURG OB
- 849 N. NOVA RD. OB
- 8TH AND NOVA 6 IB
- 8TH ST. & DERBYSHIRE OB
- 8TH ST. & VINE OB
- 8TH ST. & W. COLONIAL OB
- 9TH ST. & DERBYSHIRE IB
- ALABAMA & CAROLINE IB
- ARAGON & DERBYSHIRE IB
- ARROYO PKWY & CAROLINE IB
- BEACON & 8TH ST. IB
- BETHUNE VILLAGE & ENGRAM IB
- BRENTWOOD NOVA RD
- BRENTWOOD & DERBYSHIRE IB

Public Messages

There are currently no messages.



back to votran home page

Daytona Beach bus service schedule

Daytona area map
East Volusia Points of Interest
A1A beachside trolley

Night and Sunday bus schedules

Schedule is subject to change without notice

All times shown in **bold** are p.m. trips All trips shown in [ ] do not operate on Saturdays.
(E) Indicates end of schedule

Note: All buses equipped with wheelchair lifts and bike racks.

1A A1A North

Departs Gate S-7 Outbound to Ormond Mall

Transfer Plaza	A1A/ Silver Beach	Intermodal Transit Facility	Bellair Plaza	A1A/ Granada	Ormond Mall	A1A/Bass
5:40	5:49	5:56	6:06	6:15	6:19	-:-
6:35	6:44	6:51	7:01	7:10	7:16	7:27
7:35	7:44	7:51	8:01	8:10	8:16	8:27
8:35	8:44	8:51	9:01	9:10	9:16	9:27
9:35	9:44	9:51	10:01	10:10	10:16	10:27
10:35	10:44	10:51	11:01	11:10	11:16	11:27
11:35	11:44	11:51	**12:01**	**12:10**	**12:16**	**12:27**
12:35	**12:44**	**12:51**	**1:01**	**1:10**	**1:16**	**1:27**
1:35	**1:44**	**1:51**	**2:01**	**2:10**	**2:16**	**2:27**
2:35	**2:44**	**2:51**	**3:01**	**3:10**	**3:16**	**3:27**
3:35	**3:44**	**3:51**	**4:01**	**4:10**	**4:16**	**4:27**
4:35	**4:44**	**4:51**	**5:01**	**5:10**	**5:16**	**5:27**
5:35	**5:42**	**5:48**	**5:57**	**6:06**	**6:12**	**6:22**
6:35	**6:42**	**6:48**	**6:57**	**7:06**	(E)7:12**	-:-

Arrives Gate N-3 Inbound to Transfer Plaza

A1A/Bass	A1A/ Surfside	Ormond Mall	Granada/ Halifax	Bellair Plaza	Intermodal Transit Facility	A1A/ Silver Beach	Transfer Plaza
-:-	6:33	6:39	6:46	6:54	7:04	7:10	7:20
7:30	7:33	7:39	7:46	7:54	8:04	8:10	8:20
8:30	8:33	8:39	8:46	8:54	9:04	9:10	9:20
9:30	9:33	9:39	9:46	9:54	10:04	10:10	10:20
10:30	10:33	10:39	10:46	10:54	11:04	11:10	11:20
11:30	11:33	11:39	11:46	11:54	**12:04**	**12:10**	**12:20**
12:30	**12:33**	**12:39**	**12:46**	**12:54**	**1:04**	**1:10**	**1:20**
1:30	**1:33**	**1:39**	**1:46**	**1:54**	**2:04**	**2:10**	**2:20**
2:30	**2:33**	**2:39**	**2:46**	**2:54**	**3:04**	**3:10**	**3:20**
3:30	**3:33**	**3:39**	**3:46**	**3:54**	**4:04**	**4:10**	**4:20**
4:30	**4:33**	**4:39**	**4:46**	**4:54**	**5:04**	**5:10**	**5:20**
5:30	**5:33**	**5:39**	**5:46**	**5:54**	**6:04**	**6:10**	**6:20**
6:25	**6:28**	**6:34**	**6:41**	**6:49**	(E)7:00*	-:-	-:-

* *At 7:00 p.m. at the ITF, passengers may transfer to night service routes.*
** *At 7:20 p.m. this trip will serve Granada/U. S. 1 to Big Tree. Passengers may ride.*
* *Pasajeros en transito a servicios de ruta nocturna a las 7:00 p.m. en el ITF.*
** *A Las 7:20 p.m. este viaje va a Big Tree por Granada/U. S. 1. Los pasajeros pueden utilizar este viaje.*

3 North Ridgewood

Departs Gate S-3 Outbound to Ormond Beach

aza		ich

11 Mason Avenue

Departs Gate N-2 Outbound to Volusia Mall/I-95

Transfer Plaza	Nova/Mason	3rd St./ Jimmy Ann	V.A. Clinic	Volusia Mall/ Main Entrance	Volusia Square/ Thames Rd.	Daytona Flea Market
6:17	6:27	6:33	-:-	6:43	6:51	6:54
7:02	7:13	7:20	-:-	7:32	7:41	7:44
8:02	8:13	8:20	8:26	8:32	8:41	*8:44
9:02	9:13	9:20	9:26	9:32	9:41	*9:44
10:02	10:13	10:20	10:26	10:32	10:41	*10:44
11:02	11:13	11:20	11:26	11:32	11:41	*11:44
12:02	**12:13**	**12:20**	**12:26**	**12:32**	**12:41**	***12:44**
1:02	**1:13**	**1:20**	**1:26**	**1:32**	**1:41**	***1:44**
2:02	**2:13**	**2:20**	**2:26**	**2:32**	**2:41**	***2:44**
3:02	**3:13**	**3:20	**3:26**	**3:32**	**3:41**	***3:44**
4:02	**4:13**	**4:20**	**4:26**	**4:32**	**4:41**	***4:44**
5:02	**5:13**	**5:20**	-:-	**5:30**	**5:39**	**5:42**
6:02	**6:13**	**6:20**	-:-	**6:30**	**6:39**	(E)6:42

Arrives Gate N-6 Inbound to Transfer Plaza

Daytona Flea Market	Int'l Speedway Fentress	Daytona Beach Police Dept.	Veterans Nursing Home	Volusia County Health Dept.	Volusia Mall/ J.C. Penney	Volusia Mall/ J.C. Penney	V.A. Clinic	Jimmy Ann/ 3rd St.	Mason/Nova	Transfer Plaza
-:-	-:-	-:-	-:-	-:-	-:-	6:25	-:-	6:36	6:44	6:58
6:54	7:02	7:09	7:11	7:16	7:23	7:24	-:-	7:36	7:44	7:58
7:44	7:52	7:59	8:01	8:06	8:13	8:22	8:28	8:36	8:44	8:58
8:44	8:52	8:59	9:01	9:06	9:13	9:22	9:28	9:36	9:44	9:58
9:44	9:52	9:59	10:01	10:06	10:13	10:22	10:28	10:36	10:44	10:58
10:44	10:52	10:59	11:01	11:06	11:13	11:22	11:28	11:36	11:44	11:58
11:44	11:52	11:59	**12:01**	**12:06**	**12:13**	**12:22**	**12:28**	**12:36**	**12:44**	**12:58**
12:44	**12:52**	**12:59**	**1:01**	**1:06**	**1:13**	**1:22**	**1:28**	**1:36**	**1:44**	**1:58**
1:44	**1:52**	**1:59**	**2:01**	**2:06**	**2:13**	**2:22**	**2:28**	**2:36**	**2:44**	**2:58**
2:44	**2:52**	**2:59**	**3:01**	**3:06**	**3:13**	**3:22**	**3:28**	**3:36**	**3:44**	**3:58**
3:44	**3:52**	**3:59**	**4:01**	**4:06**	**4:13**	**4:22**	**4:28**	**4:36**	**4:44**	**4:58**
4:44	**4:52**	**4:59**	**5:01**	**5:06**	**5:13**	**5:22**	-:-	**5:36**	**5:44**	**5:58**
5:42	**5:50**	**5:57**	**5:59**	**6:04**	**6:11**	**6:15**	-:-	**6:28**	**6:36**	(E)6:50

* *Bus goes inside Flea Market on Friday and Saturday.*
* *Nuestro servicio de autobús transporta pasajeros hacia el Flea Market los Viernes y Sábado.*
** *Picks up U.C.P. passengers at 3:20 p.m. & drops them off at Volusia Mall for Route 60.*
** *Recoge los pasajeros de U.C.P. a las 3:20 p.m. y los transporta hacia el Volusia Mall hacia la ruta 60.*

2:20	2:23	2:26	2:32	2:38	2:44	2:51	2:58
3:20	3:23	3:26	3:32	3:38	3:44	3:51	3:58
4:20	4:23	4:26	4:32	4:38	4:44	4:51	4:58
5:20	5:23	5:26	5:32	5:38	5:44	5:51	5:58
6:15	6:19	6:22	6:27	6:33	6:38	6:44	(E)6:50

* *First southbound trip serves Spruce Creek High School at 7:08 a.m. via Spruce Creek to Taylor Road.*

* *El primer viaje de ruta Sur sirve Spruce Creek High School a las 7:08 a.m. vía Spruce Creek a Taylor Road.*

FOR NIGHT AND SUNDAY SERVICE OF THIS ROUTE SEE SCHEDULES ON THE REVERSE SIDE

5 Center Street

Departs Gate N-2 Outbound to Nova/Flomich

Transfer Plaza	3rd St./ Riverside Dr.	3rd St. Center	L.P.G.A. /Nova	Center/ Flomich	Nova /Flomich
6:37	6:43	6:46	6:52	6:58	7:02
7:32	7:38	7:41	7:47	7:53	7:56
8:32	8:38	8:41	8:47	8:53	8:56
9:32	9:38	9:41	9:47	9:53	9:56
10:32	10:38	10:41	10:47	10:53	10:56
11:32	11:38	11:41	11:47	11:53	11:56
12:32	**12:38**	**12:41**	**12:47**	**12:53**	**12:56**
1:32	**1:38**	**1:41**	**1:47**	**1:53**	**1:56**
2:32	**2:38**	**2:41**	**2:47**	**2:53**	**2:56**
3:32	**3:38**	**3:41**	**3:47**	**3:53**	**3:56**
4:32	**4:38**	**4:41**	**4:47**	**4:53**	**4:56**
5:32	**5:38**	**5:41**	**5:47**	**5:53**	**5:56**

Arrives Gate S-6 Inbound to Transfer Plaza

Nova /Flomich	Nova /L.P.G.A.	3rd St. Center	3rd St./ Riverside Dr.	Transfer Plaza
7:02	7:08	7:14	7:17	7:25
7:56	8:03	8:09	8:12	8:20
8:56	9:03	9:09	9:12	9:20
9:56	10:03	10:09	10:12	10:20
10:56	11:03	11:09	11:12	11:20
11:56	**12:03**	**12:09**	**12:12**	**12:20**
12:56	**1:03**	**1:09**	**1:12**	**1:20**
1:56	**2:03**	**2:09**	**2:12**	**2:20**
2:56	**3:03**	**3:09**	**3:12**	**3:20**
3:56	**4:03**	**4:09**	**4:12**	**4:20**
4:56	**5:03**	**5:09**	**5:12**	**5:20**
5:56	**6:03**	**6:09**	**6:12**	**6:20**

ROUTE 5 DOES NOT OPERATE ON SATURDAYS
LA RUTA 5, NO TRABAJA EN LOS DIAS LOS SABADOS

6 North Nova

Departs Gate S-6 Outbound to Walmart/Ormond Beach

Transfer Plaza	Dunn/White	Mason/Nova	Brentwood/ Derbyshire	Nova/8th St.	Derbyshire/ L.P.G.A. Blvd.	Hand/ Clyde Morris	Walmart/ Ormond Beach	Ormond Towne Square	Granda/Nova	Thompson Creek/ Granada
-:-	-:-	-:-	-:-	-:-	-:-	-:-	-:-	-:-	6:05	6:10
-:-	-:-	-:-	-:-	6:23	6:26	-:-	-:-	-:-	6:35	6:40
6:35	6:43	6:47	6:53	6:59	7:03	7:13	7:22	7:28	7:35	7:40
7:32	7:40	7:44	7:50	7:56	8:00	8:10	8:19	8:25	8:32	8:37
8:32	8:40	8:44	8:50	8:56	9:00	9:10	9:19	9:25	9:32	9:37
9:32	9:40	9:44	9:50	9:56	10:00	10:10	10:19	10:25	10:32	10:37
10:32	10:40	10:44	10:50	10:56	11:00	11:10	11:19	11:25	11:32	11:37
11:32	11:40	11:44	11:50	11:56	12:00	**12:10**	**12:19**	**12:25**	**12:32**	**12:37**
12:32	**12:40**	**12:44**	**12:50**	**12:56**	**1:00**	**1:10**	**1:19**	**1:25**	**1:32**	**1:37**
1:32	**1:40**	**1:44**	**1:50**	**1:56**	**2:00**	**2:10**	**2:19**	**2:25**	**2:32**	**2:37**
2:32	**2:40**	**2:44**	**2:50**	**2:56**	**3:00**	**3:10**	**3:19**	**3:25**	**3:32**	**3:37**
3:32	**3:40**	**3:44**	**3:50**	**3:56**	**4:00**	**4:10**	**4:19**	**4:25**	**4:32**	**4:37**
4:32	**4:40**	**4:44**	**4:50**	**4:56**	**5:00**	**5:10**	**5:19**	**5:25**	**5:32**	**5:37**
5:32	**5:39**	**5:43**	**5:49**	**5:55**	**5:59**	**6:09**	**6:18**	**6:24**	**6:30**	**6:35**
6:32	**6:39**	**6:43**	**6:48**	**6:54**	**6:58**	**7:08**	**7:16**	**7:22**	**7:28**	(E)7:33•

Arrives Gate N-2 Inbound to Transfer Plaza

Thompson Creek/ Granada	Granda/ Nova	Derbyshire/ L.P.G.A. Blvd.	8th St. /Nova	Derbyshire/ Brentwood	Nova/Mason	White/Dunn	Transfer Plaza
6:16	6:19	6:31	6:34	6:39	6:44	6:48	6:58
6:45	6:49	7:01	7:05	7:10	7:15	7:19	7:28
7:32	7:36	7:48	7:52	7:57	8:02	8:06	8:14
8:32	8:36	8:48	8:52	8:57	9:02	9:06	9:14
9:32	9:36	9:48	9:52	9:57	10:02	10:06	10:14
10:32	10:36	10:48	10:52	10:57	11:02	11:06	11:14
11:32	11:36	11:48	11:52	11:57	12:02	12:06	12:14
12:32	**12:36**	**12:48**	**12:52**	**12:57**	**1:02**	**1:06**	**1:14**
1:32	**1:36**	**1:48**	**1:52**	**1:57**	**2:02**	**2:06**	**2:14**
2:32	**2:36**	**2:48**	**2:52**	**2:57**	**3:02**	**3:06**	**3:14**
3:32	**3:36**	**3:48**	**3:52**	**3:57**	**4:02**	**4:06**	**4:14**
4:32	**4:36**	**4:48**	**4:52**	**4:57**	**5:02**	**5:06**	**5:14**
5:32	**5:36**	**5:48**	**5:52**	**5:57**	**6:02**	**6:06**	**6:14**
6:32	**6:36**	**6:48**	**6:52**	**6:57**	**6:58**	**7:02**	**7:10**
7:32	**7:36**	**7:48**	**7:52**	**7:57**	**8:02**	**8:06**	**8:14**
8:32	**8:36**	**8:48**	**8:52**	**8:57**	**9:02**	**9:06**	**9:14**
9:32	**9:36**	**9:48**	**9:52**	**9:57**	**10:02**	**10:06**	**10:14**
10:32	**10:36**	**10:48**	**10:52**	**10:57**	**11:02**	**11:06**	**11:14**
11:32	**11:36**	**11:48**	**11:52**	**11:57**	**12:02**	**12:06**	**12:14**

3:02	3:06	3:14	
3:32	3:36	3:44	
4:02	4:06	4:14	
4:32	4:36	4:44	
5:02	5:06	5:14	
5:32	5:36	5:44	
6:02	6:06	6:14	
6:32	6:36	6:44	

3:17	3:22	3:28	N-6
3:47	3:52	3:58	N-4
4:17	4:22	4:28	N-6
4:47	4:52	4:58	N-4
5:17	5:22	5:28	N-6
5:47	5:52	5:58	N-4
6:17	6:22	6:28	N-6
(E)6:47	-:-	-:-	

FOR NIGHT AND SUNDAY SERVICE OF THIS ROUTE SEE SCHEDULES ON THE REVERSE SIDE

17A South Atlantic

Departs Gate N-5 to Ponce Inlet

Transfer Plaza	Frank Rendon Beach Park	A1A/ Dunlawton	Marine Science Center
6:07	6:23	6:29	6:42
7:02	7:19	7:24	7:37
8:02	8:19	8:24	8:37
9:02	9:19	9:24	9:37
10:02	10:19	10:24	10:37
11:02	11:19	11:24	11:37
12:02	**12:19**	**12:24**	**12:37**
1:02	**1:19**	**1:24**	**1:37**
2:02	**2:19**	**2:24**	**2:37**
3:02	**3:19**	**3:24**	**3:37**
4:02	**4:19**	**4:24**	**4:37**
5:02	**5:19**	**5:24**	**5:37**
6:02	**6:15**	**6:20**	**6:33**

Arrives Gate S-4 Inbound to Transfer Plaza

Marine Science Center/Ponce Inlet Lighthouse	Inlet Harbor Plaza	A1A/ Dunlawton	Frank Rendon Beach Park	Frank Rendon Beach Park
6:45	6:50	7:02	7:10	7:28
7:45	7:50	8:02	8:10	8:28
8:45	8:50	9:02	9:10	9:28
9:45	9:50	10:02	10:10	10:28
10:45	10:50	11:02	11:10	11:28
11:45	11:50	**12:02**	**12:10**	**12:28**
12:45	**12:50**	**1:02**	**1:10**	**1:28**
1:45	**1:50**	**2:02**	**2:10**	**2:28**
2:45	**2:50**	**3:02**	**3:10**	**3:28**
3:45	**3:50**	**4:02**	**4:10**	**4:28**
4:45	**4:50**	**5:02**	**5:10**	**5:28**
5:41	**5:46**	**5:58**	**6:05**	(E)6:24
6:34	**6:39**	**6:50**	**6:57**	(E)7:16

FOR NIGHT AND SUNDAY SERVICE OF THIS ROUTE SEE SCHEDULES ON THE REVERSE SIDE

17B Dunlawton

Departs Gate N-5 Outbound to Nova/Dunlawton

Transfer Plaza	Frank Rendon Beach Park	A1A/ Dunlawton	Nova/Dunlawton (Swallowtail)
-:-	-:-	-:-	-:-
6:32	6:49	6:54	7:09
7:32	7:49	7:54	8:09
8:32	8:49	8:54	9:09
9:32	9:49	9:54	10:09
10:32	10:49	10:54	11:09
11:32	11:49	11:54	**12:09**
12:32	**12:49**	**12:54**	**1:09**
1:32	**1:49**	**1:54**	**2:09**
2:32	**2:49**	**2:54**	**3:09**
3:32	**3:49**	**3:54**	**4:09**
4:32	**4:49**	**4:54**	**5:09**
5:32	**5:49**	**5:54**	**6:09**
6:32	**6:49**	(E)6:54	-:-

Arrives Gate S-4 Inbound to Transfer Plaza

Nova/Dunlawton (Swallowtail)	U.S. 1/ Dunlawton	A1A/ Dunlawton	Frank Rendon Beach Park	Transfer Plaza
-:-	6:30	6:33	6:40	6:58
7:18	7:28	7:32	7:40	7:58
8:18	8:28	8:32	8:40	8:58
9:18	9:28	9:32	9:40	9:58
10:18	10:28	10:32	10:40	10:58
11:18	11:28	11:32	11:40	11:58
12:18	**12:28**	**12:32**	**12:40**	**12:58**
1:18	**1:28**	**1:32**	**1:40**	**1:58**
2:18	**2:28**	**2:32**	**2:40**	**2:58**
3:18	**3:28**	**3:32**	**3:40**	**3:58**
4:18	**4:28**	**4:32**	**4:40**	**4:58**
5:18	**5:28**	**5:32**	**5:40**	**5:58**
6:15	**6:25**	**6:29**	**6:37**	(E)6:55

18 International Speedway

Departs Gate N-3 Outbound to Florida Hospital/Ormond Memorial via Int'l Speedway/Williamson

Transfer Plaza	International Speedway/ Nova	Richard Petty/ Clyde Morris	Daytona Beach Int'l Airport	Volusia Mall Main Entrance	Twin Lakes Medical Center	Advanced Technology Ctr.	Florida Hospital/ Ormond Memorial	Walmart/ Ormond Beach
7:02	7:10	7:16	7:21	7:26	7:37	7:42	7:45	7:50
8:02	8:10	8:16	8:21	8:26	8:37	8:42	8:45	8:50
9:02	9:10	9:16	9:21	9:26	9:37	9:42	9:45	9:50
10:02	10:10	10:16	10:21	10:26	10:37	10:42	10:45	10:50
11:02	11:10	11:16	11:21	11:26	11:37	11:42	11:45	11:50
12:02	**12:10**	**12:16**	**12:21**	**12:26**	**12:37**	**12:42**	**12:45**	**12:50**
1:02	**1:10**	**1:16**	**1:21**	**1:26**	**1:37**	**1:42**	**1:45**	**1:50**
2:02	**2:10**	**2:16**	**2:21**	**2:26**	**2:37**	**2:42**	**2:45**	**2:50**
3:02	**3:10**	**3:16**	**3:21**	**3:26**	**3:37**	**3:42**	**3:45**	**3:50**
4:02	**4:10**	**4:16**	**4:21**	**4:26**	**4:37**	**4:42**	**4:45**	**4:50**

7:45	7:49	8:01	8:05	8:10	8:15	8:19	8:28
8:45	8:49	9:01	9:05	9:10	9:15	9:19	9:28
9:45	9:49	10:01	10:05	10:10	10:15	10:19	10:28
10:45	10:49	11:01	11:05	11:10	11:15	11:19	11:28
11:45	11:49	**12:01**	**12:05**	**12:10**	**12:15**	**12:19**	**12:28**
12:45	**12:49**	**1:01**	**1:05**	**1:10**	**1:15**	**1:19**	**1:28**
1:45	**1:49**	**2:01**	**2:05**	**2:10**	**2:15**	**2:19**	**2:28**
2:45	**2:49**	**3:01**	**3:05**	**3:10**	**3:15**	**3:19**	**3:28**
3:45	**3:49**	**4:01**	**4:05**	**4:10**	**4:15**	**4:19**	**4:28**
4:45	**4:49**	**5:01**	**5:05**	**5:10**	**5:15**	**5:19**	**5:28**
5:45	**5:49**	**6:01**	**6:05**	**6:10**	**6:15**	**6:19**	**(E)6:28**
6:35	**6:37**	**6:47**	**6:51**	**6:56**	**7:01**	**7:05**	**(E)7:15**

* *First trip departing Nova/8th at 5:42 a.m. goes north on Nova to Granada/Nova.*

* *El primer viaje sale de Nova/8th a las 5:52 a.m. va al Norte de Nova hacia el Granada/Nova.*

** *Second trip departs garage at 6:07 a.m. and runs directly north, beginning the outbound routing at Nova/8th St.*

** *El segundo viaje sale de garaje a las 6:07 a.m. y corre directamente Norte, comenzando la ruta de salida hacia Nova/8th. St.*

- *The 7:33 p.m. trip at Thompson Creek will use Nova Rd to the Votran Office.*
- *En la viaje de las 7:33 p.m. en la Thompson Creek va a usar Nova Rd para las oficina de Votran.*

7 South Nova

Departs Gate N-6 Outbound to Nova/Dunlawton

Transfer Plaza	Nova/ Beville	Walmart/ Beville Rd.	Nova/ Beville	Votran Office	Nova/ Dunlawton	Nova/ Spruce Creek	Dunlawton/ Clyde Morris
6:05	6:20	6:23	6:26	6:31	6:41	6:45	6:55
7:02	7:20	7:23	7:26	7:31	7:41	7:45	7:55
8:02	8:20	8:23	8:26	8:31	8:41	8:45	8:55
9:02	9:20	9:23	9:26	9:31	9:41	9:45	9:55
10:02	10:20	10:23	10:26	10:31	10:41	10:45	10:55
11:02	11:20	11:23	11:26	11:31	11:41	11:45	11:55
12:02	**12:20**	**12:23**	**12:26**	**12:31**	**12:41**	**12:45**	**12:55**
1:02	**1:20**	**1:23**	**1:26**	**1:31**	**1:41**	**1:45**	**1:55**
2:02	**2:20**	**2:23**	**2:26**	**2:31**	**2:41**	**2:45**	**2:55**
3:02	**3:20**	**3:23**	**3:26**	**3:31**	**3:41**	**3:45**	**3:55**
4:02	**4:20**	**4:23**	**4:26**	**4:31**	**4:41**	**4:45**	**4:55**
5:02	**5:20**	**5:23**	**5:26**	**5:31**	**5:41**	**5:45**	**5:55**
6:02	**6:20**	**6:23**	**6:26**	**6:31**	**6:41**	**6:45**	**6:55**
7:02	**7:15**	**-:-**	**7:15**	**(E)7:19**	**-:-**	**-:-**	**-:-**

Arrives Gate N-2 Inbound to Transfer Plaza

Dunlawton/ Clyde Morris	Spruce Creek/ Nova	Swallowtail Dr/ Village Trail	Nova/ Dunlawton	Votran Office	Nova/Beville	Walmart/ Beville Rd.	Nova/Beville	Beach/Cedar	Transfer Plaza
-:-	-:-	-:-	-:-	6:10	6:13	-:-	6:13	6:21	6:28
-:-	-:-	-:-	-:-	6:35	6:38	-:-	6:38	6:48	6:58
6:55	7:03	7:07	7:15	7:29	7:32	7:35	7:38	7:50	7:58
7:55	8:03	8:07	8:15	8:29	8:32	8:35	8:38	8:50	8:58
8:55	9:03	9:07	9:15	9:29	9:32	9:35	9:38	9:50	9:58
9:55	10:03	10:07	10:15	10:29	10:32	10:35	10:38	10:50	10:58
10:55	11:03	11:07	11:15	11:29	11:32	11:35	11:38	11:50	11:58
11:55	**12:03**	**12:07**	**12:15**	**12:29**	**12:32**	**12:35**	**12:38**	**12:50**	**12:58**
12:55	**1:03**	**1:07**	**1:15**	**1:29**	**1:32**	**1:35**	**1:38**	**1:50**	**1:58**
1:55	**2:03**	**2:07**	**2:15**	**2:29**	**2:32**	**2:35**	**2:38**	**2:50**	**2:58**
2:55	**3:03**	**3:07**	**3:15**	**3:29**	**3:32**	**3:35**	**3:38**	**3:50**	**3:58**
3:55	**4:03**	**4:07**	**4:15**	**4:29**	**4:32**	**4:35**	**4:38**	**4:50**	**4:58**
4:55	**5:03**	**5:07**	**5:15**	**5:29**	**5:32**	**5:35**	**5:38**	**5:50**	**5:58**
5:55	**6:03**	**6:07**	**6:15**	**6:29**	**6:32**	**6:35**	**6:38**	**6:50**	**6:58**
6:55	**7:03**	**7:07**	**7:07**	**(E)7:18**	**-:-**	**-:-**	**-:-**	**-:-**	**-:-**

* *At 6:54 p.m. Bus Uses Dunlawton to Nova Rd to Big Tree. Passengers may ride.*

* *A las 6:54 p.m. El autobús viaja por Dunlawton a Nova Rd a Big Tree. Los pasajeros pueden utilizar este viaje.*

8 Halifax

Departs Gate N-6 Outbound to Bellair Plaza

Transfer Plaza	Intermodal Transit Facility	Halifax/ University	Halifax/ Plaza	Cardinal/ A1A	Bellair Plaza
6:32	6:39	6:43	6:47	6:50	6:53
7:32	7:39	7:43	7:47	7:50	7:53
8:32	8:39	8:43	8:47	8:50	8:53
9:32	9:39	9:43	9:47	9:50	9:53
10:32	10:39	10:43	10:47	10:50	10:53

5:02	**5:10**	**5:16**	**5:21**	**5:26**	**5:37**	**5:42**	**5:45**	**5:50**
6:02	**6:09**	**6:14**	**6:19**	**(E)6:25**	**-:-**	**-:-**	**-:-**	**-:-**

Arrives Gate N-3 Inbound to Transfer Plaza via A1A

Walmart/ Ormond Beach	Ormond Towne Square	Granada/ Nova	Granada/ U.S. 1	Granada/ A1A	Bellair Plaza	International Transit Facility	Transfer Plaza
-:-	-:-	-:-	6:20	6:26	6:34	6:47	6:58
6:58	7:01	7:09	7:15	7:21	7:29	7:42	7:58
7:58	8:01	8:09	8:15	8:21	8:29	8:42	8:58
8:58	9:01	9:09	9:15	9:21	9:29	9:42	9:58
9:58	10:01	10:09	10:15	10:21	10:29	10:42	10:58
10:58	11:01	11:09	11:15	11:21	11:29	11:42	11:58
11:58	**12:01**	**12:09**	**12:15**	**12:21**	**12:29**	**12:42**	**12:58**
12:58	**1:01**	**1:09**	**1:15**	**1:21**	**1:29**	**1:42**	**1:58**
1:58	**2:01**	**2:09**	**2:15**	**2:21**	**2:29**	**2:42**	**2:58**
2:58	**3:01**	**3:09**	**3:15**	**3:21**	**3:29**	**3:42**	**3:58**
3:58	**4:01**	**4:09**	**4:15**	**4:21**	**4:29**	**4:42**	**4:58**
4:58	**5:01**	**5:09**	**5:15**	**5:21**	**5:29**	**5:42**	**5:58**
5:55	**5:58**	**6:06**	**6:12**	**6:18**	**6:26**	**6:36**	**(E)6:50**

19 Granada

Departs Gate S-7 Outbound to Florida Hospital/Ormond Memorial via A1A/Granada

Transfer Plaza	Intermodal Transit Facility	Bellair Plaza	Granada/ Halifax	Granada/ U.S. 1	Granada/ Nova	Walmart/ Shop Center
6:07	6:17	6:26	6:35	6:39	6:44	6:51
7:02	7:14	7:25	7:35	7:39	7:44	7:51
8:02	8:14	8:25	8:35	8:39	8:44	8:51
9:02	9:14	9:25	9:35	9:39	9:44	9:51
10:02	10:14	10:25	10:35	10:39	10:44	10:51
11:02	11:14	11:25	11:35	11:39	11:44	11:51
12:02	**12:14**	**12:25**	**12:35**	**12:39**	**12:44**	**12:51**
1:02	**1:14**	**1:25**	**1:35**	**1:39**	**1:44**	**1:51**
2:02	**2:14**	**2:25**	**2:35**	**2:39**	**2:44**	**2:51**
3:02	**3:14**	**3:25**	**3:35**	**3:39**	**3:44**	**3:51**
4:02	**4:14**	**4:25**	**4:35**	**4:39**	**4:44**	**4:51**
5:02	**5:13**	**5:24**	**5:34**	**5:38**	**5:43**	**5:50**
6:02	**6:11**	**6:20**	**6:29**	**(E)6:34**	**-:-**	**-:-**

Arrives Gate S-7 Inbound to Transfer Plaza via Int'l Speedway

Walmart/ Shop Center	Florida Hospital/ Ormond Memorial	Advanced Technology Ctr.	Twin Lakes Medical Center	Volusia Mall/ J.C. Penney-Rear	Daytona Int'l Airport	Richard Petty/ Clyde Morris	Int'l Speedway/ Nova	Transfer Plaza
7:03	7:09	7:14	7:19	7:30	7:38	7:44	7:48	7:58
8:03	8:09	8:14	8:19	8:30	8:38	8:44	8:48	8:58
9:03	9:09	9:14	9:19	9:30	9:38	9:44	9:48	9:58
10:03	10:09	10:14	10:19	10:30	10:38	10:44	10:48	10:58
11:03	11:09	11:14	11:19	11:30	11:38	11:44	11:48	11:58
12:03	**12:09**	**12:14**	**12:19**	**12:30**	**12:38**	**12:44**	**12:48**	**12:58**
1:03	**1:09**	**1:14**	**1:19**	**1:30**	**1:38**	**1:44**	**1:48**	**1:58**
2:03	**2:09**	**2:14**	**2:19**	**2:30**	**2:38**	**2:44**	**2:48**	**2:58**
3:03	**3:09**	**3:14**	**3:19**	**3:30**	**3:38**	**3:44**	**3:48**	**3:58**
4:03	**4:09**	**4:14**	**4:19**	**4:30**	**4:38**	**4:44**	**4:48**	**4:58**
5:03	**5:09**	**5:14**	**5:19**	**5:30**	**5:38**	**5:44**	**5:48**	**5:58**
5:57	**6:03**	**6:08**	**6:13**	**6:23**	**6:31**	**6:37**	**6:41**	**(E)6:50**

* *At 6:50 p.m. this trip will go to the Intermodal Transit Facility and begin night service.*

* *El viaje de las 6:50 p.m.*

FOR NIGHT AND SUNDAY SERVICE OF THIS ROUTE SEE SCHEDULES ON THE REVERSE SIDE

60 East/West Connector

Departs Gate N-3 Outbound to Northgate Plaza, DeLand

Transfer Plaza	Int'l Speedway /Nova	Volusia Mall/ Main Entrance	Branch Jail	Northgate Plaza
6:32	6:39	6:45	7:03	7:20
7:32	7:39	7:45	8:03	8:20

Appendix D

Raw Traffic Counts

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	28
COUNT LOCATION	SR 40 W. of Cone Rd
GMB PROJECT NO.	11-016.06

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	11-Oct-11	**Start Time**	12:00 AM
End Date	12-Oct-11	**End Time**	12:00 AM

VOLUMES:

ADT	7,701	**PEAK HOUR**	659
		PEAK END TIME	6:15 PM
		PEAK NB/EB MOVEMENT	397
		PEAK SB/WB MOVEMENT	262

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	8.55%	**D=**	60.3%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 28
COUNT LOCATION SR 40 W. of Cone Rd
GMB PROJECT NO. 11-016.06

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	20	26	45	0.52%	0.65%	0.58%
02:00 AM	17	15	32	0.44%	0.38%	0.41%
03:00 AM	21	23	43	0.54%	0.57%	0.56%
04:00 AM	21	16	37	0.54%	0.41%	0.47%
05:00 AM	26	47	73	0.69%	1.18%	0.94%
06:00 AM	51	76	126	1.34%	1.92%	1.64%
07:00 AM	86	277	363	2.28%	7.04%	4.71%
08:00 AM	173	420	593	4.58%	10.68%	7.69%
09:00 AM	157	322	479	4.16%	8.19%	6.21%
10:00 AM	151	237	388	4.00%	6.03%	5.04%
11:00 AM	169	215	384	4.48%	5.47%	4.99%
12:00 PM	195	230	425	5.17%	5.86%	5.52%
01:00 PM	204	248	452	5.41%	6.30%	5.86%
02:00 PM	203	206	408	5.37%	5.23%	5.30%
03:00 PM	222	241	463	5.88%	6.12%	6.01%
04:00 PM	283	218	501	7.49%	5.55%	6.50%
05:00 PM	361	228	589	9.57%	5.81%	7.65%
06:00 PM	378	265	643	10.02%	6.73%	8.34%
07:00 PM	344	216	560	9.12%	5.50%	7.27%
08:00 PM	204	134	337	5.39%	3.40%	4.38%
09:00 PM	201	99	300	5.31%	2.52%	3.89%
10:00 PM	143	84	226	3.78%	2.13%	2.93%
11:00 PM	88	55	143	2.33%	1.39%	1.85%
12:00 AM	61	37	97	1.60%	0.93%	1.26%
TOTALS	**3,774**	**3,928**	**7,701**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	29
COUNT LOCATION	SR 40 btw Rima Ridge Rd & Shadow Crossings Blvd
GMB PROJECT NO.	11-016.06

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	11-Oct-11	**Start Time**	12:00 AM
End Date	12-Oct-11	**End Time**	12:00 AM

VOLUMES:

ADT	8,524	**PEAK HOUR**	738
		PEAK END TIME	6:15 PM
		PEAK NB/EB MOVEMENT	290
		PEAK SB/WB MOVEMENT	448

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	8.66%	**D=**	60.7%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 29
COUNT LOCATION SR 40 btw Rima Ridge Rd & Shadow Crossings Blvd
GMB PROJECT NO. 11-016.06

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	22	32	53	0.49%	0.77%	0.62%
02:00 AM	17	21	37	0.37%	0.50%	0.43%
03:00 AM	20	23	43	0.45%	0.55%	0.50%
04:00 AM	22	24	45	0.49%	0.57%	0.53%
05:00 AM	33	25	57	0.74%	0.60%	0.67%
06:00 AM	83	53	136	1.88%	1.29%	1.60%
07:00 AM	237	91	328	5.37%	2.21%	3.85%
08:00 AM	476	175	651	10.79%	4.25%	7.63%
09:00 AM	402	168	569	9.10%	4.07%	6.68%
10:00 AM	301	169	470	6.82%	4.11%	5.51%
11:00 AM	252	176	428	5.70%	4.28%	5.02%
12:00 PM	260	197	456	5.88%	4.78%	5.35%
01:00 PM	270	215	485	6.12%	5.22%	5.68%
02:00 PM	228	212	440	5.15%	5.16%	5.16%
03:00 PM	270	244	514	6.12%	5.94%	6.03%
04:00 PM	244	300	544	5.53%	7.29%	6.38%
05:00 PM	245	403	647	5.54%	9.79%	7.59%
06:00 PM	266	436	702	6.02%	10.61%	8.23%
07:00 PM	270	370	640	6.12%	9.00%	7.51%
08:00 PM	173	238	411	3.91%	5.79%	4.82%
09:00 PM	112	219	330	2.53%	5.32%	3.87%
10:00 PM	102	163	265	2.30%	3.97%	3.10%
11:00 PM	67	97	164	1.52%	2.36%	1.92%
12:00 AM	48	66	114	1.09%	1.59%	1.33%
TOTALS	**4,414**	**4,111**	**8,524**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	30
COUNT LOCATION	SR 40 E of Shadow Crossings Blvd
GMB PROJECT NO.	11-016.06

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	11-Oct-11	**Start Time**	12:00 AM
End Date	12-Oct-11	**End Time**	12:00 AM

VOLUMES:

ADT	10,390	**PEAK HOUR**	903
		PEAK END TIME	6:15 PM
		PEAK NB/EB MOVEMENT	357
		PEAK SB/WB MOVEMENT	546

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	8.69%	**D=**	60.5%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 30
COUNT LOCATION SR 40 E of Shadow Crossings Blvd
GMB PROJECT NO. 11-016.06

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	26	37	63	0.49%	0.72%	0.61%
02:00 AM	17	23	40	0.32%	0.44%	0.38%
03:00 AM	21	24	45	0.39%	0.47%	0.43%
04:00 AM	27	23	50	0.50%	0.45%	0.48%
05:00 AM	32	28	60	0.61%	0.54%	0.57%
06:00 AM	90	53	143	1.71%	1.03%	1.37%
07:00 AM	255	96	351	4.83%	1.87%	3.37%
08:00 AM	535	192	727	10.14%	3.75%	6.99%
09:00 AM	503	201	704	9.54%	3.93%	6.77%
10:00 AM	383	205	588	7.26%	4.00%	5.65%
11:00 AM	303	224	526	5.74%	4.36%	5.06%
12:00 PM	264	261	525	5.01%	5.09%	5.05%
01:00 PM	332	290	622	6.30%	5.66%	5.99%
02:00 PM	297	292	588	5.63%	5.69%	5.66%
03:00 PM	325	330	655	6.17%	6.44%	6.30%
04:00 PM	301	391	692	5.70%	7.64%	6.66%
05:00 PM	314	481	795	5.96%	9.39%	7.65%
06:00 PM	327	520	846	6.20%	10.15%	8.14%
07:00 PM	331	453	784	6.28%	8.85%	7.55%
08:00 PM	214	306	520	4.06%	5.97%	5.00%
09:00 PM	137	278	414	2.59%	5.42%	3.98%
10:00 PM	113	216	329	2.13%	4.22%	3.16%
11:00 PM	77	120	197	1.45%	2.34%	1.89%
12:00 AM	52	81	133	0.99%	1.58%	1.28%
TOTALS	**5,270**	**5,121**	**10,390**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	31
COUNT LOCATION	Cone Rd N. of SR 40
GMB PROJECT NO.	11-016.06

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	11-Oct-11	**Start Time**	12:00 AM
End Date	12-Oct-11	**End Time**	12:00 AM

VOLUMES:

ADT	612	**PEAK HOUR**	68
		PEAK END TIME	6:00 PM
		PEAK NB/EB MOVEMENT	42
		PEAK SB/WB MOVEMENT	26

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	11.04%	**D=**	61.5%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 31
COUNT LOCATION Cone Rd N. of SR 40
GMB PROJECT NO. 11-016.06

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	4	2	6	1.28%	0.50%	0.90%
02:00 AM	0	1	1	0.00%	0.33%	0.16%
03:00 AM	1	1	1	0.16%	0.17%	0.16%
04:00 AM	2	2	4	0.48%	0.67%	0.57%
05:00 AM	1	2	2	0.16%	0.50%	0.33%
06:00 AM	2	7	8	0.48%	2.17%	1.31%
07:00 AM	3	21	24	0.96%	6.84%	3.84%
08:00 AM	6	42	48	1.92%	13.86%	7.77%
09:00 AM	11	31	42	3.53%	10.18%	6.79%
10:00 AM	8	17	24	2.40%	5.51%	3.92%
11:00 AM	8	18	26	2.56%	6.01%	4.25%
12:00 PM	16	20	36	5.13%	6.51%	5.81%
01:00 PM	18	17	34	5.61%	5.51%	5.56%
02:00 PM	24	18	42	7.69%	6.01%	6.87%
03:00 PM	25	20	45	8.01%	6.51%	7.28%
04:00 PM	28	13	41	8.81%	4.34%	6.62%
05:00 PM	33	13	46	10.42%	4.34%	7.44%
06:00 PM	42	26	68	13.30%	8.68%	11.04%
07:00 PM	27	16	42	8.49%	5.18%	6.87%
08:00 PM	21	8	29	6.73%	2.50%	4.66%
09:00 PM	14	6	20	4.49%	1.84%	3.19%
10:00 PM	16	4	20	5.13%	1.34%	3.27%
11:00 PM	4	1	5	1.28%	0.17%	0.74%
12:00 AM	3	1	4	0.96%	0.33%	0.65%
TOTALS	**312**	**300**	**612**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	32
COUNT LOCATION	Rima Ridge Rd S. of SR 40
GMB PROJECT NO.	11-016.06

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	11-Oct-11	**Start Time**	12:00 AM
End Date	12-Oct-11	**End Time**	12:00 AM

VOLUMES:

ADT	55	**PEAK HOUR**	11
		PEAK END TIME	10:45 AM
		PEAK NB/EB MOVEMENT	8
		PEAK SB/WB MOVEMENT	3

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	19.09%	**D=**	76.2%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 32
COUNT LOCATION Rima Ridge Rd S. of SR 40
GMB PROJECT NO. 11-016.06

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	0	0	0	0.00%	0.00%	0.00%
02:00 AM	0	0	0	0.00%	0.00%	0.00%
03:00 AM	0	0	0	0.00%	0.00%	0.00%
04:00 AM	0	0	0	0.00%	0.00%	0.00%
05:00 AM	0	0	0	0.00%	0.00%	0.00%
06:00 AM	0	0	0	0.00%	0.00%	0.00%
07:00 AM	1	1	2	2.53%	6.45%	3.64%
08:00 AM	1	1	2	2.53%	3.23%	2.73%
09:00 AM	5	1	6	12.66%	6.45%	10.91%
10:00 AM	2	0	2	5.06%	0.00%	3.64%
11:00 AM	7	3	10	17.72%	16.13%	17.27%
12:00 PM	3	1	4	7.59%	6.45%	7.27%
01:00 PM	4	2	5	8.86%	9.68%	9.09%
02:00 PM	3	1	3	6.33%	3.23%	5.45%
03:00 PM	1	1	2	2.53%	3.23%	2.73%
04:00 PM	7	2	9	17.72%	12.90%	16.36%
05:00 PM	1	1	2	2.53%	6.45%	3.64%
06:00 PM	2	1	3	5.06%	6.45%	5.45%
07:00 PM	1	1	2	1.27%	6.45%	2.73%
08:00 PM	3	2	5	7.59%	12.90%	9.09%
09:00 PM	0	0	0	0.00%	0.00%	0.00%
10:00 PM	0	0	0	0.00%	0.00%	0.00%
11:00 PM	0	0	0	0.00%	0.00%	0.00%
12:00 AM	0	0	0	0.00%	0.00%	0.00%
TOTALS	**40**	**16**	**55**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	33
COUNT LOCATION	Shadow Crossings N. of SR 40
GMB PROJECT NO.	11-016.06

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	11-Oct-11	**Start Time**	12:00 AM
End Date	12-Oct-11	**End Time**	12:00 AM

VOLUMES:

ADT	2,836	**PEAK HOUR**	306
		PEAK END TIME	6:15 PM
		PEAK NB/EB MOVEMENT	189
		PEAK SB/WB MOVEMENT	117

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	10.77%	**D=**	61.7%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 33
COUNT LOCATION Shadow Crossings N. of SR 40
GMB PROJECT NO. 11-016.06

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	7	1	8	0.47%	0.04%	0.26%
02:00 AM	5	2	7	0.34%	0.15%	0.25%
03:00 AM	5	0	5	0.31%	0.00%	0.16%
04:00 AM	1	1	2	0.03%	0.07%	0.05%
05:00 AM	3	3	6	0.17%	0.22%	0.19%
06:00 AM	3	16	18	0.17%	1.14%	0.63%
07:00 AM	12	42	53	0.78%	3.05%	1.87%
08:00 AM	77	122	199	5.19%	8.96%	7.00%
09:00 AM	53	135	187	3.56%	9.88%	6.59%
10:00 AM	60	104	164	4.07%	7.60%	5.77%
11:00 AM	71	72	143	4.78%	5.29%	5.03%
12:00 PM	71	81	152	4.78%	5.95%	5.34%
01:00 PM	92	84	176	6.24%	6.14%	6.19%
02:00 PM	104	100	203	7.02%	7.31%	7.16%
03:00 PM	112	90	201	7.56%	6.58%	7.09%
04:00 PM	132	86	218	8.95%	6.28%	7.67%
05:00 PM	112	93	205	7.60%	6.80%	7.21%
06:00 PM	172	115	287	11.63%	8.45%	10.10%
07:00 PM	133	91	224	9.02%	6.69%	7.90%
08:00 PM	79	55	134	5.36%	4.04%	4.73%
09:00 PM	78	43	121	5.26%	3.16%	4.25%
10:00 PM	56	14	70	3.76%	1.03%	2.45%
11:00 PM	25	8	32	1.66%	0.55%	1.13%
12:00 AM	19	9	28	1.29%	0.62%	0.97%
TOTALS	**1,475**	**1,361**	**2,836**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	1
COUNT LOCATION	Breakaway Tr N of SR 40
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	3,576	**PEAK HOUR**	336
		PEAK END TIME	6:15 PM
		PEAK NB/EB MOVEMENT	256
		PEAK SB/WB MOVEMENT	80

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	9.38%	**D=**	76.2%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 1
COUNT LOCATION Breakaway Tr N of SR 40
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	4	3	7	0.18%	0.18%	0.18%
02:00 AM	4	2	6	0.18%	0.15%	0.17%
03:00 AM	6	3	8	0.25%	0.18%	0.22%
04:00 AM	6	5	10	0.25%	0.33%	0.28%
05:00 AM	6	6	12	0.27%	0.40%	0.32%
06:00 AM	9	11	20	0.41%	0.77%	0.55%
07:00 AM	11	66	77	0.50%	4.81%	2.14%
08:00 AM	49	167	216	2.21%	12.23%	6.03%
09:00 AM	108	151	259	4.85%	11.09%	7.23%
10:00 AM	106	104	210	4.76%	7.64%	5.86%
11:00 AM	112	101	212	5.03%	7.38%	5.93%
12:00 PM	119	80	199	5.35%	5.88%	5.55%
01:00 PM	153	79	232	6.88%	5.80%	6.47%
02:00 PM	148	94	241	6.66%	6.87%	6.74%
03:00 PM	177	90	267	7.99%	6.58%	7.45%
04:00 PM	200	94	294	9.03%	6.91%	8.22%
05:00 PM	210	81	291	9.48%	5.95%	8.14%
06:00 PM	241	81	322	10.88%	5.95%	9.00%
07:00 PM	210	63	273	9.48%	4.59%	7.62%
08:00 PM	125	38	163	5.62%	2.79%	4.54%
09:00 PM	99	19	118	4.45%	1.40%	3.29%
10:00 PM	72	9	81	3.25%	0.62%	2.25%
11:00 PM	31	14	45	1.40%	1.03%	1.26%
12:00 AM	14	6	20	0.63%	0.44%	0.56%
TOTALS	**2,215**	**1,361**	**3,576**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	2
COUNT LOCATION	Tymber Creek N of SR 40
GMB PROJECT NO.	2

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	13,121	**PEAK HOUR**	1,295
		PEAK END TIME	8:30 AM
		PEAK NB/EB MOVEMENT	423
		PEAK SB/WB MOVEMENT	873

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	9.87%	**D=**	67.4%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 2
COUNT LOCATION Tymber Creek N of SR 40
GMB PROJECT NO. 2

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	34	18	52	0.51%	0.27%	0.39%
02:00 AM	17	14	30	0.25%	0.20%	0.23%
03:00 AM	13	12	25	0.19%	0.18%	0.19%
04:00 AM	12	11	22	0.18%	0.16%	0.17%
05:00 AM	20	26	46	0.30%	0.39%	0.35%
06:00 AM	62	78	140	0.95%	1.18%	1.07%
07:00 AM	98	298	396	1.51%	4.50%	3.01%
08:00 AM	369	713	1,082	5.66%	10.78%	8.24%
09:00 AM	317	713	1,030	4.87%	10.78%	7.85%
10:00 AM	275	440	715	4.23%	6.65%	5.45%
11:00 AM	279	380	659	4.28%	5.75%	5.02%
12:00 PM	324	354	678	4.97%	5.35%	5.16%
01:00 PM	407	410	817	6.25%	6.20%	6.23%
02:00 PM	445	433	878	6.84%	6.55%	6.69%
03:00 PM	460	483	943	7.07%	7.30%	7.18%
04:00 PM	552	486	1,038	8.48%	7.34%	7.91%
05:00 PM	590	455	1,045	9.07%	6.87%	7.96%
06:00 PM	748	492	1,240	11.49%	7.43%	9.45%
07:00 PM	498	339	837	7.65%	5.13%	6.38%
08:00 PM	339	171	510	5.21%	2.59%	3.89%
09:00 PM	256	106	362	3.93%	1.60%	2.76%
10:00 PM	219	76	295	3.37%	1.14%	2.24%
11:00 PM	107	73	180	1.64%	1.10%	1.37%
12:00 AM	72	37	108	1.10%	0.55%	0.82%
TOTALS	**6,508**	**6,613**	**13,121**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	3
COUNT LOCATION	Tymber Creek S of SR 40
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	593	**PEAK HOUR**	64
		PEAK END TIME	5:00 PM
		PEAK NB/EB MOVEMENT	33
		PEAK SB/WB MOVEMENT	32

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	10.79%	**D=**	50.8%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 3
COUNT LOCATION Tymber Creek S of SR 40
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	1	1	2	0.33%	0.17%	0.25%
02:00 AM	1	1	2	0.33%	0.17%	0.25%
03:00 AM	1	1	1	0.17%	0.17%	0.17%
04:00 AM	1	1	2	0.33%	0.34%	0.34%
05:00 AM	2	0	2	0.50%	0.00%	0.25%
06:00 AM	5	1	6	1.65%	0.17%	0.93%
07:00 AM	16	4	20	5.12%	1.38%	3.29%
08:00 AM	36	8	43	11.72%	2.59%	7.25%
09:00 AM	26	16	41	8.42%	5.34%	6.91%
10:00 AM	19	12	31	6.11%	4.14%	5.14%
11:00 AM	11	13	24	3.63%	4.31%	3.96%
12:00 PM	17	13	30	5.61%	4.48%	5.06%
01:00 PM	23	18	41	7.43%	6.21%	6.83%
02:00 PM	16	20	36	5.28%	6.72%	5.99%
03:00 PM	17	24	40	5.45%	8.10%	6.75%
04:00 PM	26	34	60	8.58%	11.55%	10.03%
05:00 PM	33	32	64	10.73%	10.86%	10.79%
06:00 PM	25	33	57	8.09%	11.21%	9.61%
07:00 PM	14	24	38	4.62%	8.10%	6.32%
08:00 PM	5	17	22	1.65%	5.69%	3.63%
09:00 PM	9	12	20	2.81%	3.97%	3.37%
10:00 PM	3	6	9	0.83%	2.07%	1.43%
11:00 PM	1	4	4	0.17%	1.21%	0.67%
12:00 AM	2	3	5	0.50%	1.03%	0.76%
TOTALS	**303**	**290**	**593**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	4
COUNT LOCATION	SR 40 West of Breakaway Tr
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	10,774	**PEAK HOUR**	973
		PEAK END TIME	5:30 PM
		PEAK NB/EB MOVEMENT	327
		PEAK SB/WB MOVEMENT	646

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	9.03%	**D=**	66.4%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 4
COUNT LOCATION SR 40 West of Breakaway Tr
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	24	33	57	0.47%	0.57%	0.52%
02:00 AM	16	29	45	0.30%	0.51%	0.41%
03:00 AM	30	17	47	0.59%	0.29%	0.43%
04:00 AM	23	28	50	0.44%	0.49%	0.46%
05:00 AM	51	18	68	0.99%	0.31%	0.63%
06:00 AM	109	55	163	2.12%	0.96%	1.51%
07:00 AM	334	143	476	6.52%	2.52%	4.42%
08:00 AM	582	196	777	11.36%	3.46%	7.21%
09:00 AM	522	255	777	10.19%	4.51%	7.21%
10:00 AM	362	251	613	7.07%	4.43%	5.69%
11:00 AM	357	290	647	6.97%	5.13%	6.01%
12:00 PM	317	324	641	6.19%	5.72%	5.95%
01:00 PM	322	327	649	6.28%	5.78%	6.02%
02:00 PM	353	350	702	6.89%	6.18%	6.52%
03:00 PM	344	387	731	6.72%	6.84%	6.79%
04:00 PM	297	530	827	5.80%	9.37%	7.68%
05:00 PM	320	567	886	6.24%	10.02%	8.22%
06:00 PM	283	662	945	5.52%	11.71%	8.77%
07:00 PM	135	385	519	2.63%	6.80%	4.82%
08:00 PM	118	265	383	2.31%	4.68%	3.55%
09:00 PM	73	228	301	1.42%	4.03%	2.79%
10:00 PM	69	156	224	1.34%	2.75%	2.08%
11:00 PM	55	106	161	1.06%	1.87%	1.49%
12:00 AM	30	60	90	0.59%	1.06%	0.84%
TOTALS	**5,119**	**5,655**	**10,774**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	5
COUNT LOCATION	SR 40 East of Tymber Creek Rd
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	26,249	**PEAK HOUR**	2,373
		PEAK END TIME	6:00 PM
		PEAK NB/EB MOVEMENT	849
		PEAK SB/WB MOVEMENT	1,524

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	9.04%	**D=**	64.2%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 5
COUNT LOCATION SR 40 East of Tymber Creek Rd
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	47	69	116	0.36%	0.53%	0.44%
02:00 AM	30	47	77	0.22%	0.36%	0.29%
03:00 AM	43	32	74	0.32%	0.24%	0.28%
04:00 AM	33	42	75	0.25%	0.32%	0.28%
05:00 AM	75	41	116	0.57%	0.31%	0.44%
06:00 AM	184	101	285	1.39%	0.77%	1.09%
07:00 AM	636	207	842	4.81%	1.58%	3.21%
08:00 AM	1,394	585	1,979	10.55%	4.48%	7.54%
09:00 AM	1,423	641	2,064	10.77%	4.91%	7.86%
10:00 AM	932	576	1,508	7.06%	4.41%	5.74%
11:00 AM	798	615	1,412	6.04%	4.71%	5.38%
12:00 PM	769	707	1,475	5.82%	5.42%	5.62%
01:00 PM	830	843	1,672	6.28%	6.46%	6.37%
02:00 PM	859	858	1,717	6.50%	6.58%	6.54%
03:00 PM	887	929	1,816	6.71%	7.12%	6.92%
04:00 PM	936	1,194	2,130	7.08%	9.16%	8.11%
05:00 PM	825	1,238	2,063	6.25%	9.49%	7.86%
06:00 PM	849	1,524	2,373	6.43%	11.68%	9.04%
07:00 PM	612	979	1,590	4.63%	7.50%	6.06%
08:00 PM	392	604	995	2.96%	4.63%	3.79%
09:00 PM	279	501	780	2.11%	3.84%	2.97%
10:00 PM	166	386	552	1.25%	2.96%	2.10%
11:00 PM	140	202	341	1.06%	1.55%	1.30%
12:00 AM	75	128	203	0.57%	0.98%	0.77%
TOTALS	**13,208**	**13,041**	**26,249**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	6
COUNT LOCATION	SR 40 West of Interchange Blvd
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	26,675	**PEAK HOUR**	2,397
		PEAK END TIME	6:00 PM
		PEAK NB/EB MOVEMENT	854
		PEAK SB/WB MOVEMENT	1,543

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	8.99%	**D=**	64.4%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 6
COUNT LOCATION SR 40 West of Interchange Blvd
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	49	73	122	0.37%	0.54%	0.46%
02:00 AM	30	48	78	0.23%	0.36%	0.29%
03:00 AM	38	32	70	0.28%	0.24%	0.26%
04:00 AM	29	41	69	0.21%	0.30%	0.26%
05:00 AM	69	41	110	0.52%	0.31%	0.41%
06:00 AM	167	101	268	1.25%	0.76%	1.00%
07:00 AM	577	207	784	4.34%	1.54%	2.94%
08:00 AM	1,329	585	1,914	9.99%	4.37%	7.17%
09:00 AM	1,474	663	2,136	11.07%	4.96%	8.01%
10:00 AM	926	616	1,542	6.96%	4.61%	5.78%
11:00 AM	782	650	1,432	5.88%	4.86%	5.37%
12:00 PM	762	725	1,487	5.73%	5.42%	5.57%
01:00 PM	831	863	1,694	6.24%	6.46%	6.35%
02:00 PM	849	899	1,748	6.38%	6.72%	6.55%
03:00 PM	885	968	1,853	6.65%	7.24%	6.94%
04:00 PM	980	1,190	2,170	7.37%	8.90%	8.13%
05:00 PM	878	1,253	2,131	6.59%	9.37%	7.99%
06:00 PM	854	1,543	2,397	6.42%	11.54%	8.99%
07:00 PM	621	1,020	1,640	4.66%	7.63%	6.15%
08:00 PM	386	635	1,021	2.90%	4.75%	3.83%
09:00 PM	332	500	832	2.49%	3.74%	3.12%
10:00 PM	251	379	630	1.88%	2.84%	2.36%
11:00 PM	134	210	344	1.01%	1.57%	1.29%
12:00 AM	78	132	210	0.59%	0.99%	0.79%
TOTALS	**13,306**	**13,369**	**26,675**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	7
COUNT LOCATION	SR 40 West of Williamson Blvd
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	33,230	**PEAK HOUR**	2,883
		PEAK END TIME	5:45 PM
		PEAK NB/EB MOVEMENT	1,130
		PEAK SB/WB MOVEMENT	1,753

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	8.67%	**D=**	60.8%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 7
COUNT LOCATION SR 40 West of Williamson Blvd
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	65	76	140	0.39%	0.46%	0.42%
02:00 AM	64	50	114	0.38%	0.30%	0.34%
03:00 AM	39	51	89	0.23%	0.31%	0.27%
04:00 AM	44	32	76	0.26%	0.19%	0.23%
05:00 AM	74	65	138	0.44%	0.39%	0.42%
06:00 AM	186	155	341	1.11%	0.94%	1.02%
07:00 AM	528	412	940	3.16%	2.49%	2.83%
08:00 AM	1,251	852	2,103	7.49%	5.15%	6.33%
09:00 AM	1,693	847	2,539	10.14%	5.12%	7.64%
10:00 AM	1,164	791	1,954	6.97%	4.78%	5.88%
11:00 AM	1,068	865	1,933	6.40%	5.23%	5.82%
12:00 PM	1,018	947	1,964	6.10%	5.72%	5.91%
01:00 PM	1,127	1,100	2,226	6.75%	6.65%	6.70%
02:00 PM	1,168	1,173	2,340	6.99%	7.09%	7.04%
03:00 PM	1,186	1,209	2,395	7.10%	7.31%	7.21%
04:00 PM	1,216	1,474	2,690	7.28%	8.91%	8.10%
05:00 PM	1,127	1,535	2,662	6.75%	9.28%	8.01%
06:00 PM	1,130	1,725	2,855	6.77%	10.43%	8.59%
07:00 PM	889	1,115	2,004	5.33%	6.74%	6.03%
08:00 PM	560	707	1,267	3.35%	4.27%	3.81%
09:00 PM	431	551	982	2.58%	3.33%	2.96%
10:00 PM	342	416	757	2.05%	2.51%	2.28%
11:00 PM	209	252	461	1.25%	1.52%	1.39%
12:00 AM	121	146	266	0.72%	0.88%	0.80%
TOTALS	**16,693**	**16,538**	**33,230**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	8
COUNT LOCATION	SR 40 East of Williamson Blvd
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	31,064	**PEAK HOUR**	2,634
		PEAK END TIME	4:00 PM
		PEAK NB/EB MOVEMENT	1,291
		PEAK SB/WB MOVEMENT	1,343

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	8.48%	**D=**	51.0%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 8
COUNT LOCATION SR 40 East of Williamson Blvd
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	67	52	119	0.43%	0.33%	0.38%
02:00 AM	47	32	79	0.30%	0.20%	0.25%
03:00 AM	35	36	71	0.23%	0.23%	0.23%
04:00 AM	32	29	61	0.21%	0.18%	0.19%
05:00 AM	46	65	110	0.29%	0.41%	0.35%
06:00 AM	113	137	250	0.73%	0.88%	0.80%
07:00 AM	307	392	698	1.98%	2.51%	2.25%
08:00 AM	855	780	1,635	5.53%	5.00%	5.26%
09:00 AM	1,157	853	2,009	7.49%	5.46%	6.47%
10:00 AM	1,016	906	1,922	6.58%	5.80%	6.19%
11:00 AM	1,003	1,008	2,010	6.49%	6.45%	6.47%
12:00 PM	1,078	1,123	2,201	6.98%	7.19%	7.09%
01:00 PM	1,175	1,240	2,415	7.61%	7.94%	7.77%
02:00 PM	1,221	1,243	2,464	7.90%	7.96%	7.93%
03:00 PM	1,236	1,232	2,467	8.00%	7.89%	7.94%
04:00 PM	1,291	1,343	2,634	8.36%	8.60%	8.48%
05:00 PM	1,206	1,321	2,527	7.81%	8.46%	8.13%
06:00 PM	1,145	1,370	2,514	7.41%	8.77%	8.09%
07:00 PM	874	863	1,736	5.65%	5.52%	5.59%
08:00 PM	544	559	1,103	3.52%	3.58%	3.55%
09:00 PM	414	424	837	2.68%	2.71%	2.69%
10:00 PM	294	330	624	1.90%	2.11%	2.01%
11:00 PM	197	189	386	1.28%	1.21%	1.24%
12:00 AM	103	95	198	0.66%	0.61%	0.64%
TOTALS	**15,450**	**15,615**	**31,064**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	9
COUNT LOCATION	SR 40 @ I-95 SB On Ramp
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	9,810	**PEAK HOUR**	1,099
		PEAK END TIME	8:15 AM
		PEAK NB/EB MOVEMENT	0
		PEAK SB/WB MOVEMENT	1,099

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	11.20%	**D=**	100.0%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 9
COUNT LOCATION SR 40 @ I-95 SB On Ramp
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	0	43	43	#DIV/0!	0.43%	0.43%
02:00 AM	0	19	19	#DIV/0!	0.19%	0.19%
03:00 AM	0	49	49	#DIV/0!	0.49%	0.49%
04:00 AM	0	35	35	#DIV/0!	0.35%	0.35%
05:00 AM	0	70	70	#DIV/0!	0.71%	0.71%
06:00 AM	0	177	177	#DIV/0!	1.80%	1.80%
07:00 AM	0	565	565	#DIV/0!	5.76%	5.76%
08:00 AM	0	1,028	1,028	#DIV/0!	10.48%	10.48%
09:00 AM	0	896	896	#DIV/0!	9.13%	9.13%
10:00 AM	0	615	615	#DIV/0!	6.26%	6.26%
11:00 AM	0	536	536	#DIV/0!	5.46%	5.46%
12:00 PM	0	545	545	#DIV/0!	5.56%	5.56%
01:00 PM	0	546	546	#DIV/0!	5.56%	5.56%
02:00 PM	0	591	591	#DIV/0!	6.02%	6.02%
03:00 PM	0	574	574	#DIV/0!	5.85%	5.85%
04:00 PM	0	701	701	#DIV/0!	7.14%	7.14%
05:00 PM	0	695	695	#DIV/0!	7.08%	7.08%
06:00 PM	0	759	759	#DIV/0!	7.74%	7.74%
07:00 PM	0	450	450	#DIV/0!	4.59%	4.59%
08:00 PM	0	268	268	#DIV/0!	2.73%	2.73%
09:00 PM	0	228	228	#DIV/0!	2.32%	2.32%
10:00 PM	0	198	198	#DIV/0!	2.01%	2.01%
11:00 PM	0	128	128	#DIV/0!	1.30%	1.30%
12:00 AM	0	100	100	#DIV/0!	1.02%	1.02%
TOTALS	**0**	**9,810**	**9,810**	**#DIV/0!**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	10
COUNT LOCATION	SR 40 @ I-95 SB Off Ramp
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	4,002	**PEAK HOUR**	398
		PEAK END TIME	8:45 AM
		PEAK NB/EB MOVEMENT	0
		PEAK SB/WB MOVEMENT	398

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	9.95%	**D=**	100.0%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 10
COUNT LOCATION SR 40 @ I-95 SB Off Ramp
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	0	17	17	#DIV/0!	0.42%	0.42%
02:00 AM	0	21	21	#DIV/0!	0.52%	0.52%
03:00 AM	0	12	12	#DIV/0!	0.30%	0.30%
04:00 AM	0	14	14	#DIV/0!	0.35%	0.35%
05:00 AM	0	26	26	#DIV/0!	0.65%	0.65%
06:00 AM	0	62	62	#DIV/0!	1.54%	1.54%
07:00 AM	0	156	156	#DIV/0!	3.89%	3.89%
08:00 AM	0	295	295	#DIV/0!	7.37%	7.37%
09:00 AM	0	382	382	#DIV/0!	9.55%	9.55%
10:00 AM	0	286	286	#DIV/0!	7.15%	7.15%
11:00 AM	0	265	265	#DIV/0!	6.61%	6.61%
12:00 PM	0	280	280	#DIV/0!	6.98%	6.98%
01:00 PM	0	287	287	#DIV/0!	7.16%	7.16%
02:00 PM	0	256	256	#DIV/0!	6.38%	6.38%
03:00 PM	0	268	268	#DIV/0!	6.68%	6.68%
04:00 PM	0	273	273	#DIV/0!	6.81%	6.81%
05:00 PM	0	247	247	#DIV/0!	6.17%	6.17%
06:00 PM	0	280	280	#DIV/0!	6.98%	6.98%
07:00 PM	0	216	216	#DIV/0!	5.40%	5.40%
08:00 PM	0	122	122	#DIV/0!	3.05%	3.05%
09:00 PM	0	86	86	#DIV/0!	2.14%	2.14%
10:00 PM	0	68	68	#DIV/0!	1.69%	1.69%
11:00 PM	0	50	50	#DIV/0!	1.25%	1.25%
12:00 AM	0	39	39	#DIV/0!	0.96%	0.96%
TOTALS	**0**	**4,002**	**4,002**	**#DIV/0!**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	11
COUNT LOCATION	SR 40 @ I-95 NB On Ramp
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	4,216	**PEAK HOUR**	454
		PEAK END TIME	5:45 PM
		PEAK NB/EB MOVEMENT	454
		PEAK SB/WB MOVEMENT	0

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	10.77%	**D=**	100.0%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 11
COUNT LOCATION SR 40 @ I-95 NB On Ramp
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	27	0	27	0.63%	#DIV/0!	0.63%
02:00 AM	22	0	22	0.52%	#DIV/0!	0.52%
03:00 AM	16	0	16	0.38%	#DIV/0!	0.38%
04:00 AM	9	0	9	0.21%	#DIV/0!	0.21%
05:00 AM	22	0	22	0.52%	#DIV/0!	0.52%
06:00 AM	47	0	47	1.11%	#DIV/0!	1.11%
07:00 AM	106	0	106	2.50%	#DIV/0!	2.50%
08:00 AM	170	0	170	4.03%	#DIV/0!	4.03%
09:00 AM	235	0	235	5.57%	#DIV/0!	5.57%
10:00 AM	212	0	212	5.03%	#DIV/0!	5.03%
11:00 AM	229	0	229	5.43%	#DIV/0!	5.43%
12:00 PM	239	0	239	5.67%	#DIV/0!	5.67%
01:00 PM	276	0	276	6.53%	#DIV/0!	6.53%
02:00 PM	290	0	290	6.87%	#DIV/0!	6.87%
03:00 PM	303	0	303	7.19%	#DIV/0!	7.19%
04:00 PM	391	0	391	9.27%	#DIV/0!	9.27%
05:00 PM	397	0	397	9.40%	#DIV/0!	9.40%
06:00 PM	423	0	423	10.03%	#DIV/0!	10.03%
07:00 PM	245	0	245	5.80%	#DIV/0!	5.80%
08:00 PM	163	0	163	3.85%	#DIV/0!	3.85%
09:00 PM	151	0	151	3.58%	#DIV/0!	3.58%
10:00 PM	129	0	129	3.05%	#DIV/0!	3.05%
11:00 PM	78	0	78	1.85%	#DIV/0!	1.85%
12:00 AM	40	0	40	0.95%	#DIV/0!	0.95%
TOTALS	**4,216**	**0**	**4,216**	**100.00%**	**#DIV/0!**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	12
COUNT LOCATION	SR 40 @ I-95 NB On Ramp
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	9,777	**PEAK HOUR**	906
		PEAK END TIME	5:45 PM
		PEAK NB/EB MOVEMENT	906
		PEAK SB/WB MOVEMENT	0

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	9.26%	**D=**	100.0%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 12
COUNT LOCATION SR 40 @ I-95 NB On Ramp
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	54	0	54	0.55%	#DIV/0!	0.55%
02:00 AM	47	0	47	0.48%	#DIV/0!	0.48%
03:00 AM	32	0	32	0.33%	#DIV/0!	0.33%
04:00 AM	52	0	52	0.53%	#DIV/0!	0.53%
05:00 AM	48	0	48	0.49%	#DIV/0!	0.49%
06:00 AM	127	0	127	1.30%	#DIV/0!	1.30%
07:00 AM	285	0	285	2.92%	#DIV/0!	2.92%
08:00 AM	684	0	684	7.00%	#DIV/0!	7.00%
09:00 AM	779	0	779	7.97%	#DIV/0!	7.97%
10:00 AM	545	0	545	5.57%	#DIV/0!	5.57%
11:00 AM	507	0	507	5.18%	#DIV/0!	5.18%
12:00 PM	507	0	507	5.18%	#DIV/0!	5.18%
01:00 PM	539	0	539	5.51%	#DIV/0!	5.51%
02:00 PM	597	0	597	6.11%	#DIV/0!	6.11%
03:00 PM	642	0	642	6.57%	#DIV/0!	6.57%
04:00 PM	776	0	776	7.94%	#DIV/0!	7.94%
05:00 PM	797	0	797	8.15%	#DIV/0!	8.15%
06:00 PM	906	0	906	9.26%	#DIV/0!	9.26%
07:00 PM	610	0	610	6.24%	#DIV/0!	6.24%
08:00 PM	398	0	398	4.07%	#DIV/0!	4.07%
09:00 PM	310	0	310	3.17%	#DIV/0!	3.17%
10:00 PM	257	0	257	2.63%	#DIV/0!	2.63%
11:00 PM	168	0	168	1.71%	#DIV/0!	1.71%
12:00 AM	114	0	114	1.16%	#DIV/0!	1.16%
TOTALS	**9,777**	**0**	**9,777**	**100.00%**	**#DIV/0!**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	13
COUNT LOCATION	Williamson Blvd South of Hands Ave
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	25-Jan-11	**Start Time**	12:00 AM
End Date	26-Jan-11	**End Time**	12:00 AM

VOLUMES:

ADT	14,474	**PEAK HOUR**	1,292
		PEAK END TIME	4:30 PM
		PEAK NB/EB MOVEMENT	746
		PEAK SB/WB MOVEMENT	546

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	8.93%	**D=**	57.7%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 13
COUNT LOCATION Williamson Blvd South of Hands Ave
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	43	31	73	0.59%	0.42%	0.50%
02:00 AM	24	20	44	0.33%	0.28%	0.30%
03:00 AM	20	11	30	0.27%	0.14%	0.21%
04:00 AM	12	18	29	0.16%	0.24%	0.20%
05:00 AM	20	38	58	0.27%	0.52%	0.40%
06:00 AM	52	86	138	0.72%	1.19%	0.95%
07:00 AM	91	322	412	1.25%	4.43%	2.85%
08:00 AM	272	563	835	3.77%	7.76%	5.77%
09:00 AM	399	685	1,084	5.53%	9.45%	7.49%
10:00 AM	335	448	783	4.63%	6.18%	5.41%
11:00 AM	341	412	753	4.72%	5.68%	5.20%
12:00 PM	490	456	946	6.78%	6.29%	6.53%
01:00 PM	562	562	1,124	7.78%	7.74%	7.76%
02:00 PM	526	539	1,064	7.28%	7.43%	7.35%
03:00 PM	576	511	1,087	7.98%	7.04%	7.51%
04:00 PM	699	528	1,227	9.68%	7.28%	8.48%
05:00 PM	754	487	1,241	10.43%	6.71%	8.57%
06:00 PM	709	458	1,166	9.81%	6.31%	8.06%
07:00 PM	412	377	789	5.71%	5.20%	5.45%
08:00 PM	310	225	535	4.29%	3.10%	3.69%
09:00 PM	217	169	386	3.01%	2.32%	2.66%
10:00 PM	173	141	314	2.40%	1.94%	2.17%
11:00 PM	103	109	212	1.43%	1.50%	1.46%
12:00 AM	87	62	148	1.20%	0.85%	1.02%
TOTALS	**7,221**	**7,253**	**14,474**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	14
COUNT LOCATION	LPGA @ I-95 NB Off Ramp
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	1-Feb-11	**Start Time**	12:00 AM
End Date	2-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	5,091	**PEAK HOUR**	704
		PEAK END TIME	8:45 AM
		PEAK NB/EB MOVEMENT	704
		PEAK SB/WB MOVEMENT	0

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	13.82%	**D=**	100.0%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 14
COUNT LOCATION LPGA @ I-95 NB Off Ramp
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	39	0	39	0.77%	#DIV/0!	0.77%
02:00 AM	29	0	29	0.57%	#DIV/0!	0.57%
03:00 AM	16	0	16	0.31%	#DIV/0!	0.31%
04:00 AM	26	0	26	0.51%	#DIV/0!	0.51%
05:00 AM	22	0	22	0.42%	#DIV/0!	0.42%
06:00 AM	50	0	50	0.97%	#DIV/0!	0.97%
07:00 AM	206	0	206	4.04%	#DIV/0!	4.04%
08:00 AM	478	0	478	9.39%	#DIV/0!	9.39%
09:00 AM	653	0	653	12.82%	#DIV/0!	12.82%
10:00 AM	319	0	319	6.26%	#DIV/0!	6.26%
11:00 AM	297	0	297	5.83%	#DIV/0!	5.83%
12:00 PM	261	0	261	5.12%	#DIV/0!	5.12%
01:00 PM	284	0	284	5.57%	#DIV/0!	5.57%
02:00 PM	294	0	294	5.77%	#DIV/0!	5.77%
03:00 PM	279	0	279	5.48%	#DIV/0!	5.48%
04:00 PM	358	0	358	7.02%	#DIV/0!	7.02%
05:00 PM	308	0	308	6.04%	#DIV/0!	6.04%
06:00 PM	356	0	356	6.99%	#DIV/0!	6.99%
07:00 PM	282	0	282	5.54%	#DIV/0!	5.54%
08:00 PM	160	0	160	3.14%	#DIV/0!	3.14%
09:00 PM	144	0	144	2.83%	#DIV/0!	2.83%
10:00 PM	113	0	113	2.22%	#DIV/0!	2.22%
11:00 PM	85	0	85	1.66%	#DIV/0!	1.66%
12:00 AM	37	0	37	0.73%	#DIV/0!	0.73%
TOTALS	**5,091**	**0**	**5,091**	**100.00%**	**#DIV/0!**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	15
COUNT LOCATION	LPGA @ I-95 NB On Loop Ramp
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	1-Feb-11	**Start Time**	12:00 AM
End Date	2-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	1,823	**PEAK HOUR**	198
		PEAK END TIME	6:00 PM
		PEAK NB/EB MOVEMENT	198
		PEAK SB/WB MOVEMENT	0

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	10.83%	**D=**	100.0%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 15
COUNT LOCATION LPGA @ I-95 NB On Loop Ramp
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	13	0	13	0.69%	#DIV/0!	0.69%
02:00 AM	3	0	3	0.14%	#DIV/0!	0.14%
03:00 AM	7	0	7	0.36%	#DIV/0!	0.36%
04:00 AM	1	0	1	0.03%	#DIV/0!	0.03%
05:00 AM	12	0	12	0.66%	#DIV/0!	0.66%
06:00 AM	23	0	23	1.23%	#DIV/0!	1.23%
07:00 AM	38	0	38	2.08%	#DIV/0!	2.08%
08:00 AM	125	0	125	6.86%	#DIV/0!	6.86%
09:00 AM	121	0	121	6.61%	#DIV/0!	6.61%
10:00 AM	90	0	90	4.94%	#DIV/0!	4.94%
11:00 AM	95	0	95	5.18%	#DIV/0!	5.18%
12:00 PM	97	0	97	5.29%	#DIV/0!	5.29%
01:00 PM	107	0	107	5.87%	#DIV/0!	5.87%
02:00 PM	90	0	90	4.91%	#DIV/0!	4.91%
03:00 PM	131	0	131	7.19%	#DIV/0!	7.19%
04:00 PM	148	0	148	8.09%	#DIV/0!	8.09%
05:00 PM	170	0	170	9.33%	#DIV/0!	9.33%
06:00 PM	198	0	198	10.83%	#DIV/0!	10.83%
07:00 PM	136	0	136	7.43%	#DIV/0!	7.43%
08:00 PM	85	0	85	4.66%	#DIV/0!	4.66%
09:00 PM	58	0	58	3.15%	#DIV/0!	3.15%
10:00 PM	44	0	44	2.39%	#DIV/0!	2.39%
11:00 PM	18	0	18	0.96%	#DIV/0!	0.96%
12:00 AM	21	0	21	1.12%	#DIV/0!	1.12%
TOTALS	**1,823**	**0**	**1,823**	**100.00%**	**#DIV/0!**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	16
COUNT LOCATION	LPGA @ I-95 NB On Ramp
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	1-Feb-11	**Start Time**	12:00 AM
End Date	2-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	4,766	**PEAK HOUR**	619
		PEAK END TIME	5:45 PM
		PEAK NB/EB MOVEMENT	619
		PEAK SB/WB MOVEMENT	0

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	12.99%	**D=**	100.0%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 16
COUNT LOCATION LPGA @ I-95 NB On Ramp
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	53	0	53	1.11%	#DIV/0!	1.11%
02:00 AM	32	0	32	0.67%	#DIV/0!	0.67%
03:00 AM	30	0	30	0.62%	#DIV/0!	0.62%
04:00 AM	25	0	25	0.52%	#DIV/0!	0.52%
05:00 AM	46	0	46	0.97%	#DIV/0!	0.97%
06:00 AM	64	0	64	1.34%	#DIV/0!	1.34%
07:00 AM	116	0	116	2.42%	#DIV/0!	2.42%
08:00 AM	185	0	185	3.87%	#DIV/0!	3.87%
09:00 AM	178	0	178	3.73%	#DIV/0!	3.73%
10:00 AM	202	0	202	4.24%	#DIV/0!	4.24%
11:00 AM	171	0	171	3.59%	#DIV/0!	3.59%
12:00 PM	211	0	211	4.42%	#DIV/0!	4.42%
01:00 PM	256	0	256	5.36%	#DIV/0!	5.36%
02:00 PM	279	0	279	5.85%	#DIV/0!	5.85%
03:00 PM	320	0	320	6.70%	#DIV/0!	6.70%
04:00 PM	413	0	413	8.67%	#DIV/0!	8.67%
05:00 PM	527	0	527	11.06%	#DIV/0!	11.06%
06:00 PM	597	0	597	12.53%	#DIV/0!	12.53%
07:00 PM	323	0	323	6.78%	#DIV/0!	6.78%
08:00 PM	255	0	255	5.35%	#DIV/0!	5.35%
09:00 PM	196	0	196	4.10%	#DIV/0!	4.10%
10:00 PM	147	0	147	3.07%	#DIV/0!	3.07%
11:00 PM	86	0	86	1.79%	#DIV/0!	1.79%
12:00 AM	59	0	59	1.23%	#DIV/0!	1.23%
TOTALS	**4,766**	**0**	**4,766**	**100.00%**	**#DIV/0!**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	17
COUNT LOCATION	LPGA @ I-95 SB Off Ramp
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	1-Feb-11	**Start Time**	12:00 AM
End Date	2-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	7,457	**PEAK HOUR**	1,150
		PEAK END TIME	8:15 AM
		PEAK NB/EB MOVEMENT	0
		PEAK SB/WB MOVEMENT	1,150

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	15.42%	**D=**	100.0%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 17
COUNT LOCATION LPGA @ I-95 SB Off Ramp
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	0	36	36	#DIV/0!	0.48%	0.48%
02:00 AM	0	29	29	#DIV/0!	0.38%	0.38%
03:00 AM	0	31	31	#DIV/0!	0.41%	0.41%
04:00 AM	0	23	23	#DIV/0!	0.31%	0.31%
05:00 AM	0	52	52	#DIV/0!	0.69%	0.69%
06:00 AM	0	99	99	#DIV/0!	1.32%	1.32%
07:00 AM	0	406	406	#DIV/0!	5.44%	5.44%
08:00 AM	0	1,033	1,033	#DIV/0!	13.85%	13.85%
09:00 AM	0	924	924	#DIV/0!	12.38%	12.38%
10:00 AM	0	574	574	#DIV/0!	7.69%	7.69%
11:00 AM	0	458	458	#DIV/0!	6.14%	6.14%
12:00 PM	0	383	383	#DIV/0!	5.14%	5.14%
01:00 PM	0	387	387	#DIV/0!	5.18%	5.18%
02:00 PM	0	446	446	#DIV/0!	5.97%	5.97%
03:00 PM	0	418	418	#DIV/0!	5.61%	5.61%
04:00 PM	0	390	390	#DIV/0!	5.23%	5.23%
05:00 PM	0	393	393	#DIV/0!	5.27%	5.27%
06:00 PM	0	426	426	#DIV/0!	5.71%	5.71%
07:00 PM	0	322	322	#DIV/0!	4.32%	4.32%
08:00 PM	0	201	201	#DIV/0!	2.70%	2.70%
09:00 PM	0	127	127	#DIV/0!	1.70%	1.70%
10:00 PM	0	124	124	#DIV/0!	1.66%	1.66%
11:00 PM	0	100	100	#DIV/0!	1.34%	1.34%
12:00 AM	0	80	80	#DIV/0!	1.07%	1.07%
TOTALS	**0**	**7,457**	**7,457**	**#DIV/0!**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	16
COUNT LOCATION	LPGA @ I-95 SB On Loop Ramp
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	1-Feb-11	**Start Time**	12:00 AM
End Date	2-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	3,264	**PEAK HOUR**	429
		PEAK END TIME	5:45 PM
		PEAK NB/EB MOVEMENT	0
		PEAK SB/WB MOVEMENT	429

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	13.15%	**D=**	100.0%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 18
COUNT LOCATION LPGA @ I-95 SB On Loop Ramp
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	0	30	30	#DIV/0!	0.92%	0.92%
02:00 AM	0	13	13	#DIV/0!	0.38%	0.38%
03:00 AM	0	10	10	#DIV/0!	0.29%	0.29%
04:00 AM	0	12	12	#DIV/0!	0.37%	0.37%
05:00 AM	0	14	14	#DIV/0!	0.41%	0.41%
06:00 AM	0	53	53	#DIV/0!	1.61%	1.61%
07:00 AM	0	103	103	#DIV/0!	3.14%	3.14%
08:00 AM	0	171	171	#DIV/0!	5.22%	5.22%
09:00 AM	0	182	182	#DIV/0!	5.56%	5.56%
10:00 AM	0	149	149	#DIV/0!	4.57%	4.57%
11:00 AM	0	164	164	#DIV/0!	5.03%	5.03%
12:00 PM	0	162	162	#DIV/0!	4.95%	4.95%
01:00 PM	0	165	165	#DIV/0!	5.06%	5.06%
02:00 PM	0	162	162	#DIV/0!	4.95%	4.95%
03:00 PM	0	198	198	#DIV/0!	6.07%	6.07%
04:00 PM	0	253	253	#DIV/0!	7.75%	7.75%
05:00 PM	0	339	339	#DIV/0!	10.37%	10.37%
06:00 PM	0	402	402	#DIV/0!	12.32%	12.32%
07:00 PM	0	212	212	#DIV/0!	6.48%	6.48%
08:00 PM	0	146	146	#DIV/0!	4.47%	4.47%
09:00 PM	0	116	116	#DIV/0!	3.55%	3.55%
10:00 PM	0	111	111	#DIV/0!	3.40%	3.40%
11:00 PM	0	72	72	#DIV/0!	2.21%	2.21%
12:00 AM	0	30	30	#DIV/0!	0.92%	0.92%
TOTALS	**0**	**3,264**	**3,264**	**#DIV/0!**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	19
COUNT LOCATION	LPGA @ I-95 SB On Ramp
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	1-Feb-11	**Start Time**	12:00 AM
End Date	2-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	635	**PEAK HOUR**	74
		PEAK END TIME	6:00 PM
		PEAK NB/EB MOVEMENT	0
		PEAK SB/WB MOVEMENT	74

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	11.57%	**D=**	100.0%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 19
COUNT LOCATION LPGA @ I-95 SB On Ramp
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	0	2	2	#DIV/0!	0.31%	0.31%
02:00 AM	0	1	1	#DIV/0!	0.08%	0.08%
03:00 AM	0	1	1	#DIV/0!	0.16%	0.16%
04:00 AM	0	2	2	#DIV/0!	0.24%	0.24%
05:00 AM	0	4	4	#DIV/0!	0.55%	0.55%
06:00 AM	0	11	11	#DIV/0!	1.73%	1.73%
07:00 AM	0	18	18	#DIV/0!	2.76%	2.76%
08:00 AM	0	53	53	#DIV/0!	8.27%	8.27%
09:00 AM	0	48	48	#DIV/0!	7.56%	7.56%
10:00 AM	0	32	32	#DIV/0!	4.96%	4.96%
11:00 AM	0	32	32	#DIV/0!	5.04%	5.04%
12:00 PM	0	38	38	#DIV/0!	5.98%	5.98%
01:00 PM	0	47	47	#DIV/0!	7.32%	7.32%
02:00 PM	0	41	41	#DIV/0!	6.38%	6.38%
03:00 PM	0	38	38	#DIV/0!	5.91%	5.91%
04:00 PM	0	51	51	#DIV/0!	8.03%	8.03%
05:00 PM	0	50	50	#DIV/0!	7.87%	7.87%
06:00 PM	0	74	74	#DIV/0!	11.57%	11.57%
07:00 PM	0	36	36	#DIV/0!	5.59%	5.59%
08:00 PM	0	25	25	#DIV/0!	3.86%	3.86%
09:00 PM	0	15	15	#DIV/0!	2.36%	2.36%
10:00 PM	0	9	9	#DIV/0!	1.42%	1.42%
11:00 PM	0	5	5	#DIV/0!	0.79%	0.79%
12:00 AM	0	8	8	#DIV/0!	1.26%	1.26%
TOTALS	**0**	**635**	**635**	**#DIV/0!**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	20
COUNT LOCATION	LPGA West of Tomoka Farms Rd
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	1-Feb-11	**Start Time**	12:00 AM
End Date	2-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	11,374	**PEAK HOUR**	1,207
		PEAK END TIME	8:15 AM
		PEAK NB/EB MOVEMENT	647
		PEAK SB/WB MOVEMENT	561

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	10.61%	**D=**	53.6%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 20
COUNT LOCATION LPGA West of Tomoka Farms Rd
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	29	31	60	0.52%	0.53%	0.52%
02:00 AM	10	20	30	0.17%	0.35%	0.26%
03:00 AM	15	18	33	0.26%	0.31%	0.29%
04:00 AM	8	9	17	0.14%	0.15%	0.15%
05:00 AM	36	18	53	0.63%	0.30%	0.47%
06:00 AM	66	77	143	1.18%	1.33%	1.25%
07:00 AM	187	219	405	3.33%	3.79%	3.56%
08:00 AM	591	559	1,149	10.54%	9.68%	10.10%
09:00 AM	472	343	815	8.41%	5.95%	7.16%
10:00 AM	313	296	609	5.58%	5.12%	5.35%
11:00 AM	302	249	551	5.39%	4.32%	4.84%
12:00 PM	298	293	591	5.31%	5.08%	5.19%
01:00 PM	323	316	639	5.76%	5.47%	5.61%
02:00 PM	341	363	704	6.08%	6.28%	6.19%
03:00 PM	387	419	806	6.91%	7.25%	7.08%
04:00 PM	475	454	929	8.48%	7.86%	8.16%
05:00 PM	446	491	937	7.95%	8.51%	8.23%
06:00 PM	509	537	1,045	9.07%	9.30%	9.19%
07:00 PM	292	350	642	5.21%	6.07%	5.64%
08:00 PM	174	238	412	3.10%	4.13%	3.62%
09:00 PM	126	191	317	2.25%	3.31%	2.79%
10:00 PM	102	145	246	1.81%	2.50%	2.16%
11:00 PM	56	87	142	0.99%	1.50%	1.25%
12:00 AM	53	54	106	0.94%	0.93%	0.93%
TOTALS	**5,605**	**5,770**	**11,374**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	21
COUNT LOCATION	LPGA East of Tomoka Farms Rd
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	1-Feb-11	**Start Time**	12:00 AM
End Date	2-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	14,549	**PEAK HOUR**	1,407
		PEAK END TIME	9:15 AM
		PEAK NB/EB MOVEMENT	672
		PEAK SB/WB MOVEMENT	735

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	9.67%	**D=**	52.2%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 21
COUNT LOCATION LPGA East of Tomoka Farms Rd
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	53	59	111	0.76%	0.77%	0.76%
02:00 AM	33	36	68	0.47%	0.47%	0.47%
03:00 AM	12	23	35	0.17%	0.30%	0.24%
04:00 AM	14	22	36	0.20%	0.28%	0.24%
05:00 AM	9	12	21	0.12%	0.16%	0.14%
06:00 AM	33	22	54	0.47%	0.28%	0.37%
07:00 AM	65	87	152	0.94%	1.14%	1.04%
08:00 AM	177	260	437	2.54%	3.42%	3.00%
09:00 AM	588	674	1,262	8.46%	8.87%	8.67%
10:00 AM	557	583	1,139	8.01%	7.66%	7.83%
11:00 AM	391	422	813	5.63%	5.55%	5.59%
12:00 PM	385	407	792	5.54%	5.35%	5.44%
01:00 PM	405	414	819	5.82%	5.45%	5.63%
02:00 PM	441	447	888	6.35%	5.87%	6.10%
03:00 PM	457	511	968	6.57%	6.72%	6.65%
04:00 PM	516	586	1,102	7.42%	7.71%	7.57%
05:00 PM	581	585	1,166	8.36%	7.70%	8.01%
06:00 PM	588	631	1,218	8.46%	8.30%	8.37%
07:00 PM	661	660	1,320	9.51%	8.68%	9.07%
08:00 PM	400	413	813	5.76%	5.43%	5.58%
09:00 PM	227	272	499	3.27%	3.58%	3.43%
10:00 PM	168	222	390	2.41%	2.92%	2.68%
11:00 PM	126	160	286	1.81%	2.11%	1.97%
12:00 AM	67	98	165	0.96%	1.28%	1.13%
TOTALS	**6,948**	**7,601**	**14,549**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	22
COUNT LOCATION	LPGA West of Williamson Blvd
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	1-Feb-11	**Start Time**	12:00 AM
End Date	2-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	27,625	**PEAK HOUR**	2,781
		PEAK END TIME	8:30 AM
		PEAK NB/EB MOVEMENT	2,066
		PEAK SB/WB MOVEMENT	715

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	10.07%	**D=**	74.3%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 22
COUNT LOCATION LPGA West of Williamson Blvd
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	86	115	201	0.57%	0.92%	0.73%
02:00 AM	45	55	100	0.30%	0.44%	0.36%
03:00 AM	44	54	97	0.29%	0.43%	0.35%
04:00 AM	48	48	96	0.31%	0.38%	0.35%
05:00 AM	95	68	163	0.63%	0.54%	0.59%
06:00 AM	199	178	376	1.31%	1.42%	1.36%
07:00 AM	751	344	1,095	4.95%	2.76%	3.96%
08:00 AM	1,776	685	2,461	11.72%	5.49%	8.91%
09:00 AM	1,663	624	2,287	10.97%	5.00%	8.28%
10:00 AM	1,025	604	1,629	6.76%	4.84%	5.90%
11:00 AM	898	586	1,484	5.93%	4.70%	5.37%
12:00 PM	792	641	1,432	5.22%	5.14%	5.18%
01:00 PM	848	702	1,550	5.59%	5.63%	5.61%
02:00 PM	953	783	1,736	6.29%	6.28%	6.28%
03:00 PM	931	873	1,804	6.14%	7.00%	6.53%
04:00 PM	987	1,019	2,006	6.51%	8.17%	7.26%
05:00 PM	947	1,207	2,154	6.25%	9.68%	7.80%
06:00 PM	1,084	1,400	2,484	7.15%	11.22%	8.99%
07:00 PM	688	762	1,450	4.54%	6.11%	5.25%
08:00 PM	420	581	1,001	2.77%	4.66%	3.62%
09:00 PM	305	450	754	2.01%	3.60%	2.73%
10:00 PM	264	349	613	1.74%	2.79%	2.22%
11:00 PM	197	225	421	1.30%	1.80%	1.52%
12:00 AM	115	124	239	0.76%	0.99%	0.86%
TOTALS	**15,156**	**12,469**	**27,625**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	22
COUNT LOCATION	LPGA East of Williamson Blvd
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	1-Feb-11	**Start Time**	12:00 AM
End Date	2-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	21,208	**PEAK HOUR**	1,993
		PEAK END TIME	8:30 AM
		PEAK NB/EB MOVEMENT	1,222
		PEAK SB/WB MOVEMENT	772

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	9.40%	**D=**	61.3%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 22
COUNT LOCATION LPGA East of Williamson Blvd
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	95	87	182	0.87%	0.84%	0.86%
02:00 AM	77	63	140	0.71%	0.60%	0.66%
03:00 AM	32	33	65	0.29%	0.32%	0.30%
04:00 AM	31	31	62	0.29%	0.30%	0.29%
05:00 AM	19	24	42	0.17%	0.23%	0.20%
06:00 AM	49	64	113	0.45%	0.62%	0.53%
07:00 AM	110	183	292	1.01%	1.77%	1.38%
08:00 AM	867	592	1,458	7.97%	5.72%	6.87%
09:00 AM	823	587	1,410	7.57%	5.68%	6.65%
10:00 AM	861	575	1,436	7.92%	5.56%	6.77%
11:00 AM	712	531	1,243	6.55%	5.14%	5.86%
12:00 PM	648	534	1,182	5.96%	5.16%	5.57%
01:00 PM	596	584	1,180	5.48%	5.65%	5.56%
02:00 PM	651	615	1,266	5.98%	5.95%	5.97%
03:00 PM	710	644	1,354	6.53%	6.23%	6.38%
04:00 PM	718	740	1,458	6.60%	7.16%	6.87%
05:00 PM	749	854	1,603	6.88%	8.26%	7.56%
06:00 PM	788	971	1,759	7.24%	9.40%	8.29%
07:00 PM	776	998	1,774	7.14%	9.66%	8.36%
08:00 PM	498	574	1,072	4.58%	5.55%	5.05%
09:00 PM	336	393	728	3.09%	3.80%	3.43%
10:00 PM	300	305	605	2.76%	2.95%	2.85%
11:00 PM	255	214	469	2.34%	2.07%	2.21%
12:00 AM	178	142	320	1.64%	1.37%	1.51%
TOTALS	**10,875**	**10,334**	**21,208**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	23
COUNT LOCATION	Booth Rd N of SR 40
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	15-Feb-11	**Start Time**	12:00 AM
End Date	16-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	1,224	**PEAK HOUR**	225
		PEAK END TIME	9:45 PM
		PEAK NB/EB MOVEMENT	4
		PEAK SB/WB MOVEMENT	221

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	18.34%	**D=**	98.2%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 23
COUNT LOCATION Booth Rd N of SR 40
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	1	2	3	0.18%	0.21%	0.20%
02:00 AM	0	1	1	0.00%	0.11%	0.08%
03:00 AM	0	0	0	0.00%	0.00%	0.00%
04:00 AM	0	0	0	0.00%	0.00%	0.00%
05:00 AM	0	0	0	0.00%	0.00%	0.00%
06:00 AM	0	0	0	0.00%	0.00%	0.00%
07:00 AM	2	5	7	0.54%	0.53%	0.53%
08:00 AM	25	50	75	9.03%	5.23%	6.09%
09:00 AM	44	125	169	15.88%	13.15%	13.77%
10:00 AM	22	26	48	7.94%	2.75%	3.92%
11:00 AM	7	17	23	2.35%	1.74%	1.88%
12:00 PM	4	17	21	1.44%	1.80%	1.72%
01:00 PM	12	37	49	4.33%	3.85%	3.96%
02:00 PM	9	29	38	3.25%	3.01%	3.06%
03:00 PM	16	32	48	5.78%	3.38%	3.92%
04:00 PM	27	135	162	9.75%	14.20%	13.19%
05:00 PM	15	81	96	5.42%	8.55%	7.84%
06:00 PM	20	64	84	7.04%	6.76%	6.82%
07:00 PM	39	54	92	13.90%	5.65%	7.52%
08:00 PM	28	25	52	9.93%	2.59%	4.25%
09:00 PM	6	36	42	1.99%	3.80%	3.39%
10:00 PM	2	208	210	0.72%	21.91%	17.12%
11:00 PM	2	7	8	0.54%	0.69%	0.65%
12:00 AM	0	1	1	0.00%	0.11%	0.08%
TOTALS	**277**	**947**	**1,224**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	25
COUNT LOCATION	Booth Rd S of SR 40
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	15-Feb-11	**Start Time**	12:00 AM
End Date	16-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	876	**PEAK HOUR**	99
		PEAK END TIME	5:45 PM
		PEAK NB/EB MOVEMENT	50
		PEAK SB/WB MOVEMENT	50

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	11.31%	**D=**	50.0%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 25
COUNT LOCATION Booth Rd S of SR 40
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	1	1	2	0.22%	0.24%	0.23%
02:00 AM	2	2	3	0.33%	0.35%	0.34%
03:00 AM	1	1	1	0.11%	0.12%	0.11%
04:00 AM	2	2	4	0.44%	0.47%	0.46%
05:00 AM	1	1	2	0.22%	0.24%	0.23%
06:00 AM	5	5	9	1.00%	1.06%	1.03%
07:00 AM	10	10	19	2.11%	2.23%	2.17%
08:00 AM	32	32	64	7.11%	7.52%	7.31%
09:00 AM	34	34	68	7.56%	7.99%	7.77%
10:00 AM	26	26	52	5.78%	6.11%	5.94%
11:00 AM	20	20	39	4.33%	4.58%	4.45%
12:00 PM	26	26	52	5.78%	6.11%	5.94%
01:00 PM	22	22	43	4.78%	5.05%	4.91%
02:00 PM	32	24	56	7.11%	5.64%	6.40%
03:00 PM	35	22	56	7.67%	5.05%	6.40%
04:00 PM	37	33	70	8.11%	7.76%	7.94%
05:00 PM	35	35	70	7.78%	8.23%	8.00%
06:00 PM	46	46	91	10.11%	10.69%	10.39%
07:00 PM	34	34	67	7.44%	7.87%	7.65%
08:00 PM	16	16	32	3.56%	3.76%	3.66%
09:00 PM	17	17	33	3.67%	3.88%	3.77%
10:00 PM	13	13	25	2.78%	2.94%	2.86%
11:00 PM	8	8	15	1.67%	1.76%	1.71%
12:00 AM	2	2	3	0.33%	0.35%	0.34%
TOTALS	**450**	**426**	**876**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	26
COUNT LOCATION	Interchange Blvd S of SR 40
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	15-Feb-11	**Start Time**	12:00 AM
End Date	16-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	8,590	**PEAK HOUR**	641
		PEAK END TIME	6:15 PM
		PEAK NB/EB MOVEMENT	357
		PEAK SB/WB MOVEMENT	284

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	7.46%	**D=**	55.7%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 26
COUNT LOCATION Interchange Blvd S of SR 40
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	26	24	50	0.55%	0.63%	0.58%
02:00 AM	18	13	31	0.37%	0.34%	0.36%
03:00 AM	10	12	21	0.20%	0.30%	0.24%
04:00 AM	14	18	32	0.29%	0.46%	0.37%
05:00 AM	30	31	61	0.63%	0.80%	0.70%
06:00 AM	58	51	109	1.21%	1.33%	1.26%
07:00 AM	165	149	314	3.46%	3.90%	3.66%
08:00 AM	338	257	595	7.08%	6.72%	6.92%
09:00 AM	363	273	636	7.62%	7.14%	7.40%
10:00 AM	287	231	518	6.02%	6.03%	6.02%
11:00 AM	284	203	486	5.95%	5.30%	5.66%
12:00 PM	293	229	521	6.14%	5.98%	6.07%
01:00 PM	319	270	589	6.69%	7.06%	6.86%
02:00 PM	327	236	563	6.86%	6.17%	6.55%
03:00 PM	301	236	536	6.30%	6.16%	6.24%
04:00 PM	300	263	563	6.29%	6.87%	6.55%
05:00 PM	286	250	536	6.00%	6.53%	6.23%
06:00 PM	339	256	595	7.11%	6.68%	6.92%
07:00 PM	311	266	577	6.52%	6.96%	6.72%
08:00 PM	229	173	402	4.80%	4.53%	4.68%
09:00 PM	176	150	326	3.68%	3.92%	3.79%
10:00 PM	144	112	256	3.01%	2.93%	2.97%
11:00 PM	85	70	155	1.77%	1.83%	1.80%
12:00 AM	69	55	124	1.44%	1.44%	1.44%
TOTALS	**4,767**	**3,823**	**8,590**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

PROJECT	SR 40 Design Traffic Project
LOCATION CODE	27
COUNT LOCATION	Tomoka Farms Rd S of LPGA Blvd
GMB PROJECT NO.	06-129.34

TYPE OF COUNT:

48 HOUR VOLUME COUNT

TIME OF COUNT:

Start Date	15-Feb-11	**Start Time**	12:00 AM
End Date	16-Feb-11	**End Time**	12:00 AM

VOLUMES:

ADT	4,167	**PEAK HOUR**	368
		PEAK END TIME	1:30 PM
		PEAK NB/EB MOVEMENT	165
		PEAK SB/WB MOVEMENT	203

MEASURED TRAVEL CHARACTERISTICS:

"Peak to Daily Ratio"

K=	8.82%	**D=**	55.2%

HOURLY DISTRIBUTION OF TRAFFIC VOLUMES

PROJECT SR 40 Design Traffic Project
LOCATION CODE 27
COUNT LOCATION Tomoka Farms Rd S of LPGA Blvd
GMB PROJECT NO. 06-129.34

HOUR END AT	HOURLY VOLUME DIRECTION (NB/EB)	HOURLY VOLUME DIRECTION (SB/WB)	TOTAL VOLUMES BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB/EB)	DISTRIBUTION PERCENT DIRECTION (SB/WB)	TOTAL PERCENT BOTH DIRECTIONS
01:00 AM	6	4	9	0.29%	0.15%	0.22%
02:00 AM	2	1	2	0.08%	0.02%	0.05%
03:00 AM	1	3	4	0.03%	0.13%	0.08%
04:00 AM	2	4	6	0.08%	0.18%	0.13%
05:00 AM	7	6	13	0.37%	0.24%	0.30%
06:00 AM	9	11	20	0.47%	0.46%	0.47%
07:00 AM	24	48	72	1.24%	2.12%	1.72%
08:00 AM	60	141	200	3.13%	6.20%	4.80%
09:00 AM	100	226	326	5.26%	9.98%	7.82%
10:00 AM	102	165	267	5.37%	7.26%	6.40%
11:00 AM	118	166	284	6.21%	7.33%	6.82%
12:00 PM	138	176	314	7.26%	7.75%	7.52%
01:00 PM	151	193	344	7.94%	8.52%	8.26%
02:00 PM	170	183	353	8.94%	8.06%	8.46%
03:00 PM	157	197	353	8.23%	8.67%	8.47%
04:00 PM	183	169	352	9.60%	7.46%	8.44%
05:00 PM	170	176	346	8.94%	7.75%	8.29%
06:00 PM	181	176	357	9.52%	7.77%	8.57%
07:00 PM	128	83	211	6.73%	3.66%	5.06%
08:00 PM	64	41	105	3.37%	1.81%	2.52%
09:00 PM	57	33	90	3.00%	1.46%	2.16%
10:00 PM	36	28	64	1.89%	1.24%	1.54%
11:00 PM	20	22	42	1.05%	0.95%	1.00%
12:00 AM	19	19	38	1.00%	0.84%	0.91%
TOTALS	**1,901**	**2,266**	**4,167**	**100.00%**	**100.00%**	**100.00%**

TRAFFIC COUNT DATA

FINANCE NO: SR 40 Design Traffic Project
LOCATION CODE: 1
COUNT LOCATION: Hand Ave. E. of Williamson Blvd

TYPE OF COUNT:

48 Hour Classification Count

TIME OF COUNT:

Start Date: 1/25/2011 Start Time: Midnight
End Date: 1/26/2011 End Time: Midnight

VOLUMES:

		Peak Hour Begin Time:	3:30 PM
Average Daily:	8,290	Average Peak Hour:	777
Daily Truck Avg:	249	Max Hour Truck Avg:	34
		Peak Hour Truck Avg:	24

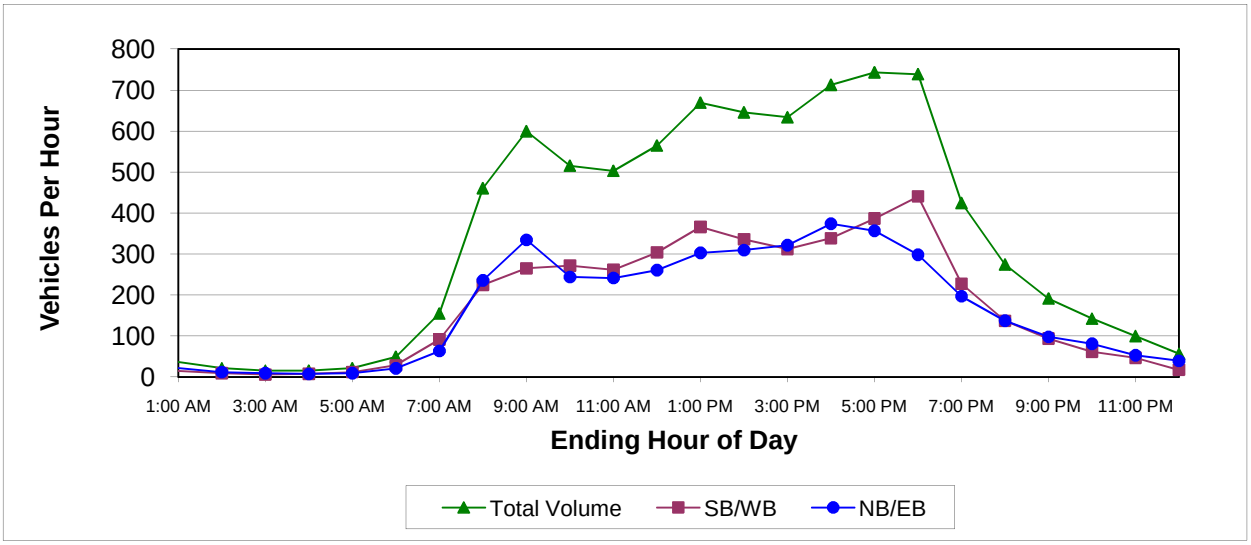
TRAVEL CHARACTERISTICS:

K MEASURED		D MEASURED	
K=	9.4%	D=	51.4%
T Max Hour	4.4%	T daily	3.0%
T med (max)	3.3%	T med Daily	2.4%
T heavy (max)	1.0%	T heavy Daily	0.6%
T Peak Hour	3.0%		
T med Peak Hour	2.3%		
T heavy Peak Hour	0.8%		

HOURLY DISTRIBUTIONS OF TRAFFIC VOLUMES

FINANCE NO: SR 40 Design Traffic Project
LOCATION CODE: 1
COUNT LOCATION: Hand Ave. E. of Williamson Blvd

HOUR ENDING AT	HOURLY VOLUME DIRECTION (NB OR EB)	HOURLY VOLUME DIRECTION (SB OR WB)	TOTAL VOLUME BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB OR EB)	DISTRIBUTION PERCENT DIRECTION (SB OR WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	22	15	37	0.55%	0.34%	0.44%
2:00 AM	12	10	22	0.30%	0.22%	0.26%
3:00 AM	10	6	16	0.24%	0.14%	0.19%
4:00 AM	8	8	16	0.19%	0.19%	0.19%
5:00 AM	10	12	22	0.24%	0.28%	0.26%
6:00 AM	21	29	50	0.52%	0.67%	0.60%
7:00 AM	64	92	155	1.58%	2.15%	1.87%
8:00 AM	236	225	461	5.84%	5.28%	5.55%
9:00 AM	335	265	600	8.30%	6.22%	7.23%
10:00 AM	244	272	516	6.06%	6.37%	6.22%
11:00 AM	242	262	503	5.99%	6.14%	6.07%
12:00 PM	261	304	565	6.46%	7.14%	6.81%
1:00 PM	303	366	669	7.52%	8.59%	8.07%
2:00 PM	310	336	646	7.68%	7.89%	7.79%
3:00 PM	322	312	634	7.98%	7.32%	7.64%
4:00 PM	374	339	713	9.28%	7.95%	8.59%
5:00 PM	357	387	743	8.85%	9.07%	8.96%
6:00 PM	298	441	739	7.40%	10.34%	8.91%
7:00 PM	197	228	425	4.89%	5.34%	5.12%
8:00 PM	138	137	275	3.41%	3.22%	3.31%
9:00 PM	98	94	192	2.43%	2.19%	2.31%
10:00 PM	81	62	143	2.01%	1.44%	1.72%
11:00 PM	53	47	100	1.32%	1.10%	1.21%
12:00 AM	40	18	57	0.98%	0.41%	0.69%
TOTALS	4,030	4,261	8,290	100.0%	100.0%	100.0%



ANNUAL VEHICLE CLASSIFICATION REPORT

FINANCE NO: SR 40 Design Traffic Project

LOCATION CODE: 1

COUNT LOCATION: Hand Ave. E. of Williamson Blvd

Vehicle Classification	Vehicle Type	Average Daily Statistics	
		Volume	Percentage
Class 1	Motorcycles	61	0.74%
Class 2	Cars	6,942	83.70%
Class 3	Pick-Ups & Vans	961	11.59%
Class 4	Buses	22	0.27%
Class 5	2 Axle, Single Unit Trucks	175	2.11%
Class 6	3 Axle, Single Unit Trucks	12	0.14%
Class 7	4 Axle, Single Unit Trucks	1	0.01%
Class 8	2 Axle Trctr with 1 or 2 Axle Trlr, 3 Axle Trctr with 1 Axle	32	0.39%
Class 9	3 Axle Tractor with 2 Axle Trailer	8	0.10%
Class 10	3 Axle Tractor with 3 Axle Trailer	0	0.00%
Class 11	5 Axle Multi Trailer	1	0.01%
Class 12	6 Axle Multi Trailer	0	0.00%
Class 13	7 or more Axles	1	0.01%
Class 14	Not Used	0	0.00%
Class 15	Other	78	0.94%
TOTALS		**8,294**	**100.00%**

TRAFFIC COUNT DATA

FINANCE NO: SR 40 Design Traffic Project
LOCATION CODE: 2
COUNT LOCATION: LPGA Blvd. W. of Tymber Creek Extension

TYPE OF COUNT:

48 Hour Classification Count

TIME OF COUNT:

Start Date:	2/1/2011	Start Time:	Midnight
End Date:	2/2/2011	End Time:	Midnight

VOLUMES:

		Peak Hour Begin Time:	7:15 AM
Average Daily:	10,779	Average Peak Hour:	1,132
Daily Truck Avg:	562	Max Hour Truck Avg:	66
		Peak Hour Truck Avg:	48

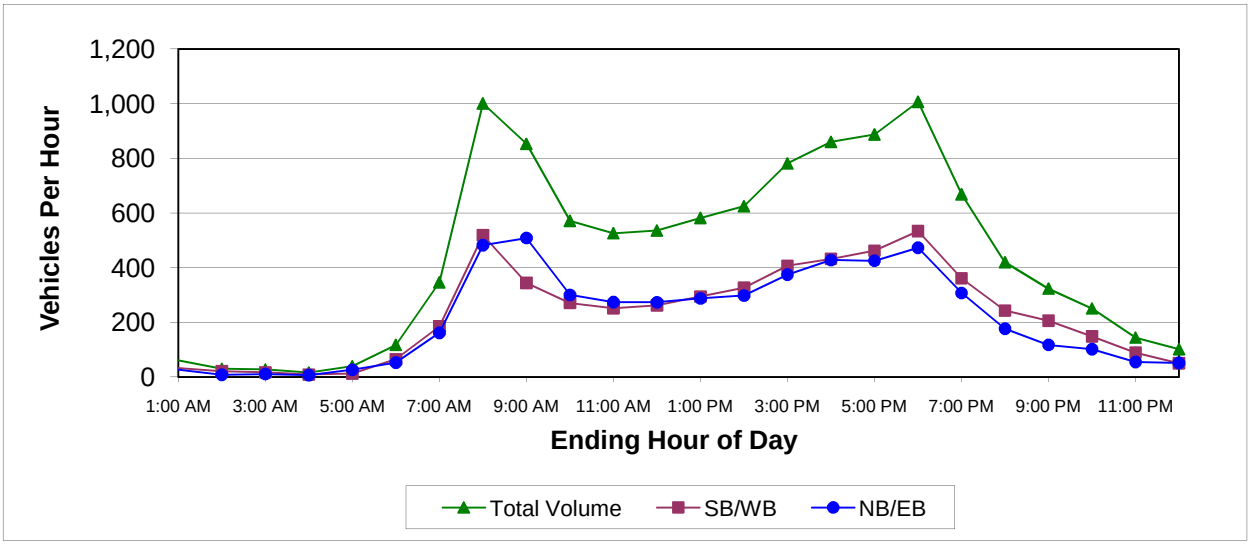
TRAVEL CHARACTERISTICS:

K MEASURED		D MEASURED	
K=	10.5%	D=	52.5%
T Max Hour	5.8%	T daily	5.2%
T med (max)	4.7%	T med Daily	4.2%
T heavy (max)	1.1%	T heavy Daily	1.0%
T Peak Hour	4.2%		
T med Peak Hour	3.7%		
T heavy Peak Hour	0.5%		

HOURLY DISTRIBUTIONS OF TRAFFIC VOLUMES

FINANCE NO: SR 40 Design Traffic Project
LOCATION CODE: 2
COUNT LOCATION: LPGA Blvd. W. of Tymber Creek Extension

HOUR ENDING AT	HOURLY VOLUME DIRECTION (NB OR EB)	HOURLY VOLUME DIRECTION (SB OR WB)	TOTAL VOLUME BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB OR EB)	DISTRIBUTION PERCENT DIRECTION (SB OR WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	28	33	61	0.53%	0.59%	0.56%
2:00 AM	9	22	30	0.16%	0.39%	0.28%
3:00 AM	11	17	28	0.21%	0.31%	0.26%
4:00 AM	7	9	16	0.13%	0.16%	0.15%
5:00 AM	27	13	40	0.51%	0.23%	0.37%
6:00 AM	53	65	118	1.00%	1.17%	1.09%
7:00 AM	162	185	347	3.09%	3.33%	3.21%
8:00 AM	483	519	1,001	9.22%	9.35%	9.29%
9:00 AM	509	345	853	9.72%	6.21%	7.91%
10:00 AM	301	271	572	5.75%	4.88%	5.30%
11:00 AM	274	252	526	5.24%	4.54%	4.88%
12:00 PM	274	263	536	5.23%	4.73%	4.97%
1:00 PM	288	295	582	5.50%	5.31%	5.40%
2:00 PM	298	327	625	5.70%	5.89%	5.80%
3:00 PM	375	407	782	7.16%	7.34%	7.25%
4:00 PM	428	433	861	8.18%	7.80%	7.98%
5:00 PM	426	462	888	8.13%	8.33%	8.23%
6:00 PM	473	534	1,007	9.04%	9.63%	9.34%
7:00 PM	308	361	669	5.88%	6.51%	6.20%
8:00 PM	177	243	420	3.38%	4.38%	3.90%
9:00 PM	118	206	324	2.25%	3.71%	3.00%
10:00 PM	102	149	251	1.95%	2.69%	2.33%
11:00 PM	55	90	145	1.05%	1.61%	1.34%
12:00 AM	52	51	102	0.98%	0.91%	0.95%
TOTALS	5,231	5,548	10,779	100.0%	100.0%	100.0%



ANNUAL VEHICLE CLASSIFICATION REPORT

FINANCE NO: SR 40 Design Traffic Project

LOCATION CODE: 2

COUNT LOCATION: LPGA Blvd. W. of Tymber Creek Extension

Vehicle Classification	Vehicle Type	Average Daily Statistics	
		Volume	Percentage
Class 1	Motorcycles	0	0.00%
Class 2	Cars	8,143	75.54%
Class 3	Pick-Ups & Vans	2,075	19.25%
Class 4	Buses	65	0.60%
Class 5	2 Axle, Single Unit Trucks	386	3.58%
Class 6	3 Axle, Single Unit Trucks	0	0.00%
Class 7	4 Axle, Single Unit Trucks	0	0.00%
Class 8	2 Axle Trctr with 1 or 2 Axle Trlr, 3 Axle Trctr with 1 Axle	108	1.00%
Class 9	3 Axle Tractor with 2 Axle Trailer	0	0.00%
Class 10	3 Axle Tractor with 3 Axle Trailer	0	0.00%
Class 11	5 Axle Multi Trailer	3	0.03%
Class 12	6 Axle Multi Trailer	0	0.00%
Class 13	7 or more Axles	0	0.00%
Class 14	Not Used	0	0.00%
Class 15	Other	0	0.00%
TOTALS		**10,780**	**100.00%**

TRAFFIC COUNT DATA

FINANCE NO:	SR 40 Design Traffic Project Supplement
LOCATION CODE:	3
COUNT LOCATION:	SR 40 E. of Cone Rd

TYPE OF COUNT:

48 Hour Classification Count

TIME OF COUNT:

Start Date:	10/11/2011	Start Time:	Midnight
End Date:	10/12/2011	End Time:	Midnight

VOLUMES:

		Peak Hour Begin Time:	5:15 PM
Average Daily:	7,820	Average Peak Hour:	688
Daily Truck Avg:	864	Max Hour Truck Avg:	85
		Peak Hour Truck Avg:	48

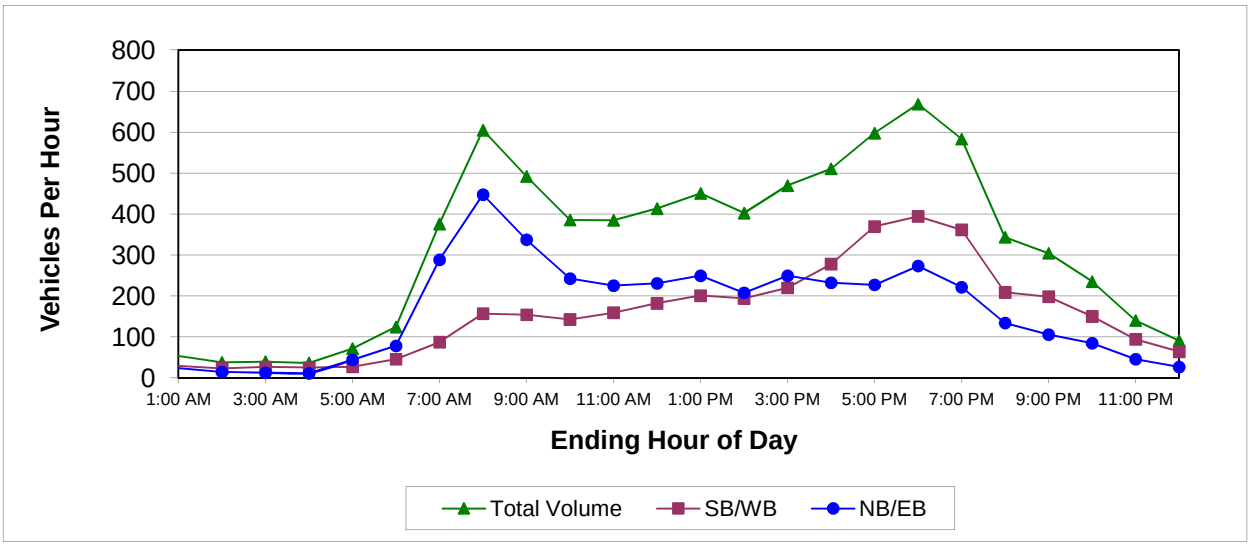
TRAVEL CHARACTERISTICS:

K MEASURED		D MEASURED	
K=	8.8%	D=	61.1%
T Max Hour	12.4%	T daily	11.0%
T med (max)	6.6%	T med Daily	5.6%
T heavy (max)	5.7%	T heavy Daily	5.5%
T Peak Hour	6.9%		
T med Peak Hour	4.4%		
T heavy Peak Hour	2.5%		

HOURLY DISTRIBUTIONS OF TRAFFIC VOLUMES

FINANCE NO: SR 40 Design Traffic Project Supplement
LOCATION CODE 3
COUNT LOCATION: SR 40 E. of Cone Rd
SR 40 E. of Cone Rd

HOUR ENDING AT	HOURLY VOLUME DIRECTION (NB OR EB)	HOURLY VOLUME DIRECTION (SB OR WB)	TOTAL VOLUME BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB OR EB)	DISTRIBUTION PERCENT DIRECTION (SB OR WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	25	30	54	0.61%	0.78%	0.69%
2:00 AM	15	24	39	0.37%	0.62%	0.49%
3:00 AM	13	27	40	0.32%	0.71%	0.51%
4:00 AM	12	26	37	0.29%	0.67%	0.47%
5:00 AM	45	28	72	1.11%	0.72%	0.92%
6:00 AM	79	46	125	1.95%	1.21%	1.59%
7:00 AM	289	88	376	7.18%	2.30%	4.81%
8:00 AM	448	157	605	11.13%	4.13%	7.73%
9:00 AM	338	155	492	8.40%	4.07%	6.29%
10:00 AM	243	143	386	6.03%	3.76%	4.93%
11:00 AM	226	160	385	5.61%	4.20%	4.92%
12:00 PM	231	183	414	5.75%	4.80%	5.29%
1:00 PM	250	201	451	6.21%	5.29%	5.76%
2:00 PM	208	195	403	5.17%	5.12%	5.15%
3:00 PM	250	220	470	6.21%	5.79%	6.00%
4:00 PM	233	278	511	5.78%	7.32%	6.53%
5:00 PM	228	370	598	5.66%	9.74%	7.64%
6:00 PM	274	395	668	6.80%	10.38%	8.54%
7:00 PM	222	362	583	5.51%	9.51%	7.46%
8:00 PM	135	209	344	3.35%	5.50%	4.39%
9:00 PM	106	199	305	2.64%	5.22%	3.89%
10:00 PM	85	151	236	2.11%	3.96%	3.01%
11:00 PM	46	95	141	1.14%	2.49%	1.80%
12:00 AM	27	65	92	0.67%	1.70%	1.17%
TOTALS	4,020	3,800	7,820	100.0%	100.0%	100.0%



ANNUAL VEHICLE CLASSIFICATION REPORT

FINANCE NO: SR 40 Design Traffic Project Supplement

LOCATION CODE: 3

COUNT LOCATION: SR 40 E. of Cone Rd

SR 40 E. of Cone Rd

Vehicle Classification	Vehicle Type	Average Daily Statistics	
		Volume	Percentage
Class 1	Motorcycles	360	4.60%
Class 2	Cars	4,647	59.40%
Class 3	Pick-Ups & Vans	1,661	21.23%
Class 4	Buses	59	0.75%
Class 5	2 Axle, Single Unit Trucks	378	4.83%
Class 6	3 Axle, Single Unit Trucks	32	0.41%
Class 7	4 Axle, Single Unit Trucks	2	0.03%
Class 8	2 Axle Trctr with 1 or 2 Axle Trlr, 3 Axle Trctr with 1 Axle	173	2.21%
Class 9	3 Axle Tractor with 2 Axle Trailer	201	2.57%
Class 10	3 Axle Tractor with 3 Axle Trailer	5	0.06%
Class 11	5 Axle Multi Trailer	10	0.13%
Class 12	6 Axle Multi Trailer	3	0.04%
Class 13	7 or more Axles	3	0.04%
Class 14	Not Used	289	3.69%
Class 15	Other	0	0.00%
TOTALS		**7,823**	**100.00%**

TRAFFIC COUNT DATA

FINANCE NO: SR 40 Design Traffic Project
LOCATION CODE: 3
COUNT LOCATION: SR 40 E. of Breakway Trail

TYPE OF COUNT:

48 Hour Classification Count

TIME OF COUNT:

Start Date: 1/25/2011 Start Time: Midnight
End Date: 1/26/2011 End Time: Midnight

VOLUMES:

		Peak Hour Begin Time:	5:00 PM
Average Daily:	12,180	Average Peak Hour:	1,103
Daily Truck Avg:	1,254	Max Hour Truck Avg:	128
		Peak Hour Truck Avg:	86

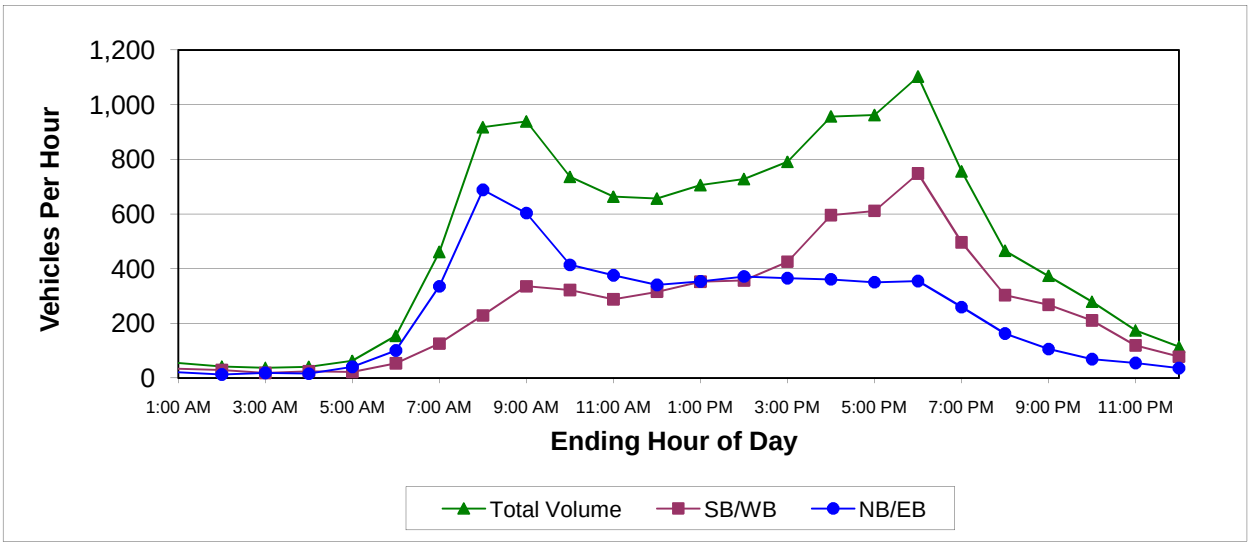
TRAVEL CHARACTERISTICS:

K MEASURED		D MEASURED	
K=	9.1%	D=	67.8%
T Max Hour	11.6%	T daily	10.3%
T med (max)	6.5%	T med Daily	5.9%
T heavy (max)	5.1%	T heavy Daily	4.4%
T Peak Hour	7.8%		
T med Peak Hour	4.7%		
T heavy Peak Hour	3.1%		

HOURLY DISTRIBUTIONS OF TRAFFIC VOLUMES

FINANCE NO: SR 40 Design Traffic Project
LOCATION CODE: 3
COUNT LOCATION: SR 40 E. of Breakway Trail

HOUR ENDING AT	HOURLY VOLUME DIRECTION (NB OR EB)	HOURLY VOLUME DIRECTION (SB OR WB)	TOTAL VOLUME BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB OR EB)	DISTRIBUTION PERCENT DIRECTION (SB OR WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	21	35	56	0.36%	0.54%	0.46%
2:00 AM	13	30	43	0.22%	0.46%	0.35%
3:00 AM	19	19	38	0.32%	0.30%	0.31%
4:00 AM	16	25	41	0.28%	0.39%	0.34%
5:00 AM	41	22	63	0.71%	0.35%	0.52%
6:00 AM	101	54	155	1.73%	0.85%	1.27%
7:00 AM	336	126	462	5.77%	1.98%	3.79%
8:00 AM	689	229	918	11.84%	3.60%	7.53%
9:00 AM	604	336	939	10.38%	5.27%	7.71%
10:00 AM	414	322	736	7.12%	5.06%	6.04%
11:00 AM	376	288	664	6.46%	4.52%	5.45%
12:00 PM	341	316	657	5.87%	4.96%	5.39%
1:00 PM	354	353	706	6.08%	5.54%	5.80%
2:00 PM	372	357	728	6.39%	5.60%	5.98%
3:00 PM	366	426	791	6.29%	6.68%	6.49%
4:00 PM	361	596	957	6.21%	9.36%	7.86%
5:00 PM	351	612	962	6.03%	9.61%	7.90%
6:00 PM	355	748	1,103	6.11%	11.75%	9.06%
7:00 PM	260	497	756	4.46%	7.80%	6.21%
8:00 PM	163	304	466	2.80%	4.77%	3.83%
9:00 PM	106	268	374	1.82%	4.21%	3.07%
10:00 PM	69	211	280	1.19%	3.31%	2.29%
11:00 PM	55	120	175	0.95%	1.88%	1.43%
12:00 AM	37	78	115	0.63%	1.23%	0.94%
TOTALS	5,814	6,366	12,180	100.0%	100.0%	100.0%



ANNUAL VEHICLE CLASSIFICATION REPORT

FINANCE NO: SR 40 Design Traffic Project

LOCATION CODE: 3

COUNT LOCATION: SR 40 E. of Breakway Trail

Vehicle Classification	Vehicle Type	Average Daily Statistics	
		Volume	Percentage
Class 1	Motorcycles	112	0.92%
Class 2	Cars	8,084	66.36%
Class 3	Pick-Ups & Vans	2,731	22.42%
Class 4	Buses	86	0.71%
Class 5	2 Axle, Single Unit Trucks	631	5.18%
Class 6	3 Axle, Single Unit Trucks	43	0.35%
Class 7	4 Axle, Single Unit Trucks	9	0.07%
Class 8	2 Axle Trctr with 1 or 2 Axle Trlr, 3 Axle Trctr with 1 Axle	245	2.01%
Class 9	3 Axle Tractor with 2 Axle Trailer	193	1.58%
Class 10	3 Axle Tractor with 3 Axle Trailer	24	0.20%
Class 11	5 Axle Multi Trailer	13	0.11%
Class 12	6 Axle Multi Trailer	4	0.03%
Class 13	7 or more Axles	7	0.06%
Class 14	Not Used	0	0.00%
Class 15	Other	0	0.00%
TOTALS		**12,182**	**100.00%**

TRAFFIC COUNT DATA

FINANCE NO: SR 40 Design Traffic Project
LOCATION CODE: 4
COUNT LOCATION: Willaimson Blvd S. of SR 40

TYPE OF COUNT:

48 Hour Classification Count

TIME OF COUNT:

Start Date: 2/15/2011 Start Time: Midnight
End Date: 2/16/2011 End Time: Midnight

VOLUMES:

		Peak Hour Time:	4:45 PM
Average Daily:	19,004	Average Peak Hour:	1,594
Daily Truck Avg:	1,446	Max Hour Truck Avg:	156
		Peak Hour Truck Avg:	140

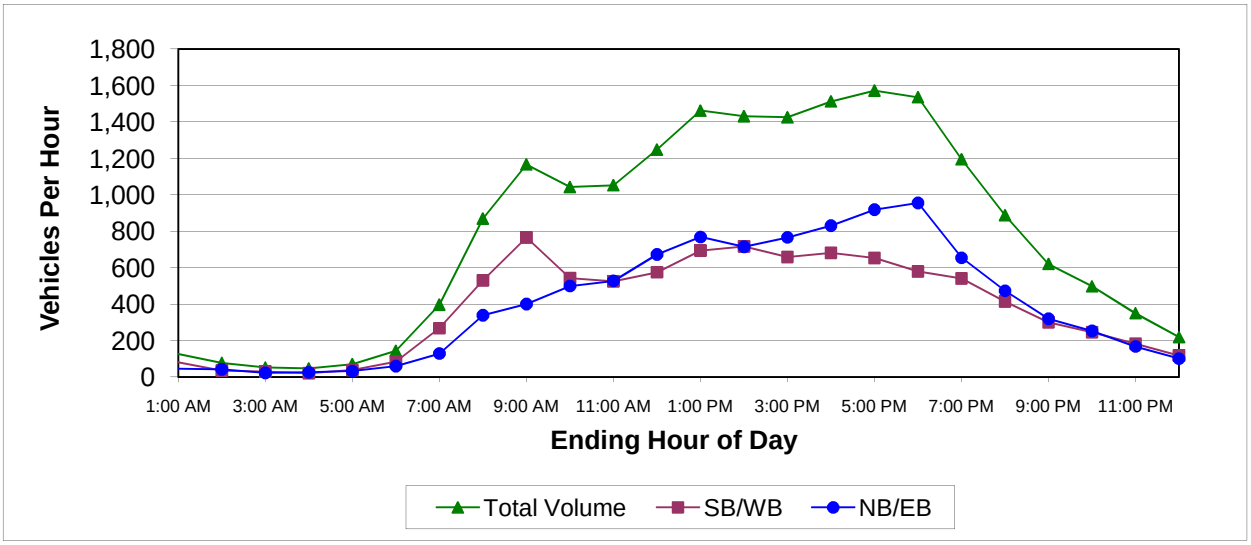
TRAVEL CHARACTERISTICS:

K MEASURED		D MEASURED	
K=	8.4%	D=	62.4%
T Max Hour	9.8%	T daily	7.6%
T med (max)	7.9%	T med Daily	6.3%
T heavy (max)	1.9%	T heavy Daily	1.3%
T Peak Hour	8.8%		
T med Peak Hour	7.3%		
T heavy Peak Hour	1.5%		

HOURLY DISTRIBUTIONS OF TRAFFIC VOLUMES

FINANCE NO: SR 40 Design Traffic Project
LOCATION CODE: 4
COUNT LOCATION: Willaimson Blvd S. of SR 40

HOUR ENDING AT	HOURLY VOLUME DIRECTION (NB OR EB)	HOURLY VOLUME DIRECTION (SB OR WB)	TOTAL VOLUME BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB OR EB)	DISTRIBUTION PERCENT DIRECTION (SB OR WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	45	82	127	0.46%	0.88%	0.67%
2:00 AM	42	36	78	0.43%	0.38%	0.41%
3:00 AM	23	30	53	0.24%	0.32%	0.28%
4:00 AM	26	22	47	0.26%	0.23%	0.25%
5:00 AM	33	38	71	0.33%	0.41%	0.37%
6:00 AM	60	85	144	0.61%	0.91%	0.76%
7:00 AM	129	268	397	1.33%	2.89%	2.09%
8:00 AM	339	531	870	3.49%	5.71%	4.58%
9:00 AM	401	766	1,167	4.12%	8.25%	6.14%
10:00 AM	500	544	1,043	5.14%	5.85%	5.49%
11:00 AM	528	525	1,053	5.43%	5.65%	5.54%
12:00 PM	673	575	1,248	6.92%	6.19%	6.57%
1:00 PM	769	694	1,462	7.91%	7.47%	7.69%
2:00 PM	715	717	1,432	7.36%	7.72%	7.53%
3:00 PM	767	659	1,426	7.89%	7.10%	7.50%
4:00 PM	831	682	1,513	8.55%	7.34%	7.96%
5:00 PM	919	654	1,572	9.45%	7.04%	8.27%
6:00 PM	956	580	1,536	9.83%	6.25%	8.08%
7:00 PM	655	541	1,195	6.73%	5.82%	6.29%
8:00 PM	474	415	888	4.87%	4.46%	4.67%
9:00 PM	320	301	621	3.29%	3.24%	3.27%
10:00 PM	253	246	498	2.60%	2.64%	2.62%
11:00 PM	168	183	350	1.72%	1.97%	1.84%
12:00 AM	101	118	219	1.04%	1.27%	1.15%
TOTALS	9,720	9,284	19,004	100.0%	100.0%	100.0%



ANNUAL VEHICLE CLASSIFICATION REPORT

FINANCE NO: SR 40 Design Traffic Project

LOCATION CODE: 4

COUNT LOCATION: Willaimson Blvd S. of SR 40

Vehicle Classification	Vehicle Type	Average Daily Statistics	
		Volume	Percentage
Class 1	Motorcycles	77	0.41%
Class 2	Cars	10,641	55.98%
Class 3	Pick-Ups & Vans	6,841	35.99%
Class 4	Buses	88	0.46%
Class 5	2 Axle, Single Unit Trucks	1,119	5.89%
Class 6	3 Axle, Single Unit Trucks	21	0.11%
Class 7	4 Axle, Single Unit Trucks	2	0.01%
Class 8	2 Axle Trctr with 1 or 2 Axle Trlr, 3 Axle Trctr with 1 Axle	182	0.96%
Class 9	3 Axle Tractor with 2 Axle Trailer	11	0.06%
Class 10	3 Axle Tractor with 3 Axle Trailer	10	0.05%
Class 11	5 Axle Multi Trailer	9	0.05%
Class 12	6 Axle Multi Trailer	5	0.03%
Class 13	7 or more Axles	2	0.01%
Class 14	Not Used	0	0.00%
Class 15	Other	0	0.00%
TOTALS		**19,008**	**100.00%**

VOLUSIA COUNTY
2010
TRAFFIC DATA

ROAD NAME	LOCATION	2010 Raw Data	2010 Date	2010 Raw AADT	2010 County AADT
Hand Av	E of Williamson Bl	8780	04/05/10	8341	8340
Hand Av	E of Clyde Morris Bl	14216	04/05/10	13505	13510
Hand Av	W of SR 5A/Nova Rd	15949	04/05/10	15152	15150
Hand Av	E of SR 5A/Nova Rd	8069	04/05/10	7666	7670
LPGA Bl (DB)	N of US 92	7008	03/29/10	6588	6590
LPGA Bl (DB)	W of Champions Dr	7646	06/14/10	7875	7880
LPGA Bl (DB)	W of Williamson Bl	25186	04/12/10	24179	24180
LPGA Bl (DB)	W of Clyde Morris Bl	21677	04/19/10	21027	21030
LPGA Bl (DB)	W of Jimmy Ann Dr	14281	04/19/10	13853	13850
LPGA Bl (DB)	E of Jimmy Ann Dr	16359	04/12/10	15705	15700
LPGA Bl (CO)	E of Derbyshire Rd	13621	04/12/10	13076	13080
LPGA Bl (HH)	E of Nova Rd	10685	04/12/10	10258	10260
Tomoka Farms Rd Extension	S of LPGA Blvd	3737	06/14/10	3849	3850
Tomoka Farms Rd Extension	N of US 92	3287	06/14/10	3386	3390
Tomoka Farms Rd ***Note: Location has changed.***	S of Bellevue Av	5800	06/14/10	5974	5970
Tomoka Farms Rd	N of Halifax Dr	5472	05/17/10	5527	5530
Tomoka Farms Rd	N of Taylor Rd	5907	06/01/10	6025	6030
Tomoka Farms Rd	S of Taylor Rd	9086	06/01/10	9268	9270
Tomoka Farms Rd	N of SR 44	4655	06/07/10	4795	4790
Tymber Creek Rd	N of Airport Rd	1916	04/05/10	1820	1820
Tymber Creek Rd	S of Airport Rd	8674	04/05/10	8240	8240
Tymber Creek Rd	N of SR 40	12966	04/05/10	12318	12320
Tymber Creek Rd	S of SR 40	784	04/05/10	745	740
Williamson Bl	S of SR 40	20142	04/05/10	19135	19130
Williamson Bl	N of LPGA Bl (11th St)	13555	04/12/10	13013	13010
Williamson Bl	S of LPGA Bl (11th St)	15257	04/12/10	14647	14650
Williamson Bl	S of Mason Av	13083	06/07/10	13475	13480
Williamson Bl	N of SR 600/US 92	15373	06/07/10	15834	15830
Williamson Bl	S of SR 600/US 92	10185	06/14/10	10491	10490
Williamson Bl	N of Bellevue Av Ext	13297	06/14/10	13696	13700
Williamson Bl	N of SR 400/Beville Rd	15419	05/10/10	15419	15420
Williamson Bl	S of SR 400/Beville Rd	14496	05/10/10	14496	14500
Williamson Bl	N of Willow Run Bl	14336	05/18/10	14479	14480
Williamson Bl	S of Willow Run Bl	12795	05/24/10	13051	13050
Williamson Bl	N of Taylor Rd	14380	05/24/10	14668	14670

Roadway Count Summary

GMB Engineers & Planners, Inc.

County	Volusia	**City**	Ormond Beach
Intersection	Cone Rd	&	SR 40
Date	October 11, 2011		**All Vehicles**
Time Period	AM Peak Hour		

GMB Project #: 11-016.06

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	7	0	0
7:15 - 7:30	0	0	0	10	0	1
7:30 - 7:45	0	0	0	18	0	2
7:45 - 8:00	0	0	0	5	0	0
8:00 - 8:15	0	0	0	14	0	1
8:15 - 8:30	0	0	0	6	0	1
8:30 - 8:45	0	0	0	3	0	1
8:45 - 9:00	0	0	0	8	0	1
TOTAL	0	0	0	71	0	7

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	86	0	0	29	1
7:15 - 7:30	0	112	0	0	41	2
7:30 - 7:45	1	113	0	0	37	0
7:45 - 8:00	0	99	0	0	33	0
8:00 - 8:15	0	94	0	0	41	2
8:15 - 8:30	0	94	0	0	28	4
8:30 - 8:45	1	82	0	0	26	3
8:45 - 9:00	0	75	0	0	22	1
TOTAL	2	755	0	0	257	13

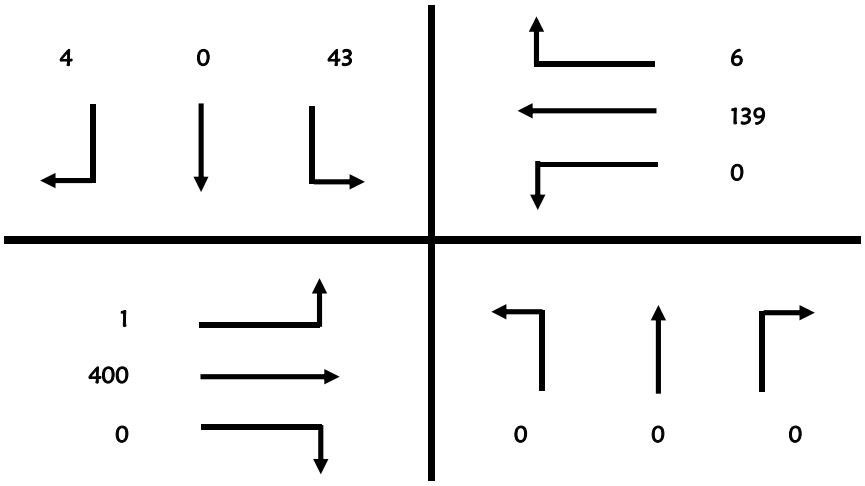
North / South
Cone Rd

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.87

Total Pk Hr Voume
593



Roadway Count Summary

GMB Engineers & Planners, Inc.

County	Volusia	**City**	Ormond Beach
Intersection	Cone Rd	&	SR 40
Date	October 11, 2011		
Time Period	AM Peak Hour	**Trucks**	

GMB Project #: 11-016.06

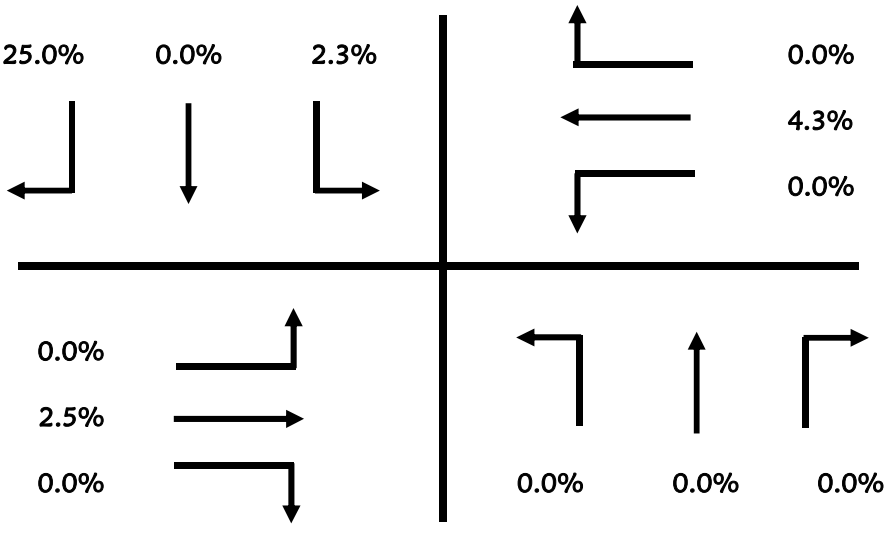
Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	0	0	0
7:15 - 7:30	0	0	0	0	0	0
7:30 - 7:45	0	0	0	1	0	0
7:45 - 8:00	0	0	0	0	0	0
8:00 - 8:15	0	0	0	0	0	1
8:15 - 8:30	0	0	0	0	0	0
8:30 - 8:45	0	0	0	0	0	0
8:45 - 9:00	0	0	0	0	0	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	3	0	0	2	0
7:15 - 7:30	0	2	0	0	2	1
7:30 - 7:45	0	2	0	0	2	0
7:45 - 8:00	0	3	0	0	1	0
8:00 - 8:15	0	1	0	0	3	0
8:15 - 8:30	0	4	0	0	0	0
8:30 - 8:45	0	3	0	0	0	0
8:45 - 9:00	0	6	0	0	2	0

North / South
Cone Rd

East / West
SR 40

Peak Hour
7:30 - 8:30



Roadway Count Summary

GMB Engineers & Planners, Inc.

County	Volusia	**City**	Ormond Beach
Intersection	Cone Rd	&	SR 40
Date	October 11, 2011		**All Vehicles**
Time Period	PM Peak Hour		

GMB Project #: 11-016.06

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	2	0	2
4:15 - 4:30	0	0	0	2	0	0
4:30 - 4:45	0	0	0	1	0	0
4:45 - 5:00	0	0	0	5	0	0
5:00 - 5:15	0	0	0	4	0	1
5:15 - 5:30	0	0	0	3	0	3
5:30 - 5:45	0	0	0	9	0	0
5:45 - 6:00	0	0	0	6	0	0
TOTAL	0	0	0	32	0	6

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	57	0	0	87	5
4:15 - 4:30	2	53	0	0	82	11
4:30 - 4:45	1	56	0	0	92	4
4:45 - 5:00	1	45	0	0	89	10
5:00 - 5:15	0	55	0	0	102	11
5:15 - 5:30	1	61	0	0	87	5
5:30 - 5:45	1	60	0	0	94	8
5:45 - 6:00	0	53	0	0	113	16
TOTAL	6	440	0	0	746	70

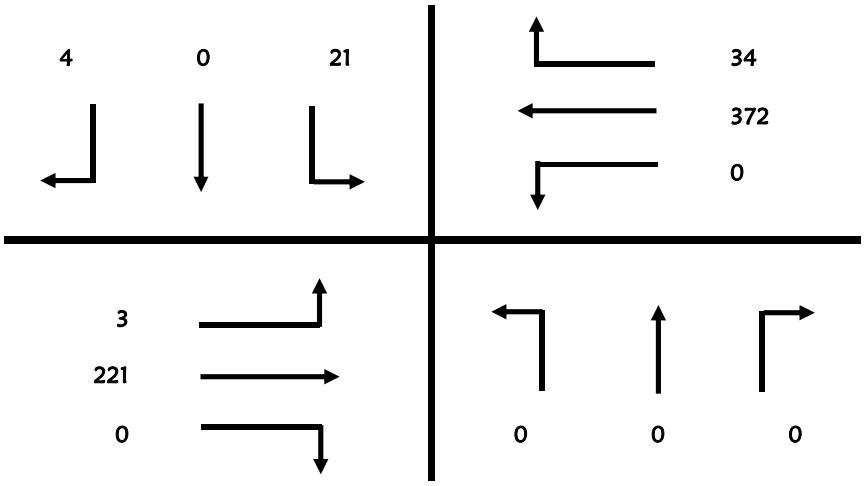
North / South
Cone Rd

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.95

Total Pk Hr Voume
655



Roadway Count Summary

GMB Engineers & Planners, Inc.

County	Volusia	**City**	Ormond Beach
Intersection	Cone Rd	&	SR 40
Date	October 11, 2011		
Time Period	PM Peak Hour	**Trucks**	

GMB Project #: 11-016.06

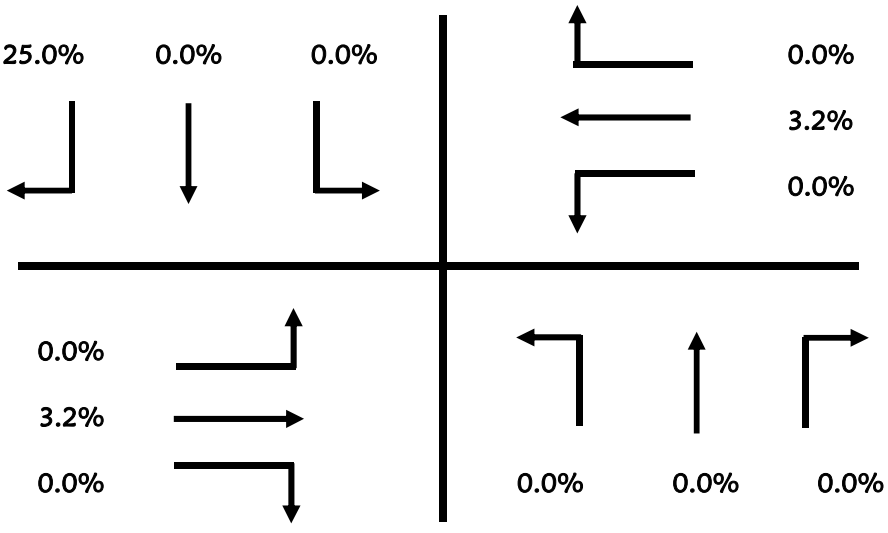
Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	0	0	0
4:15 - 4:30	0	0	0	0	0	0
4:30 - 4:45	0	0	0	0	0	0
4:45 - 5:00	0	0	0	0	0	0
5:00 - 5:15	0	0	0	0	0	1
5:15 - 5:30	0	0	0	0	0	0
5:30 - 5:45	0	0	0	0	0	0
5:45 - 6:00	0	0	0	0	0	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	3	0	0	6	0
4:15 - 4:30	0	3	0	0	4	2
4:30 - 4:45	0	4	0	0	1	0
4:45 - 5:00	0	1	0	0	2	0
5:00 - 5:15	0	2	0	0	4	0
5:15 - 5:30	0	2	0	0	4	0
5:30 - 5:45	0	2	0	0	2	0
5:45 - 6:00	0	1	0	0	2	0

North / South
Cone Rd

East / West
SR 40

Peak Hour
4:45 - 5:45



Roadway Count Summary

GMB Engineers & Planners, Inc.

County	Volusia	**City**	Ormond Beach
Intersection	Rima Ridge Rd	&	SR 40
Date	October 11, 2011		**All Vehicles**
Time Period	AM Peak Hour		

GMB Project #: 11-016.06

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	0	0	0
7:15 - 7:30	0	0	0	0	0	0
7:30 - 7:45	0	0	0	0	0	0
7:45 - 8:00	0	0	0	0	0	0
8:00 - 8:15	0	0	1	0	0	0
8:15 - 8:30	0	0	1	0	0	0
8:30 - 8:45	0	0	0	0	0	0
8:45 - 9:00	0	0	0	0	0	0
TOTAL	0	0	2	0	0	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	89	0	0	37	0
7:15 - 7:30	0	135	0	0	47	0
7:30 - 7:45	0	160	0	0	36	0
7:45 - 8:00	0	93	0	0	31	0
8:00 - 8:15	0	96	2	0	51	0
8:15 - 8:30	0	78	0	0	31	0
8:30 - 8:45	0	101	0	0	40	0
8:45 - 9:00	0	67	0	0	35	0
TOTAL	0	819	2	0	308	0

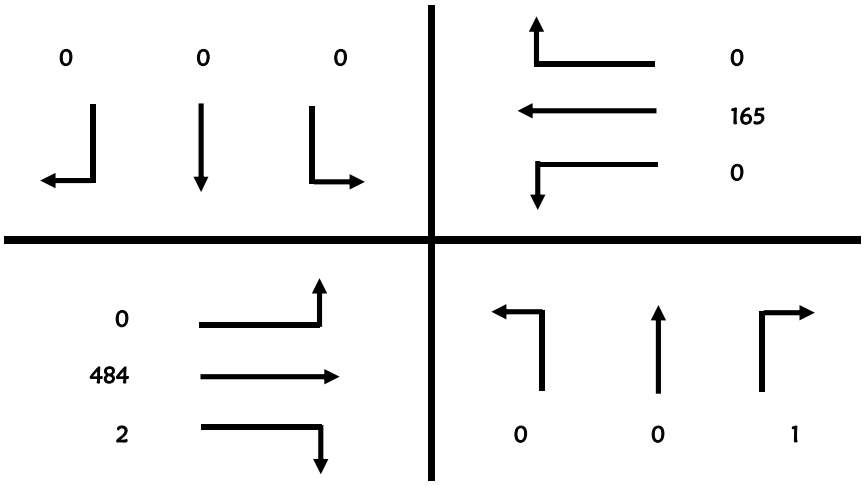
North / South
Rima Ridge Rd

East / West
SR 40

Peak Hour
7:15 - 8:15

Peak Hour Factor
0.83

Total Pk Hr Voume
652



Roadway Count Summary

GMB Engineers & Planners, Inc.

County	Volusia	**City**	Ormond Beach
Intersection	Rima Ridge Rd	&	SR 40
Date	October 11, 2011		
Time Period	AM Peak Hour	**Trucks**	

GMB Project #: 11-016.06

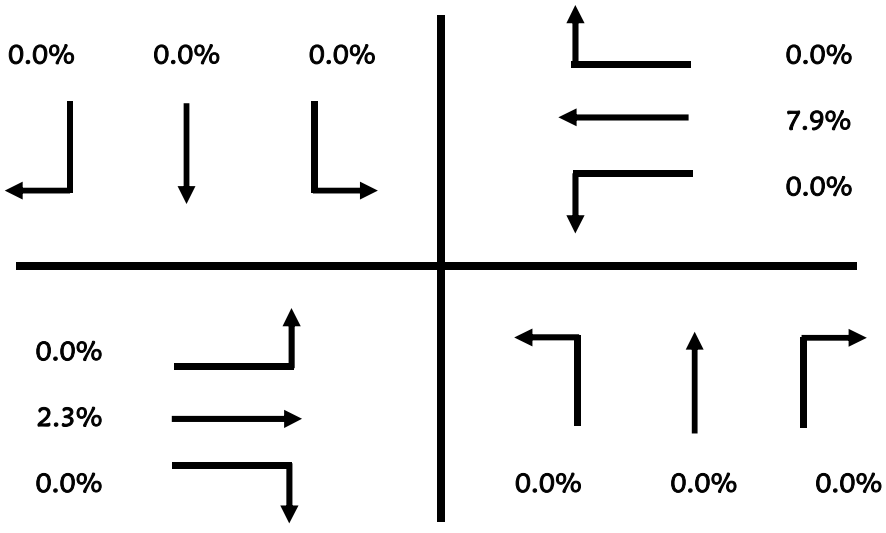
Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	0	0	0
7:15 - 7:30	0	0	0	0	0	0
7:30 - 7:45	0	0	0	0	0	0
7:45 - 8:00	0	0	0	0	0	0
8:00 - 8:15	0	0	0	0	0	0
8:15 - 8:30	0	0	0	0	0	0
8:30 - 8:45	0	0	0	0	0	0
8:45 - 9:00	0	0	0	0	0	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	3	0	0	2	0
7:15 - 7:30	0	2	0	0	3	0
7:30 - 7:45	0	3	0	0	4	0
7:45 - 8:00	0	2	0	0	2	0
8:00 - 8:15	0	4	0	0	4	0
8:15 - 8:30	0	9	0	0	1	0
8:30 - 8:45	0	4	0	0	0	0
8:45 - 9:00	0	8	0	0	3	0

North / South
Rima Ridge Rd

East / West
SR 40

Peak Hour
7:15 - 8:15



Roadway Count Summary

GMB Engineers & Planners, Inc.

County	Volusia	**City**	Ormond Beach
Intersection	Rima Ridge Rd	&	SR 40
Date	October 11, 2011		**All Vehicles**
Time Period	PM Peak Hour		

GMB Project #: 11-016.06

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	0	0	0
4:15 - 4:30	0	0	0	0	0	0
4:30 - 4:45	0	0	1	0	0	0
4:45 - 5:00	0	0	0	0	0	0
5:00 - 5:15	0	0	1	0	0	0
5:15 - 5:30	0	0	1	0	0	0
5:30 - 5:45	0	0	0	0	0	0
5:45 - 6:00	0	0	0	0	0	0
TOTAL	0	0	3	0	0	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	63	0	0	96	0
4:15 - 4:30	0	59	0	0	97	0
4:30 - 4:45	0	57	1	0	96	0
4:45 - 5:00	0	57	0	0	108	0
5:00 - 5:15	0	62	0	0	124	0
5:15 - 5:30	0	67	0	0	101	0
5:30 - 5:45	0	64	0	0	98	0
5:45 - 6:00	0	66	5	0	127	0
TOTAL	0	495	6	0	847	0

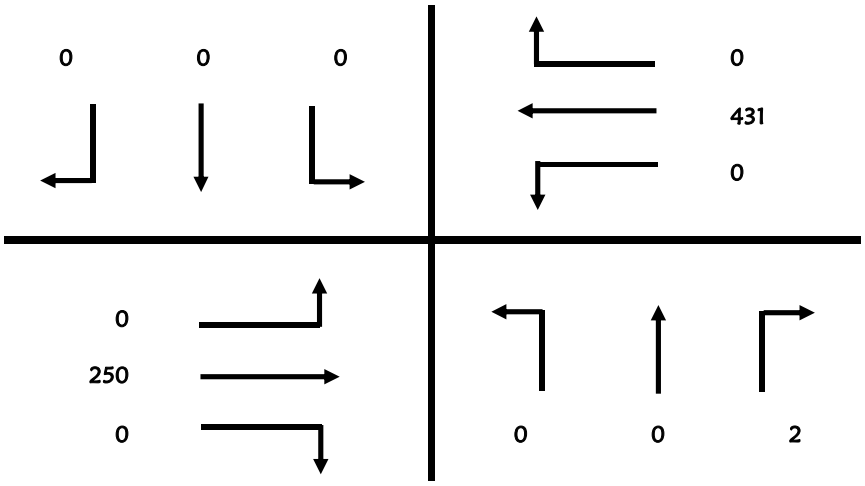
North / South
Rima Ridge Rd

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.96

Total Pk Hr Voume
716



Roadway Count Summary

GMB Engineers & Planners, Inc.

County	Volusia	**City**	Ormond Beach
Intersection	Rima Ridge Rd	&	SR 40
Date	October 11, 2011		
Time Period	PM Peak Hour	**Trucks**	

GMB Project #: 11-016.06

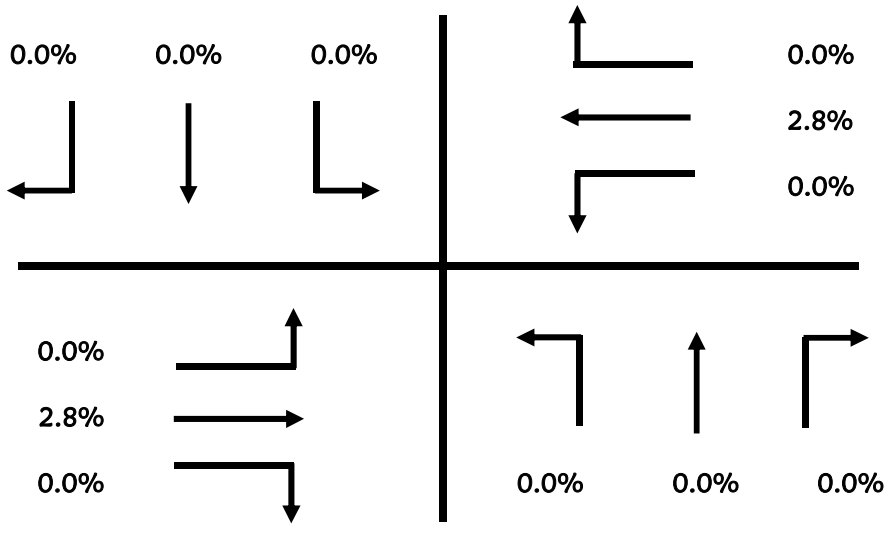
Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	0	0	0
4:15 - 4:30	0	0	0	0	0	0
4:30 - 4:45	0	0	0	0	0	0
4:45 - 5:00	0	0	0	0	0	0
5:00 - 5:15	0	0	0	0	0	0
5:15 - 5:30	0	0	0	0	0	0
5:30 - 5:45	0	0	0	0	0	0
5:45 - 6:00	0	0	0	0	0	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	4	0	0	5	0
4:15 - 4:30	0	3	0	0	5	0
4:30 - 4:45	0	4	0	0	1	0
4:45 - 5:00	0	1	0	0	2	0
5:00 - 5:15	0	1	0	0	4	0
5:15 - 5:30	0	3	0	0	5	0
5:30 - 5:45	0	2	0	0	1	0
5:45 - 6:00	0	1	0	0	3	0

North / South
Rima Ridge Rd

East / West
SR 40

Peak Hour
4:45 - 5:45



Roadway Count Summary

GMB Engineers & Planners, Inc.

County	Volusia	**City**	Ormond Beach
Intersection	Shadow Crossing Bv	&	SR 40
Date	October 11, 2011		**All Vehicles**
Time Period	AM Peak Hour		

GMB Project #: 11-016.06

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	27	0	6
7:15 - 7:30	0	0	0	21	0	2
7:30 - 7:45	0	0	0	17	0	1
7:45 - 8:00	0	0	0	24	0	4
8:00 - 8:15	0	0	0	22	0	0
8:15 - 8:30	0	0	0	30	0	1
8:30 - 8:45	0	0	0	19	0	0
8:45 - 9:00	0	0	0	16	0	3
TOTAL	0	0	0	176	0	17

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	2	82	0	0	38	7
7:15 - 7:30	8	121	0	0	42	8
7:30 - 7:45	18	138	0	0	35	7
7:45 - 8:00	4	99	0	0	34	8
8:00 - 8:15	1	111	0	0	44	9
8:15 - 8:30	0	74	0	0	28	5
8:30 - 8:45	1	86	0	0	46	11
8:45 - 9:00	0	85	0	0	39	12
TOTAL	34	796	0	0	306	67

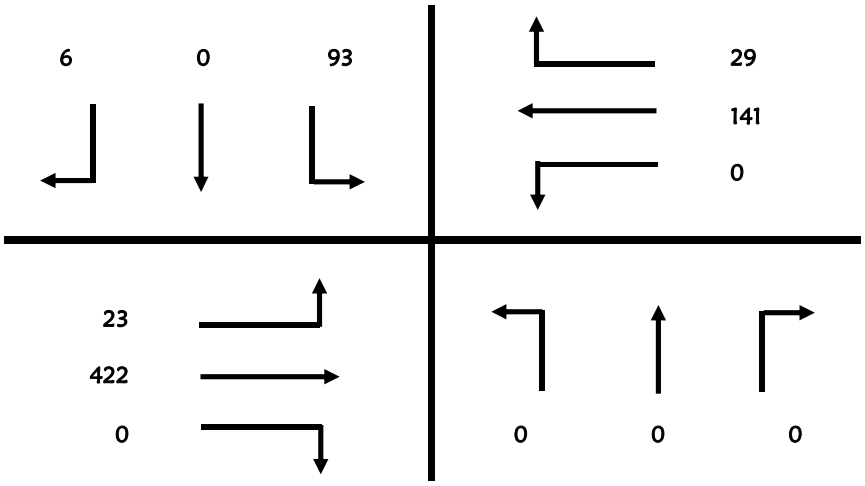
North / South
Shadow Crossing Bv

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.83

Total Pk Hr Voume
714



Roadway Count Summary

GMB Engineers & Planners, Inc.

County	Volusia	**City**	Ormond Beach
Intersection	Shadow Crossing Bv	&	SR 40
Date	October 11, 2011		
Time Period	AM Peak Hour	**Trucks**	

GMB Project #: 11-016.06

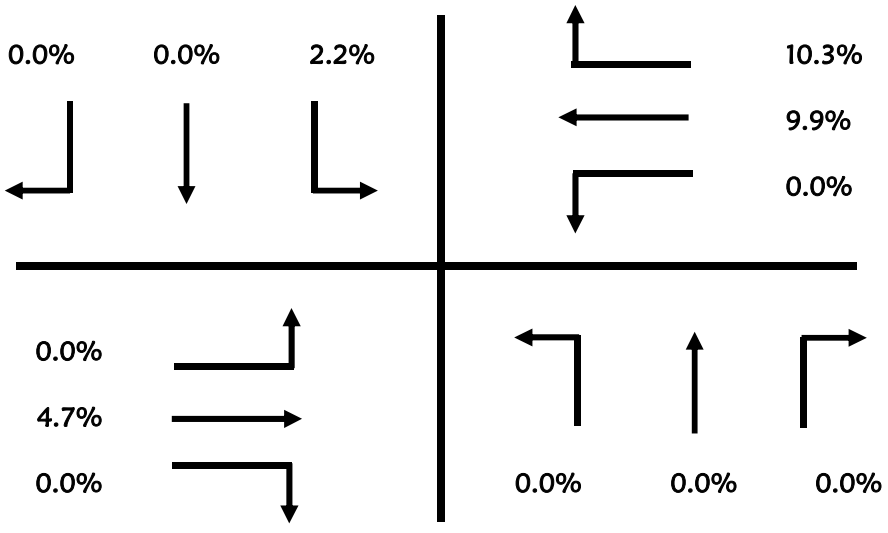
Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	0	0	0
7:15 - 7:30	0	0	0	0	0	0
7:30 - 7:45	0	0	0	0	0	0
7:45 - 8:00	0	0	0	0	0	0
8:00 - 8:15	0	0	0	0	0	0
8:15 - 8:30	0	0	0	2	0	0
8:30 - 8:45	0	0	0	0	0	0
8:45 - 9:00	0	0	0	0	0	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	2	0	0	3	0
7:15 - 7:30	0	1	0	0	3	0
7:30 - 7:45	0	3	0	0	4	1
7:45 - 8:00	0	4	0	0	2	1
8:00 - 8:15	0	4	0	0	6	1
8:15 - 8:30	0	9	0	0	2	0
8:30 - 8:45	0	2	0	0	1	0
8:45 - 9:00	0	9	0	0	1	0

North / South
Shadow Crossing Bv

East / West
SR 40

Peak Hour
7:30 - 8:30



Roadway Count Summary

GMB Engineers & Planners, Inc.

County	Volusia	**City**	Ormond Beach
Intersection	Shadow Crossing Bv	&	SR 40
Date	October 11, 2011		**All Vehicles**
Time Period	PM Peak Hour		

GMB Project #: 11-016.06

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	16	0	2
4:15 - 4:30	0	0	0	26	0	1
4:30 - 4:45	0	0	0	12	0	3
4:45 - 5:00	0	0	0	17	0	5
5:00 - 5:15	0	0	0	20	0	4
5:15 - 5:30	0	0	0	13	0	4
5:30 - 5:45	0	0	0	9	0	3
5:45 - 6:00	0	0	0	20	0	1
TOTAL	0	0	0	133	0	23

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	4	62	0	0	99	12
4:15 - 4:30	1	53	0	0	93	16
4:30 - 4:45	1	50	0	0	101	20
4:45 - 5:00	2	52	0	0	94	24
5:00 - 5:15	5	62	0	0	113	27
5:15 - 5:30	1	56	0	0	97	24
5:30 - 5:45	5	63	0	0	119	27
5:45 - 6:00	3	69	0	0	126	25
TOTAL	22	467	0	0	842	175

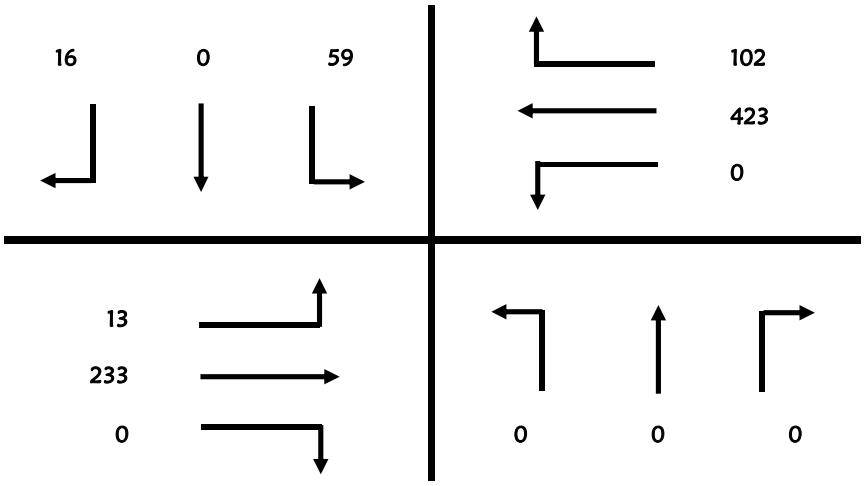
North / South
Shadow Crossing Bv

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.92

Total Pk Hr Voume
846



Roadway Count Summary

GMB Engineers & Planners, Inc.

County	Volusia	**City**	Ormond Beach
Intersection	Shadow Crossing Bv	&	SR 40
Date	October 11, 2011		
Time Period	PM Peak Hour	**Trucks**	

GMB Project #: 11-016.06

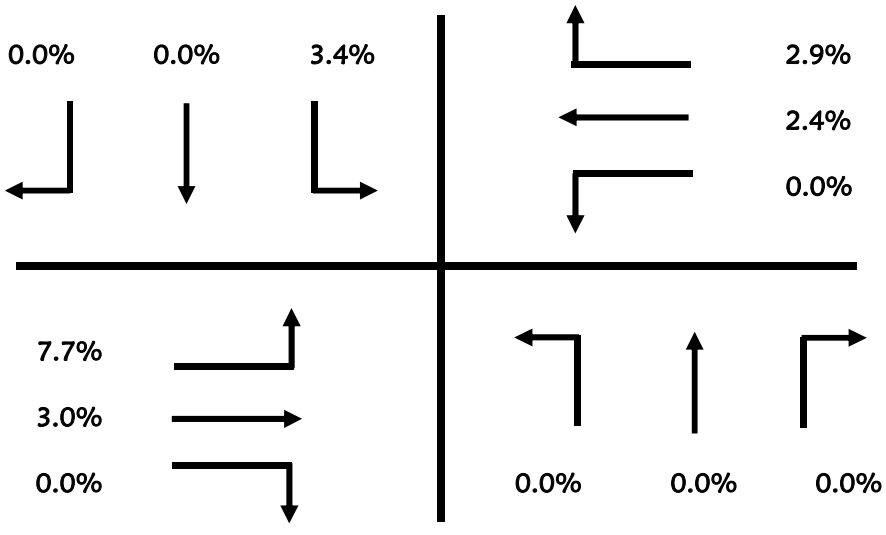
Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	1	0	0
4:15 - 4:30	0	0	0	1	0	0
4:30 - 4:45	0	0	0	0	0	0
4:45 - 5:00	0	0	0	0	0	0
5:00 - 5:15	0	0	0	2	0	0
5:15 - 5:30	0	0	0	0	0	0
5:30 - 5:45	0	0	0	0	0	0
5:45 - 6:00	0	0	0	0	0	0

Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	4	0	0	6	0
4:15 - 4:30	0	3	0	0	5	1
4:30 - 4:45	0	4	0	0	3	0
4:45 - 5:00	0	2	0	0	1	2
5:00 - 5:15	1	2	0	0	4	0
5:15 - 5:30	0	2	0	0	4	0
5:30 - 5:45	0	1	0	0	1	1
5:45 - 6:00	0	1	0	0	1	0

North / South
Shadow Crossing Bv

East / West
SR 40

Peak Hour
4:45 - 5:45



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Breakaway Trail & SR 40

Date January 27, 2011

Time Period AM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	0	0	0	0	0	27	0	0	0	27
7:15 - 7:30	0	0	0	0	0	43	0	1	0	44
7:30 - 7:45	0	0	0	0	0	43	0	2	0	45
7:45 - 8:00	0	0	0	0	0	37	0	0	0	37
8:00 - 8:15	0	0	0	0	0	32	0	3	0	35
8:15 - 8:30	0	0	0	0	0	40	0	0	0	40
8:30 - 8:45	0	0	0	0	0	39	0	4	0	43
8:45 - 9:00	0	0	0	0	0	42	0	1	0	43
	0	0	0	0	0	303	0	11	0	314

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	0	120	0	0	120	0	33	3	0	36
7:15 - 7:30	1	130	0	0	131	1	40	5	0	46
7:30 - 7:45	0	172	0	0	172	0	37	5	0	42
7:45 - 8:00	0	164	0	0	164	0	54	13	0	67
8:00 - 8:15	0	120	0	0	120	0	49	17	0	66
8:15 - 8:30	0	122	0	0	122	1	41	19	0	61
8:30 - 8:45	0	134	0	0	134	0	56	11	0	67
8:45 - 9:00	1	101	0	0	102	0	57	15	0	72
	2	1,063	0	0	1,065	2	367	88	0	457

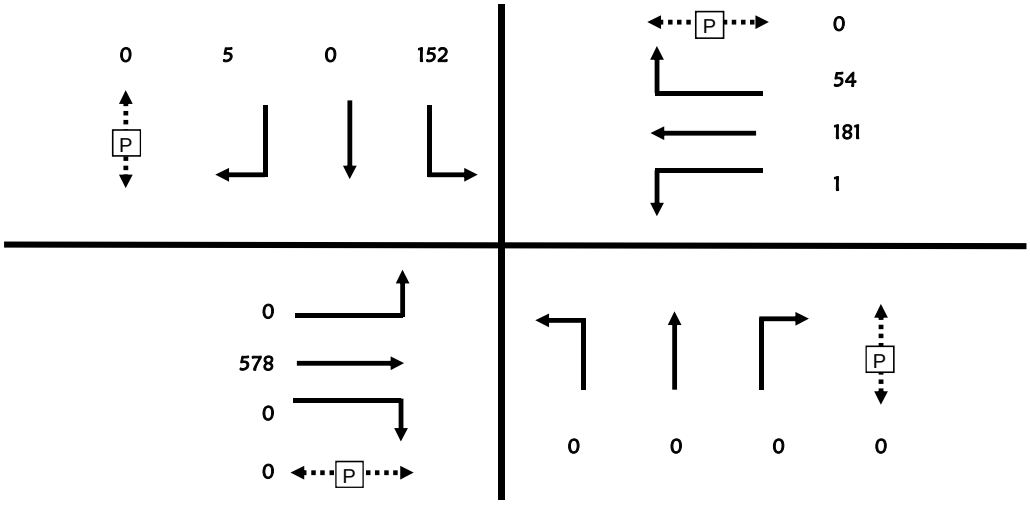
North / South
Breakaway Trail

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.91

Total Pk Hr Voume
971



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection	Breakaway Trail	&	SR 40
Date	January 27, 2011		
Time Period	AM Peak Hour		**Trucks**

Time Period			Northbound			Southbound		
			Left	Through	Right	Left	Through	Right
7:00	-	7:15	0	0	0	0	0	0
7:15	-	7:30	0	0	0	1	0	0
7:30	-	7:45	0	0	0	0	0	0
7:45	-	8:00	0	0	0	0	0	0
8:00	-	8:15	0	0	0	0	0	1
8:15	-	8:30	0	0	0	0	0	0
8:30	-	8:45	0	0	0	0	0	1
8:45	-	9:00	0	0	0	1	0	0

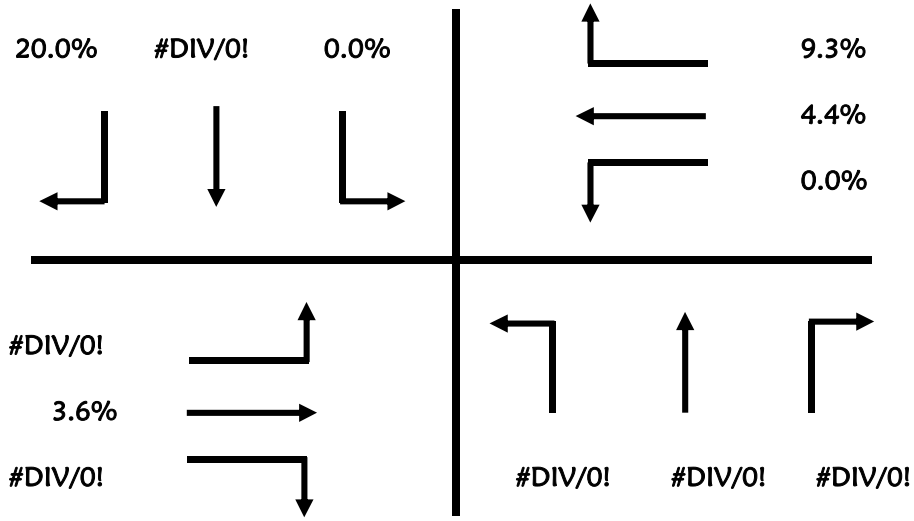
Time Period			Eastbound			Westbound		
			Left	Through	Right	Left	Through	Right
7:00	-	7:15	0	1	0	0	6	0
7:15	-	7:30	1	7	0	0	4	0
7:30	-	7:45	0	4	0	0	1	0
7:45	-	8:00	0	1	0	0	3	2
8:00	-	8:15	0	4	0	0	2	2
8:15	-	8:30	0	12	0	0	2	1
8:30	-	8:45	0	4	0	0	2	1
8:45	-	9:00	0	3	0	0	3	0

North / South
Breakaway Trail

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Breakaway Trail & SR 40

Date January 27, 2011

Time Period PM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	0	0	0	0	0	14	0	2	0	16
4:15 - 4:30	0	0	0	0	0	19	0	1	0	20
4:30 - 4:45	0	0	0	0	0	12	0	2	0	14
4:45 - 5:00	0	0	0	0	0	14	0	0	0	14
5:00 - 5:15	0	0	0	0	0	21	0	2	0	23
5:15 - 5:30	0	0	0	0	0	29	0	2	0	31
5:30 - 5:45	0	0	0	0	0	12	0	0	0	12
5:45 - 6:00	0	0	0	0	0	14	0	1	0	15
	0	0	0	0	0	135	0	10	0	145

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	0	68	0	0	68	0	121	35	0	156
4:15 - 4:30	1	62	0	0	63	0	120	30	0	150
4:30 - 4:45	3	87	0	0	90	0	141	33	0	174
4:45 - 5:00	2	69	0	0	71	0	146	33	0	179
5:00 - 5:15	2	86	0	0	88	0	169	33	0	202
5:15 - 5:30	1	69	0	0	70	0	156	32	0	188
5:30 - 5:45	1	73	0	0	74	0	141	37	1	178
5:45 - 6:00	6	70	0	0	76	1	142	35	0	178
	16	584	0	0	600	1	1,136	268	1	1,405

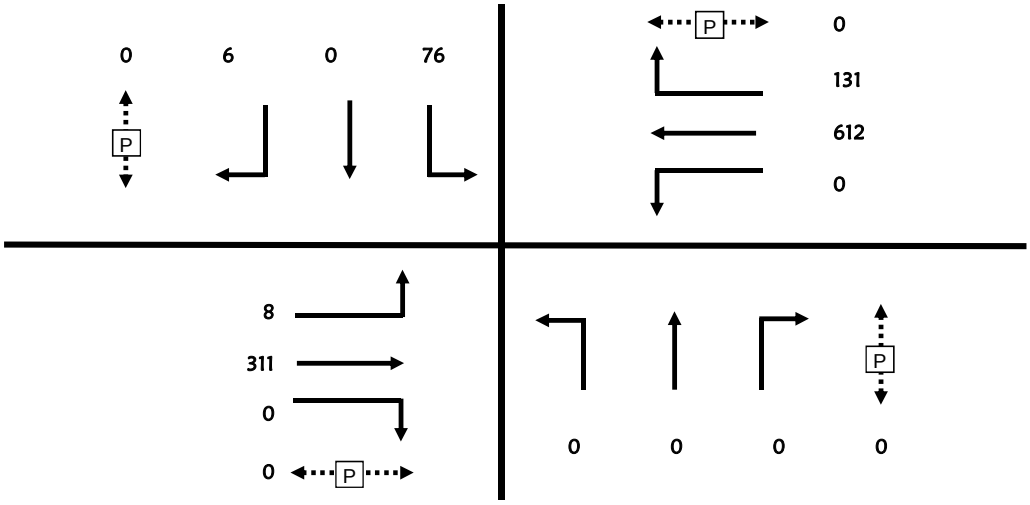
North / South
Breakaway Trail

East / West
SR 40

Peak Hour
4:30 - 5:30

Peak Hour Factor
0.91

Total Pk Hr Voume
1,144



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection	Breakaway Trail	&	SR 40
Date	January 27, 2011		
Time Period	PM Peak Hour		**Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	0	0	1
4:15 - 4:30	0	0	0	0	0	0
4:30 - 4:45	0	0	0	0	0	0
4:45 - 5:00	0	0	0	0	0	0
5:00 - 5:15	0	0	0	0	0	0
5:15 - 5:30	0	0	0	1	0	0
5:30 - 5:45	0	0	0	0	0	0
5:45 - 6:00	0	0	0	0	0	0

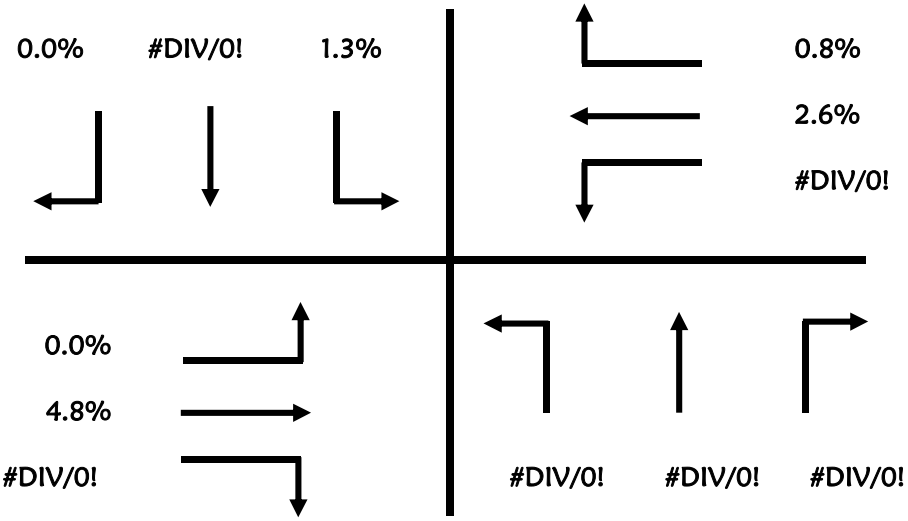
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	6	0	0	9	0
4:15 - 4:30	0	1	0	0	2	0
4:30 - 4:45	0	2	0	0	4	0
4:45 - 5:00	0	9	0	0	8	1
5:00 - 5:15	0	0	0	0	1	0
5:15 - 5:30	0	4	0	0	3	0
5:30 - 5:45	0	4	0	0	0	0
5:45 - 6:00	0	4	0	0	1	0

North / South
Breakaway Trail

East / West
SR 40

Peak Hour
4:30 - 5:30

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Tymber Creek Road & SR 40

Date January 27, 2011

Time Period AM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	1	2	8	0	11	133	3	3	0	139
7:15 - 7:30	3	4	6	0	13	136	5	5	0	146
7:30 - 7:45	3	10	5	0	18	205	8	8	0	221
7:45 - 8:00	3	4	7	0	14	215	14	23	0	252
8:00 - 8:15	13	5	15	0	33	212	6	0	0	218
8:15 - 8:30	2	7	10	0	19	152	11	6	0	169
8:30 - 8:45	7	1	10	0	18	115	4	0	0	119
8:45 - 9:00	3	4	10	0	17	122	11	5	0	138
	35	37	71	0	143	1,290	62	50	0	1,402

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	5	146	7	0	158	12	32	51	0	95
7:15 - 7:30	14	169	3	0	186	15	46	68	0	129
7:30 - 7:45	13	181	6	0	200	20	62	106	0	188
7:45 - 8:00	11	235	6	0	252	15	97	119	0	231
8:00 - 8:15	8	173	3	0	184	21	63	68	0	152
8:15 - 8:30	8	167	3	0	178	24	74	70	1	168
8:30 - 8:45	8	156	3	0	167	23	65	52	0	140
8:45 - 9:00	2	169	3	0	174	21	75	66	0	162
	69	1,396	34	0	1,499	151	514	600	1	1,265

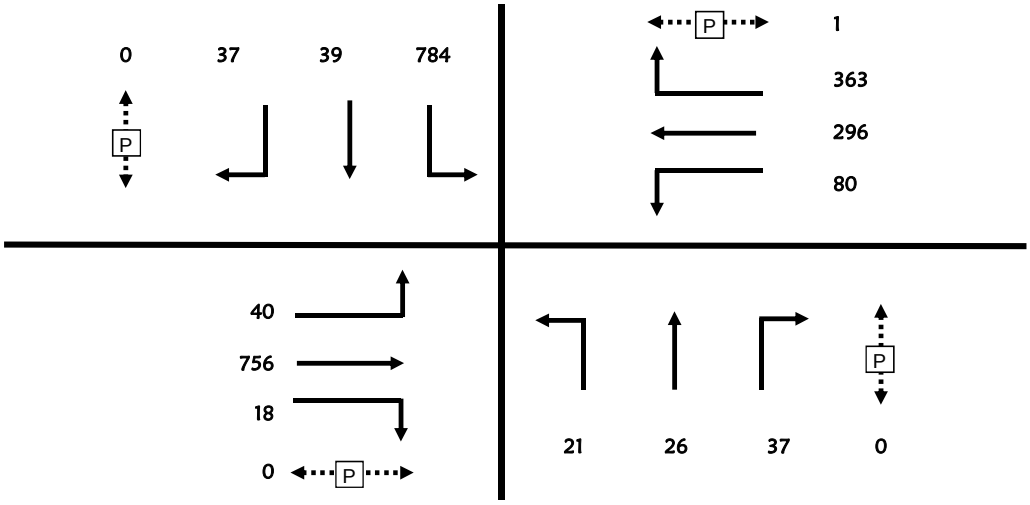
North / South
Tymber Creek Road

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.83

Total Pk Hr Voume
2,497



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection	Tymber Creek Road	&	SR 40
Date	January 27, 2011		
Time Period	AM Peak Hour		**Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	0	0	0
7:15 - 7:30	0	0	0	0	0	0
7:30 - 7:45	0	0	0	0	0	0
7:45 - 8:00	0	0	0	0	0	0
8:00 - 8:15	0	0	0	1	0	0
8:15 - 8:30	0	0	0	0	0	0
8:30 - 8:45	0	0	0	1	0	0
8:45 - 9:00	0	0	0	1	0	0

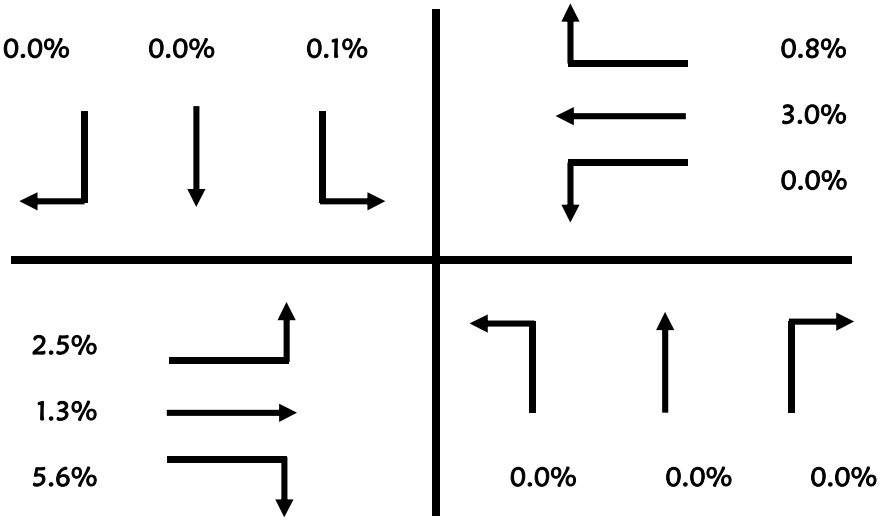
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	0	5	0
7:15 - 7:30	0	5	0	0	3	0
7:30 - 7:45	0	3	0	0	1	1
7:45 - 8:00	1	1	0	0	3	1
8:00 - 8:15	0	2	0	0	2	0
8:15 - 8:30	0	4	1	0	3	1
8:30 - 8:45	6	3	0	0	1	0
8:45 - 9:00	0	2	0	0	3	1

North / South
Tymber Creek Road

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Tymber Creek Road & SR 40

Date January 27, 2011

Time Period PM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	6	7	9	0	22	89	2	9	0	100
4:15 - 4:30	6	6	8	0	20	95	8	4	0	107
4:30 - 4:45	13	5	4	0	22	133	9	10	0	152
4:45 - 5:00	6	5	7	0	18	110	5	13	0	128
5:00 - 5:15	11	6	7	0	24	150	8	10	0	168
5:15 - 5:30	8	14	3	0	25	126	4	11	0	141
5:30 - 5:45	10	8	2	0	20	140	2	6	0	148
5:45 - 6:00	8	7	6	0	21	102	4	5	0	111
	68	58	46	0	172	945	42	68	0	1,055

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	8	89	3	0	100	32	153	149	0	334
4:15 - 4:30	4	97	5	0	106	21	160	137	0	318
4:30 - 4:45	7	104	1	0	112	24	141	128	0	293
4:45 - 5:00	7	97	2	0	106	25	179	151	0	355
5:00 - 5:15	13	106	3	0	122	20	199	156	0	375
5:15 - 5:30	10	120	6	0	136	39	206	177	0	422
5:30 - 5:45	20	89	7	0	116	29	172	173	0	374
5:45 - 6:00	20	79	3	0	102	42	186	136	0	364
	89	781	30	0	900	232	1,396	1,207	0	2,835

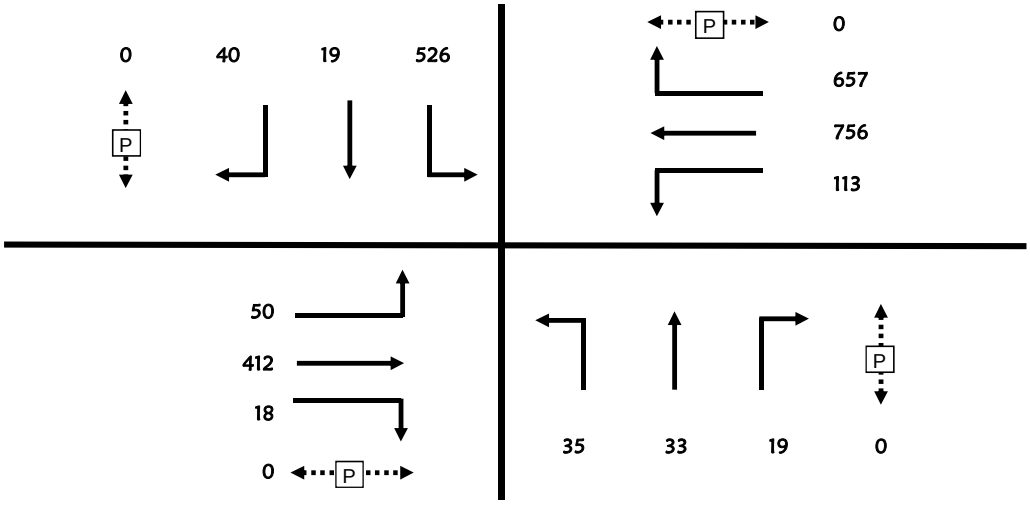
North / South
Tymber Creek Road

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.93

Total Pk Hr Voume
2,678



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection	Tymber Creek Road	&	SR 40
Date	January 27, 2011		
Time Period	PM Peak Hour		**Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	0	0	0
4:15 - 4:30	0	0	0	0	0	0
4:30 - 4:45	0	0	0	1	1	0
4:45 - 5:00	0	0	0	0	0	3
5:00 - 5:15	0	0	0	1	0	0
5:15 - 5:30	0	0	0	0	0	0
5:30 - 5:45	0	0	0	0	0	0
5:45 - 6:00	0	0	0	0	0	0

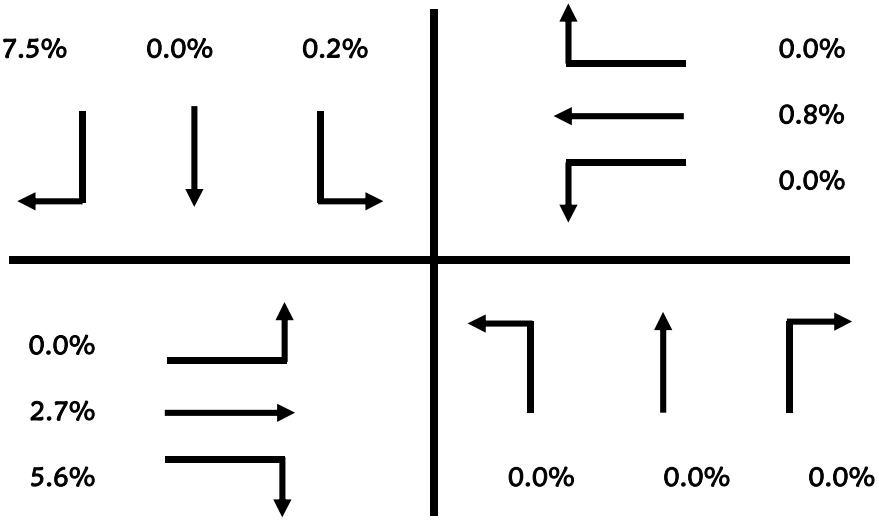
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	2	0	0	5	0
4:15 - 4:30	0	0	0	0	2	0
4:30 - 4:45	0	0	0	0	3	0
4:45 - 5:00	0	5	0	0	4	0
5:00 - 5:15	0	1	0	0	0	0
5:15 - 5:30	0	4	1	0	2	0
5:30 - 5:45	0	1	0	0	0	0
5:45 - 6:00	2	4	0	0	2	0

North / South
Tymber Creek Road

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Booth Road & SR 40

Date January 27, 2011

Time Period AM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	0	0	6	0	6	4	0	0	0	4
7:15 - 7:30	2	0	8	0	10	9	0	1	0	10
7:30 - 7:45	5	0	6	0	11	18	0	1	0	19
7:45 - 8:00	2	0	6	0	8	51	1	11	0	63
8:00 - 8:15	2	0	6	0	8	64	0	10	0	74
8:15 - 8:30	1	0	4	0	5	17	0	0	0	17
8:30 - 8:45	1	0	10	0	11	5	0	2	0	7
8:45 - 9:00	0	0	4	0	4	7	0	1	0	8
	13	0	50	0	63	175	1	26	0	202

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	2	290	0	0	292	5	86	0	0	91
7:15 - 7:30	3	347	0	0	350	3	138	0	0	141
7:30 - 7:45	4	386	2	0	392	6	165	0	0	171
7:45 - 8:00	24	435	1	0	460	34	248	6	1	288
8:00 - 8:15	13	404	4	0	421	23	177	4	0	204
8:15 - 8:30	3	344	0	0	347	8	167	0	0	175
8:30 - 8:45	2	349	4	0	355	14	155	3	0	172
8:45 - 9:00	5	348	2	0	355	13	187	1	0	201
	56	2,903	13	0	2,972	106	1,323	14	1	1,443

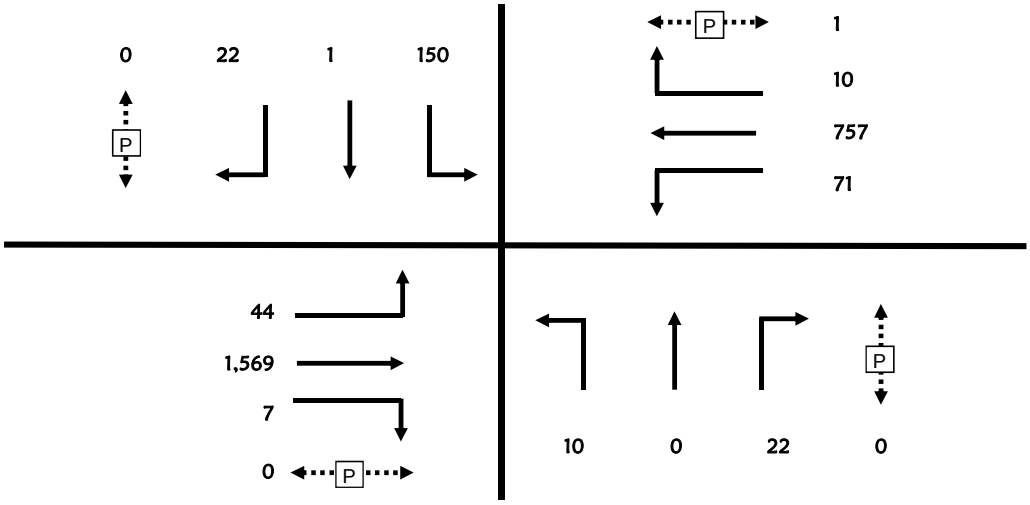
North / South
Booth Road

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.81

Total Pk Hr Voume
2,663



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection	Booth Road	&	SR 40
Date	January 27, 2011		
Time Period	AM Peak Hour		Trucks

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	0	0	0
7:15 - 7:30	0	0	0	0	0	0
7:30 - 7:45	0	0	0	0	0	0
7:45 - 8:00	0	0	0	0	0	0
8:00 - 8:15	0	0	0	0	0	0
8:15 - 8:30	0	0	0	0	0	0
8:30 - 8:45	0	0	0	0	0	0
8:45 - 9:00	0	0	0	0	0	0

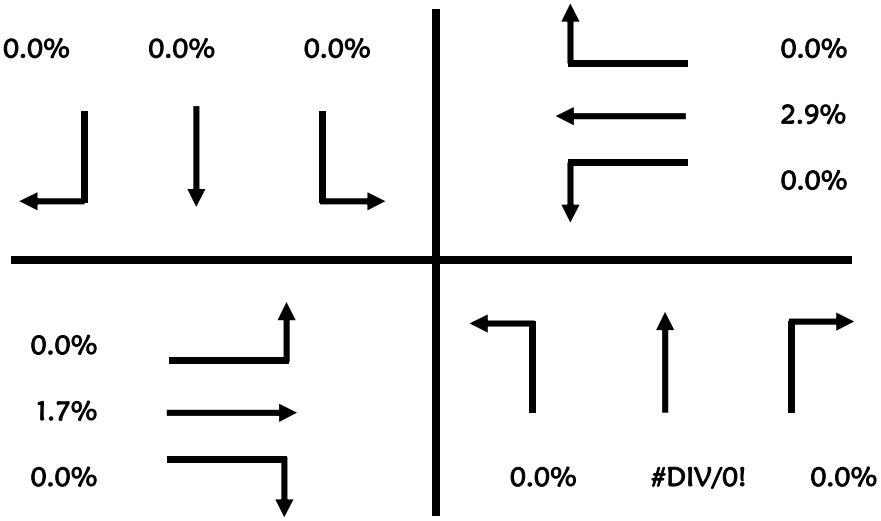
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	3	0	0	8	0
7:15 - 7:30	0	5	0	0	12	0
7:30 - 7:45	0	6	0	0	9	0
7:45 - 8:00	0	5	0	0	6	0
8:00 - 8:15	0	4	0	0	2	0
8:15 - 8:30	0	12	0	0	5	0
8:30 - 8:45	0	7	0	0	4	0
8:45 - 9:00	0	5	0	0	5	0

North / South
Booth Road

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Booth Road & SR 40

Date January 27, 2011

Time Period PM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	4	0	3	0	7	11	0	4	0	15
4:15 - 4:30	2	0	6	0	8	28	0	4	0	32
4:30 - 4:45	2	0	16	0	18	18	0	2	0	20
4:45 - 5:00	4	2	7	0	13	26	0	3	0	29
5:00 - 5:15	2	0	7	0	9	13	0	1	0	14
5:15 - 5:30	0	0	6	0	6	9	0	3	0	12
5:30 - 5:45	2	0	8	0	10	8	0	8	0	16
5:45 - 6:00	1	1	7	0	9	15	0	3	0	18
	17	3	60	0	80	128	0	28	0	156

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	2	192	2	0	196	9	339	2	0	350
4:15 - 4:30	0	209	1	0	210	10	293	0	0	303
4:30 - 4:45	0	221	4	0	225	5	293	0	0	298
4:45 - 5:00	3	241	1	0	245	8	356	1	0	365
5:00 - 5:15	2	258	0	0	260	4	390	0	0	394
5:15 - 5:30	2	281	2	0	285	6	400	2	0	408
5:30 - 5:45	2	260	1	0	263	16	389	1	0	406
5:45 - 6:00	1	231	0	0	232	0	374	0	0	374
	12	1,893	11	0	1,916	58	2,834	6	0	2,898

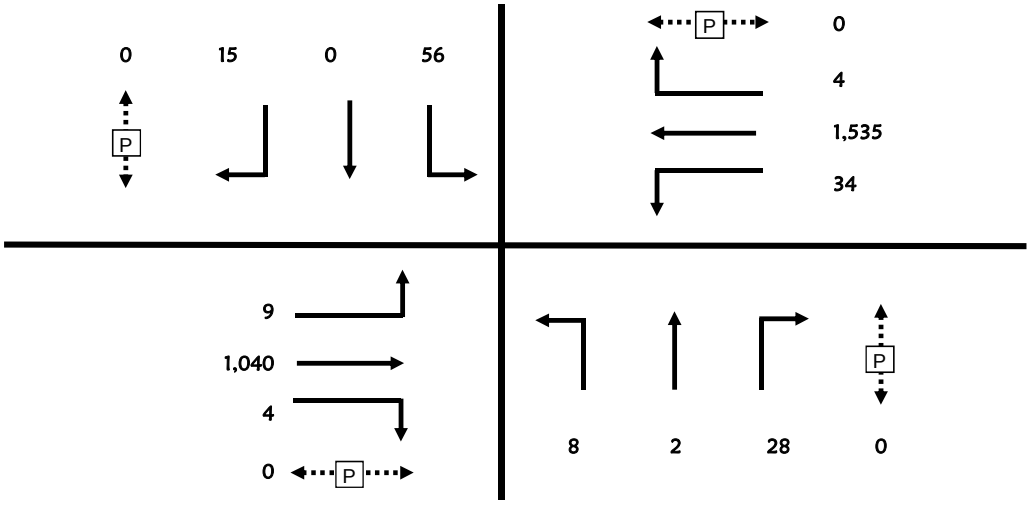
North / South
Booth Road

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.96

Total Pk Hr Voume
2,735



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection	Booth Road	&	SR 40
Date	January 27, 2011		
Time Period	PM Peak Hour		Trucks

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	0	0	0
4:15 - 4:30	0	0	0	0	0	0
4:30 - 4:45	0	0	0	0	0	0
4:45 - 5:00	0	0	0	0	0	0
5:00 - 5:15	0	0	0	0	0	0
5:15 - 5:30	0	0	0	0	0	1
5:30 - 5:45	0	0	0	0	0	0
5:45 - 6:00	0	0	0	0	0	0

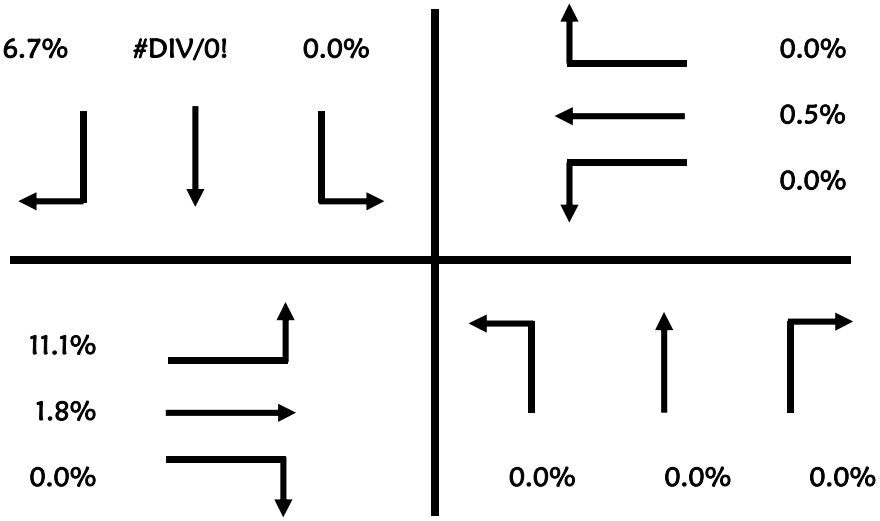
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	6	0	0	12	0
4:15 - 4:30	0	3	0	0	2	0
4:30 - 4:45	0	7	1	0	6	0
4:45 - 5:00	1	5	0	0	4	0
5:00 - 5:15	0	6	0	0	1	0
5:15 - 5:30	0	3	0	0	2	0
5:30 - 5:45	0	5	0	0	1	0
5:45 - 6:00	0	5	0	0	1	0

North / South
Booth Road

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Interchange Boulevard & SR 40

Date January 27, 2011

Time Period AM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	6	0	41	0	47	0	0	0	0	0
7:15 - 7:30	5	0	46	0	51	0	0	0	0	0
7:30 - 7:45	12	0	43	0	55	0	0	0	0	0
7:45 - 8:00	11	0	45	1	56	0	0	0	0	0
8:00 - 8:15	15	0	38	0	53	0	0	1	1	1
8:15 - 8:30	14	0	46	0	60	0	0	0	0	0
8:30 - 8:45	14	0	40	0	54	0	0	0	0	0
8:45 - 9:00	20	0	32	0	52	0	0	0	0	0
	97	0	331	1	428	0	0	1	1	1

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	0	286	20	0	306	13	83	0	0	96
7:15 - 7:30	0	298	6	0	304	30	122	0	0	152
7:30 - 7:45	0	395	6	0	401	22	202	0	0	224
7:45 - 8:00	2	450	14	0	466	36	263	0	0	299
8:00 - 8:15	0	429	20	0	449	22	155	0	0	177
8:15 - 8:30	2	417	14	0	433	32	162	0	0	194
8:30 - 8:45	1	292	11	0	304	30	143	0	0	173
8:45 - 9:00	1	257	18	0	276	30	155	0	0	185
	6	2,824	109	0	2,939	215	1,285	0	0	1,500

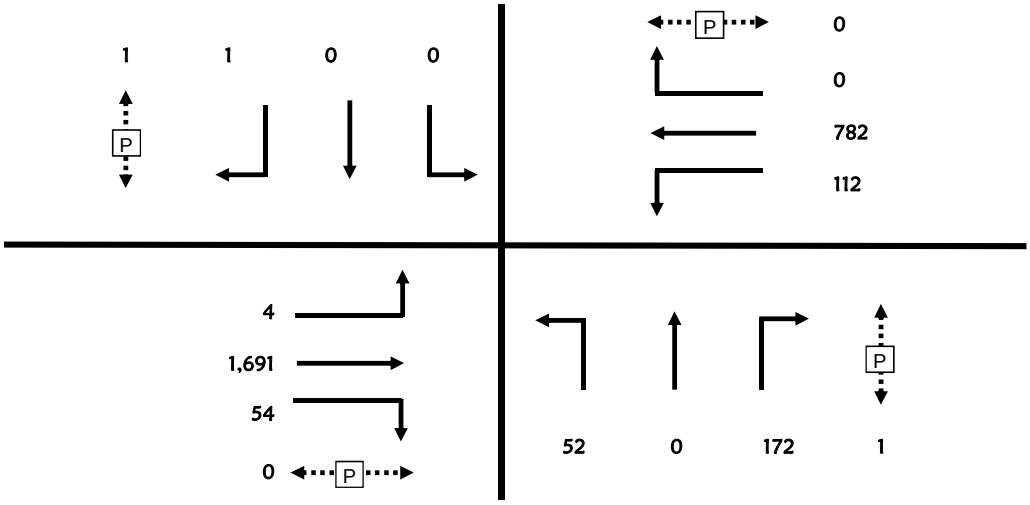
North / South
Interchange Boulevard

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.87

Total Pk Hr Voume
2,868



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Interchange Boulevard & SR 40

Date January 27, 2011

Time Period AM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	2	0	0	0
7:15 - 7:30	0	0	1	0	0	0
7:30 - 7:45	1	0	0	0	0	0
7:45 - 8:00	0	0	0	0	0	0
8:00 - 8:15	0	0	1	0	0	0
8:15 - 8:30	0	0	1	0	0	0
8:30 - 8:45	0	0	1	0	0	0
8:45 - 9:00	0	0	0	0	0	0

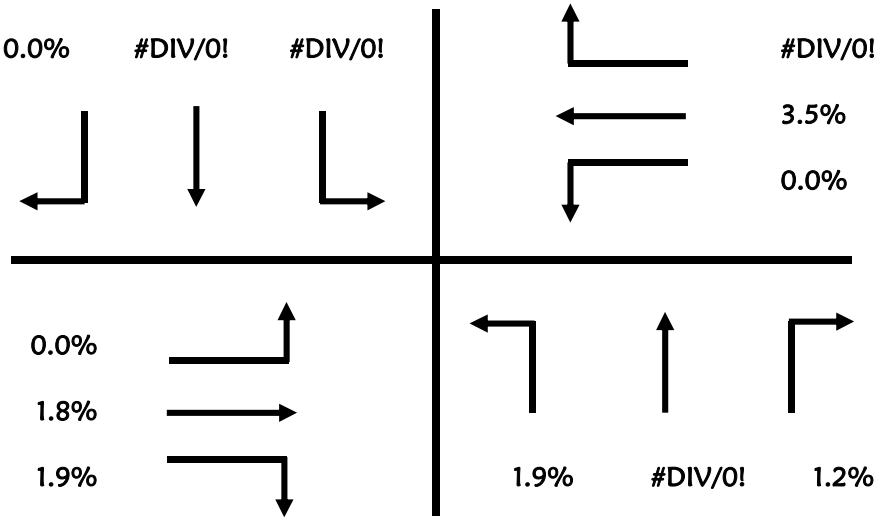
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	3	0	0	10	0
7:15 - 7:30	0	8	0	0	10	0
7:30 - 7:45	0	9	0	0	8	0
7:45 - 8:00	0	2	0	0	6	0
8:00 - 8:15	0	5	0	0	7	0
8:15 - 8:30	0	14	1	0	6	0
8:30 - 8:45	0	6	0	1	4	0
8:45 - 9:00	0	5	0	1	9	0

North / South
Interchange Boulevard

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Interchange Boulevard & SR 40

Date January 27, 2011

Time Period PM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	15	0	23	0	38	0	0	0	0	0
4:15 - 4:30	15	0	25	0	40	0	0	0	0	0
4:30 - 4:45	12	0	33	0	45	0	0	0	0	0
4:45 - 5:00	15	0	25	0	40	0	0	0	0	0
5:00 - 5:15	14	0	34	0	48	0	0	0	0	0
5:15 - 5:30	22	0	27	0	49	0	0	0	0	0
5:30 - 5:45	10	0	35	0	45	0	0	0	0	0
5:45 - 6:00	12	0	20	0	32	0	0	0	0	0
	115	0	222	0	337	0	0	0	0	0

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	3	183	3	0	189	30	332	0	0	362
4:15 - 4:30	0	206	10	0	216	26	270	0	0	296
4:30 - 4:45	0	209	14	0	223	31	270	0	0	301
4:45 - 5:00	3	261	5	0	269	38	344	0	0	382
5:00 - 5:15	0	271	6	0	277	38	367	0	0	405
5:15 - 5:30	0	266	12	0	278	39	397	0	0	436
5:30 - 5:45	0	251	10	0	261	43	367	0	0	410
5:45 - 6:00	1	192	8	0	201	39	327	0	0	366
	7	1,839	68	0	1,914	284	2,674	0	0	2,958

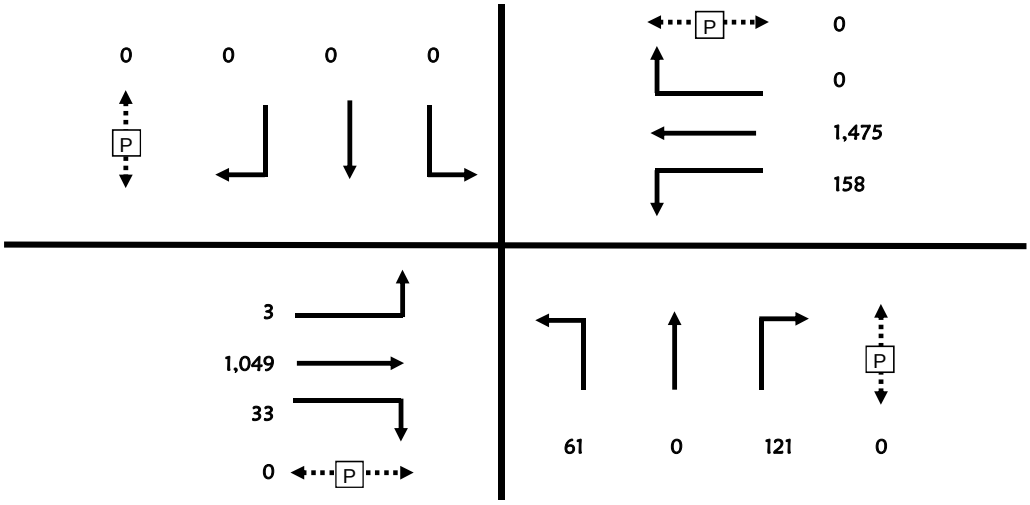
North / South
Interchange Boulevard

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.95

Total Pk Hr Voume
2,900



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Interchange Boulevard & SR 40

Date January 27, 2011

Time Period PM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	0	0	0
4:15 - 4:30	0	0	1	0	0	0
4:30 - 4:45	0	0	1	0	0	0
4:45 - 5:00	0	0	1	0	0	0
5:00 - 5:15	0	0	1	0	0	0
5:15 - 5:30	0	0	0	0	0	0
5:30 - 5:45	0	0	0	0	0	0
5:45 - 6:00	0	0	0	0	0	0

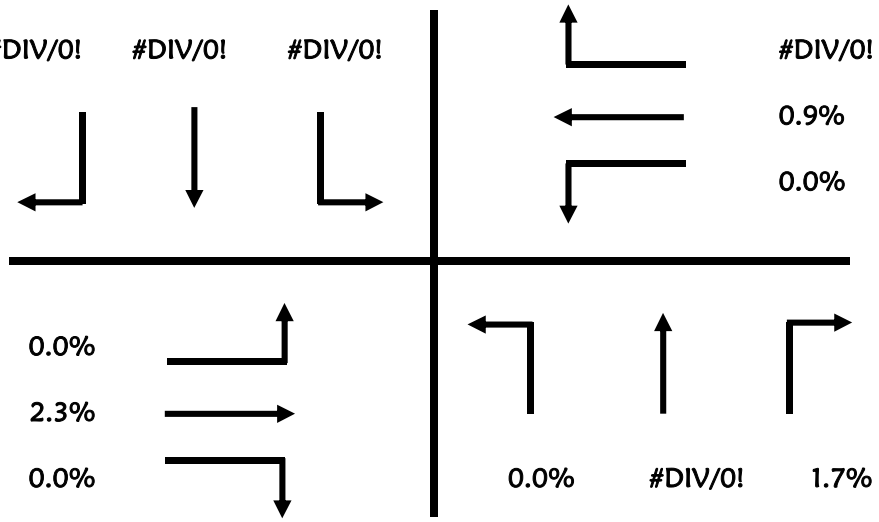
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	6	0	2	14	0
4:15 - 4:30	0	4	0	0	5	0
4:30 - 4:45	0	5	0	0	7	0
4:45 - 5:00	0	7	0	0	7	0
5:00 - 5:15	0	6	0	0	2	0
5:15 - 5:30	0	5	0	0	3	0
5:30 - 5:45	0	6	0	0	2	0
5:45 - 6:00	0	6	0	0	4	0

North / South
Interchange Boulevard

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 SB ramps & SR 40

Date January 27, 2011

Time Period AM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	0	0	0	0	0	31	0	9	0	40
7:15 - 7:30	0	0	0	0	0	53	0	14	0	67
7:30 - 7:45	0	0	0	0	0	72	0	31	0	103
7:45 - 8:00	0	0	0	0	0	77	0	37	0	114
8:00 - 8:15	0	0	0	0	0	57	0	16	0	73
8:15 - 8:30	0	0	0	0	0	73	0	17	0	90
8:30 - 8:45	0	0	0	0	0	55	0	30	0	85
8:45 - 9:00	0	0	0	0	0	50	0	6	0	56
	0	0	0	0	0	468	0	160	0	628

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	0	169	150	0	319	114	0	0	0	114
7:15 - 7:30	0	175	167	0	342	90	0	0	0	90
7:30 - 7:45	0	237	187	0	424	90	0	0	0	90
7:45 - 8:00	0	318	205	0	523	80	0	0	0	80
8:00 - 8:15	0	317	161	0	478	72	0	0	0	72
8:15 - 8:30	0	226	144	0	370	60	0	0	2	60
8:30 - 8:45	1	223	106	0	330	97	0	0	0	97
8:45 - 9:00	0	198	75	0	273	85	0	0	0	85
	1	1,863	1,195	0	3,059	688	0	0	2	688

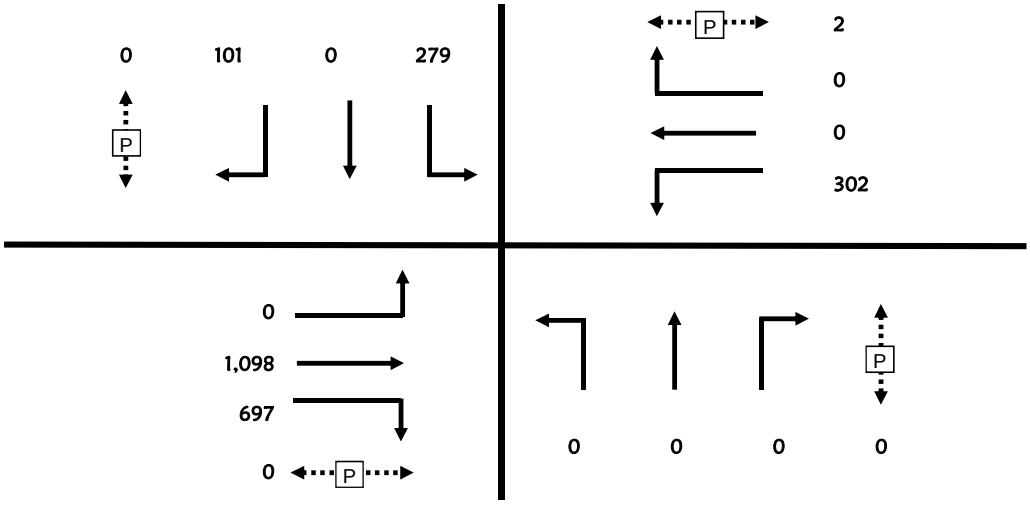
North / South
I-95 SB ramps

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.86

Total Pk Hr Voume
2,477



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 SB ramps & SR 40

Date January 27, 2011

Time Period AM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	3	0	2
7:15 - 7:30	0	0	0	1	0	4
7:30 - 7:45	0	0	0	0	0	0
7:45 - 8:00	0	0	0	1	0	0
8:00 - 8:15	0	0	0	2	0	0
8:15 - 8:30	0	0	0	1	0	0
8:30 - 8:45	0	0	0	0	0	0
8:45 - 9:00	0	0	0	0	0	0

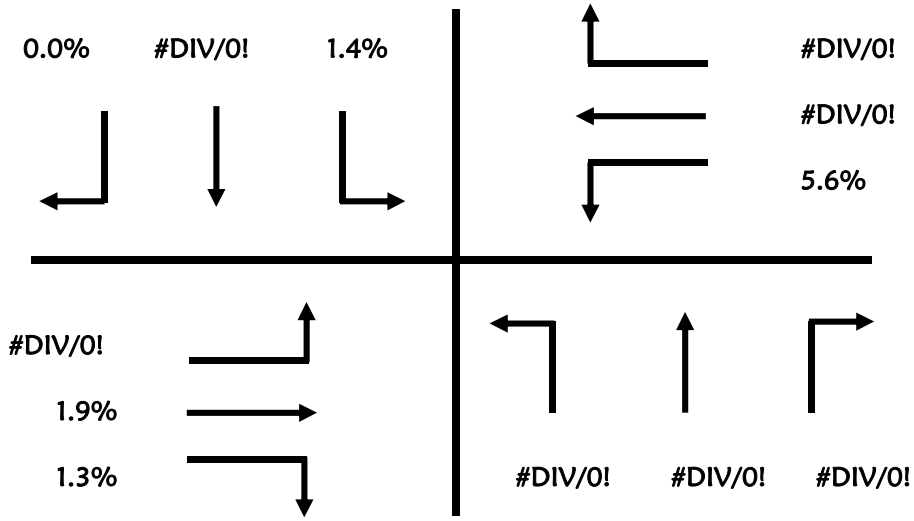
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	3	2	2	0	0
7:15 - 7:30	0	2	6	0	0	0
7:30 - 7:45	0	6	3	3	0	0
7:45 - 8:00	0	1	1	5	0	0
8:00 - 8:15	0	3	1	3	0	0
8:15 - 8:30	0	11	4	6	0	0
8:30 - 8:45	0	3	5	5	0	0
8:45 - 9:00	0	0	0	0	0	0

North / South
I-95 SB ramps

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 SB ramps & SR 40

Date January 27, 2011

Time Period PM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	0	0	0	0	0	37	0	16	0	53
4:15 - 4:30	0	0	0	0	0	41	0	26	0	67
4:30 - 4:45	0	0	0	0	0	49	0	16	0	65
4:45 - 5:00	0	0	0	0	0	64	0	19	0	83
5:00 - 5:15	0	0	0	0	0	52	0	29	0	81
5:15 - 5:30	0	0	0	0	0	52	0	33	0	85
5:30 - 5:45	0	0	0	0	0	50	0	27	0	77
5:45 - 6:00	0	0	0	0	0	40	0	24	0	64
	0	0	0	0	0	385	0	190	0	575

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	0	161	67	0	228	101	0	0	2	101
4:15 - 4:30	0	170	85	0	255	82	0	0	0	82
4:30 - 4:45	0	192	96	0	288	78	0	0	0	78
4:45 - 5:00	0	173	113	0	286	77	0	0	0	77
5:00 - 5:15	0	192	104	0	296	130	0	0	1	130
5:15 - 5:30	0	183	98	0	281	128	0	0	0	128
5:30 - 5:45	0	200	94	0	294	97	0	0	0	97
5:45 - 6:00	0	164	81	0	245	100	0	0	0	100
	0	1,435	738	0	2,173	793	0	0	3	793

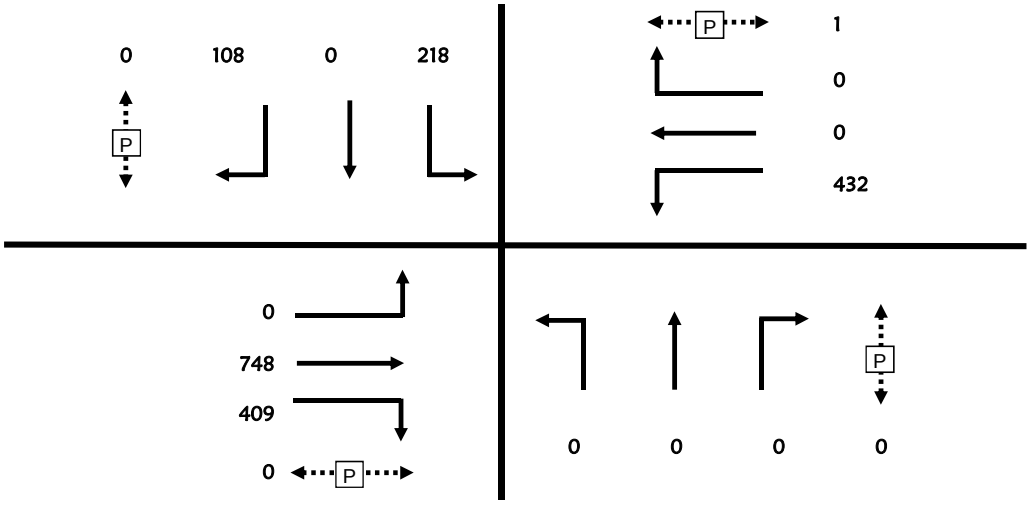
North / South
I-95 SB ramps

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.94

Total Pk Hr Voume
1,915



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection	I-95 SB ramps	&	SR 40
Date	January 27, 2011		
Time Period	PM Peak Hour		Trucks

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	1	0	0
4:15 - 4:30	0	0	0	0	0	0
4:30 - 4:45	0	0	0	2	0	1
4:45 - 5:00	0	0	0	2	0	2
5:00 - 5:15	0	0	0	0	0	1
5:15 - 5:30	0	0	0	0	0	0
5:30 - 5:45	0	0	0	2	0	1
5:45 - 6:00	0	0	0	0	0	0

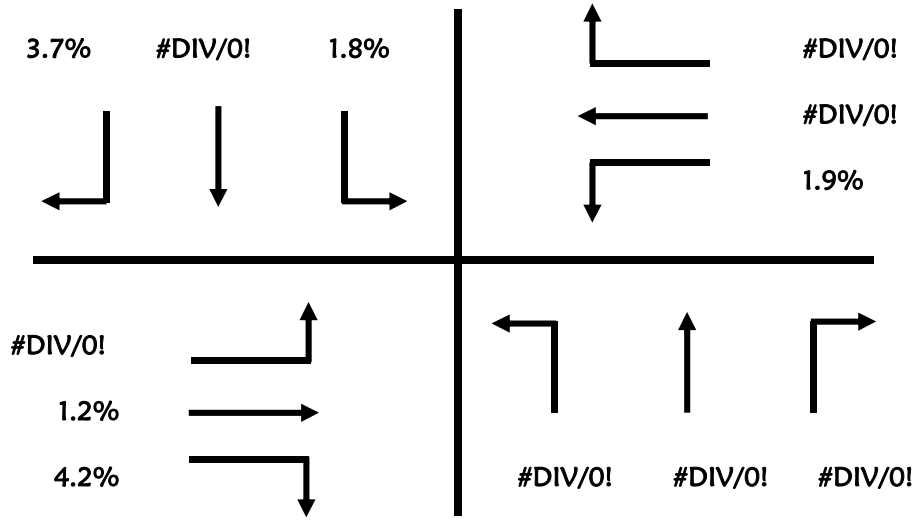
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	2	5	2	0	0
4:15 - 4:30	0	2	3	1	0	0
4:30 - 4:45	0	4	3	2	0	0
4:45 - 5:00	0	4	6	1	0	0
5:00 - 5:15	0	0	5	3	0	0
5:15 - 5:30	0	2	4	4	0	0
5:30 - 5:45	0	3	2	0	0	0
5:45 - 6:00	0	2	4	0	0	0

North / South
I-95 SB ramps

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 NB ramps & SR 40

Date January 27, 2011

Time Period AM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	33	0	28	0	61	0	0	0	0	0
7:15 - 7:30	62	0	73	0	135	0	0	0	0	0
7:30 - 7:45	87	0	107	0	194	0	0	0	0	0
7:45 - 8:00	157	0	113	0	270	0	0	0	0	0
8:00 - 8:15	69	0	84	0	153	0	0	0	0	0
8:15 - 8:30	61	0	97	0	158	0	0	0	0	0
8:30 - 8:45	47	0	74	0	121	0	0	0	0	0
8:45 - 9:00	68	0	91	0	159	0	0	0	0	0
	584	0	667	0	1,251	0	0	0	0	0

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	15	0	0	0	15	0	158	32	0	190
7:15 - 7:30	9	0	0	0	9	0	178	27	0	205
7:30 - 7:45	19	0	0	0	19	0	202	30	0	232
7:45 - 8:00	26	0	0	0	26	0	230	32	0	262
8:00 - 8:15	24	0	0	0	24	0	179	32	0	211
8:15 - 8:30	27	0	0	0	27	0	167	28	0	195
8:30 - 8:45	15	1	0	0	16	0	211	29	1	240
8:45 - 9:00	19	0	0	0	19	0	182	35	0	217
	154	1	0	0	155	0	1,507	245	1	1,752

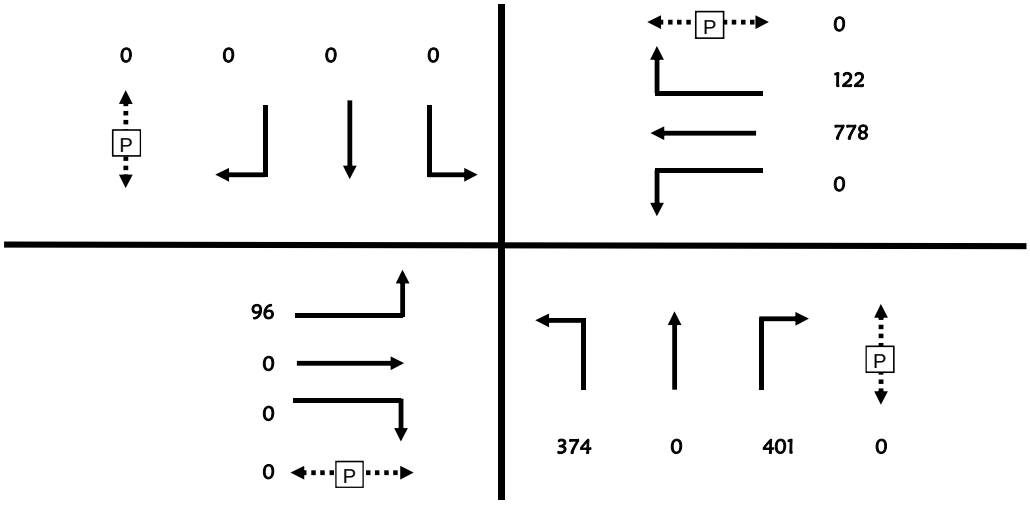
North / South
I-95 NB ramps

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.79

Total Pk Hr Voume
1,771



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection	I-95 NB ramps	&	SR 40
Date	January 27, 2011		
Time Period	AM Peak Hour		**Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	3	0	2	0	0	0
7:15 - 7:30	5	0	7	0	0	0
7:30 - 7:45	1	0	2	0	0	0
7:45 - 8:00	4	0	0	0	0	0
8:00 - 8:15	3	0	7	0	0	0
8:15 - 8:30	1	0	4	0	0	0
8:30 - 8:45	1	0	2	0	0	0
8:45 - 9:00	4	0	5	0	0	0

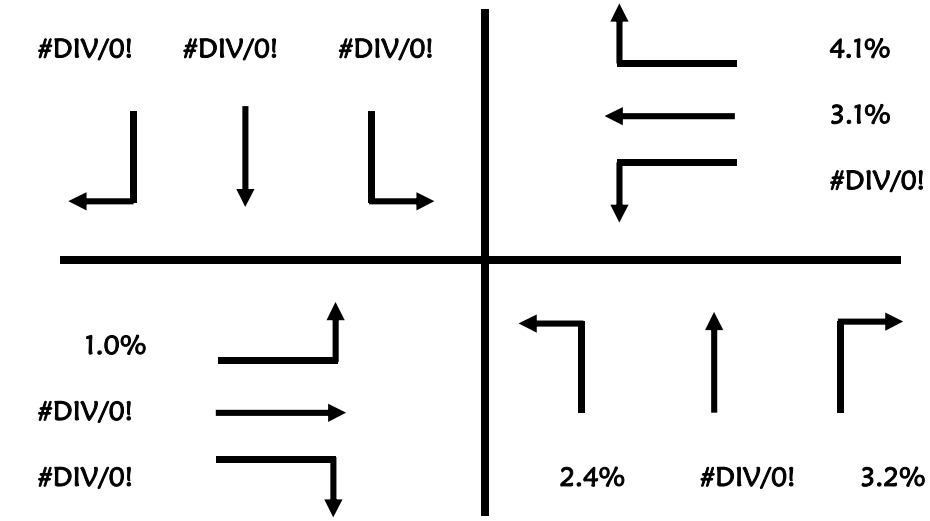
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	1	0	0	0	4	2
7:15 - 7:30	1	0	0	0	6	0
7:30 - 7:45	0	0	0	0	10	0
7:45 - 8:00	0	0	0	0	5	1
8:00 - 8:15	0	0	0	0	2	2
8:15 - 8:30	1	0	0	0	7	2
8:30 - 8:45	0	1	0	0	6	4
8:45 - 9:00	1	0	0	0	4	1

North / South
I-95 NB ramps

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 NB ramps & SR 40

Date January 27, 2011

Time Period PM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	93	0	90	0	183	0	0	0	0	0
4:15 - 4:30	106	0	105	0	211	0	0	0	0	0
4:30 - 4:45	103	0	91	0	194	0	0	0	0	0
4:45 - 5:00	114	0	104	0	218	0	0	0	0	0
5:00 - 5:15	131	0	91	0	222	0	0	0	0	0
5:15 - 5:30	125	0	91	0	216	0	0	0	0	0
5:30 - 5:45	122	0	85	1	207	0	0	0	0	0
5:45 - 6:00	125	0	106	0	231	0	0	0	0	0
	919	0	763	1	1,682	0	0	0	0	0

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	26	2	0	0	28	0	344	70	1	414
4:15 - 4:30	13	0	0	0	13	0	272	87	0	359
4:30 - 4:45	18	0	0	0	18	0	284	72	0	356
4:45 - 5:00	15	0	0	0	15	0	327	81	0	408
5:00 - 5:15	25	0	0	0	25	0	351	85	0	436
5:15 - 5:30	22	0	0	0	22	0	385	87	0	472
5:30 - 5:45	34	0	0	0	34	0	332	72	1	404
5:45 - 6:00	17	0	0	0	17	0	318	51	0	369
	170	2	0	0	172	0	2,613	605	2	3,218

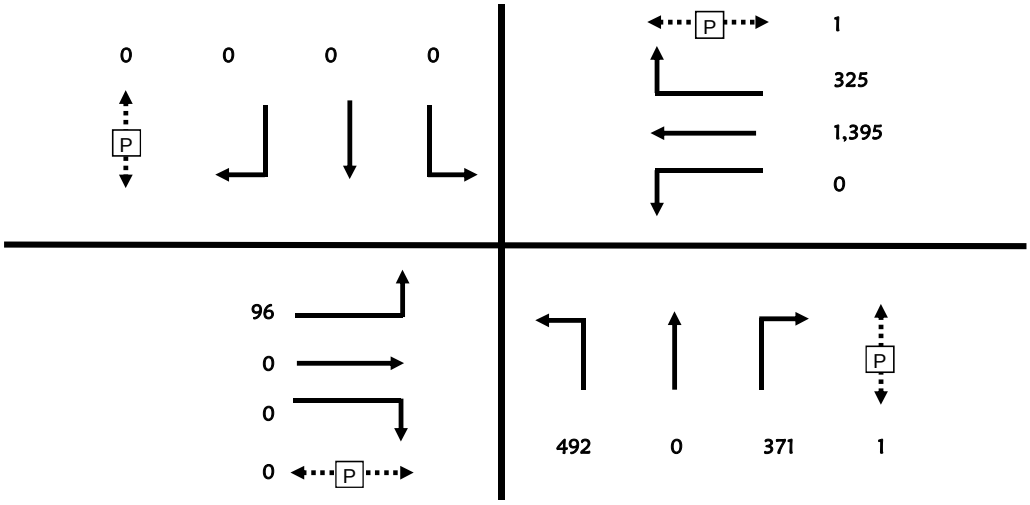
North / South
I-95 NB ramps

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.94

Total Pk Hr Voume
2,679



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection	I-95 NB ramps	&	SR 40
Date	January 27, 2011		
Time Period	PM Peak Hour		**Trucks**

Time Period			Northbound			Southbound		
			Left	Through	Right	Left	Through	Right
4:00	-	4:15	5	0	1	0	0	0
4:15	-	4:30	2	0	2	0	0	0
4:30	-	4:45	1	0	0	0	0	0
4:45	-	5:00	2	0	1	0	0	0
5:00	-	5:15	0	0	0	0	0	0
5:15	-	5:30	2	0	1	0	0	0
5:30	-	5:45	1	0	0	0	0	0
5:45	-	6:00	1	0	1	0	0	0

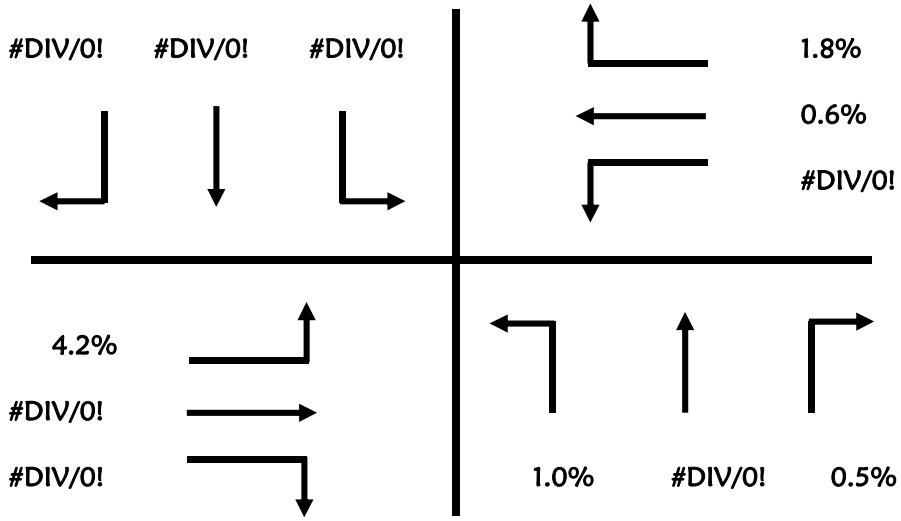
Time Period			Eastbound			Westbound		
			Left	Through	Right	Left	Through	Right
4:00	-	4:15	1	0	0	0	6	0
4:15	-	4:30	0	0	0	0	2	2
4:30	-	4:45	0	0	0	0	5	0
4:45	-	5:00	1	0	0	0	2	3
5:00	-	5:15	2	0	0	0	3	0
5:15	-	5:30	0	0	0	0	2	1
5:30	-	5:45	1	0	0	0	1	2
5:45	-	6:00	1	0	0	0	1	0

North / South
I-95 NB ramps

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Williamson Boulevard & SR 40

Date January 27, 2011

Time Period AM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	40	5	5	0	50	11	14	14	1	39
7:15 - 7:30	39	8	13	0	60	6	6	15	0	27
7:30 - 7:45	72	3	18	0	93	9	5	16	0	30
7:45 - 8:00	92	12	25	0	129	16	9	17	0	42
8:00 - 8:15	63	12	26	0	101	11	14	22	0	47
8:15 - 8:30	49	11	26	0	86	8	10	18	0	36
8:30 - 8:45	61	10	32	0	103	12	17	13	0	42
8:45 - 9:00	80	9	40	0	129	15	12	9	0	36
	496	70	185	0	751	88	87	124	1	299

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	4	151	71	0	226	20	139	4	0	163
7:15 - 7:30	12	204	89	0	305	29	120	5	0	154
7:30 - 7:45	21	221	147	0	389	42	143	7	0	192
7:45 - 8:00	26	277	174	0	477	34	147	7	0	188
8:00 - 8:15	22	270	180	0	472	33	122	9	0	164
8:15 - 8:30	16	214	133	0	363	34	116	8	0	158
8:30 - 8:45	17	231	93	0	341	41	151	16	0	208
8:45 - 9:00	9	259	113	0	381	37	126	15	0	178
	127	1,827	1,000	0	2,954	270	1,064	71	0	1,405

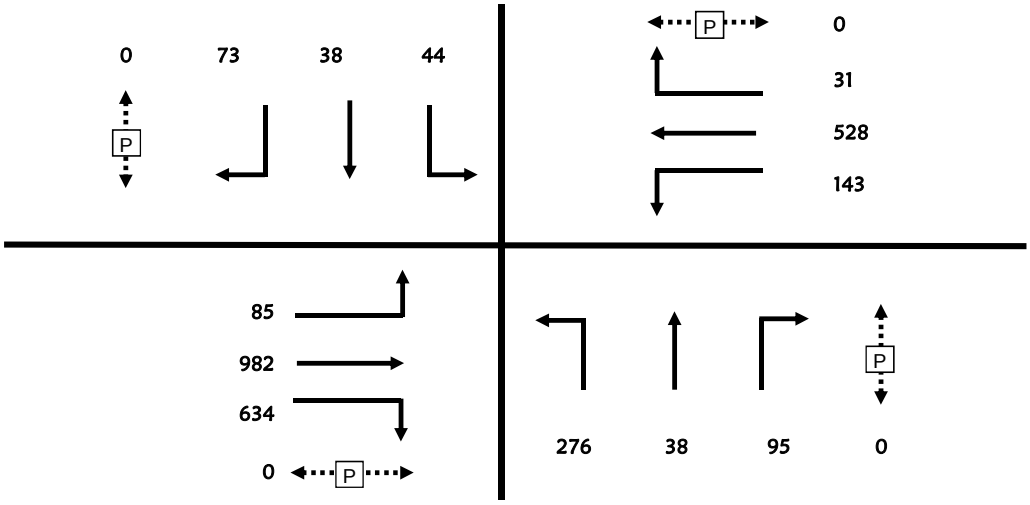
North / South
Williamson Boulevard

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.89

Total Pk Hr Voume
2,967



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Williamson Boulevard & SR 40

Date January 27, 2011

Time Period AM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	0	1	1
7:15 - 7:30	2	1	0	1	1	0
7:30 - 7:45	1	0	1	0	0	0
7:45 - 8:00	2	1	1	0	0	0
8:00 - 8:15	1	1	1	0	2	0
8:15 - 8:30	0	0	0	0	1	0
8:30 - 8:45	7	0	1	0	1	1
8:45 - 9:00	2	1	0	0	0	0

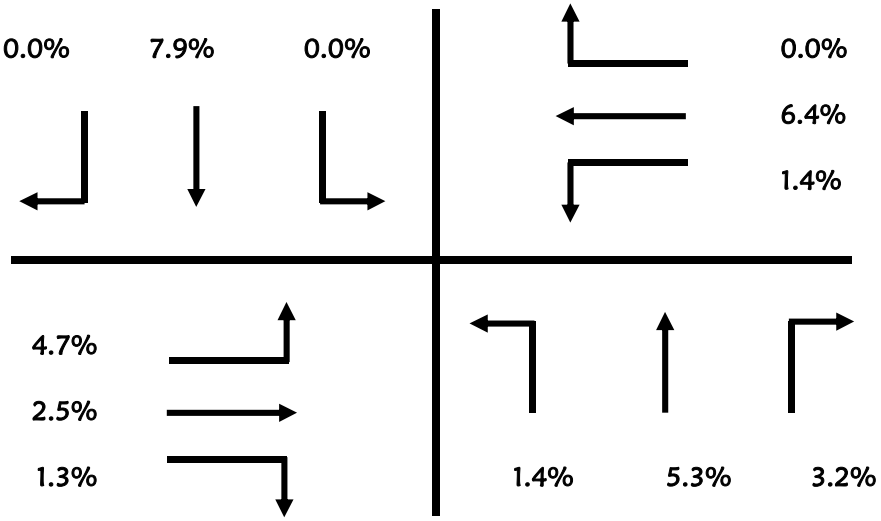
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	6	1	0	7	0
7:15 - 7:30	0	9	0	2	3	0
7:30 - 7:45	0	5	1	0	8	0
7:45 - 8:00	1	5	0	1	11	0
8:00 - 8:15	1	10	1	0	6	0
8:15 - 8:30	2	5	6	1	9	0
8:30 - 8:45	0	5	1	0	3	0
8:45 - 9:00	1	6	2	0	6	0

North / South
Williamson Boulevard

East / West
SR 40

Peak Hour
7:30 - 8:30

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Williamson Boulevard & SR 40

Date January 27, 2011

Time Period PM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	195	30	46	1	271	40	33	46	0	119
4:15 - 4:30	161	48	48	0	257	56	42	36	0	134
4:30 - 4:45	130	30	53	0	213	38	25	36	0	99
4:45 - 5:00	176	35	52	0	263	43	32	40	0	115
5:00 - 5:15	162	26	40	0	228	53	25	41	0	119
5:15 - 5:30	185	49	40	0	274	27	36	26	0	89
5:30 - 5:45	147	39	35	0	221	43	30	47	0	120
5:45 - 6:00	144	41	28	0	213	39	27	53	0	119
	1,300	298	342	1	1,940	339	250	325	0	914

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	30	192	64	0	286	60	207	28	0	295
4:15 - 4:30	34	189	63	0	286	55	194	25	0	274
4:30 - 4:45	27	203	109	0	339	59	198	29	0	286
4:45 - 5:00	23	193	102	1	318	49	200	20	0	269
5:00 - 5:15	24	200	72	0	296	52	229	17	0	298
5:15 - 5:30	29	201	97	0	327	38	266	38	0	342
5:30 - 5:45	38	200	100	9	338	55	226	31	0	312
5:45 - 6:00	31	203	77	0	311	32	171	51	1	254
	236	1,581	684	10	2,501	400	1,691	239	1	2,330

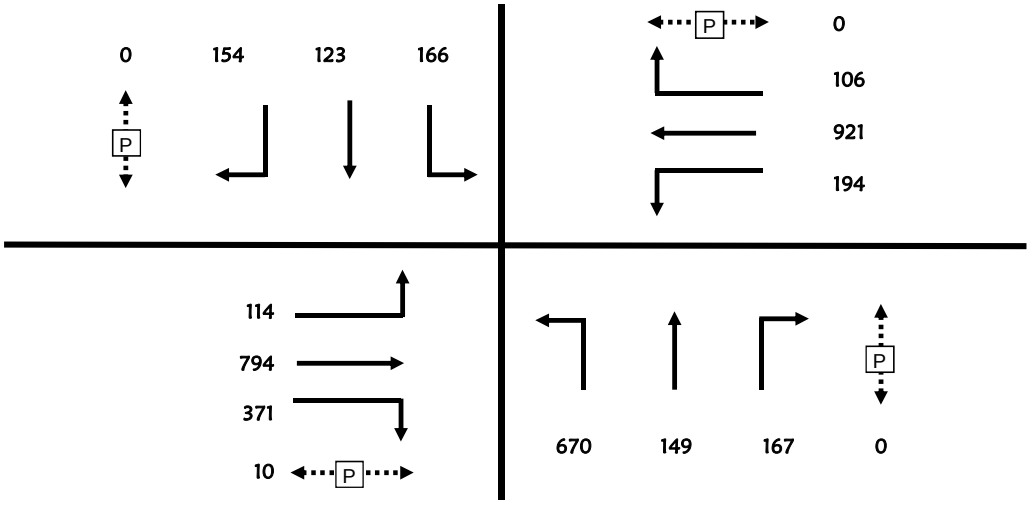
North / South
Williamson Boulevard

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.95

Total Pk Hr Voume
3,929



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Williamson Boulevard & SR 40

Date January 27, 2011

Time Period PM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	3	1	0	0	0	0
4:15 - 4:30	1	1	0	1	0	1
4:30 - 4:45	1	0	1	0	0	1
4:45 - 5:00	2	1	1	0	0	1
5:00 - 5:15	2	0	0	0	0	0
5:15 - 5:30	0	1	0	0	0	0
5:30 - 5:45	1	0	1	0	0	0
5:45 - 6:00	0	1	2	0	0	0

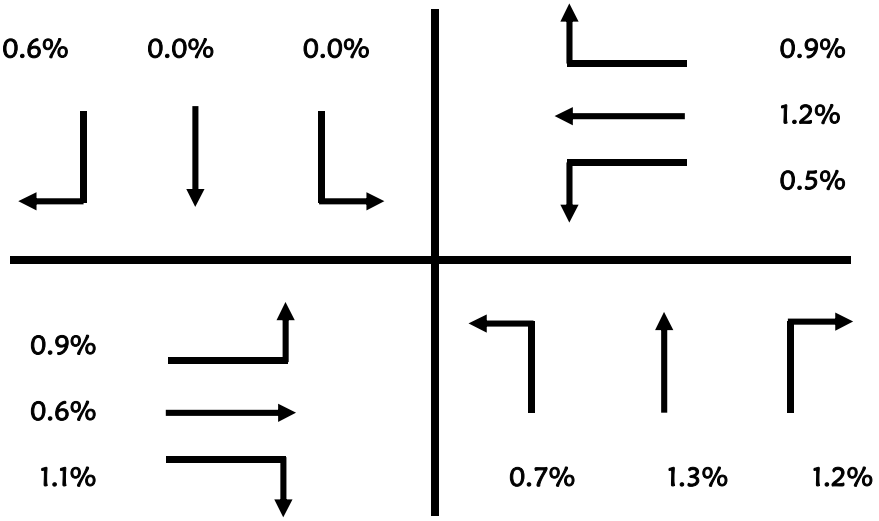
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	1	2	0	1	2	0
4:15 - 4:30	0	3	1	1	4	0
4:30 - 4:45	1	1	2	0	5	0
4:45 - 5:00	0	2	2	0	2	0
5:00 - 5:15	0	0	0	1	3	0
5:15 - 5:30	0	2	1	0	4	0
5:30 - 5:45	1	1	1	0	2	1
5:45 - 6:00	0	3	0	1	0	0

North / South
Williamson Boulevard

East / West
SR 40

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Williamson Blvd & Hand Avenue

Date February 3, 2011

Time Period AM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	1	32	15	0	48	29	85	0	0	114
7:15 - 7:30	0	47	22	0	69	48	111	0	0	159
7:30 - 7:45	0	68	19	0	87	56	123	0	0	179
7:45 - 8:00	0	70	27	0	97	71	186	0	0	257
8:00 - 8:15	2	60	28	0	90	72	149	0	0	221
8:15 - 8:30	0	73	36	0	109	64	138	0	0	202
8:30 - 8:45	0	71	28	0	99	54	143	0	0	197
8:45 - 9:00	0	104	26	0	130	57	88	0	0	145
	3	525	201	0	729	451	1,023	0	0	1,474

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	0	0	0	0	0	21	0	23	0	44
7:15 - 7:30	0	0	0	0	0	32	0	33	0	65
7:30 - 7:45	0	0	0	0	0	31	0	44	0	75
7:45 - 8:00	0	0	0	0	0	32	0	47	0	79
8:00 - 8:15	0	0	0	0	0	30	0	38	0	68
8:15 - 8:30	0	0	0	0	0	37	0	29	0	66
8:30 - 8:45	0	0	0	0	0	23	0	29	0	52
8:45 - 9:00	0	0	0	0	0	24	0	48	0	72
	0	0	0	0	0	230	0	291	0	521

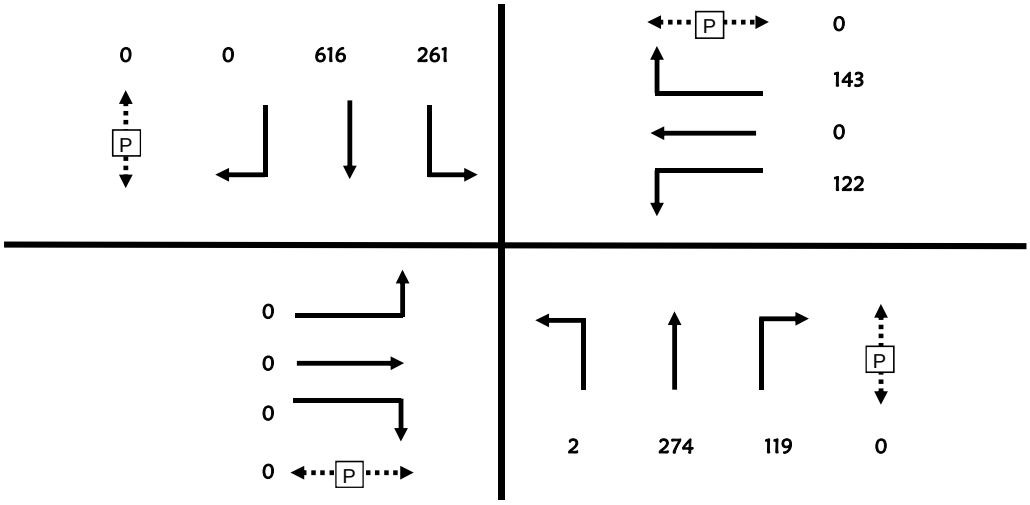
North / South
Williamson Blvd

East / West
Hand Avenue

Peak Hour
7:45 - 8:45

Peak Hour Factor
0.89

Total Pk Hr Voume
1,537



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Williamson Blvd & Hand Avenue

Date February 3, 2011

Time Period AM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	1	0	0	2	0
7:15 - 7:30	0	0	0	0	1	0
7:30 - 7:45	0	2	0	0	0	0
7:45 - 8:00	0	1	0	0	1	0
8:00 - 8:15	0	1	0	1	2	0
8:15 - 8:30	0	1	0	0	8	0
8:30 - 8:45	0	4	0	0	1	0
8:45 - 9:00	0	4	0	1	4	0

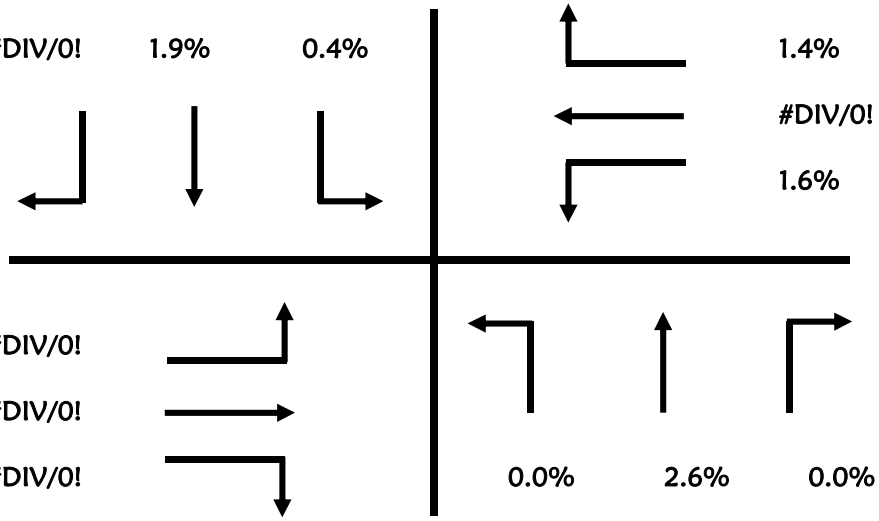
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	1	0	1
7:15 - 7:30	0	0	0	0	0	2
7:30 - 7:45	0	0	0	3	0	1
7:45 - 8:00	0	0	0	0	0	0
8:00 - 8:15	0	0	0	0	0	1
8:15 - 8:30	0	0	0	2	0	0
8:30 - 8:45	0	0	0	0	0	1
8:45 - 9:00	0	0	0	1	0	2

North / South
Williamson Blvd

East / West
Hand Avenue

Peak Hour
7:45 - 8:45

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Williamson Blvd & Hand Avenue

Date February 3, 2011

Time Period PM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	0	181	25	0	206	44	105	0	0	149
4:15 - 4:30	1	133	29	0	163	56	104	0	0	160
4:30 - 4:45	0	183	28	0	211	66	112	0	0	178
4:45 - 5:00	0	184	43	0	227	56	110	0	0	166
5:00 - 5:15	0	138	42	0	180	56	106	0	0	162
5:15 - 5:30	0	197	24	0	221	48	103	0	0	151
5:30 - 5:45	0	179	34	0	213	43	80	0	0	123
5:45 - 6:00	0	143	23	0	166	31	91	0	0	122
	1	1,338	248	0	1,587	400	811	0	0	1,211

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	0	0	0	0	0	23	0	82	0	105
4:15 - 4:30	0	0	0	0	0	16	0	97	0	113
4:30 - 4:45	0	0	0	0	0	41	0	74	0	115
4:45 - 5:00	0	0	0	0	0	32	0	121	0	153
5:00 - 5:15	0	0	0	0	0	58	0	117	0	175
5:15 - 5:30	0	0	0	0	0	45	0	92	0	137
5:30 - 5:45	0	0	0	0	0	19	0	78	0	97
5:45 - 6:00	0	0	0	0	0	26	0	47	0	73
	0	0	0	0	0	260	0	708	0	968

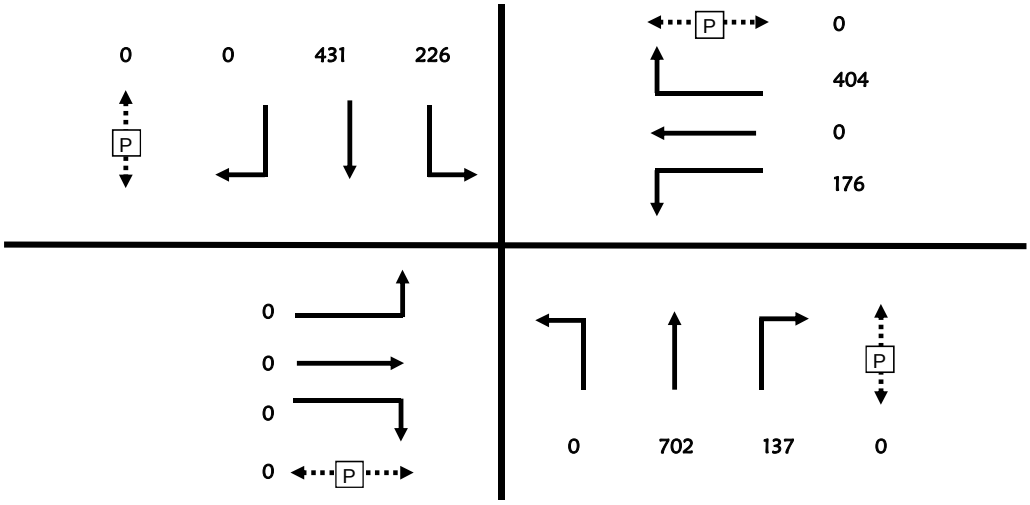
North / South
Williamson Blvd

East / West
Hand Avenue

Peak Hour
4:30 - 5:30

Peak Hour Factor
0.95

Total Pk Hr Voume
2,076



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Williamson Blvd & Hand Avenue

Date February 3, 2011

Time Period PM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	4	0	1	1	0
4:15 - 4:30	0	1	2	0	1	0
4:30 - 4:45	0	1	1	0	3	0
4:45 - 5:00	0	4	0	0	0	0
5:00 - 5:15	0	0	0	0	2	0
5:15 - 5:30	0	0	2	0	1	0
5:30 - 5:45	0	0	0	0	0	0
5:45 - 6:00	0	1	0	0	0	0

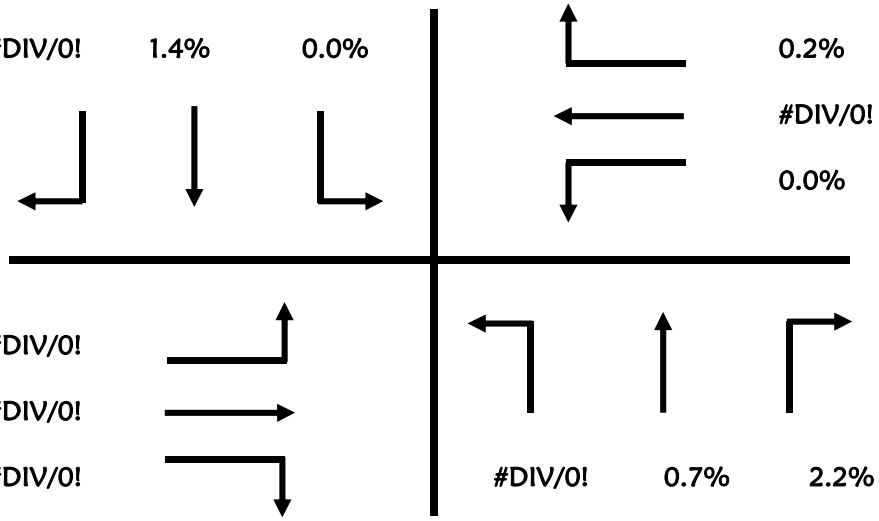
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	0	0	0
4:15 - 4:30	0	0	0	0	0	1
4:30 - 4:45	0	0	0	0	0	0
4:45 - 5:00	0	0	0	0	0	0
5:00 - 5:15	0	0	0	0	0	0
5:15 - 5:30	0	0	0	0	0	1
5:30 - 5:45	0	0	0	0	0	0
5:45 - 6:00	0	0	0	0	0	0

North / South
Williamson Blvd

East / West
Hand Avenue

Peak Hour
4:30 - 5:30

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 NB ramps & LPGA Boulevard

Date February 3, 2011

Time Period AM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	11	0	60	0	71	0	0	0	0	0
7:15 - 7:30	30	0	97	0	127	0	0	0	0	0
7:30 - 7:45	16	0	134	0	150	0	0	0	0	0
7:45 - 8:00	23	0	187	0	210	0	0	0	0	0
8:00 - 8:15	26	0	139	0	165	0	0	0	0	0
8:15 - 8:30	23	0	138	0	161	0	0	0	0	0
8:30 - 8:45	9	0	99	0	108	0	0	0	0	0
8:45 - 9:00	10	0	92	0	102	0	0	0	0	0
	148	0	946	0	1,094	0	0	0	0	0

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	0	0	0	0	0	0	115	29	0	144
7:15 - 7:30	0	0	0	0	0	0	151	51	0	202
7:30 - 7:45	0	0	0	0	0	0	170	59	0	229
7:45 - 8:00	0	0	0	0	0	0	114	51	0	165
8:00 - 8:15	0	0	0	0	0	0	136	32	0	168
8:15 - 8:30	0	0	0	0	0	0	111	43	0	154
8:30 - 8:45	0	0	0	0	0	0	110	42	0	152
8:45 - 9:00	0	0	0	0	0	0	104	34	0	138
	0	0	0	0	0	0	1,011	341	0	1,352

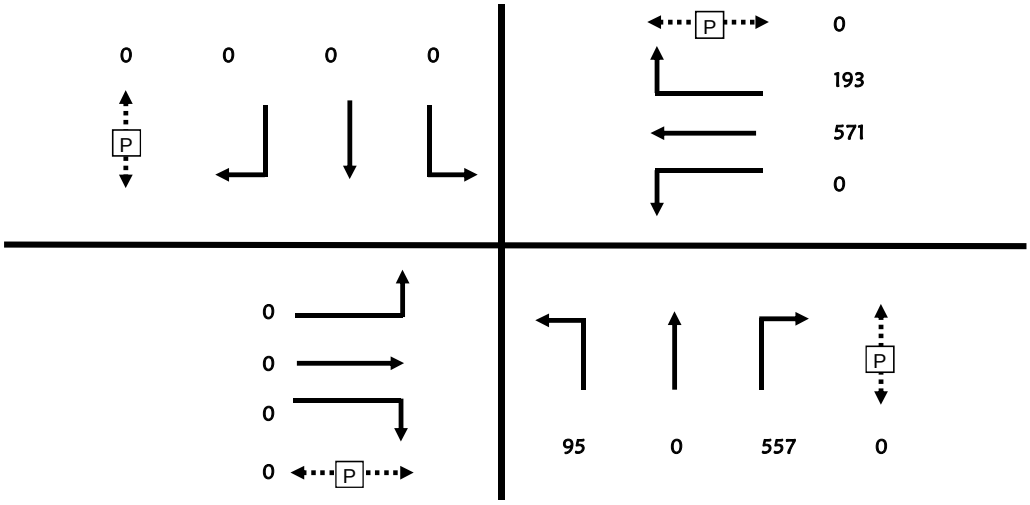
North / South
I-95 NB ramps

East / West
LPGA Boulevard

Peak Hour
7:15 - 8:15

Peak Hour Factor
0.93

Total Pk Hr Voume
1,416



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 NB ramps & LPGA Boulevard

Date February 3, 2011

Time Period AM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	1	0	0	0
7:15 - 7:30	0	0	4	0	0	0
7:30 - 7:45	1	0	3	0	0	0
7:45 - 8:00	1	0	3	0	0	0
8:00 - 8:15	1	0	2	0	0	0
8:15 - 8:30	0	0	4	0	0	0
8:30 - 8:45	0	0	2	0	0	0
8:45 - 9:00	0	0	2	0	0	0

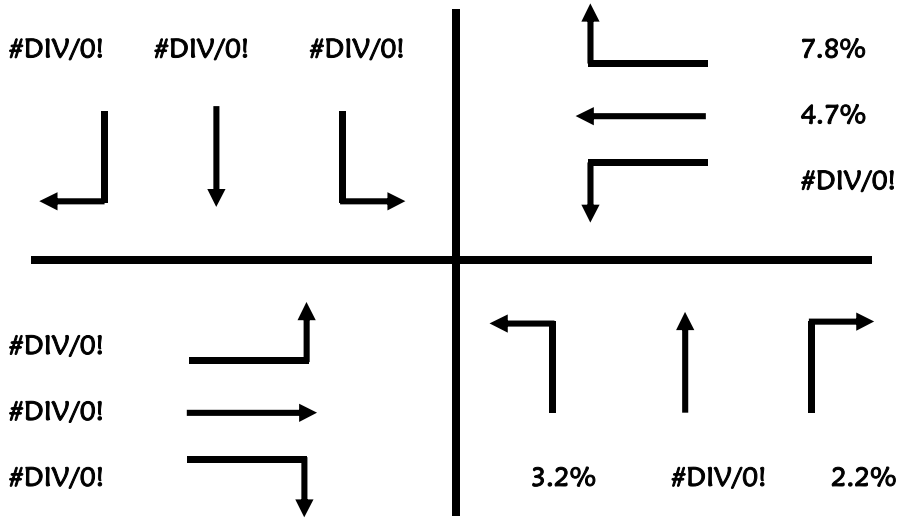
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	0	9	9
7:15 - 7:30	0	0	0	0	6	6
7:30 - 7:45	0	0	0	0	9	4
7:45 - 8:00	0	0	0	0	4	3
8:00 - 8:15	0	0	0	0	8	2
8:15 - 8:30	0	0	0	0	9	2
8:30 - 8:45	0	0	0	0	2	5
8:45 - 9:00	0	0	0	0	3	2

North / South
I-95 NB ramps

East / West
LPGA Boulevard

Peak Hour
7:15 - 8:15

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 NB ramps & LPGA Boulevard

Date February 3, 2011

Time Period PM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	15	1	59	0	75	0	0	0	0	0
4:15 - 4:30	18	0	66	0	84	0	0	0	0	0
4:30 - 4:45	13	0	65	0	78	0	0	0	0	0
4:45 - 5:00	12	0	74	0	86	0	0	0	0	0
5:00 - 5:15	11	0	52	0	63	0	0	0	0	0
5:15 - 5:30	14	0	86	0	100	0	0	0	0	0
5:30 - 5:45	18	0	72	0	90	0	0	0	0	0
5:45 - 6:00	14	0	68	0	82	0	0	0	0	0
	115	1	542	0	658	0	0	0	0	0

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	0	0	0	0	0	0	158	140	0	298
4:15 - 4:30	0	0	0	0	0	0	184	115	1	299
4:30 - 4:45	0	0	0	0	0	0	191	140	0	331
4:45 - 5:00	0	0	0	0	0	0	196	117	0	313
5:00 - 5:15	0	0	0	0	0	0	241	142	0	383
5:15 - 5:30	0	0	0	0	0	0	235	168	0	403
5:30 - 5:45	0	0	0	0	0	0	196	158	0	354
5:45 - 6:00	0	0	0	0	0	0	127	108	0	235
	0	0	0	0	0	0	1,528	1,088	1	2,616

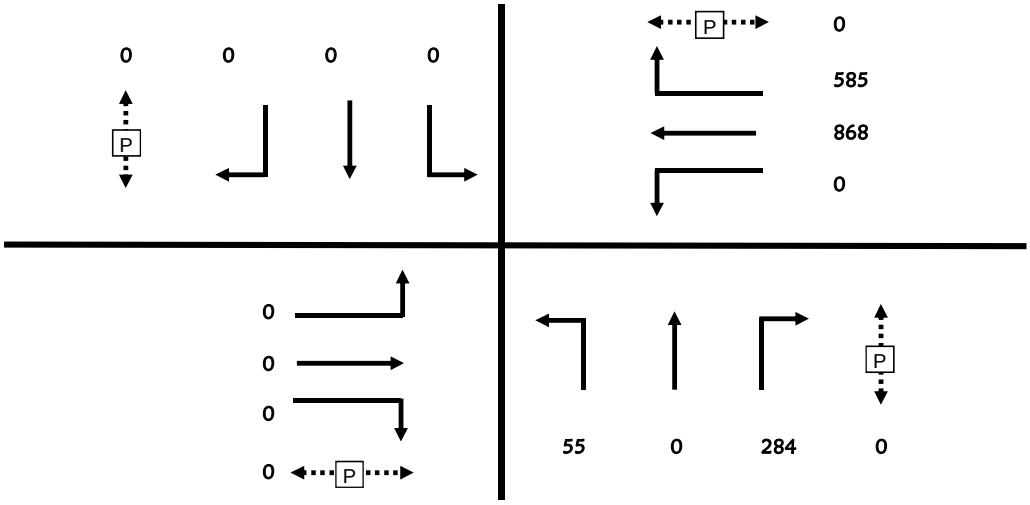
North / South
I-95 NB ramps

East / West
LPGA Boulevard

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.89

Total Pk Hr Voume
1,792



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 NB ramps & LPGA Boulevard

Date February 3, 2011

Time Period PM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	4	0	0	0
4:15 - 4:30	0	0	5	0	0	0
4:30 - 4:45	0	0	1	0	0	0
4:45 - 5:00	0	0	0	0	0	0
5:00 - 5:15	0	0	1	0	0	0
5:15 - 5:30	0	0	0	0	0	0
5:30 - 5:45	0	0	3	0	0	0
5:45 - 6:00	0	0	1	0	0	0

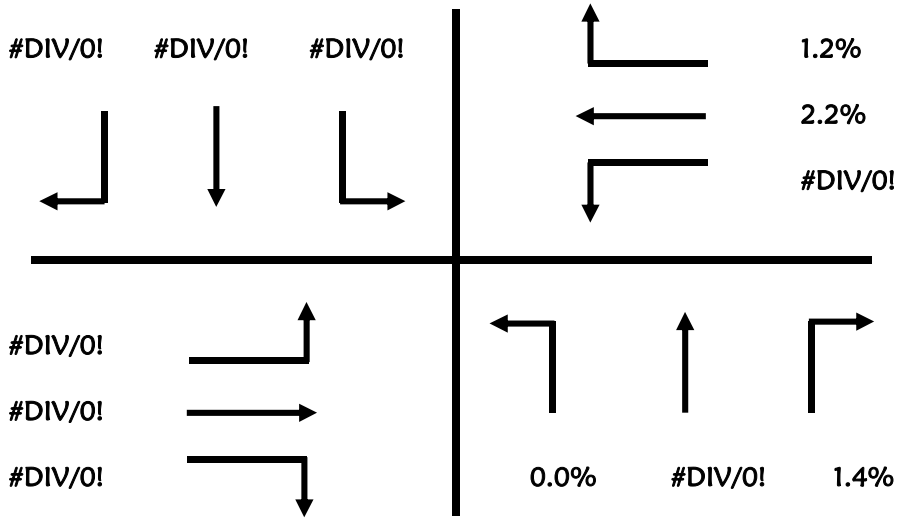
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	0	3	4
4:15 - 4:30	0	0	0	0	5	1
4:30 - 4:45	0	0	0	0	0	3
4:45 - 5:00	0	0	0	0	4	1
5:00 - 5:15	0	0	0	0	5	3
5:15 - 5:30	0	0	0	0	6	0
5:30 - 5:45	0	0	0	0	4	3
5:45 - 6:00	0	0	0	0	3	1

North / South
I-95 NB ramps

East / West
LPGA Boulevard

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 SB ramps & LPGA Boulevard

Date February 3, 2011

Time Period AM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	0	0	0	0	0	113	0	57	0	170
7:15 - 7:30	0	0	0	0	0	181	0	87	0	268
7:30 - 7:45	0	0	0	0	0	233	0	55	0	288
7:45 - 8:00	0	0	0	0	0	268	0	56	0	324
8:00 - 8:15	0	0	0	0	0	209	0	45	0	254
8:15 - 8:30	0	0	0	0	0	141	0	51	0	192
8:30 - 8:45	0	0	0	0	0	151	0	39	0	190
8:45 - 9:00	0	0	0	0	0	156	0	38	0	194
	0	0	0	0	0	1,452	0	428	0	1,880

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	0	73	6	0	79	0	0	0	0	0
7:15 - 7:30	0	114	14	0	128	0	0	0	0	0
7:30 - 7:45	0	167	16	0	183	0	0	0	0	0
7:45 - 8:00	0	207	19	0	226	0	0	0	0	0
8:00 - 8:15	0	117	13	0	130	0	0	0	0	0
8:15 - 8:30	0	146	13	0	159	0	0	0	0	0
8:30 - 8:45	0	112	14	0	126	0	0	0	0	0
8:45 - 9:00	0	105	12	0	117	0	0	0	0	0
	0	1,041	107	0	1,148	0	0	0	0	0

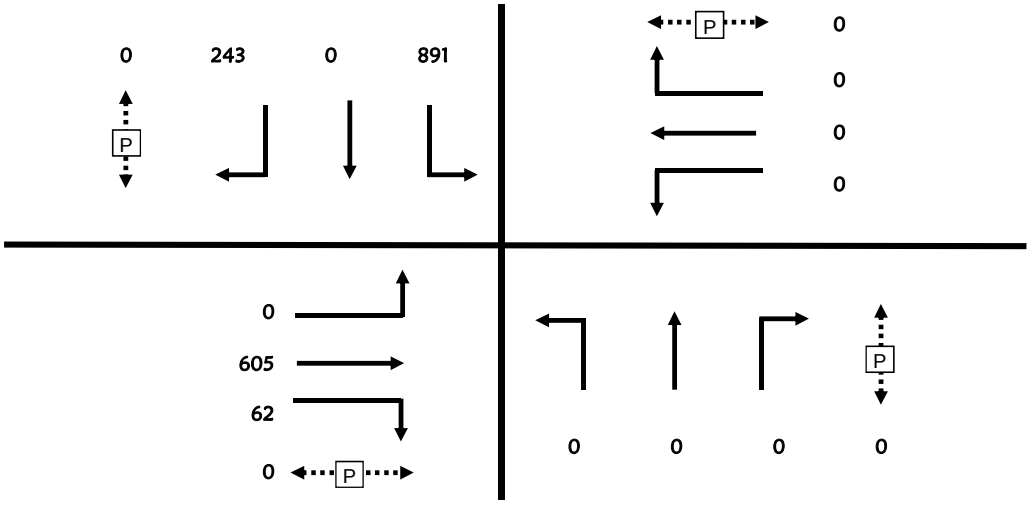
North / South
I-95 SB ramps

East / West
LPGA Boulevard

Peak Hour
7:15 - 8:15

Peak Hour Factor
0.82

Total Pk Hr Voume
1,801



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 SB ramps & LPGA Boulevard

Date February 3, 2011

Time Period AM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	0	2	0	1
7:15 - 7:30	0	0	0	2	0	0
7:30 - 7:45	0	0	0	3	0	0
7:45 - 8:00	0	0	0	5	0	3
8:00 - 8:15	0	0	0	3	0	1
8:15 - 8:30	0	0	0	3	0	1
8:30 - 8:45	0	0	0	3	0	2
8:45 - 9:00	0	0	0	1	0	0

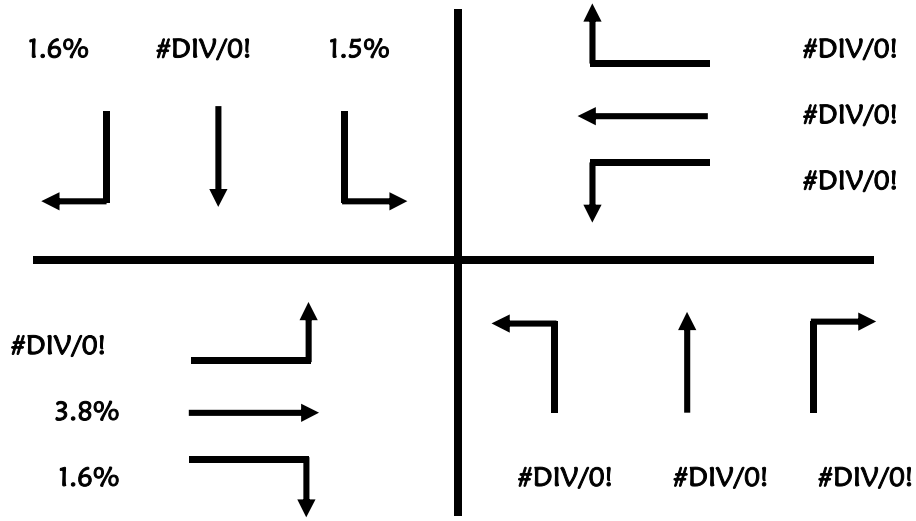
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	3	0	0	0	0
7:15 - 7:30	0	2	1	0	0	0
7:30 - 7:45	0	7	0	0	0	0
7:45 - 8:00	0	8	0	0	0	0
8:00 - 8:15	0	6	0	0	0	0
8:15 - 8:30	0	5	1	0	0	0
8:30 - 8:45	0	6	2	0	0	0
8:45 - 9:00	0	6	0	0	0	0

North / South
I-95 SB ramps

East / West
LPGA Boulevard

Peak Hour
7:15 - 8:15

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 SB ramps & LPGA Boulevard

Date February 3, 2011

Time Period PM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	0	0	0	0	0	68	0	27	0	95
4:15 - 4:30	0	0	0	0	0	61	0	30	0	91
4:30 - 4:45	0	0	0	0	0	73	0	38	0	111
4:45 - 5:00	0	0	0	0	0	75	0	39	0	114
5:00 - 5:15	0	0	0	0	0	65	0	32	0	97
5:15 - 5:30	0	0	0	0	0	55	0	39	0	94
5:30 - 5:45	0	0	0	0	0	58	0	42	0	100
5:45 - 6:00	0	0	0	0	0	61	0	35	0	96
	0	0	0	0	0	516	0	282	0	798

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	0	138	17	0	155	0	0	0	0	0
4:15 - 4:30	0	127	11	0	138	0	0	0	0	0
4:30 - 4:45	0	130	7	0	137	0	0	0	0	0
4:45 - 5:00	0	135	15	0	150	0	0	0	0	0
5:00 - 5:15	0	133	15	0	148	0	0	0	0	0
5:15 - 5:30	0	138	16	0	154	0	0	0	0	0
5:30 - 5:45	0	166	20	0	186	0	0	0	0	0
5:45 - 6:00	0	124	15	0	139	0	0	0	0	0
	0	1,091	116	0	1,207	0	0	0	0	0

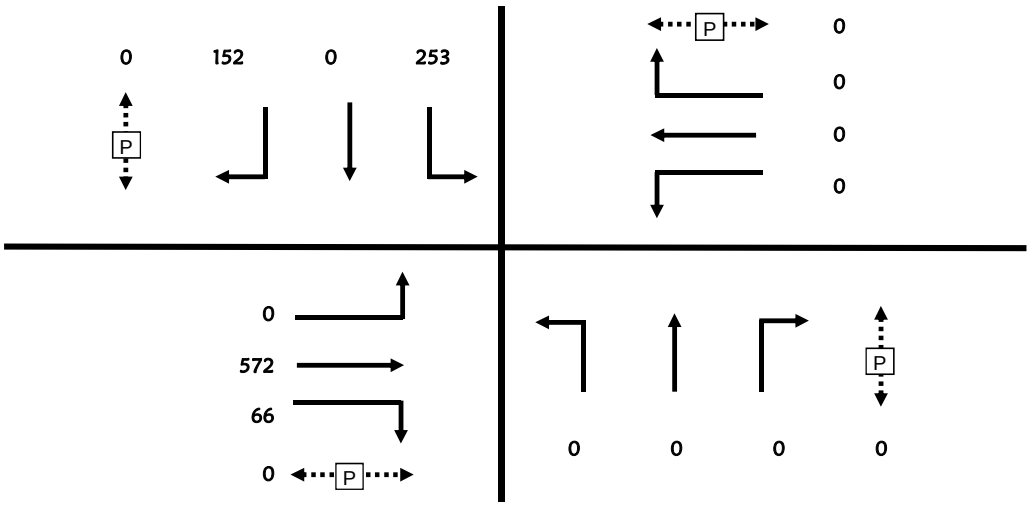
North / South
I-95 SB ramps

East / West
LPGA Boulevard

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.91

Total Pk Hr Voume
1,043



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection I-95 SB ramps & LPGA Boulevard

Date February 3, 2011

Time Period PM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	6	0	2
4:15 - 4:30	0	0	0	6	0	1
4:30 - 4:45	0	0	0	8	0	2
4:45 - 5:00	0	0	0	9	0	2
5:00 - 5:15	0	0	0	4	0	0
5:15 - 5:30	0	0	0	3	0	1
5:30 - 5:45	0	0	0	1	0	1
5:45 - 6:00	0	0	0	3	0	0

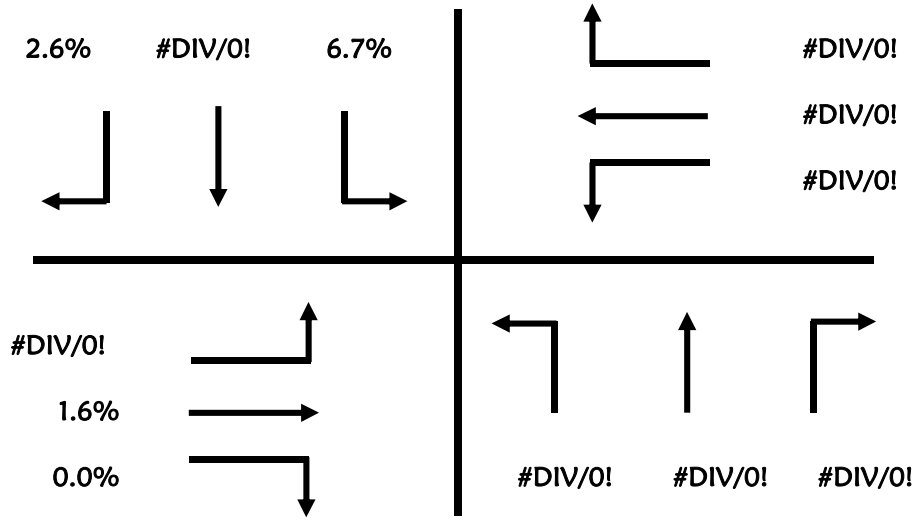
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	1	0	0	0
4:15 - 4:30	0	2	0	0	0	0
4:30 - 4:45	0	6	0	0	0	0
4:45 - 5:00	0	1	0	0	0	0
5:00 - 5:15	0	3	0	0	0	0
5:15 - 5:30	0	2	0	0	0	0
5:30 - 5:45	0	3	0	0	0	0
5:45 - 6:00	0	3	0	0	0	0

North / South
I-95 SB ramps

East / West
LPGA Boulevard

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Tomoka Farms Road & LPGA Boulevard

Date February 3, 2011

Time Period AM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	0	1	10	0	11	0	0	0	0	0
7:15 - 7:30	2	0	10	0	12	0	0	0	0	0
7:30 - 7:45	2	0	16	0	18	0	0	0	0	0
7:45 - 8:00	0	0	21	0	21	1	0	0	0	1
8:00 - 8:15	3	0	11	1	14	0	0	0	0	0
8:15 - 8:30	0	0	28	0	28	0	0	0	0	0
8:30 - 8:45	0	0	22	0	22	2	1	0	0	3
8:45 - 9:00	3	0	21	0	24	2	0	0	0	2
	10	1	139	1	150	5	1	0	0	6

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	2	71	3	0	76	16	93	2	0	111
7:15 - 7:30	0	117	5	0	122	36	180	1	0	217
7:30 - 7:45	0	164	10	0	174	32	156	4	1	192
7:45 - 8:00	0	201	6	0	207	41	115	2	0	158
8:00 - 8:15	0	116	8	0	124	57	90	5	0	152
8:15 - 8:30	0	130	7	0	137	59	84	3	0	146
8:30 - 8:45	2	101	10	0	113	40	70	3	0	113
8:45 - 9:00	0	101	1	0	102	42	73	12	0	127
	4	1,001	50	0	1,055	323	861	32	1	1,216

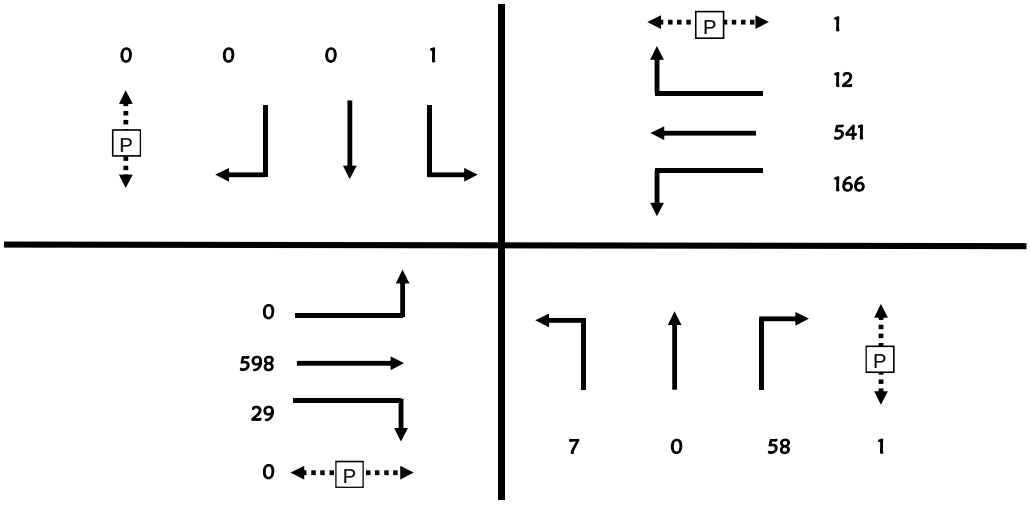
North / South
Tomoka Farms Road

East / West
LPGA Boulevard

Peak Hour
7:15 - 8:15

Peak Hour Factor
0.91

Total Pk Hr Voume
1,412



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Tomoka Farms Road & LPGA Boulevard

Date February 3, 2011

Time Period AM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	0	1	0	0	0
7:15 - 7:30	0	0	0	0	0	0
7:30 - 7:45	1	0	0	0	0	0
7:45 - 8:00	0	0	1	1	0	0
8:00 - 8:15	1	0	1	0	0	0
8:15 - 8:30	0	0	2	0	0	0
8:30 - 8:45	0	0	1	0	0	0
8:45 - 9:00	0	0	3	0	0	0

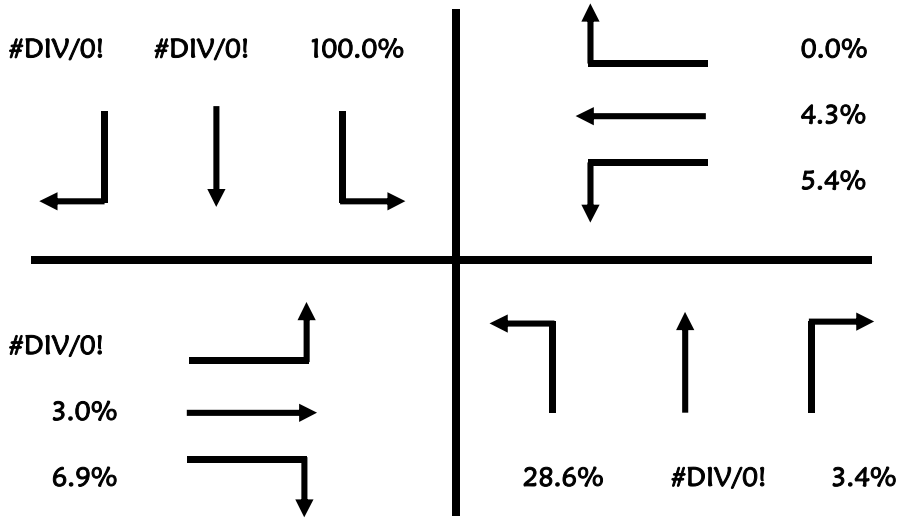
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	0	2	0	0	4	0
7:15 - 7:30	0	2	0	1	3	0
7:30 - 7:45	0	6	1	1	8	0
7:45 - 8:00	0	8	1	3	5	0
8:00 - 8:15	0	2	0	4	7	0
8:15 - 8:30	0	5	0	0	6	0
8:30 - 8:45	0	5	0	2	2	1
8:45 - 9:00	0	3	0	2	2	0

North / South
Tomoka Farms Road

East / West
LPGA Boulevard

Peak Hour
7:15 - 8:15

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Tomoka Farms Road & LPGA Boulevard

Date February 3, 2011

Time Period PM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	0	0	40	0	40	10	0	1	0	11
4:15 - 4:30	0	0	34	0	34	4	2	1	0	7
4:30 - 4:45	3	0	32	0	35	4	1	0	0	5
4:45 - 5:00	3	0	22	0	25	7	0	1	0	8
5:00 - 5:15	4	1	39	0	44	10	0	1	0	11
5:15 - 5:30	3	0	38	0	41	11	0	1	0	12
5:30 - 5:45	1	1	30	0	32	11	1	2	0	14
5:45 - 6:00	4	0	31	0	35	2	1	0	0	3
	18	2	266	0	286	59	5	7	0	71

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	1	94	3	0	98	29	91	4	0	124
4:15 - 4:30	1	103	5	0	109	32	116	9	0	157
4:30 - 4:45	0	99	1	0	100	20	104	4	0	128
4:45 - 5:00	0	118	0	0	118	22	115	7	0	144
5:00 - 5:15	1	108	2	0	111	17	125	6	0	148
5:15 - 5:30	0	112	3	0	115	25	141	4	0	170
5:30 - 5:45	0	132	0	0	132	32	148	4	0	184
5:45 - 6:00	0	106	2	0	108	20	103	1	0	124
	3	872	16	0	891	197	943	39	0	1,179

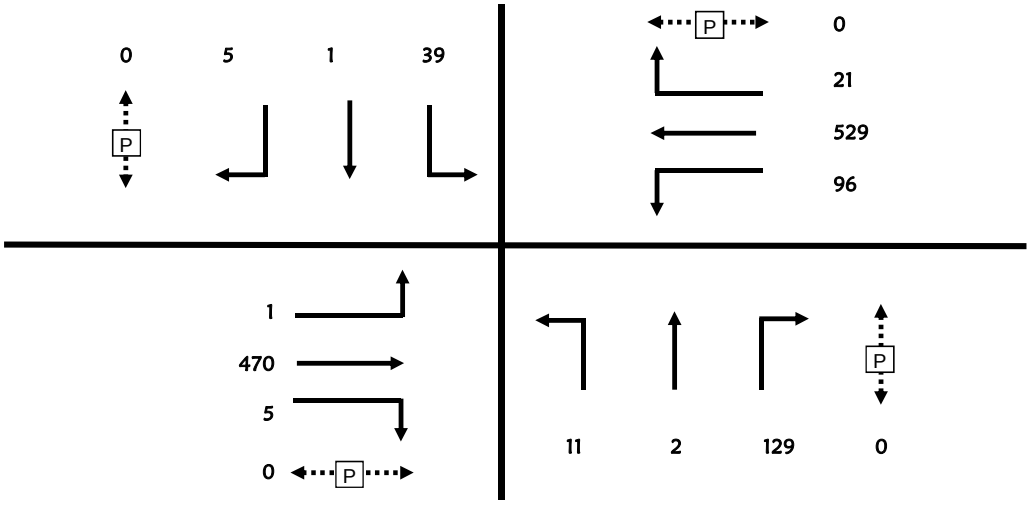
North / South
Tomoka Farms Road

East / West
LPGA Boulevard

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.90

Total Pk Hr Voume
1,309



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Tomoka Farms Road & LPGA Boulevard

Date February 3, 2011

Time Period PM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	1	0	0
4:15 - 4:30	0	0	1	0	0	0
4:30 - 4:45	0	0	1	0	0	0
4:45 - 5:00	0	0	1	0	0	0
5:00 - 5:15	0	0	0	0	0	0
5:15 - 5:30	0	0	0	0	0	0
5:30 - 5:45	0	0	1	0	0	0
5:45 - 6:00	0	0	1	0	0	0

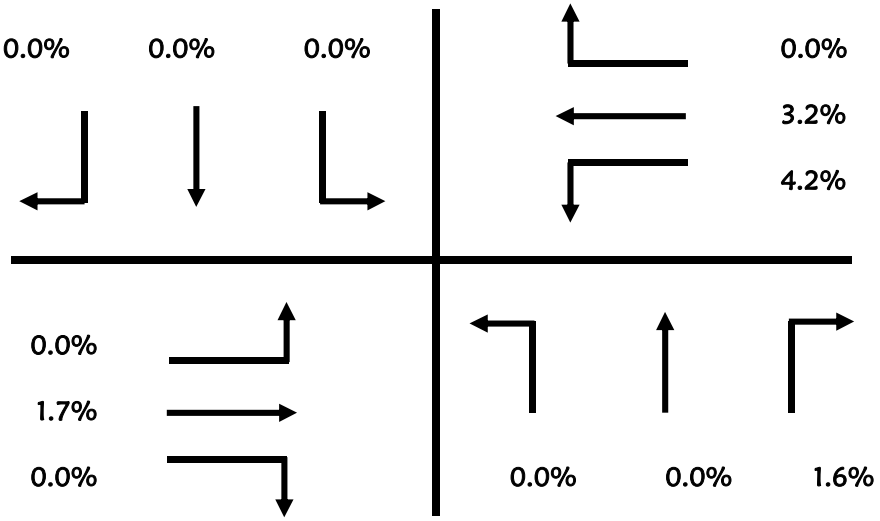
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	0	0	0	3	2	0
4:15 - 4:30	0	2	0	1	4	0
4:30 - 4:45	0	6	0	1	2	0
4:45 - 5:00	0	1	0	0	3	0
5:00 - 5:15	0	2	0	2	5	0
5:15 - 5:30	0	5	0	0	3	0
5:30 - 5:45	0	0	0	2	6	0
5:45 - 6:00	0	2	0	0	0	0

North / South
Tomoka Farms Road

East / West
LPGA Boulevard

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Williamson Blvd & LPGA Blvd

Date February 22, 2011

Time Period AM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	16	14	6	0	36	21	33	12	0	66
7:15 - 7:30	22	27	13	0	62	17	51	20	0	88
7:30 - 7:45	51	37	13	0	101	34	50	17	0	101
7:45 - 8:00	15	37	12	0	64	41	67	13	0	121
8:00 - 8:15	27	32	15	0	74	31	55	14	0	100
8:15 - 8:30	30	39	19	0	88	23	64	19	0	106
8:30 - 8:45	31	57	16	0	104	25	52	17	0	94
8:45 - 9:00	32	34	6	0	72	26	38	23	0	87
	224	277	100	0	601	218	410	135	0	763

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
7:00 - 7:15	21	155	75	0	251	13	133	13	0	159
7:15 - 7:30	42	226	97	0	365	17	158	14	0	189
7:30 - 7:45	50	277	126	0	453	27	148	25	0	200
7:45 - 8:00	69	351	140	0	560	46	105	24	1	175
8:00 - 8:15	60	278	99	0	437	32	119	18	0	169
8:15 - 8:30	59	225	98	0	382	18	111	21	0	150
8:30 - 8:45	50	198	102	0	350	28	114	22	1	164
8:45 - 9:00	41	203	105	0	349	21	95	23	0	139
	392	1,913	842	0	3,147	202	983	160	2	1,345

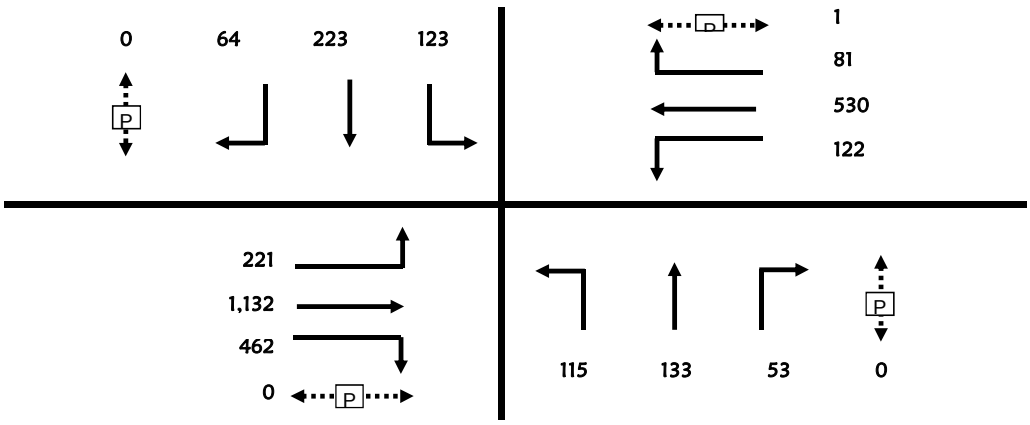
North / South
Williamson Blvd

East / West
LPGA Blvd

Peak Hour
7:15 - 8:15

Peak Hour Factor
0.89

Total Pk Hr Voume
3,259



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Williamson Blvd & LPGA Blvd

Date February 22, 2011

Time Period AM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	2	0	0	1	4	0
7:15 - 7:30	3	0	0	2	2	0
7:30 - 7:45	4	1	1	1	3	0
7:45 - 8:00	2	1	2	1	2	1
8:00 - 8:15	1	0	0	0	5	0
8:15 - 8:30	0	2	0	1	4	2
8:30 - 8:45	1	1	0	2	7	1
8:45 - 9:00	0	1	0	0	1	1

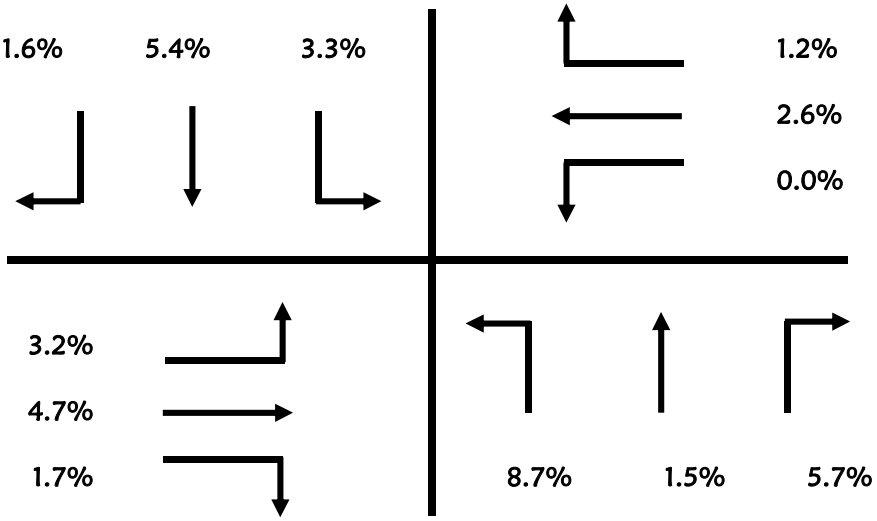
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
7:00 - 7:15	1	4	2	0	4	0
7:15 - 7:30	3	9	3	0	4	0
7:30 - 7:45	1	20	1	0	5	0
7:45 - 8:00	1	18	1	0	2	1
8:00 - 8:15	2	6	3	0	3	0
8:15 - 8:30	3	10	3	0	6	0
8:30 - 8:45	3	5	2	1	7	2
8:45 - 9:00	4	10	6	0	2	0

North / South
Williamson Blvd

East / West
LPGA Blvd

Peak Hour
7:15 - 8:15

Peak Hour Factor
0.00



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Williamson Blvd & LPGA Blvd

Date February 22, 2011

Time Period PM Peak Hour

Time Period	Northbound					Southbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	50	66	27	0	143	29	63	32	0	124
4:15 - 4:30	48	64	37	0	149	26	56	26	0	108
4:30 - 4:45	61	57	44	0	162	49	59	38	0	146
4:45 - 5:00	52	68	25	0	145	19	56	39	0	114
5:00 - 5:15	65	55	28	0	148	28	54	40	0	122
5:15 - 5:30	75	52	22	0	149	27	57	31	0	115
5:30 - 5:45	67	62	15	0	144	29	60	34	0	123
5:45 - 6:00	65	75	21	0	161	32	57	26	0	115
	483	499	219	0	1,201	239	462	266	0	967

Time Period	Eastbound					Westbound				
	Left	Through	Right	Peds	Total	Left	Through	Right	Peds	Total
4:00 - 4:15	32	140	28	0	200	34	194	21	0	249
4:15 - 4:30	35	140	45	0	220	23	251	35	0	309
4:30 - 4:45	56	151	35	0	242	25	208	29	0	262
4:45 - 5:00	50	142	42	0	234	29	226	30	0	285
5:00 - 5:15	47	196	43	0	286	32	264	24	0	320
5:15 - 5:30	51	177	28	0	256	33	251	27	0	311
5:30 - 5:45	48	154	44	0	246	23	193	33	0	249
5:45 - 6:00	49	124	30	0	203	17	155	41	0	213
	368	1,224	295	0	1,887	216	1,742	240	0	2,198

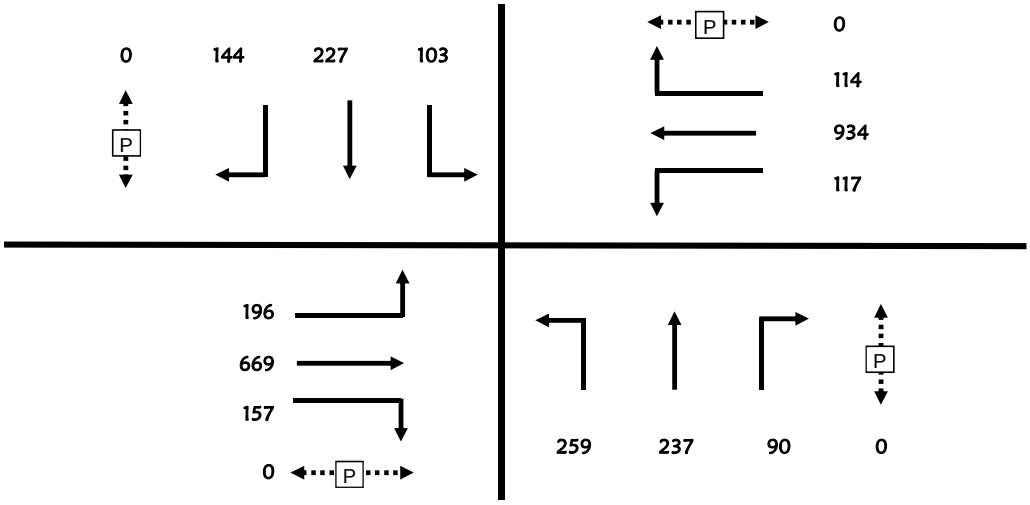
North / South
Williamson Blvd

East / West
LPGA Blvd

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.93

Total Pk Hr Voume
3,247



Roadway Count Summary

GMB Engineers & Planners, Inc.

Intersection Williamson Blvd & LPGA Blvd

Date February 22, 2011

Time Period PM Peak Hour **Trucks**

Time Period	Northbound			Southbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	1	1	0	0	3	3
4:15 - 4:30	2	0	0	2	3	1
4:30 - 4:45	1	0	0	0	1	2
4:45 - 5:00	2	1	0	2	1	2
5:00 - 5:15	1	3	1	1	2	1
5:15 - 5:30	0	0	0	2	2	0
5:30 - 5:45	2	0	0	0	4	2
5:45 - 6:00	3	0	0	0	3	0

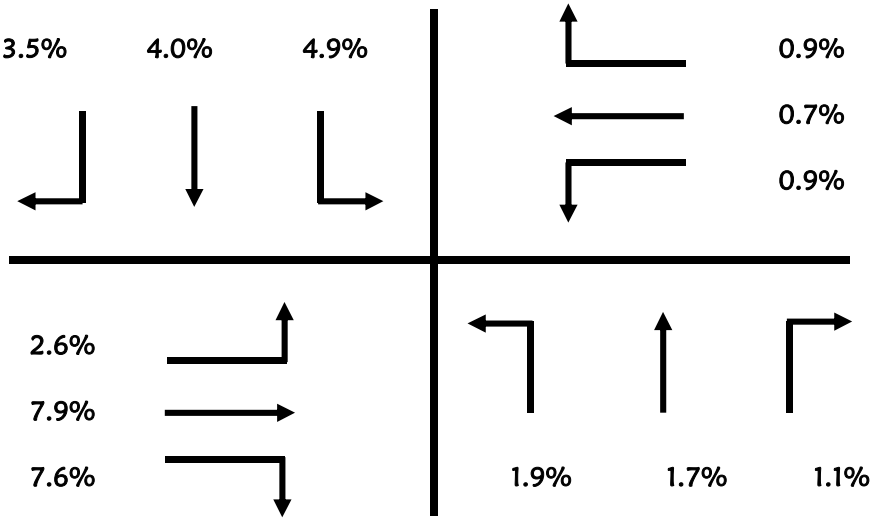
Time Period	Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right
4:00 - 4:15	2	13	3	1	2	0
4:15 - 4:30	2	12	5	1	6	0
4:30 - 4:45	2	9	2	1	3	1
4:45 - 5:00	2	18	3	0	1	0
5:00 - 5:15	2	16	4	0	1	0
5:15 - 5:30	1	10	2	1	3	0
5:30 - 5:45	0	9	3	0	2	1
5:45 - 6:00	0	5	1	0	1	0

North / South
Williamson Blvd

East / West
LPGA Blvd

Peak Hour
4:45 - 5:45

Peak Hour Factor
0.00



Appendix E

FDOT Counts and Seasonal & Axle Factors

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 79 - VOLUSIA

Site: 0499 - ON SR-40, 0.22 MI. W OF I-95 (UVL)

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	27000 C	E 13500	W 13500	10.39	62.46	9.70
2009	29000 C	E 15000	W 14000	10.54	62.19	8.90
2008	26500 C	E 13000	W 13500	10.88	64.83	10.90
2007	28500 C	E 14000	W 14500	11.05	64.64	13.10
2006	28000 C	E 14000	W 14000	10.68	60.08	14.70
2005	28500 C	E 14000	W 14500	10.70	57.20	4.80
2004	30000 C	E 15000	W 15000	10.40	58.90	5.00
2003	27500 C	E 13500	W 14000	10.20	55.20	8.20
2002	25000 C	E 12000	W 13000	8.90	53.80	9.70
2001	25000 C	E 12500	W 12500	10.60	65.50	17.20
2000	25000 C	E 12500	W 12500	10.00	62.20	14.70
1999	25000 F	E 12000	W 13000	10.30	64.20	14.40
1998	24000 C	E 11500	W 12500	10.90	60.80	10.50
1997	22000 F	E 11000	W 11000	10.70	63.10	6.10
1996	21000 C	E 10500	W 10500	10.60	64.90	6.00
1995	17800 C	E 8900	W 8900	9.90	62.00	5.80

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 79 - VOLUSIA

Site: 0523 - ON SR-40, 2.011 MI. W OF I-95 (RCLP)

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	10000 C	E 5000	W 5000	10.39	62.46	8.20
2009	10800 C	E 5500	W 5300	10.54	62.19	8.90
2008	10800 C	E 5400	W 5400	10.88	64.83	10.00
2007	11200 C	E 5400	W 5800	11.05	64.64	10.90
2006	13500 E	E 7000	W 6500	10.68	60.08	14.70
2005	13000 S	E 6400	W 6600	10.70	57.20	8.20
2004	12400 F	E 6100	W 6300	10.40	58.90	8.20
2003	11800 C	E 5800	W 6000	10.20	55.20	8.20
2002	10400 C	E 5200	W 5200	8.90	53.80	9.70
2001	9400 C	E 4500	W 4900	10.60	65.50	17.20
2000	9400 C	E 4700	W 4700	10.00	62.20	14.70
1999	8900 C	E 4300	W 4600	10.30	64.20	14.40
1998	8900 F	E 4500	W 4400	10.90	60.80	10.50
1997	8500 C	E 4300	W 4200	10.70	63.10	6.10
1996	11200 C	E 5600	W 5600	10.60	64.90	6.00
1995	11700 C	E 5900	W 5800	9.90	62.00	5.80

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 79 - VOLUSIA

Site: 7089 - ON WILLIAMSON BLVD., 0.16 MILES SOUTH OF HAND AVENUE, (HPMS)

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	11900 F	N 6000	S 5900	10.39	62.46	15.10
2009	12500 C	N 6300	S 6200	10.54	62.19	14.80

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 79 - VOLUSIA

Site: 7088 - ON WILLIAMSON BLVD., 1.21 MILES NORTH OF LPGA BLVD., (HPMS)

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	13400 F	N 6400	S 7000	10.39	62.46	3.90
2009	14000 C	N 6700	S 7300	10.54	62.19	2.80

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 79 - VOLUSIA

Site: 7087 - ON WILLIAMSON BLVD., 0.17 MILES NORTH OF LPGA BLVD., (HPMS)

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	12700 F	N 6400	S 6300	10.39	62.46	2.20
2009	13300 C	N 6700	S 6600	10.54	62.19	1.00

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 79 - VOLUSIA

Site: 7025 - LPGA BLVD., END BRIDGE OVER I-95 TO RIVERSIDE DRIVE (HPMS)

Year	AADT	Direction 1		Direction 2		K Factor	D Factor	T Factor
2010	15900 S	E	7900	W	8000	10.39	62.46	6.40
2009	16500 F	E	8200	W	8300	10.54	62.19	7.10
2008	17100 C	E	8500	W	8600	10.88	64.83	7.00

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

2009 Peak Season Factor Category Report - Report Type: ALL

Category: 7900 VOLUSIA COUNTYWIDE

MOCF: 0.93

Week	Dates	SF	PSCF
1	01/01/2009 - 01/03/2009	1.05	1.13
2	01/04/2009 - 01/10/2009	1.03	1.11
3	01/11/2009 - 01/17/2009	1.00	1.08
4	01/18/2009 - 01/24/2009	0.99	1.06
* 5	01/25/2009 - 01/31/2009	0.97	1.04
* 6	02/01/2009 - 02/07/2009	0.95	1.02
* 7	02/08/2009 - 02/14/2009	0.94	1.01
* 8	02/15/2009 - 02/21/2009	0.92	0.99
* 9	02/22/2009 - 02/28/2009	0.91	0.98
*10	03/01/2009 - 03/07/2009	0.91	0.98
*11	03/08/2009 - 03/14/2009	0.90	0.97
*12	03/15/2009 - 03/21/2009	0.89	0.96
*13	03/22/2009 - 03/28/2009	0.91	0.98
*14	03/29/2009 - 04/04/2009	0.92	0.99
*15	04/05/2009 - 04/11/2009	0.94	1.01
*16	04/12/2009 - 04/18/2009	0.96	1.03
*17	04/19/2009 - 04/25/2009	0.97	1.04
18	04/26/2009 - 05/02/2009	0.99	1.06
19	05/03/2009 - 05/09/2009	1.00	1.08
20	05/10/2009 - 05/16/2009	1.01	1.09
21	05/17/2009 - 05/23/2009	1.02	1.10
22	05/24/2009 - 05/30/2009	1.02	1.10
23	05/31/2009 - 06/06/2009	1.02	1.10
24	06/07/2009 - 06/13/2009	1.02	1.10
25	06/14/2009 - 06/20/2009	1.02	1.10
26	06/21/2009 - 06/27/2009	1.03	1.11
27	06/28/2009 - 07/04/2009	1.03	1.11
28	07/05/2009 - 07/11/2009	1.04	1.12
29	07/12/2009 - 07/18/2009	1.05	1.13
30	07/19/2009 - 07/25/2009	1.04	1.12
31	07/26/2009 - 08/01/2009	1.04	1.12
32	08/02/2009 - 08/08/2009	1.04	1.12
33	08/09/2009 - 08/15/2009	1.04	1.12
34	08/16/2009 - 08/22/2009	1.04	1.12
35	08/23/2009 - 08/29/2009	1.04	1.12
36	08/30/2009 - 09/05/2009	1.04	1.12
37	09/06/2009 - 09/12/2009	1.04	1.12
38	09/13/2009 - 09/19/2009	1.05	1.13
39	09/20/2009 - 09/26/2009	1.04	1.12
40	09/27/2009 - 10/03/2009	1.02	1.10
41	10/04/2009 - 10/10/2009	1.01	1.09
42	10/11/2009 - 10/17/2009	1.00	1.08
43	10/18/2009 - 10/24/2009	1.01	1.09
44	10/25/2009 - 10/31/2009	1.02	1.10
45	11/01/2009 - 11/07/2009	1.02	1.10
46	11/08/2009 - 11/14/2009	1.03	1.11
47	11/15/2009 - 11/21/2009	1.04	1.12
48	11/22/2009 - 11/28/2009	1.04	1.12
49	11/29/2009 - 12/05/2009	1.04	1.12
50	12/06/2009 - 12/12/2009	1.05	1.13
51	12/13/2009 - 12/19/2009	1.05	1.13
52	12/20/2009 - 12/26/2009	1.03	1.11
53	12/27/2009 - 12/31/2009	1.00	1.08

* Peak Season

2009 Weekly Axle Factor Category Report - Report Type: ALL

County: 79 - VOLUSIA

Week	Dates	7901 VOLUSIA RURAL	7902 VOLUSIA URBAN	7903 I95, SR44 TO FLAG CO	7904 I4, SEMI.CO-I95
1	01/01/2009 - 01/03/2009	0.99	0.99	0.87	0.94
2	01/04/2009 - 01/10/2009	0.99	0.99	0.87	0.94
3	01/11/2009 - 01/17/2009	0.99	0.99	0.86	0.94
4	01/18/2009 - 01/24/2009	0.99	0.99	0.86	0.94
5	01/25/2009 - 01/31/2009	0.99	0.99	0.86	0.94
6	02/01/2009 - 02/07/2009	0.99	0.99	0.86	0.94
7	02/08/2009 - 02/14/2009	0.99	0.99	0.86	0.94
8	02/15/2009 - 02/21/2009	0.99	0.99	0.86	0.94
9	02/22/2009 - 02/28/2009	0.98	0.99	0.86	0.94
10	03/01/2009 - 03/07/2009	0.98	0.99	0.86	0.94
11	03/08/2009 - 03/14/2009	0.98	0.99	0.86	0.94
12	03/15/2009 - 03/21/2009	0.98	0.99	0.86	0.94
13	03/22/2009 - 03/28/2009	0.98	0.99	0.86	0.94
14	03/29/2009 - 04/04/2009	0.98	0.99	0.86	0.94
15	04/05/2009 - 04/11/2009	0.98	0.99	0.86	0.94
16	04/12/2009 - 04/18/2009	0.98	0.99	0.86	0.94
17	04/19/2009 - 04/25/2009	0.98	0.99	0.86	0.94
18	04/26/2009 - 05/02/2009	0.98	0.99	0.86	0.94
19	05/03/2009 - 05/09/2009	0.98	0.99	0.86	0.94
20	05/10/2009 - 05/16/2009	0.99	0.99	0.86	0.94
21	05/17/2009 - 05/23/2009	0.99	0.99	0.86	0.94
22	05/24/2009 - 05/30/2009	0.99	0.99	0.86	0.94
23	05/31/2009 - 06/06/2009	0.99	0.99	0.87	0.94
24	06/07/2009 - 06/13/2009	0.99	0.99	0.87	0.94
25	06/14/2009 - 06/20/2009	0.99	0.99	0.87	0.94
26	06/21/2009 - 06/27/2009	0.98	0.99	0.87	0.93
27	06/28/2009 - 07/04/2009	0.98	0.99	0.87	0.92
28	07/05/2009 - 07/11/2009	0.97	0.99	0.87	0.91
29	07/12/2009 - 07/18/2009	0.97	0.99	0.87	0.90
30	07/19/2009 - 07/25/2009	0.97	0.99	0.87	0.91
31	07/26/2009 - 08/01/2009	0.97	0.99	0.87	0.92
32	08/02/2009 - 08/08/2009	0.97	0.99	0.87	0.93
33	08/09/2009 - 08/15/2009	0.97	0.99	0.87	0.94
34	08/16/2009 - 08/22/2009	0.97	0.99	0.86	0.94
35	08/23/2009 - 08/29/2009	0.98	0.99	0.86	0.94
36	08/30/2009 - 09/05/2009	0.98	0.99	0.86	0.94
37	09/06/2009 - 09/12/2009	0.98	0.99	0.85	0.94
38	09/13/2009 - 09/19/2009	0.99	0.99	0.85	0.94
39	09/20/2009 - 09/26/2009	0.99	0.99	0.85	0.94
40	09/27/2009 - 10/03/2009	0.99	0.99	0.85	0.94
41	10/04/2009 - 10/10/2009	0.99	0.99	0.85	0.94
42	10/11/2009 - 10/17/2009	0.99	0.99	0.85	0.94
43	10/18/2009 - 10/24/2009	0.99	0.99	0.85	0.94
44	10/25/2009 - 10/31/2009	0.99	0.99	0.85	0.94
45	11/01/2009 - 11/07/2009	0.99	0.99	0.86	0.94
46	11/08/2009 - 11/14/2009	0.99	0.99	0.86	0.94
47	11/15/2009 - 11/21/2009	0.99	0.99	0.86	0.94
48	11/22/2009 - 11/28/2009	0.99	0.99	0.86	0.94
49	11/29/2009 - 12/05/2009	0.99	0.99	0.87	0.94
50	12/06/2009 - 12/12/2009	0.99	0.99	0.87	0.94
51	12/13/2009 - 12/19/2009	0.99	0.99	0.87	0.94
52	12/20/2009 - 12/26/2009	0.99	0.99	0.87	0.94
53	12/27/2009 - 12/31/2009	0.99	0.99	0.86	0.94

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2009 Weekly Axle Factor Category Report - Report Type: ALL

County: 79 - VOLUSIA

Axle Factors

Week	Dates	7909 SR40,EAST OF US17	7910 SR11	7911 US17, SR600 - PUTNAM	7912 US17,SEMI.CO-SR15A
1	01/01/2009 - 01/03/2009	0.92	0.97	0.96	0.99
2	01/04/2009 - 01/10/2009	0.92	0.97	0.96	0.99
3	01/11/2009 - 01/17/2009	0.92	0.97	0.96	0.99
4	01/18/2009 - 01/24/2009	0.92	0.97	0.96	0.99
5	01/25/2009 - 01/31/2009	0.92	0.97	0.96	0.99
6	02/01/2009 - 02/07/2009	0.92	0.97	0.96	0.99
7	02/08/2009 - 02/14/2009	0.92	0.97	0.96	0.99
8	02/15/2009 - 02/21/2009	0.92	0.97	0.96	0.99
9	02/22/2009 - 02/28/2009	0.92	0.97	0.96	0.99
10	03/01/2009 - 03/07/2009	0.92	0.97	0.96	0.99
11	03/08/2009 - 03/14/2009	0.92	0.97	0.96	0.99
12	03/15/2009 - 03/21/2009	0.92	0.97	0.96	0.99
13	03/22/2009 - 03/28/2009	0.92	0.97	0.96	0.99
14	03/29/2009 - 04/04/2009	0.92	0.97	0.96	0.99
15	04/05/2009 - 04/11/2009	0.92	0.97	0.96	0.99
16	04/12/2009 - 04/18/2009	0.92	0.97	0.96	0.99
17	04/19/2009 - 04/25/2009	0.92	0.97	0.96	0.99
18	04/26/2009 - 05/02/2009	0.92	0.97	0.96	0.99
19	05/03/2009 - 05/09/2009	0.92	0.97	0.96	0.99
20	05/10/2009 - 05/16/2009	0.92	0.97	0.96	0.99
21	05/17/2009 - 05/23/2009	0.92	0.97	0.96	0.99
22	05/24/2009 - 05/30/2009	0.92	0.97	0.96	0.99
23	05/31/2009 - 06/06/2009	0.92	0.97	0.96	0.99
24	06/07/2009 - 06/13/2009	0.92	0.97	0.96	0.99
25	06/14/2009 - 06/20/2009	0.92	0.97	0.96	0.99
26	06/21/2009 - 06/27/2009	0.92	0.97	0.96	0.99
27	06/28/2009 - 07/04/2009	0.92	0.97	0.96	0.99
28	07/05/2009 - 07/11/2009	0.92	0.97	0.96	0.99
29	07/12/2009 - 07/18/2009	0.92	0.97	0.96	0.99
30	07/19/2009 - 07/25/2009	0.92	0.97	0.96	0.99
31	07/26/2009 - 08/01/2009	0.92	0.97	0.96	0.99
32	08/02/2009 - 08/08/2009	0.92	0.97	0.96	0.99
33	08/09/2009 - 08/15/2009	0.92	0.97	0.96	0.99
34	08/16/2009 - 08/22/2009	0.92	0.97	0.96	0.99
35	08/23/2009 - 08/29/2009	0.92	0.97	0.96	0.99
36	08/30/2009 - 09/05/2009	0.92	0.97	0.96	0.99
37	09/06/2009 - 09/12/2009	0.92	0.97	0.96	0.99
38	09/13/2009 - 09/19/2009	0.92	0.97	0.96	0.99
39	09/20/2009 - 09/26/2009	0.92	0.97	0.96	0.99
40	09/27/2009 - 10/03/2009	0.92	0.97	0.96	0.99
41	10/04/2009 - 10/10/2009	0.92	0.97	0.96	0.99
42	10/11/2009 - 10/17/2009	0.92	0.97	0.96	0.99
43	10/18/2009 - 10/24/2009	0.92	0.97	0.96	0.99
44	10/25/2009 - 10/31/2009	0.92	0.97	0.96	0.99
45	11/01/2009 - 11/07/2009	0.92	0.97	0.96	0.99
46	11/08/2009 - 11/14/2009	0.92	0.97	0.96	0.99
47	11/15/2009 - 11/21/2009	0.92	0.97	0.96	0.99
48	11/22/2009 - 11/28/2009	0.92	0.97	0.96	0.99
49	11/29/2009 - 12/05/2009	0.92	0.97	0.96	0.99
50	12/06/2009 - 12/12/2009	0.92	0.97	0.96	0.99
51	12/13/2009 - 12/19/2009	0.92	0.97	0.96	0.99
52	12/20/2009 - 12/26/2009	0.92	0.97	0.96	0.99
53	12/27/2009 - 12/31/2009	0.92	0.97	0.96	0.99

2010 Peak Season Factor Category Report - Report Type: ALL

Category: 7900 VOLUSIA COUNTYWIDE

MOCF: 0.95

Week	Dates	SF	PSCF
1	01/01/2010 - 01/02/2010	1.05	1.11
2	01/03/2010 - 01/09/2010	1.04	1.10
3	01/10/2010 - 01/16/2010	1.03	1.09
4	01/17/2010 - 01/23/2010	1.01	1.06
5	01/24/2010 - 01/30/2010	0.99	1.04
* 6	01/31/2010 - 02/06/2010	0.97	1.02
* 7	02/07/2010 - 02/13/2010	0.96	1.01
* 8	02/14/2010 - 02/20/2010	0.94	0.99
* 9	02/21/2010 - 02/27/2010	0.94	0.99
*10	02/28/2010 - 03/06/2010	0.93	0.98
*11	03/07/2010 - 03/13/2010	0.93	0.98
*12	03/14/2010 - 03/20/2010	0.93	0.98
*13	03/21/2010 - 03/27/2010	0.94	0.99
*14	03/28/2010 - 04/03/2010	0.94	0.99
*15	04/04/2010 - 04/10/2010	0.95	1.00
*16	04/11/2010 - 04/17/2010	0.96	1.01
*17	04/18/2010 - 04/24/2010	0.97	1.02
*18	04/25/2010 - 05/01/2010	0.98	1.03
19	05/02/2010 - 05/08/2010	0.98	1.03
20	05/09/2010 - 05/15/2010	0.99	1.04
21	05/16/2010 - 05/22/2010	1.00	1.05
22	05/23/2010 - 05/29/2010	1.00	1.05
23	05/30/2010 - 06/05/2010	1.01	1.06
24	06/06/2010 - 06/12/2010	1.01	1.06
25	06/13/2010 - 06/19/2010	1.02	1.07
26	06/20/2010 - 06/26/2010	1.02	1.07
27	06/27/2010 - 07/03/2010	1.03	1.09
28	07/04/2010 - 07/10/2010	1.04	1.10
29	07/11/2010 - 07/17/2010	1.05	1.11
30	07/18/2010 - 07/24/2010	1.04	1.10
31	07/25/2010 - 07/31/2010	1.04	1.10
32	08/01/2010 - 08/07/2010	1.04	1.10
33	08/08/2010 - 08/14/2010	1.04	1.10
34	08/15/2010 - 08/21/2010	1.04	1.10
35	08/22/2010 - 08/28/2010	1.04	1.10
36	08/29/2010 - 09/04/2010	1.03	1.09
37	09/05/2010 - 09/11/2010	1.03	1.09
38	09/12/2010 - 09/18/2010	1.03	1.09
39	09/19/2010 - 09/25/2010	1.02	1.07
40	09/26/2010 - 10/02/2010	1.01	1.06
41	10/03/2010 - 10/09/2010	1.00	1.05
42	10/10/2010 - 10/16/2010	0.99	1.04
43	10/17/2010 - 10/23/2010	0.99	1.04
44	10/24/2010 - 10/30/2010	1.00	1.05
45	10/31/2010 - 11/06/2010	1.00	1.05
46	11/07/2010 - 11/13/2010	1.01	1.06
47	11/14/2010 - 11/20/2010	1.01	1.06
48	11/21/2010 - 11/27/2010	1.02	1.07
49	11/28/2010 - 12/04/2010	1.03	1.09
50	12/05/2010 - 12/11/2010	1.04	1.10
51	12/12/2010 - 12/18/2010	1.05	1.11
52	12/19/2010 - 12/25/2010	1.04	1.10
53	12/26/2010 - 12/31/2010	1.03	1.09

* Peak Season

2010 Weekly Axle Factor Category Report - Report Type: ALL

County: 79 - VOLUSIA

Week	Dates	7901 VOLUSIA RURAL	7902 VOLUSIA URBAN	7903 I95, SR44 TO FLAG CO	7904 I4, SEMI.CO-I95
1	01/01/2010 - 01/02/2010	0.99	0.99	0.86	0.94
2	01/03/2010 - 01/09/2010	0.99	0.99	0.86	0.94
3	01/10/2010 - 01/16/2010	0.99	0.99	0.86	0.94
4	01/17/2010 - 01/23/2010	0.99	0.99	0.86	0.94
5	01/24/2010 - 01/30/2010	0.99	0.99	0.86	0.94
6	01/31/2010 - 02/06/2010	0.99	0.99	0.86	0.94
7	02/07/2010 - 02/13/2010	0.99	0.99	0.86	0.94
8	02/14/2010 - 02/20/2010	0.99	0.99	0.86	0.94
9	02/21/2010 - 02/27/2010	0.99	0.99	0.86	0.94
10	02/28/2010 - 03/06/2010	0.99	0.99	0.86	0.94
11	03/07/2010 - 03/13/2010	0.99	0.99	0.86	0.94
12	03/14/2010 - 03/20/2010	0.99	0.99	0.86	0.94
13	03/21/2010 - 03/27/2010	0.99	0.99	0.86	0.94
14	03/28/2010 - 04/03/2010	0.99	0.99	0.86	0.94
15	04/04/2010 - 04/10/2010	0.99	0.99	0.86	0.94
16	04/11/2010 - 04/17/2010	0.99	0.99	0.86	0.94
17	04/18/2010 - 04/24/2010	0.99	0.99	0.86	0.94
18	04/25/2010 - 05/01/2010	0.99	0.99	0.86	0.94
19	05/02/2010 - 05/08/2010	0.99	0.99	0.86	0.94
20	05/09/2010 - 05/15/2010	0.99	0.99	0.86	0.94
21	05/16/2010 - 05/22/2010	0.99	0.99	0.86	0.94
22	05/23/2010 - 05/29/2010	0.99	0.99	0.86	0.94
23	05/30/2010 - 06/05/2010	0.99	0.99	0.86	0.94
24	06/06/2010 - 06/12/2010	0.99	0.99	0.86	0.94
25	06/13/2010 - 06/19/2010	0.99	0.99	0.86	0.94
26	06/20/2010 - 06/26/2010	0.99	0.99	0.86	0.94
27	06/27/2010 - 07/03/2010	0.99	0.99	0.87	0.94
28	07/04/2010 - 07/10/2010	0.99	0.99	0.87	0.94
29	07/11/2010 - 07/17/2010	0.99	0.99	0.87	0.94
30	07/18/2010 - 07/24/2010	0.98	0.99	0.87	0.94
31	07/25/2010 - 07/31/2010	0.98	0.99	0.87	0.94
32	08/01/2010 - 08/07/2010	0.98	0.99	0.86	0.93
33	08/08/2010 - 08/14/2010	0.98	0.99	0.86	0.93
34	08/15/2010 - 08/21/2010	0.97	0.99	0.86	0.93
35	08/22/2010 - 08/28/2010	0.98	0.99	0.86	0.92
36	08/29/2010 - 09/04/2010	0.98	0.99	0.86	0.91
37	09/05/2010 - 09/11/2010	0.98	0.99	0.86	0.90
38	09/12/2010 - 09/18/2010	0.98	0.99	0.86	0.89
39	09/19/2010 - 09/25/2010	0.98	0.99	0.86	0.90
40	09/26/2010 - 10/02/2010	0.98	0.99	0.86	0.91
41	10/03/2010 - 10/09/2010	0.99	0.99	0.86	0.93
42	10/10/2010 - 10/16/2010	0.99	0.99	0.86	0.94
43	10/17/2010 - 10/23/2010	0.99	0.99	0.86	0.94
44	10/24/2010 - 10/30/2010	0.99	0.99	0.86	0.94
45	10/31/2010 - 11/06/2010	0.99	0.99	0.86	0.94
46	11/07/2010 - 11/13/2010	0.99	0.99	0.86	0.94
47	11/14/2010 - 11/20/2010	0.99	0.99	0.86	0.94
48	11/21/2010 - 11/27/2010	0.99	0.99	0.86	0.94
49	11/28/2010 - 12/04/2010	0.99	0.99	0.86	0.94
50	12/05/2010 - 12/11/2010	0.99	0.99	0.86	0.94
51	12/12/2010 - 12/18/2010	0.99	0.99	0.86	0.94
52	12/19/2010 - 12/25/2010	0.99	0.99	0.86	0.94
53	12/26/2010 - 12/31/2010	0.99	0.99	0.86	0.94

2010 Weekly Axle Factor Category Report - Report Type: ALL

County: 79 - VOLUSIA

Week	Dates	7909 SR40,EAST OF US17	7910 SR11	7911 US17, SR600 - PUTNAM	7912 US17,SEMI.CO-SR15A
1	01/01/2010 - 01/02/2010	0.92	0.96	0.93	0.99
2	01/03/2010 - 01/09/2010	0.92	0.96	0.93	0.99
3	01/10/2010 - 01/16/2010	0.92	0.96	0.93	0.99
4	01/17/2010 - 01/23/2010	0.92	0.96	0.93	0.99
5	01/24/2010 - 01/30/2010	0.92	0.96	0.93	0.99
6	01/31/2010 - 02/06/2010	0.92	0.96	0.93	0.99
7	02/07/2010 - 02/13/2010	0.92	0.96	0.93	0.99
8	02/14/2010 - 02/20/2010	0.92	0.96	0.93	0.99
9	02/21/2010 - 02/27/2010	0.92	0.96	0.93	0.99
10	02/28/2010 - 03/06/2010	0.92	0.96	0.93	0.99
11	03/07/2010 - 03/13/2010	0.92	0.96	0.93	0.99
12	03/14/2010 - 03/20/2010	0.92	0.96	0.93	0.99
13	03/21/2010 - 03/27/2010	0.92	0.96	0.93	0.99
14	03/28/2010 - 04/03/2010	0.92	0.96	0.93	0.99
15	04/04/2010 - 04/10/2010	0.92	0.96	0.93	0.99
16	04/11/2010 - 04/17/2010	0.92	0.96	0.93	0.99
17	04/18/2010 - 04/24/2010	0.92	0.96	0.93	0.99
18	04/25/2010 - 05/01/2010	0.92	0.96	0.93	0.99
19	05/02/2010 - 05/08/2010	0.92	0.96	0.93	0.99
20	05/09/2010 - 05/15/2010	0.92	0.96	0.93	0.99
21	05/16/2010 - 05/22/2010	0.92	0.96	0.93	0.99
22	05/23/2010 - 05/29/2010	0.92	0.96	0.93	0.99
23	05/30/2010 - 06/05/2010	0.92	0.96	0.93	0.99
24	06/06/2010 - 06/12/2010	0.92	0.96	0.93	0.99
25	06/13/2010 - 06/19/2010	0.92	0.96	0.93	0.99
26	06/20/2010 - 06/26/2010	0.92	0.96	0.93	0.99
27	06/27/2010 - 07/03/2010	0.92	0.96	0.93	0.99
28	07/04/2010 - 07/10/2010	0.92	0.96	0.93	0.99
29	07/11/2010 - 07/17/2010	0.92	0.96	0.93	0.99
30	07/18/2010 - 07/24/2010	0.92	0.96	0.93	0.99
31	07/25/2010 - 07/31/2010	0.92	0.96	0.93	0.99
32	08/01/2010 - 08/07/2010	0.92	0.96	0.93	0.99
33	08/08/2010 - 08/14/2010	0.92	0.96	0.93	0.99
34	08/15/2010 - 08/21/2010	0.92	0.96	0.93	0.99
35	08/22/2010 - 08/28/2010	0.92	0.96	0.93	0.99
36	08/29/2010 - 09/04/2010	0.92	0.96	0.93	0.99
37	09/05/2010 - 09/11/2010	0.92	0.96	0.93	0.99
38	09/12/2010 - 09/18/2010	0.92	0.96	0.93	0.99
39	09/19/2010 - 09/25/2010	0.92	0.96	0.93	0.99
40	09/26/2010 - 10/02/2010	0.92	0.96	0.93	0.99
41	10/03/2010 - 10/09/2010	0.92	0.96	0.93	0.99
42	10/10/2010 - 10/16/2010	0.92	0.96	0.93	0.99
43	10/17/2010 - 10/23/2010	0.92	0.96	0.93	0.99
44	10/24/2010 - 10/30/2010	0.92	0.96	0.93	0.99
45	10/31/2010 - 11/06/2010	0.92	0.96	0.93	0.99
46	11/07/2010 - 11/13/2010	0.92	0.96	0.93	0.99
47	11/14/2010 - 11/20/2010	0.92	0.96	0.93	0.99
48	11/21/2010 - 11/27/2010	0.92	0.96	0.93	0.99
49	11/28/2010 - 12/04/2010	0.92	0.96	0.93	0.99
50	12/05/2010 - 12/11/2010	0.92	0.96	0.93	0.99
51	12/12/2010 - 12/18/2010	0.92	0.96	0.93	0.99
52	12/19/2010 - 12/25/2010	0.92	0.96	0.93	0.99
53	12/26/2010 - 12/31/2010	0.92	0.96	0.93	0.99

Appendix F

Signal Timings & SYNCHRO Intersection Analysis Outputs for Year 2011

Signal Timing Sheets
Volusia County

COUNTY OF VOLUSIA TRAFFIC SIGNAL MAINTENANCE INVENTORY SHEET

LOCATION: SR-40 & Breakaway Tr. ISOLATED: X
Ormond Beach
SIGNAL #: 376
CO-ORD:

NAME: A.C. DATE: 5-14-98
NAME: DATE:
NAME: DATE:
NAME: DATE:

MASTER INFORMATION:
CLOSED LOOP: MASTER LOC #: PHONE #: CENTRAL PX:
LOCAL LOC #: LOCAL PX:

MOVEMENT CHART:

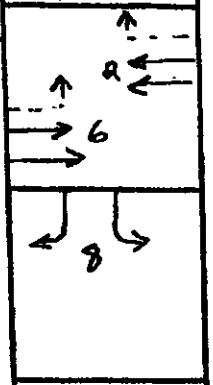
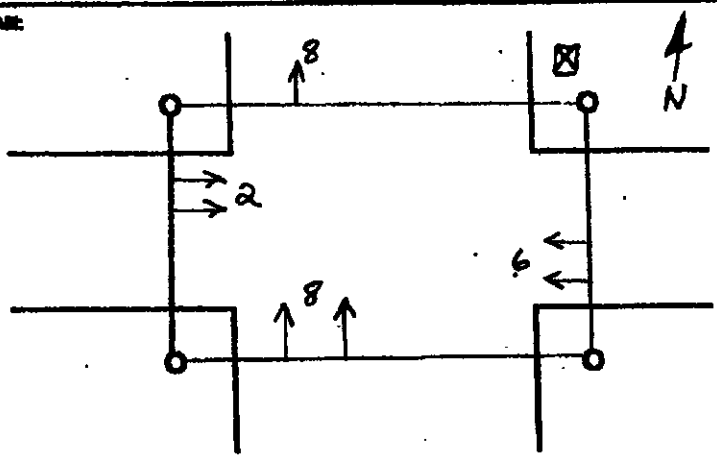


DIAGRAM:



SHOW:
1. POLES
2. SPAN WIRES
3. HEADS
4. CABINET
5. STREET NAMES
6. NORTH ARROW

PH	MOVE	INT	EXT	CLR	RED	MAX1	MAX2	WALK	PDW	RECALL	DET. FUNC	FLASH
2/6	2/6	17	4	2	60					(MIN)	L	Y
8	8	8	3	1	38						NL	R

MAX 2

T.O.D.	
DAY OF WEEK:	

MAX 3

PH	LIMIT	ADJ	UP	DOWN

GENERAL INFORMATION

CONTROLLER TYPE PHASES	1980 EL
PROM NUMBER	92159
CABINET TYPE	V
MAX 2 CLOCK/TBC MOD	
CONDITION OF OVERHEAD	ok.
OVERHEAD STREET NAMES	YES ___ NO ✓
ILLUMINATED STREET NAMES	YES ✓ NO ___
PRE-EMPTION	YES ✓ NO ___
TYPE	OPTICOM

LEDS: RED 7 N 8 3 E 2 W 2 RED ARROW ___ N ___ S ___ E ___ W ___
AMBER 7 N 8 3 E 2 W 2 AMBER ARROW ___ N ___ S ___ E ___ W ___
GREEN 7 N 8 3 E 2 W 2 GREEN ARROW ___ N ___ S ___ E ___ W ___
PED ___ NE ___ SE ___ NW ___ SW ___

BLANK OUT: N ___ S ___ E ___ W ___
ϕ

REMARKS: SPEED LIMIT 60 mph.

(Grn switch) CAB. DATE 8/01

123/SIGMNTN.WK4

COUNTY OF VOLUSIA TRAFFIC SIGNAL MAINTENANCE INVENTORY SHEET

LOCATION: SR 40 & TYMBER CREEK ISOLATED: ____ NAME: L. MARTIN DATE: 10-11-12
SIGNAL #: ORMOND BEACH 257 CO-ORD: ✓ NAME: ____ DATE: ____
NAME: ____ DATE: ____
NAME: ____ DATE: ____

MASTER INFORMATION:
CLOSED LOOP: MASTER LOC #: 17 PHONE #: CENTRAL PX: ____
LOCAL LOC #: 22 LOCAL PX: ____

MOVEMENT CHART:

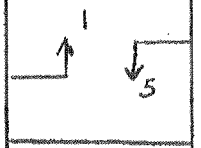
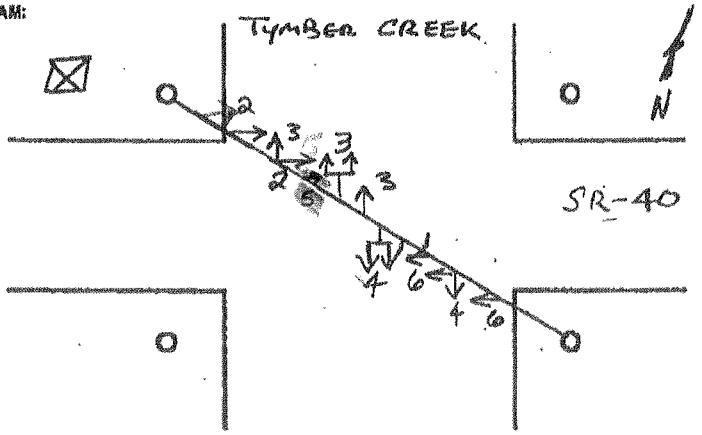
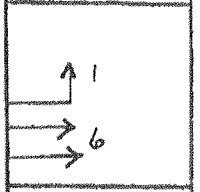
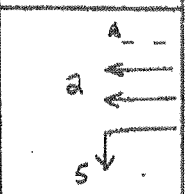


DIAGRAM:

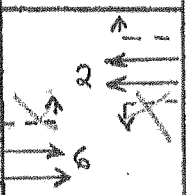


SHOW:
1. POLES
2. SPAN WIRES
3. HEADS
4. CABINET
5. STREET NAMES
6. NORTH ARROW





PH	MOVE	INT	EXT	CLR	RED	MAX1	MAX2	WALK	FOW	RECALL	DET. FUNC	FLASH
1+5	1+5	5	4	4	1	15	18				NL	-
2+6	2+6	13	4	4	2	50	50	7		MIN	L	Y
3	3	8	4	4	2	30	45				NL	R
4	4	8	4	4	2	15	15				NL	R



MAX 2

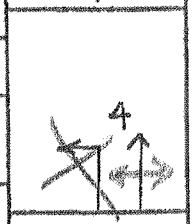
T.O.D.: 6:00AM - 9:00AM
DAY OF WEEK: M-F

MAX 3

PH	LIMIT	ADJ	UP	DOWN
3	60	10	1	2

GENERAL INFORMATION

CONTROLLER TYPE PHASES:
PROM NUMBER:
CABINET TYPE: V
MAX 2 CLOCK/TBC MOD: CL FIBER / MAX-II FREE
CONDITION OF OVERHEAD:
OVERHEAD STREET NAMES: YES ✓ NO ____
ILLUMINATED STREET NAMES: YES ____ NO ✓
PRE-EMPTION: YES ✓ NO ____
TYPE OPTICOM



LEDS: RED 1 N 2 S 3 E 2 W 2 RED ARROW 2 N S E/W 1
AMBER 1 N 2 S 3 E 2 W 2 AMBER ARROW 6 N 2 S 2 E/W 1
GREEN 1 N 2 S 3 E 2 W 2 GREEN ARROW 6 N 2 S 2 E W
PED ____ NE ____ SE ____ NW ____ SW ____

BLANK OUT: N ____ S ____ E ____ W ____

∅

REMARKS: 5 SPEED LIMIT

CAB. DATE 08/1995

123/SGMNTIN.WK4

VOLUSIA COUNTY TRAFFIC ENGINEERING
SYSTEM INVENTORY

Volusia County
FLORIDA

CENT PH #1 9 0 0002397774
CENT PH #1 9 0 0002397774
LOCAL PH # (386) 943-2973

DATE: 11/2/2010 DESIGNED BY:

LOCATION: SR 40 & BOOTH AVE,O.B. ID NO: 346 SYSTEM ID: 17 INTERSECTION NO: 21 TP# 1

CONTROLLER TIME CHART

MVMNT	MIN	EXT	CLR	A.R.	MAX1	MAX2	MAX3	WALK	FDW	DET	REC	FL	SET	CLR	ADJST
1	5	3	4.7	1	20					NL					
2	15	4	5	2	45		60	7		L	MIN	Y	2	2	5
3															
4	8	4	4	1	30					NL		R			
5	5	3	4.7	1	20					NL					
6	15	4	5	2	45		60	7		L	MIN	Y	2	2	5
7															
8	8	4	4	1	30		35			NL		R	1	2	10

CO-ORDINATION

PLAN	1	2	3	4	5	6	7	8
CYCLE	110	120	130					
OFF 1	32	23	21					
OFF 2								
OFF 3								
OFF 4								
OFF 5								
PERM	10%	10%	10%	10%	10%	10%	10%	10%

PHASE SPLITS (%)

CY/SP	C1/S1	C2/S1	C3/S1	C4/S1	C5/S1	C6/S1	C1/S2	C2/S2	C3/S2	C4/S2	C5/S2	C6/S2
PH 1	16	21	17									
PH 2	56	58	62									
PH 3												
PH 4	28	21	21									
PH 5	16	21	17									
PH 6	56	58	62									
PH 7												
PH 8	28	21	21									

BASE DAY		1	2	3	4	5	6	7	8	9	10	11	
MON #1	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
TUES#1	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
WED #1	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
THU #1	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
FRI #1	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
SAT #2	TIME	00:01-09:15	09:15-14:30	14:30-18:15	18:15-22:00	22:00-00:00							
	PLAN	FREE	C2S1	C3S1	C2S1	FREE							
SUN #2	TIME	00:01-09:15	09:15-14:30	14:30-18:15	18:15-22:00	22:00-00:00							
	PLAN	FREE	C2S1	C3S1	C2S1	FREE							

VOLUSIA COUNTY TRAFFIC ENGINEERING
SYSTEM INVENTORY

Volusia County
FLORIDA

CENT PH #1 9 0 0002397774
CENT PH #1 9 0 0002397774
LOCAL PH # (386) 943-2973

DATE: 11/2/2010 DESIGNED BY:

LOCATION: SR 40 & I 95 S.B.OFF RAMP,O.B. ID NO: 263 SYSTEM ID: 17 INTERSECTION NO: 20 TP# 1

CONTROLLER TIME CHART

MVMNT	MIN	EXT	CLR	A.R.	MAX1	MAX2	MAX3	WALK	FDW	DET	REC	FL	SET	CLR	ADJST
1															
2	15	4	4	1	40		60	7	25	L	MIN	Y	2	2	10
3															
4															
5	5	4	4.3	1	25					NL		R			
6	15	4	4	1	40		60	7	25	L	MIN	Y	2	2	10
7															
8	8	4	4	1	25					NL		R			

CO-ORDINATION

PLAN	1	2	3	4	5	6	7	8
CYCLE	110	120	130	175				
OFF 1	35	27	14	20				
OFF 2								
OFF 3								
OFF 4								
OFF 5								
PERM	10%	10%	10%	10%	10%	10%	10%	10%

PHASE SPLITS (%)

CY/SP	C1/S1	C2/S1	C3/S1	C4/S1	C5/S1	C6/S1	C1/S2	C2/S2	C3/S2	C4/S2	C5/S2	C6/S2
PH 1	27	*25	30	*70								
PH 2	51	50	45	22								
PH 3												
PH 4	22	25	25	*8								
PH 5	27	25	30	70								
PH 6	51	50	45	22								
PH 7												
PH 8	22	25	25	8								

BASE DAY		1	2	3	4	5	6	7	8	9	10	11	
	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
MON #1	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
TUES#1	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
WED #1	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
THU #1	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
FRI #1	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
	TIME	00:01-09:15	09:15-14:30	14:30-18:15	18:15-22:00	22:00-00:00							
SAT #2	PLAN	FREE	C2S1	C3S1	C2S1	FREE							
	TIME	00:01-09:15	09:15-14:30	14:30-18:15	18:15-22:00	22:00-00:00							
SUN #2	PLAN	FREE	C2S1	C3S1	C2S1	FREE							

VOLUSIA COUNTY TRAFFIC ENGINEERING
SYSTEM INVENTORY

Volusia County
FLORIDA

CENT PH #1 9 0 0002397774
CENT PH #1 9 0 0002397774
LOCAL PH # (386) 943-2973

DATE: 2/2/2010 DESIGNED BY:

LOCATION: SR 40 & I 95 N.B.OFF RAMP,O.B. ID NO: 262 SYSTEM ID: 17 INTERSECTION NO: 19 TP# 1

CONTROLLER TIME CHART

MVMNT	MIN	EXT	CLR	A.R.	MAX1	MAX2	MAX3	WALK	FDW	DET	REC	FL	SET	CLR	ADJST
1	5	4	4.3	1	20					NL		R			
2	15	4	5	2	40		60	7	29	L	MIN	Y	2	2	10
3															
4	8	4	4	1	25					L		R			
5															
6	15	4	5	2	40		60	7	29	L	MIN	Y	2	2	10
7															
8															

CO-ORDINATION

PLAN	1	2	3	4	5	6	7	8
CYCLE	110	120	130	175				
OFF 1	36	30	14	15				
OFF 2								
OFF 3								
OFF 4								
OFF 5								
PERM	10%	10%	10%	10%	10%	10%	10%	10%

PHASE SPLITS (%)

CY/SP	C1/S1	C2/S1	C3/S1	C4/S1	C5/S1	C6/S1	C1/S2	C2/S2	C3/S2	C4/S2	C5/S2	C6/S2
PH 1	18	17	23	8								
PH 2	57	58	42	67								
PH 3												
PH 4	25	25	35	32								
PH 5	*18	17	23	*8								
PH 6	57	58	42	67								
PH 7												
PH 8	*25	25	35	*32								

BASE DAY		1	2	3	4	5	6	7	8	9	10	11	
MON #1	TIME	00:01-06:45	06:45-09:15	09:15-14:30	14:30-18:45	18:45-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
TUES#1	TIME	00:01-06:45	06:45-09:15	09:15-14:30	14:30-18:45	18:45-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
WED #1	TIME	00:01-06:45	06:45-09:15	09:15-14:30	14:30-18:45	18:45-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
THU #1	TIME	00:01-06:45	06:45-09:15	09:15-14:30	14:30-18:45	18:45-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
FRI #1	TIME	00:01-06:45	06:45-09:15	09:15-14:30	14:30-18:45	18:45-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
SAT #2	TIME	00:01-09:15	09:15-14:30	14:30-18:15	18:15-22:00	22:00-00:00							
	PLAN	FREE	C2S1	C3S1	C2S1	FREE							
SUN #2	TIME	00:01-09:15	09:15-14:30	14:30-18:15	18:15-22:00	22:00-00:00							
	PLAN	FREE	C2S1	C3S1	C2S1	FREE							

VOLUSIA COUNTY TRAFFIC ENGINEERING
SYSTEM INVENTORY

Volusia County
FLORIDA

CENT PH #1 9 0 0002397774
CENT PH #1 9 0 0002397774
LOCAL PH # (386) 943-2973

DATE: 11/2/2010 DESIGNED BY:

LOCATION: SR 40 & WILLIAMSON BLVD.,O.B. ID NO: 187 SYSTEM ID: 17 INTERSECTION NO: 18 TP# 1 of 2

CONTROLLER TIME CHART

MVMNT	MIN	EXT	CLR	A.R.	MAX1	MAX2	MAX3	WALK	FDW	DET	REC	FL	SET	CLR	ADJST
1	5	3	4.3	1	15					NL		R			
2	15	3	5	2	45		60	7	30	L	MIN	Y	2	2	10
3	5	3	4	1	20					NL		R			
4	8	3	4	1	20		30	7	30	NL		R			
5	5	3	4.3	1	15					NL		R			
6	15	3	5	2	45		60	7	30	L	MIN	Y	2	2	10
7	5	3	4	1	20		45			NL		R			
8	8	3	4	1	20					NL		R			

CO-ORDINATION								
PLAN	1	2	3	4	5	6	7	8
CYCLE	110	120	130	175				
OFF 1	38	38	17	66				
OFF 2								
OFF 3								
OFF 4								
OFF 5								
PERM	10%	10%	10%	10%	10%	10%	10%	10%

PHASE SPLITS (%)

CY/SP	C1/S1	C2/S1	C3/S1	C4/S1	C5/S1	C6/S1	C1/S2	C2/S2	C3/S2	C4/S2	C5/S2	C6/S2
PH 1	18	17	16	10						10		
PH 2	47	40	40	55						45		
PH 3	14	17	15	15						35		
PH 4	21	26	29	20						10		
PH 5	20	18	19	10						10		
PH 6	45	39	37	55						41		
PH 7	21	25	29	15						35		
PH 8	~~14~~ 15	18	15	20						10		

BASE DAY		1	2	3	4	5	6	7	8	9	10	11	
MON #1	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
TUES#1	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
WED #1	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
THU #1	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
FRI #1	TIME	00:01-06:30	06:30-09:30	09:30-14:30	14:30-19:00	19:00-22:00	22:00-00:00						
	PLAN	FREE	C1S1	C2S1	C3S1	C2S1	FREE						
SAT #2	TIME	00:01-09:15	09:15-14:30	14:30-18:15	18:15-22:00	22:00-00:00							
	PLAN	FREE	C2S1	C3S1	C2S1	FREE							
SUN #2	TIME	00:01-09:15	09:15-14:30	14:30-18:15	18:15-22:00	22:00-00:00							
	PLAN	FREE	C2S1	C3S1	C2S1	FREE							

VOLUSIA COUNTY TRAFFIC ENGINEERING
SYSTEM INVENTORY

LOCATION: WILLIAMSON & HAND AVE. SYSTEM NO.: 17 INTERSECTION NO.: 24 (ID# 349)

DATE: 10-7-08

DESIGNED BY: G. LESTER

Volusia County
FLORIDA

CONTROLLER TIME CHART

MVMNT	MIN	EXT	CLR	A.R.	MAXI	MAX II	WALK	FDW	LOCK	REC	FLASH
1	5	3	4	1	10				NL		-
2	6	3	4	1	35				L	MIN	Y
3											
4											
5											
6	6	3	4	1	35				L	MIN	Y
7											
8	5	3	4	1	15				NL		R

PHASE SPLITS (%)

PHASE NO.	DIAL # 1	2	3	4	5	6
1						
2						
3						
4						
5						
6						
7						
8						

COORDINATION

PLAN NO.	1		2		3		4		5		6	
CYCLE												
PARMATER	SEC	%	SEC	%	SEC	%	SEC	%	SEC	%	SEC	%
OFFSET 1												
OFFSET 2												
OFFSET 3												
BEGIN P.P.												
END P.P.		6%		6%		6%		6%		6%		6%

CLOCK SETTINGS

PERIOD NO.		1	2	3	4	5	6	7	8	9	10	11	12
MON	TIME	00:00											
	PLAN NO.	FREE											
TUES	TIME												
	PLAN NO.												
WED	TIME												
	PLAN NO.												
THURS	TIME												
	PLAN NO.												
FRI	TIME												
	PLAN NO.												
SAT	TIME												
	PLAN NO.												
SUN	TIME												
	PLAN NO.												

VOLUSIA COUNTY TRAFFIC ENGINEERING
SYSTEM INVE Y

LOCATION: I-95 SB @ LPGA BLVD. SYSTEM NO.: 21 INTERSECTION NO.: 1 (ID # 333)

DATE: 9-15-08

DESIGNED BY: G. LESTER

Volusia County
FLORIDA

CONTROLLER TIME CHART

MVMNT	MIN	EXT	CLR	A.R.	MAXI	MAX II	WALK	FDW	LOCK	REC	FLASH
1											
2	15	4	5	2	30		12		C	MIN	Y
3											
4											
5											
6	15	4	5	2	30		12		C	MIN	Y
7											
8	8	3	5	2	30				NC		R

COORDINATION

PLAN NO.	1		2		3		4		5		6	
CYCLE	70		66		75							
PARMATER	SEC	%	SEC	%	SEC	%	SEC	%	SEC	%	SEC	%
OFFSET 1		0		0		0						
OFFSET 2												
OFFSET 3												
BEGIN P.P.												
END P.P.		6%		6%		6%		6%		6%		6%

PHASE SPLITS (%)

PHASE NO.	DIAL # 1	2	3	4	5	6
1						
2	49	51	53			
3						
4						
5						
6	49	51	53			
7						
8	51	49	47			

CLOCK SETTINGS

PERIOD NO.		1	2	3	4	5	6	7	8	9	10	11	12
MON	TIME	00:00-											
	PLAN NO.	FREE											
TUES	TIME												
	PLAN NO.												
WED	TIME												
	PLAN NO.												
THURS	TIME												
	PLAN NO.												
FRI	TIME												
	PLAN NO.												
SAT	TIME												
	PLAN NO.												
SUN	TIME												
	PLAN NO.												

VOLUSIA COUNTY TRAFFIC ENGINEERING
SYSTEM INVENTORY

LOCATION: I-95 NB. & LPGA BLVD. SYSTEM NO.: 21 INTERSECTION NO.: 2 (ID # 332)

DATE: 9-15-08

DESIGNED BY: G.LESTER

Volusia County
FLORIDA

CONTROLLER TIME CHART

MVMNT	MIN	EXT	CLR	A.R.	MAXI	MAX II	WALK	FDW	LOCK	REC	FLASH
1											
2	15	4	5	2	30		17		L	MIN	4
3											
4	8	3	4	2	30				NL		R
5											
6	15	3	5	2	30		17		L	MIN	4
7											
8											

COORDINATION

PLAN NO.	1		2		3		4		5		6	
CYCLE	70		66		75							
PARMATER	SEC	%	SEC	%	SEC	%	SEC	%	SEC	%	SEC	%
OFFSET 1		89		86		89						
OFFSET 2												
OFFSET 3												
BEGIN P.P.												
END P.P.		6%		6%		6%		6%		6%		6%

PHASE SPLITS (%)

PHASE NO.	DIAL # 1	2	3	4	5	6
1						
2	78	78	79			
3						
4	22	22	21			
5						
6	78	78	79			
7						
8						

CLOCK SETTINGS

PERIOD NO.		1	2	3	4	5	6	7	8	9	10	11	12
MON	TIME	00:00											
	PLAN NO.	FREE											
TUES	TIME												
	PLAN NO.												
WED	TIME												
	PLAN NO.												
THURS	TIME												
	PLAN NO.												
FRI	TIME												
	PLAN NO.												
SAT	TIME												
	PLAN NO.												
SUN	TIME												
	PLAN NO.												

VOLUSIA COUNTY TRAFFIC ENGINEERING
SYSTEM INVENTORY

LOCATION: LPGA & WILLIAMSON SYSTEM NO.: 21 INTERSECTION NO.: 3 (ID #228)

DATE: 8-8-08

DESIGNED BY: G. LESTER

Volusia County FLORIDA

CONTROLLER TIME CHART

MVMNT	MIN	EXT	CLR	A.R.	MAXI	MAX II	WALK	FDW	LOCK	REC	FLASH
1	5	3	4	1	23	12			NL		—
2	8	3	5	2	27	32	7		L		Y
3	5	3	4	1	10	14			NL		R
4	6	3	5	2	35	38			L		R
5	5	3	4	1	13	12			NL		-
6	8	3	5	2	27	32	7		L		Y
7	5	3	4	1	10	14			NL		R
8	6	3	5	2	35	38			L		R

DENSITY ACTIVE
Φ2,4,6,8 ADDED INT. 3 SECONDS
MAX INT. 15 SECONDS
MIN GAP 3 SECONDS

COORDINATION

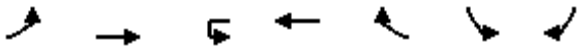
PLAN NO.	1		2		3		4		5		6	
CYCLE	70		66		75							
PARMATER	SEC	%	SEC	%	SEC	%	SEC	%	SEC	%	SEC	%
OFFSET 1												
OFFSET 2												
OFFSET 3												
BEGIN P.P.												
END P.P.		6%		6%		6%		6%		6%		6%

PHASE SPLITS (%)

PHASE NO.	DIAL # 1	2	3	4	5	6
1						
2						
3						
4						
5						
6						
7						
8						

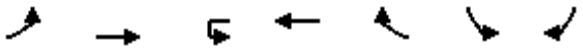
CLOCK SETTINGS

PERIOD NO.		1	2	3	4	5	6	7	8	9	10	11	12
MON	TIME	11:00-600	6:00-1100										
	PLAN NO.	FREE	FREE										
TUES	TIME	MAX-II											
	PLAN NO.												
WED	TIME												
	PLAN NO.												
THURS	TIME												
	PLAN NO.												
FRI	TIME												
	PLAN NO.												
SAT	TIME												
	PLAN NO.												
SUN	TIME												
	PLAN NO.												



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	1	400	0	139	6	43	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1805	3539	1900	3456	0	1723	0
Flt Permitted	0.950					0.957	
Satd. Flow (perm)	1805	3539	1900	3456	0	1723	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	4%	0%	2%	25%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1	460	0	167	0	54	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	1	400	0	139	6	43	4
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	1	460	0	160	7	49	5
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	167		0			395	83
vC1, stage 1 conf vol						163	
vC2, stage 2 conf vol						232	
vCu, unblocked vol	167		0			395	83
tC, single (s)	4.1		0.0			6.8	7.4
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.5
p0 queue free %	100		0			93	99
cM capacity (veh/h)	1424		0			717	890

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	1	230	230	107	60	0	54
Volume Left	1	0	0	0	0	0	49
Volume Right	0	0	0	0	7	0	5
cSH	1424	1700	1700	1700	1700	1700	729
Volume to Capacity	0.00	0.14	0.14	0.06	0.04	0.00	0.07
Queue Length 95th (ft)	0	0	0	0	0	0	5
Control Delay (s)	7.5	0.0	0.0	0.0	0.0	0.0	10.3
Lane LOS	A						B
Approach Delay (s)	0.0			0.0			10.3
Approach LOS							B

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	21.1%	ICU Level of Service	A
Analysis Period (min)	15		

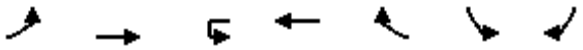
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	23	422	0	141	29	93	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1805	3438	1900	3282	1468	1767	0
Flt Permitted	0.950					0.955	
Satd. Flow (perm)	1805	3438	1900	3282	1468	1767	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		2348		1457	
Travel Time (s)		30.2		26.7		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	0%	10%	10%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	28	508	0	170	35	119	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 30.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	23	422	0	141	29	93	6
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	28	508	0	170	35	112	7
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	170		0			480	85
vC1, stage 1 conf vol						170	
vC2, stage 2 conf vol						310	
vCu, unblocked vol	170		0			480	85
tC, single (s)	4.1		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	98		0			83	99
cM capacity (veh/h)	1420		0			652	964

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	28	254	254	85	85	35	0	119
Volume Left	28	0	0	0	0	0	0	112
Volume Right	0	0	0	0	0	35	0	7
cSH	1420	1700	1700	1700	1700	1700	1700	665
Volume to Capacity	0.02	0.15	0.15	0.05	0.05	0.02	0.00	0.18
Queue Length 95th (ft)	1	0	0	0	0	0	0	13
Control Delay (s)	7.6	0.0	0.0	0.0	0.0	0.0	0.0	11.6
Lane LOS	A							B
Approach Delay (s)	0.4			0.0				11.6
Approach LOS								B

Intersection Summary			
Average Delay	1.9		
Intersection Capacity Utilization	30.5%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	1	578	1	181	54	152	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1805	3471	1805	3471	1482	1805	1346
Flt Permitted	0.627		0.411			0.950	
Satd. Flow (perm)	1191	3471	781	3471	1482	1805	1346
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					59		5
Link Speed (mph)		50		50		30	
Link Distance (ft)		4032		4152		622	
Travel Time (s)		55.0		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	0%	4%	9%	0%	20%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	1	635	1	199	59	167	5
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		6		2		8	
Permitted Phases	6		2		2		8
Total Split (s)	60.0	60.0	60.0	60.0	60.0	30.0	30.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	4.0
Act Effct Green (s)	19.6	19.6	19.6	19.6	19.6	9.2	9.2
Actuated g/C Ratio	0.50	0.50	0.50	0.50	0.50	0.24	0.24
v/c Ratio	0.00	0.36	0.00	0.11	0.08	0.39	0.02
Control Delay	6.0	6.9	6.0	5.8	2.6	14.4	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.0	6.9	6.0	5.8	2.6	14.4	7.2
LOS	A	A	A	A	A	B	A
Approach Delay		6.9		5.0		14.1	
Approach LOS		A		A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 39			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay: 7.6		Intersection LOS: A	
Intersection Capacity Utilization 38.3%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	3	37	756	18	43	37	296	363	21	26	37	784
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		0		435		385	0		0	0
Storage Lanes		1		0		1		1	0		0	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	1754	3522	0	0	1805	3505	1599	0	1765	0	1698
Flt Permitted		0.950				0.950				0.988		0.950
Satd. Flow (perm)	0	1754	3522	0	0	1805	3505	1599	0	1765	0	1698
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2					437		24		
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.83	0.83	0.83	0.83	1.00	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	3%	2%	6%	0%	0%	3%	1%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												45%
Lane Group Flow (vph)	0	49	933	0	0	88	357	437	0	101	0	520
Turn Type	Prot	Prot	NA		Prot	Prot	NA	Perm	Split	NA		Split
Protected Phases	1	1	6		5	5	2		3	3		4
Permitted Phases								2				
Total Split (s)	14.0	14.0	47.0	0.0	16.0	16.0	49.0	49.0	15.0	15.0	0.0	52.0
Total Lost Time (s)	5.0	5.0	6.0	4.0	5.0	4.0	6.0	6.0	6.0	6.0	4.0	6.0
Act Effct Green (s)		8.5	38.2			11.4	39.7	39.7		9.0		43.1
Actuated g/C Ratio		0.07	0.32			0.09	0.33	0.33		0.07		0.36
v/c Ratio		0.40	0.84			0.51	0.31	0.53		0.66		0.86
Control Delay		67.8	47.1			67.1	32.1	5.5		65.5		52.6
Queue Delay		0.0	0.0			0.0	0.0	0.0		0.0		0.0
Total Delay		67.8	47.1			67.1	32.1	5.5		65.5		52.6
LOS		E	D			E	C	A		E		D
Approach Delay			48.1				22.4			65.5		
Approach LOS			D				C			E		

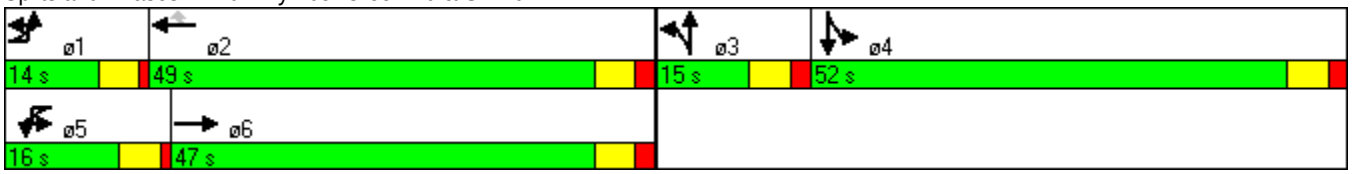
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 120.6			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 42.5		Intersection LOS: D	
Intersection Capacity Utilization 69.8%		ICU Level of Service C	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	39	37
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Satd. Flow (prot)	1698	0
Flt Permitted	0.961	
Satd. Flow (perm)	1698	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	4	
Link Speed (mph)	30	
Link Distance (ft)	328	
Travel Time (s)	7.5	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.83	0.83
Growth Factor	100%	100%
Heavy Vehicles (%)	0%	0%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	517	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Total Split (s)	52.0	0.0
Total Lost Time (s)	6.0	4.0
Act Effct Green (s)	43.1	
Actuated g/C Ratio	0.36	
v/c Ratio	0.85	
Control Delay	51.4	
Queue Delay	0.0	
Total Delay	51.4	
LOS	D	
Approach Delay	52.0	
Approach LOS	D	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	44	1569	7	8	63	757	10	10	0	22	150	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		0		300		325	0		0	0	
Storage Lanes	1		0		1		1	0		0	0	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1805	3536	0	0	1758	3610	1615	0	1697	0	0	1811
Flt Permitted	0.266				0.060				0.895			0.699
Satd. Flow (perm)	505	3536	0	0	111	3610	1615	0	1542	0	0	1328
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		1					12		27			
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	0%	3%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	54	1946	0	0	88	935	12	0	39	0	0	186
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2		2	4			8	
Total Split (s)	18.0	61.0	0.0	18.0	18.0	61.0	61.0	31.0	31.0	0.0	31.0	31.0
Total Lost Time (s)	5.7	7.0	4.0	5.7	5.7	7.0	7.0	5.0	5.0	4.0	5.0	5.0
Act Effct Green (s)	73.1	66.4			75.0	67.3	67.3		20.7			20.7
Actuated g/C Ratio	0.66	0.60			0.68	0.61	0.61		0.19			0.19
v/c Ratio	0.13	0.91			0.47	0.42	0.01		0.12			0.74
Control Delay	6.6	29.5			30.1	10.0	2.8		17.7			59.6
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			0.0
Total Delay	6.6	29.5			30.1	10.0	2.8		17.7			59.6
LOS	A	C			C	A	A		B			E
Approach Delay		28.9				11.6			17.7			53.7
Approach LOS		C				B			B			D

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 32 (29%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 24.9	Intersection LOS: C

Lane Group	SBR
Lane Configurations	
Volume (vph)	22
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	1
Taper Length (ft)	
Satd. Flow (prot)	1615
Flt Permitted	
Satd. Flow (perm)	1615
Right Turn on Red	Yes
Satd. Flow (RTOR)	27
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.81
Growth Factor	100%
Heavy Vehicles (%)	0%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	27
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Total Split (s)	31.0
Total Lost Time (s)	5.0
Act Effct Green (s)	20.7
Actuated g/C Ratio	0.19
v/c Ratio	0.08
Control Delay	12.7
Queue Delay	0.0
Total Delay	12.7
LOS	B
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 77.5% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

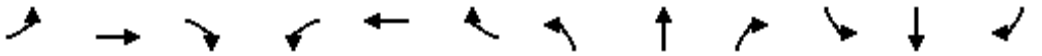
Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Volume (vph)	4	1691	54	112	782	52	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%			0%	0%	
Storage Length (ft)	0		0	300		75	0
Storage Lanes	0		0	1		1	1
Taper Length (ft)	25			25		25	
Satd. Flow (prot)	0	3522	0	1805	3471	1770	1599
Flt Permitted				0.950		0.950	
Satd. Flow (perm)	0	3522	0	1805	3471	1770	1599
Link Speed (mph)		45			45	30	
Link Distance (ft)		656			721	393	
Travel Time (s)		9.9			10.9	8.9	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	2%	0%	4%	2%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%			0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	2011	0	129	899	60	198
Sign Control		Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 83.5%		ICU Level of Service E	
Analysis Period (min) 15			

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Volume (veh/h)	4	1691	54	112	782	52	172
Sign Control		Free			Free	Stop	
Grade		0%			0%	0%	
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Hourly flow rate (vph)	0	1944	62	129	899	60	198
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised			Raised		
Median storage veh)		1			1		
Upstream signal (ft)		656			721		
pX, platoon unblocked	0.00			0.47		0.50	0.47
vC, conflicting volume	0			2006		2682	1003
vC1, stage 1 conf vol						1975	
vC2, stage 2 conf vol						707	
vCu, unblocked vol	0			881		1755	0
tC, single (s)	0.0			4.1		6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	0.0			2.2		3.5	3.3
p0 queue free %	0			65		50	61
cM capacity (veh/h)	0			364		119	510

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	1296	710	129	449	449	60	198
Volume Left	0	0	129	0	0	60	0
Volume Right	0	62	0	0	0	0	198
cSH	1700	1700	364	1700	1700	119	510
Volume to Capacity	0.76	0.42	0.35	0.26	0.26	0.50	0.39
Queue Length 95th (ft)	0	0	31	0	0	46	36
Control Delay (s)	0.0	0.0	20.2	0.0	0.0	62.6	16.4
Lane LOS			C			F	C
Approach Delay (s)	0.0		2.5			27.2	
Approach LOS						D	

Intersection Summary			
Average Delay	2.9		
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

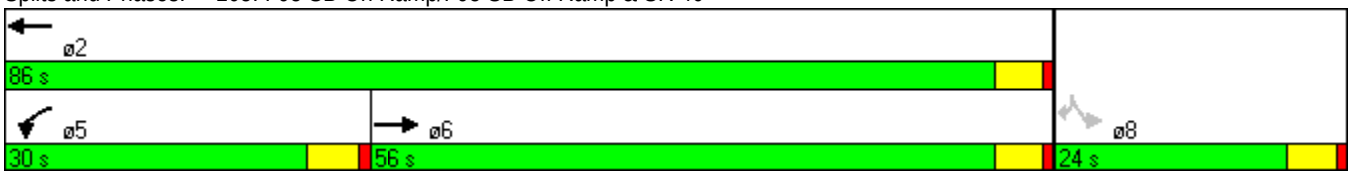


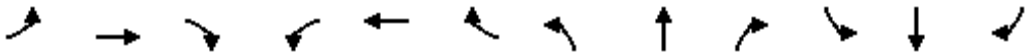
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1166	697	302	850	0	0	0	0	279	0	101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		0	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6071	0	3303	3505	0	0	0	0	3467	0	1615
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6071	0	3303	3505	0	0	0	0	3467	0	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		182										117
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	1%	6%	3%	0%	0%	0%	0%	1%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2166	0	351	988	0	0	0	0	324	0	117
Turn Type		NA		Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases										8		8
Total Split (s)	0.0	56.0	0.0	30.0	86.0	0.0	0.0	0.0	0.0	24.0	0.0	24.0
Total Lost Time (s)	4.0	5.0	4.0	5.3	5.0	4.0	4.0	4.0	4.0	5.0	4.0	5.0
Act Effct Green (s)		60.8		17.8	83.9					16.1		16.1
Actuated g/C Ratio		0.55		0.16	0.76					0.15		0.15
v/c Ratio		0.63		0.66	0.37					0.64		0.35
Control Delay		13.9		53.0	4.2					50.0		10.3
Queue Delay		0.0		0.0	0.1					0.0		0.0
Total Delay		13.9		53.0	4.2					50.0		10.3
LOS		B		D	A					D		B
Approach Delay		13.9			17.0							
Approach LOS		B			B							

Intersection Summary	
Area Type:	Other
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 35 (32%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 17.8	Intersection LOS: B

Intersection Capacity Utilization 57.9% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



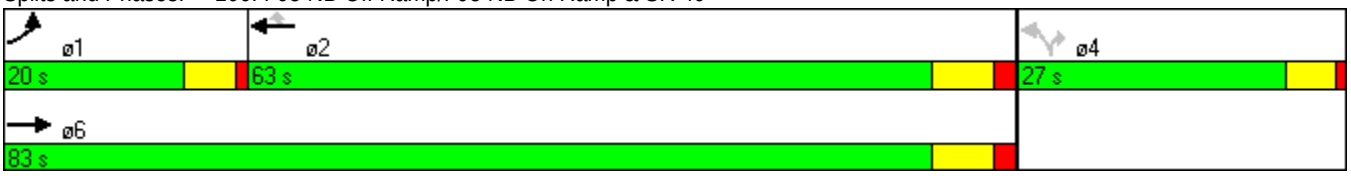


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	1349	0	0	778	122	374	0	401	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1787	5085	0	0	6346	1553	3433	0	2760	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1787	5085	0	0	6346	1553	3433	0	2760	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						154			69			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	2%	0%	0%	3%	4%	2%	0%	3%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	1708	0	0	985	154	473	0	508	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	20.0	83.0	0.0	0.0	63.0	63.0	27.0	0.0	27.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	7.0	4.0	4.0	7.0	7.0	5.0	4.0	5.0	4.0	4.0	4.0
Act Effct Green (s)	12.9	72.9			54.7	54.7	25.1		25.1			
Actuated g/C Ratio	0.12	0.66			0.50	0.50	0.23		0.23			
v/c Ratio	0.58	0.51			0.31	0.18	0.60		0.74			
Control Delay	57.9	10.9			15.7	4.7	41.1		40.8			
Queue Delay	0.0	0.1			0.0	0.0	0.0		0.0			
Total Delay	57.9	11.0			15.7	4.7	41.1		40.8			
LOS	E	B			B	A	D		D			
Approach Delay		14.1			14.2							
Approach LOS		B			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 36 (33%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 20.8		Intersection LOS: C	

Intersection Capacity Utilization 57.9% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	982	634	143	551	31	276	38	95	44	38	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3539	1599	3467	3406	1615	3467	1810	1568	3502	1759	1615
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3539	1599	3467	3406	1615	3467	1810	1568	3502	1759	1615
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			641			35			107			82
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	2%	1%	1%	6%	0%	1%	5%	3%	0%	8%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	96	1103	712	161	619	35	310	43	107	49	43	82
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Total Split (s)	20.0	50.0	50.0	22.0	52.0	52.0	23.0	23.0	23.0	15.0	15.0	15.0
Total Lost Time (s)	5.3	7.0	7.0	5.3	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0
Act Effct Green (s)	11.2	56.3	56.3	10.4	55.6	55.6	14.9	16.1	16.1	7.0	8.7	8.7
Actuated g/C Ratio	0.10	0.51	0.51	0.09	0.51	0.51	0.14	0.15	0.15	0.06	0.08	0.08
v/c Ratio	0.55	0.61	0.63	0.49	0.36	0.04	0.66	0.16	0.33	0.22	0.31	0.40
Control Delay	55.0	21.7	6.3	52.0	19.1	6.5	52.1	41.1	10.6	50.9	53.7	16.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	55.0	21.7	6.3	52.0	19.1	6.5	52.1	41.1	10.6	50.9	53.7	16.6
LOS	E	C	A	D	B	A	D	D	B	D	D	B
Approach Delay		17.6			25.1			41.4			35.4	
Approach LOS		B			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 38 (35%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 23.6		Intersection LOS: C	

Intersection Capacity Utilization 64.5% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40

Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	261	616	2	276	119	122	143
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	350		0		0	150	0
Storage Lanes	1		0		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1787	3539	0	3357	0	1770	1583
Flt Permitted	0.327			0.950		0.950	
Satd. Flow (perm)	615	3539	0	3189	0	1770	1583
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				134			161
Link Speed (mph)		40		40		50	
Link Distance (ft)		1131		272		528	
Travel Time (s)		19.3		4.6		7.2	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	2%	0%	3%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	293	692	0	446	0	137	161
Turn Type	pm+pt	NA	Perm	NA		NA	Perm
Protected Phases	1	6		2		8	
Permitted Phases	6		2				8
Total Split (s)	10.0	54.5	44.5	44.5	0.0	15.5	15.5
Total Lost Time (s)	5.0	5.0	5.0	5.0	4.0	5.0	5.0
Act Effct Green (s)	20.1	21.7		9.5		8.3	8.3
Actuated g/C Ratio	0.57	0.61		0.27		0.23	0.23
v/c Ratio	0.56	0.32		0.47		0.33	0.33
Control Delay	11.3	5.7		10.1		15.6	5.3
Queue Delay	0.0	0.0		0.0		0.0	0.0
Total Delay	11.3	5.7		10.1		15.6	5.3
LOS	B	A		B		B	A
Approach Delay		7.4		10.1		10.0	
Approach LOS		A		B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 35.4			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 8.5		Intersection LOS: A	
Intersection Capacity Utilization 47.8%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	11	210	1132	462	122	530	81	115	133	53	123	223
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		0	250	
Storage Lanes		1		1	1		1	1		0	1	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	1753	3438	1583	1805	3505	1599	1656	1763	0	1752	1760
Flt Permitted		0.323			0.098			0.305			0.429	
Satd. Flow (perm)	0	596	3438	1583	186	3505	1599	532	1763	0	791	1760
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				384			91		16			13
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			6363
Travel Time (s)			32.8			34.7			9.9			86.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	3%	5%	2%	0%	3%	1%	9%	2%	6%	3%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	248	1272	519	137	596	91	129	209	0	138	329
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA
Protected Phases		1	6		5	2		7	4		3	8
Permitted Phases	1	6		6	2		2	4			8	
Total Split (s)	18.0	18.0	56.0	56.0	12.0	50.0	50.0	11.0	28.0	0.0	14.0	31.0
Total Lost Time (s)	5.0	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0	4.0	5.0	7.0
Act Effct Green (s)		58.7	45.5	45.5	49.9	40.8	40.8	27.3	19.2		32.5	21.8
Actuated g/C Ratio		0.56	0.43	0.43	0.48	0.39	0.39	0.26	0.18		0.31	0.21
v/c Ratio		0.53	0.85	0.57	0.69	0.44	0.13	0.63	0.62		0.42	0.87
Control Delay		16.1	33.3	8.3	36.9	25.0	5.1	43.6	45.8		30.5	62.8
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay		16.1	33.3	8.3	36.9	25.0	5.1	43.6	45.8		30.5	62.8
LOS		B	C	A	D	C	A	D	D		C	E
Approach Delay			24.8			24.8			45.0			53.3
Approach LOS			C			C			D			D

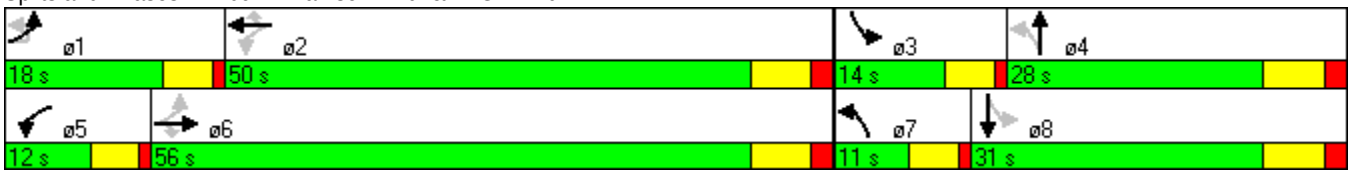
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 104.6			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 30.3		Intersection LOS: C	
Intersection Capacity Utilization 80.4%		ICU Level of Service D	

Lane Group	SBR
Lane Configurations	
Volume (vph)	69
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.89
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	4.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

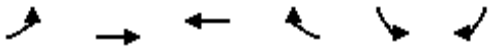


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1348	0	0	571	95	557
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3438	3400	1583
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3438	3400	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						208
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	5%	3%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1449	0	0	614	102	599
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	102.0	0.0	0.0	102.0	18.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	39.2			39.2	8.2	55.3
Actuated g/C Ratio	0.71			0.71	0.15	1.00
v/c Ratio	0.59			0.25	0.20	0.38
Control Delay	7.1			4.5	23.7	0.7
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	7.1			4.5	23.7	0.7
LOS	A			A	C	A
Approach Delay	7.1			4.5	4.0	
Approach LOS	A			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 55.3			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 5.8		Intersection LOS: A	
Intersection Capacity Utilization 54.8%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd

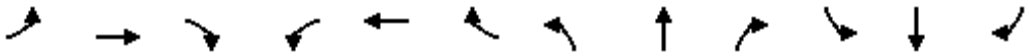


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	605	486	0	891	243
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3438	0	3433	1583
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3438	0	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						263
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	5%	0%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	738	593	0	1087	296
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	45.0	45.0	0.0	25.0	25.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		18.8	18.8		18.1	18.1
Actuated g/C Ratio		0.37	0.37		0.36	0.36
v/c Ratio		0.58	0.47		0.89	0.40
Control Delay		14.7	13.4		28.9	5.1
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		14.7	13.4		28.9	5.1
LOS		B	B		C	A
Approach Delay		14.7	13.4		23.8	
Approach LOS		B	B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 50.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 19.0		Intersection LOS: B	
Intersection Capacity Utilization 70.6%		ICU Level of Service C	

Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp



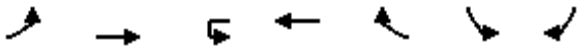
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	608	29	166	551	12	7	0	58	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		325	300		0	250		0	0		0
Storage Lanes	0		1	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1845	1509	1719	1823	0	1399	1900	1568	0	902	0
Flt Permitted				0.950			0.950				0.950	
Satd. Flow (perm)	0	1845	1509	1719	1823	0	1399	1900	1568	0	902	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1127			429			405			251	
Travel Time (s)		17.1			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	7%	5%	4%	0%	29%	0%	3%	100%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	668	32	182	618	0	8	0	64	0	1	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 75.1%		ICU Level of Service D	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	608	29	166	551	12	7	0	58	1	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	0	668	32	182	605	13	8	0	64	1	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1057							
pX, platoon unblocked	0.85						0.85	0.85		0.85	0.85	0.85
vC, conflicting volume	619			700			1638	1652	668	1709	1677	612
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	468			700			1662	1678	668	1745	1707	460
tC, single (s)	4.1			4.1			7.4	6.5	6.2	8.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.8	4.0	3.3	4.4	4.0	3.3
p0 queue free %	100			79			84	100	86	95	100	100
cM capacity (veh/h)	943			883			48	65	456	24	62	517

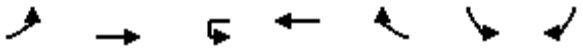
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1
Volume Total	668	32	182	619	8	0	64	1
Volume Left	0	0	182	0	8	0	0	1
Volume Right	0	32	0	13	0	0	64	0
cSH	943	1700	883	1700	48	1700	456	24
Volume to Capacity	0.00	0.02	0.21	0.36	0.16	0.00	0.14	0.05
Queue Length 95th (ft)	0	0	15	0	10	0	10	3
Control Delay (s)	0.0	0.0	10.1	0.0	94.3	0.0	14.2	161.2
Lane LOS			B		F	A	B	F
Approach Delay (s)	0.0		2.3		22.8			161.2
Approach LOS					C			F

Intersection Summary				
Average Delay	2.3			
Intersection Capacity Utilization	75.1%	ICU Level of Service		D
Analysis Period (min)	15			



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	3	221	0	372	34	21	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1805	3505	1900	3468	0	1718	0
Flt Permitted	0.950					0.959	
Satd. Flow (perm)	1805	3505	1900	3468	0	1718	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	0%	3%	0%	0%	25%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	3	233	0	428	0	26	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 21.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	3	221	0	372	34	21	4
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	3	233	0	392	36	22	4
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	427		0			532	214
vC1, stage 1 conf vol						409	
vC2, stage 2 conf vol						123	
vCu, unblocked vol	427		0			532	214
tC, single (s)	4.1		0.0			6.8	7.4
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.5
p0 queue free %	100		0			96	99
cM capacity (veh/h)	1143		0			613	725

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	3	116	116	261	166	0	26
Volume Left	3	0	0	0	0	0	22
Volume Right	0	0	0	0	36	0	4
cSH	1143	1700	1700	1700	1700	1700	629
Volume to Capacity	0.00	0.07	0.07	0.15	0.10	0.00	0.04
Queue Length 95th (ft)	0	0	0	0	0	0	3
Control Delay (s)	8.2	0.0	0.0	0.0	0.0	0.0	11.0
Lane LOS	A						B
Approach Delay (s)	0.1			0.0			11.0
Approach LOS							B

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	21.4%	ICU Level of Service	A
Analysis Period (min)	15		

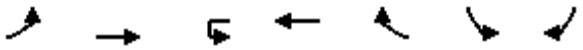
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	13	233	0	423	102	59	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1671	3505	1900	3539	1568	1735	0
Flt Permitted	0.950					0.962	
Satd. Flow (perm)	1671	3505	1900	3539	1568	1735	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		2360		1457	
Travel Time (s)		30.2		26.8		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	8%	3%	0%	2%	3%	3%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	14	253	0	460	111	81	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 22.6%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	13	233	0	423	102	59	16
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	14	253	0	460	111	64	17
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	460		0			615	230
vC1, stage 1 conf vol						460	
vC2, stage 2 conf vol						155	
vCu, unblocked vol	460		0			615	230
tC, single (s)	4.3		0.0			6.9	6.9
tC, 2 stage (s)						5.9	
tF (s)	2.3		0.0			3.5	3.3
p0 queue free %	99		0			89	98
cM capacity (veh/h)	1056		0			565	779

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	14	127	127	230	230	111	0	82
Volume Left	14	0	0	0	0	0	0	64
Volume Right	0	0	0	0	0	111	0	17
cSH	1056	1700	1700	1700	1700	1700	1700	600
Volume to Capacity	0.01	0.07	0.07	0.14	0.14	0.07	0.00	0.14
Queue Length 95th (ft)	1	0	0	0	0	0	0	9
Control Delay (s)	8.5	0.0	0.0	0.0	0.0	0.0	0.0	11.9
Lane LOS	A							B
Approach Delay (s)	0.4			0.0				11.9
Approach LOS								B

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	22.6%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	8	311	0	612	131	76	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1805	3438	1900	3505	1599	1770	1615
Flt Permitted	0.396					0.950	
Satd. Flow (perm)	752	3438	1900	3505	1599	1770	1615
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					144		7
Link Speed (mph)		50		50		30	
Link Distance (ft)		4032		4152		622	
Travel Time (s)		55.0		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	0%	3%	1%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	9	342	0	673	144	84	7
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		6		2		8	
Permitted Phases	6		2		2		8
Total Split (s)	60.0	60.0	60.0	60.0	60.0	30.0	30.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	4.0
Act Effct Green (s)	26.6	26.6		26.6	26.6	8.2	8.2
Actuated g/C Ratio	0.71	0.71		0.71	0.71	0.22	0.22
v/c Ratio	0.02	0.14		0.27	0.12	0.22	0.02
Control Delay	5.0	4.3		4.7	1.7	13.3	7.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	5.0	4.3		4.7	1.7	13.3	7.3
LOS	A	A		A	A	B	A
Approach Delay		4.3		4.2		12.8	
Approach LOS		A		A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 37.7			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay: 4.8		Intersection LOS: A	
Intersection Capacity Utilization 38.3%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	4	46	412	18	42	71	756	657	35	33	19	526
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		0		435		385	0		0	0
Storage Lanes		1		0		1		1	0		0	1
Taper Length (ft)		25				25			0			0
Satd. Flow (prot)	0	1756	3385	0	0	1805	3574	1615	0	1808	0	1698
Flt Permitted		0.435				0.950				0.980		0.950
Satd. Flow (perm)	0	804	3385	0	0	1805	3574	1615	0	1808	0	1698
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			3					706		8		
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	6%	6%	0%	0%	1%	0%	0%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												44%
Lane Group Flow (vph)	0	53	462	0	0	121	813	706	0	93	0	317
Turn Type	custom	Prot	NA		Prot	Prot	NA	Perm	Split	NA		Split
Protected Phases		1	6		5	5	2		3	3		4
Permitted Phases	1							2				
Total Split (s)	14.0	14.0	47.0	0.0	16.0	16.0	49.0	49.0	15.0	15.0	0.0	52.0
Total Lost Time (s)	5.0	5.0	6.0	4.0	5.0	5.0	6.0	6.0	6.0	6.0	4.0	6.0
Act Effct Green (s)		9.2	35.5			10.9	37.2	37.2		8.9		28.0
Actuated g/C Ratio		0.09	0.33			0.10	0.35	0.35		0.08		0.26
v/c Ratio		0.77	0.41			0.66	0.65	0.69		0.59		0.71
Control Delay		109.2	29.5			67.7	33.0	6.2		62.8		45.6
Queue Delay		0.0	0.0			0.0	0.0	0.0		0.0		0.0
Total Delay		109.2	29.5			67.7	33.0	6.2		62.8		45.6
LOS		F	C			E	C	A		E		D
Approach Delay			37.7				24.0			62.8		
Approach LOS			D				C			E		

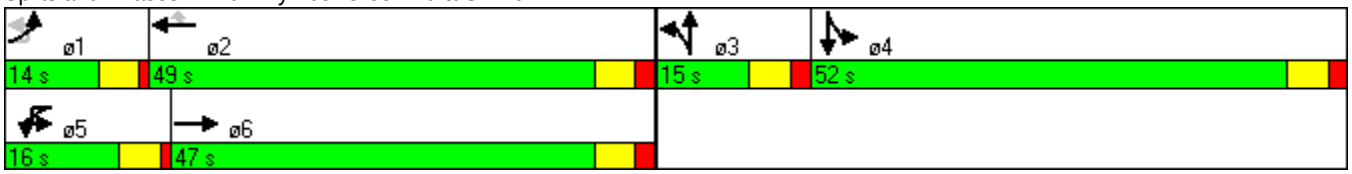
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 106.8			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 32.3		Intersection LOS: C	
Intersection Capacity Utilization 65.7%		ICU Level of Service C	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	19	40
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		0
Storage Lanes		0
Taper Length (ft)		
Satd. Flow (prot)	1668	0
Flt Permitted	0.962	
Satd. Flow (perm)	1668	0
Right Turn on Red		Yes
Satd. Flow (RTOR)	7	
Link Speed (mph)	30	
Link Distance (ft)	328	
Travel Time (s)	7.5	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.93	0.93
Growth Factor	100%	100%
Heavy Vehicles (%)	0%	8%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	312	0
Turn Type	NA	
Protected Phases	4	
Permitted Phases		
Total Split (s)	52.0	0.0
Total Lost Time (s)	6.0	4.0
Act Effct Green (s)	28.0	
Actuated g/C Ratio	0.26	
v/c Ratio	0.71	
Control Delay	44.5	
Queue Delay	0.0	
Total Delay	44.5	
LOS	D	
Approach Delay	45.0	
Approach LOS	D	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	9	1040	4	11	23	1535	4	8	2	28	56	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		0		300		325	0		0	0	
Storage Lanes	1		0		1		1	0		0	0	
Taper Length (ft)	25				25			0			0	
Satd. Flow (prot)	1626	3536	0	0	1805	3574	1615	0	1693	0	0	1805
Flt Permitted	0.132				0.237				0.927			0.856
Satd. Flow (perm)	226	3536	0	0	450	3574	1615	0	1585	0	0	1626
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)							4		29			
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	11%	2%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	9	1087	0	0	35	1599	4	0	39	0	0	58
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2		2	4			8	
Total Split (s)	22.0	81.0	0.0	22.0	22.0	81.0	81.0	27.0	27.0	0.0	27.0	27.0
Total Lost Time (s)	5.7	7.0	4.0	5.7	5.7	7.0	7.0	5.0	5.0	4.0	5.0	5.0
Act Effct Green (s)	106.8	103.4			109.5	108.2	108.2		11.4			11.4
Actuated g/C Ratio	0.82	0.80			0.84	0.83	0.83		0.09			0.09
v/c Ratio	0.04	0.39			0.08	0.54	0.00		0.23			0.41
Control Delay	2.8	6.2			2.2	4.9	3.5		27.1			63.6
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			0.0
Total Delay	2.8	6.2			2.2	4.9	3.5		27.1			63.6
LOS	A	A			A	A	A		C			E
Approach Delay		6.2				4.9			27.1			54.9
Approach LOS		A				A			C			D

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 21 (16%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.54	
Intersection Signal Delay: 7.0	Intersection LOS: A

Lane Group	SBR
Lane Configurations	
Volume (vph)	15
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	1
Taper Length (ft)	
Satd. Flow (prot)	1509
Flt Permitted	
Satd. Flow (perm)	1509
Right Turn on Red	Yes
Satd. Flow (RTOR)	16
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.96
Growth Factor	100%
Heavy Vehicles (%)	7%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	16
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Total Split (s)	27.0
Total Lost Time (s)	5.0
Act Effct Green (s)	11.4
Actuated g/C Ratio	0.09
v/c Ratio	0.11
Control Delay	23.1
Queue Delay	0.0
Total Delay	23.1
LOS	C
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 69.9% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

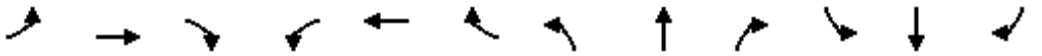
Lane Group	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Volume (vph)	3	1099	33	158	1509	61	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%			0%	0%	
Storage Length (ft)	0		0	300		75	0
Storage Lanes	0		0	1		1	1
Taper Length (ft)	0			25		25	
Satd. Flow (prot)	0	3494	0	1805	3574	1805	1583
Flt Permitted				0.950		0.950	
Satd. Flow (perm)	0	3494	0	1805	3574	1805	1583
Link Speed (mph)		45			45	30	
Link Distance (ft)		656			721	393	
Travel Time (s)		9.9			10.9	8.9	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	0%	0%	1%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%			0%	0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	0	1195	0	166	1588	64	127
Sign Control		Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 86.6%		ICU Level of Service E	
Analysis Period (min) 15			

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Volume (veh/h)	3	1099	33	158	1509	61	121
Sign Control		Free			Free	Stop	
Grade		0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	0	1157	35	166	1588	64	127
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised			Raised		
Median storage veh)		1			1		
Upstream signal (ft)		656			721		
pX, platoon unblocked	0.00			0.89		0.90	0.89
vC, conflicting volume	0			1192		2301	596
vC1, stage 1 conf vol						1174	
vC2, stage 2 conf vol						1127	
vCu, unblocked vol	0			969		1674	300
tC, single (s)	0.0			4.1		6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	0.0			2.2		3.5	3.3
p0 queue free %	0			74		58	79
cM capacity (veh/h)	0			640		155	620

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	NB 2
Volume Total	771	420	166	794	794	64	127
Volume Left	0	0	166	0	0	64	0
Volume Right	0	35	0	0	0	0	127
cSH	1700	1700	640	1700	1700	155	620
Volume to Capacity	0.45	0.25	0.26	0.47	0.47	0.42	0.21
Queue Length 95th (ft)	0	0	21	0	0	37	15
Control Delay (s)	0.0	0.0	12.6	0.0	0.0	43.9	12.3
Lane LOS			B			E	B
Approach Delay (s)	0.0		1.2			22.9	
Approach LOS						C	

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	86.6%	ICU Level of Service	E
Analysis Period (min)	15		

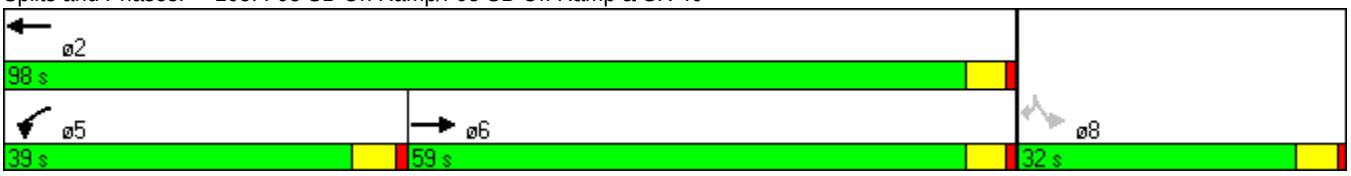


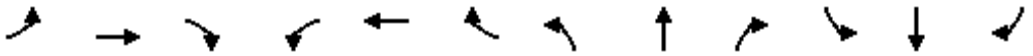
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	748	409	432	1480	0	0	0	0	218	0	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		0	2		0	0		0	2		1
Taper Length (ft)	25			0			0			25		
Satd. Flow (prot)	0	6065	0	3433	3574	0	0	0	0	3433	0	1553
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6065	0	3433	3574	0	0	0	0	3433	0	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		130										57
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	1%	4%	2%	1%	0%	0%	0%	0%	2%	0%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1231	0	460	1574	0	0	0	0	232	0	115
Turn Type		NA		Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases										8		8
Total Split (s)	0.0	59.0	0.0	39.0	98.0	0.0	0.0	0.0	0.0	32.0	0.0	32.0
Total Lost Time (s)	4.0	5.0	4.0	5.3	5.0	4.0	4.0	4.0	4.0	5.0	4.0	5.0
Act Effct Green (s)		75.9		23.7	105.0					15.0		15.0
Actuated g/C Ratio		0.58		0.18	0.81					0.12		0.12
v/c Ratio		0.34		0.73	0.55					0.58		0.50
Control Delay		11.9		51.1	6.1					60.3		35.3
Queue Delay		0.0		0.0	0.4					0.0		0.0
Total Delay		11.9		51.1	6.6					60.3		35.3
LOS		B		D	A					E		D
Approach Delay		11.9			16.6							
Approach LOS		B			B							

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 14 (11%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 18.4	Intersection LOS: B

Intersection Capacity Utilization 55.9% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



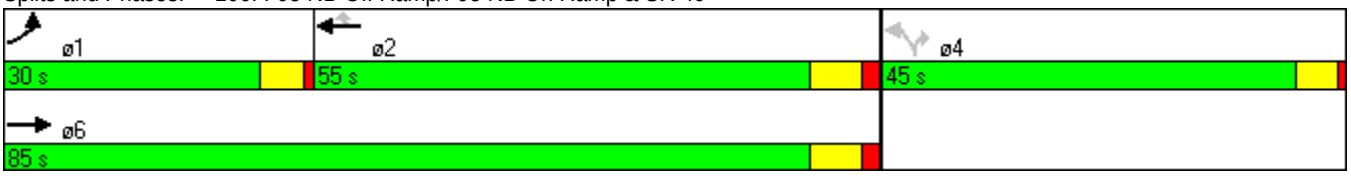


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	96	870	0	0	1420	325	492	0	371	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	0			100			0			0		
Satd. Flow (prot)	1736	5136	0	0	6471	1583	3467	0	2814	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1736	5136	0	0	6471	1583	3467	0	2814	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						346			252			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	1%	0%	0%	1%	2%	1%	0%	1%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	102	926	0	0	1511	346	523	0	395	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	30.0	85.0	0.0	0.0	55.0	55.0	45.0	0.0	45.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	7.0	4.0	4.0	7.0	7.0	5.0	4.0	5.0	4.0	4.0	4.0
Act Effct Green (s)	13.9	90.2			71.0	71.0	27.8		27.8			
Actuated g/C Ratio	0.11	0.69			0.55	0.55	0.21		0.21			
v/c Ratio	0.55	0.26			0.43	0.34	0.70		0.49			
Control Delay	68.8	5.4			19.7	6.3	52.3		17.0			
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			
Total Delay	68.8	5.4			19.7	6.3	52.3		17.0			
LOS	E	A			B	A	D		B			
Approach Delay		11.7			17.2							
Approach LOS		B			B							

Intersection Summary	
Area Type:	Other
Cycle Length: 130	
Actuated Cycle Length: 130	
Offset: 14 (11%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 20.5	Intersection LOS: C

Intersection Capacity Utilization 55.9% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40

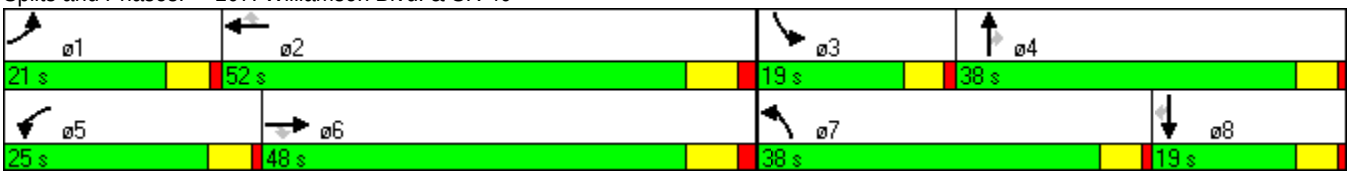


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	794	371	194	921	106	670	149	167	166	123	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1787	3574	1599	3467	3574	1599	3467	1881	1599	3502	1900	1599
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1787	3574	1599	3467	3574	1599	3467	1881	1599	3502	1900	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			391			112			176			162
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	836	391	204	969	112	705	157	176	175	129	162
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Total Split (s)	21.0	48.0	48.0	25.0	52.0	52.0	38.0	38.0	38.0	19.0	19.0	19.0
Total Lost Time (s)	5.3	7.0	7.0	5.3	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0
Act Effct Green (s)	13.2	51.9	51.9	13.0	51.6	51.6	30.3	31.3	31.3	11.6	12.6	12.6
Actuated g/C Ratio	0.10	0.40	0.40	0.10	0.40	0.40	0.23	0.24	0.24	0.09	0.10	0.10
v/c Ratio	0.66	0.59	0.45	0.59	0.68	0.16	0.87	0.35	0.34	0.56	0.70	0.54
Control Delay	70.9	34.0	7.3	62.8	36.9	5.7	60.5	42.7	7.3	63.5	76.8	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.9	34.0	7.3	62.8	36.9	5.7	60.5	42.7	7.3	63.5	76.8	14.9
LOS	E	C	A	E	D	A	E	D	A	E	E	B
Approach Delay		29.5			38.3			48.8			50.3	
Approach LOS		C			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 17 (13%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 39.4		Intersection LOS: D	

Intersection Capacity Utilization 76.1% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	226	431	702	137	176	404
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	350			0	150	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	1805	3539	3483	0	1805	1599
Flt Permitted	0.181				0.950	
Satd. Flow (perm)	344	3539	3483	0	1805	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			54			300
Link Speed (mph)		40	40		50	
Link Distance (ft)		1131	272		528	
Travel Time (s)		19.3	4.6		7.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	1%	2%	0%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	238	454	883	0	185	425
Turn Type	pm+pt	NA	NA		NA	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Total Split (s)	10.0	55.0	45.0	0.0	15.0	15.0
Total Lost Time (s)	5.0	5.0	5.0	4.0	5.0	5.0
Act Effct Green (s)	28.6	28.6	18.5		9.5	9.5
Actuated g/C Ratio	0.59	0.59	0.38		0.20	0.20
v/c Ratio	0.67	0.22	0.65		0.52	0.76
Control Delay	16.4	4.8	13.6		24.7	18.4
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	16.4	4.8	13.6		24.7	18.4
LOS	B	A	B		C	B
Approach Delay		8.8	13.6		20.3	
Approach LOS		A	B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 48.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 14.0		Intersection LOS: B	
Intersection Capacity Utilization 58.5%		ICU Level of Service B	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	23	173	669	157	117	934	114	259	237	90	103	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		0	250	
Storage Lanes		1		1	1		1	1		0	1	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	1754	3343	1495	1787	3574	1599	1770	1791	0	1719	1721
Flt Permitted		0.104			0.294			0.145			0.477	
Satd. Flow (perm)	0	192	3343	1495	553	3574	1599	270	1791	0	863	1721
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				169			123		18			27
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			6363
Travel Time (s)			32.8			34.7			9.9			86.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	3%	8%	8%	1%	1%	1%	2%	2%	1%	5%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	211	719	169	126	1004	123	278	352	0	111	399
Turn Type	custom	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA
Protected Phases		1	6		5	2		7	4		3	8
Permitted Phases	1	6		6	2		2	4			8	
Total Split (s)	16.0	16.0	47.0	47.0	12.0	43.0	43.0	19.0	40.0	0.0	11.0	32.0
Total Lost Time (s)	5.0	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0	4.0	5.0	7.0
Act Effct Green (s)		51.4	38.4	38.4	43.4	34.4	34.4	46.0	33.0		33.0	25.0
Actuated g/C Ratio		0.47	0.35	0.35	0.40	0.32	0.32	0.42	0.30		0.30	0.23
v/c Ratio		0.85	0.61	0.26	0.42	0.88	0.21	0.90	0.63		0.36	0.95
Control Delay		52.6	31.3	4.8	20.5	45.6	5.6	57.5	37.1		25.0	73.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay		52.6	31.3	4.8	20.5	45.6	5.6	57.5	37.1		25.0	73.9
LOS		D	C	A	C	D	A	E	D		C	E
Approach Delay			31.3			39.2			46.1			63.3
Approach LOS			C			D			D			E

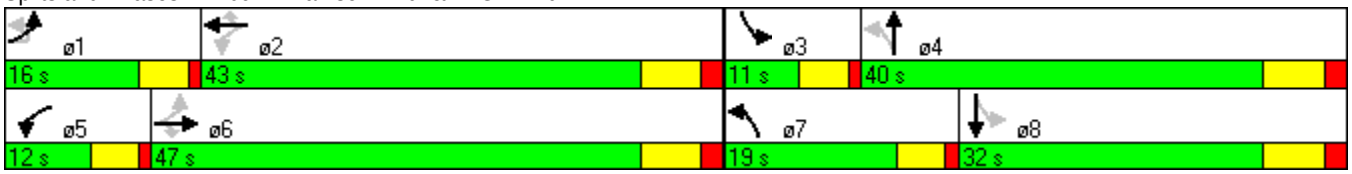
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 108.4			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 41.5		Intersection LOS: D	
Intersection Capacity Utilization 91.8%		ICU Level of Service F	

Lane Group	SBR
Lane Configurations	
Volume (vph)	144
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.93
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	4.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

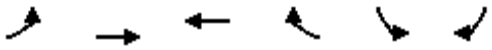


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	632	0	0	868	55	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			0		0	
Satd. Flow (prot)	3471	0	0	3539	3502	1583
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3539	3502	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						319
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	2%	0%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	710	0	0	975	62	319
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	102.0	0.0	0.0	102.0	18.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	35.1			35.1	8.2	46.5
Actuated g/C Ratio	0.75			0.75	0.18	1.00
v/c Ratio	0.27			0.37	0.10	0.20
Control Delay	4.5			5.0	18.3	0.3
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	4.5			5.0	18.3	0.3
LOS	A			A	B	A
Approach Delay	4.5			5.0	3.2	
Approach LOS	A			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 46.5			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay: 4.5		Intersection LOS: A	
Intersection Capacity Utilization 41.5%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd

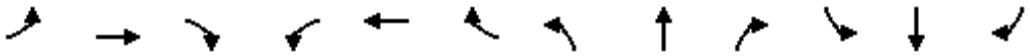


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	572	494	0	253	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	0				100	
Satd. Flow (prot)	0	3539	3539	0	3273	1568
Flt Permitted					0.950	
Satd. Flow (perm)	0	3539	3539	0	3273	1568
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						167
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	2%	0%	7%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	629	543	0	278	167
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	45.0	45.0	0.0	25.0	25.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		16.1	16.1		9.0	9.0
Actuated g/C Ratio		0.41	0.41		0.23	0.23
v/c Ratio		0.43	0.37		0.37	0.34
Control Delay		9.5	9.0		14.6	5.4
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		9.5	9.0		14.6	5.4
LOS		A	A		B	A
Approach Delay		9.5	9.0		11.2	
Approach LOS		A	A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 39.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 9.8		Intersection LOS: A	
Intersection Capacity Utilization 34.7%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	470	5	96	529	21	11	2	129	39	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		325	300		0	250		0	0		0
Storage Lanes	0		1	1		0	1		1	0		0
Taper Length (ft)	0			25			25			0		
Satd. Flow (prot)	0	1863	1615	1736	1836	0	1805	1900	1583	0	1793	0
Flt Permitted				0.950			0.950				0.959	
Satd. Flow (perm)	0	1863	1615	1736	1836	0	1805	1900	1583	0	1793	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		1127			429			405			251	
Travel Time (s)		17.1			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	4%	3%	0%	0%	0%	2%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	523	6	107	611	0	12	2	143	0	50	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 73.1%		ICU Level of Service D	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	470	5	96	529	21	11	2	129	39	1	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1	522	6	107	588	23	12	2	143	43	1	6
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1057							
pX, platoon unblocked	0.86						0.86	0.86		0.86	0.86	0.86
vC, conflicting volume	611			528			1332	1349	522	1482	1343	599
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	467			528			1304	1324	522	1479	1317	454
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			90			89	98	74	29	99	99
cM capacity (veh/h)	951			1029			108	121	554	61	122	525

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1
Volume Total	523	6	107	611	12	2	143	50
Volume Left	1	0	107	0	12	0	0	43
Volume Right	0	6	0	23	0	0	143	6
cSH	951	1700	1029	1700	108	121	554	68
Volume to Capacity	0.00	0.00	0.10	0.36	0.11	0.02	0.26	0.73
Queue Length 95th (ft)	0	0	7	0	7	1	21	67
Control Delay (s)	0.0	0.0	8.9	0.0	42.6	35.3	13.7	142.5
Lane LOS	A		A		E	E	B	F
Approach Delay (s)	0.0		1.3		16.3			142.5
Approach LOS					C			F

Intersection Summary				
Average Delay	7.3			
Intersection Capacity Utilization	73.1%	ICU Level of Service		D
Analysis Period (min)	15			

Appendix G

SYNCHRO Roadway Analysis Outputs for Year 2011& Exhibit 15-2 (HCM 2000)

HCM 2000, Chapter 15, Exhibit 15-2

	Arterial Classification			
	I	II	III	IV
Range of Freeflow	45 - 55	35 - 45	30 - 35	25 - 35
Typical Free Flow	50	40	33	30
Level of Service		**Speed (MPH)**		
A	42	35	30	25
B	34	28	24	19
C	27	22	18	13
D	21	17	14	9
E	16	13	10	7
F	16	13	10	7

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst:	SK
Agency/Co:	GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date:	11/14/2011
Analysis Period:	AM Peak Hour
Highway:	SR 40
From/To:	Cone Rd
Jurisdiction:	Breakway Trail
Analysis Year:	Existing 2011
Project ID:	SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	579	vph	186	vph
Peak-hour factor, PHF	0.92		0.92	
Peak 15-minute volume, v15	157		51	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	323	pcphpl	104	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	323	pcphpl	104	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	5.4	pc/mi/ln	1.7	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-95 SB Off Ramp	II	45	38.9	14.7	53.6	0.41	27.8	C
I-95 NB Off Ramp	II	45	28.7	7.1	35.8	0.29	29.1	B
Williamson Blvd.	II	45	42.2	33.3	75.5	0.46	22.1	C
Total	II		109.8	55.1	164.9	1.17	25.5	C

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	25.0	64.5	0.43	24.2	C
I-95 NB Off Ramp	II	45	42.2	4.5	46.7	0.46	35.7	A
I-95 SB Off Ramp	II	45	28.7	13.4	42.1	0.29	24.8	C
Total	II		110.4	42.9	153.3	1.19	27.9	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Breakaway Tr	I	58	276.9	6.9	283.8	4.46	56.6	A
Tymber Creek Rd	I	50	71.5	47.1	118.6	0.99	30.2	C
Booth Rd	I	50	38.1	29.5	67.6	0.53	28.2	C
I-95 SB On Ramp	I	45	27.1	13.9	41.0	0.26	22.9	D
I-95 NB Off Ramp	I	45	7.9	10.9	18.8	0.08	14.6	F
Williamson Blvd.	I	45	15.3	21.7	37.0	0.15	14.3	F
Total	I		436.8	130.0	566.8	6.47	41.1	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	19.1	58.0	0.43	26.5	D
I-95 NB On Ramp	I	45	15.3	15.7	31.0	0.15	17.1	E
I-95 SB Off Ramp	I	45	7.9	4.2	12.1	0.08	22.7	D
Booth Rd	I	47	27.1	10.0	37.1	0.26	25.3	D
Tymber Creek Rd	I	50	38.1	32.1	70.2	0.53	27.1	C
Breakaway Tr	I	50	71.5	5.8	77.3	0.99	46.3	A
Total	I		198.8	86.9	285.7	2.43	30.7	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	45.8	58.5	0.11	6.8	F
Hand Ave	I	50	150.0	10.1	160.1	2.07	46.6	A
SR 40	I	40	56.3	41.1	97.4	0.62	23.1	D
Total	I		219.0	97.0	316.0	2.81	32.0	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	53.7	76.7	0.20	9.4	F
Hand Ave	I	40	56.3	5.7	62.0	0.62	36.3	B
LPGA Blvd	I	50	150.0	62.8	212.8	2.07	35.0	B
Total	I		229.3	122.2	351.5	2.90	29.7	C

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/14/2011
Analysis Period: PM Peak Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Breakway Trail
Analysis Year: Existing 2011
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	319	vph	618	vph
Peak-hour factor, PHF	0.92		0.92	
Peak 15-minute volume, v15	87		168	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	178	pcphpl	345	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	178	pcphpl	345	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	3.0	pc/mi/ln	5.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-95 SB Off Ramp	II	45	38.9	9.5	48.4	0.41	30.8	B
I-95 NB Off Ramp	II	45	28.7	4.5	33.2	0.29	31.4	B
Williamson Blvd.	II	45	42.2	31.3	73.5	0.46	22.7	C
Total	II		109.8	45.3	155.1	1.17	27.1	C

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	45.6	85.1	0.43	18.3	D
I-95 NB Off Ramp	II	45	42.2	5.0	47.2	0.46	35.3	A
I-95 SB Off Ramp	II	45	28.7	9.0	37.7	0.29	27.7	C
Total	II		110.4	59.6	170.0	1.19	25.1	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Breakaway Tr	I	58	277.0	4.3	281.3	4.46	57.1	A
Tymber Creek Rd	I	50	71.5	29.5	101.0	0.99	35.4	B
Booth Rd	I	50	38.1	6.2	44.3	0.53	43.0	A
I-95 SB On Ramp	I	45	27.1	11.9	39.0	0.26	24.1	D
I-95 NB Off Ramp	I	45	7.9	5.4	13.3	0.08	20.6	E
Williamson Blvd.	I	45	15.3	34.0	49.3	0.15	10.8	F
Total	I		436.9	91.3	528.2	6.47	44.1	A

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	36.9	75.8	0.43	20.3	E
I-95 NB On Ramp	I	45	15.3	19.7	35.0	0.15	15.2	F
I-95 SB Off Ramp	I	45	7.9	6.1	14.0	0.08	19.6	E
Booth Rd	I	47	27.1	4.9	32.0	0.26	29.3	C
Tymber Creek Rd	I	50	38.1	33.0	71.1	0.53	26.8	D
Breakaway Tr	I	50	71.5	4.7	76.2	0.99	47.0	A
Total	I		198.8	105.3	304.1	2.43	28.8	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	37.1	49.8	0.11	8.0	F
Hand Ave	I	50	150.0	13.6	163.6	2.07	45.6	A
SR 40	I	40	56.3	42.7	99.0	0.62	22.7	D
Total	I		219.0	93.4	312.4	2.81	32.3	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	76.8	99.8	0.20	7.2	F
Hand Ave	I	40	56.3	4.8	61.1	0.62	36.8	B
LPGA Blvd	I	50	150.0	73.9	223.9	2.07	33.3	C
Total	I		229.3	155.5	384.8	2.90	27.1	C

Appendix H

ARTPLAN Multi-Modal LOS Outputs for Year 2011

ARTPLAN 2009 Conceptual Planning Analysis

Project Information

Analyst	PR	**Arterial Name**	SR 40	**Study Period**	Dir Hr Demand Vol
Date Prepared	2/22/2011 11:16:35 AM	**From**	Breakaway Tr	**Modal Analysis**	Multimodal
Agency	GMB	**To**	Williamson Blvd	**Program**	ARTPLAN 2009
Area Type	Other Urbanized	**Peak Direction**	Eastbound	**Version Date**	12/12/10
Arterial Class	2				

File Name	C:\Users\rpemmanaboina\AppData\Local\Temp\preview.xml
User Notes	SR 40_AM_EB

Arterial Data

K	0.097	**PHF**	0.925	**Control Type**	Semiactuated
D	0.55	**% Heavy Vehicles**	3	**Base Sat. Flow Rate**	1950

Automobile Intersection and Segment Data

Segment #	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	FFS	Median Type
1 (to Tymber Creek Rd)	130	0.33	3	2	5	2	Yes	1	235	0.07	No	5248	11800	814	2	55	Restrictive
2 (to Booth Rd)	110	0.52	4	2	3	1	Yes	1	235	0.13	No	2791	15000	1620	2	55	Restrictive
3 (to SB Ramps)	110	0.55	5	3	0	37	No				No	1377	29700	1863	2	55	Restrictive
4 (to NB Ramps)	110	0.66	5	3	7	0	Yes	1	700	0.12	No	402	29700	1863	3	50	Restrictive
5 (to Williamson Blvd)	110	0.5	5	2	5	37	Yes	1	235	0.10	Yes	780	27000	1445	3	50	Restrictive

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to Tymber Creek Rd)	836	3635	0.697	40.11	D	0.17	32.94	B
2 (to Booth Rd)	1699	3767	0.867	20.67	C	0.16	31.43	B
3 (to SB Ramps)	2014	5442	0.673	3.73	A	0.00	37.32	A
4 (to NB Ramps)	1873	5380	0.528	0.39	A	0.16	34.50	B
5 (to Williamson Blvd)	906	1995	0.908	20.05	C	0.31	15.95	E

Arterial Length	2.0072	Weighted g/C	0.44	FFS Delay	102.78	Threshold Delay	0.00	Auto Speed	30.67	Auto LOS	B

Multimodal Segment Data

Segment #	Pave Shldr /Bike Lane	Outside Lane Width	Pave Cond	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Obstacle To Bus Stop	Bus Freq	Bus Span Service
1 (to Tymber Creek Rd)	Yes	Typical	Typical	Yes	Typical	No	No	0	0
2 (to Booth Rd)	Yes	Typical	Typical	No	NA	No	No	0	0
3 (to SB Ramps)	Yes	Typical	Typical	No	NA	No	No	0	0
4 (to NB Ramps)	No	Typical	Typical	Yes	Adjacent	No	No	0	0
5 (to Williamson Blvd)	No	Typical	Typical	Yes	Adjacent	No	No	0	0

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to Tymber Creek Rd)	100			Yes			Typical			No		
2 (to Booth Rd)	100			No			NA			No		
3 (to SB Ramps)	100			No			NA			No		
4 (to NB Ramps)	100			Yes			Adjacent			No		
5 (to Williamson Blvd)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle LOS		Pedestrian LOS					Bus LOS	
Segment #	**Score**	**Segment**	**1**	**2**	**3**	**Score**	**Segment**	**Adj. Buses**	**Segment**
1 (to Tymber Creek Rd)	2.91	C				3.41	C	0.00	F
2 (to Booth Rd)	3.20	C				5.47	E	0.00	F
3 (to SB Ramps)	3.21	C				5.63	F	0.00	F
4 (to NB Ramps)	4.56	E				3.70	D	0.00	F
5 (to Williamson Blvd)	4.51	E				3.47	C	0.00	F

Bicycle LOS	Pedestrian LOS	Bus LOS

ARTPLAN 2009 Conceptual Planning Analysis

Project Information

Analyst	PR	**Arterial Name**	SR 40	**Study Period**	Dir Hr Demand Vol
Date Prepared	2/22/2011 11:16:35 AM	**From**	Williamson Blvd	**Modal Analysis**	Multimodal
Agency	GMB	**To**	Breakaway Tr	**Program**	ARTPLAN 2009
Area Type	Other Urbanized	**Peak Direction**	Westbound	**Version Date**	12/12/10
Arterial Class	2				

File Name	C:\Users\rpemmanaboina\AppData\Local\Temp\preview.xml
User Notes	SR 40_PM Peak_WB

Arterial Data

K	0.097	**PHF**	0.925	**Control Type**	Semiactuated
D	0.55	**% Heavy Vehicles**	3	**Base Sat. Flow Rate**	1950

Automobile Intersection and Segment Data

Segment #	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	FFS	Median Type
1 (to NB Ramps)	130	0.55	5	2	0	19	No				Yes	778	29700	1745	2	50	Restrictive
2 (to SB Ramps)	130	0.81	5	2	23	0	Yes	2	470	0.18	No	402	29700	1912	2	50	Restrictive
3 (to Booth Rd)	130	0.59	5	2	2	1	Yes	1	235	0.14	Yes	1377	27000	1573	2	50	Restrictive
4 (to Tymber Creek Rd)	130	0.35	3	2	7	43	Yes	1	235	0.10	Yes	2791	23400	1526	2	55	Restrictive
5 (to Breakaway Tr)	130	0.62	3	2	1	18	Yes	1	235	0.15	Yes	5248	11800	743	2	55	Restrictive

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to NB Ramps)	1528	3123	0.890	7.45	A	0.00	24.19	C
2 (to SB Ramps)	1592	3682	0.534	0.23	A	0.46	32.73	B
3 (to Booth Rd)	1650	3695	0.757	2.89	A	0.12	36.21	A
4 (to Tymber Creek Rd)	825	1813	1.300	183.90	F	0.89	8.52	F
5 (to Breakaway Tr)	651	3111	0.337	11.91	B	0.03	44.69	A

Arterial Length	**2.0068**	**Weighted g/C**	**0.50**	**FFS Delay**	**225.25**	**Threshold Delay**	**0.00**	**Auto Speed**	**###**	**Auto LOS**	**###**

Multimodal Segment Data

Segment #	Pave Shldr /Bike Lane	Outside Lane Width	Pave Cond	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Obstacle To Bus Stop	Bus Freq	Bus Span Service
1 (to NB Ramps)	No	Typical	Typical	Yes	Adjacent	No	No	0	0
2 (to SB Ramps)	No	Typical	Typical	Yes	Adjacent	No	No	0	0
3 (to Booth Rd)	Yes	Typical	Typical	No	NA	No	No	0	0
4 (to Tymber Creek Rd)	Yes	Typical	Typical	No	NA	No	No	0	0
5 (to Breakaway Tr)	Yes	Typical	Typical	Yes	Typical	No	No	0	0

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	1	2	3	1	2	3	1	2	3	1	2	3
1 (to NB Ramps)	100			Yes			Adjacent			No		
2 (to SB Ramps)	100			Yes			Adjacent			No		
3 (to Booth Rd)	100			No			NA			No		
4 (to Tymber Creek Rd)	100			No			NA			No		
5 (to Breakaway Tr)	100			Yes			Typical			No		

Multimodal LOS

	Bicycle LOS		Pedestrian LOS					Bus LOS	
Segment #	Score	Segment	1	2	3	Score	Segment	Adj. Buses	Segment
1 (to NB Ramps)	4.74	E				4.33	D	0.00	F
2 (to SB Ramps)	4.71	E				4.45	D	0.00	F
3 (to Booth Rd)	3.07	C				5.17	E	0.00	F
4 (to Tymber Creek Rd)	3.17	C				5.37	E	0.00	F
5 (to Breakaway Tr)	2.87	C				3.34	C	0.00	F

Bicycle LOS	Pedestrian LOS	Bus LOS

ARTPLAN 2009 Conceptual Planning Analysis

Project Information

Analyst	PR	**Arterial Name**	Williamson Blvd	**Study Period**	Dir Hr Demand Vol
Date Prepared	2/22/2011 11:16:35 AM	**From**	SR 40	**Modal Analysis**	Multimodal
Agency	GMB	**To**	LPGA Blvd	**Program**	ARTPLAN 2009
Area Type	Other Urbanized	**Peak Direction**	Southbound	**Version Date**	12/12/10
Arterial Class	2				

File Name	C:\Users\rpemmanaboina\AppData\Local\Temp\preview.xml
User Notes	Williamson Blvd from SR 40 to Hand Ave_AM

Arterial Data

K	0.097	**PHF**	0.925	**Control Type**	Actuated
D	0.55	**% Heavy Vehicles**	3	**Base Sat. Flow Rate**	1950

Automobile Intersection and Segment Data

Segment #	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	FFS	Median Type
1 (to Hand Ave)	70	0.73	3	2	30	0	Yes	1	350	0.15	No	3300	16000	877	2	45	Restrictive
2 (to LPGA Blvd)	70	0.25	3	1	30	17	Yes	1	350	0.09	No	1760	34000	1814	2	55	Restrictive

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to Hand Ave)	664	3324	0.273	3.25	A	0.92	39.85	A
2 (to LPGA Blvd)	1373	1840	2.985	942.18	F	#	1.24	F

Arterial Length	**0.9583**	**Weighted g/C**	**0.49**	**FFS Delay**	**953.34**	**Threshold Delay**	**822.21**	**Auto Speed**	**###**	**Auto LOS**	**###**

Multimodal Segment Data

Segment #	Pave Shldr /Bike Lane	Outside Lane Width	Pave Cond	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Obstacle To Bus Stop	Bus Freq	Bus Span Service
1 (to Hand Ave)	Yes	Typical	Typical	Yes	Adjacent	No	No	3	12
2 (to LPGA Blvd)	No	Typical	Typical	No	NA	No	No	2	12

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to Hand Ave)	69	10	21	Yes	No	Yes	Adjacent	NA	Adjacent	No	No	No
2 (to LPGA Blvd)	100			No			NA			No		

Multimodal LOS

	Bicycle LOS		Pedestrian LOS					Bus LOS	
Segment #	**Score**	**Segment**	**1**	**2**	**3**	**Score**	**Segment**	**Adj. Buses**	**Segment**
1 (to Hand Ave)	2.80	C				3.42	C	2.84	D
2 (to LPGA Blvd)	4.92	E				6.05	F	0.99	F

Bicycle LOS	Pedestrian LOS	Bus LOS

ARTPLAN 2009 Conceptual Planning Analysis

Project Information

Analyst	PR	**Arterial Name**	Williamson Blvd	**Study Period**	Dir Hr Demand Vol
Date Prepared	2/22/2011 11:16:35 AM	**From**	LPGA Blvd	**Modal Analysis**	Multimodal
Agency	GMB	**To**	SR 40	**Program**	ARTPLAN 2009
Area Type	Other Urbanized	**Peak Direction**	Northbound	**Version Date**	12/12/10
Arterial Class	2				

File Name	C:\Users\rpemmanaboina\AppData\Local\Temp\preview.xml
User Notes	Williamson Blvd from SR 40 to Hand Ave_PM

Arterial Data

K	0.097	**PHF**	0.925	**Control Type**	Semiactuated
D	0.55	**% Heavy Vehicles**	3	**Base Sat. Flow Rate**	1950

Automobile Intersection and Segment Data

Segment #	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	FFS	Median Type
1 (to Hand Ave)	70	0.59	3	2	0	16	No				No	10932	13900	839	2	55	Restrictive
2 (to SR 40)	130	0.23	3	2	13	17	Yes	1	300	0.24	Yes	3300	17300	986	2	45	Restrictive

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to Hand Ave)	907	3530	0.435	8.52	A	0.00	49.91	A
2 (to SR 40)	746	2973	1.091	110.36	F	0.37	13.72	E

Arterial Length	**2.6955**	**Weighted g/C**	**0.41**	**FFS Delay**	**127.85**	**Threshold Delay**	**0.00**	**Auto Speed**	**###**	**Auto LOS**	**###**

Multimodal Segment Data

Segment #	Pave Shldr /Bike Lane	Outside Lane Width	Pave Cond	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Obstacle To Bus Stop	Bus Freq	Bus Span Service
1 (to Hand Ave)	No	Typical	Typical	No	NA	No	No	2	12
2 (to SR 40)	Yes	Typical	Typical	Yes	Adjacent	No	No	3	12

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to Hand Ave)	100			No			NA			No		
2 (to SR 40)	47	33	20	Yes	No	Yes	Adjacent	NA	Adjacent	No	No	No

Multimodal LOS

	Bicycle LOS		Pedestrian LOS					Bus LOS	
Segment #	**Score**	**Segment**	**1**	**2**	**3**	**Score**	**Segment**	**Adj. Buses**	**Segment**
1 (to Hand Ave)	4.63	E				5.15	E	1.53	E
2 (to SR 40)	2.86	C				3.83	D	2.70	D

Bicycle LOS	Pedestrian LOS	Bus LOS

Appendix I

Year 2010 sub-area Model Validation Memorandum

GMB ENGINEERS & PLANNERS, INC.

FINAL MEMORANDUM

Prepared For: Florida Department of Transportation, District Five

To: Lance Decuir, P.E., Terry Rains

Prepared By: Babuji Ambikapathy, P.E., AICP, GMB Engineers & Planners, Inc.

Subject: **SR 40 PD&E Study – Year 2010 Model Validation**

The Florida Department of Transportation (FDOT) District Five is conducting a Project Development and Environment (PD&E) study to evaluate possible alternative improvements to the SR 40 corridor from Breakaway Trail to Williamson Boulevard, the proposed extension of Hand Avenue from its existing western terminus to the west till Tymber Creek Road Extension and the Tymber Creek Road Extension to the south to LPGA Boulevard in Volusia County, Florida.

GMB Engineers & Planners, Inc. (GMB) has been retained by the FDOT, to perform the Design Traffic Analysis to determine the impacts and assess the need for future capacity improvements on SR 40, Williamson Boulevard, LPGA Boulevard, Hand Avenue Extension and Tymber Creek Road Extension. This Final Technical Memorandum for base year model validation was prepared under the scope of this project and was finalized based on the comments received for the Draft Memorandum. The Document containing the comments received from the FDOT and the corresponding GMB's responses is provided in **Appendix A** of this memorandum.

MODEL USED:

The Central Florida Regional Planning Model, Version 5.0 (CFRPM5.0) travel demand forecasting model was used as the base model for this study. The latest adopted model has a 2005 base validated model and a 2035 Cost Feasible Plan model. Based on the scope, the base year for performing validation is 2010. The 2005 base year model was used as the starting point. Any additional roadway widening projects constructed between 2005 and 2010 have been added to the new 2010 network. The CFRPM5.0 socio economic data (zdata) for years 2005 (base year) and 2015 (interim year) was interpolated to obtain the year 2010 zdata.

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2010 BASE MODEL ADJUSTMENTS:

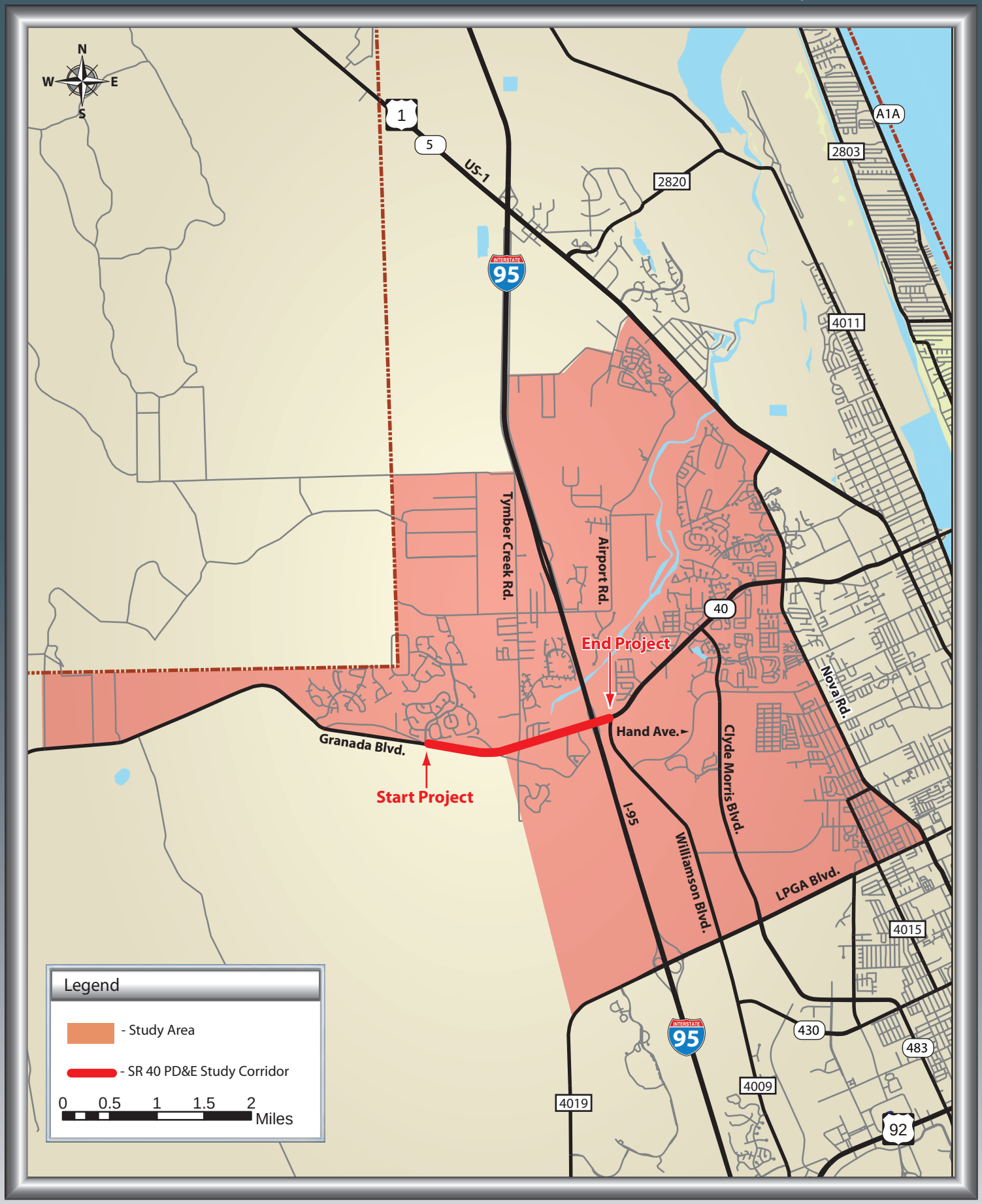
Year 2010 Zdata Changes:

GMB conducted a reasonableness check of the 2010 base model network within the project study area shown in **Figure 1**. The zdata associated with the Development of Regional Impacts (DRIs) and major planned developments in the vicinity of the study area (shown in **Figure 2**) including Hunter's Ridge, Breakaway Trails, LPGA, Plantation Bay, National Gardens, and Ormond Crossings were looked at.

The interpolated 2010 zdata was further refined by verifying the land uses within the study area by using aerial photographs and the latest DRI annual reports. The aerial photos and DRI annual reports were used to evaluate the 2010 interpolated zdata and make the necessary changes. **Table 1** shows the original interpolated zdata for year 2010 along with the revised zdata for year 2010.

The interpolated 2010 zdata for the Traffic Analysis Zones (TAZs) within Volusia County showed a population of 512,062. This was compared to the Volusia County Population estimate for year 2010 of 510,300 based on the information from University of Florida - Bureau of Economic Business Research (BEBR). The comparison indicates that the population estimate for year 2010 for Volusia County based on the interpolated zdata is within 0.34% to the population estimate for year 2010 for Volusia County based on BEBR estimates.

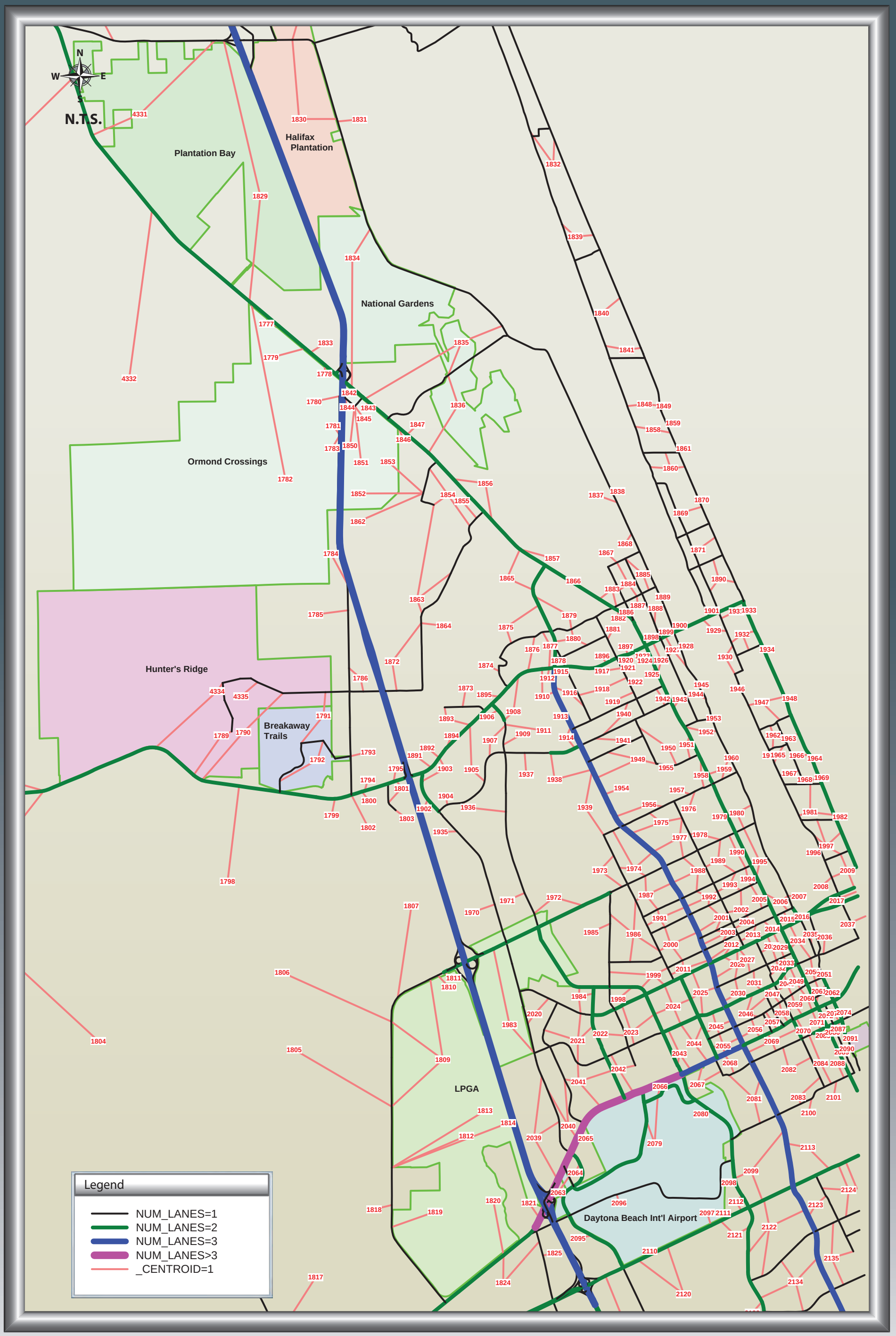
The year 2011 employment estimate from the County (source: www.volusia.org) stands at 223,400 compared to the employment control total of 215,900 (interpolated zdata) for the year 2010. The comparison indicates that the employment estimate for year 2010 for Volusia County based on the interpolated zdata is within 3.36% to the employment estimate for year 2010 for Volusia County based on the County estimates.



Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

SR 40 PD&E Model Validation Report

Figure 1
Study Area Map



Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

SR 40 PD&E Model Validation Report

Figure 2
DRI and Other Developments around study area

Table 1: Original Interpolated & Revised 2010 Zdatas

DRI NAMES	CFRPM5.0 ZONES	2010 interpolated zdatas [1]								2010 Modified zdatas [2]							
		SF	MF	HOTEL	IND	COM	SER	TOTAL EMP	SCH	SF	MF	HOTEL	IND	COM	SER	TOTAL EMP	SCH
Ormond Crossings	1777	4	0		186	75	320	581		4	0		186	75	320	581	
	1778	0	0	236	0	40	57	97		0	0	236	0	40	57	97	
	1779	~~23~~	~~24~~														
	1780		~~45~~			~~170~~		~~170~~									
	1781				~~87~~			~~87~~									
	1782	~~81~~	~~50~~						~~313~~								
	1783				~~91~~	~~9~~		~~100~~									
	1842					47	14	61						47	14	61	
	1843	2			15	9	28	51		2			15	9	28	51	
	1844				~~83~~			~~83~~									
	1845				~~99~~		~~1~~	~~100~~									
	1850				~~26~~			~~26~~									
	1851				~~313~~		~~3~~	~~316~~									
	1852				~~639~~		~~1~~	~~640~~									
	1853				~~276~~	~~106~~	~~434~~	~~816~~									
2010 Total		**110**	**119**	**236**	**1815**	**456**	**858**	**3128**	**313**	**6**	**0**	**236**	**201**	**171**	**419**	**790**	**0**
LPGA	1809	364	32		31	19	304	316		364	32		31	19	304	316	
	1810				40	415	74	528					40	415	74	528	
	1811				1	11		12					1	11		12	
	1812	10								10							
	1813	2			4			4		2			4			4	
	1814				13			13					13			13	
	1983	0	236		179	83	~~1182~~	~~1443~~		0	236		179	83	732	994	
	1984	2	110	82	93	243	~~774~~	~~1109~~		2	110	82	93	243	324	660	
2010 Phase I + Existing (Zone 1984)		**378**	**378**	**82**	**361**	**771**	**2334**	**3425**		**378**	**378**	**82**	**361**	**771**	**1434**	**2527**	
Breakaway Trails	1791	830			38	13	102	153	647	830			38	13	102	153	647
	1792	372			48	47	56	150		372			48	47	56	150	
2010 (DRI + Existing)		**1202**	**0**	**0**	**86**	**60**	**158**	**303**	**647**	**1202**	**0**	**0**	**86**	**60**	**158**	**303**	**647**
Hunter's Ridge	1789	169					5	5		169					5	5	
	1790	112				4	8	12		112				4	8	12	
	4334	~~11~~	~~11~~		~~4~~	~~12~~	~~149~~	~~165~~	~~184~~								
	4335	~~7~~	~~3~~		~~1~~	~~4~~	~~37~~	~~43~~									
2010 Total		**299**	**14**	**0**	**5**	**20**	**199**	**225**	**184**	**281**	**0**	**0**	**0**	**4**	**13**	**17**	**0**
National Gardens	1834	13		75	11	52	8	70		13		75	11	52	8	70	
	1835	179			45	90	78	213		179			45	90	78	213	
	1836	585			10	2	6	19		585			10	2	6	19	
2010 Total		**777**	**0**	**75**	**66**	**144**	**92**	**302**	**0**	**777**	**0**	**75**	**66**	**144**	**92**	**302**	**0**
Plantation Bay	1829	~~532~~	56		15	10	60	85		597	56		15	10	60	85	
	4331	~~571~~	~~83~~		~~107~~	~~378~~	~~915~~	~~1400~~	~~180~~	223	40						
2010 Total		**1103**	**139**	**0**	**122**	**388**	**975**	**1485**	**180**	**820**	**96**	**0**	**15**	**10**	**60**	**85**	**0**
Total for All Review DRIs		**3,869**	**650**	**393**	**2,455**	**1,839**	**4,616**	**8,868**	**1,324**	**3,464**	**474**	**393**	**729**	**1,160**	**2,176**	**4,024**	**647**

1 original interporlated 2010 zdata obtained by interpolated of 2005 and 2015 CFRPM50 zdata sets

2 Revised 2010 zdata obtained based on review of aerial and DRI Annual Reports

Year 2010 Roadway Network Changes:

The year 2010 network was created by using the adopted CFRPM5.0 base year 2005 network as the starting point. Any roadway widening projects constructed between 2005 and 2010 were added to the year 2010 network.

The following adjustments were made to the year 2005 network to reflect 2010 conditions:

- SR 40 from Tymber Creek Road to Cone Road – Changed the number of lanes from 2 to 4 to reflect roadway widening.
- I-95 from I-4 to LPGA Boulevard and from SR 40 to Flagler County Line – Changed the number of lanes from 4 to 6 to reflect roadway widening.
- LPGA Boulevard – The 4 lanes was extended to west of I-95 and just east of Tomoka Farms Road.
- North Old Kings Road was extended from SR 40 to Nova Road as a two lane roadway.
- Clyde Morris Boulevard from SR 40 to LPGA Boulevard - Changed the facility type from 32 to 22.
- Hand Avenue from Williamson Boulevard to Nova Road – Changed the facility type from 42 to 41.
- Added a centroid connector from TAZ 1983 to LPGA Boulevard to reflect the University of Phoenix's main entrance on LPGA Boulevard.
- Added a centroid connector from TAZ 1938 to Nova Road and a centroid connector from TAZ 1865 to US 1.
- Airport Road Extension west of Tymber Creek Road and River Chase Way (connecting to Tymber Creek Road) were added as two lane roadways in the network.
- Adjusted centroid loadings for TAZs 1791, 1792, 1789, 1790, 4334, and 4335.

The highway network showing the daily total volumes for the year 2010 after validation adjustments is included in the **Appendix B.**

MODEL VALIDATION:

The model validation is performed to insure that the model is accurate enough to forecast the number of lanes to handle the forecasted volumes. The validation of a traffic model involves verifying the various statistics, most of which are related to actual ground counts that have been taken on various links throughout the highway network. Three measures of effectiveness including the ratio of assigned volume to count volume on links, ratio of assigned volume to count volume on cut lines, and Percent Root Mean Square Error (RMSE) have been used in this study to evaluate whether the year 2010 model has been validated within the allowable limits.

Table 8.1 in **Technical Resource Document 8** states the level of accuracy for screenlines and cutlines as ± 10% (> 50,000 VPD) and ± 20% (<=50,000) and within 10% for limited access facilities.

Ratio of Volumes to Counts:

The base year 2010 count AADT for individual roadway segments were obtained from GMB (traffic counts collected as part of SR 40 PD&E study), 2009 FDOT Traffic Count CD, and 2010 Volusia County counts. The Peak Season Weekly Average Daily Traffic (PSWADT) obtained from the CFRPM was converted to AADT using the latest 2009 Model Output Conversion Factor (MOCF) of 0.93 for all roadways with the exception of I-95 where a MOCF of 0.95 was used. The MOCF values used to obtain AADT along with the traffic counts used in this study is included in **Appendix C**.

The ratio of assigned volume to count volume on the cutlines and ratio of assigned volume to count volume on individual roadway links were calculated as MOEs and are summarized in **Tables 2 and 3**, respectively. The cutlines are groups of links which lie within the same travel corridor within the region. Three north/south cutlines and two east/west cutlines shown in **Figure 3** were selected within the study area. Based on **Tables 2 and 3** it can be seen that all the five cutlines and all the individual roadway segments perform well within the acceptable levels of accuracy (volume/count ratios are ± 10% for > 50,000 VPD and ± 20% for <=50,000 VPD).

Root Mean Square Error (RMSE):

Percent RMSE by link volume group gives an indication as to the ability of the model to correctly replicate the traffic volumes among varying levels of facility types. The RMSE difference measures the deviation between model assigned traffic volumes and ground counts. A high percent indicates a large deviation between the assigned and counted traffic volumes and a lower percentage indicates that the assigned volumes are closer to the ground counts. An RMSE of 0.0 percent would indicate perfect agreement between the model and traffic count. **Table 2** shows percentage RMSE by volume group for the study area for the year 2010 model.

A ratio of assigned model volumes to count volumes for each volume group is also listed in **Table 4**. Based on Table 4 it can be seen that the Volume/Count ratio for all volume groups is within 10% and all volume groups are well within acceptable error limits in terms of Percent RMSE. This clearly shows that the adjusted network has been well fine-tuned to replicate the ground counts within study area.

Table 2: Comparison of Model Volumes against Ground Counts

Roadway Segment		Count AADT[1]	2010 Model AADT[2]	Volume / Count [3]
SR 40	Rima Ridge Road to Tymber Creek Road	10,900	12,741	1.17
	Tymber Creek Road to I-95	23,800	26,450	1.11
	I-95 to Clyde Morris Boulevard	28,700	25,300	0.88
	Clyde Morris Boulevard to Nova Road	28,600	29,960	1.05
Hand Avenue	East of Williamson Boulevard	8,000	7,779	0.97
	East of Clyde Morris Boulevard	13,510	14,006	1.04
	West of Nova Road	15,150	13,903	0.92
LPGA Boulevard	West of Tomoka Farms Road	10,700	9,759	0.91
	West of Williamson Boulevard	26,000	27,890	1.07
	West of Clyde Morris Boulevard	21,030	24,403	1.16
	West of Jimmy Ann Drive.	13,850	12,105	0.87
	West of Nova Rd	13,080	12,231	0.94
Williamson Boulevard	South of SR 40	17,300	17,054	0.99
	South of Hand Avenue	12,500	11,603	0.93
	North of LPGA Boulevard	13,010	12,665	0.97
Clyde Morris Boulevard	South of SR 40	13,030	13,089	1.00
	South of Hand Avenue	12,400	13,527	1.09
	North of LPGA Boulevard	13,000	14,115	1.09
Nova Road	South of US 1	13,400	15,957	1.19
	North of SR 40	23,000	25,829	1.12
	South of SR 40	27,500	24,959	0.91
	South of Hand Avenue	29,000	33,324	1.15
Tymber Creek Road	South of Airport Road	8,240	8,442	1.02
	North of SR 40	12,320	12,640	1.03
Airport Road	East of Tymber Creek Road	5,290	4,828	1.04
	South of Sunshine Boulevard	4,370	3,858	0.89
	West of US 1	7,190	7,477	1.05
I-95	North of SR 40	68,500	71,052	1.03
	South of SR 40	79,500	87,593	1.09
US 1	South of Nova Road	17,000	17,959	1.06
Total		**589,870**	**612,498**	**1.04**

Note: 1. Latest count from FDOT (2009), Volusia County (2010) and GMB (2011)

2. PSWADT from the Model were multiplied by MOCF of 0.95 to derive the 2010 Model AADT for I95 and 0.93 for the rest of roads.

3. Acceptable Volume-Count ratios are +/-10% for > 50,000 VPD and +/-20% for <=50,000 VPD.

Table 3: Comparison of Model Volumes against Ground Counts at the Cutlines

Cut Line Number	Roadway Name	Location	Count AADT [1]	Model AADT [2]	Volume / Count [3]
North / South Cut Lines					
Cut Line 1	Airport Road	East of Tymber Creek Road	5,290	4,828	
	SR 40	East of Tymber Creek Road	23,800	26,450	
	LPGA	West of Tomoka Farms Road	10,700	9,759	
Total Cut Line 1			**39,790**	**41,037**	**1.03**
Cut Line 2	SR 40	East of Williamson Boulevard	28,700	25,300	
	Hand Avenue	East of Williamson Boulevard	8,000	7,779	
	LPGA	East of Williamson Boulevard	21,030	24,403	
Total Cut Line 2			**57,730**	**57,482**	**1.00**
Cut Line 3	SR 40	West of Nova Road	28,600	29,960	
	Hand Avenue	West of Nova Road	15,150	13,903	
	LPGA	West of Nova Road	13,080	12,231	
Total Cut Line 3			**56,830**	**56,094**	**0.99**
East / West Cut Lines					
Cut Line 4	Tymber Creek Road	south of Airport Road	8,240	8,442	
	I-95	North of SR 40	68,500	71,052	
	Nova Road	South of US 1	13,400	15,957	
	US 1	South of Nova Road	17,000	17,959	
Total Cut Line 4			**107,140**	**113,410**	**1.06**
Cut Line 5	I-95	South of SR 40	79,500	87,593	
	Williamson Boulevard	South of Hand Avenue	12,500	11,603	
	Clyde Morris Boulevard	South of Hand Avenue	12,400	13,527	
	Nova Road	South of Hand Avenue	29,000	33,324	
Total Cut Line 5			**133,400**	**146,047**	**1.09**

Note: 1. Latest count from FDOT (2009), Volusia County (2010) and GMB (2011)

2. PSWADT from the Model were multiplied by MOCF of 0.95 to derive the 2010 Model AADT for I95 and 0.93 for the rest of roads.

3. Acceptable Volume-Count ratios are +/-10% for > 50,000 VPD and +/-20% for <=50,000 VPD.

Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

SR 40 PD&E Model Validation Report

Figure 3
Location of Cutlines

TABLE 4: Percent RMSE By Volume Group – 2010 Model

Volume Group	% RMSE	Allowable % RMSE	Model AADT	Count AADT	Volume-Count Ratio*
1-5,000:	8.12%	45-55%	5,098	5,950	0.98
5,000-10,000:	3.75%	35-45%	28,826	29,060	0.99
10,000- 20,000:	8.73%	27-35%	221,231	220,790	1.00
20,000- 30,000:	11.44%	24-27%	295,155	270,230	1.06
60,000- 70,000:	3.73%	17-18%	70,304	68,500	1.04
70,000- 80,000:	10.18%	16-17%	86,672	79,500	1.10
1-500,000:	**6.10%**	**32-39%**	**809,511**	**765,883**	**1.04**

* - Acceptable Volume-Count ratios are ± 10% for > 50,000 VPD and ± 20% for <=50,000 VPD.

CONCLUSION:

Based on the validation efforts performed, the model is considered acceptable for use in estimating future travel demand within the study area. The validation adjustments carried over to the Year 2015, 2025 and 2035 model will be able to achieve better results in forecasting the Years 2015, 2025 and 2035 traffic for roadways within the study area.

APPENDIX A

COMMENTS & RESPONSES DOCUMENT

GMB ENGINEERS & PLANNERS, INC.

March 31, 2011

Mr. Terry Rains

Project Manager – Design Traffic

FDOT District 5 / Mailstop PL 4-548

719 S. Woodland Blvd.

DeLand, FL 32720

RE: SR 40 PD&E Study – Year 2010 Model Validation

FDOT FM No. 42081311201

Response to Comments

GMB Project No. 06-129.34

Comment #1: Table 1 shows the modifications made to the original interpolated land use dataset based on a detailed land use review. Were the countywide control totals (population and employment) maintained for both population and employment after these land use modifications? If so, where was the land use redistributed to?

Response: *Initially, the 2010 ZDATA (that was supposed to be used for validation purpose) was interpolated using the ZDATA for the Years 2005 and 2015 from the latest CFRPM Version 5. Based on this interpolated 2010 ZDATA, Volusia County had a population of 512,000 and an employment of 215,900. However, in the course of validation process, the controls totals were changed to 511,600 (population) and 212,800 (employment). In comparison, BEBR's 2010 population estimate for Volusia County was 510,300 and Volusia County's 2010 employment estimate was 223,400 (source: www.volusia.org). Below is a Table that shows the difference between the two estimates (Values used in the Model vs Values from BEBR & Volusia County).*

Based on Table 1, there is less than 5% difference between the control totals from the above mentioned two sources and therefore the land use was not further redistributed.

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GMB New York
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Saratoga Springs, NY 12866
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www.GMB.cc

Table 1: Control Total Comparison

Control Type	Model Values Used in Model Validation	Values from BEBR & Volusia County Employment	Absolute % Difference
Population	511,600	510,300	0.25%
Employment	212,800	223,400	4.74%

Comment #2: The population from the 2010 interpolated zdata for Volusia County was compared to the BEBR 2010 population estimate. Is there a similar comparison that can be done for the Volusia County employment total in the interpolated zdata?

Response: *Yes, the employment comparison can be done using the year 2011 statistics provided at www.volusia.org in the Demographics section. The employment estimate from the County stands at 223,400 compared to the employment control total of 212,800 that was used in the year 2010 model validation. Please also refer to response for comment # 1.*

The memorandum will be appropriately changed to reflect the response to this comment.

Comment #3: Were any roadway network improvements **outside** of the study area completed between 2005 and 2010 included in the 2010 network? If so, please include a listing of the major improvements that were included.

Response: *The widening of I-95 from 4 to 6 lanes is the only improvement that was considered outside the planning study area. This improvement is listed under the "YEAR 2010 ROADWAY NETWORK CHANGES" in the memorandum.*

Comment #4: On Figure 1, please label SR 40 and include the begin and end project limits of the PD&E Study.

Response: *This comment is acknowledged and appropriate changes were made to Figure 1 in the memorandum.*

Comment #5: In Table 1, in the TAZs listed as "No Changes" in the 2010 Modified Zdata (Breakway Trails and National Gardens), please add the appropriate land use data in the under the land use categories.

Response: *This comment is acknowledged and appropriate changes were made to Table 1 in the memorandum.*

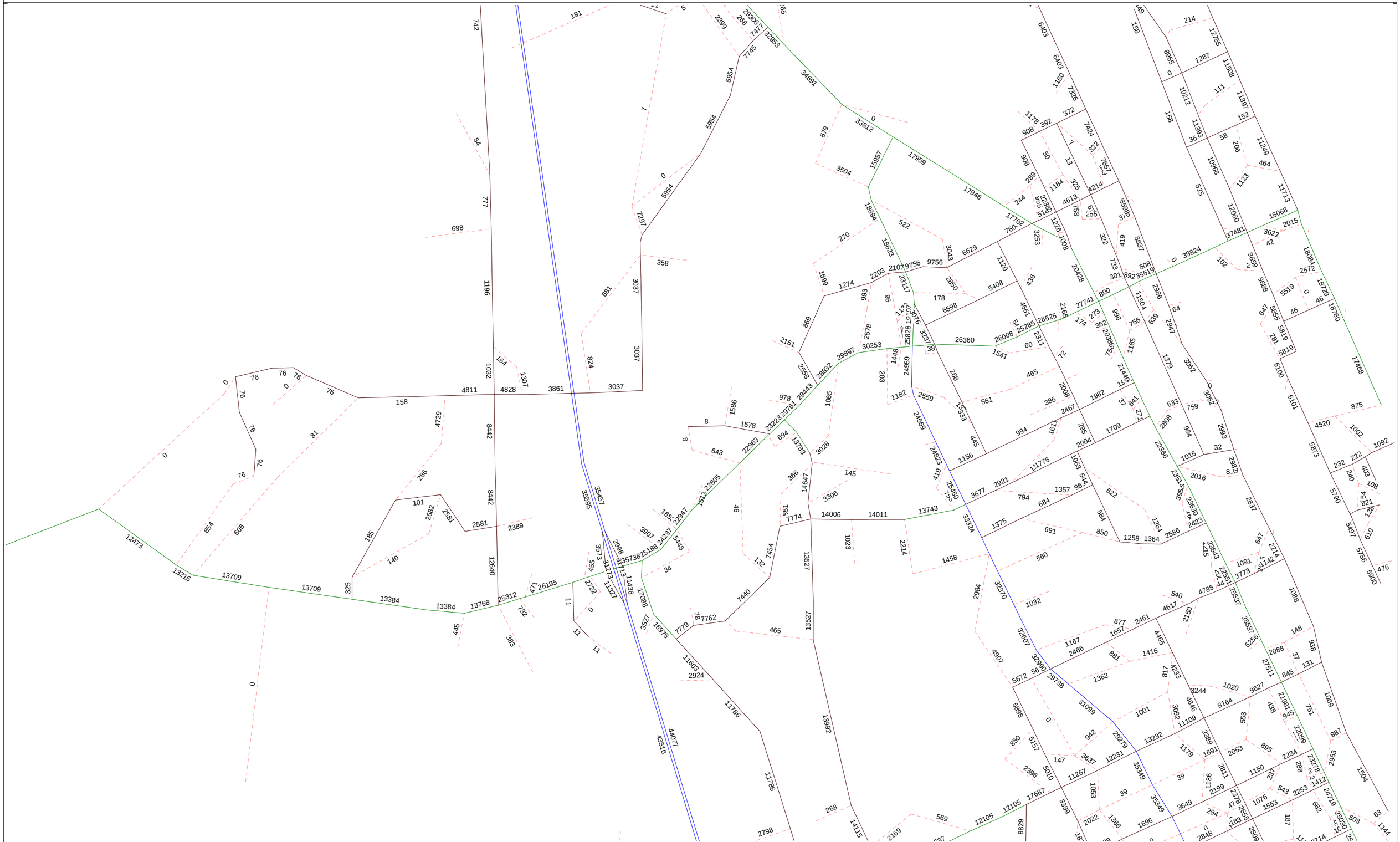
Comment #6: Please total the land use categories for the original 2010 Interpolated Zdata and the 2010 Modified Zdata in Table 1.

Response: *This comment is acknowledged and appropriate changes were made to Table 1 in the memorandum.*

APPENDIX B

NETWORK PLOT AFTER ADJUSTMENTS

Year 2010 Total Traffic Volumes (AADT)
CFRPM50



APPENDIX C

FDOT Model Output Conversion Factors along with Traffic Counts from FDOT, Volusia County and GMB

GMB ENGINEERS & PLANNERS, INC.

2009 Peak Season Factor Category Report - Report Type: ALL
Category: 7900 VOLUSIA COUNTYWIDE

MOCF: 0.93

Week	Dates	SF	PSCF
1	01/01/2009 - 01/03/2009	1.05	1.13
2	01/04/2009 - 01/10/2009	1.03	1.11
3	01/11/2009 - 01/17/2009	1.00	1.08
4	01/18/2009 - 01/24/2009	0.99	1.06
* 5	01/25/2009 - 01/31/2009	0.97	1.04
* 6	02/01/2009 - 02/07/2009	0.95	1.02
* 7	02/08/2009 - 02/14/2009	0.94	1.01
* 8	02/15/2009 - 02/21/2009	0.92	0.99
* 9	02/22/2009 - 02/28/2009	0.91	0.98
*10	03/01/2009 - 03/07/2009	0.91	0.98
*11	03/08/2009 - 03/14/2009	0.90	0.97
*12	03/15/2009 - 03/21/2009	0.89	0.96
*13	03/22/2009 - 03/28/2009	0.91	0.98
*14	03/29/2009 - 04/04/2009	0.92	0.99
*15	04/05/2009 - 04/11/2009	0.94	1.01
*16	04/12/2009 - 04/18/2009	0.96	1.03
*17	04/19/2009 - 04/25/2009	0.97	1.04
18	04/26/2009 - 05/02/2009	0.99	1.06
19	05/03/2009 - 05/09/2009	1.00	1.08
20	05/10/2009 - 05/16/2009	1.01	1.09
21	05/17/2009 - 05/23/2009	1.02	1.10
22	05/24/2009 - 05/30/2009	1.02	1.10
23	05/31/2009 - 06/06/2009	1.02	1.10
24	06/07/2009 - 06/13/2009	1.02	1.10
25	06/14/2009 - 06/20/2009	1.02	1.10
26	06/21/2009 - 06/27/2009	1.03	1.11
27	06/28/2009 - 07/04/2009	1.03	1.11
28	07/05/2009 - 07/11/2009	1.04	1.12
29	07/12/2009 - 07/18/2009	1.05	1.13
30	07/19/2009 - 07/25/2009	1.04	1.12
31	07/26/2009 - 08/01/2009	1.04	1.12
32	08/02/2009 - 08/08/2009	1.04	1.12
33	08/09/2009 - 08/15/2009	1.04	1.12
34	08/16/2009 - 08/22/2009	1.04	1.12
35	08/23/2009 - 08/29/2009	1.04	1.12
36	08/30/2009 - 09/05/2009	1.04	1.12
37	09/06/2009 - 09/12/2009	1.04	1.12
38	09/13/2009 - 09/19/2009	1.05	1.13
39	09/20/2009 - 09/26/2009	1.04	1.12
40	09/27/2009 - 10/03/2009	1.02	1.10
41	10/04/2009 - 10/10/2009	1.01	1.09
42	10/11/2009 - 10/17/2009	1.00	1.08
43	10/18/2009 - 10/24/2009	1.01	1.09
44	10/25/2009 - 10/31/2009	1.02	1.10
45	11/01/2009 - 11/07/2009	1.02	1.10
46	11/08/2009 - 11/14/2009	1.03	1.11
47	11/15/2009 - 11/21/2009	1.04	1.12
48	11/22/2009 - 11/28/2009	1.04	1.12
49	11/29/2009 - 12/05/2009	1.04	1.12
50	12/06/2009 - 12/12/2009	1.05	1.13
51	12/13/2009 - 12/19/2009	1.05	1.13
52	12/20/2009 - 12/26/2009	1.03	1.11
53	12/27/2009 - 12/31/2009	1.00	1.08

* Peak Season

2009 Peak Season Factor Category Report - Report Type: ALL
Category: 7995 VOLUSIA I95

Week	Dates	SF	MOCF: 0.95 PSCF
1	01/01/2009 - 01/03/2009	0.95	1.00
2	01/04/2009 - 01/10/2009	1.01	1.06
3	01/11/2009 - 01/17/2009	1.06	1.12
4	01/18/2009 - 01/24/2009	1.05	1.11
5	01/25/2009 - 01/31/2009	1.03	1.08
6	02/01/2009 - 02/07/2009	1.02	1.07
* 7	02/08/2009 - 02/14/2009	1.00	1.05
* 8	02/15/2009 - 02/21/2009	0.98	1.03
* 9	02/22/2009 - 02/28/2009	0.97	1.02
*10	03/01/2009 - 03/07/2009	0.96	1.01
*11	03/08/2009 - 03/14/2009	0.94	0.99
*12	03/15/2009 - 03/21/2009	0.93	0.98
*13	03/22/2009 - 03/28/2009	0.92	0.97
*14	03/29/2009 - 04/04/2009	0.92	0.97
*15	04/05/2009 - 04/11/2009	0.91	0.96
*16	04/12/2009 - 04/18/2009	0.91	0.96
*17	04/19/2009 - 04/25/2009	0.94	0.99
*18	04/26/2009 - 05/02/2009	0.97	1.02
*19	05/03/2009 - 05/09/2009	1.00	1.05
20	05/10/2009 - 05/16/2009	1.04	1.09
21	05/17/2009 - 05/23/2009	1.03	1.08
22	05/24/2009 - 05/30/2009	1.02	1.07
23	05/31/2009 - 06/06/2009	1.02	1.07
24	06/07/2009 - 06/13/2009	1.01	1.06
25	06/14/2009 - 06/20/2009	1.01	1.06
26	06/21/2009 - 06/27/2009	0.99	1.04
27	06/28/2009 - 07/04/2009	0.98	1.03
28	07/05/2009 - 07/11/2009	0.97	1.02
29	07/12/2009 - 07/18/2009	0.95	1.00
30	07/19/2009 - 07/25/2009	0.98	1.03
31	07/26/2009 - 08/01/2009	1.00	1.05
32	08/02/2009 - 08/08/2009	1.02	1.07
33	08/09/2009 - 08/15/2009	1.04	1.09
34	08/16/2009 - 08/22/2009	1.06	1.12
35	08/23/2009 - 08/29/2009	1.08	1.14
36	08/30/2009 - 09/05/2009	1.10	1.16
37	09/06/2009 - 09/12/2009	1.12	1.18
38	09/13/2009 - 09/19/2009	1.14	1.20
39	09/20/2009 - 09/26/2009	1.12	1.18
40	09/27/2009 - 10/03/2009	1.11	1.17
41	10/04/2009 - 10/10/2009	1.09	1.15
42	10/11/2009 - 10/17/2009	1.07	1.13
43	10/18/2009 - 10/24/2009	1.05	1.11
44	10/25/2009 - 10/31/2009	1.03	1.08
45	11/01/2009 - 11/07/2009	1.02	1.07
46	11/08/2009 - 11/14/2009	1.00	1.05
47	11/15/2009 - 11/21/2009	0.98	1.03
48	11/22/2009 - 11/28/2009	0.98	1.03
49	11/29/2009 - 12/05/2009	0.97	1.02
50	12/06/2009 - 12/12/2009	0.96	1.01
51	12/13/2009 - 12/19/2009	0.95	1.00
52	12/20/2009 - 12/26/2009	1.01	1.06
53	12/27/2009 - 12/31/2009	1.06	1.12

* Peak Season

FLORIDA DEPARTMENT OF TRANSPORTATION
2009 Annual Average Daily Traffic Report - Report Type: ALL

County: 79 VOLUSIA

Site	Site Type	Description	Direction 1		Direction 2		AADT Two-Way		"K" Fctr	Demand K100	"D" Fctr	Demand D100	"T" Fctr
0001		ON US-1, 0.115 MI. N OF N PUTNAM GROVE RD. (RVL)	N	2100	S	2100	4200	C	10.54F	9.96	62.19F	52.00	5.57F
0002		ON US-1, 0.203 MILES N OF WEST HALIFAX AVE. (RCL	N	2900	S	3000	5900	C	10.54F	9.96	62.19F	52.00	6.99A
0003		ON US-1, 8.620 MI. N OF BREVARD COUNTY (RC)	N	3800	S	3800	7600	C	10.54F	9.96	62.19F	52.00	6.96A
0004		SR-11, 0.304 MI. N OF SR-15 (UCLP)	N	3200	S	3200	6400	C	10.54F	9.96	62.19F	52.00	5.36A
0005		ON US-92, 1.181 MI. E OF US-17 (UCLP)	E	12000	W	12500	24500	C	10.54F	9.96	62.19F	52.00	5.21A
0006		ON SR-15A, 1.557 MI. N OF US-17/92 (UVL)	N	9500	S	10500	20000	C	10.54F	9.96	62.19F	52.00	7.49F
0009		ON SR-415, 0.11 MI. N OF TWIN LAKE AVE. (RV)	N	4000	S	4000	8000	C	10.54F	9.96	62.19F	52.00	6.28F
0010		MIDWAY AV., 0.1 MI S OF RICHARD PETTY BV. (SIS)	N	2200	S	2200	4400	C	10.54F	9.96	62.19F	52.00	2.33A
0011		SR-400, 0.126 MI. W OF US-1 (UV)	E	9600	W	8900	18500	C	10.54F	9.96	62.19F	52.00	4.03F
0013		ON US-1,0.23 MI. S OF SR-5A (PORT ORANGE)(UVL)	N	9900	S	11000	20900	C	10.54F	9.96	62.19F	52.00	5.57F
0019		SR-44, 0.18 MI. W OF C-4101 (KEPLER RD.) (UVL)	E	7400	W	7700	15100	C	10.54F	9.96	62.19F	52.00	7.41F
0025		ON SR-415, 1.517 MI. NE OF SEMINOLE CO. (RCLP)	N	8600	S	8500	17100	C	10.54F	9.96	62.19F	52.00	5.27A
0027		ON US-1, 0.72 MI. S OF SR-442 (UVL)	N	9700	S	9900	19600	C	10.54F	9.96	62.19F	52.00	5.57F
0041		ON SR-44, 0.48 MI W OF PIONEER TL (UC)	E	7600	W	7500	15100	C	10.54F	9.96	62.19F	52.00	8.37A
0046		ON US-17, 0.17 MI. S OF CR-3 (RVL)	N	2300	S	2400	4700	C	10.54F	9.96	62.19F	52.00	5.68F
0066		ON US-17/92, 0.65 MI. S OF US-92 (UC)	N	11500	S	11500	23000	C	10.54F	9.96	62.19F	52.00	3.26A
0069		ON US-17, 0.149 MI. S OF SR-11 (UVL)	N	11000	S	11500	22500	C	10.54F	9.96	62.19F	52.00	5.68F
0080		SR-44, 1.5 MI. E OF US-17/92 (UVL)	E	6700	W	7800	14500	C	10.54F	9.96	62.19F	52.00	7.41F
0100		ON US-1,0.140 MI.NW OF SR-5A(ORMOND BCH.)(UV)	N	13500	S	12000	25500	C	10.54F	9.96	62.19F	52.00	5.88F
0101		ON US-17/92, 0.151 MI.S OF DIRKSEN DR. (UVL)	N	11500	S	11500	23000	C	10.54F	9.96	62.19F	52.00	4.20F
0104		ON US-17, 2.436 MI. S OF SR-40 (RCLP)	N	4000	S	4000	8000	C	10.54F	9.96	62.19F	52.00	7.56A
0111		ON BUS.SR-44,0.3 MI. W OF US-1 (UC)	E	5600	W	6900	12500	C	10.54F	9.96	62.19F	52.00	7.04A
0133	T	I-95,2.7 MI N OF SR44,@CR44 O/P,VOLUSIA CO.	N	18930	S	18502	37432	C	10.52A	9.30	57.71A	57.71	13.91A

Site Type : P= Portable; T= Telemetered
AADT Flags : C= Computed; E= Manual Est; F= First Year Est; S= Second Year Est; T= Third Year Est; X= Unknown
"K/D" Flags : A= Actual; F= Volume Fctr Catg; D= Dist/Func. Class; P= Prior Year; S= State-wide Default; W= One-Way Road
"T" Flags : A= Actual; F= Axle Fctr Catg; D= Dist/Func. Class; P= Prior Year; S= State-wide Default; X= Cross-Reference

County: 79 VOLUSIA

Site	Site Type	Description	Direction 1		Direction 2		AADT Two-Way	"K" Fctr	Demand K100	"D" Fctr	Demand D100	"T" Fctr
0152		ON US-1, 0.684 MI. N OF SR-5A(IN PORT ORANGE)(UC	N	7700	S	7500	15200 C	10.54F	9.96	62.19F	52.00	5.23A
0170	T	SR-442, 0.53 MI E OF I-95,VOLUSIA CO.	E	4620	W	4532	9152 C	10.63A	10.30	74.68A	74.11	6.26A
0171		ON SR-40, 0.581 MI. W OF SR-A1A (UV)	E	17500	W	17000	34500 C	10.54F	9.96	62.19F	52.00	8.87F
0174		ON SR-A1A, 1.93 MI. N OF SR-40 (UVL)	N	8000	S	8400	16400 C	10.54F	9.96	62.19F	52.00	3.63F
0207		ON SR A-1-A, 0.766 MI. E OF SR-5 OVERPASS (UC)	E	15000	W	15000	30000 C	10.54F	9.96	62.19F	52.00	2.99A
0213		ON US-1, 0.619 MI N OF A-1-A (DUNLAWTON AVE.)(UV	N	13000	S	13000	26000 C	10.54F	9.96	62.19F	52.00	5.57F
0236		US-17, 0.121 MI. N OF SR-11 (GLENWOOD RD)(UVL)	N	7600	S	7600	15200 C	10.54F	9.96	62.19F	52.00	5.68F
0259		SR-44, 0.122 MI. W OF C-4139(LK. HELEN RD.)(UVL)	E	8300	W	9000	17300 C	10.54F	9.96	62.19F	52.00	7.41F
0274		ON SR-44, 0.114 MI. E OF OLD NEW YORK AV (UVL)	E	5800	W	4800	10600 C	10.54F	9.96	62.19F	52.00	7.41F
0280		ON US-17, 0.074 MI. S OF MCBRIDE RD. (RVL)	N	2300	S	2300	4600 C	10.54F	9.96	62.19F	52.00	5.68F
0290		ON SR-44, 0.133MI. E OF CR-4053 (RVL)	E	5500	W	5300	10800 C	10.54F	9.96	62.19F	52.00	7.41F
0321		ON SR-415, 0.127 MI. N OF CR-4145 (UV)	N	3200	S	3500	6700 C	10.54F	9.96	62.19F	52.00	6.28F
0337		ON US-92, 0.474 MI. W OF A-1-A (UCLP)	E	8900	W	8500	17400 C	10.54F	9.96	62.19F	52.00	2.00A
0344		ON SR-40, 0.055 MI. E OF CR-3 (RVL)	E	3500	W	3500	7000 C	10.54F	9.96	62.19F	52.00	14.77F
0348		ON SR-5A(NOVA RD), 0.412 MI. N OF SR-400 (UVL)	N	17000	S	17500	34500 C	10.54F	9.96	62.19F	52.00	4.16F
0351		ON US-1, 0.68 MI. SE OF I-95 (RCLP)	N	10500	S	11000	21500 C	10.54F	9.96	62.19F	52.00	7.59A
0363		SR-5A(NOVA RD), 0.251 MI.S OF BIG TREE RD.(UCLP)	N	13500	S	14000	27500 C	10.54F	9.96	62.19F	52.00	4.09A
0366		ON SR-5A(NOVA RD), 0.099 MI. S OF LPGA BLVD (UV)	N	15500	S	14500	30000 C	10.54F	9.96	62.19F	52.00	4.16F
0367		ON SR-5A(NOVA RD), 0.076 MI N OF 4TH ST.(UC)	N	14500	S	15500	30000 C	10.54F	9.96	62.19F	52.00	4.29A
0368		ON SR-A1A, 4.168 MI. N OF SR-40 (UC)	N	7600	S	7500	15100 C	10.54F	9.96	62.19F	52.00	3.30A
0421		ON SR-44, 0.154 MI. E OF EAST CIRCLE (UCLP)	E	4800	W	4400	9200 C	10.54F	9.96	62.19F	52.00	12.33A
0423		ON SR-44, 1.39 MI. E OF SR-415 (RVL)	E	9200	W	9000	18200 C	10.54F	9.96	62.19F	52.00	8.36F

Site Type : P= Portable; T= Telemetered
AADT Flags : C= Computed; E= Manual Est; F= First Year Est; S= Second Year Est; T= Third Year Est; X= Unknown
"K/D" Flags : A= Actual; F= Volume Fctr Catg; D= Dist/Func. Class; P= Prior Year; S= State-wide Default; W= One-Way Road
"T" Flags : A= Actual; F= Axle Fctr Catg; D= Dist/Func. Class; P= Prior Year; S= State-wide Default; X= Cross-Reference

County: 79 VOLUSIA

Site	Site Type	Description	Direction 1		Direction 2		AADT Two-Way	"K" Fctr	Demand K100	"D" Fctr	Demand D100	"T" Fctr
0486		ON I-4, 0.452 MI. NE OF SR-44 OVERPASS (RVL)	E	29500	W	26500	56000 C	8.67F	9.50	54.57F	52.00	11.74F
0489		ON SR-40, 0.212 MI. W OF SR-5A (UVL)	E	17000	W	16500	33500 C	10.54F	9.96	62.19F	52.00	8.87F
0491		ON I-4, 2.273 MI. W OF I-95 OVERPASS (RVL)	E	23000	W	22500	45500 C	8.67F	8.50	54.57F	52.00	11.74F
0492		ON I-95, 0.512 MI. S OF SR-400 (UVL)	N	27000	S	25500	52500 C	10.99F	9.61	54.46F	52.00	15.17F
0494		ON I-95, 0.854 MI. S OF LPGA BLVD. (UCLP)	N	34000	S	36000	70000 C	10.99F	9.61	54.46F	52.00	16.43A
0495		ON I-95, 0.74 MI. S OF SR-5 (UVL)	N	34000	S	34500	68500 C	10.99F	9.61	54.46F	52.00	15.17F
0496		ON I-95, 0.662 MI. N OF SR-5 (UV)	N	33500	S	32500	66000 C	10.99F	9.61	54.46F	52.00	15.17F
0497		ON I-4, 1.18 MI. SW OF SR-44 (RC)	E	31000	W	30500	61500 C	8.67F	8.50	54.57F	52.00	11.75A
0499		ON SR-40, 0.22 MI. W OF I-95 (UVL)	E	15000	W	14000	29000 C	10.54F	9.96	62.19F	52.00	8.87F
0501		ON SR-400, 0.509 MI. E OF WILLIAMSON BLVD (UCLP)	E	12000	W	12000	24000 C	10.54F	9.96	62.19F	52.00	4.96A
0502		ON SR-400, 0.186 MI. E OF NOVA RD (UVL)	E	12500	W	12000	24500 C	10.54F	9.96	62.19F	52.00	4.03F
0503		ON I-95, 0.41 MI. S OF SR-44 (RV)	N	16000	S	16000	32000 C	10.99F	9.61	54.46F	52.00	15.17F
0505		ON SR-442, 1.5 MI. W OF SR-5 (RVL)	E	6000	W	6000	12000 C	10.54F	9.96	62.19F	52.00	6.12F
0508		ON US-92, 0.453 MI W OF WILLIAMSON BLVD (UV)	E	22500	W	21000	43500 C	10.54F	9.96	62.19F	52.00	5.02F
0509		ON US-17/92, 0.126 MI S OF SAXON BLVD.(RCLP)	N	14000	S	13500	27500 C	10.54F	9.96	62.19F	52.00	4.30A
0510		ON SR-5A(NOVA RD), 0.418 MI. S OF SR-40 (UCLP)	N	14000	S	13500	27500 C	10.54F	9.96	62.19F	52.00	4.57A
0511		ON SR-400, 0.271 MI.E OF SR-483 (UVL)	E	16500	W	16000	32500 C	10.54F	9.96	62.19F	52.00	4.03F
0514		ON SR-44, 0.5 MI. W OF SR-5 OVERPASS (UC)	E	11500	W	10500	22000 C	10.54F	9.96	62.19F	52.00	4.71A
0515		ON SR-44, 0.408 MI. E OF I-95 (UCLP)	E	12500	W	13000	25500 C	10.54F	9.96	62.19F	52.00	5.47A
0516		ON BUS. SR-44,0.083 MI. E OF SR-44 MAINLINE (UV)	E	5400	W	6800	12200 C	10.54F	9.96	62.19F	52.00	5.88F
0517		ON SR-421, 0.394 MI. NE OF I-95 (UVL)	E	19000	W	19000	38000 C	10.54F	9.96	62.19F	52.00	3.31F
0518		SR-5A(NOVA RD), 0.159 MI. N OF SR-40 (UVL)	N	11000	S	12000	23000 C	10.54F	9.96	62.19F	52.00	4.16F

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County: 79 VOLUSIA

Site	Site Type	Description	Direction 1		Direction 2		AADT Two-Way		"K" Fctr	Demand K100	"D" Fctr	Demand D100	"T" Fctr
0519		ON US-17, 3.232 MI.N OF SR-15A(RVL)	N	5400	S	5400	10800	C	10.54F	9.96	62.19F	52.00	5.68F
0521		I-4 RAMP FROM I-4 EB TO US-92 EB (SBD=482)(RCLP)	N	6000		0	6000	C	10.54F	9.96	99.99W	99.99	8.20A
0522		ON SR-40, 1.29 MI. W OF SR-5A (UVL)	E	17500	W	18000	35500	C	10.54F	9.96	62.19F	52.00	8.87F
0523		ON SR-40, 2.011 MI. W OF I-95 (RCLP)	E	5500	W	5300	10800	C	10.54F	9.96	62.19F	52.00	8.92A
0527		SR-11, 0.142 MI. S OF SR-40 (RCLP)	N	1300	S	1300	2600	C	10.54F	9.96	62.19F	52.00	9.62A
0528		ON SR-5A(NOVA RD), 1.464 MI. S OF SR-40 (UVL)	N	14500	S	14500	29000	C	10.54F	9.96	62.19F	52.00	4.16F
0530		ON SR-40, 0.69 MI. E OF SR-15 (RVLP)	E	2900	W	2800	5700	C	10.54F	9.96	62.19F	52.00	15.59P
0531		ON US-1, 4.124 MI. NE OF BREVARD COUNTY (UVL)	N	1800	S	2000	3800	C	10.54F	9.96	62.19F	52.00	5.57F
0532		ON US-92, 0.25 MI. E OF LPGA BLVD. (UCLP)	E	13500	W	12000	25500	C	10.54F	9.96	62.19F	52.00	5.75A
0533		SR-40, 0.146 MI. E OF LAKE COUNTY (RCLP)	E	3900	W	3800	7700	C	10.54F	9.96	62.19F	52.00	14.25A
0534		ON I-95, 1.0 MI. N OF LPGA BLVD. (UVL)	N	39500	S	40000	79500	C	10.54F	9.96	62.19F	52.00	15.17F
0535		SR-472, O.163 E OF CR-4101 (M.L.K. JR BLVD) (RV)	E	12000	W	12000	24000	C	10.54F	9.96	62.19F	52.00	5.31F
0536		ON US-1, 0.019 MI. S OF FLAGLER (RVL)	N	7600	S	7600	15200	C	10.54F	9.96	62.19F	52.00	5.88F
0537		SR-15A,0.447 MI. S OF CR-92 (INT'L SPDWY BV)(UCL	N	11000	S	11000	22000	C	10.54F	9.96	62.19F	52.00	10.95A
0538		SR-44, 0.209 E. OF CR-4139(LK. HELEN RD.)(UCLP)	E	7800	W	8500	16300	C	10.54F	9.96	62.19F	52.00	6.39A
0539		US-17/92, 0.23 MI. N OF SAXON BLVD. (UV)	N	9900	S	9500	19400	C	10.54F	9.96	62.19F	52.00	4.20F
1000		ON US-17, 0.335 MI. N OF US-92 (UCLP)	N	16500	S	15500	32000	C	10.54F	9.96	62.19F	52.00	2.78A
1001		ON US-92, 0.619 MI. E OF SR-15(US-17)(UVL)	E	13500	W	13500	27000	C	10.54F	9.96	62.19F	52.00	5.02F
1003		ON I-4,1.236 MI W OF SR-472 (ITS)	E	26500	W	27000	53500	C	8.67F	8.50	54.57F	52.00	11.74F
1004		US-17/92, 0.102 MI. N OF GOLF CLUB DR (S) (UCLP)	N	21000	S	22500	43500	C	10.54F	9.96	62.19F	52.00	4.38A
1005		ON SR-15A, 0.38 MI.W OF US-17 (S. DELAND) (UCLP)	W	10000	E	11000	21000	C	10.54F	9.96	62.19F	52.00	5.97A
1006		ON US-17/92, 0.134 MI. N OF SR-15A (UCLP)	N	13000	S	13500	26500	C	10.54F	9.96	62.19F	52.00	7.50A
1007		ON SR-44,0.064MI. E OF LAKE COUNTY LINE (RCLP)	E	5200	W	5200	10400	C	10.54F	9.96	62.19F	52.00	10.75A

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County: 79 VOLUSIA

Site	Site Type	Description	Direction 1		Direction 2		AADT Two-Way		"K" Fctr	Demand K100	"D" Fctr	Demand D100	"T" Fctr
1009		ON SR-415,0.2 MI S OF SR-44 (RCLP)	N	4900	S	4300	9200	C	10.54F	9.96	62.19F	52.00	7.36A
1011		ON SR-44, 0.4 MI. W OF SR-415 (RCLP)	E	6100	W	5900	12000	C	10.54F	9.96	62.19F	52.00	9.24A
1012		ON SR-44, 0.25 MI. E OF SR-415 (RVL)	E	8300	W	8100	16400	C	10.54F	9.96	62.19F	52.00	8.36F
1014		ON SR-421, 0.252 MI. W OF SR-5A (UV)	E	14500	W	16500	31000	C	10.54F	9.96	62.19F	52.00	3.31F
1015		ON SR-421, 0.4385 MI. E OF SR-5A (UVL)	E	14000	W	15500	29500	C	10.54F	9.96	62.19F	52.00	3.31F
1016		ON SR-5A(NOVA RD), 0.374 MI. S OF SR-421 (UCLP)	N	12500	S	12500	25000	C	10.54F	9.96	62.19F	52.00	3.24A
1017		ON SR-5A(NOVA RD), 0.442 MI. N OF SR-421 (UVL)	N	13000	S	13500	26500	C	10.54F	9.96	62.19F	52.00	3.66F
1018		ON US-1, 203 MI. N OF SR-430(MASON AVE)(UCLP)	N	13500	S	12500	26000	C	10.54F	9.96	62.19F	52.00	1.96A
1019		ON US-1, 0.78 MI. S OF SR-5A (ORMOND BCH)(UVL)	N	8700	S	8300	17000	C	10.54F	9.96	62.19F	52.00	5.88F
1020		ON SR-40, 0.45 MI. E OF SR-5A (UVL)	E	16000	W	16000	32000	C	10.54F	9.96	62.19F	52.00	8.87F
2000		I-95,RAMP FROM I-95 N.BD. TO SR-442	N	900		0	900	C	10.99F	9.61	99.99W	99.99	8.36F
2001		I-95,RAMP FROM SR-442, TO I-95 N.BD.	N	4100		0	4100	C	10.99F	9.61	99.99W	99.99	8.36F
2002		I-95,RAMP FROM I-95 S.BD. TO SR-442	S	3600		0	3600	C	10.99F	9.61	99.99W	99.99	8.36F
2003		I-95,RAMP FROM SR-442 TO I-95 S.BD.	S	750		0	750	C	10.99F	9.61	99.99W	99.99	8.36F
2004		I-95,RAMP FROM I-95 N.BD. TO SR-44	N	2800		0	2800	C	10.99F	9.61	99.99W	99.99	8.36F
2005		I-95,RAMP FROM SR-44 TO I-95 N.BD.	N	5100		0	5100	C	10.99F	9.61	99.99W	99.99	8.36F
2006		I-95,RAMP FROM I-95 S.BD. TO SR-44 W.BD.	S	750		0	750	C	10.99F	9.61	99.99W	99.99	8.36F
2007		I-95,RAMP FROM SR-44 TO I-95 S.BD.	S	2600		0	2600	C	10.99F	9.61	99.99W	99.99	8.36F
2008		I-95,RAMP FROM I-95 N.BD. TO SR-421	N	3500		0	3500	C	10.99F	9.61	99.99W	99.99	3.31F
2009		I-95,RAMP FROM SR-421 TO I-95 N.BD.	N	9000		0	9000	C	10.99F	9.61	99.99W	99.99	3.31F
2010		I-95,RAMP FROM I-95 S.BD. TO SR-421	S	8200		0	8200	C	10.99F	9.61	99.99W	99.99	3.31F
2011		I-95,RAMP FROM SR-421 TO I-95 S.BD.	S	3600		0	3600	C	10.99F	9.61	99.99W	99.99	3.31F

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County: 79 VOLUSIA

Site	Site Type	Description	Direction 1		Direction 2		AADT Two-Way		"K" Fctr	Demand K100	"D" Fctr	Demand D100	"T" Fctr
7071		ON RIVERSIDE DRIVE, 1.31 MILES SOUTH OF PARK AVE	N	2800	S	2800	5600	C	10.54F	9.96	62.19F	52.00	5.68F
7072		ON TAYLOR ROAD, 0.22 MILES EAST OF TOMOKA FARMS	E	4300	W	3600	7900	C	10.54F	9.96	62.19F	52.00	8.36F
7073		ON TAYLOR ROAD, 1.09 MILES EAST OF TOMOKA FARMS	E	4900	W	5100	10000	C	10.54F	9.96	62.19F	52.00	8.87F
7074		ON TAYLOR ROAD, 0.39 MILES WEST OF S. WILLIAMSON	E	9200	W	7200	16400	C	10.54F	9.96	62.19F	52.00	6.12F
7075		ON TAYLOR ROAD, 0.17 MILES WEST OF S. WILLIAMSON	E	10000	W	8900	18900	C	10.54F	9.96	62.19F	52.00	3.63F
7076		ON COURTLAND BLVD., 0.49 MILES SOUTH OF DOYLE RO	N	1400	S	750	2150	C	10.54F	9.96	62.19F	52.00	4.98F
7077		ON COURTLAND BLVD., 0.68 MILES SOUTH OF FORT SMI	N	2900	S	2800	5700	C	10.54F	9.96	62.19F	52.00	6.28F
7078		ON N. BEACH STREET, 1.85 MILES NORTH OF DOMICILI	N	1000	S	1000	2000	C	10.54F	9.96	62.19F	52.00	8.36F
7079		ON MASON AVENUE, 0.33 MILES WEST OF BILL FRANCE	E	5700	W	5700	11400	C	10.54F	9.96	62.19F	52.00	4.98F
7080		ON TAYLOR ROAD, 0.43 MILES WEST OF SPRUCE CREEK	E	6000	W	6400	12400	C	10.54F	9.96	62.19F	52.00	5.88F
7081		ON S WILLIAMSON BLVD., 1.25 MILES NORTH OF I-95,	N	6600	S	7800	14400	C	10.54F	9.96	62.19F	52.00	4.98F
7082		ON S WILLIAMSON BLVD., 0.79 MILES NORTH OF BEVIL	N	8500	S	9100	17600	C	10.54F	9.96	62.19F	52.00	2.80F
7083		ON S WILLIAMSON BLVD., 0.19 MILES SOUTH OF INTER	N	6700	S	5600	12300	C	10.54F	9.96	62.19F	52.00	2.80F
7084		ON ATLANTIC AVENUE, 0.15 MILES SOUTH OF FLAGLER	N	2700	S	2600	5300	C	10.54F	9.96	62.19F	52.00	1.03F
7085		ON WILLIAMSON BLVD., 0.83 MILES NORTH OF INTL SP	N	7500	S	8200	15700	C	10.54F	9.96	62.19F	52.00	5.02F
7086		ON WILLIAMSON BLVD., 0.16 MILES SOUTH OF DUNN AV	N	8500	S	8200	16700	C	10.54F	9.96	62.19F	52.00	7.49F
7087		ON WILLIAMSON BLVD., 0.17 MILES NORTH OF LPGA BL	N	6700	S	6600	13300	C	10.54F	9.96	62.19F	52.00	1.03F
7088		ON WILLIAMSON BLVD., 1.21 MILES NORTH OF LPGA BL	N	6700	S	7300	14000	C	10.54F	9.96	62.19F	52.00	2.80F
7089		ON WILLIAMSON BLVD., 0.16 MILES SOUTH OF HAND AV	N	6300	S	6200	12500	C	10.54F	9.96	62.19F	52.00	14.77F
7090		ON CLYDE MORRIS BLVD., 0.22 MILES NORTH OF MADEL	N	11000	S	11000	22000	C	10.54F	9.96	62.19F	52.00	5.02F
7091		ON FAIRVIEW AVENUE, 0.64 MILES EAST OF NOVA ROAD	E	6000	W	5600	11600	C	10.54F	9.96	62.19F	52.00	7.41F
7092		ON RIVERSIDE DRIVE, 0.13 MILES SOUTH OF EIGHTH S	N	2900	S	2900	5800	C	10.54F	9.96	62.19F	52.00	5.57F
7093		ON DOYLE ROAD, 0.56 MILES WEST OF PROVIDENCE BLV	E	11500	W	9600	21100	C	10.54F	9.96	62.19F	52.00	4.98F

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Site	Site Type	Description	Direction 1		Direction 2		AADT Two-Way		"K" Fctr	Demand K100	"D" Fctr	Demand D100	"T" Fctr
7094		ON DOYLE ROAD, 0.21 MILES WEST OF PROVIDENCE BLV	E	10500	W	10000	20500	C	10.54F	9.96	62.19F	52.00	5.02F
7095		ON OLD DIXIE HWY., 1.89 MILES SOUTH OF HIGHBRIDG	N	800	S	950	1750	C	10.54F	9.96	62.19F	52.00	7.41F
7096		ON MADELINE AVENUE, 0.43 MILES EAST OF RIDGEWOOD	E	950	W	1100	2050	C	10.54F	9.96	62.19F	52.00	5.57F
7097		ON MIDWAY AVENUE, 0.72 MILES EAST OF S WILLIAMSO	E	1700	W	1600	3300	C	10.54F	9.96	62.19F	52.00	5.88F
7098		ON AIRPORT BLVD., 0.2 MILES NORTH OF PIONEER TRA	N	2500	S	2400	4900	C	10.54F	9.96	62.19F	52.00	5.02F
7099		ON AIRPORT BLVD., 0.99 MILES NORTH OF PIONEER TR	N	2500	S	2400	4900	C	10.54F	9.96	62.19F	52.00	2.80F
7100		ON S. WILLIAMSON BLVD., 1.01 MILES SOUTH OF TAYL	N	4200	S	4400	8600	C	10.54F	9.96	62.19F	52.00	4.20F
7101		ON CLYDE MORRIS BLVD., 0.95 MILES SOUTH OF HAND	N	6200	S	6200	12400	C	10.54F	9.96	62.19F	52.00	5.57F
7102		ON CR 15A, 0.44 MILES EAST OF US 17 (HPMS)	E	1800	W	1900	3700	C	10.54F	9.96	62.19F	52.00	4.98F
7103		ON PIONEER TRAIL, 0.67 MILES NORTH OF SR 44 (HPM	N	3800	S	3900	7700	C	10.54F	9.96	62.19F	52.00	5.88F
7105		ON GRAVES AVENUE, 0.95 MILES EAST OF VOLUSIA AVE	E	1200	W	1300	2500	C	10.54F	9.96	62.19F	52.00	5.88F
7106		ON CASSADAGA ROAD, 0.77 MILES EAST OF I-4 (HPMS)	E	800	W	750	1550	C	10.54F	9.96	62.19F	52.00	7.41F
7107		ON SUMMIT AVENUE, 0.67 MILES SOUTH OF SR 44 (HPM	N	1100	S	1100	2200	C	10.54F	9.96	62.19F	52.00	4.98F
7108		ON SR 44 EXTENSION, 0.14 MILES EAST OF WESTBOUND	E	9100	W	9800	18900	C	10.54F	9.96	62.19F	52.00	4.98F
7109		ON SR 44 EXTENSION, 0.11 MILES WEST OF I-4 EASTB	E	9300	W	10000	19300	C	10.54F	9.96	62.19F	52.00	1.03F
7110		ON LPGA BLVD., 0.22 MILES EAST OF CLYDE MORRIS B	E	7600	W	7200	14800	C	10.54F	9.96	62.19F	52.00	6.28F
7111		ON HALIFAX DRIVE/RIVERSIDE DRIVE, 1.52 MILES SOU	N	450	S	700	1150	C	10.54F	9.96	62.19F	52.00	8.87F
7112		ON ADELLE AVENUE, 0.15 MILES SOUTH OF NEW HAMPSH	N	200	S	200	400	C	10.54F	9.96	62.19F	52.00	7.41F
7113		ON TYMBER CREEK ROAD, 0.26 MILES NORTH OF GRANAD	N	5900	S	5900	11800	C	10.54F	9.96	62.19F	52.00	14.77F
9906	T	ON I-4,169' E OF ENTERPRISE RD O/P,VOLUSIA CO.	E	47112	W	47552	94664	C	8.70A	8.50	56.36A	55.89	8.21A
9925	T	US-92,0.25 MI E OF CLARKS BAY RD,VOLUSIA CO	E	7118	W	7132	14250	C	11.05A	10.55	61.41A	61.39	4.79A
9929	T	SR-5/US-1,0.25 MI N OF RIO GRANDE RD,VOLUSIA CO.	N	5931	S	5735	11666	C	11.15A	10.05	58.58A	54.63	3.97A

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VOLUSIA COUNTY
2010
TRAFFIC DATA

ROAD NAME	LOCATION	2010 Raw Data	2010 Date	2010 Raw AADT	2010 County AADT
Airport Rd (OB)	E of Tymber Creek Rd	5567	04/05/10	5289	5290
Airport Rd (OB)	S of Sunshine Bl	4745	03/22/10	4365	4370
Airport Rd (OB)	W of US 1	7061	03/22/10	6496	6500
Clyde Morris Bl	S of SR 40	13,717	04/05/10	13031	13030
Clyde Morris Bl	N of LPGA Bl (11th St)	13542	04/12/10	13000	13000
Clyde Morris Bl	S of LPGA Bl (11th St)	14256	04/12/10	13686	13690
Hand Av	E of Williamson Bl	8780	04/05/10	8341	8340
Hand Av	E of Clyde Morris Bl	14216	04/05/10	13505	13510
Hand Av	W of SR 5A/Nova Rd	15949	04/05/10	15152	15150
LPGA Bl (DB)	W of Champions Dr	7646	06/14/10	7875	7880
LPGA Bl (DB)	W of Williamson Bl	25186	04/12/10	24179	24180
LPGA Bl (DB)	W of Clyde Morris Bl	21677	04/19/10	21027	21030
LPGA Bl (DB)	W of Jimmy Ann Dr	14281	04/19/10	13853	13850
LPGA Bl (CO)	E of Derbyshire Rd	13621	04/12/10	13076	13080
Tymber Creek Rd	N of Airport Rd	1916	04/05/10	1820	1820
Tymber Creek Rd	S of Airport Rd	8674	04/05/10	8240	8240
Tymber Creek Rd	N of SR 40	12966	04/05/10	12318	12320
Williamson Bl	S of SR 40	20142	04/05/10	19135	19130
Williamson Bl	N of LPGA Bl (11th St)	13555	04/12/10	13013	13010
Williamson Bl	S of LPGA Bl (11th St)	15257	04/12/10	14647	14650
Williamson Bl	S of Mason Av	13083	06/07/10	13475	13480
Williamson Bl	N of SR 600/US 92	15373	06/07/10	15834	15830
Williamson Bl	S of SR 600/US 92	10185	06/14/10	10491	10490
Williamson Bl	N of Bellevue Av Ext	13297	06/14/10	13696	13700
Williamson Bl	N of SR 400/Beville Rd	15419	05/10/10	15419	15420
Williamson Bl	S of SR 400/Beville Rd	14496	05/10/10	14496	14500
Williamson Bl	N of Willow Run Bl	14336	05/18/10	14479	14480
Williamson Bl	S of Willow Run Bl	12795	05/24/10	13051	13050
Williamson Bl	N of Taylor Rd	14380	05/24/10	14668	14670

Table 4: Year 2011 Existing Traffic Volumes

Roadway / Segment	Date of Count	Type of Count	Measured Characteristics ADT	Peak Hr.	NB/EB	SB/WB	Peak Time	Axle Adj.[2]	Seasonal Adj.[1]	Adjusted AADT[3]
Mainline Characteristics										
SR 40										
West of Breakaway Trail	1/25/2011	48-Hour Volume	10,774	973	327	646	4:30-5:30 PM	0.92	0.97	9,600
East of Breakaway Trail	1/25/2011	48-Hour Classification	12,180	1,103	355	748	5:00-6:00 PM	0.92	0.97	10,900
East of Tymber Creek Road	1/25/2011	48-Hour Volume	26,249	2,373	849	1524	5:00-6:00 PM	0.92	0.97	23,400
West of Interchange Boulevad	1/25/2011	48-Hour Volume	26,675	2,397	854	1543	5:00-6:00 PM	0.92	0.97	23,800
West of Williamson Boulevard	1/25/2011	48-Hour Volume	33,230	2,883	1130	1753	4:45-:5:45 PM	0.92	0.97	29,700
East of Williamson Boulevard	1/25/2011	48-Hour Volume	31,064	2,634	1291	1343	3:00-4:00 PM	0.92	0.97	27,700
Williamson Boulevard										
South of SR 40	2/15/2011	48-Hour Classification	19,004	1,594	994	600	4:45-5:45 PM	0.99	0.92	17,300
South of Hand Avenue	1/25/2011	48-Hour Volume	14,474	1,292	746	546	3:30-4:30 PM	0.99	0.97	13,900
North of LPGA Boulevard[4]	4/12/2010	-	-	-	-	-	-	-	-	13,000
South of LPGA Boulevard[4]	4/12/2010	-	-	-	-	-	-	-	-	14,700
LPGA Boulevard										
West of Champions Drive	2/1/2011	48-Hour Classification	10,779	1,132	595	537	7:15-8:15 AM	0.99	0.95	10,100
West of Tomoka Farms Road	2/1/2011	48-Hour Volume	11,374	1,207	647	560	7:15-8:15 AM	0.99	0.95	10,700
East of Tomoka Farms Road	2/1/2011	48-Hour Volume	14,549	1,407	672	735	8:15-9:15 AM	0.99	0.95	13,700
West of Williamson Boulevard	2/1/2011	48-Hour Volume	27,625	2,781	2066	715	7:30-8:30 AM	0.99	0.95	26,000
East of Williamson Boulevard	2/1/2011	48-Hour Volume	21,208	1,993	1222	771	7:30-8:30 AM	0.99	0.95	19,900
Side Street Characteristics										
Breakaway Trail										
North of SR 40	1/25/2011	48-Hour Volume	3,576	336	256	80	5:15-6:15 PM	0.99	0.97	3,400
Tymber Creek Road										
North of SR 40	1/25/2011	48-Hour Volume	13,121	1,295	422	873	7:30-8:30 AM	0.99	0.97	12,600
South of SR 40	1/25/2011	48-Hour Volume	593	64	33	31	4:00-5:00 PM	0.99	0.97	600
Booth Road										
North of SR 40	2/15/2011	48-Hour Volume	1,229	225	4	221	8:45-9:45 AM	0.99	0.92	1,100
South of SR 40	2/15/2011	48-Hour Volume	876	99	50	49	4:45-5:45 PM	0.99	0.92	800
Interchange Boulevard										
South of SR 40	2/15/2011	48-Hour Volume	8,590	641	357	284	5:15-6:15 PM	0.99	0.92	7,800
I-95 & SR 40 Ramps										
SB On Ramp	1/25/2011	48-Hour Volume	9,810	1,099	0	1099	7:15:8:15 AM	0.99	0.97	9,400
SB Off Ramp	1/25/2011	48-Hour Volume	4,002	398	0	398	7:45-8:45 AM	0.99	0.97	3,800
NB On Ramp	1/25/2011	48-Hour Volume	4,216	454	454	0	4:45-5:45 PM	0.99	0.97	4,000
NB Off Ramp	1/25/2011	48-Hour Volume	9,777	906	906	0	4:45-5:45 PM	0.99	0.97	9,400
Hand Avenue										
East of Williamson Boulevard	1/25/2011	48-Hour Classification	8,290	777	400	377	3:30-4:30 PM	0.99	0.97	8,000
Tomoka Farms Road										
South of LPGA Boulevard	2/15/2011	48-Hour Volume	4,167	368	165	203	12:30-1:30 PM	0.99	0.92	3,800
I-95 & LPGA Ramps										
SB On Ramp	2/1/2011	48-Hour Volume	635	74	0	74	5:00-6:00 PM	0.99	0.95	600
SB Off Ramp	2/1/2011	48-Hour Volume	7,457	1,150	0	1150	7:15-8:15 AM	0.99	0.95	7,000
SB On Loop Ramp	2/1/2011	48-Hour Volume	3,264	429	0	429	4:45-5:45 PM	0.99	0.95	3,100
NB On Ramp	2/1/2011	48-Hour Volume	4,766	619	619	0	4:45-5:45 PM	0.99	0.95	4,500
NB Off Ramp	2/1/2011	48-Hour Volume	5,091	704	704	0	7:45-8:45 AM	0.99	0.95	4,800
NB On Loop Ramp	2/1/2011	48-Hour Volume	1,823	198	198	0	5:00-6:00 PM	0.99	0.95	1,700

Notes:

1. Most Recent Seasonal Adjustment factors were obtained from FDOT 2009 Traffic Count CD.
2. Axle Adjustment factors were obtained from FDOT 2009 Traffic Count CD.
3. Measured ADT * Axle Adjustment * Seasonal Adjustment = Adjusted AADT
4. Year 2010 Volusia County Counts were used for these locations because of the ongoing construction.

GMB ENGINEERS & PLANNERS, INC.

March 31, 2011

Mr. Terry Rains

Project Manager – Design Traffic

FDOT District 5 / Mailstop PL 4-548

719 S. Woodland Blvd.

DeLand, FL 32720

RE: SR 40 PD&E Study – Year 2010 Model Validation

FDOT FM No. 42081311201

Response to Comments

GMB Project No. 06-129.34

Comment #1: Table 1 shows the modifications made to the original interpolated land use dataset based on a detailed land use review. Were the countywide control totals (population and employment) maintained for both population and employment after these land use modifications? If so, where was the land use redistributed to?

Response: *Initially, the 2010 ZDATA (that was supposed to be used for validation purpose) was interpolated using the ZDATA for the Years 2005 and 2015 from the latest CFRPM Version 5. Based on this interpolated 2010 ZDATA, Volusia County had a population of 512,000 and an employment of 215,900. However, in the course of validation process, the controls totals were changed to 511,600 (population) and 212,800 (employment). In comparison, BEBR's 2010 population estimate for Volusia County was 510,300 and Volusia County's 2010 employment estimate was 223,400 (source: www.volusia.org). Below is a Table that shows the difference between the two estimates (Values used in the Model vs Values from BEBR & Volusia County).*

Based on Table 1, there is less than 5% difference between the control totals from the above mentioned two sources and therefore the land use was not further redistributed.

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Table 1: Control Total Comparison

Control Type	Model Values Used in Model Validation	Values from BEBR & Volusia County Employment	Absolute % Difference
Population	511,600	510,300	0.25%
Employment	212,800	223,400	4.74%

Comment #2: The population from the 2010 interpolated zdata for Volusia County was compared to the BEBR 2010 population estimate. Is there a similar comparison that can be done for the Volusia County employment total in the interpolated zdata?

Response: *Yes, the employment comparison can be done using the year 2011 statistics provided at www.volusia.org in the Demographics section. The employment estimate from the County stands at 223,400 compared to the employment control total of 212,800 that was used in the year 2010 model validation. Please also refer to response for comment # 1.*

The memorandum will be appropriately changed to reflect the response to this comment.

Comment #3: Were any roadway network improvements **outside** of the study area completed between 2005 and 2010 included in the 2010 network? If so, please include a listing of the major improvements that were included.

Response: *The widening of I-95 from 4 to 6 lanes is the only improvement that was considered outside the planning study area. This improvement is listed under the "YEAR 2010 ROADWAY NETWORK CHANGES" in the memorandum.*

Comment #4: On Figure 1, please label SR 40 and include the begin and end project limits of the PD&E Study.

Response: *This comment is acknowledged and appropriate changes were made to Figure 1 in the memorandum.*

Comment #5: In Table 1, in the TAZs listed as "No Changes" in the 2010 Modified Zdata (Breakway Trails and National Gardens), please add the appropriate land use data in the under the land use categories.

Response: *This comment is acknowledged and appropriate changes were made to Table 1 in the memorandum.*

Comment #6: Please total the land use categories for the original 2010 Interpolated Zdata and the 2010 Modified Zdata in Table 1.

Response: *This comment is acknowledged and appropriate changes were made to Table 1 in the memorandum.*

Appendix J

Year 2035 Model Refinements Memorandum

GMB ENGINEERS & PLANNERS, INC.

FINAL MEMORANDUM

Prepared For:	Florida Department of Transportation, District Five
To:	**Lance Decuir, P.E., Terry Rains**
Prepared By:	Babuji Ambikapathy, P.E., AICP, GMB Engineers & Planners, Inc.
Date:	April 19, 2011
Subject:	SR 40 Design Traffic Technical Memorandum – Year 2035 CFRPM 5.0 Model Refinements

Background

The Florida Department of Transportation (FDOT) District Five is conducting a Project Development and Environment (PD&E) study to evaluate possible alternative improvements to the SR 40 corridor from Breakaway Trail to Williamson Boulevard, the proposed extension of Hand Avenue from Williamson Boulevard to Tymber Creek Road Extension and the Tymber Creek Road Extension From SR 40 to LPGA Boulevard in Volusia County, Florida. GMB Engineers & Planners, Inc. (GMB) has been retained by the FDOT, to perform the Design Traffic Analysis to determine the impacts and assess the need for future capacity improvements on SR 40, Williamson Boulevard, LPGA Boulevard, Hand Avenue Extension and Tymber Creek Road Extension.

This Technical Memorandum was revised based on the comments received on the April 8, 2011 Technical Memorandum. This technical memorandum, an important part of the Design Traffic Process for SR 40, was prepared to disseminate information to FDOT District 5, Volusia County, City of Daytona Beach and City of Ormond Beach on critical model refinements that were

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applied to the original/adopted **C**entral **F**lorida **R**egional **P**lanning **M**odel, version 5.0.

Year 2035 Model Refinements

GMB conducted a reasonableness check of the 2035 model network within the project study area shown in **Figure 1**. In addition to carrying the validation adjustments from the year 2010 validated network, the socio-economic data (Zone Data) associated with the Development of Regional Impacts (DRIs) and Comprehensive Planned Amendments (CPAs) were reviewed to ascertain the latest approved land uses are included in the year 2035 CFRPM 5.0 network. The DRIs that were looked at in detail included Hunter's Ridge, Breakaway Trails, LPGA, and National Gardens, while the CPA's included Consolidated Tomoka Landing and Ormond Crossings.

Given the current growth patterns and based on the discussions with staff from the Cities of Ormond Beach and Daytona Beach, latest approved land use data for the DRIs obtained from the development orders and annual reports from East Central Florida Regional Planning Council (ECFRPC), discussions with the project staff from the FDOT District 5 and PD&E Study Team, it was decided to modify the Zone Data for the following DRIs/CPAs.

- **Ormond Crossings CPA:** Changes were made based on the information that was available for the latest Ordinance # 2010-07. The information was provided by the City of Ormond Beach.
- **National Gardens DRI:** Changes were made based on the latest approved land uses obtained from the ECFRPC.
- **Hunters Ridge DRI:** Changes were made based on the latest approved land uses obtained from the ECFRPC and the latest Development order from Flagler County.

- **Consolidated Tomoka Landing CPA:** Based on the discussion with the City of Daytona Beach and keeping in mind the current growth trends, it was decided to restrict Single Family Units to 1,000 units and commercial land use to 653,400 sq. feet for parcel A (4,318 acres). Similarly, for Parcel B (84 acres located south of US 92 and north of I-4) it was decided to restrict the future development to 75% of the approved development.

It should be noted that the modified Zone Data was represented reasonably via logical TAZ connections in the 2035 model network.

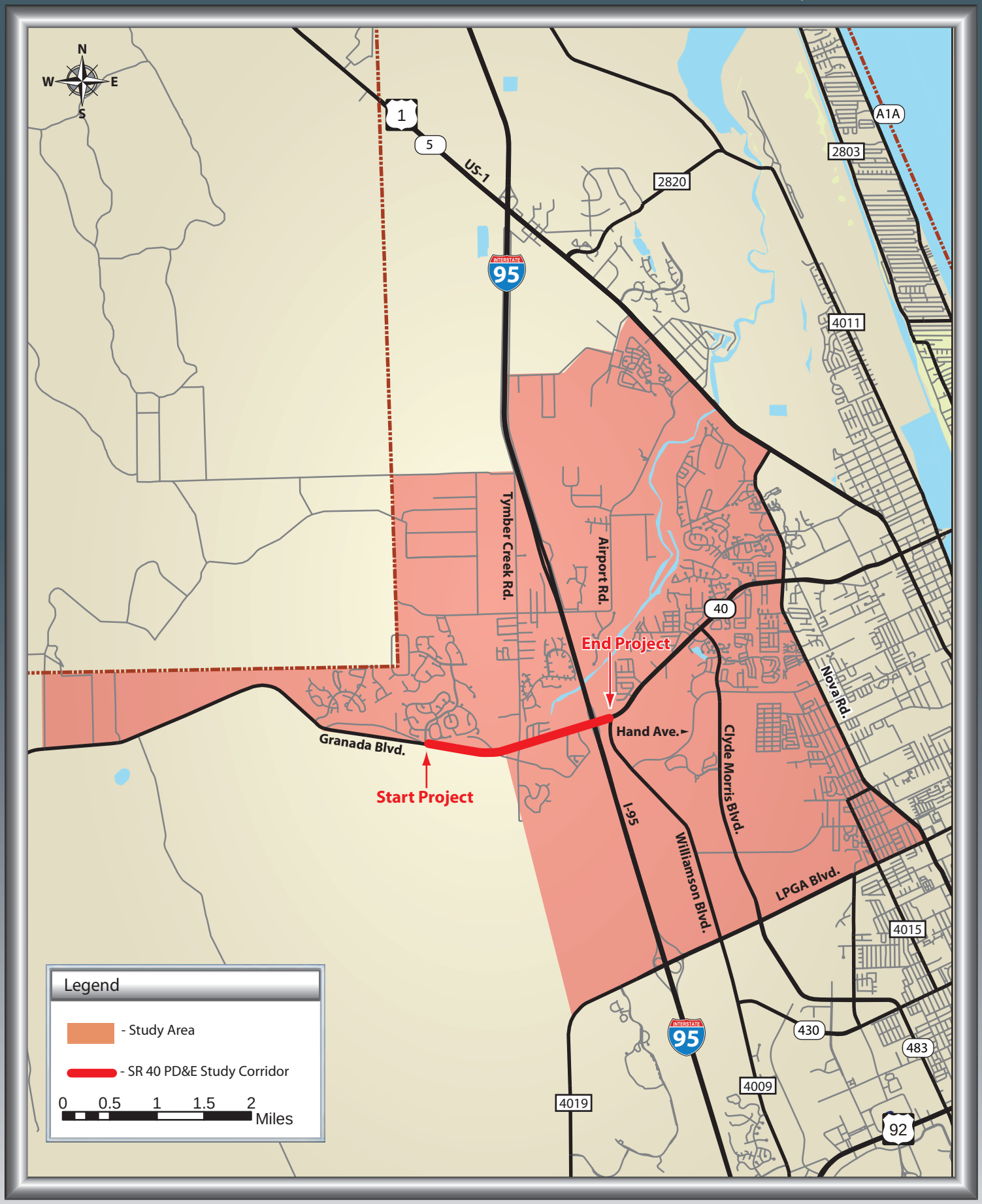
Table 1 illustrates the Zone Data adjustments that were included in the refined 2035 model network to reflect the latest approved land uses for the DRIs and CPAs listed above. The supporting documentation that shows the latest approved land uses for the DRIs and CPAs in the vicinity of the study area is provided in the Appendix.

The following programmed / planned improvements were added to the 2035 CFRPM 5.0 network based on reviewing the latest Volusia County Five Year Road Program, Volusia Transportation Planning Organization (TPO) 2035 Long Range Transportation Plan (LRTP), and based on discussions with staff from Volusia County, City of Daytona Beach and City of Ormond Beach.

- **Williamson Boulevard from Dunn Avenue to LPGA Boulevard:** This section of Williamson Boulevard is currently being widened (under construction) to a four-lane roadway.
- **SR 40 from Breakaway Trail to I-95** : This section is shown as a six-lane roadway in the 2035 LRTP for Volusia County.

- **LPGA Boulevard from Jimmy Ann Drive to Old Kings Road:** This section of LPGA Boulevard has ROW funding (FY 11/12) for four-lane widening based on the latest Volusia County Five Year Road Program (FY 10/11 – FY 14/15).
- **Stage Coach Road** as a new two lane roadway between SR 40 and Tymber Creek Road.
- **Hunters Ridge Boulevard** as a new two lane roadway from Airport Road Extension to SR 40 where Stage Coach Road connects to SR 40.

The modified 2035 CFRPM 5.0 network along with the location of the DRIs and CPAs are shown in **Figure 2**.



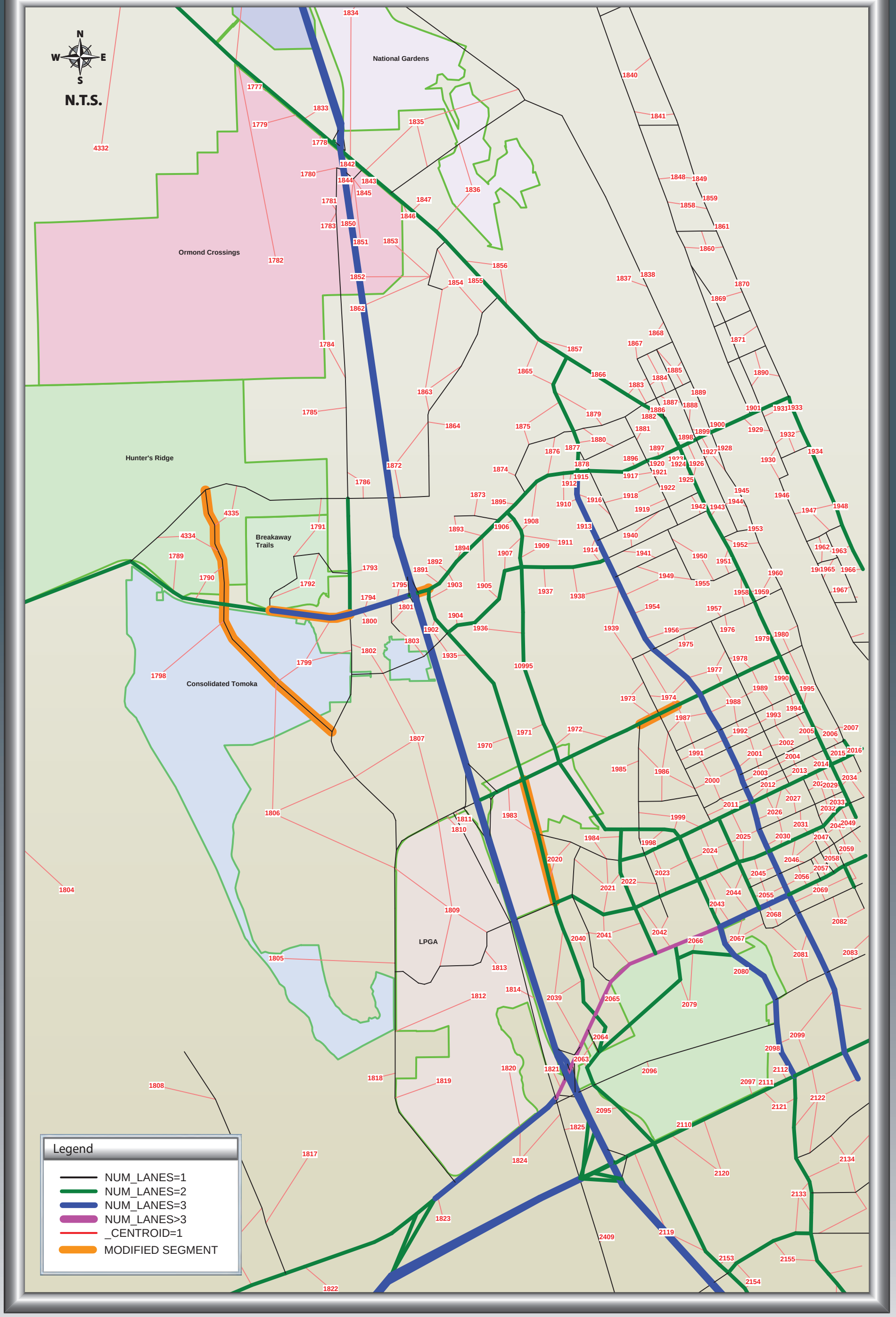
Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

SR 40 PD&E Model Validation Report

Figure 1
Study Area Map

Table 1: Original & Modified Year 2035 Zone Data

DRI NAMES	CFRPM 5.0 Traffic Zones	Original 2035 Zone Data (CFRPM 5.0)								2035 Modified Zone Data (for SR 40 PD&E)								Notes
		SF	MF	HOTEL	IND	COM	SER	TOTAL EMP	SCH	SF	MF	HOTEL	IND	COM	SER	TOTAL EMP	SCH	
Ormond Crossings CPA	1777	38			270	240	1000	1510					130	85	1560	1775		
	1778			236		68	105	173				236		25	173	198		Changes were based on the
	1779	258	272							295	295							information for the
	1780		507			616		616		74	74			215		215		Latest Ordinance No. 2010-07
	1781				313			313					130			130		provided by the City of Ormond
	1782	923	564						1878	1106	1106						720	Beach.
	1783				328	33		361					130			130		
	1842					60	28	88						25	40	65		
	1843	2			17	20	65	102					17	20	107	144		
	1844				300			300					130			130		
	1845				360		1	361					130		3	133		
	1850				93			93					80			80		
	1851				1132		11	1143					473		20	493		
	1852				2315		1	2316					1000		3	1003		
	1853				999	383	1570	2952					420	130	2426	2976		
2035 TOTAL		**1221**	**1343**	**236**	**6127**	**1420**	**2781**	**10328**	**1878**	**1475**	**1475**	**236**	**2640**	**500**	**4332**	**7472**	**720**	
LPGA DRI	1809	524	197		35	22	541	598		524	197		35	22	541	598		No Change
	1810				84	429	76	589					84	429	76	589		Based on discussions with City
	1811				1	38		39					1	38		39		of Daytona Beach staff the
	1812	116								116								Zone Data included in 2035
	1813	16			12			12		16			12			12		model is reasonable.
	1814				45			45					45			45		
	1983	9	362		306	120	3808	4234		9	362		306	120	3808	4234		
	1984	19	1264	491	98	343	1130	1572	831	19	1264	491	98	343	1130	1572	831	
2035 TOTAL		**684**	**1823**	**491**	**581**	**952**	**5555**	**7089**	**831**	**684**	**1823**	**491**	**581**	**952**	**5555**	**7089**	**831**	
Breakaway Trails DRI	1791	807			38	13	102	153	725	807			38	13	102	153	725	No Change
	1792	362			53	104	62	219		362			53	104	62	219		
2035 TOTAL		**1169**	**0**	**0**	**91**	**117**	**164**	**372**	**725**	**1169**	**0**	**0**	**91**	**117**	**164**	**372**	**725**	
Hunter's Ridge DRI	1789	164					5	5		800					327	327		Changes were based on the
	1790	177				4	8	12		835	212			230	433	663		information obtianed from
	4334	45	94		24	72	893	989	1101	944	806		350	228	643	1221	1300	ECFRPC and the latest DO.
	4335	15	23		6	25	224	255		350	202		88	80	161	329		
2035 TOTAL		**401**	**117**	**0**	**30**	**101**	**1130**	**1261**	**1101**	**2929**	**1220**	**0**	**438**	**538**	**1564**	**2540**	**1300**	
National Gardens DRI	1834	138		75	11	62	8	81		550		75	11	62	8	81		Changes were based on the
	1835	223			49	163	85	297		865			49	163	85	297		latest approved land uses
	1836	658			10	2	6	18		2515			10	2	6	18		obtianed from ECFRPC
2035 TOTAL		**1019**	**0**	**75**	**70**	**227**	**99**	**396**	**0**	**3930**	**0**	**75**	**70**	**227**	**99**	**396**	**0**	
Consolidated Tomokda Landing CPA																		
Lot A (4,318 acres)	1798	373								270				544		544		Based on the information from
	1799	460			3		69	72	149	330			3	545	69	617	149	the City of Daytona Beach
	1803	1								10				545		545		
	1805	543			3		35	38		390			3		35	38		
	1806								736							0	736	
Lot B (84 acres)	1823		476	323		126	508	634		396	476	323		750	508	1258		
2035 TOTAL		**1377**	**476**	**323**	**6**	**126**	**612**	**744**	**885**	**1396**	**476**	**323**	**6**	**2384**	**612**	**3002**	**885**	
Total for All Review DRIs		**5,871**	**3,759**	**1,125**	**6,905**	**2,943**	**10,341**	**20,190**	**5,420**	**11,583**	**4,994**	**1,125**	**3,826**	**4,718**	**12,326**	**20,871**	**4,461**	



Prepared For: FDOT District Five **Prepared By: GMB Engineers & Planners, Inc.**	**SR 40 Design Traffic Technical Memorandum**	**Figure 2** 2035 Network and DRI / Other Developments around the Study Area

APPENDIX

Supporting Documentation - Latest Approved Land Uses for the relevant DRIs & CPAs

GMB ENGINEERS & PLANNERS, INC.

Ormond Crossings - CPA

02/25/2010 03:43 PM
Instrument# 2010-034465 # 1
Book: 6449
Page: 2154

ORDINANCE NO. 2010-07

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, APPROVING A DEVELOPMENT AGREEMENT BETWEEN THE CITY OF ORMOND BEACH AND TOMOKA HOLDINGS, LLC, AS OWNER AND DEVELOPER; PROVIDING FOR THE DEVELOPMENT OF A 2,924 ACRE MIXED-USE DEVELOPMENT ON PROPERTY LOCATED ON THE SOUTH SIDE OF THE FLORIDA EAST COAST RAILROAD, SPANNING BOTH SIDES OF I-95 AND NORTH OF THE ORMOND BEACH MUNICIPAL AIRPORT WITHIN THE CITY OF ORMOND BEACH TO BE KNOWN AS "ORMOND CROSSINGS"; AUTHORIZING EXECUTION OF THE DEVELOPMENT AGREEMENT; REPEALING ALL INCONSISTENT ORDINANCES OR PARTS THEREOF; PROVIDING FOR SEVERABILITY; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, this is an administrative request to approve a Development Agreement, attached hereto as Exhibit "A" and incorporated herein by reference, between the City of Ormond Beach, a Florida municipal corporation (the "City") and Tomoka Holdings, LLC, a Florida limited liability company, owner and developer (the "owner and developer) for the purpose of developing a 2,924 acre mixed-use development, and adjacent right-of-way to be known as "Ormond Crossings" and located on the south side of the Florida East Coast railroad, spanning both sides of I-95 and north of the Ormond Beach Municipal Airport, on land more particularly described in the Development Agreement, and

WHEREAS, the City is required to enter into this Development Agreement in order to meet the conditions of a stipulated settlement agreement between the City and the Florida Department of Community Affairs ("DCA"), and

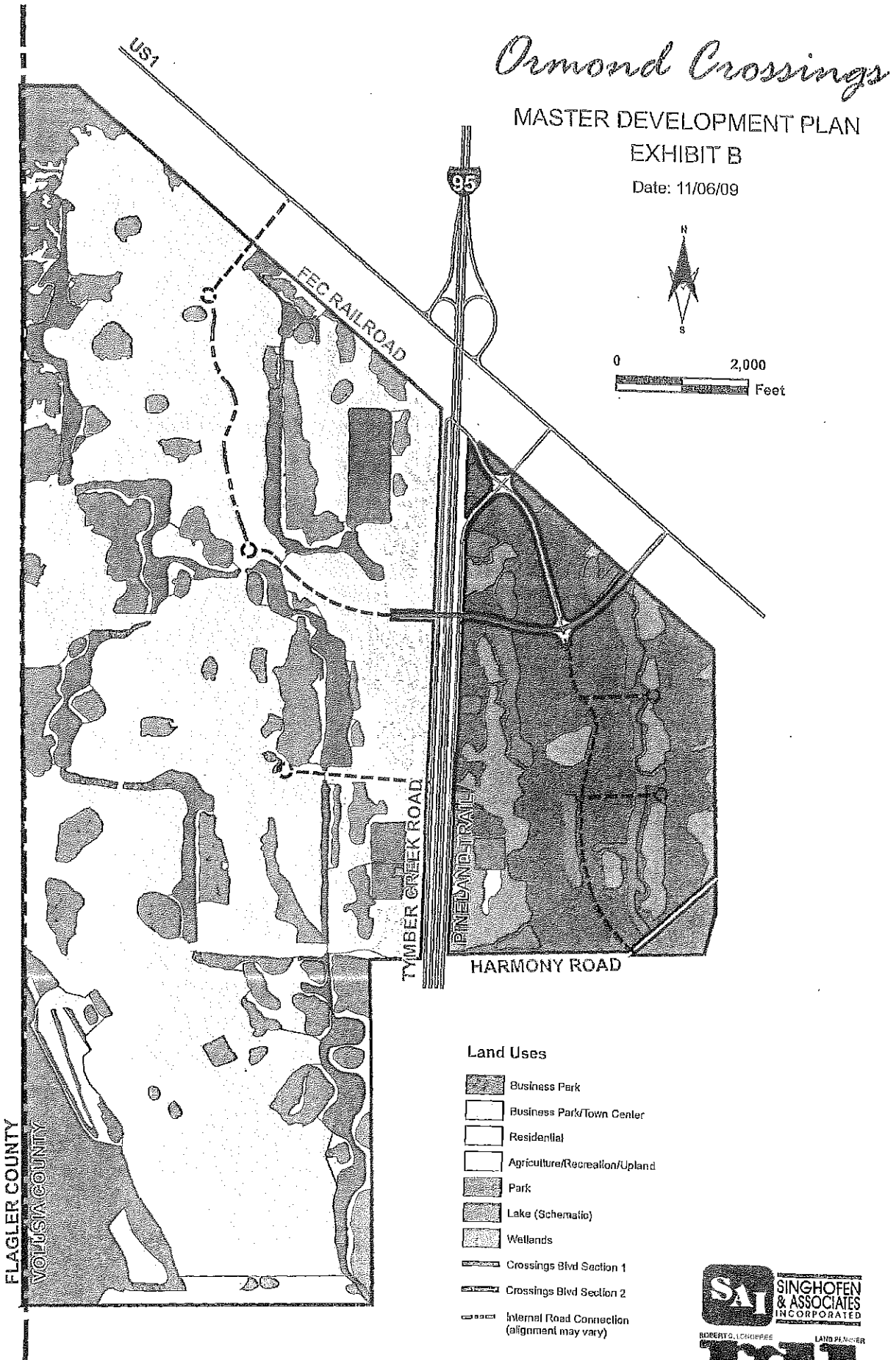
2. Permitted Development Uses. Ormond Crossings shall consist of a mixture of uses. In order to ensure that Ormond Crossings provides the necessary economic diversity, there shall be a minimum of 1,000 acres of land (inclusive of rights-of-way, wetlands and stormwater facilities) to be developed for a "Business Park" that will have a mixture of industrial, warehousing, distribution, office and limited retail coordinated in the Business Park/Town Center with residential uses in order to minimize net external trips outside the boundary of Ormond Crossings. The following table identifies the mixture of land uses that would be appropriate at Ormond Crossings:

Land Use	Gross Bldg./Units/Students/Acreage
Retail/Comm.	200,000/SF
Office	900,000/SF
Business/Flex-space (light industrial)	350,000/SF
Industrial (does not include Business/Flex space)	800,000/SF
Storage	240,000/SF
Warehouse/Distribution	560,000/SF
Public/Institutional	165,000/SF
Elementary School	720 students
Residential	2,950 units
Stormwater and Lakes	400 acres
Open Space	450 acres

Ormond Crossings

MASTER DEVELOPMENT PLAN
EXHIBIT B

Date: 11/06/09



SINGHOFEN & ASSOCIATES INCORPORATED
ROBERT G. LENDERMAN LAND PLANNER
PLANNING AND DESIGN

Breakaway Trails - DRI

BREAKAWAY TRAILS, INC.
2379 Beville Road
Daytona Beach, FL 32119
(386) 788-0820

January 29, 2010

Mr. Fred Milch, DRI Manager
East Central Florida Regional Planning Council
309 Cranes Roost Blvd., Suite 2000
Altamonte Springs, FL 32701

Re: **Breakaway Trails PUD 2008 & 2009 Biennial Report**

Dear Mr. Milch:

Enclosed, please find the 2008 & 2009 Biennial Report for the Breakaway Trails PUD for the twenty-four-month period ended December 31, 2009. This document is submitted in accordance with Chapter 380.06(18) of the Florida Statutes and the City of Ormond Beach Development Order.

We believe this report to be complete and in accordance with Florida Statutes and the Development Order. Should you require clarification or additional information, please do not hesitate to contact me.

Very truly yours,

Richard D. Smith
Manager

Enclosure

cc: Ray Eubanks, Florida Department of Community Affairs
Mr. Richard Goss, City of Ormond Beach
Permit Data Services, SJRWMD
Christianne C. Ferraro, FDEP
David S. Hobbie, ACOE
Dr. Bonnie Sorensen, Volusia County Health Department

RDS/

BREAKAWAY TRAILS

PLANNED UNIT DEVELOPMENT

2008 & 2009 Biennial Status Report

For The Period January 1, 2008 - December 31, 2009

Reporting Period: January 1, 2008 to December 31, 2009

Development: Breakaway Trails, PUD

Location: Ormond Beach, Volusia County, Florida.

Developer: Breakaway Trails, Inc.

2379 Beville Road

Daytona Beach, Florida 32119

Exhibits

Exhibit A	2008 - 2009 Development Summary
Exhibit B-1	Annexation Development Agreement (Resolution No. 88-199 Ormond Beach), Status
Exhibit B-2	Resolution No. 95-101 Ormond Beach, Status
Exhibit B-3	Resolution No. 2006-39 Ormond Beach
Exhibit B-4	Resolution No. 2006-187 Ormond Beach
Exhibit C	Distribution List

1. **Describe any changes made in the proposed plan of development, phasing, or in the representations contained in the Application for Development Approval.**

   Florida Statute 380.06, Section 19 (c), extended the build-out date for three (3) years of all DRI's under construction as of July 1st, 2007. The new build-out expiration date for the Breakaway Trails DRI is 12/30/11.

2. **Has there been a change in local government jurisdiction for any portion of the development?**

   There has been no change in local government jurisdiction in this reporting period.

3. **Provide copies of any revised master plans, incremental site plans, etc., not previously submitted.**

   There have been no revisions to master plans or approval of incremental site plans, etc. nor have there been any master plans or incremental site plans that have not been submitted previously.

4. **Provide a summary comparison of development activity proposed and actually conducted for the reporting year as well as a cumulative total of development proposed and actually conducted to date.**

   The Development Summary for 2008 & 2009 is Exhibit A. Construction of all subdivision infrastructure has been complete for all Phases of Breakaway Trails.

5. **Have any undeveloped tracts of land in the development (other than individual single-family lots) been sold to a separate entity or developer?**

   No undeveloped tracts of land in the development have been sold to a separate entity or developer in this reporting period.

6. **Describe any lands purchased or optioned adjacent to the original Development of Regional Impact site subsequent to issuance of the Development Order.**

   No lands have been purchased or optioned adjacent to the development.

7. **List any substantial local, state, and federal permits, which have been obtained, applied for, or denied during this reporting period.**

   No substantial local, state or federal permits were obtained, applied for, or denied during this reporting period.

8. **Provide a list specifying each development order condition and each developer commitment as contained in the ADA and state how and when each condition or commitment has been complied with during the Biennial Report reporting period.**

   Following in Exhibit B-1 is the status of the Development Order conditions as found in City of Ormond Beach Resolution 88-199, Annexation Development Agreement. Exhibit B-2 provides the status of the amenity improvements as found in Resolution 95-101, amending the Development Order.

9. **Provide any information that is specifically required by the development order to be included in the biennial report.**

   Section F. (a) - (h) of Volusia County DRI Approval Resolution 85-65 lists the biennial report requirements of this development order and have all been addressed in items 1 - 10 of this report.

10. **Provide a statement certifying that all persons have been sent copies of the biennial report in conformance with Subsections 380.06 (15) and (18), F.S.**

    All persons listed in Exhibit "C" in accordance with Subsections 380.06 (15) and (18), F.S. have been sent copies of this biennial report.

Person completing the questionnaire:	Richard D. Smith
Title:	Manager
Representing:	Breakaway Trails, Inc.

EXHIBIT "A"

DEVELOPMENT SUMMARY

January 1, 2008 - December 31, 2009

Development Summary					Traffic				Water and Sewer					
Land Use	Approved in D.O.[1]	C.O.'s Year[2]	Approved Cumulative[3]	Coming Year[4]	From ADA[5]	Year[6]	Cumulative[7]	Coming Year[8]	Allocated Water[9]	Allocated Sewer[10]	Estimated Usage Water[11]	Estimated Usage Sewer[12]	Coming Year Water[13]	Coming Year Sewer[14]
Single Fam Residential	1000 du	4 du	914 du	20 du	9132 adt	37 adt	8347 adt	183 adt	300,000 gpd	300,000	147,154 gpd	147,154	150,374 gpd	150,374

[1] Approved land uses in terms of square footage, dwelling units, rooms or other appropriate measure.

[2] Certificates of occupancy issued during the reporting year in terms of dwelling units (du).

[3] Certificates of occupancy issued since original development order approval, including that of column 2, in terms of dwelling units (du).

[4] Development program anticipated for the next annual reporting period in terms of square footage, etc.

[5] Total average daily trips from the approved Application for Development Approval for each land use.

[6] Average daily trips estimated from reporting period's development using the ITE 4th Edition Trip Generation rates.

[7] Total average daily trips from development since original development order approval, including that of column 6.

[8] Average daily trips expected from the coming year's development.

[9, 10] Water and sewer service for which firm allocations have been made in gallons per day.

[11, 12] Total current project water and sewer demand. Based upon average usage per dwelling unit information provided by David Ponitz, Ormond Beach Utilities Manager.

[13, 14] Additional water and sewer demand expected from the coming year's development program.

Also attach a current master plan which depicts the boundaries of all recorded plats and/or site plans for the reporting period, past years and areas expected to be submitted in the coming year. Within each boundary shall be the local approval number and amount of development approved in terms of square footage, dwelling units, etc.

A master plan should also be included which indicates wetlands and floodprone areas filled or disrupted and their mitigation and compensatory storage areas. Such activity should be shown for the reporting period, past years and expected for the coming year. See Exhibit "B".

Hunter's Ridge - DRI

Table 21.B.1
Phase 1 (2015) Trip Generation
Hunter's Ridge DRI Substantial Deviation

TAZ	ITE Land Use Descritpion	ITE Code	Qty.	Units	Trip Generation Rates				Trip Generation				Net External Trip Generation						
						P.M. Peak-Hour				P.M. Peak-Hour				Daily		P.M. Peak-Hour			
							Directional %				Directional								
					Daily Rate[1]	Rate[2]	In	Out	Daily Total	Total	In	Out	Internal Capture	Internal Trips	Daily Total	Internal Trips	Total	In	Out
3646	Shopping Center	820	57.25	KSF	82.55	7.56	48%	52%	4,726	433	208	225	30.0%	1,419	3,307	130	303	145	158
	Church	560	15.00	KSF	9.13	0.53	48%	52%	137	8	4	4	17.9%	25	112	1	7	3	4
3647	Senior Housing - Detached	251	0	DUs	0.00	0.00	61%	39%	0	0	0	0	17.9%	0	0	0	0	0	0
	Congregate Care	253	0	DUs	0.00	0.00	55%	45%	0	0	0	0	17.9%	0	0	0	0	0	0
3648	Assisted Living	254	172	Beds	2.74	0.22	44%	56%	471	38	17	21	17.9%	84	387	7	31	14	17
3649	General Office	710	30.00	KSF	17.60	3.73	17%	83%	528	112	19	93	38.6%	204	324	43	69	12	57
	Shopping Center	820	15.00	KSF	132.00	11.93	48%	52%	1,980	179	86	93	30.0%	595	1,385	54	125	60	65
3650	Elementary School	520	500	Students	1.29	0.15	49%	51%	645	75	37	38	50.1%	323	322	38	37	18	19
	Middle School	522	800	Students	1.62	0.16	49%	51%	1,296	128	63	65	50.1%	649	647	64	64	31	33
3651	Light Industrial	110	74.732	KSF	6.10	0.96	12%	88%	456	72	9	63	38.6%	176	280	28	44	5	39
3652	Shopping Center	820	66.26	KSF	78.45	7.20	48%	52%	5,198	477	229	248	30.0%	1,561	3,637	143	334	160	174
	General Office	710	110.00	KSF	13.05	1.84	17%	83%	1,436	202	34	168	38.6%	554	882	78	124	21	103
3653	Business Park	770	72.45	KSF	21.06	1.55	23%	77%	1,526	112	26	86	38.6%	589	937	43	69	16	53
3654	Condos/Townhomes	230	300	DUs	5.58	0.49	67%	33%	1,673	148	99	49	17.9%	299	1,374	26	122	81	41
3655	Shopping Center	820	0.00	KSF	0.00	0.00	48%	52%	0	0	0	0	30.0%	0	0	0	0	0	0
3656	Warehousing	150	30.00	KSF	5.87	0.33	25%	75%	176	10	3	8	38.6%	68	108	4	6	2	4
3657	General Office	710	0.00	KSF	0.00	0.00	17%	83%	0	0	0	0	38.6%	0	0	0	0	0	0
3658	Apartments	220	0	DUs	0.00	0.00	65%	35%	0	0	0	0	17.9%	0	0	0	0	0	0
3659	Single-family	210	0	DUs	0.00	0.00	63%	37%	0	0	0	0	17.9%	0	0	0	0	0	0
3660	Single-family	210	618	DUs	8.99	0.89	63%	37%	5,555	552	348	204	17.9%	994	4,561	99	453	286	167
3661	Single-family	210	464	DUs	9.20	0.92	63%	37%	4,267	427	269	158	17.9%	763	3,504	76	351	221	130
3662	Single-family	210	688	DUs	8.91	0.88	63%	37%	6,131	608	383	225	17.9%	1,097	5,034	109	499	315	184
	Condos/Townhomes	230	186	DUs	5.94	0.54	67%	33%	1,104	100	67	33	17.9%	197	907	18	82	55	27
				Totals:					37,305	3,681	1,899	1,782	26.11%	9,595	27,710	961	2,720	1,445	1,275

1 Daily rate is back-calculated from Daily Total which was calculated using the equations in the methodology letter

2 P.M. Peak-Hour rate is back-calculated from P.M. Peak-Hour Total which was calculated using the equations in the methodology letter

shopping MF SF
11,904 7,228 17.9%
30.0%

Table 21.B.2
Phase 2 (2020) Trip Generation
Hunter's Ridge DRI Substantial Deviation

TAZ	ITE Land Use Descritpion	ITE Code	Qty.	Units	Trip Generation Rates				Trip Generation				Net External Trip Generation						
						P.M. Peak-Hour				P.M. Peak-Hour				Daily		P.M. Peak-Hour			
							Directional %				Directional								
					Daily Rate[1]	Rate[2]	In	Out	Daily Total	Total	In	Out	Internal Capture	Internal Trips	Daily Total	Internal Trips	Total	In	Out
3646	Shopping Center	820	57.25	KSF	82.55	7.56	48%	52%	4,726	433	208	225	31.1%	1,470	3,256	135	298	143	155
	Church	560	15.00	KSF	9.13	0.53	48%	52%	137	8	4	4	18.1%	25	112	1	7	3	4
3647	Senior Housing - Detached	251	172	DUs	4.99	0.39	61%	39%	859	67	41	26	18.1%	155	704	12	55	33	22
	Congregate Care	253	0	DUs	0.00	0.00	55%	45%	0	0	0	0	18.1%	0	0	0	0	0	0
3648	Assisted Living	254	172	Beds	2.74	0.22	44%	56%	471	38	17	21	18.1%	85	386	7	31	14	17
3649	General Office	710	30.00	KSF	17.60	3.73	17%	83%	528	112	19	93	38.5%	203	325	43	69	12	57
	Shopping Center	820	15.00	KSF	132.00	11.93	48%	52%	1,980	179	86	93	31.1%	616	1,364	56	123	59	64
3650	Elementary School	520	500	Students	1.29	0.15	49%	51%	645	75	37	38	59.7%	385	260	45	30	15	15
	Middle School	522	800	Students	1.62	0.16	49%	51%	1,296	128	63	65	59.7%	774	522	76	52	25	27
3651	Light Industrial	110	149.464	KSF	6.79	0.97	12%	88%	1,015	145	17	128	38.5%	390	625	56	89	11	78
3652	Shopping Center	820	130.35	KSF	61.89	5.72	48%	52%	8,068	746	358	388	31.1%	2,510	5,558	232	514	247	267
	General Office	710	172.45	KSF	11.77	1.58	17%	83%	2,030	272	46	226	38.5%	781	1,249	105	167	28	139
3653	Business Park	770	72.45	KSF	21.06	1.55	23%	77%	1,526	112	26	86	38.5%	587	939	43	69	16	53
3654	Condos/Townhomes	230	300	DUs	5.58	0.49	67%	33%	1,673	148	99	49	18.1%	303	1,370	27	121	81	40
3655	Shopping Center	820	12.52	KSF	140.58	12.70	48%	52%	1,760	159	76	83	31.1%	548	1,212	49	110	53	57
3656	Warehousing	150	30.00	KSF	5.87	0.33	25%	75%	176	10	3	8	38.5%	68	108	4	6	2	4
3657	General Office	710	72.45	KSF	14.38	2.21	17%	83%	1,042	160	27	133	38.5%	401	641	62	98	17	81
3658	Apartments	220	316	DUs	6.45	0.60	65%	35%	2,039	191	124	67	18.1%	369	1,670	35	156	102	54
3659	Single-family	210	292	DUs	9.54	0.96	63%	37%	2,787	281	177	104	18.1%	504	2,283	51	230	145	85
3660	Single-family	210	967	DUs	8.67	0.85	63%	37%	8,386	826	520	306	18.1%	1,517	6,869	149	677	426	251
3661	Single-family	210	464	DUs	9.20	0.92	63%	37%	4,267	427	269	158	18.1%	772	3,495	77	350	220	130
3662	Single-family	210	688	DUs	8.91	0.88	63%	37%	6,131	608	383	225	18.1%	1,109	5,022	110	498	314	184
	Condos/Townhomes	230	186	DUs	5.94	0.54	67%	33%	1,104	100	67	33	18.1%	200	904	18	82	55	27
Cumulative Totals:									**52,646**	**5,225**	**2,667**	**2,558**	**26.65%**	**13,773**	**38,873**	**1,393**	**3,832**	**2,021**	**1,811**
Phase 2 Only Totals:									**15,341**	**1,544**	**768**	**776**		**4,178**	**11,163**	**432**	**1,112**	**576**	**536**

1 Daily rate is back-calculated from Daily Total which was calculated using the equations in the methodology letter

2 P.M. Peak-Hour rate is back-calculated from P.M. Peak-Hour Total which was calculated using the equations in the methodology letter

Note: Phase 2 Trip Generation totals include Phase 1 land use

Table 21.B.3
Phase 3 (2025) Trip Generation
Hunter's Ridge DRI Substantial Deviation

TAZ	ITE Land Use Descritpion	ITE Code	Qty.	Units	Trip Generation Rates				Trip Generation				Net External Trip Generation						
						P.M. Peak-Hour				P.M. Peak-Hour				Daily		P.M. Peak-Hour			
							Directional %				Directional								
					Daily Rate[1]	Rate[2]	In	Out	Daily Total	Total	In	Out	Internal Capture	Internal Trips	Daily Total	Internal Trips	Total	In	Out
3646	Shopping Center	820	57.25	KSF	82.55	7.56	48%	52%	4,726	433	208	225	31.9%	1,508	3,218	138	295	142	153
	Church	560	15.00	KSF	9.13	0.53	48%	52%	137	8	4	4	15.6%	21	116	1	7	3	4
3647	Senior Housing - Detached	251	172	DUs	4.99	0.39	61%	39%	859	67	41	26	15.6%	134	725	10	57	35	22
	Congregate Care	253	146	DUs	2.02	0.17	55%	45%	295	25	14	11	15.6%	46	249	4	21	12	9
3648	Assisted Living	254	172	Beds	2.74	0.22	44%	56%	471	38	17	21	15.6%	73	398	6	32	14	18
3649	General Office	710	30.00	KSF	17.60	3.73	17%	83%	528	112	19	93	38.4%	203	325	43	69	12	57
	Shopping Center	820	15.00	KSF	132.00	11.93	48%	52%	1,980	179	86	93	31.9%	632	1,348	57	122	59	63
3650	Elementary School	520	500	Students	1.29	0.15	49%	51%	645	75	37	38	64.6%	416	229	48	27	13	14
	Middle School	522	800	Students	1.62	0.16	49%	51%	1,296	128	63	65	64.6%	837	459	83	45	22	23
3651	Light Industrial	110	213.52	KSF	6.99	0.97	12%	88%	1,493	207	25	182	38.4%	573	920	79	128	15	113
3652	Shopping Center	820	130.35	KSF	61.89	5.72	48%	52%	8,068	746	358	388	31.9%	2,574	5,494	238	508	244	264
	General Office	710	172.45	KSF	11.77	1.58	17%	83%	2,030	272	46	226	38.4%	779	1,251	104	168	28	140
3653	Business Park	770	72.45	KSF	21.06	1.55	23%	77%	1,526	112	26	86	38.4%	586	940	43	69	16	53
3654	Condos/Townhomes	230	300	DUs	5.58	0.49	67%	33%	1,673	148	99	49	15.6%	261	1,412	23	125	84	41
3655	Shopping Center	820	12.52	KSF	140.58	12.70	48%	52%	1,760	159	76	83	31.9%	562	1,198	51	108	52	56
3656	Warehousing	150	30.00	KSF	5.87	0.33	25%	75%	176	10	3	8	38.4%	68	108	4	6	2	4
3657	General Office	710	72.45	KSF	14.38	2.21	17%	83%	1,042	160	27	133	38.4%	400	642	61	99	17	82
3658	Apartments	220	416	DUs	6.36	0.59	65%	35%	2,645	246	160	86	15.6%	412	2,233	38	208	135	73
3659	Single-family	210	810	DUs	8.80	0.87	63%	37%	7,124	704	444	260	15.6%	1,110	6,014	110	594	374	220
3660	Single-family	210	967	DUs	8.67	0.85	63%	37%	8,386	826	520	306	15.6%	1,307	7,079	129	697	439	258
3661	Single-family	210	464	DUs	9.20	0.92	63%	37%	4,267	427	269	158	15.6%	665	3,602	67	360	227	133
3662	Single-family	210	688	DUs	8.91	0.88	63%	37%	6,131	608	383	225	15.6%	956	5,175	95	513	323	190
	Condos/Townhomes	230	186	DUs	5.94	0.54	67%	33%	1,104	100	67	33	15.6%	172	932	16	84	57	27
								Cumulative Totals:	**58,362**	**5,790**	**2,990**	**2,800**	**25.01%**	**14,293**	**44,069**	**1,448**	**4,342**	**2,325**	**2,017**
								Phase 3 Only Totals:	**5,716**	**565**	**323**	**242**		**519**	**5,197**	**56**	**509**	**304**	**205**

1 Daily rate is back-calculated from Daily Total which was calculated using the equations in the methodology letter

2 P.M. Peak-Hour rate is back-calculated from P.M. Peak-Hour Total which was calculated using the equations in the methodology letter

Note: Phase 3 Trip Generation totals include Phase 2 land use

Table 21.C.1
Internal/External Split – Vehicle Trips
Hunter's Ridge DRI Substantial Deviation

	VEHICLE TRIPS (ADT)		PEAK HOUR VEHICLE TRIPS	
PHASING	INTERNAL	EXTERNAL	INTERNAL	EXTERNAL
Phase 1 (2015)	9,595	27,710	961	2,720
Phase 2 (2020) [cumulative]	4,178 [13,773]	11,163 [38,873]	432 [1,393]	1,112 [3,832]
Phase 3 (2025) [cumulative]	519 [14,293] 24%	5,197 [44,069]	56 [1,448] 25%	509 [4,342]

The calculated internalization of trips produced by the CFRPM is a direct result of the mix of land uses proposed for the DRI. Most of the typical urban land uses are provided including a variety of residential products from single family to multi-family to life care centers; various scales of retail use ranging from community to neighborhood sizes; employment centers including office and warehouse space; recreational facilities, civic uses; and schools. In addition to an internal road network that will serve personal automobile travel, goods delivery and potential transit, a system of planned interconnected multi-use paths is proposed to serve as an alternative efficient transportation mode that will foster community cohesiveness while minimizing green-house gas emissions.

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D. Provide a projection of total peak hour directional traffic, with the DRI, on the highway network within the study area at the end of each phase of development. If these projections are based on a validated FSUTMS, state the source, date and network of the model and of the traffic analysis zones (TAZ) projections. If no standard model is available or some other model or procedure is used, describe it in detail and include documentation showing its validity. Describe the procedure used to estimate and distribute traffic with full DRI development in subzones at buildout and at interim phase-end years. These assignments may reflect the effects of any new road or improvements which are programmed in adopted capital improvements programs and/or comprehensive plans to be constructed during DRI construction; however, the inclusion of such roads should be clearly identified. Show these link projections on maps or tables of the study area network, one map or table for each phase-end year. Describe how these conclusions were reached.

The CFRPM socio-economic (S/E) data was modified to include the Hunter's Ridge DRI, LPGA DRI, the Breakaway Trails DRI, the Ormond Crossings DRI, Plantation Oaks DRI, Halifax Plantation DRI, Plantation Bay DRI, Bulow Plantation

DRI, SR 100 DRI, and the Town Center DRI. In addition, the remaining S/E growth data was extrapolated to the end of Phase 3 (2025) and interim years (Phase 1 - 2015 and Phase 2 - 2020) were interpolated to determine phase-specific background data. The Hunter's Ridge DRI was divided into 14 TAZs for Phase 1, 17 TAZs for Phase 2 and 17 TAZs for Phase 3. Single land use TAZs were used in most cases.

Future phase background growth was derived from CFRPM projections in most cases except for SR 11, Pineland Trail, and portions of Tymber Creek Road where alternative rates were used due to unexplained growth in volumes without corresponding growth in S/E data. In all cases, an annual growth rate of no less than one percent was used.

Growth rates for background traffic are presented in Table 21.D.1. These rates were used to project the p.m. peak-hour directional traffic presented in Tables 21.D.2, 21.D.3 and 21.D.4 as well as Maps 21.D.1, 21.D.2 and 21.D.3 for Phases 1, 2 and 3, respectively. The trips associated with the Hunter's Ridge DRI were determined by applying the internal capture rates reported by the model (see Section C above) to the ITE trip generation matrices (see Section B above) and then assigning these trips according to the trip distribution pattern determined by the CFRPM. The trip distribution graphics for each phase are contained in Appendix A.21.9. P.M. peak-hour turning movement data is presented in Maps 21.D.4, 21.D.5 and 21.D.6 for Phases 1, 2 and 3, respectively.

National Gardens - DRI

DRI Report - National Gardens

Generated on 4/6/2011

DRI Information

Development Type: Residential

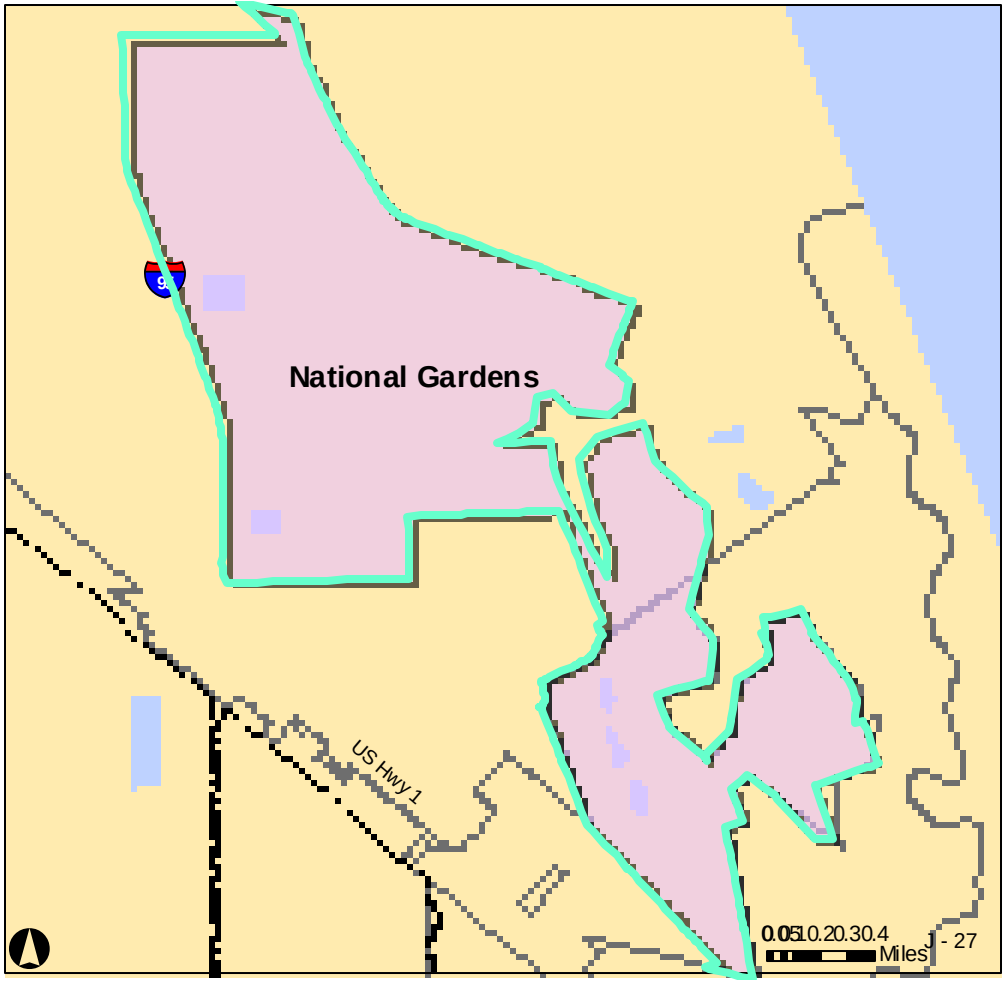
Jurisdiction: City of Ormond Beach

County: Volusia

Status: Approved

RPC: ECFRPC

Total Acres: 0



Land Use Information

Land Use Type	Units	Total Development
ResUnitsSF	Dwelling Units	3930.00

Documents

Name	Size (MB)
Development Agreement.pdf	0.38
Traffic Analysis.pdf	0.22
Annual Report.pdf	0.20
3rd Amendment December 2001.pdf	0.33
4th Amendment December 2002.pdf	0.28
Amended New October 1990.pdf	1.68
1st Amendment June 1998.pdf	0.18
2nd Amendment April 2000.pdf	0.11
5th Amendment December 2002.pdf	4.34
October 1986.pdf	0.77
DRI Summary.pdf	0.15
Map.pdf	0.24

DRI Land Use Information By Phase

Phase 1
Status Approved
Phase Years 1985 - 2002

Land Use Type	Units	Phase Development	Cumulative Development
ResUnitsSF	Dwelling Units	642.00	642.00

Phase 2
Status Approved
Phase Years 2002 - 2006

Land Use Type	Units	Phase Development	Cumulative Development
ResUnitsSF	Dwelling Units	768.00	1410.00

Phase	3
Status	Approved
Phase Years	2004 - 2012

Land Use Type	Units	Phase Development	Cumulative Development
ResUnitsSF	Dwelling Units	756.00	2166.00

Phase	4
Status	Approved
Phase Years	2010 - 2016

Land Use Type	Units	Phase Development	Cumulative Development
ResUnitsSF	Dwelling Units	1764.00	3930.00

Disclaimer

All provided GIS data is to be considered a generalized spatial representation which is subject to revisions. The data is provided as is with no implied warranty for usability. The data used for this application were developed from various sources and scales. The map information is not a survey. This map is intended to be used for planning purposes only and is not to be construed as a legal document. The ECFRPC and associated agencies have taken reasonable efforts to ensure the accuracy of this map. However, the ECFRPC and associated agencies provide no warranty as to the map's accuracy or completeness, and assume no liability for losses or damages incurred by persons relying on the information it provides. Any reliance on the information contained herein is at the user's own risk. The features here represented are not to be used to establish legal boundaries or entitlements. For specific information, contact the appropriate department or agency. The user assumes all responsibility for determining whether this file is appropriate for a particular purpose.

186.803 Use of geographic information by governmental entities.--When state agencies, water management districts, regional planning councils, local governments, and other governmental entities use maps, including geographic information maps and other graphic information materials, as the source of data for planning or any other purposes, they must take into account that the accuracy and reliability of such maps and data may be limited by various factors, including the scale of the maps, the timeliness and accuracy of the underlying information, the availability of more accurate site-specific information, and the presence or absence of ground truthing or peer review of the underlying information contained in such maps and other graphic information. This section does not apply to maps adopted pursuant to part II of chapter 163.

Consolidated Tomoka landing - CPA

The CITY OF DAYTONA BEACH

"THE WORLD'S MOST FAMOUS BEACH"

Development and Administrative Services
Planning Division

November 2, 2010

Mr. D. Ray Eubanks
Plan Review and Processing Administrator
Department of Community Affairs
Bureau of State Planning Plan Processing Section
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100

Re: Adoption of The City of Daytona Beach's 2010 First Cycle Large Scale Comprehensive Plan Amendments

Dear Mr. Eubanks:

Please find enclosed the City of Daytona Beach's First Cycle 2010 Large Scale Comprehensive Plan Amendments (DCA No: 10-1) that were adopted by Ordinance 10-281 by the City Commission at a public hearing held on October 20, 2010. Included in this cycle are the following amendments:

Exhibit A: Consolidated Tomoka Land Company, Daytona West, DEV2009-124

Exhibit B: Consolidated Tomoka Land Company, West ISB, DEV2009-125

Exhibit C: Consolidated Tomoka Land Company, Tomoka Farms Road, DEV2009-127

Exhibit D: First Baptist Church, DEV2009-142

On June 15, 2010, the Department of Community Affairs provided the City with an Objections, Recommendations and Comments report. This report included three objections, each of which is addressed in detail in the July 30, 2010 response letter to the Department of Community Affairs, and was included in our adoption and ordinance.

As required by 9J-11.011(5), FAC, three copies of the amendment package are enclosed for your review (one hard copy and two additional copies in PDF form on CD). One copy of the amendment package is being sent to each of the state review agencies and a summary of the amendments package is being sent to all of the local governments that are contiguous to or may be affected. The newspaper in which the Department of Community Affairs can publish the required Notice of Intent is the Daytona Beach News-Journal.

EXHIBIT "A"

FUTURE LAND USE ELEMENT

NEIGHBORHOOD "V"

(m) Issue: As identified by Policy 2.2.7 of the Future Land Use Element, the 4,318 acre property depicted on Exhibit m-1 is located within a designated urban area of the City and has frontage along major roads including LPGA Boulevard, SR 40, and I-95. The property is adjacent to the City of Ormond Beach which abuts the north side of SR 40 and part of the southwest quadrant of the I-95 interchange. Recognizing that SR 40 must accommodate regional trips and local trips within and between both municipalities and unincorporated portions of Volusia County, and has had historic LOS issues and is expected to continue to have such issues, the City shall demonstrate a commitment to limiting impacts to the SR 40 link between Tymber Creek Road and I-95 by working with adjacent jurisdictions, FDOT, and the MPO to plan for alternative corridors.

The City will require that development of this area shall achieve efficient use of land and reduced infrastructure costs. The current residential density on portions of the property of one dwelling unit per one or more gross acres is inconsistent with urban development patterns and is inappropriate for lands within a City with central water and sewer. In addition, development will not occur instantaneously over the 4,318 acres, but rather will be developed at a rate determined by real market demand in compliance with the following development regulations. The following policies are intended to ensure that adequate infrastructure is provided in a manner timed to development and that the site is developed in a compact and contiguous manner so as to discourage urban sprawl, and that development methods compatible with adjacent uses and ecologically sensitive areas are utilized. The property shall be developed as one or more Planned Unit Developments and be restricted by the following policies and development standards:

(1) **Policy:** The future land uses of the 4,318 acres are Mixed Use, Low Intensity Urban (LIU) and Potentially Environmentally Sensitive (PES) as illustrated on the City's Official Future Land Use Map.

(2) **Policy:** Current densities and intensities for the planning area shall be based upon existing maximum development yield of the entire 4,318 acres. Therefore, at this time, density and intensity shall not exceed 2,539 units and 3,319,688 square feet of non-residential. Schools, police stations and fire stations are not included in this maximum square footage threshold. To encourage growth in proximity to currently urbanized areas, residential development shall be directed to those areas labeled A and B depicted on Exhibit m-2. Notwithstanding the overall density limitations of this policy, the density of area B shall not exceed a gross density of 2 dwelling units per acre (DU/Acre) and Area A designated as Mixed Use shall not exceed a gross density of 20 DU/Acre. Clustering of residential units shall be required. Notwithstanding the overall intensity limitations of this policy, non-residential uses shall not exceed 22.5% of the total acres and shall not exceed a floor area ratio of 0.3.

(3) **Policy:** Sections within area C on Exhibit m-2 were previously designated as Urban Transition (426 acres) and Low Intensity Urban (1,027 acres) with a Neighborhood V Policy allowing a density of 2 DU's/acre and restricting non-residential uses to 22.5% of the total acres and a maximum floor area ratio of 0.3. The existing residential entitlements from these previous land use designations for area C are reallocated to areas A and B and the existing

residential entitlements of the entire amendment area shall be developed on areas A and B. Non-residential entitlements may be developed in areas A, B & C subject to the limits inherent to the land use and subject to the restriction on non-residential within 3,000 SF of SR 40 specified in Policy 5. At such time as need is demonstrated and other justification is provided, area C may obtain additional development rights through the City's Comprehensive Plan amendment process.

(4) **Policy:** It is anticipated that development of the preferred development areas will likely originate along SR 40 with non-residential development intended to serve the existing residential on the north side of SR 40 and future residential to the south. While it is impossible to predict the final development timeline for the subject parcels, it is anticipated based on market conditions that initial development will be non-residential in nature and developer will ensure that there is sufficient non-residential development to support job creation and adequate commercial services for the planned residential development as it occurs over time.

(5) **Policy**: The applicant shall reduce the impact on SR 40 by limiting the amount of retail development within 3000 linear feet of SR 40 to 653,400 square feet.

(6) **Policy:** The developer shall complete construction of either Stagecoach or Tymber Creek Roads to extend to LPGA Boulevard by the time residential density exceeds 1,086 residential units, and shall complete construction on both roads in their entirety prior to the approval of more than 2,000 residential units being authorized by any Daytona Beach development order. The developer shall coordinate the construction of these roads with Votran to help facilitate stops.

(7) **Policy:** As referenced in the adopted development agreement between the applicant and Volusia County, executed on December 28, 2005, the applicant shall set aside sufficient rights-of-way for roadways and related retention areas for Tymber Creek Road, Hand Avenue, and Stagecoach Road.

(8) **Policy:** The developer will have a School Planning Capacity Enhancement Agreement in place by the time the new residential units exceed existing entitlements of 2,539 units.

(9) **Policy:** At such time as the City of Daytona Beach desires to construct a fire station on the subject property, land owner will donate a site subject to impact fee credits allowed by law. The land owner will work with the City to locate a mutually acceptable location on the subject property. Similarly, the developer has ensured that access into the subject property will be in place as development occurs under this agreement; the developer has agreed to construct Stagecoach and Tymber Creek Roads at 1,086 and 2,000 units. Until such time as there is sufficient density to require thru access and road alignments have been finalized, the property can be served via SR 40 by City of Daytona Beach Fire Station #7 and by the City of Ormond Beach and Volusia County Fire Stations per the existing Interlocal First Responder Agreement.

(10) **Policy:** Water and sewer service shall be provided to the subject property in accordance with the City of Daytona Beach and the City of Ormond Beach Interlocal Wholesale Water and Wastewater Service Area Agreement. The City of Ormond Beach shall provide water and sewer as the wholesale provider to the portions of the subject site that are within its service area. If the City of Ormond Beach is unable to provide service, the City of Daytona Beach shall provide water and sewer service.

(11) **Policy:** Prior to approval of any site plan or subdivision plan, the applicant shall provide a master utility plan that identifies the potential location of utilities for that particular development area. The plan shall demonstrate that the service lines are appropriately sized and located. The utility master plan shall also include reuse water lines.

(7) **Policy:** Recognizing that SR 40 has had historic LOS issues from multi-jurisdictional sources and will continue to have such issues, further land use amendments or development orders by the

City within neighborhood V will demonstrate a commitment of the City, landowners, and developers to limit impacts (in the short term and long term) to the SR 40 link between Tymber Creek Road and Interstate 95. Such demonstration may include one or more of the following:

- Assisting in the funding of studies that plan for alternative corridors to relieve SR 40, particularly the Hand Avenue Extension
- Assisting in providing alternative corridors
- Requiring a land use mix that encourages trip capture
- Coordinating with VOTRAN ~~or~~ and other mass transit entities in processing development applications
- Requiring multi-modal design features in development design including bike lanes, pedestrian paths and/or bus stops
- The landowner and it successors in title agree to work cooperatively with the City during the development review process to assure that adequate sites for municipal services (e.g., fire, police, etc.) are appropriately located.

(8) Policy: The City shall continue to participate in intergovernmental coordination activities with FDOT, the MPO, Volusia County and/or the City of Ormond Beach and in subsequent planning of roadway improvements that may be associated with the development of neighborhood V. To contribute to the resolution of roadway capacity issues on SR 40 (which is not within the corporate limits of the City), the City shall not allow development within neighborhood V to proceed, beyond the development thresholds indicated in these policies until the two "reliever" roadways extending southward from SR 40 to LPGA Boulevard (Stagecoach Road and the southerly extension of Tymber Creek) are completed. These improvements are presently shown in the Volusia County 2025 Thoroughfare Map and in the City's Future Traffic Circulation Map. These improvements shall be shown in the City's Capital Improvements Program after 2015, and shall be funded per the terms of the Development Agreement dated December 28, 2005 between the land owner and Volusia County. These improvements may be advanced by earlier funding. In participation with FDOT and other willing partners, the City may further engage in or jointly fund planning activity with respect to extraterritorial alternate corridors that provide further relief to SR 40.

(9) Policy: In addition to the coordination required under Policy (8), the City shall provide information to Volusia County and FDOT in conjunction with its consideration of approval(s) of Planned Unit Development(s) within neighborhood V, as to the estimated timing of construction, anticipated timing of roadway improvements that will connect to State or County roads, and other proposed roadway improvements to be made or approved by the City that may affect the LOS on County and State roadways.

(10) Policy: No development orders shall be approved beyond 10,086 trips on the subject property unless either the Stagecoach Road or Tymber Creek Road extension from SR 40 to LPGA Blvd has been constructed. No development order shall be approved beyond 20,000 trips on the subject property unless both Stagecoach Road and Tymber Creek Road extensions have been constructed. The developer shall coordinate the construction of these roads with Votran to help facilitate stops.

(11) Policy: As referenced in the adopted development agreement between the applicant and Volusia County, executed on December 28, 2005, the applicant shall set aside sufficient rights-of-way for roadways and related retention areas for Tymber Creek Road, Hand Avenue, and Stagecoach Road.

(12) Policy: Prior to approval of any Planned Unit Development Master Plan, the applicant shall demonstrate the amount of development that may be accommodated without a shortfall in the ability of the City to serve the recreational/park needs of its residents. Any shortfall may be remedied by donation of land, payment of impact fees for recreational purposes, or the provision of such services by others. The applicant shall also provide a recreational/parks master plan that identifies the conceptual location for mini-parks and neighborhood parks prior to development in the area. The plan shall demonstrate that the acreage standards as well as facility standards, as identified by the City's Comprehensive Plan, are sufficient to accommodate the recreational needs of the residents in the area.

(13) Policy: To improve the protection of habitat and environmentally sensitive areas of the site, all development shall be required to connect to central water and sewer and reclaimed water. If reclaimed water is not currently available to a particular site, a suitable alternative will be determined by the City.

(14) Policy: Lands formerly within the Volusia County Environmental Systems Conservation (ESC) land use category shall be preserved through development techniques including requiring Planned Unit Development rezoning, smart growth techniques, cluster zoning and implementing the City's wetland regulations.

(15) Policy: To provide increased protection of ecologically sensitive lands (lands formerly within the NRMA and designated as ESC), these lands shall be designated in the City as Potentially Environmentally Significant (PES) and have their development rights extinguished except for those uses specifically permitted by the City's Comprehensive Plan.

(16) Policy: Lands with the PES land use category shall be maintained free of structures or other modification to the natural landscape, except for approved drainage conveyances, thoroughfare crossings, utility crossings, walkways, park benches and similar amenities for public use.

(17) Policy: Development applications shall be reviewed by the City to ensure that project design has specifically addressed clustering residential units and buildings to minimize impacts to wetlands, providing a variety of housing choices, encouraging compact development and providing a mix of land uses.

(18) Policy: An environmental upland buffer shall be utilized to protect the functional abilities of preserved wetlands. The landward extent of the buffer shall be consistent with the wetland buffer requirements of the St. Johns River Water Management District and or the USACOE.

(19) Policy: A fifty (50') foot Scenic setback shall be required along SR 40 (Granada Blvd.). The setback shall contain landscape planting in accordance with Article 16, Section 4 of the City of Daytona Beach Land Development Code or the article that is in place at the time of development approval.

(20) Policy: A minimum open space requirement of 25% of site uplands in the Low Intensity Urban (LIU) category shall be required. This shall include 10% of the site uplands in the form of a contiguous upland buffer along the western property line adjacent to the Tiger Bay State Forest. Land retained as open space shall be suitable for habitat protection.

(21) Policy: Development shall be required to use Florida Friendly landscaping.

(22) Policy: The design of stormwater treatment systems should ensure that the pre-development volume and natural fluctuation of runoff into wetlands are maintained. This shall be reviewed during site plan review to ensure compliance.

(23) Policy: Development applications shall be reviewed to ensure that they comply with the following Sustainable Neighborhood Guidelines:

- Community design shall encourage people to embrace alternative modes of transportation such as walking, bicycling and taking the bus. This shall be achieved through compact design, a mix of land uses, and as determined by the City, the provision of bike paths/lanes.
- Shade shall be provided in the form of tree canopy or man-made structures to promote walkability along arterials and collectors by providing relief from direct sunlight.
- Sidewalk connections will be provided between residential areas, retail centers and pubic destination points such as libraries, schools and parks.
- Safely lit sidewalks with physical separation from adjacent roadways (via curbing or otherwise adequate spatial separation) shall be provided to encourage night-time use.
- Lots shall be created so that driveways and buildings are located above the 100 year flood plain. If necessary, compensating storage shall be required to mitigate impacts to the floodplain.

EXHIBIT "B"

FUTURE LAND USE ELEMENT

NEIGHBORHOOD "V"

For property located on the south side of West International Speedway Boulevard and the north side of Interstate 4, approximately 900 feet east of the Interstate 4 ramp, changing the Future Land Use Map designation of 84± acres from Volusia County Environmental System Corridor (ESC) to City of Daytona Beach Potential Environmentally Significant (PES); of 80± acres from Volusia County Low Impact Urban (LIU) to Mixed Uses; and adding an issue with the following policies in the Neighborhood V section of the Future Land Use Element.

(n) **Issue:** As identified by Policy 2.2.7 of the Future Land Use Element, the 164-acre property with a parcel ID number of 04-16-32-00-00-0020 is located within a designated urban area of the City. Development of this area shall achieve efficient use of land and reduced infrastructure costs. The current density of one dwelling unit per gross acre is inconsistent with urban development patterns. The property shall be developed as a Planned Unit Development and be restricted by the following development standards.

(1) **Policy:** This property shall have a future land use designation of Mixed Use on 80 +/- acres with a PES on 84+/- acres of the site. The Mixed Use designation shall be limited to a maximum of 400,000 sq. ft. of non-residential and a maximum of 528 dwelling units. Development applications shall be reviewed to ensure that the proposed project design has: reasonably maximized the use of clustering of residential units and buildings to minimize impacts to wetlands, encouraged compact development and a mix of land uses and provided sidewalk connections between residential areas, retail centers and pubic destination points such as libraries, schools and parks when feasible.

(2) **Policy:** To provide increased protection of ecologically sensitive lands (lands formerly within the NRMA and designated as ESC), these lands shall be designated in the City as Potentially Environmentally Significant (PES) and have their development rights extinguished except for those uses specifically permitted by the City's Comprehensive Plan.

(3) **Policy**: Lands with the PES land use category shall be maintained free of structures or other modification to the natural landscape, except for approved drainage conveyances, thoroughfare crossings, utility crossings, walkways, park benches and similar amenities for public use.

(4) **Policy:** Lands within the former Environmental Systems (Conservation)(ESC) land use category and now City PES shall be preserved through development techniques including requiring Planned Unit Development rezoning, smart growth techniques, cluster zoning and implementing the City's wetland regulations.

(5) **Policy:** A minimum open space requirement of 25% of site uplands in the Low Intensity Urban (LIU) category shall be required. 10% of the required 25% shall be in the form of an upland buffer along the wetland jurisdictional line in the eastern portion of the property.

(6) **Policy:** The applicant shall demonstrate the amount of development that may be accommodated without a shortfall in the ability of the City to serve the recreational/park needs of its residents. Any shortfall may be remedied by donation of land, payment of impact fees for recreational purposes, or the provision of such services by others. The applicant shall also provide a recreational/parks master plan that identifies the conceptual location for mini-parks and neighborhood parks prior to development in the area. The plan shall demonstrate that the acreage standards as well as facility standards, as identified by the City's Comprehensive Plan, are sufficient to accommodate the recreational needs of the residents in the area.

(7) **Policy:** If necessary, the applicant will coordinate with the City of Daytona Beach to locate and provide a site for a fire station to serve future development.

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING
225 E Robinson Street, Suite 450, Orlando, FL 32801 P 407.540.0555 F 407.540.0550

MEMORANDUM

Date: April 14, 2011 Project #: 11508

To: Babuji Ambikapathy, P.E., AICP

CC: Lance Decuir , John Zielinski

From: Chris J. Walsh, P.E.

Project: SR 40 PD&E Study

Subject: Review of the SR 40 Design Traffic Technical Memorandum – Year 2035 CFRPM 5.0 Model Refinements

We have reviewed the SR 40 Design Traffic Technical Memorandum – Year 2035 CFRPM 5.0 Model Refinements, dated April 8, 2011 as prepared by GMB Engineers and Planners, Inc. and we offer the following comments:

1. The absorption rates appear to be high. Perhaps the existing LPGA development and Breakaway Trails should be reviewed to understand their historical absorption rates. Are Volusia County, Ormond Beach, and Daytona Beach comfortable with the rates?

2. Have the traffic analysis zones used to represent the developments been compared against master plans and/or analyses as conduced for these same developments in an effort to achieve proper network loading and appropriate allocation of uses within each development? Particular focus should be placed on those developments immediately adjacent to SR 40. As it relates to Consolidated Tomoka, TAZs 1805 and 1823 should be checked to see if they are representative of Consolidated Tomoka as they appear to be too far south. With that being said, Figure 2 should be revised to show the Consolidated Tomoka CPA boundary.

3. It is not entirely clear how decisions were made with regard to the modifications of socioeconomic within each Traffic Analysis Zone. Please provide clarification for this process whether it be specific comments on each TAZ or a general approach.

4. Within the Hunter's Ridge DRI, consideration should be given to extending Hunter's Ridge Boulevard from Stagecoach Road up to the Airport Road extension. Both the Hunter Ridge and Consolidated Tomoka developers have expressed a strong desire to construct this roadway. Additionally, the Hunter's Ridge DRI Development Order should be reviewed to determine if the extension of this facility is a condition of approval.

5. For the 2035 analysis the network should show SR 40 as six lanes from Breakaway Trails to Williamson Boulevard. Figure 2 shows it as a four lane facility between Breakaway Trails and Tymber Creek Road.

GMB ENGINEERS & PLANNERS, INC.

MEMORANDUM

Prepared For:	Florida Department of Transportation, District Five
To:	**Lance Decuir, P.E., Terry Rains**
Prepared By:	Babuji Ambikapathy, P.E., AICP, GMB Engineers & Planners, Inc.
Date:	April 08, 2011
Subject:	SR 40 Design Traffic Technical Memorandum – Year 2035 CFRPM 5.0 Model Refinements

Background

The Florida Department of Transportation (FDOT) District Five is conducting a Project Development and Environment (PD&E) study to evaluate possible alternative improvements to the SR 40 corridor from Breakaway Trail to Williamson Boulevard, the proposed extension of Hand Avenue from its existing western terminus to the west till Tymber Creek Road Extension and the Tymber Creek Road Extension to the south to LPGA Boulevard in Volusia County, Florida. GMB Engineers & Planners, Inc. (GMB) has been retained by the FDOT, to perform the Design Traffic Analysis to determine the impacts and assess the need for future capacity improvements on SR 40, Williamson Boulevard, LPGA Boulevard, Hand Avenue Extension and Tymber Creek Road Extension.

This Technical Memorandum, an important part of the Design Traffic Process for SR 40, was prepared to disseminate information to FDOT District 5, Volusia County, City of Daytona Beach and City of Ormond Beach ~~the~~ critical model refinements that were applied to the original/adopted ~~2035 Volusia County Travel Demand Forecasting Model (~~**C**entral **F**lorida **R**egional **P**lanning **M**odel, version 5.0~~)~~.

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Year 2035 Model Refinements

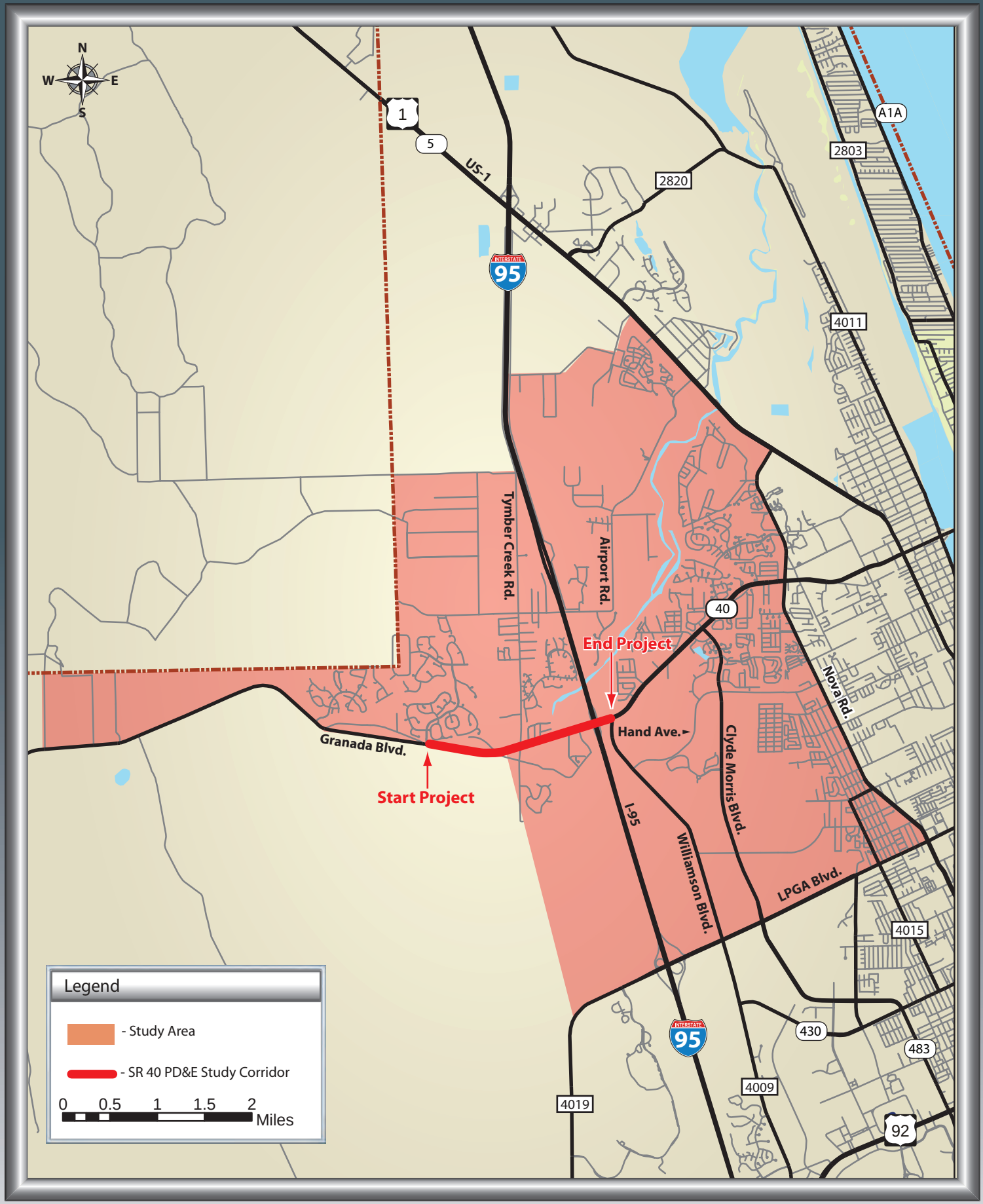
GMB conducted a reasonableness check of the 2035 model network within the project study area shown in **Figure 1**. In addition to carrying the validation adjustments from the year 2010 validated network, the socio-economic data (Zone Data) associated with the Development of Regional Impacts (DRIs) and Comprehensive Planned Amendments (CPAs) were reviewed to ascertain the latest approved land uses are included in the year 2035 CFRPM 5.0 network. The DRIs that were looked at in detail included Hunter's Ridge, Breakaway Trails, LPGA, and National Gardens, while the CPA's included Consolidated Tomoka Landing and Ormond Crossings.

Table 1 illustrates the Zone Data adjustments that were included in the refined 2035 model network to reflect the latest approved land uses for the DRIs and CPAs listed above. The supporting documentation that shows the latest approved land uses for the DRIs and CPAs in the vicinity of the study area is provided in the Appendix.

The following programmed / planned improvements were added to the 2035 CFRPM 5.0 network.

- **Williamson Boulevard from Dunn Avenue to LPGA Boulevard:** This section of Williamson Boulevard is currently being widened (under construction) to a four-lane roadway.
- **LPGA Boulevard from Jimmy Ann Drive to Old Kings Road:** This section of LPGA Boulevard has ROW funding (FY 11/12) for four-lane widening based on the latest Volusia County Five Year Road Program (FY 10/11 – FY 14/15).
- **Stage Coach Road** as a new two lane roadway between SR 40 and Tymber Creek Road.

The modified 2035 CFRPM 5.0 network along with the location of the DRIs and CPAs are shown in **Figure 2**.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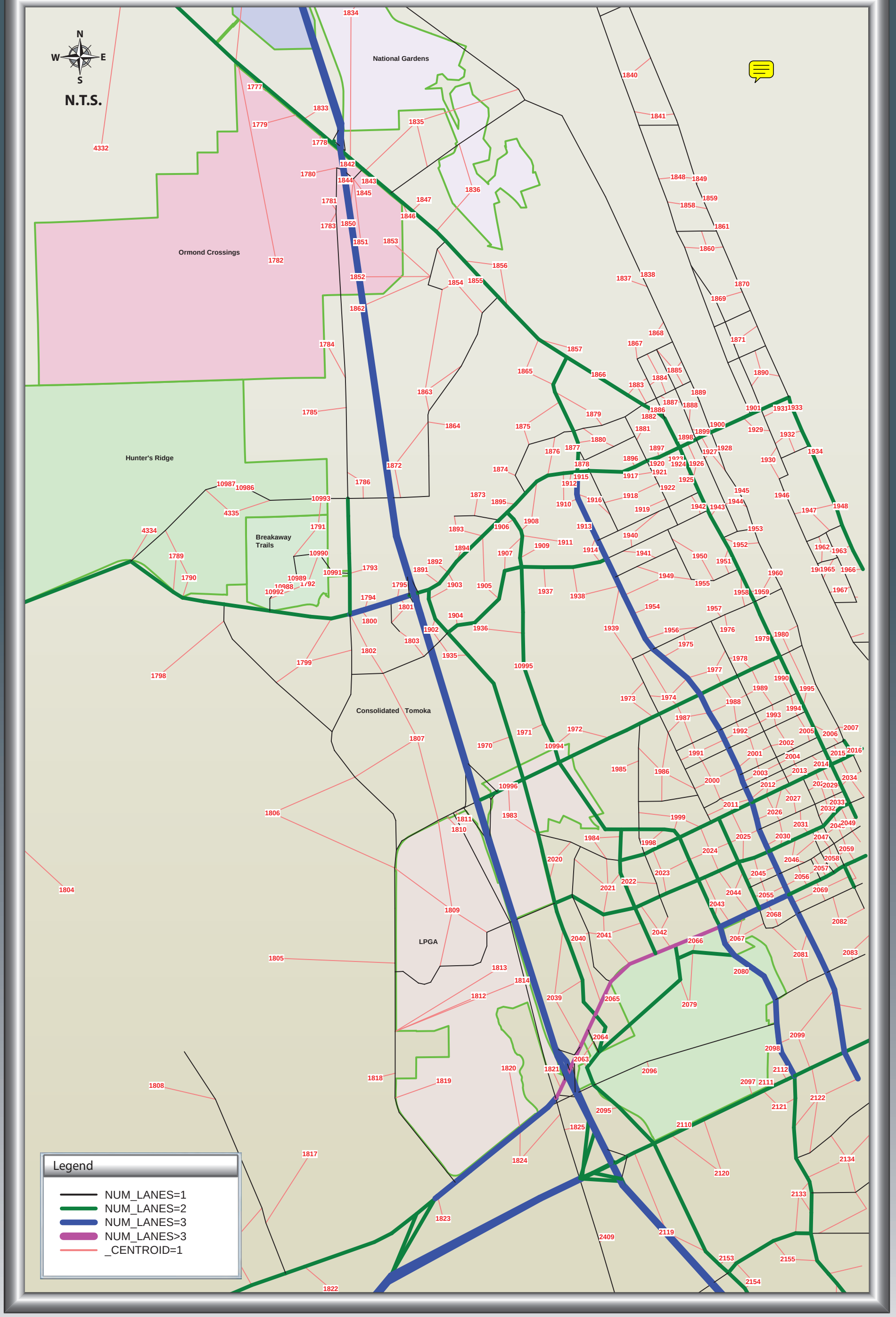
US-1
A1A
2803
2820
95
4011
Tymber Creek Rd.
Airport Rd.
40
End Project
Nova Rd.
Hand Ave.
Granada Blvd.
Start Project
I-95
Clyde Morris Blvd.
Williamson Blvd.
LPGA Blvd.
4015
430
483
4009
4019
92
Legend
- Study Area
- SR 40 PD&E Study Corridor
0 0.5 1 1.5 2
Miles

Table 1: Original & Modified Year 2035 Zone Data

DRI/CPA NAMES	CFRPM 5.0 TRAFFIC ZONES	Original 2035 Zone Data (CFRPM 5.0)								2035 Modified Zone Data (for SR 40 PD&E)							
		SF	MF	HOTEL	IND	COM	SER	TOTAL EMP	SCHOOL	SF	MF	HOTEL	IND	COM	SER	TOTAL EMP	SCHOOL
Ormond Crossings CPA	1777	38			270	240	1000	1510					130	85	1560	1775	
	1778			236		68	105	173				236		25	173	198	
	1779	258	272							295	295						
	1780		507			616		616		74	74			215		215	
	1781				313			313					130			130	
	1782	923	564						1878	1106	1106						720
	1783				328	33		361					130			130	
	1842					60	28	88						25	40	65	
	1843	2			17	20	65	102					17	20	107	144	
	1844				300			300					130			130	
	1845				360		1	361					130		3	133	
	1850				93			93					80			80	
	1851				1132		11	1143					473		20	493	
	1852				2315		1	2316					1000		3	1003	
	1853				999	383	1570	2952					420	130	2426	2976	
2035 TOTAL		**1221**	**1343**	**236**	**6127**	**1420**	**2781**	**10328**	**1878**	**1475**	**1475**	**236**	**2640**	**500**	**4332**	**7472**	**720**
LPGA DRI	1809	524	197		35	22	541	598		2317			270	95	1236	1601	
	1810				84	429	76	589					620	2145	124	2889	
	1811				1	38		39					10	190		200	
	1812	116								512							
	1813	16			12			12		75			120			120	
	1814				45			45					360			360	
	1983	9	362		306	120	3808	4234		15	933		2380	620	8531	11531	
	1984	19	1264	491	98	343	1130	1572	831	90	2076	985	750	1716	2473	4939	831
2035 TOTAL		**684**	**1823**	**491**	**581**	**952**	**5555**	**7089**	**831**	**3009**	**3009**	**985**	**4510**	**4766**	**12364**	**21640**	**831**
Breakaway Trails DRI	1791	807			38	13	102	153	725	807			38	13	102	153	725
	1792	362			53	104	62	219		362			53	104	62	219	
2035 TOTAL		**1169**	**0**	**0**	**91**	**117**	**164**	**372**	**725**	**1169**	**0**	**0**	**91**	**117**	**164**	**372**	**725**
Hunter's Ridge DRI	1789	164					5	5		1200					7	7	
	1790	177				4	8	12		1288				21	10	31	
	4334	45	94		24	72	893	989	1101	322	976		350	382	1235	1967	1300
	4335	15	23		6	25	224	255		119	244		88	135	312	535	
2035 TOTAL		**401**	**117**	**0**	**30**	**101**	**1130**	**1261**	**1101**	**2929**	**1220**	**0**	**438**	**538**	**1564**	**2540**	**1300**
National Gardens DRI	1834	138		75	11	62	8	81		550		75	11	62	8	81	
	1835	223			49	163	85	297		865			49	163	85	297	
	1836	658			10	2	6	18		2515			10	2	6	18	
2035 TOTAL		**1019**	**0**	**75**	**70**	**227**	**99**	**396**	**0**	**3930**	**0**	**75**	**70**	**227**	**99**	**396**	**0**
Consolidated Tomoka Landing CPA	1798	373								686				4137		4137	
	1799	460			3		69	72	149	838			3	2069	69	2141	149
	1803	1								25				827		827	
	1805	543			3		35	38		990			3	827	35	865	
	1806								736					414		414	736
	1823		476	323		126	508	634		528	476	323		1000	508	1508	
	1811				1	38		39					714	38		752	
2035 TOTAL		**1377**	**476**	**323**	**7**	**164**	**612**	**783**	**885**	**3067**	**476**	**323**	**720**	**9312**	**612**	**10644**	**885**
Total for All Review DRIs/CPAs		**5,871**	**3,759**	**1,125**	**6,906**	**2,981**	**10,341**	**20,229**	**5,420**	**15,579**	**6,180**	**1,619**	**8,469**	**15,460**	**19,135**	**43,064**	**4,461**



Prepared For: FDOT District Five
Prepared By: GMB Engineers & Planners, Inc.

SR 40 Design Traffic Technical Memorandum

Figure 2
2035 Network and DRI / Other Developments around the Study Area
Page 5

Appendix K

Year 2035 Roadway Alternatives Analysis Memorandum

DRAFT MEMORANDUM

Prepared For:	Florida Department of Transportation, District Five
To:	**Lance Decuir, P.E., Terry Rains**
Prepared By:	Babuji Ambikapathy, P.E., AICP, GMB Engineers & Planners, Inc.
Date:	**May 17, 2011**
Subject:	SR 40 Design Traffic Technical Memorandum – Year 2035 Roadway Alternatives Analysis

Introduction

The Florida Department of Transportation (FDOT) District Five is conducting a Project Development and Environment (PD&E) study to evaluate possible alternative improvements to the SR 40 corridor from Breakaway Trail to Williamson Boulevard, including the proposed extension of Hand Avenue from Williamson Boulevard to Tymber Creek Road Extension and Tymber Creek Road Extension from SR 40 to LPGA Boulevard in Volusia County, Florida. GMB Engineers & Planners, Inc. (GMB) has been retained by the FDOT, to perform the Design Traffic Analysis to determine the impacts and assess the need for future capacity improvements on SR 40, Williamson Boulevard, LPGA Boulevard, Hand Avenue Extension and Tymber Creek Road Extension.

This technical memorandum, an important part of the Design Traffic Process for SR 40, was prepared to disseminate information to FDOT District 5, Volusia County, City of Daytona Beach and City of Ormond Beach on the preliminary Future Year 2035 Roadway Build Alternative Analysis. As described in the Project Scope of Services, a total of seven (7) future alternatives were selected for the preliminary screening. These seven (7) Build alternatives were tested using the revised Year 2035 CFRPM 5.0 model that was developed as part of the process documented in the Final Memorandum **"SR 40 Design Traffic Technical Memorandum – Year 2035 - CFRPM 5.0 Model Refinements, dated April 19, 2011" (Model Refinements Memorandum).**

The ultimate intention is to select three (3) final Build alternatives, which would provide the most benefit in terms of relieving the SR 40 corridor. SR 40 Corridor from Breakaway Trail to Williamson Boulevard is the primary focus area of the study. For the purposes of this memorandum, the primary study area is expanded to include the following surrounding roadway facilities and the corresponding segments.

- SR 40 from Breakaway Trail to Williamson Boulevard
  - Breakaway Trail to Tymber Creek Road
  - Tymber Creek Road to I-95 NB Ramps
  - I-95 NB Ramps to Williamson Boulevard
  - East of Williamson Boulevard
- Hand Avenue/Hand Avenue Extension from East of Williamson Boulevard to Tymber Creek Road Extension.
  - East of Williamson Boulevard
  - Williamson Boulevard to Tymber Creek Road Extension
- Tymber Creek Road/ Tymber Creek Road Extension from Tymber Run to LPGA Boulevard
  - Tymber Run to SR 40
  - SR 40 to Hand Avenue Extension
  - Hand Avenue Extension to Stage Coach Road
  - Stage Coach Road to LPGA Boulevard
- Williamson Boulevard from SR 40 to south of LPGA Boulevard
  - SR 40 to Hand Avenue
  - Hand Avenue to LPGA Boulevard
- LPGA Boulevard from east of Williamson Boulevard to Tymber Creek Road Extension.
  - East of Williamson Boulevard
  - Williamson Boulevard to I-95 NB Ramps
  - I-95 NB Ramps to Tomoka Farms Road
  - West of Tomoka Farms Road
- Hunters Ridge Boulevard north of SR 40
- Stage Coach Road from SR 40 to Tymber Creek Road Extension

Preliminary Screening of Year 2035 Build Alternatives

The screening process compared the anticipated benefits offered by each Build Alternative in relieving the SR 40 study corridor. The following Build Alternatives went through the preliminary screening process using the revised CFRPM 5.0 Model.

- **Alternative 1:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes)
- **Alternative 2:** Hand Avenue Extension (2 lanes) from Williamson Boulevard to Tymber Creek Road (2 lanes)
- **Alternative 3:** Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Boulevard.
- **Alternative 4:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes) and Hand Avenue Extension (2 lanes) from Williamson Boulevard to Tymber Creek Road (2 lanes)
- **Alternative 5:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Boulevard.
- **Alternative 6:** Hand Avenue Extension (2 lanes) from Williamson Boulevard to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Boulevard.
- **Alternative 7:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes), Hand Avenue Extension (2 lanes) from Williamson Boulevard to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Boulevard.

The main intention of this screening process is not establish future operating conditions of the study roadway segments, but to identify the relative effect of other roadway improvements on the SR 40 Corridor.

As the first step, the model volumes for each of the seven (7) alternatives were compared against the adopted capacities at the corresponding adopted Levels of Service (LOS) to determine the Volume to Capacity (V/C) ratio. This step essentially shows how the anticipated demand compares to the future adopted roadway capacities. The adopted capacities and LOS standards were obtained from the Volusia County's 2009 AADT Count Sheet.

A MOCF (Model Output Conversion Factor) value of 0.95 (source: 2010 FDOT Traffic CD) was utilized to convert the model volumes (Peak Season Weekday Average Daily Traffic - PSWADT) to AADT volumes. The year 2035 CFRPM Model Plots illustrating the roadway network and total two-way volumes for each of the seven (7) alternatives are provided in **Appendix A** of this memorandum. The tables illustrating the implementation of step 1 for each of the seven (7) Build alternatives are included in **Appendix B** of this memorandum.

Then, as the second step, a descending ordinal ranking was given to each of the roadway sub-segments based on the V/C percentages. Finally, in the third step, the ranking for each roadway facility was determined by adding the individual roadway segment rankings. The implementation of steps 2 and 3 are illustrated in **Table 1**. As shown in **Table 1**, Alternatives 7, 4, and 5 take up the first three ranking spots in the ordinal ranking of the SR 40 Corridor between Breakaway Trail and Williamson Boulevard. The ranking indirectly shows that Alternatives 7, 4 and 5 show the maximum benefit to the SR 40 Corridor in terms of the future capacity issues.

The other interesting point to note is that Alternatives 7, 5 and 6 occupy the first three (3) spots in the ordinal ranking of the system-wide roadway facilities. This shows that Alternative 6 is anticipated to distribute the system-wide network traffic better compared to Alternative 4. Nonetheless, since the primary focus is providing relief to the SR 40 Corridor, the ordinal ranking for this facility only was considered for the purposes of this study.

Table 1: Future Roadway Alternative Analysis - Capacity Comparison/Ranking

Roadway	Limits	Alternative #							Alternative #						
		1	2	3	4	5	6	7	1	2	3	4	5	6	7
		% of Capacity							Descending Ordinal Rank						
SR 40	Breakaway Tr to Tymber Creek Rd	98%	137%	123%	98%	89%	124%	89%	4	1	3	4	7	2	6
	Tymber Creek Rd to I-95 NB Ramps	167%	178%	139%	144%	157%	169%	137%	3	1	6	5	4	2	7
	I-95 NB Ramps to Williamson Blvd	167%	114%	139%	144%	157%	108%	137%	1	6	4	3	2	7	5
	East of Williamson Blvd	124%	136%	159%	107%	123%	135%	112%	4	2	1	7	5	3	6
							Sum of Ranks of Facility: SR 40		12	10	14	19	18	14	24
							SR 40 Final Rank		6	7	4	2	3	4	1
Williamson Blvd	SR 40 to Hand Ave	112%	83%	96%	97%	113%	83%	102%	2	6	5	4	1	6	3
	Hand Ave to LPGA Blvd	97%	98%	88%	99%	91%	91%	95%	3	2	7	1	5	6	4
	South of LPGA Blvd	90%	90%	83%	90%	87%	85%	87%	2	2	7	1	4	6	4
							Sum of Ranks of Facility: Williamson Blvd		7	10	19	6	10	18	11
Hand Ave	East of Williamson Blvd	62%	82%	63%	82%	71%	81%	81%	7	2	6	1	5	3	3
	Williamson Blvd to Tymber Creek Rd Ext	0%	142%	0%	116%	0%	127%	96%	0	1	0	3	0	2	4
							Sum of Ranks of Facility: Hand Ave		7	3	6	4	5	5	7
LPGA Blvd	West of Tomoka Farms Rd	176%	171%	184%	172%	169%	171%	150%	2	4	1	3	6	4	7
	Tomoka Farms Rd to I-95 NB Ramps	93%	93%	92%	93%	86%	87%	80%	1	1	4	1	6	5	7
	I-95 NB Ramps to Williamson Blvd	132%	129%	134%	127%	131%	128%	118%	2	4	1	6	3	5	7
	East of Williamson Blvd	140%	137%	140%	135%	140%	140%	132%	2	5	1	6	2	2	7
							Sum of Ranks of Facility: LPGA Blvd		7	14	7	16	17	16	28
Tymber Creek Rd/Extension	Tymber Run to SR 40	66%	66%	68%	72%	71%	69%	75%	6	7	5	2	3	4	1
	SR 40 to Hand Ave Ext	3%	107%	43%	86%	48%	124%	99%	7	2	6	4	5	1	3
	Hand Ave Ext to Stage Coach Rd	0%	0%	43%	0%	48%	38%	44%	0	0	3	0	1	4	2
	Stage Coach Rd to LPGA Blvd	0%	0%	124%	0%	113%	108%	99%	0	0	1	0	2	3	4
							Sum of Ranks of Facility: Tymber Creek Rd		13	9	15	6	11	12	10
Hunters Ridge Blvd/Stage Coach Rd	North of SR 40	25%	25%	19%	28%	31%	30%	33%	5	5	7	4	2	3	1
	SR 40 to Tymber Creek Rd	50%	43%	80%	53%	71%	80%	63%	6	7	1	5	3	1	4
							Sum of Ranks Facility: Hunters Ridge Blvd/Stage Coach Rd		11	12	8	9	5	4	5
							Sum of Ranks of All Roadway Facilities		57	58	69	60	66	69	85
							Systemwide Final Rank		7	6	2	5	4	2	1

Notes:

1. SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes)
2. Hand Avenue Extension (2 lanes) from Williamson Blvd to Tymber Creek Road (2 lanes)
3. Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Blvd
4. SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes) and Hand Avenue Extension (2 lanes) from Williamson Blvd to Tymber Creek Road (2 lanes)
5. SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Blvd
6. Hand Avenue Extension (2 lanes) from Williamson Blvd to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Blvd
7. SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes), Hand Avenue Extension (2 lanes) from Williamson Blvd to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Blvd
8. Descending Ordinal Ranking is based on the % of Capacity Values. The lower the values, the higher the rank

Conclusions

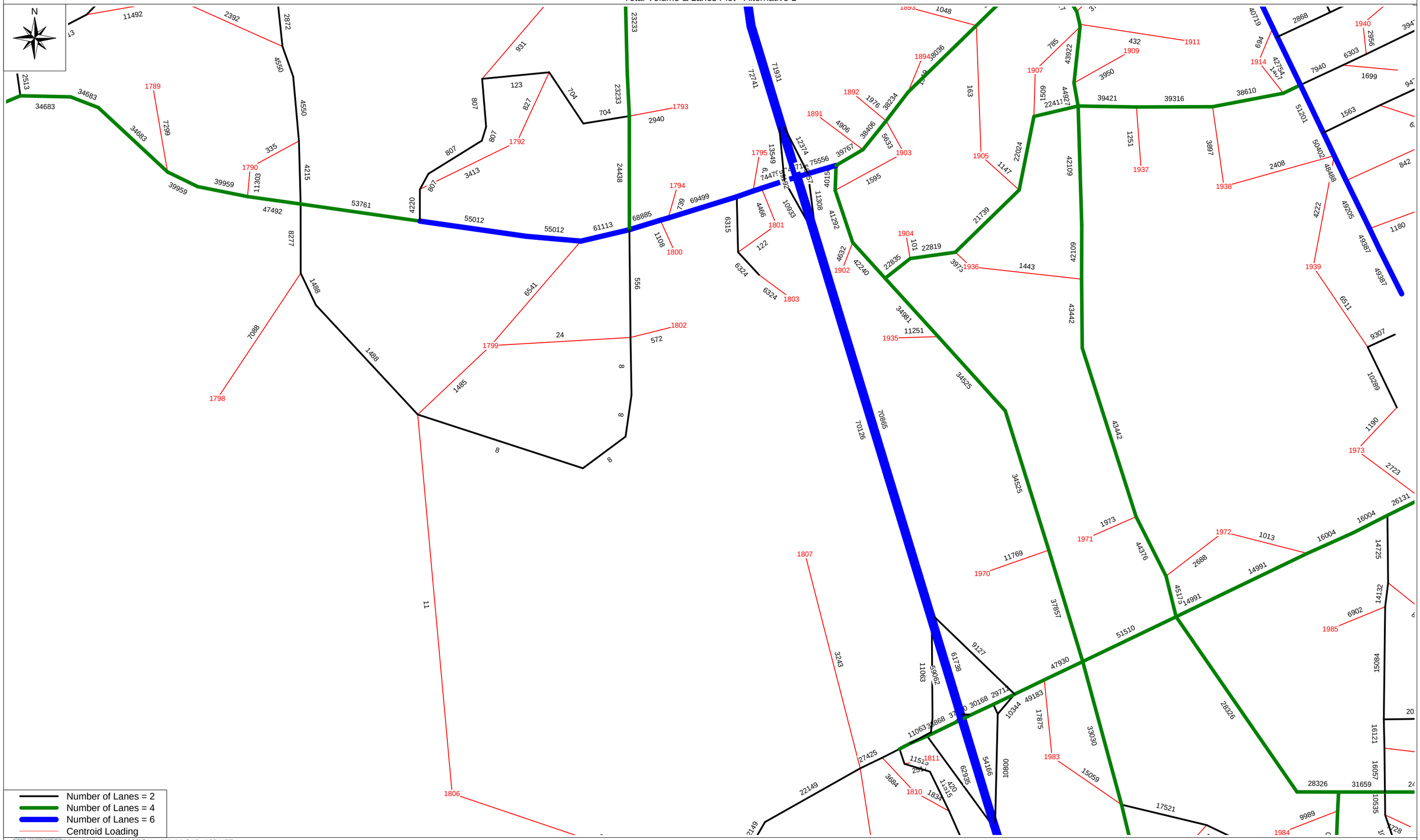
Based on the ordinal ranking procedure of the volume over capacity values for each of the seven (7) Build alternatives considered for this study, Alternatives 7, 4, and 5 provide the maximum benefit to the SR 40 Corridor in terms of relieving the future congestion. Therefore, these future Build alternatives will be considered for the next stage (developing Future Traffic Forecasts, performing Multi-Modal LOS analysis and recommending Roadway/ Intersection Improvements & queue lengths) in the SR 40 Design Traffic Process. The Build Alternatives 7, 4 and 5 are explained below. The roadway network (including number of lanes and two-way volumes) for these Build alternatives is shown in **Appendix A** of Memorandum.

- **Alternative 4:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes) and Hand Avenue Extension (2 lanes) from Williamson Blvd to Tymber Creek Road (2 lanes)
- **Alternative 5:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Blvd.
- **Alternative 7:** SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes), Hand Avenue Extension (2 lanes) from Williamson Blvd to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Blvd.

Appendix A

Year 2035 Model Plots

SR 40 Design Traffic Technical Memorandum
Future Year 2035 Roadway Alternative Analysis
Total Volume & Lanes Plot - Alternative 1



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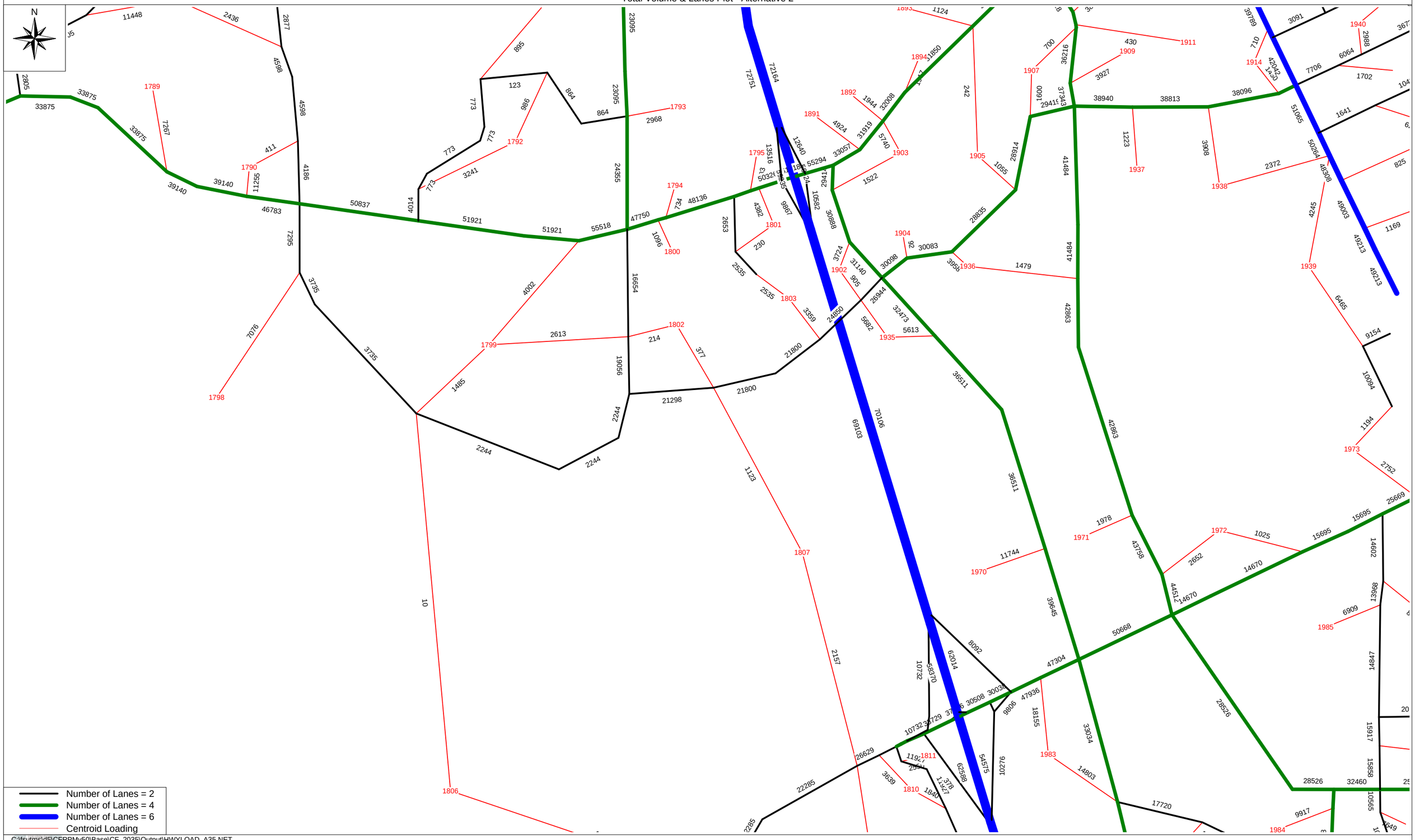
SR 40 Design Traffic Technical Memorandum
Future Year 2035 Roadway Alternative Analysis
Total Volume & Lanes Plot - Alternative 2



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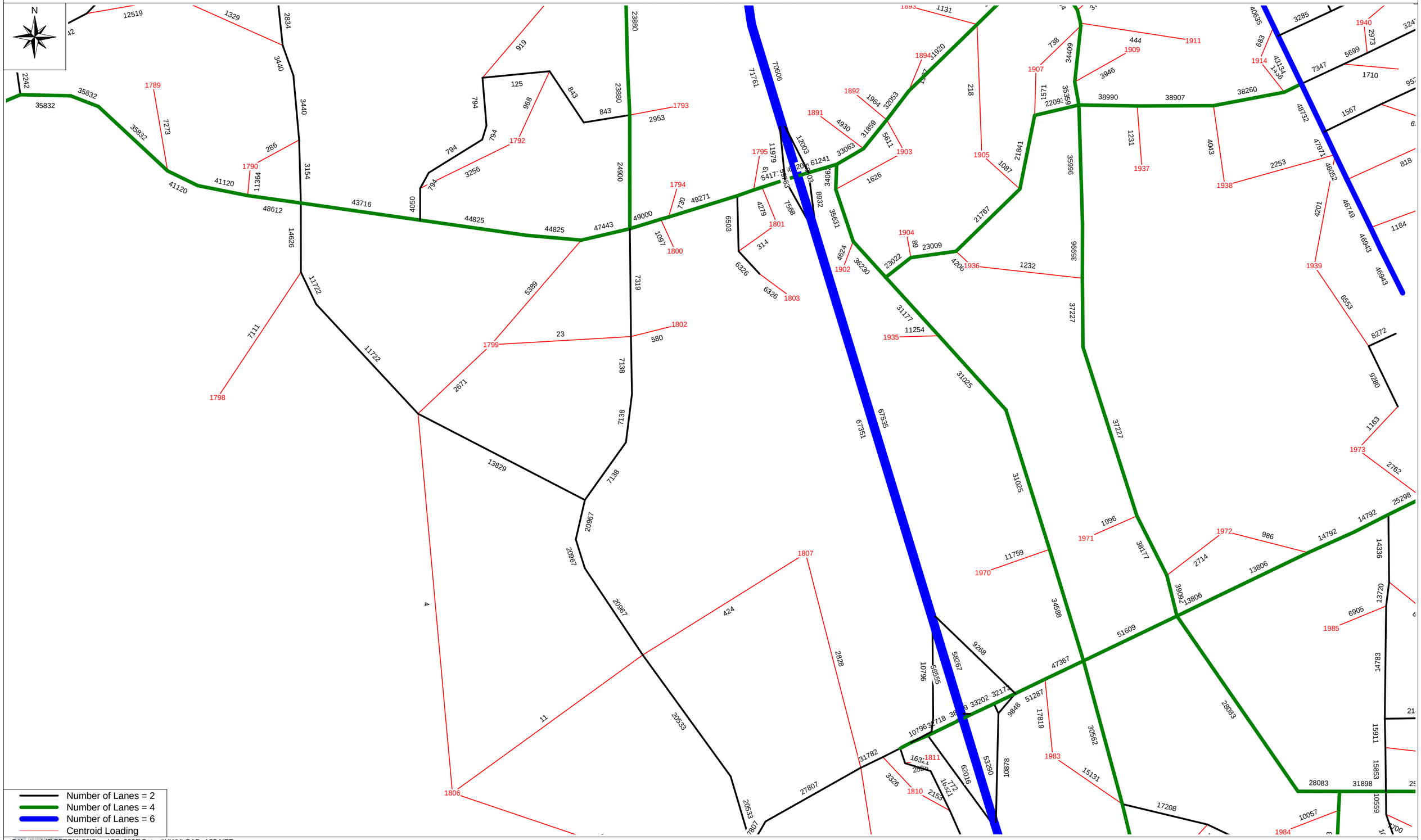
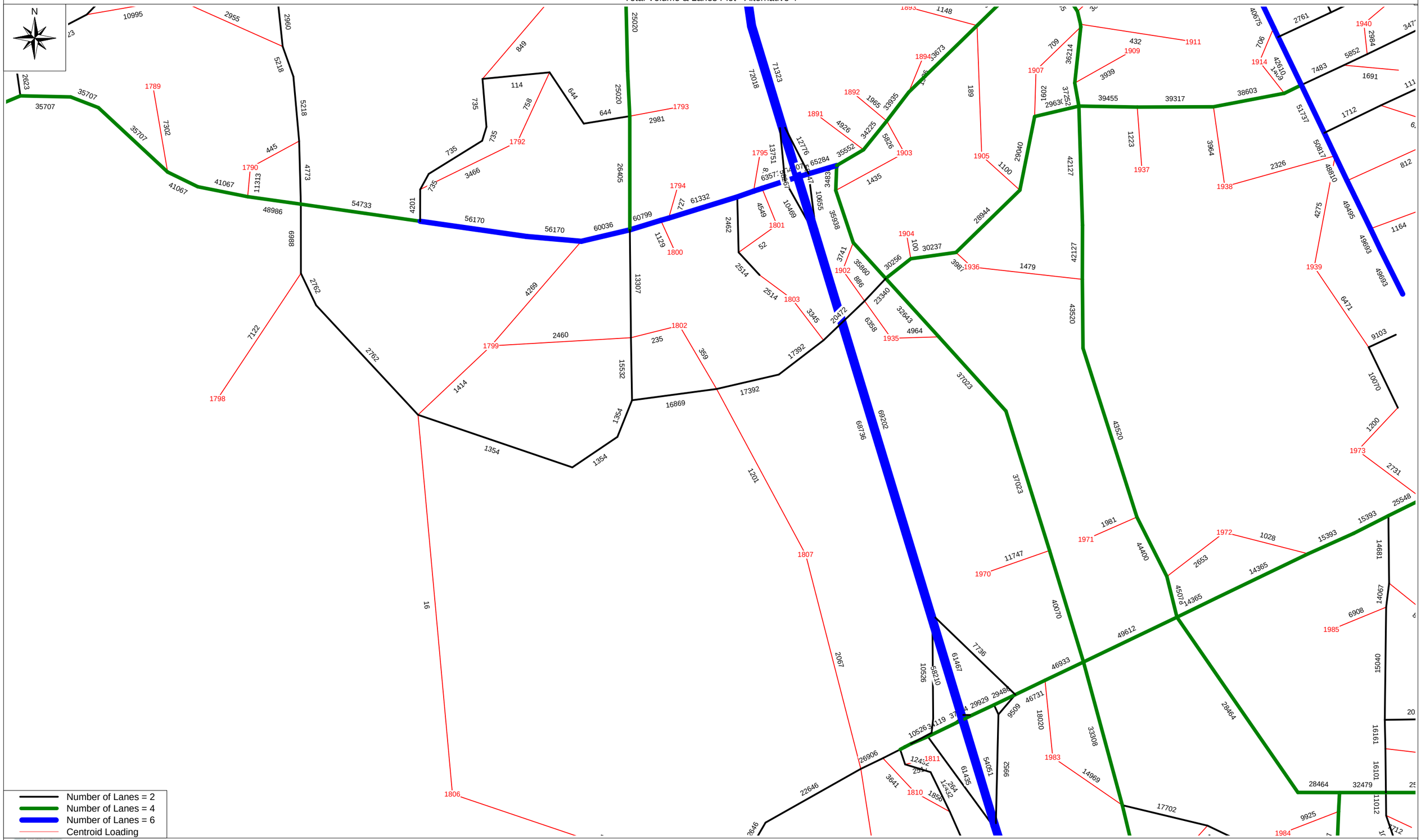
SR 40 Design Traffic Technical Memorandum
Future Year 2035 Roadway Alternative Analysis
Total Volume & Lanes Plot - Alternative 3



SR 40 Design Traffic Technical Memorandum
Future Year 2035 Roadway Alternative Analysis
Total Volume & Lanes Plot - Alternative 4



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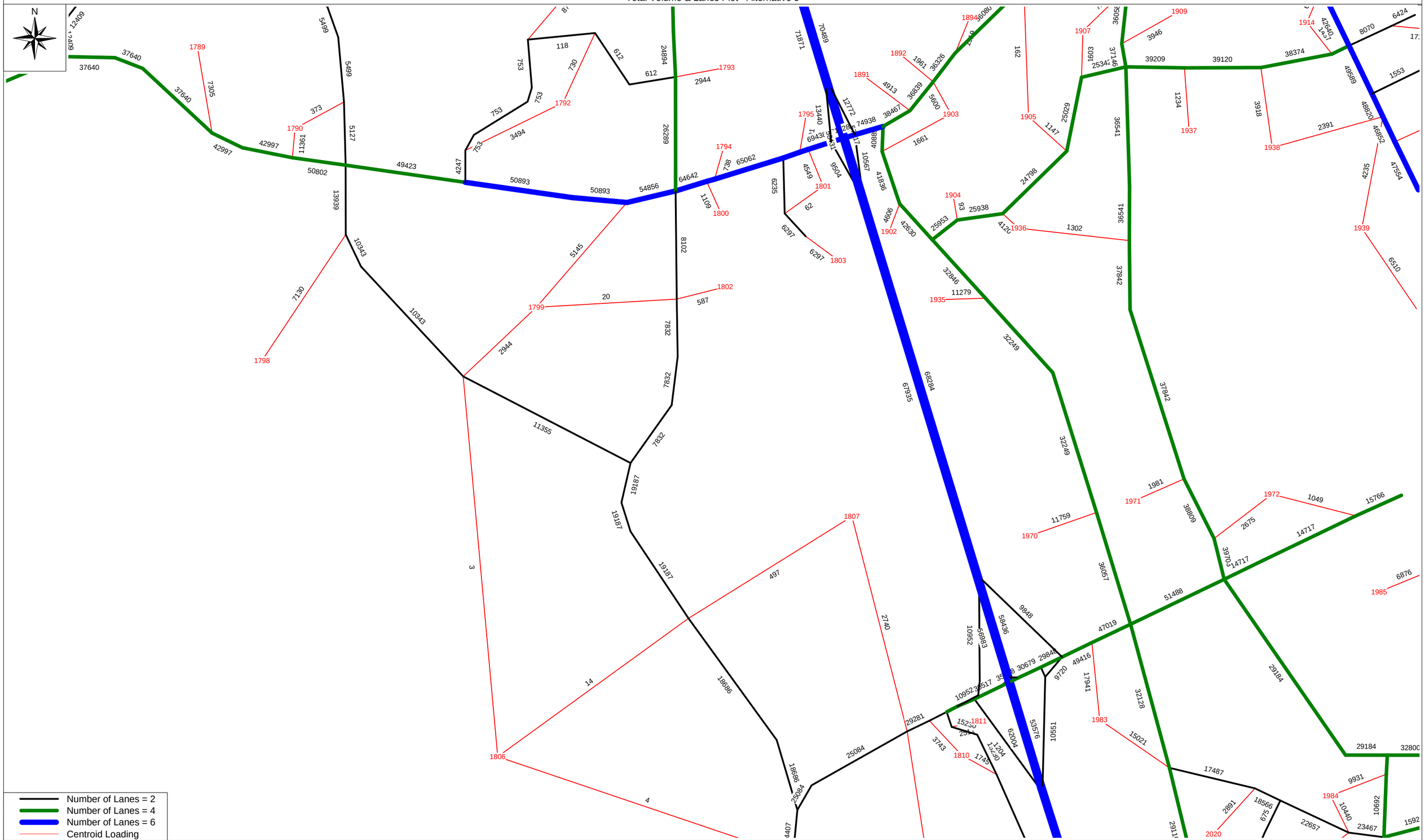
SR 40 Design Traffic Technical Memorandum
Future Year 2035 Roadway Alternative Analysis
Total Volume & Lanes Plot - Alternative 5



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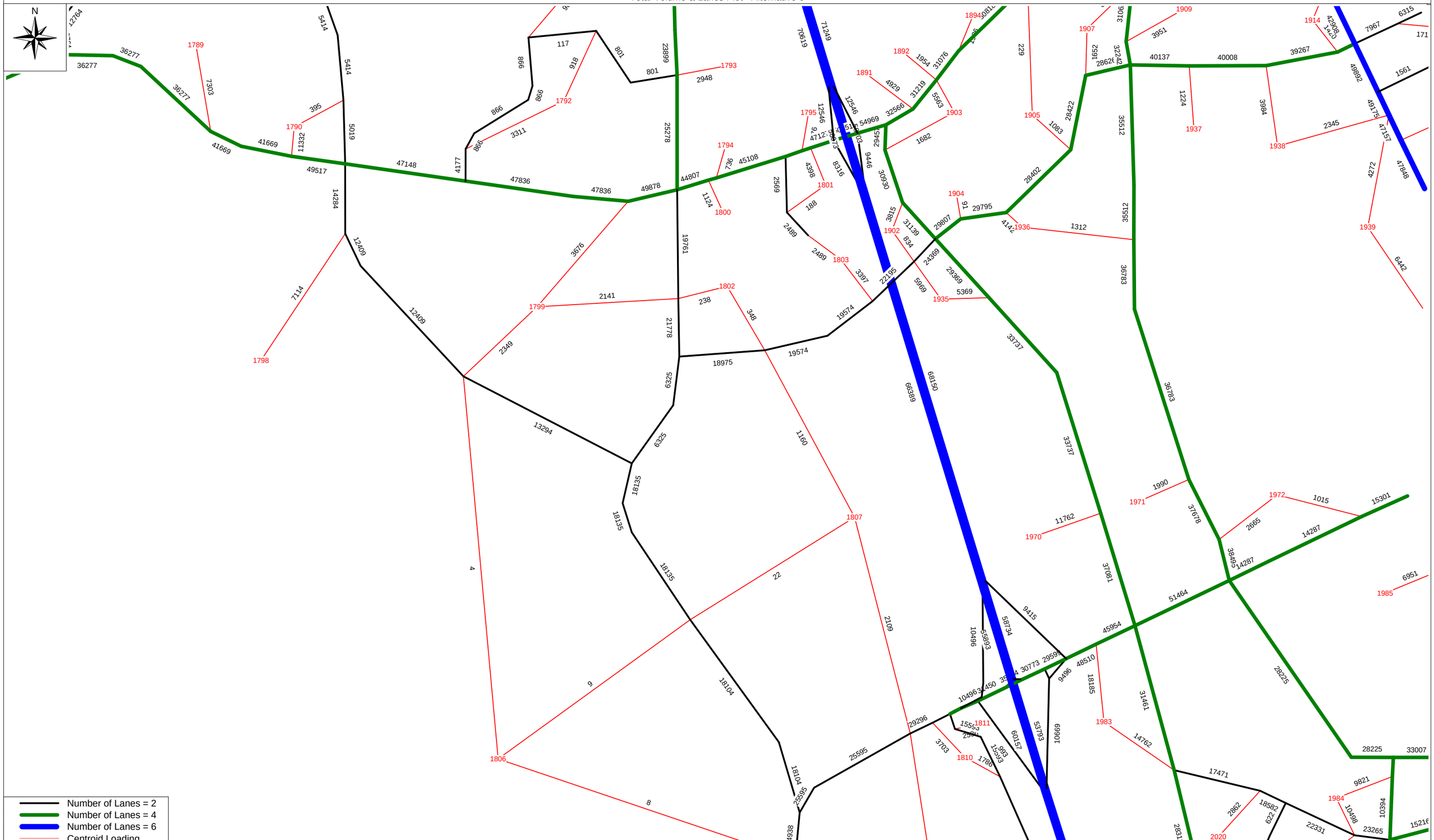
SR 40 Design Traffic Technical Memorandum
Future Year 2035 Roadway Alternative Analysis
Total Volume & Lanes Plot - Alternative 6



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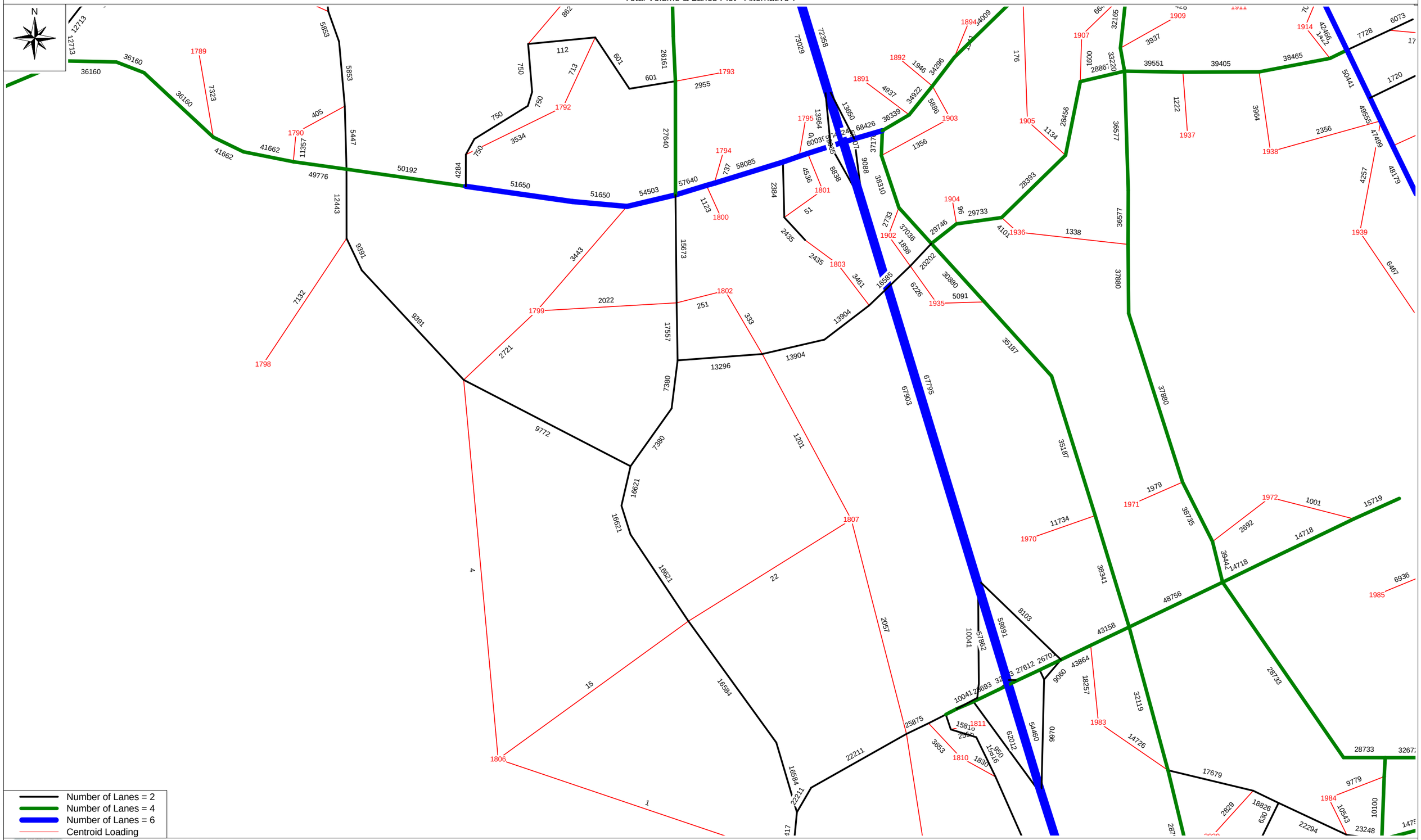
SR 40 Design Traffic Technical Memorandum
Future Year 2035 Roadway Alternative Analysis
Total Volume & Lanes Plot - Alternative 7



Appendix B

Future Capacity Analysis Tables

Year 2035 Roadway Capacity Analysis

Roadway	Limits	Existing Lanes	2035 Lanes	Adopted LOS Standard	2035 Capacity[3]	Alternative-1		
						Model Volume	AADT[2]	% of Capacity
SR 40	Breakaway Tr to Tymber Creek Rd	4	6	C	56,390	58,063	55,200	98%
	Tymber Creek Rd to I-95 NB Ramps	4	6	C	40,950	71,943	68,300	167%
	I-95 NB Ramps to Williamson Blvd	4	6	D	58,070	75,556	71,800	124%
	East of Williamson Blvd	4	4	D	38,540	39,767	37,800	98%
Williamson Blvd	SR 40 to Hand Ave	4	4	E	35,010	41,227	39,200	112%
	Hand Ave to LPGA Blvd	2	4	E	35,010	35,788	34,000	97%
	South of LPGA Blvd	2	4	E	35,010	33,030	31,400	90%
Hand Ave	East of Williamson Blvd	2	4	E	35,010	22,835	21,700	62%
LPGA Blvd	West of Tomoka Farms Rd	2	2	E	15,890	29,362	27,900	176%
	Tomoka Farms Rd to I-95 NB Ramps	4	4	E	35,010	34,058	32,400	93%
	I-95 NB Ramps to Williamson Blvd	4	4	E	35,010	48,557	46,100	132%
	East of Williamson Blvd	4	4	E	35,010	51,510	48,900	140%
Tymber Creek Rd	Tymber Run to SR 40	2	4	E	35,010	24,438	23,200	66%
Stage Coach Rd/Hunter's Ridge Rd	North of SR 40	-	2	E	15,890	4,215	4,000	25%
	SR 40 to Tymber Creek Rd	-	2	E	15,890	8,277	7,900	50%

Notes:
1. Alternative 1: SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes)
2. AADT = Model Volume * MOCF. A MOCF of 0.95 from the 2010 FDOT Traffic CD was used.
3. Year 2035 Capacities at the Adopted LOS & the Adopted LOS Standard were obtained from the Volusia County's 2009 AADT Count Sheet.

Year 2035 Roadway Capacity Analysis

Roadway	Limits	Existing Lanes	2035 Lanes	Adopted LOS Standard	2035 Capacity[3]	Alternative-2		
						Model Volume	AADT[2]	% of Capacity
SR 40	Breakaway Tr to Tymber Creek Rd	4	4	C	37,280	53,720	51,000	137%
	Tymber Creek Rd to I-95 NB Ramps	4	4	C	26,250	49,021	46,600	178%
	I-95 NB Ramps to Williamson Blvd	4	4	D	38,540	55,294	52,500	136%
	East of Williamson Blvd	4	4	D	38,540	33,057	31,400	81%
Williamson Blvd	SR 40 to Hand Ave	4	4	E	35,010	30,481	29,000	83%
	Hand Ave to LPGA Blvd	2	4	E	35,010	36,210	34,400	98%
	South of LPGA Blvd	2	4	E	35,010	33,034	31,400	90%
Hand Ave	East of Williamson Blvd	2	4	E	35,010	30,098	28,600	82%
	Williamson Blvd to Tymber Creek Rd Ext	-	2	E	15,890	23,723	22,500	142%
LPGA Blvd	West of Tomoka Farms Rd	2	2	E	15,890	28,540	27,100	171%
	Tomoka Farms Rd to I-95 NB Ramps	4	4	E	35,010	34,155	32,400	93%
	I-95 NB Ramps to Williamson Blvd	4	4	E	35,010	47,620	45,200	129%
	East of Williamson Blvd	4	4	E	35,010	50,668	48,100	137%
Tymber Creek Rd	Tymber Run to SR 40	2	4	E	35,010	24,355	23,100	66%
	SR 40 to Hand Ave Ext	-	2	E	15,890	17,855	17,000	107%
Stage Coach Rd/Hunter's Ridge Rd	North of SR 40	-	2	E	15,890	4,186	4,000	25%
	SR 40 to Tymber Creek Rd	-	2	E	15,890	7,295	6,900	43%

Notes:
1. Alternative 2 - Hand Avenue Extension (2 lanes) from Williamson Blvd to Tymber Creek Road (2 lanes)
2. AADT = Model Volume * MOCF. A MOCF of 0.95 from the 2010 FDOT Traffic CD was used.
3. Year 2035 Capacities at the Adopted LOS & the Adopted LOS Standard were obtained from the Volusia County's 2009 AADT Count Sheet.

Year 2035 Roadway Capacity Analysis

Roadway	Limits	Existing Lanes	2035 Lanes	Adopted LOS Standard	2035 Capacity[3]	Alternative-3		
						Model Volume	AADT[2]	% of Capacity
SR 40	Breakaway Tr to Tymber Creek Rd	4	4	C	37,280	46,134	43,800	123%
	Tymber Creek Rd to I-95 NB Ramps	4	4	C	26,250	51,965	49,400	139%
	I-95 NB Ramps to Williamson Blvd	4	4	D	38,540	61,241	58,200	159%
	East of Williamson Blvd	4	4	D	38,540	33,063	31,400	81%
Williamson Blvd	SR 40 to Hand Ave	4	4	E	35,010	35,308	33,500	96%
	Hand Ave to LPGA Blvd	2	4	E	35,010	32,263	30,700	88%
	South of LPGA Blvd	2	4	E	35,010	30,562	29,000	83%
Hand Ave	East of Williamson Blvd	2	4	E	35,010	23,022	21,900	63%
LPGA Blvd	West of Tomoka Farms Rd	2	2	E	15,890	30,815	29,300	184%
	Tomoka Farms Rd to I-95 NB Ramps	4	4	E	35,010	33,864	32,200	92%
	I-95 NB Ramps to Williamson Blvd	4	4	E	35,010	49,327	46,900	134%
	East of Williamson Blvd	4	4	E	35,010	51,609	49,000	140%
Tymber Creek Rd	Tymber Run to SR 40	2	4	E	35,010	24,900	23,700	68%
	SR 40 to Hand Ave	-	2	E	15,890	7,229	6,900	43%
	Hand Ave to Stage Coach Rd	-	2	E	15,890	7,229	6,900	43%
	Stage Coach Rd to LPGA Blvd	-	2	E	15,890	20,750	19,700	124%
Stage Coach Rd/Hunter's Ridge Rd	North of SR 40	-	2	E	15,890	3,154	3,000	19%
	SR 40 to Tymber Creek Rd Ext	-	2	E	15,890	13,392	12,700	80%

Notes:
1. Alternative 3 - Tymber Creek Road Extension (4 lanes) from SR 40 to LPGA Blvd.
2. AADT = Model Volume * MOCF. A MOCF of 0.95 from the 2010 FDOT Traffic CD was used.
3. Year 2035 Capacities at the Adopted LOS & the Adopted LOS Standard were obtained from the Volusia County's 2009 AADT Count Sheet.

Year 2035 Roadway Capacity Analysis

Roadway	Limits	Existing Lanes	2035 Lanes	Adopted LOS Standard	2035 Capacity[3]	Alternative-4		
						Model Volume	AADT[2]	% of Capacity
SR 40	Breakaway Tr to Tymber Creek Rd	4	6	C	56,390	58,103	55,200	98%
	Tymber Creek Rd to I-95 NB Ramps	4	6	C	40,950	62,151	59,000	144%
	I-95 NB Ramps to Williamson Blvd	4	6	D	58,070	65,284	62,000	107%
	East of Williamson Blvd	4	4	D	38,540	35,552	33,800	88%
Williamson Blvd	SR 40 to Hand Ave	4	4	E	35,010	35,545	33,800	97%
	Hand Ave to LPGA Blvd	2	4	E	35,010	36,579	34,700	99%
	South of LPGA Blvd	2	4	E	35,010	33,308	31,600	90%
Hand Ave	East of Williamson Blvd	2	4	E	35,010	30,256	28,700	82%
	Williamson Blvd to Tymber Creek Rd Ext	-	2	E	15,890	19,518	18,500	116%
LPGA Blvd	West of Tomoka Farms Rd	2	2	E	15,890	28,852	27,400	172%
	Tomoka Farms Rd to I-95 NB Ramps	4	4	E	35,010	34,101	32,400	93%
	I-95 NB Ramps to Williamson Blvd	4	4	E	35,010	46,832	44,500	127%
	East of Williamson Blvd	4	4	E	35,010	49,612	47,100	135%
Tymber Creek Rd	Tymber Run to SR 40	2	4	E	35,010	26,405	25,100	72%
	SR 40 to Hand Ave Ext	-	2	E	15,890	14,420	13,700	86%
Stage Coach Rd/Hunter's Ridge Rd	North of SR 40	-	2	E	15,890	4,773	4,500	28%
	SR 40 to Tymber Creek Rd	-	2	E	15,890	8,869	8,400	53%

Notes:
1. Alternative 4 - SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes) and Hand Avenue Extension (2 lanes) from Williamson Blvd to Tymber Creek Rc
2. AADT = Model Volume * MOCF. A MOCF of 0.95 from the 2010 FDOT Traffic CD was used.
3. Year 2035 Capacities at the Adopted LOS & the Adopted LOS Standard were obtained from the Volusia County's 2009 AADT Count Sheet.

Year 2035 Roadway Capacity Analysis

Roadway	Limits	Existing Lanes	2035 Lanes	Adopted LOS Standard	2035 Capacity[3]	Alternative-5		
						Model Volume	AADT[2]	% of Capacity
SR 40	Breakaway Tr to Tymber Creek Rd	4	6	C	56,390	52,875	50,200	89%
	Tymber Creek Rd to I-95 NB Ramps	4	6	C	40,950	67,528	64,200	157%
	I-95 NB Ramps to Williamson Blvd	4	6	D	58,070	74,938	71,200	123%
	East of Williamson Blvd	4	4	D	38,540	38,467	36,500	95%
Williamson Blvd	SR 40 to Hand Ave	4	4	E	35,010	41,785	39,700	113%
	Hand Ave to LPGA Blvd	2	4	E	35,010	33,717	32,000	91%
	South of LPGA Blvd	2	4	E	35,010	32,128	30,500	87%
Hand Ave	East of Williamson Blvd	2	4	E	35,010	25,953	24,700	71%
LPGA Blvd	West of Tomoka Farms Rd	2	2	E	15,890	28,303	26,900	169%
	Tomoka Farms Rd to I-95 NB Ramps	4	4	E	35,010	31,705	30,100	86%
	I-95 NB Ramps to Williamson Blvd	4	4	E	35,010	48,218	45,800	131%
	East of Williamson Blvd	4	4	E	35,010	51,488	48,900	140%
Tymber Creek Rd	Tymber Run to SR 40	2	4	E	35,010	26,289	25,000	71%
	SR 40 to Hand Ave Ext	-	2	E	15,890	7,967	7,600	48%
	Hand Ave Ext to Stage Coach Rd	-	2	E	15,890	7,967	7,600	48%
	Stage Coach Rd to LPGA Blvd	-	2	E	15,890	18,937	18,000	113%
Stage Coach Rd/Hunter's Ridge Rd	North of SR 40	-	2	E	15,890	5,127	4,900	31%
	SR 40 to Tymber Creek Rd Ext	-	2	E	15,890	11,879	11,300	71%

Notes:
1. Alternative 5 - SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Blvd
2. AADT = Model Volume * MOCF. A MOCF of 0.95 from the 2010 FDOT Traffic CD was used.
3. Year 2035 Capacities at the Adopted LOS & the Adopted LOS Standard were obtained from the Volusia County's 2009 AADT Count Sheet.

Year 2035 Roadway Capacity Analysis

Roadway	Limits	Existing Lanes	2035 Lanes	Adopted LOS Standard	2035 Capacity[3]	Alternative-6		
						Model Volume	AADT[2]	% of Capacity
SR 40	Breakaway Tr to Tymber Creek Rd	4	4	C	37,280	48,857	46,400	124%
	Tymber Creek Rd to I-95 NB Ramps	4	4	C	26,250	46,643	44,300	169%
	I-95 NB Ramps to Williamson Blvd	4	4	D	38,540	54,969	52,200	135%
	East of Williamson Blvd	4	4	D	38,540	32,566	30,900	80%
Williamson Blvd	SR 40 to Hand Ave	4	4	E	35,010	30,509	29,000	83%
	Hand Ave to LPGA Blvd	2	4	E	35,010	33,394	31,700	91%
	South of LPGA Blvd	2	4	E	35,010	31,461	29,900	85%
Hand Ave	East of Williamson Blvd	2	4	E	35,010	29,807	28,300	81%
	Williamson Blvd to Tymber Creek Rd Ext	-	2	E	15,890	21,278	20,200	127%
LPGA Blvd	Tymber Creek Rd Ext. to Tomoka Farms Rd	2	2	E	15,890	28,485	27,100	171%
	Tomoka Farms Rd to I-95 NB Ramps	4	4	E	35,010	32,257	30,600	87%
	I-95 NB Ramps to Williamson Blvd	4	4	E	35,010	47,232	44,900	128%
	East of Williamson Blvd	4	4	E	35,010	51,464	48,900	140%
Tymber Creek Rd	Tymber Run to SR 40	2	4	E	35,010	25,278	24,000	69%
	SR 40 to Hand Ave Ext	-	2	E	15,890	20,770	19,700	124%
	Hand Ave Ext to Stage Coach Rd	-	2	E	15,890	6,325	6,000	38%
	Stage Coach Rd to LPGA Blvd	-	2	E	15,890	18,120	17,200	108%
Stage Coach Rd/Hunter's Ridge Rd	North of SR 40	-	2	E	15,890	5,019	4,800	30%
	SR 40 to Tymber Creek Rd Ext	-	2	E	15,890	13,329	12,700	80%

Notes:
1. Alternative 6 - Hand Avenue Extension (2 lanes) from Williamson Blvd to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Blvd.
2. AADT = Model Volume * MOCF. A MOCF of 0.95 from the 2010 FDOT Traffic CD was used.
3. Year 2035 Capacities at the Adopted LOS & the Adopted LOS Standard were obtained from the Volusia County's 2009 AADT Count Sheet.

Year 2035 Roadway Capacity Analysis

Roadway	Limits	Existing Lanes	2035 Lanes	Adopted LOS Standard	2035 Capacity[3]	Alternative-7		
						Model Volume	AADT[2]	% of Capacity
SR 40	Breakaway Tr to Tymber Creek Rd	4	6	C	56,390	53,077	50,400	89%
	Tymber Creek Rd to I-95 NB Ramps	4	6	C	40,950	59,160	56,200	137%
	I-95 NB Ramps to Williamson Blvd	4	6	D	58,070	68,426	65,000	112%
	East of Williamson Blvd	4	4	D	38,540	36,339	34,500	90%
Williamson Blvd	SR 40 to Hand Ave	4	4	E	35,010	37,505	35,600	102%
	Hand Ave to LPGA Blvd	2	4	E	35,010	35,149	33,400	95%
	South of LPGA Blvd	2	4	E	35,010	32,119	30,500	87%
Hand Ave	East of Williamson Blvd	2	4	E	35,010	29,746	28,300	81%
	Williamson Blvd to Tymber Creek Rd Ext	-	2	E	15,890	15,997	15,200	96%
LPGA Blvd	Tymber Creek Rd Ext. to Tomoka Farms Rd	2	2	E	15,890	25,062	23,800	150%
	Tomoka Farms Rd to I-95 NB Ramps	4	4	E	35,010	29,623	28,100	80%
	I-95 NB Ramps to Williamson Blvd	4	4	E	35,010	43,511	41,300	118%
	East of Williamson Blvd	4	4	E	35,010	48,756	46,300	132%
Tymber Creek Rd	Tymber Run to SR 40	2	4	E	35,010	27,640	26,300	75%
	SR 40 to Hand Ave Ext	-	2	E	15,890	16,615	15,800	99%
	Hand Ave Ext to Stage Coach Rd	-	2	E	15,890	7,380	7,000	44%
	Stage Coach Rd to LPGA Blvd	-	2	E	15,890	16,621	15,800	99%
Stage Coach Rd/Hunter's Ridge Rd	North of SR 40	-	2	E	15,890	5,447	5,200	33%
	SR 40 to Tymber Creek Rd Ext	-	2	E	15,890	10,535	10,000	63%

Notes:
1. Alternative 7 - SR 40 widening from Breakaway Trail to Williamson Boulevard (from 4 to 6 lanes), Hand Avenue Extension (2 lanes) from Williamson Blvd to Tymber Creek Road (2 lanes) and Tymber Creek Road Extension (2 lanes) from SR 40 to LPGA Blvd.
2. AADT = Model Volume * MOCF. A MOCF of 0.95 from the 2010 FDOT Traffic CD was used.
3. Year 2035 Capacities at the Adopted LOS & the Adopted LOS Standard were obtained from the Volusia County's 2009 AADT Count Sheet.

2010 Peak Season Factor Category Report - Report Type: ALL

Category: 7900 VOLUSIA COUNTYWIDE

MOCF: 0.95

Week	Dates	SF	PSCF
1	01/01/2010 - 01/02/2010	1.05	1.11
2	01/03/2010 - 01/09/2010	1.04	1.10
3	01/10/2010 - 01/16/2010	1.03	1.09
4	01/17/2010 - 01/23/2010	1.01	1.06
5	01/24/2010 - 01/30/2010	0.99	1.04
* 6	01/31/2010 - 02/06/2010	0.97	1.02
* 7	02/07/2010 - 02/13/2010	0.96	1.01
* 8	02/14/2010 - 02/20/2010	0.94	0.99
* 9	02/21/2010 - 02/27/2010	0.94	0.99
*10	02/28/2010 - 03/06/2010	0.93	0.98
*11	03/07/2010 - 03/13/2010	0.93	0.98
*12	03/14/2010 - 03/20/2010	0.93	0.98
*13	03/21/2010 - 03/27/2010	0.94	0.99
*14	03/28/2010 - 04/03/2010	0.94	0.99
*15	04/04/2010 - 04/10/2010	0.95	1.00
*16	04/11/2010 - 04/17/2010	0.96	1.01
*17	04/18/2010 - 04/24/2010	0.97	1.02
*18	04/25/2010 - 05/01/2010	0.98	1.03
19	05/02/2010 - 05/08/2010	0.98	1.03
20	05/09/2010 - 05/15/2010	0.99	1.04
21	05/16/2010 - 05/22/2010	1.00	1.05
22	05/23/2010 - 05/29/2010	1.00	1.05
23	05/30/2010 - 06/05/2010	1.01	1.06
24	06/06/2010 - 06/12/2010	1.01	1.06
25	06/13/2010 - 06/19/2010	1.02	1.07
26	06/20/2010 - 06/26/2010	1.02	1.07
27	06/27/2010 - 07/03/2010	1.03	1.09
28	07/04/2010 - 07/10/2010	1.04	1.10
29	07/11/2010 - 07/17/2010	1.05	1.11
30	07/18/2010 - 07/24/2010	1.04	1.10
31	07/25/2010 - 07/31/2010	1.04	1.10
32	08/01/2010 - 08/07/2010	1.04	1.10
33	08/08/2010 - 08/14/2010	1.04	1.10
34	08/15/2010 - 08/21/2010	1.04	1.10
35	08/22/2010 - 08/28/2010	1.04	1.10
36	08/29/2010 - 09/04/2010	1.03	1.09
37	09/05/2010 - 09/11/2010	1.03	1.09
38	09/12/2010 - 09/18/2010	1.03	1.09
39	09/19/2010 - 09/25/2010	1.02	1.07
40	09/26/2010 - 10/02/2010	1.01	1.06
41	10/03/2010 - 10/09/2010	1.00	1.05
42	10/10/2010 - 10/16/2010	0.99	1.04
43	10/17/2010 - 10/23/2010	0.99	1.04
44	10/24/2010 - 10/30/2010	1.00	1.05
45	10/31/2010 - 11/06/2010	1.00	1.05
46	11/07/2010 - 11/13/2010	1.01	1.06
47	11/14/2010 - 11/20/2010	1.01	1.06
48	11/21/2010 - 11/27/2010	1.02	1.07
49	11/28/2010 - 12/04/2010	1.03	1.09
50	12/05/2010 - 12/11/2010	1.04	1.10
51	12/12/2010 - 12/18/2010	1.05	1.11
52	12/19/2010 - 12/25/2010	1.04	1.10
53	12/26/2010 - 12/31/2010	1.03	1.09

* Peak Season

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TRANSPORTATION ENGINEERING / PLANNING
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MEMORANDUM

Date: May 16, 2011 Project #: 11508

To: Babuji Ambikapathy, P.E., AICP

CC: Lance Decuir , John Zielinski

From: Chris J. Walsh, P.E.

Project: SR 40 PD&E Study

Subject: Review of the SR 40 Design Traffic Technical Memorandum – Year 2035 Alternatives Analysis

We received the SR 40 Design Traffic Technical Memorandum – Year 2035 Roadway Alternatives Analysis, dated April 28, 2011, and we offer the following comments:

1.) GMB has recommended two of the three build alternatives to have the Hand Avenue Extension. With the potential environmental issues that have been noted for the Hand Avenue Extension, we believe a more conservative approach should be taken for the SR 40 PD&E Study. This will result in the intersections to be designed to meet the more conservative approach. For the purposes of the SR 40 PD&E Study, we believe that the three alternatives that should be studied further are 1, 5, and 7 for the following reasons:
   a. Alternative 1 provides a worst-case scenario under which SR 40 is six laned. However, should the only improvement in the vicinity be the six laning of SR 40, then it is likely that the development west of I-95 will be less than that which would occur should all the improvements occur (Hand Avenue extension, Tymber Creek Road extension, Stagecoach Road). Thus, consideration should be given towards refining/reducing the ZDATA for this alternative.
   b. Alternative 7 provides a best-case network scenario that reflects all the improvements in the LRTP and thus it should be one of the final three alternatives.
   c. The memorandum suggested Alternative 4 was one of the final alternatives based on the ranking criteria. However, we believe because it is more likely for the Tymber Creek Road extension to be built ahead of Hand Avenue due to environmental and cost considerations that Alternative 5 should be included in the final three alternatives.

2.) We understand that this memorandum is not intended to address the no-build network. However, we would like to also understand which roadways will be included in the no-build alternative.

3.) Below are comments on the provided ranking analysis. Please note that these comments do not affect comment 1 above.
   a. The MOCF for 2010 is now available and is shown to be 0.95 for Volusia County
   b. The Future Capacity Analysis Tables for Alternatives 4, 5, and 7, as included in Appendix B, show SR 40 as six lanes east of Williamson Boulevard. The number of lanes and the corresponding capacity should be revised to four lanes.
   c. There effectively are three eastbound lanes on SR 40 between I-95 and Williamson Boulevard. Although the outside lane becomes a right-turn lane drop, based on the 2011 AM turning movements, approximately 37% of the eastbound volume is right-turns and 29% of the PM volume is right turns. Thus, it would seem appropriate to modify the model network accordingly as well as the service volume for this section to show three eastbound lanes.
   d. For the state facilities, it is recommended to use the generalized service volumes from the LOS_ALL table versus the County table.
   e. Were the trips generated by the TAZs which represent the various developments identified in the April 19th memorandum (Hunter's Ridge, Consolidated Tomoka, etc.) compared against ITE trip generation rates or the approved number of trips for the respective developments as may be contained in Development Orders, etc?
   f. Are Daytona Beach, Ormond Beach, and Volusia County comfortable with the TAZ network in terms of its representation of the major developments listed in the April 19th memorandum?

From: Babuji Ambikapathy
To: Rajashekar Pemmanaboina
Subject: FW: SR 40 PD&E - review comments on 2035 Alternatives Analysis memo
Date: Thursday, June 30, 2011 12:04:21 PM

Babuji Ambikapathy, P.E., AICP

Principal

GMB ENGINEERS & PLANNERS, INC.

GMB Engineers & Planners, Inc.

2602 E. Livingston St. Orlando, FL 32803
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Orlando, FL · Saratoga Springs, NY

Minority / Disadvantaged Business Enterprise

From: Decuir, Lance [mailto:Lance.Decuir@dot.state.fl.us]
Sent: Monday, May 16, 2011 2:34 PM
To: Babuji Ambikapathy
Cc: Jack Freeman; Zielinski, John; Chris Walsh; McGehee, Mary; WaltonR@codb.us; goss@ormondbeach.org; Jon Cheney
Subject: RE: SR 40 PD&E - review comments on 2035 Alternatives Analysis memo

Thanks Babuji,

Lance Decuir, P.E.
D-5 PD&E
w - 386-943-5383
c - 407-756-9655

From: Babuji Ambikapathy [mailto:bambikapathy@gmb.cc]
Sent: Monday, May 16, 2011 2:17 PM
To: Decuir, Lance
Cc: Jack Freeman; Zielinski, John; Chris Walsh; McGehee, Mary; WaltonR@codb.us; goss@ormondbeach.org; Jon Cheney
Subject: RE: SR 40 PD&E - review comments on 2035 Alternatives Analysis memo

Thanks Lance. We will proceed with analyzing Alternatives 1, 5 and 7. We will incorporate the comments in our detailed analysis for No-Build, and Build Alternatives 1, 5, and 7.

In the case of comment # 3E, we did not compare the trips generated from the developments with ITE trip generation rates. As summarized in our April 19th memo land uses for the DRIs were accounted for based on the discussions with staff from the Cities of Ormond Beach and Daytona Beach, latest approved land use data for the DRIs obtained from the development orders and annual reports from East Central Florida Regional Planning Council (ECFRPC). The land uses for the DRIs were appropriately accounted for and used in the model to obtain traffic forecasts. For this project, the traffic forecasts will be based on the model traffic projections since there are various new facilities in the study are include Hand Avenue Extension, Tymber Creek Extension, and Stage Coach Road.

Thanks and have a good day.

Babuji Ambikapathy, P.E., AICP
Principal

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Minority / Disadvantaged Business Enterprise

From: Decuir, Lance [mailto:Lance.Decuir@dot.state.fl.us]
Sent: Monday, May 16, 2011 11:07 AM
To: Chris Walsh; Babuji Ambikapathy
Cc: Jack Freeman; Zielinski, John
Subject: RE: SR 40 PD&E - review comments on 2035 Alternatives Analysis memo

I concur with Kittelson's comments.

Lance Decuir, P.E.
D-5 PD&E
w - 386-943-5383
c - 407-756-9655

From: Chris Walsh [mailto:cwalsh@kittelson.com]
Sent: Monday, May 16, 2011 10:39 AM
To: Decuir, Lance; bambikapathy@gmb.cc
Cc: Jack Freeman; Zielinski, John
Subject: SR 40 PD&E - review comments on 2035 Alternatives Analysis memo

Good morning,

We have reviewed the SR 40 DTTM – Year 2035 Alternatives Analysis memorandum. Attached is a memorandum summarizing our comments. Thank you for the opportunity to review this document. Please call Jack Freeman or me with any questions you may have.

Chris

<<Review of GMB Tech Memo - 2035 Alternatives Analysis - May 16_2011.pdf>>

Chris J. Walsh, P.E.
Associate Engineer

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Streetwise Twitter Facebook

Appendix L

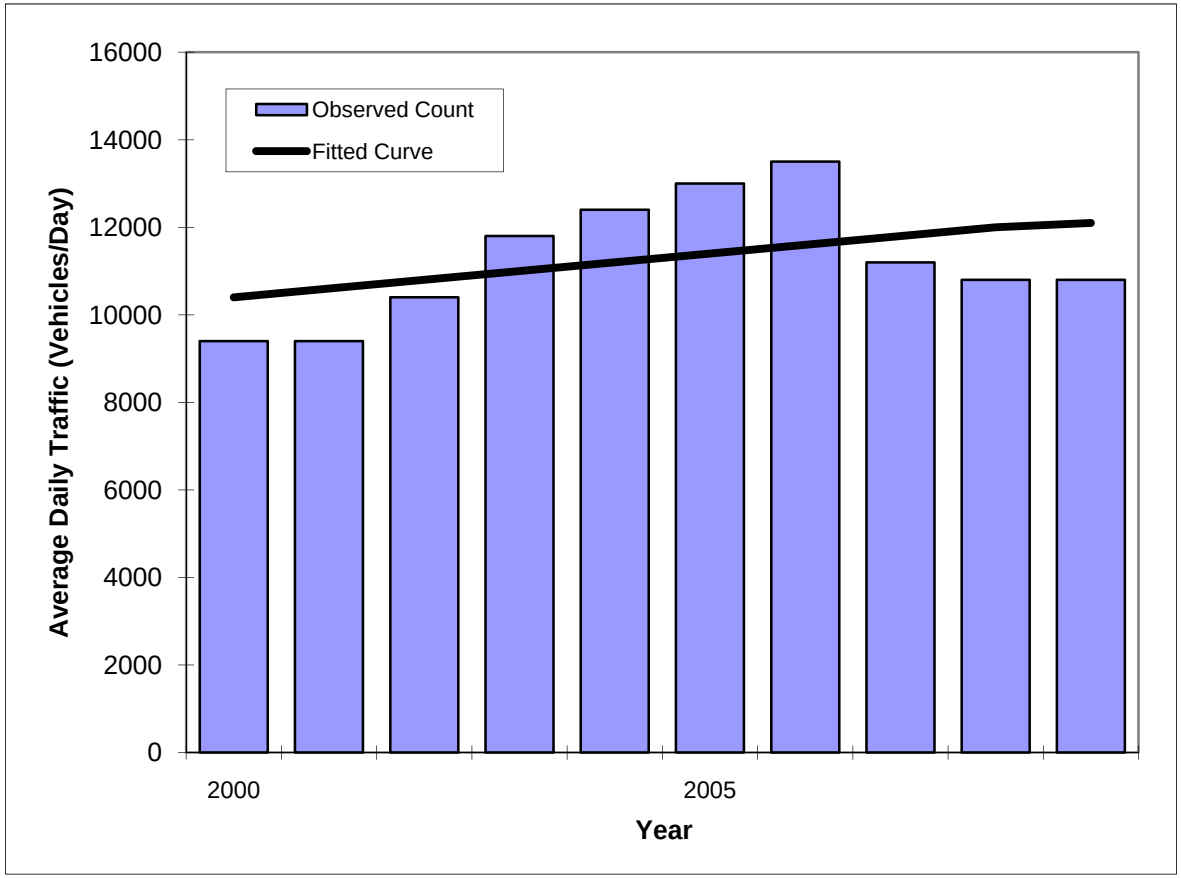
Trends Analysis Sheets

Traffic Trends - V2.0

SR 40 -- Rima Ridge Rd to Tymber Creek Rd

FIN#	**973215-1**
Location	**1**

County:	Volusia (79)
Station #:	0523
Highway:	SR 40



Year	Traffic (ADT/AADT) Count*	Trend**
2000	9400	10400
2001	9400	10600
2002	10400	10800
2003	11800	11000
2004	12400	11200
2005	13000	11400
2006	13500	11600
2007	11200	11800
2008	10800	12000
2009	10800	12100
2015 Opening Year Trend		
2015	N/A	13300
2025 Mid-Year Trend		
2025	N/A	15300
2035 Design Year Trend		
2035	N/A	17200
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	195
Trend R-squared:	17.62%
Trend Annual Historic Growth Rate:	1.82%
Trend Growth Rate (2009 to Design Year):	1.62%
Printed:	28-Jun-11

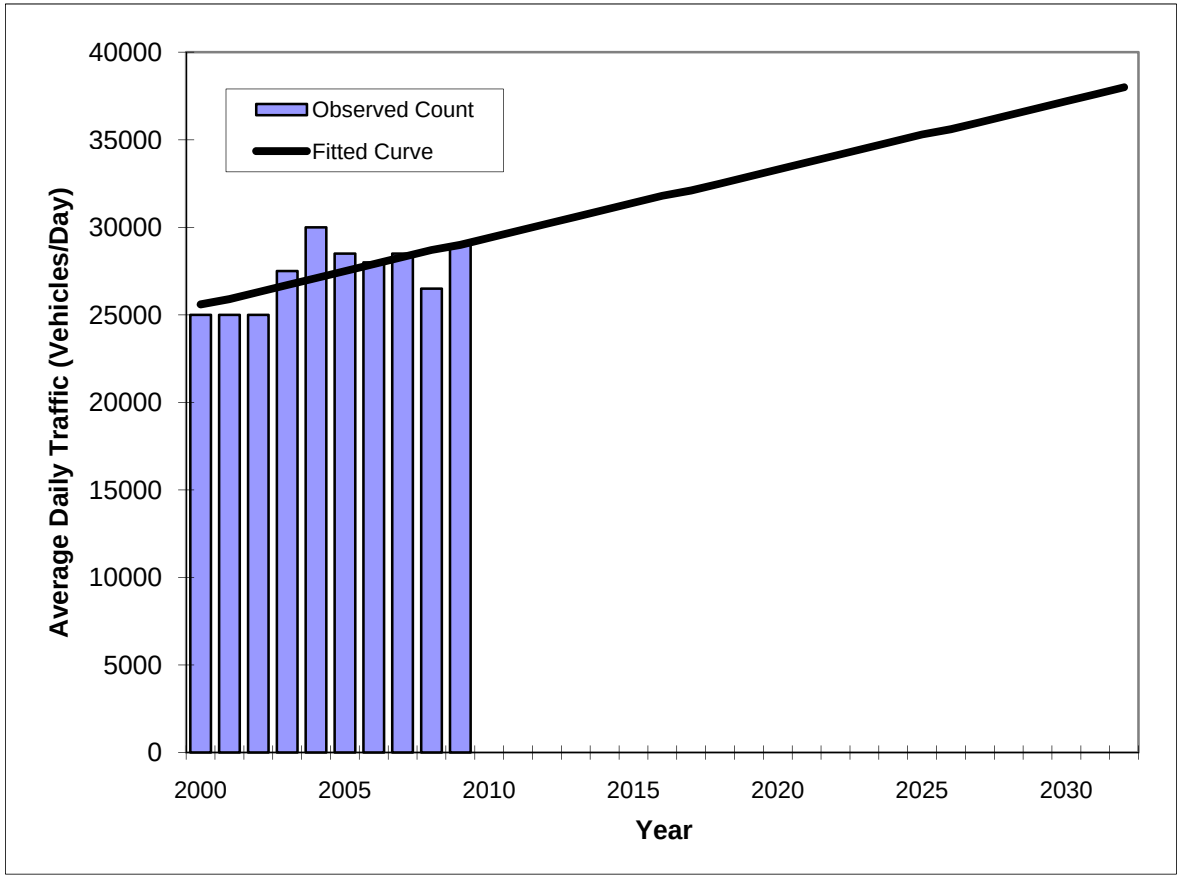
Straight Line Growth Option

Traffic Trends - V2.0

SR 40 -- Tymber Creek Rd to I-95

FIN#	**973215-1**
Location	**1**

County:	Volusia (79)
Station #:	0
Highway:	SR 40



Year	Traffic (ADT/AADT) Count*	Trend**
2000	25000	25600
2001	25000	25900
2002	25000	26300
2003	27500	26700
2004	30000	27100
2005	28500	27500
2006	28000	27900
2007	28500	28300
2008	26500	28700
2009	29000	29000
2015 Opening Year Trend		
2015	N/A	31400
2025 Mid-Year Trend		
2025	N/A	35300
2035 Design Year Trend		
2035	N/A	39100
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	388
Trend R-squared:	41.24%
Trend Annual Historic Growth Rate:	1.48%
Trend Growth Rate (2009 to Design Year):	1.34%
Printed:	28-Jun-11

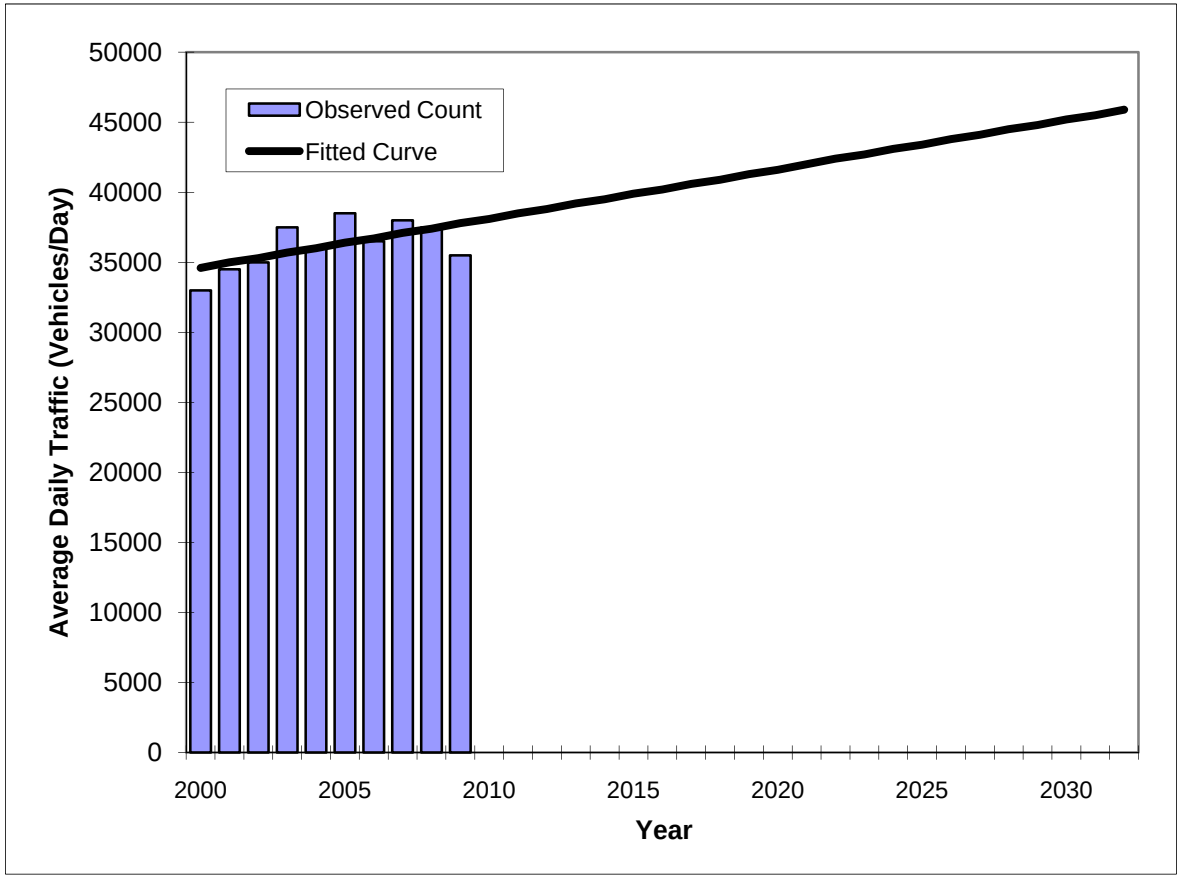
Straight Line Growth Option

Traffic Trends - V2.0

SR 40 -- I-95 to Clyde Morris Blvd

FIN#	**973215-1**
Location	**1**

County:	Volusia (79)
Station #:	0
Highway:	SR 40



Year	Traffic (ADT/AADT) Count*	Trend**
2000	33000	34600
2001	34500	35000
2002	35000	35300
2003	37500	35700
2004	36000	36000
2005	38500	36400
2006	36500	36700
2007	38000	37100
2008	37500	37400
2009	35500	37800
2015 Opening Year Trend		
2015	N/A	39900
2025 Mid-Year Trend		
2025	N/A	43400
2035 Design Year Trend		
2035	N/A	46900
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	352
Trend R-squared:	37.62%
Trend Annual Historic Growth Rate:	1.03%
Trend Growth Rate (2009 to Design Year):	0.93%
Printed:	28-Jun-11

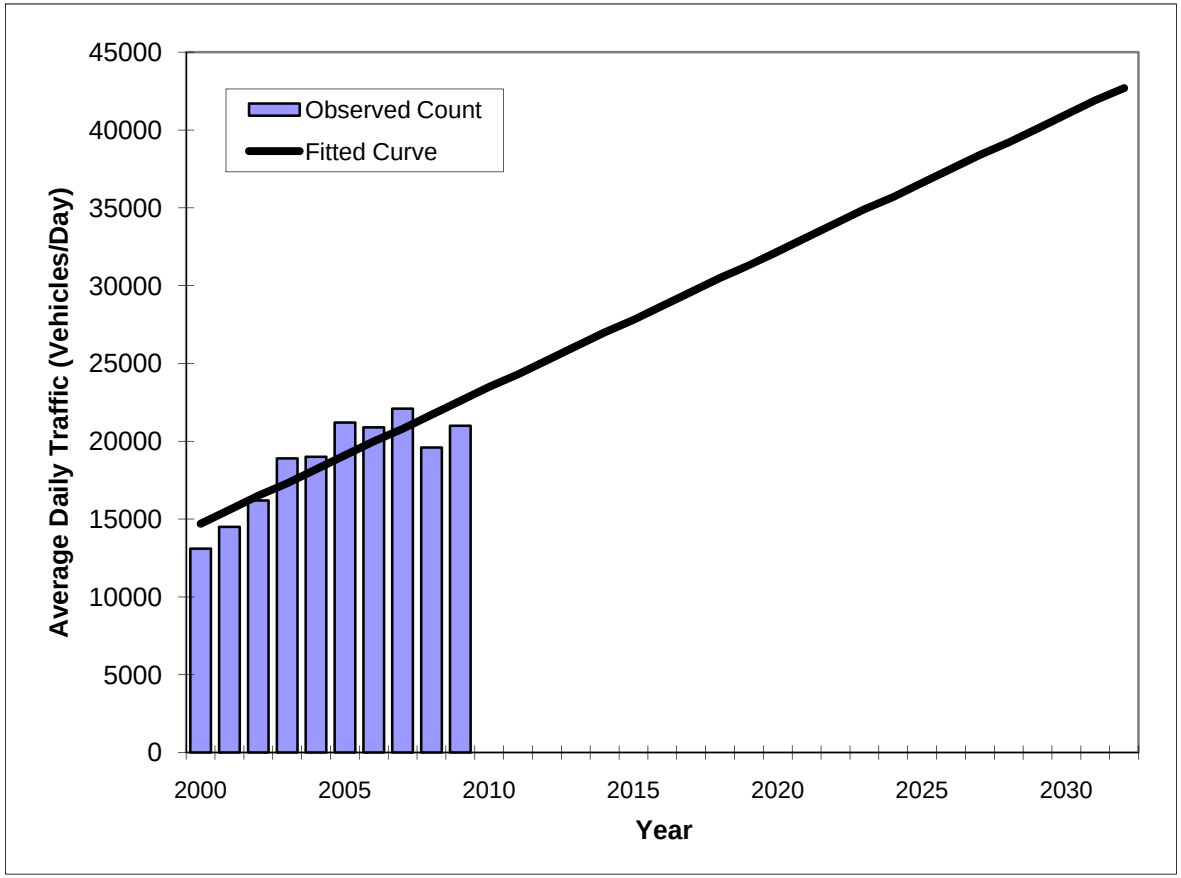
Straight Line Growth Option

Traffic Trends - V2.0

WILLIAMSON BLVD -- South of SR 40

FIN#	**973215-1**
Location	**1**

County:	Volusia (79)
Station #:	0
Highway:	WILLIAMSON BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2000	13100	14700
2001	14500	15600
2002	16200	16500
2003	18900	17300
2004	19000	18200
2005	21200	19100
2006	20900	20000
2007	22100	20800
2008	19600	21700
2009	21000	22600
2015 Opening Year Trend		
2015	N/A	27800
2025 Mid-Year Trend		
2025	N/A	36600
2035 Design Year Trend		
2035	N/A	45400
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	876
Trend R-squared:	75.23%
Trend Annual Historic Growth Rate:	5.97%
Trend Growth Rate (2009 to Design Year):	3.88%
Printed:	28-Jun-11

Straight Line Growth Option

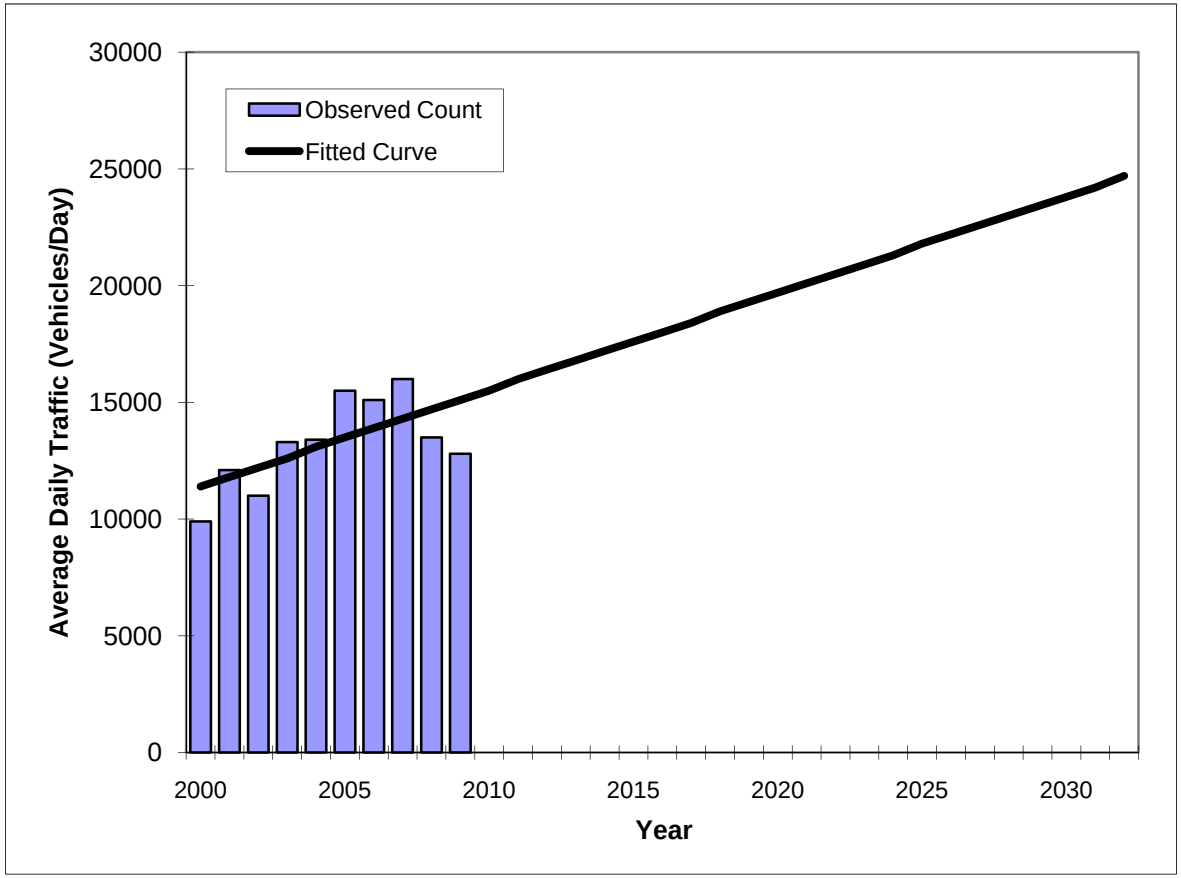
*Axle-Adjusted

Traffic Trends - V2.0

WILLIAMSON BLVD -- South of Hand Ave

FIN#	**973215-1**
Location	**1**

County:	Volusia (79)
Station #:	0
Highway:	WILLIAMSON BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2000	9900	11400
2001	12100	11800
2002	11000	12200
2003	13300	12600
2004	13400	13100
2005	15500	13500
2006	15100	13900
2007	16000	14300
2008	13500	14700
2009	12800	15100
2015 Opening Year Trend		
2015	N/A	17600
2025 Mid-Year Trend		
2025	N/A	21800
2035 Design Year Trend		
2035	N/A	25900
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	415
Trend R-squared:	41.77%
Trend Annual Historic Growth Rate:	3.61%
Trend Growth Rate (2009 to Design Year):	2.75%
Printed:	28-Jun-11

Straight Line Growth Option

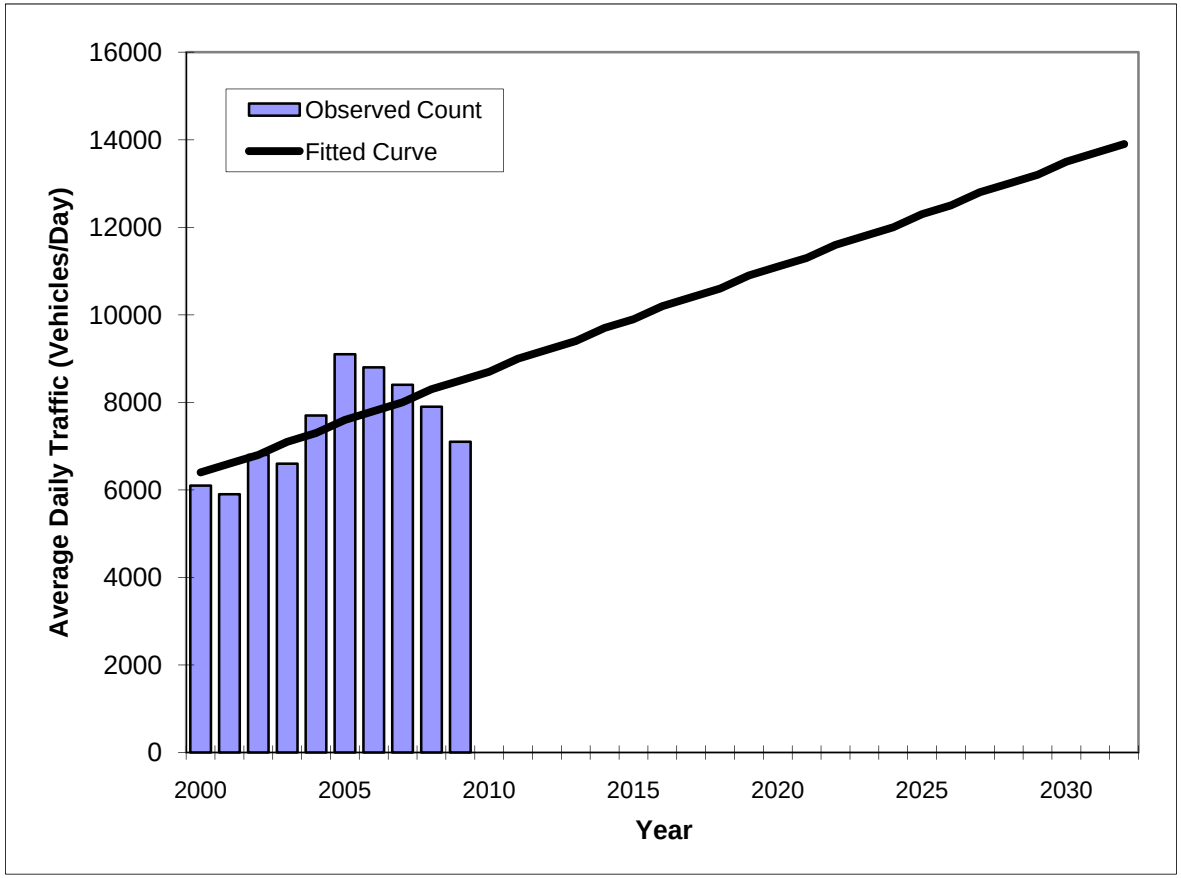
*Axle-Adjusted

Traffic Trends - V2.0

HAND AVE -- Williamson Blvd to Cylde Morris Blvd

FIN#	**973215-1**
Location	**1**

County:	Volusia (79)
Station #:	0
Highway:	HAND AVE



Year	Traffic (ADT/AADT) Count*	Trend**
2000	6100	6400
2001	5900	6600
2002	6800	6800
2003	6600	7100
2004	7700	7300
2005	9100	7600
2006	8800	7800
2007	8400	8000
2008	7900	8300
2009	7100	8500
2015 Opening Year Trend		
2015	N/A	9900
2025 Mid-Year Trend		
2025	N/A	12300
2035 Design Year Trend		
2035	N/A	14600
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	236
Trend R-squared:	41.14%
Trend Annual Historic Growth Rate:	3.65%
Trend Growth Rate (2009 to Design Year):	2.76%
Printed:	28-Jun-11

Straight Line Growth Option

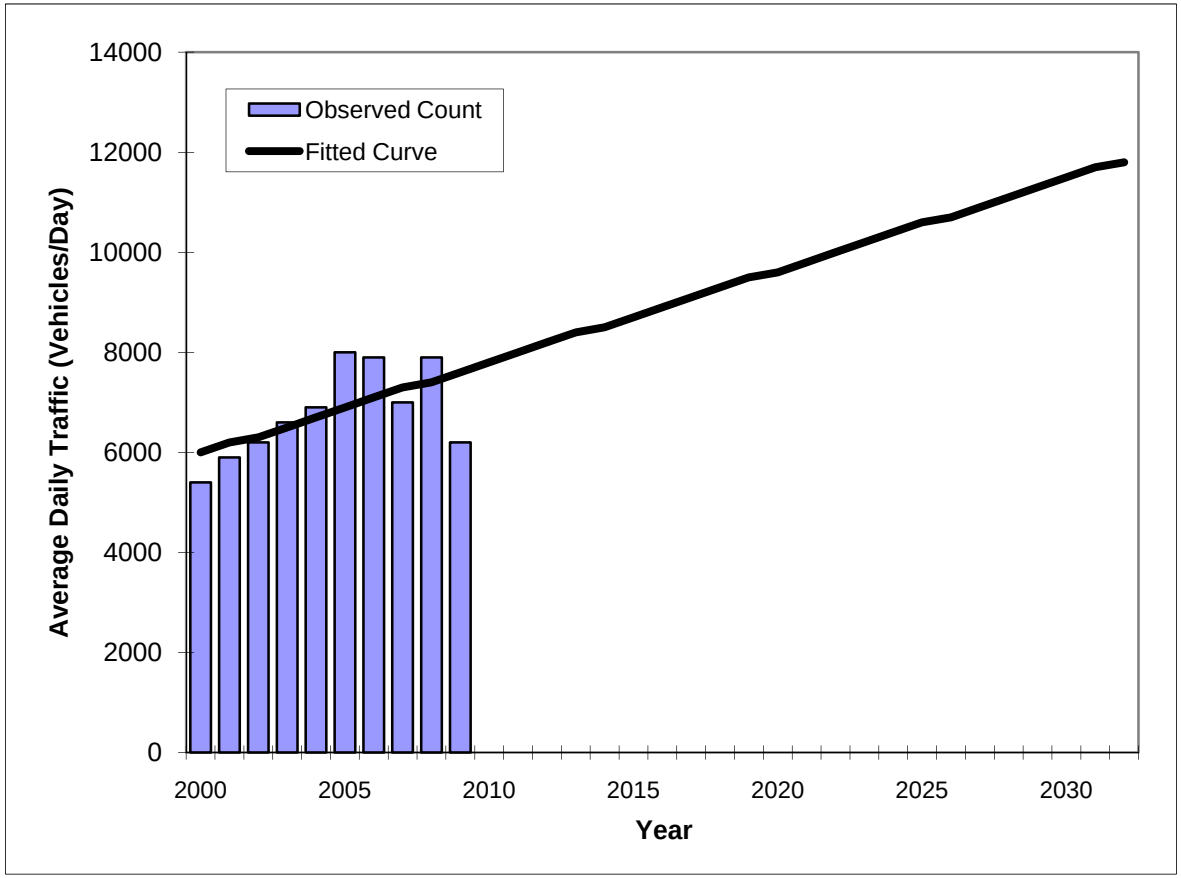
*Axle-Adjusted

Traffic Trends - V2.0

LPGA BLVD -- Tomoka Farms Rd to Williamson Blvd

FIN#	**973215-1**
Location	**1**

County:	Volusia (79)
Station #:	0
Highway:	LPGA BLVD



Year	Traffic (ADT/AADT) Count*	Trend**
2000	5400	6000
2001	5900	6200
2002	6200	6300
2003	6600	6500
2004	6900	6700
2005	8000	6900
2006	7900	7100
2007	7000	7300
2008	7900	7400
2009	6200	7600
2015 Opening Year Trend		
2015	N/A	8700
2025 Mid-Year Trend		
2025	N/A	10600
2035 Design Year Trend		
2035	N/A	12400
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	183
Trend R-squared:	37.15%
Trend Annual Historic Growth Rate:	2.96%
Trend Growth Rate (2009 to Design Year):	2.43%
Printed:	28-Jun-11

Straight Line Growth Option

Appendix M

BEBR Population Projections for Volusia County

Projections of Florida Population by County, 2008–2035 (continued)

County and State	Census April 1, 2000	Estimate April 1, 2008	Projections, April 1 2010	2015	2020	2025	2030	2035
SANTA ROSA	117,743	144,136						
Low			141,300	146,900	152,500	156,900	159,800	161,300
Medium			147,100	159,100	172,900	186,300	198,900	210,600
High			153,000	172,500	194,100	216,700	239,700	263,100
SARASOTA	325,961	393,608						
Low			380,200	392,900	404,800	413,800	419,800	422,800
Medium			396,000	425,500	458,900	491,500	522,700	552,400
High			411,900	461,200	515,200	571,500	629,700	689,900
SEMINOLE	365,199	426,413						
Low			407,600	412,500	418,000	420,800	420,400	417,100
Medium			424,600	447,200	474,200	500,000	523,900	546,000
High			441,600	484,200	532,000	581,100	630,600	680,600
SUMTER	53,345	93,034						
Low			92,300	104,300	114,900	123,100	128,700	131,800
Medium			98,200	117,600	139,400	161,200	182,400	203,200
High			104,100	132,800	165,300	200,800	239,100	280,100
SUWANNEE	34,844	40,927						
Low			43,500	44,900	46,200	47,200	47,800	48,100
Medium			45,400	48,700	52,400	56,000	59,500	62,800
High			47,200	52,700	58,800	65,100	71,700	78,500
TAYLOR	19,256	23,199						
Low			23,100	23,200	23,400	23,300	23,200	22,900
Medium			24,000	25,200	26,500	27,800	28,900	30,000
High			25,000	27,300	29,700	32,200	34,800	37,400
UNION	13,442	15,974						
Low			15,300	15,000	14,700	14,300	13,800	13,100
Medium			16,300	17,000	17,900	18,800	19,600	20,400
High			17,300	19,100	21,200	23,300	25,500	27,900
VOLUSIA	443,343	510,750						
Low			489,800	493,800	498,600	500,200	498,100	492,900
Medium			510,300	535,500	565,600	594,400	620,900	645,300
High			530,700	579,700	634,600	690,700	747,200	804,100
WAKULLA	22,863	30,717						
Low			30,500	32,700	34,600	36,200	37,300	37,900
Medium			32,100	36,100	40,600	45,100	49,400	53,600
High			33,700	39,900	46,900	54,300	62,100	70,400
WALTON	40,601	57,784						
Low			54,800	57,800	60,400	61,900	62,300	61,700
Medium			58,300	65,300	73,400	81,200	88,600	95,500
High			61,800	73,500	86,900	101,000	115,800	131,100
WASHINGTON	20,973	24,779						
Low			24,600	24,500	24,300	23,900	23,300	22,400
Medium			26,100	27,800	29,600	31,400	33,100	34,700
High			27,700	31,200	35,000	39,000	43,200	47,500
FLORIDA	15,982,824	18,807,219						
Low			18,471,400	19,243,200	20,214,400	21,162,300	22,049,900	22,886,000
Medium			18,881,400	20,055,900	21,417,500	22,738,200	23,979,000	25,148,300
High			19,664,900	21,474,900	23,339,700	25,177,600	26,951,600	28,674,100

Note: Numbers for April 1, 2000 are decennial census counts and include all adjustments to those counts made by the U.S. Census Bureau.

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Warrington College of Business Administration
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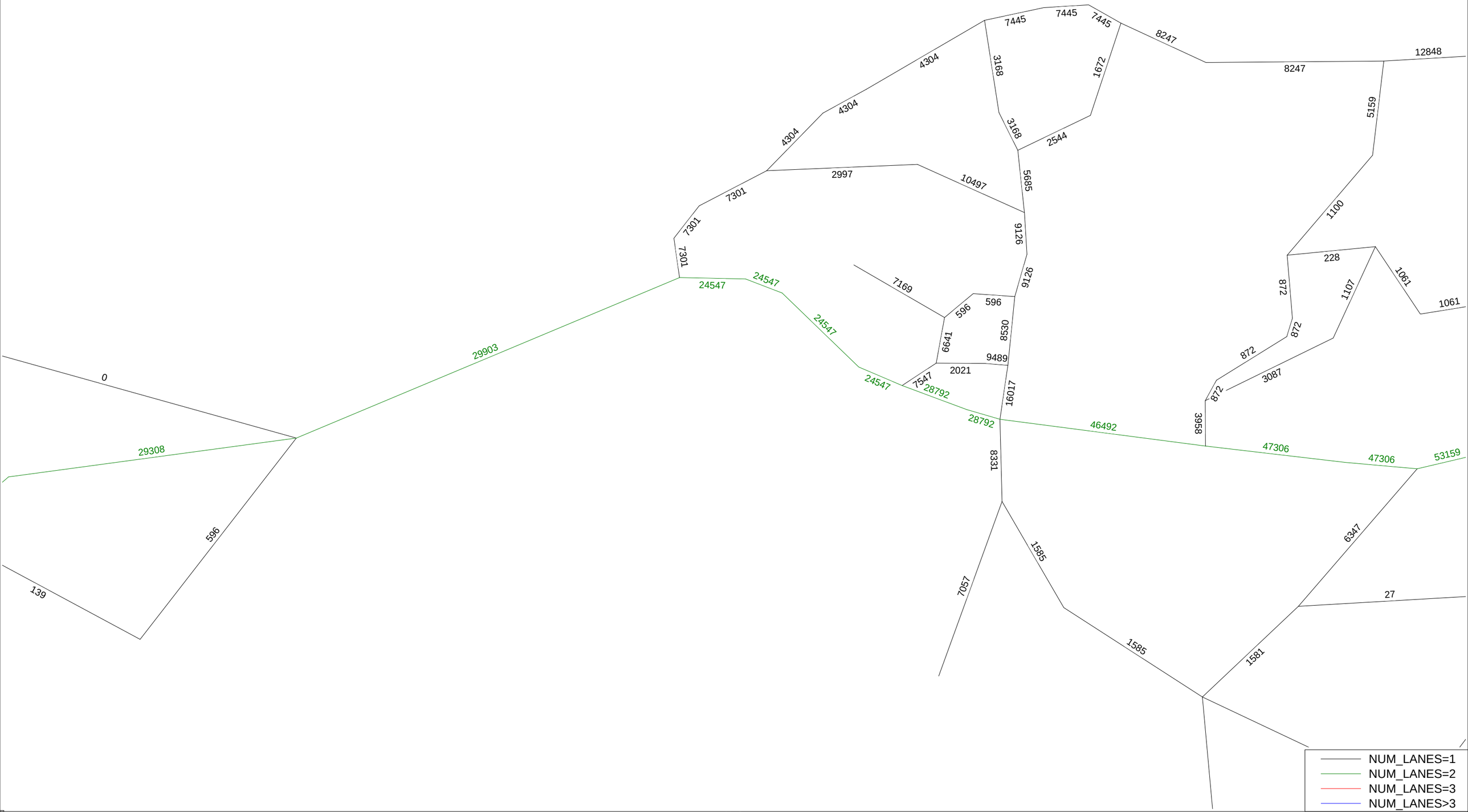
fax (352) 392-4739
email: info@bebr.ufl.edu
http://www.bebr.ufl.edu

Appendix N

Year 2035 CFRPM 5.0 Model Plots

No Build Alternative - CFRPM 5.0 Year 2035 Model Plots



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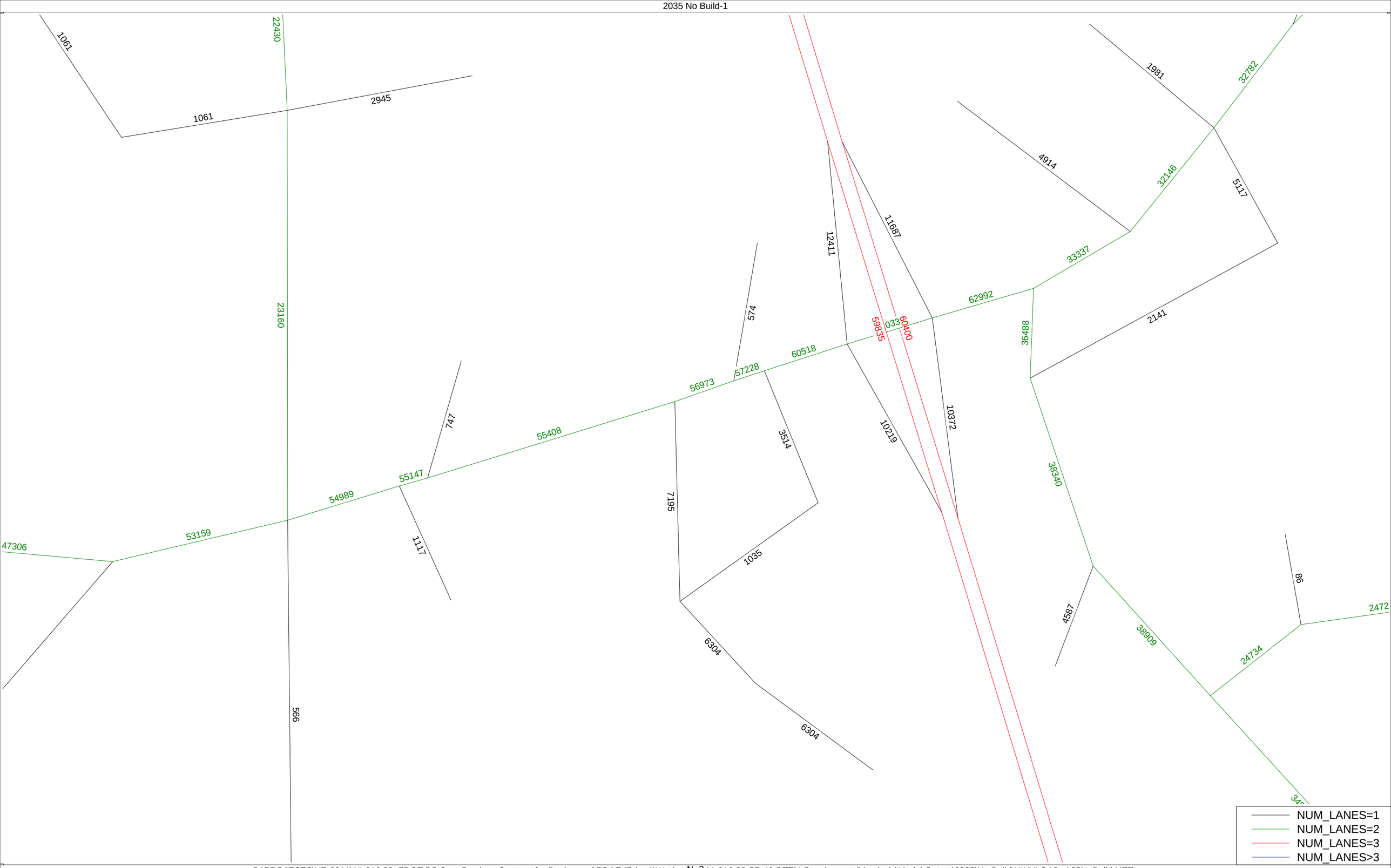

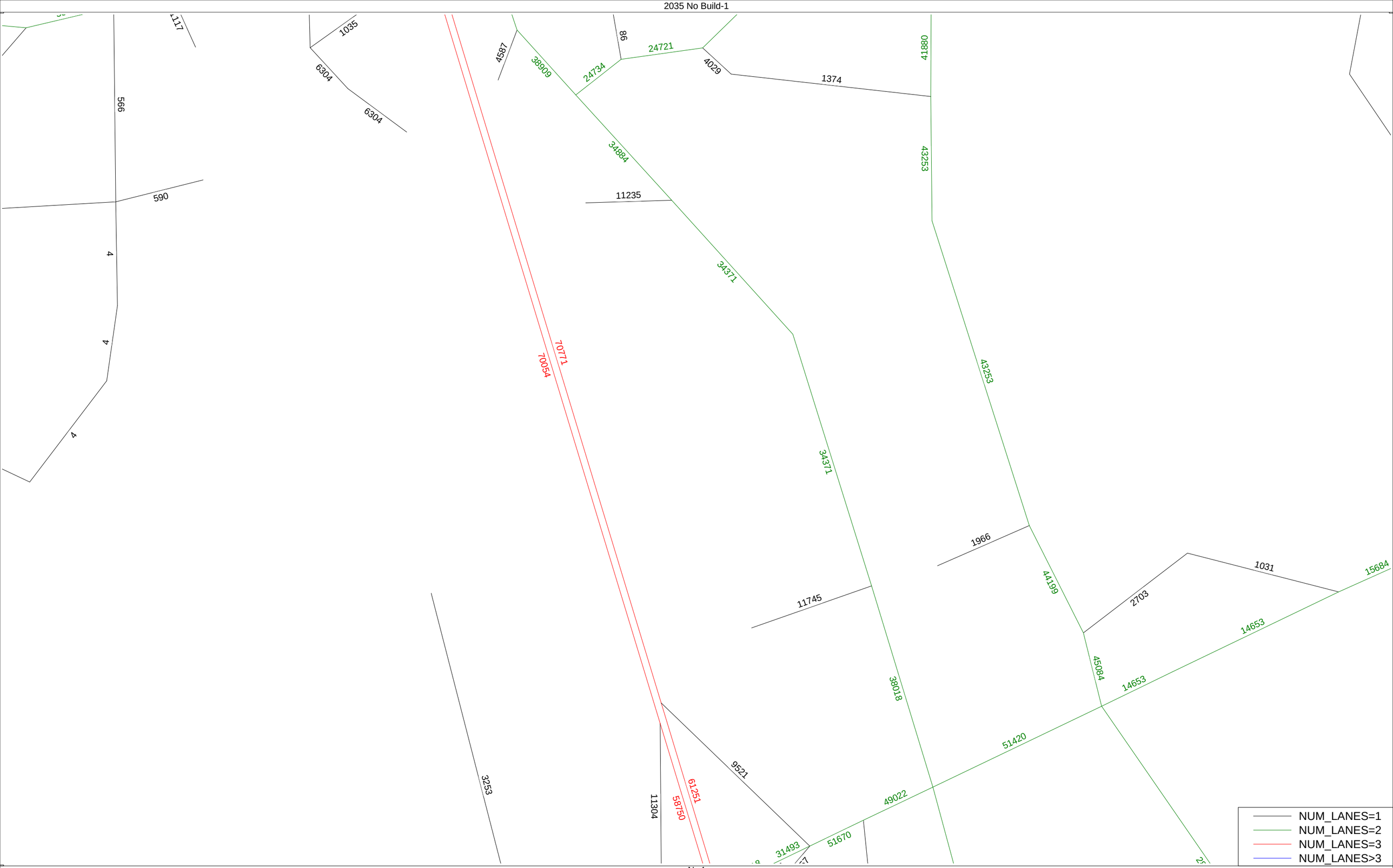

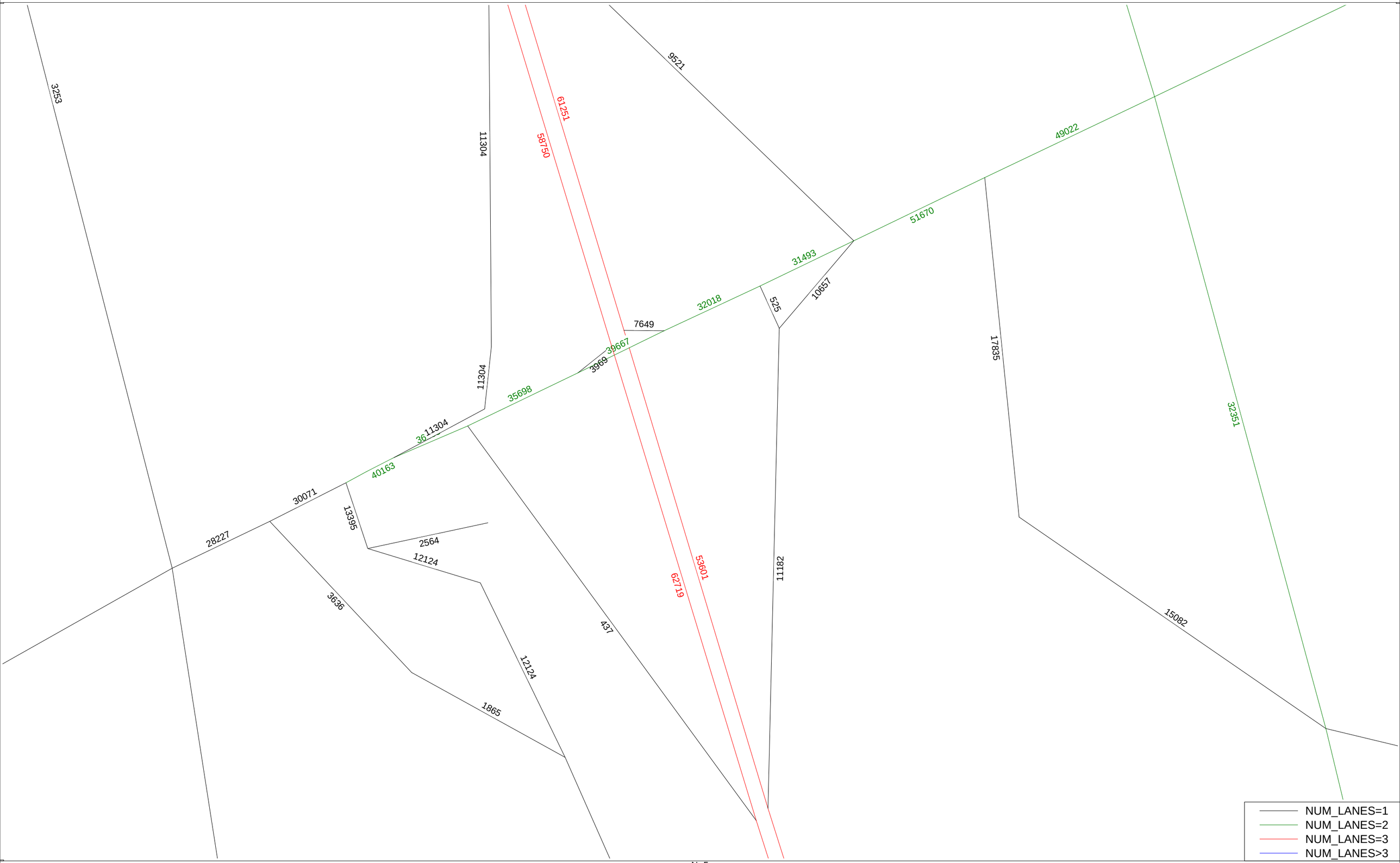

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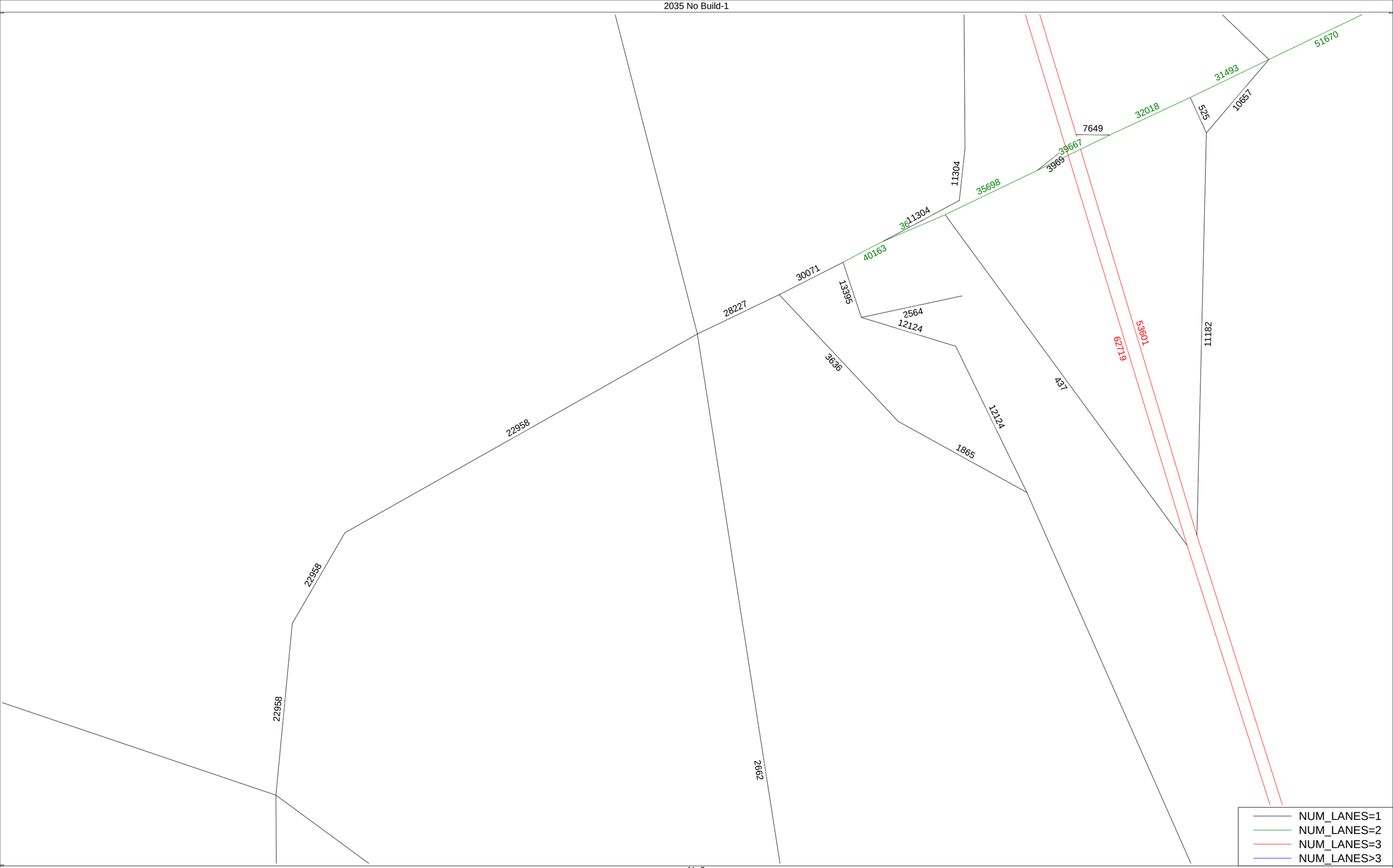

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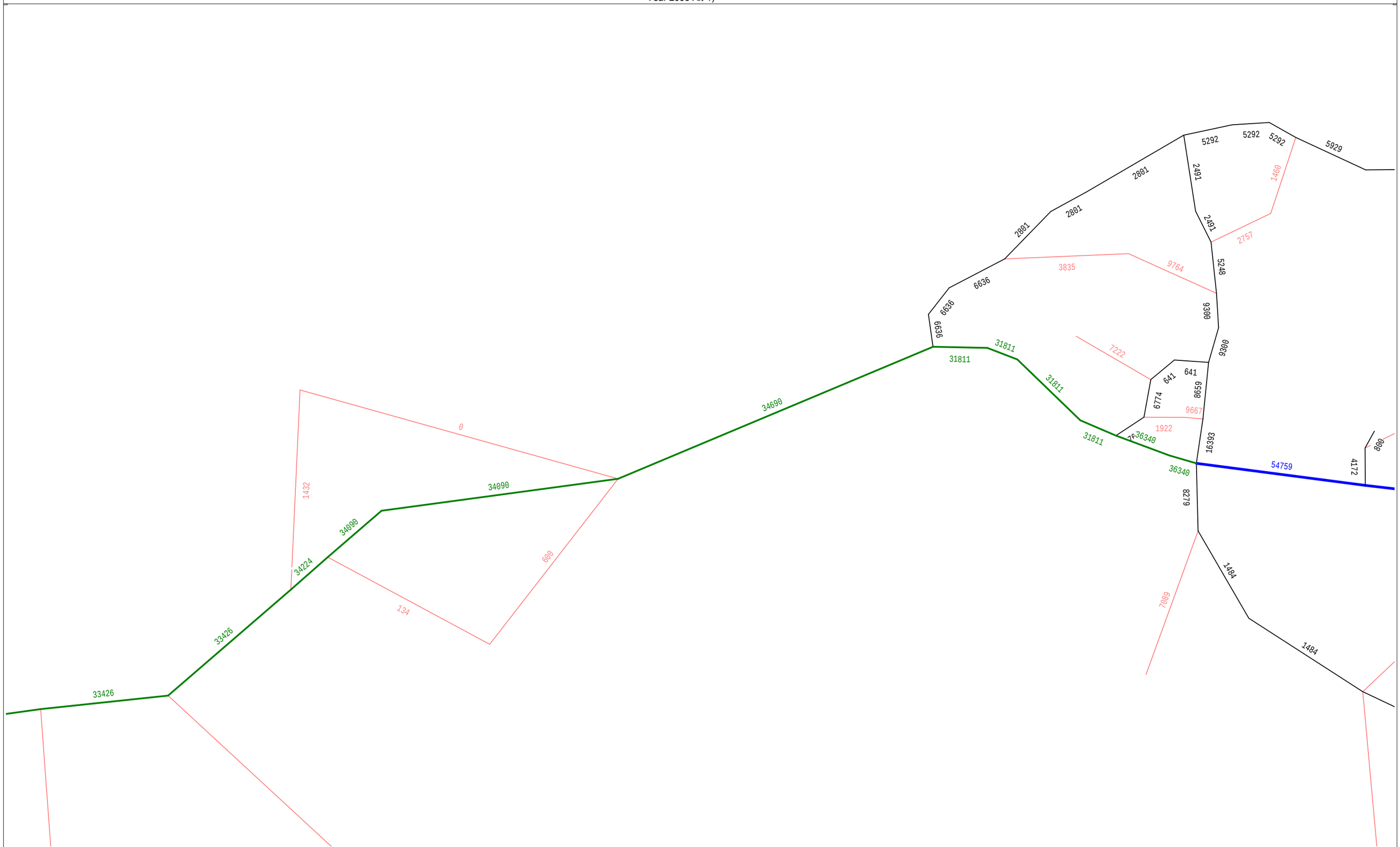
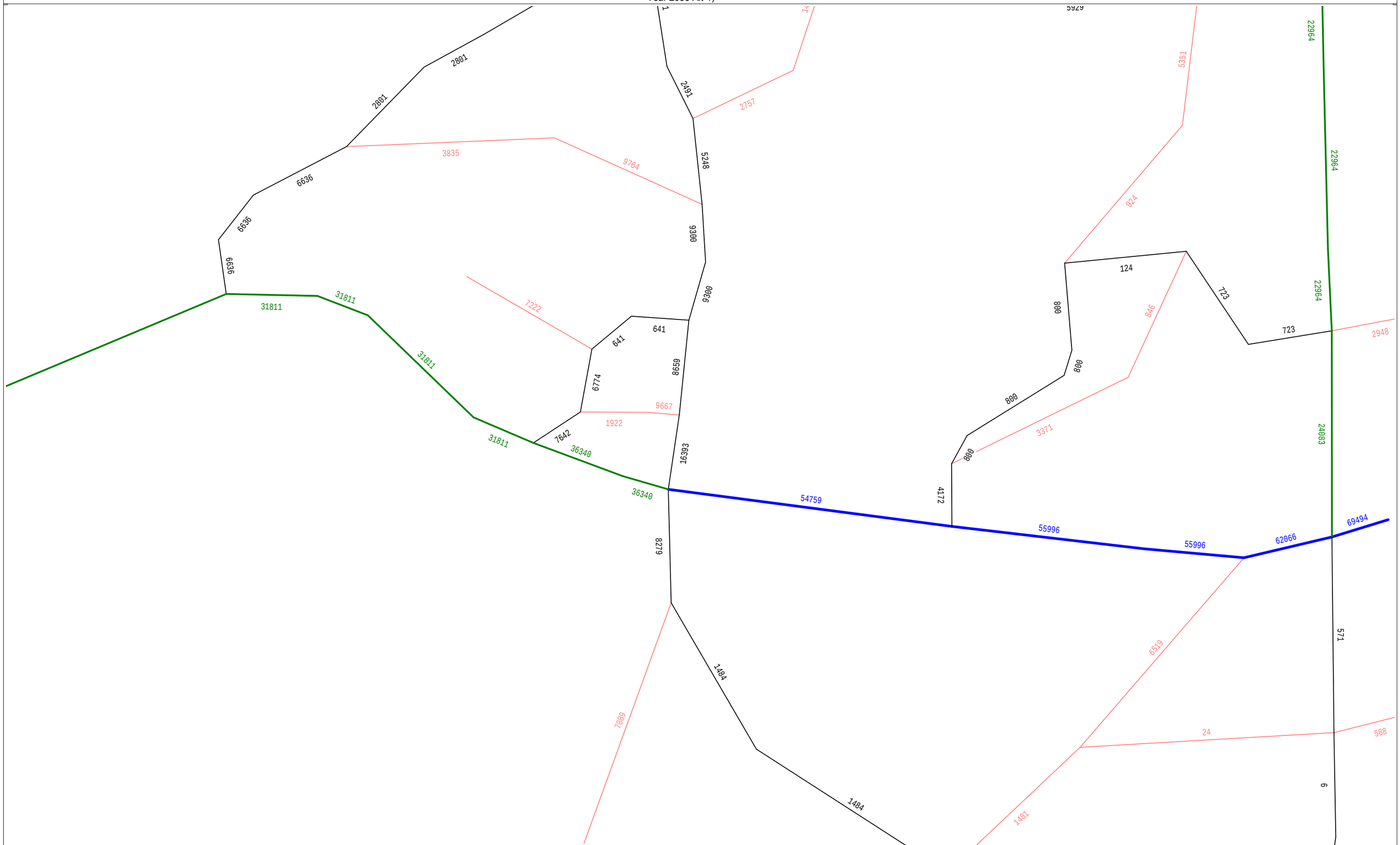
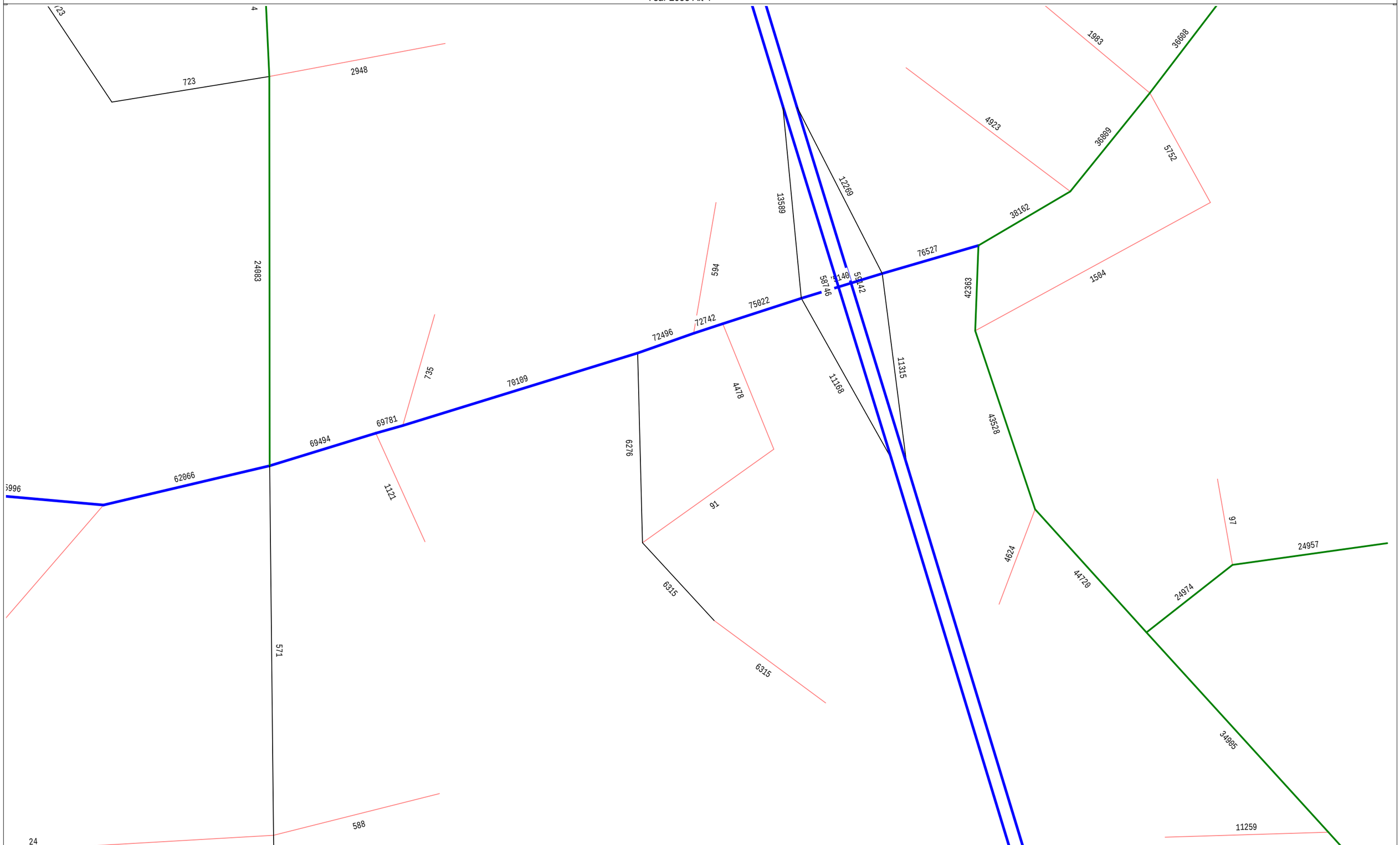
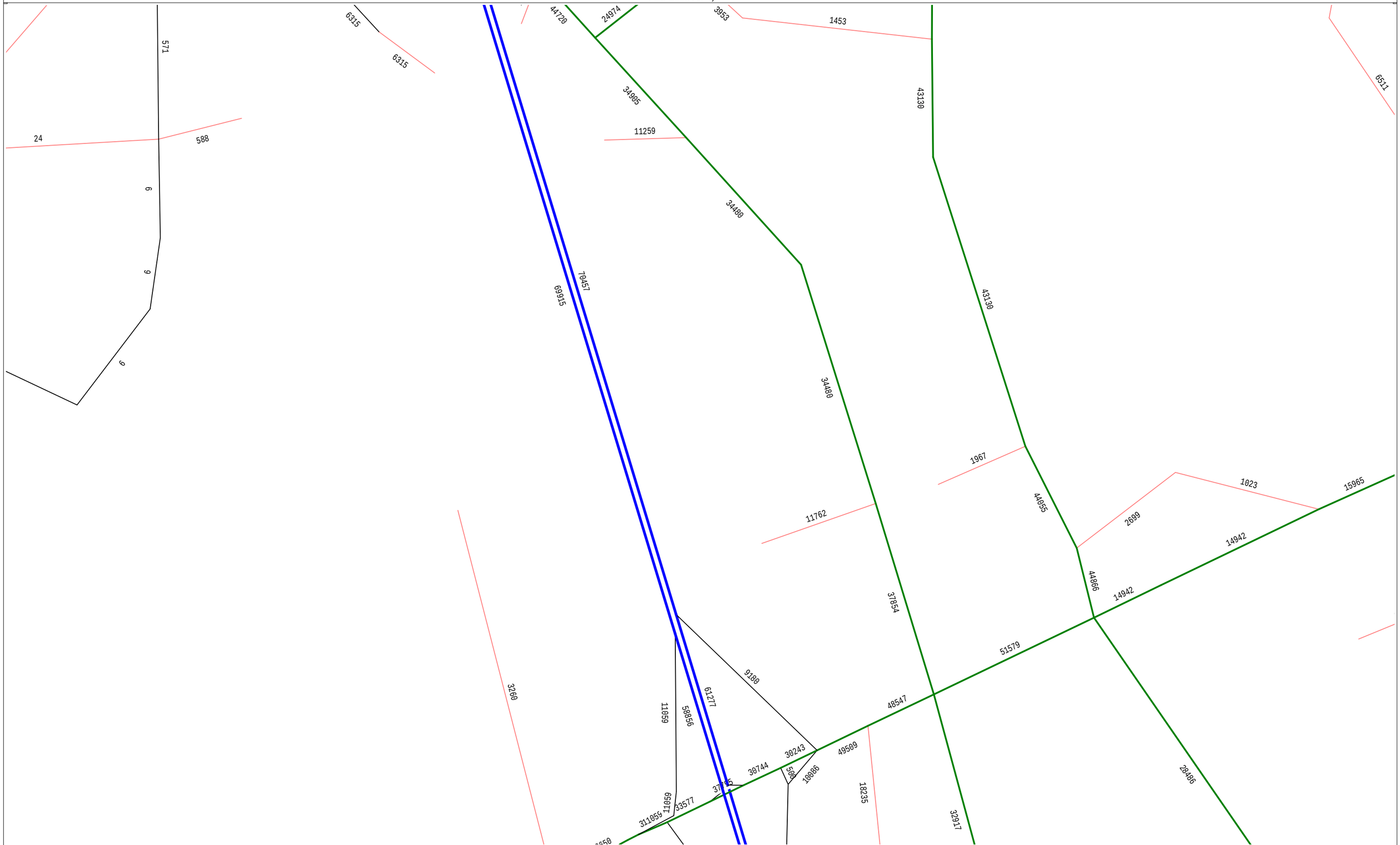
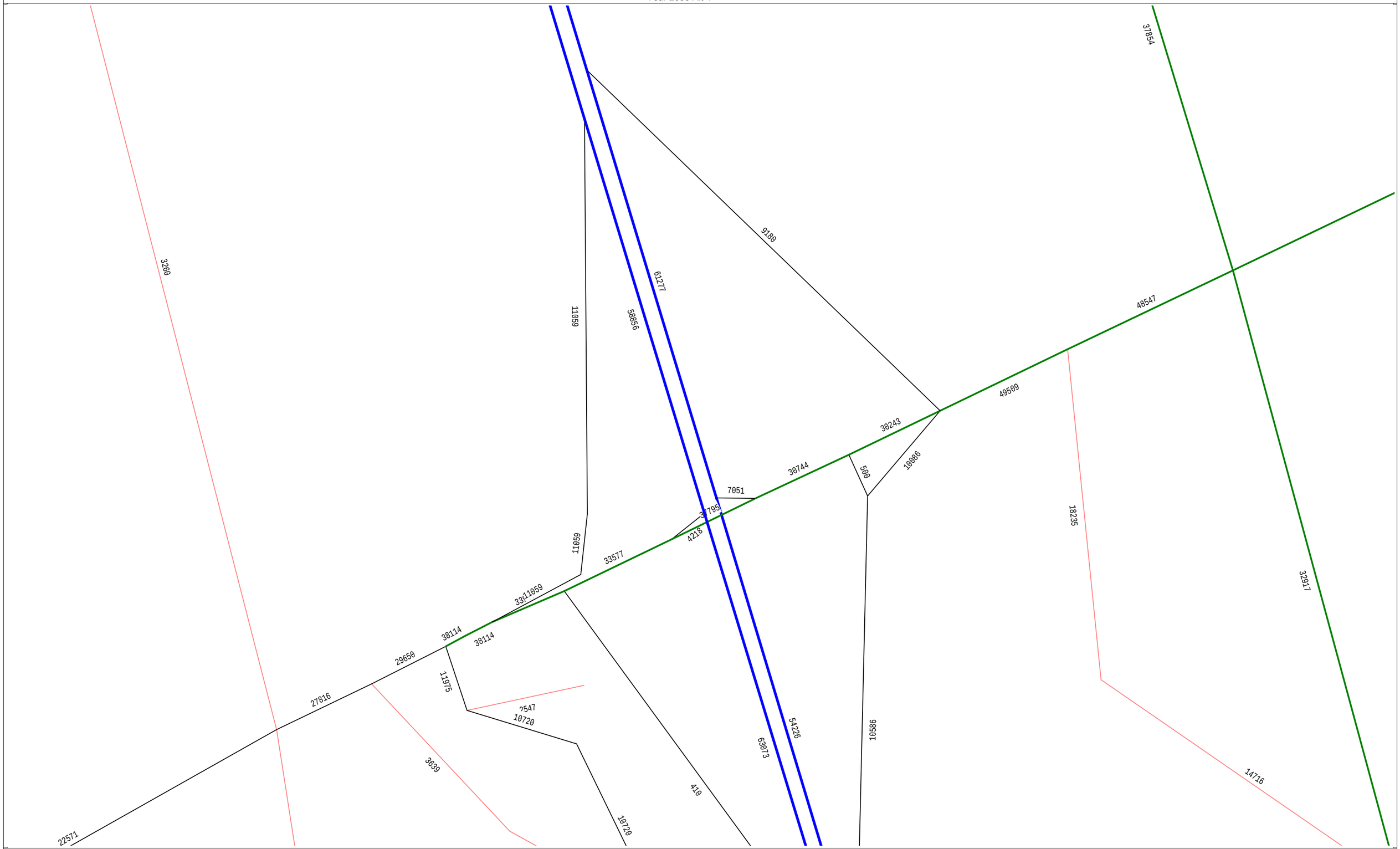
Build Alternative 1 - CFRPM 5.0 Year 2035 Model Plots



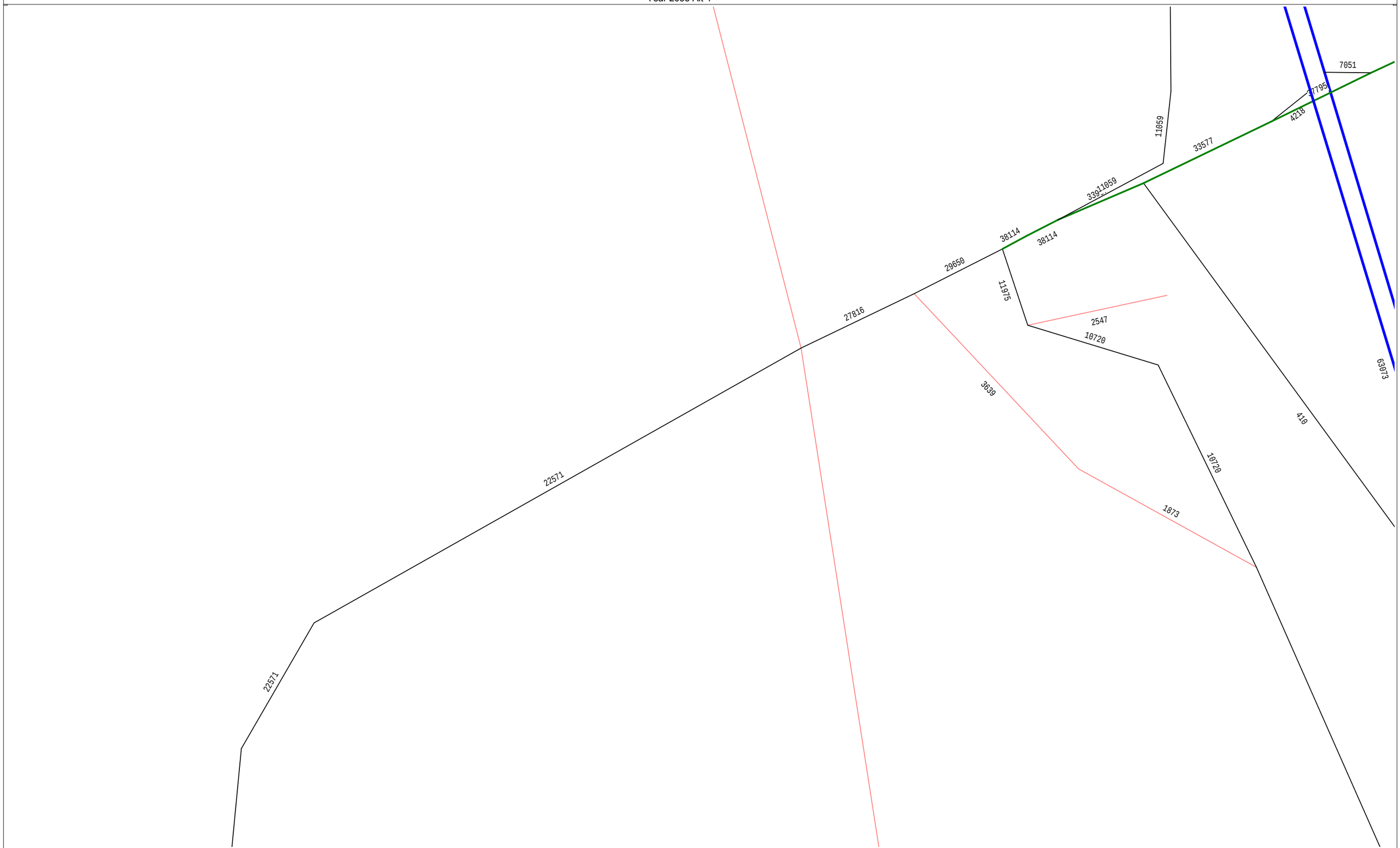




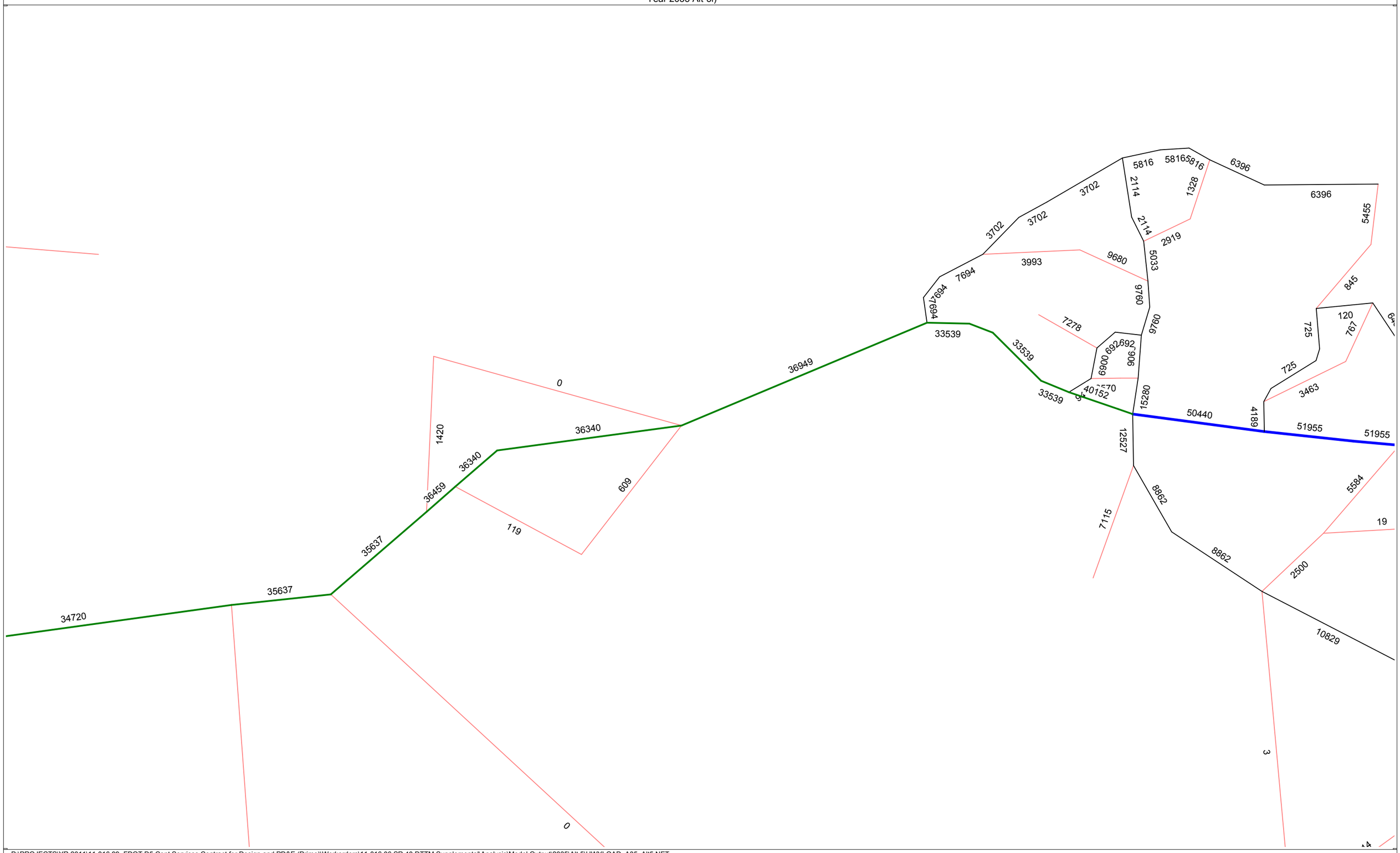


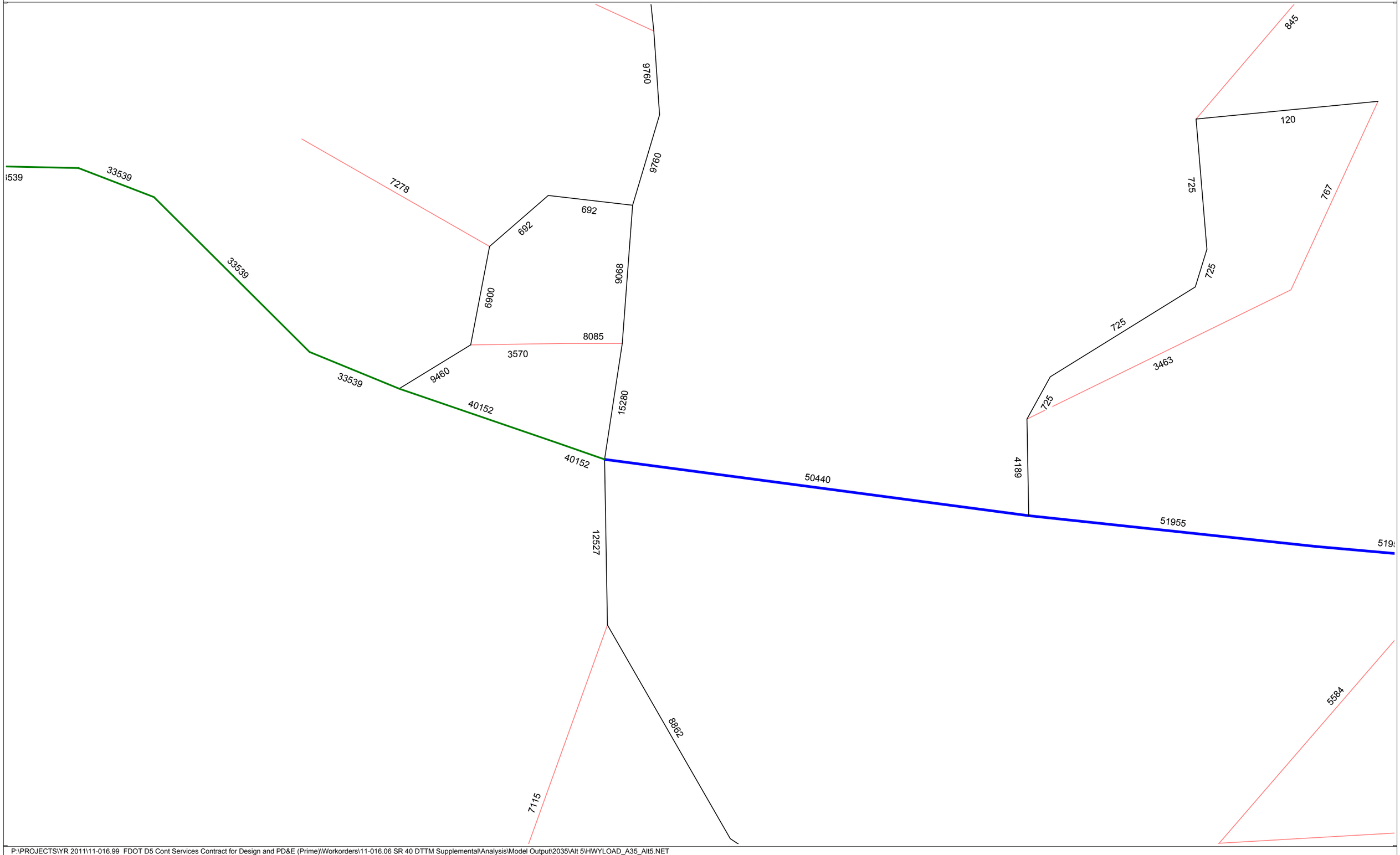


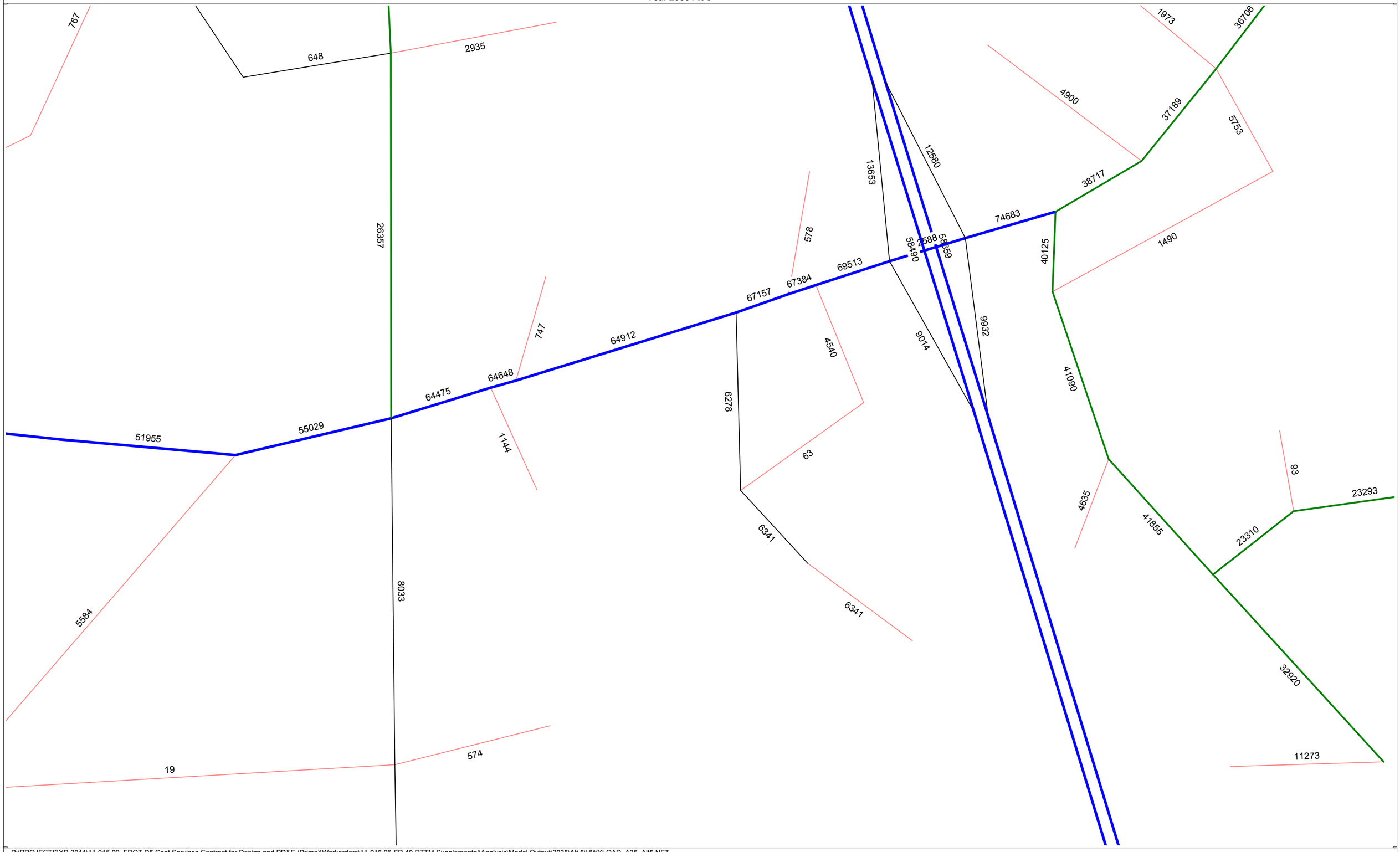
Year 2035 Alt-1

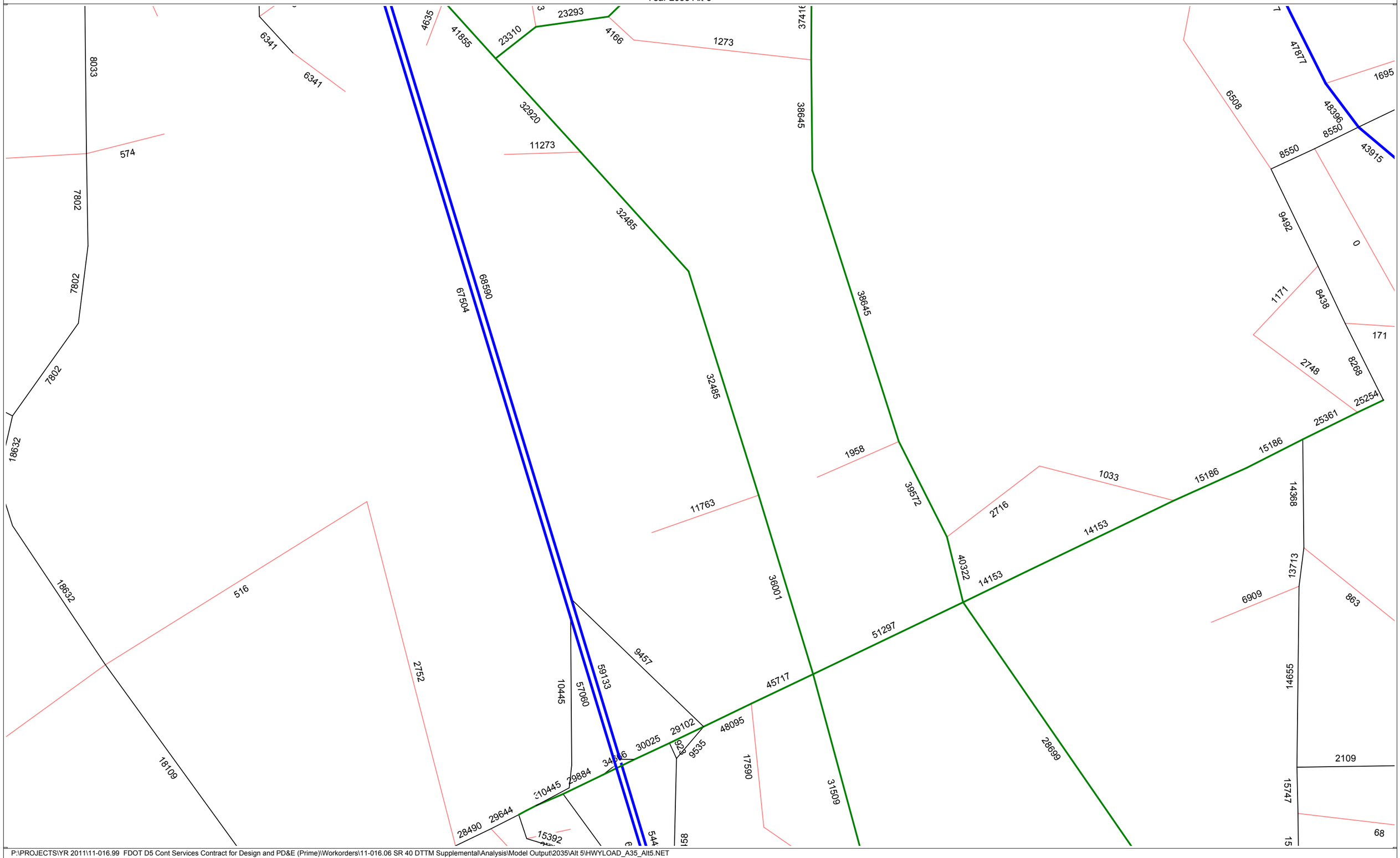


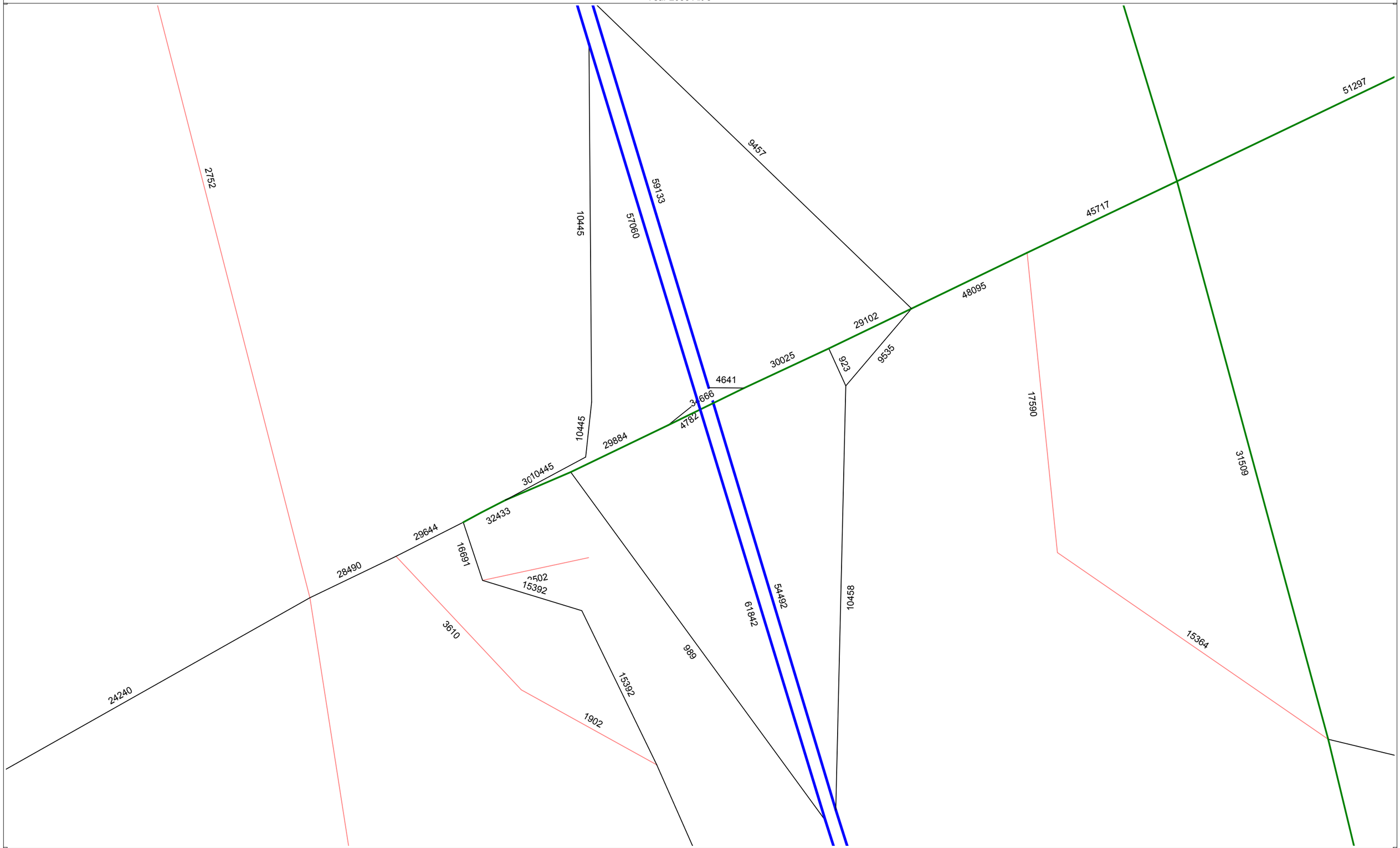
Build Alternative 5 - CFRPM 5.0 Year 2035 Model Plots

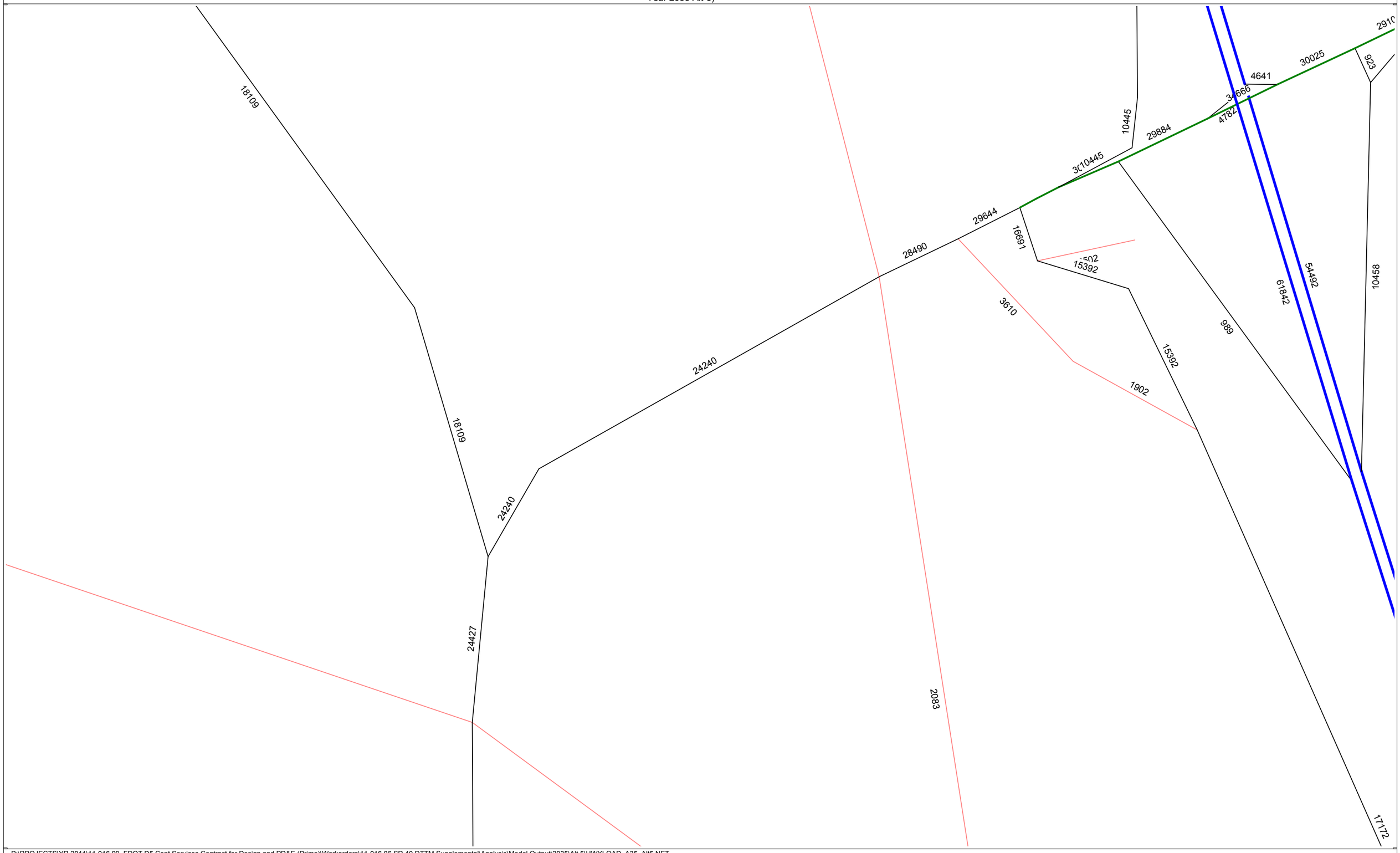












Appendix O

TURNS 5 Sheets

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	*Mainline*	
	38.0%	Westbound (WB)
	62.0%	Eastbound (EB)
	Sidestreet	
	38.0%	Northbound (NB)
	62.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2011	7000	7600	600	0	14600
2035	27300	27300	750	0	55350

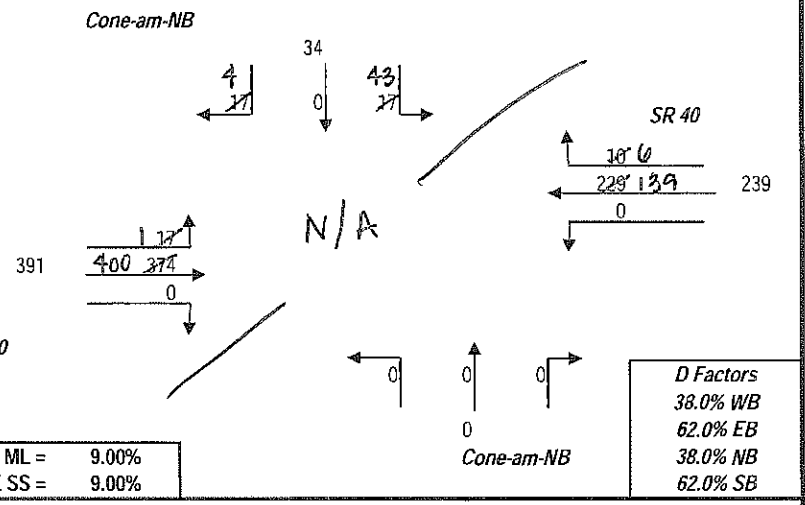
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	1%	1
(EB THRU)	*West-to-East*	99%	99
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	94%	94
(WB RT)	*East-to-North*	6%	6
(SB LT)	*North-to-East*	91%	91
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	9%	9
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

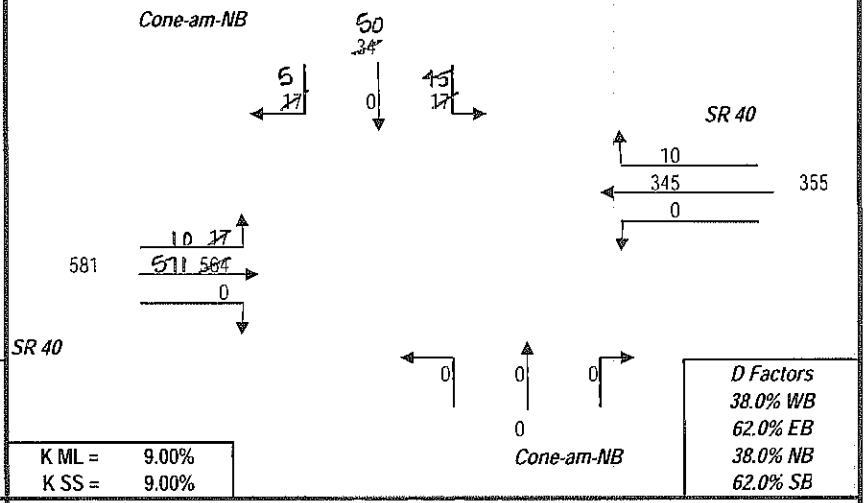
PROJECT TRAFFIC FOR SR 40 AT Cone-am-NB: Cone Road TO Williamson Blvd

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



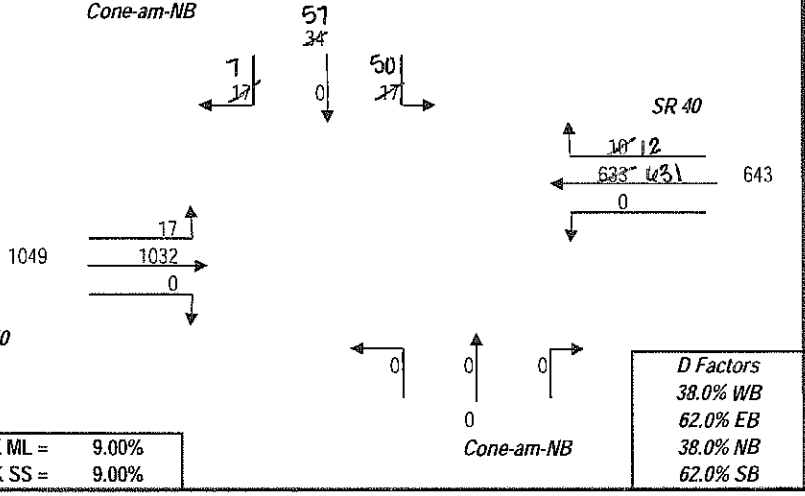
K ML =	9.00%
K SS =	9.00%

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



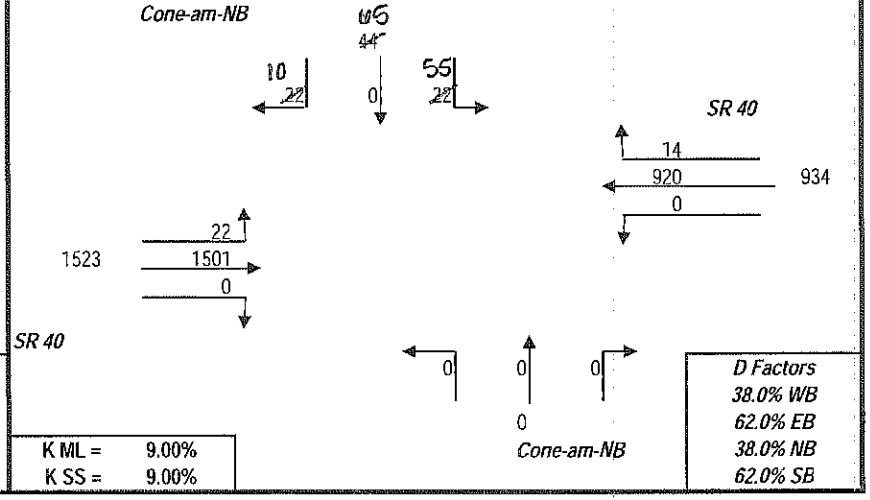
K ML =	9.00%
K SS =	9.00%

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11

Is the Mainline Oriented North/South? (Enter Yes or No) — ○ Yes ◉ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
38.0%	Northbound (NB)
62.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) — ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West:	*From East:*	*From North:*	*From South:*	
EB Approach	*WB Approach*	*SB Approach*	*NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West:	*From East:*	*From North:*	*From South:*	
	EB Approach	*WB Approach*	*SB Approach*	*NB Approach*	***TOTAL***
2015	11200	11500	1000	0	23700
2035	28100	25300	6900	0	60300

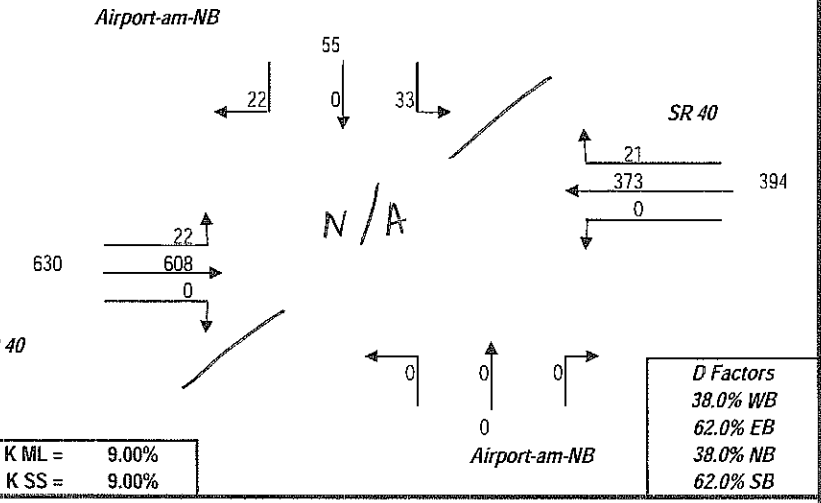
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**
(EB LT)	*West-to-North*	20%	20
(EB THRU)	*West-to-East*	80%	80
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	90%	90
(WB RT)	*East-to-North*	10%	10
(SB LT)	*North-to-East*	40%	40
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	60%	60
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Airport-am-NB: Cone Road TO Williamson Blvd

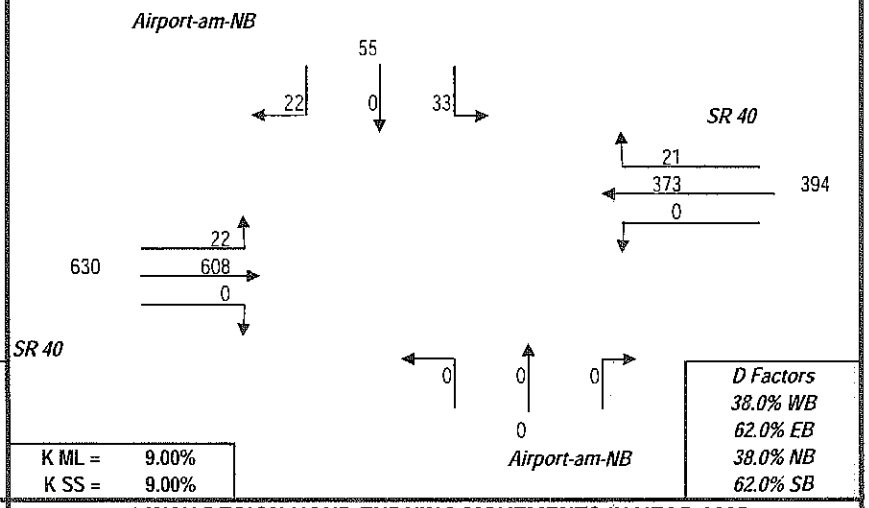
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

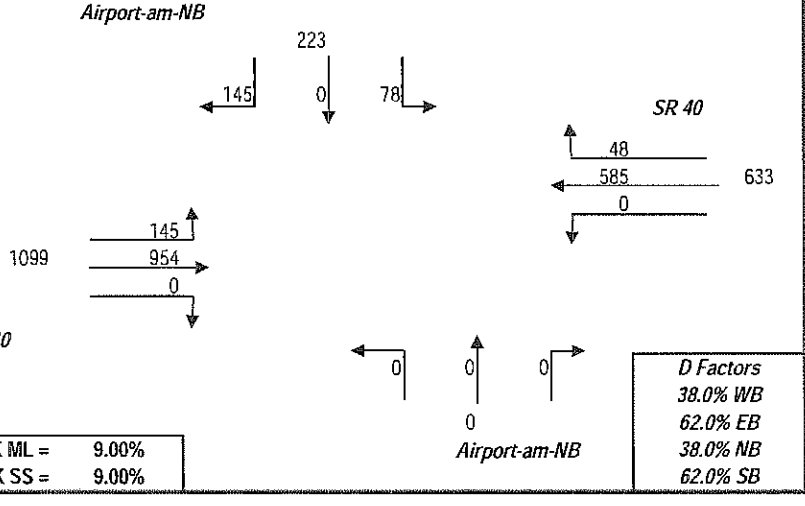
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

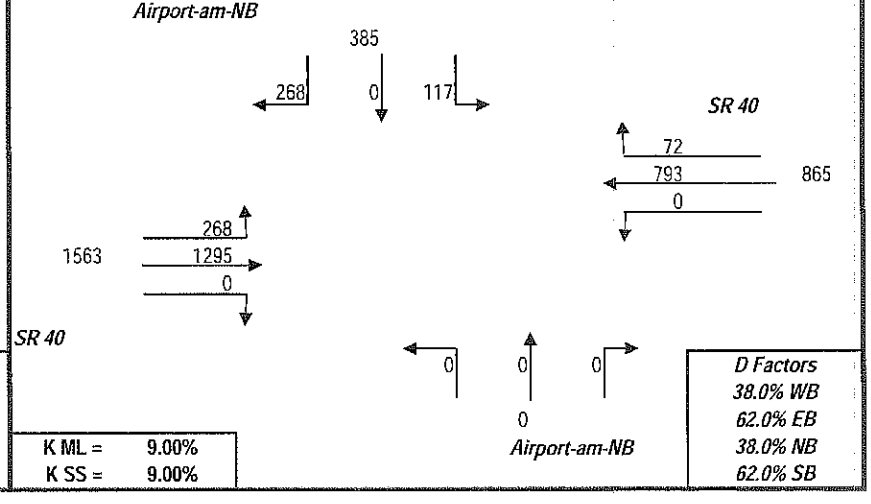
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors

Mainline	
9.00%	
Sidestreet	
9.00%	

D Factors

Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
38.0%	Northbound (NB)
62.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

	Year	Mainline Growth Rate	Side Street Growth Rate
Base			
Opening			
Mid			
Design			

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

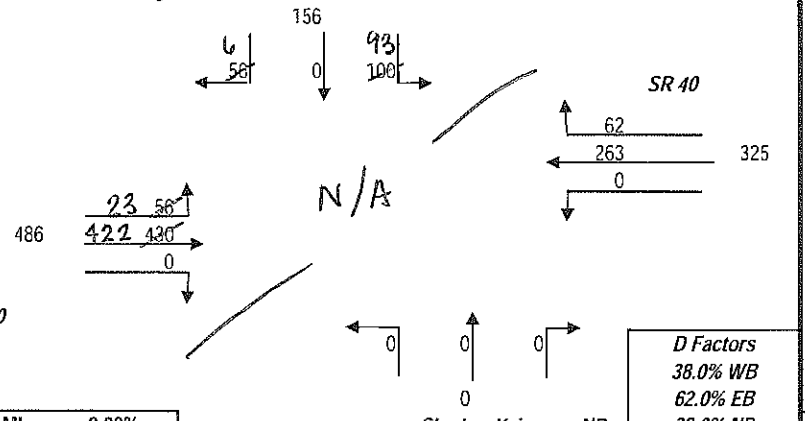
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	3700	9500	2800	0	21000
2035	25300	27400	3500	0	56200

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**	
(EB LT)	*West-to-North*	5%	5	
(EB THRU)	*West-to-East*	95%	95	
(EB RT)	*West-to-South*	0%	0	
(WB LT)	*East-to-South*	0%	0	(must be done manually)
(WB THRU)	*East-to-West*	83%	83	
(WB RT)	*East-to-North*	17%	17	
(SB LT)	*North-to-East*	93%	93	
(SB THRU)	*North-to-South*	0%	0	
(SB RT)	*North-to-West*	7%	7	
(NB LT)	*South-to-West*	0%	0	
(NB THRU)	*South-to-North*	100%	100	
(NB RT)	*South-to-East*	0%	0	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Shadow Xsing-am-NB: Cone Road TO Williamson Blvd

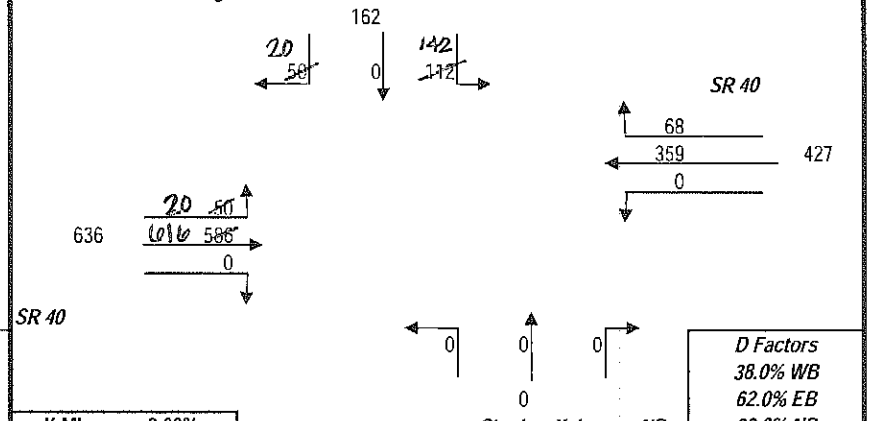
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

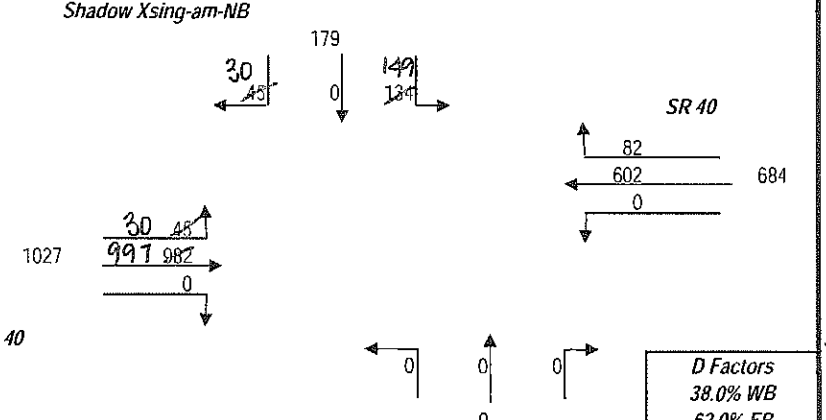
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

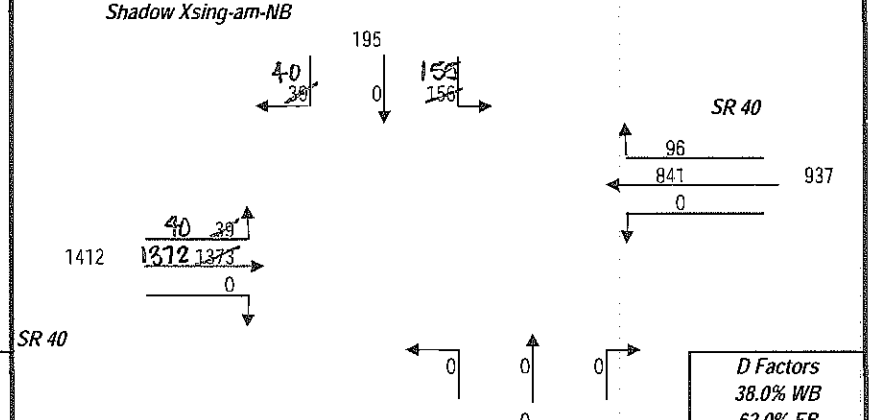
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Phase:
Tip:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
38.0%	Northbound (NB)
62.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Sidestreet Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2005

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2011	9500	9500	0	0	19000
2035	27400	44200	16900	7900	98400

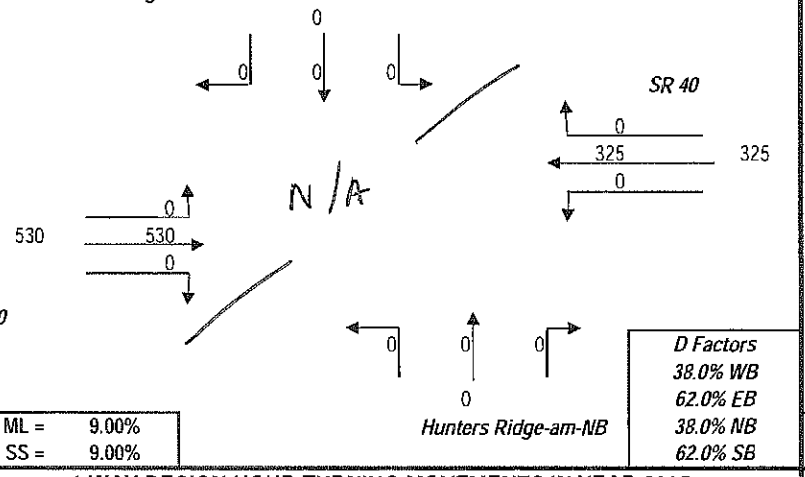
		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	85%	85
(EB RT)	*West-to-South*	10%	10
(WB LT)	*East-to-South*	20%	20
(WB THRU)	*East-to-West*	65%	65
(WB RT)	*East-to-North*	15%	15
(SB LT)	*North-to-East*	60%	60
(SB THRU)	*North-to-South*	35%	35
(SB RT)	*North-to-West*	5%	5
(NB LT)	*South-to-West*	25%	25
(NB THRU)	*South-to-North*	5%	5
(NB RT)	*South-to-East*	70%	70

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Hunters Ridge-am-NB: Cone Road TO Williamson Blvd

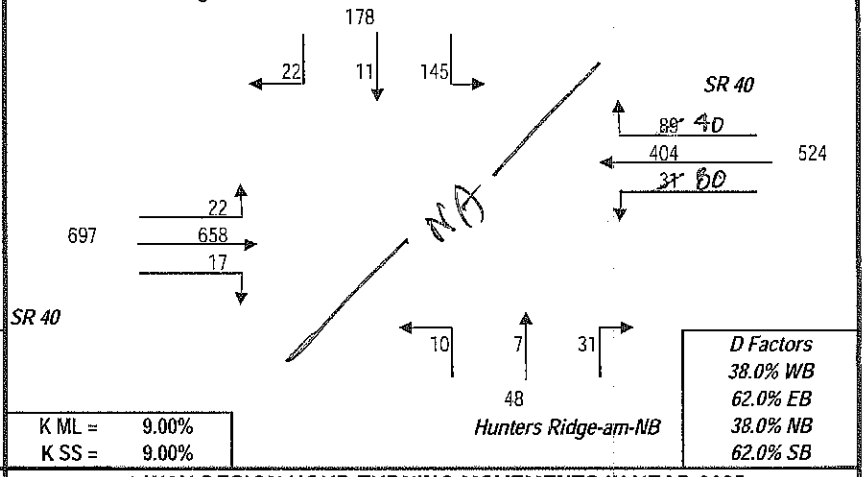
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

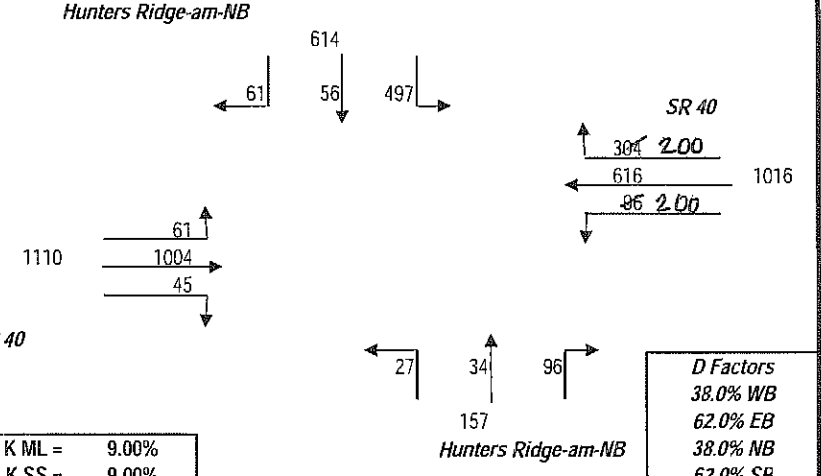
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

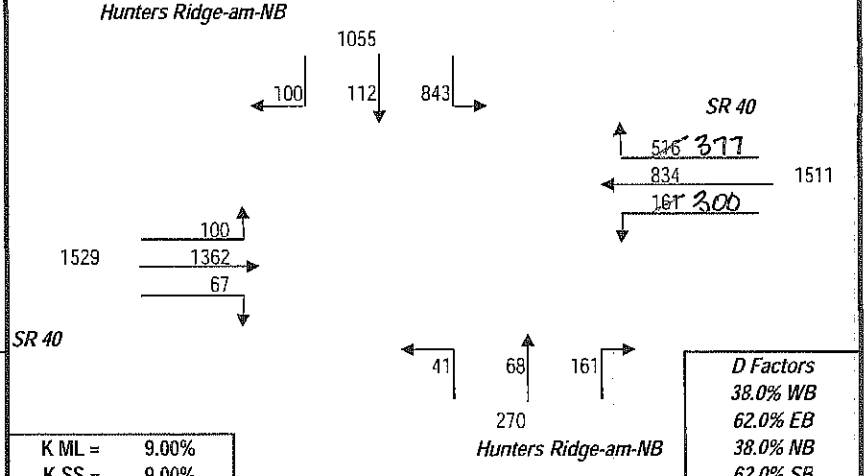
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
32.9%	Northbound (NB)
67.1%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Main Line	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

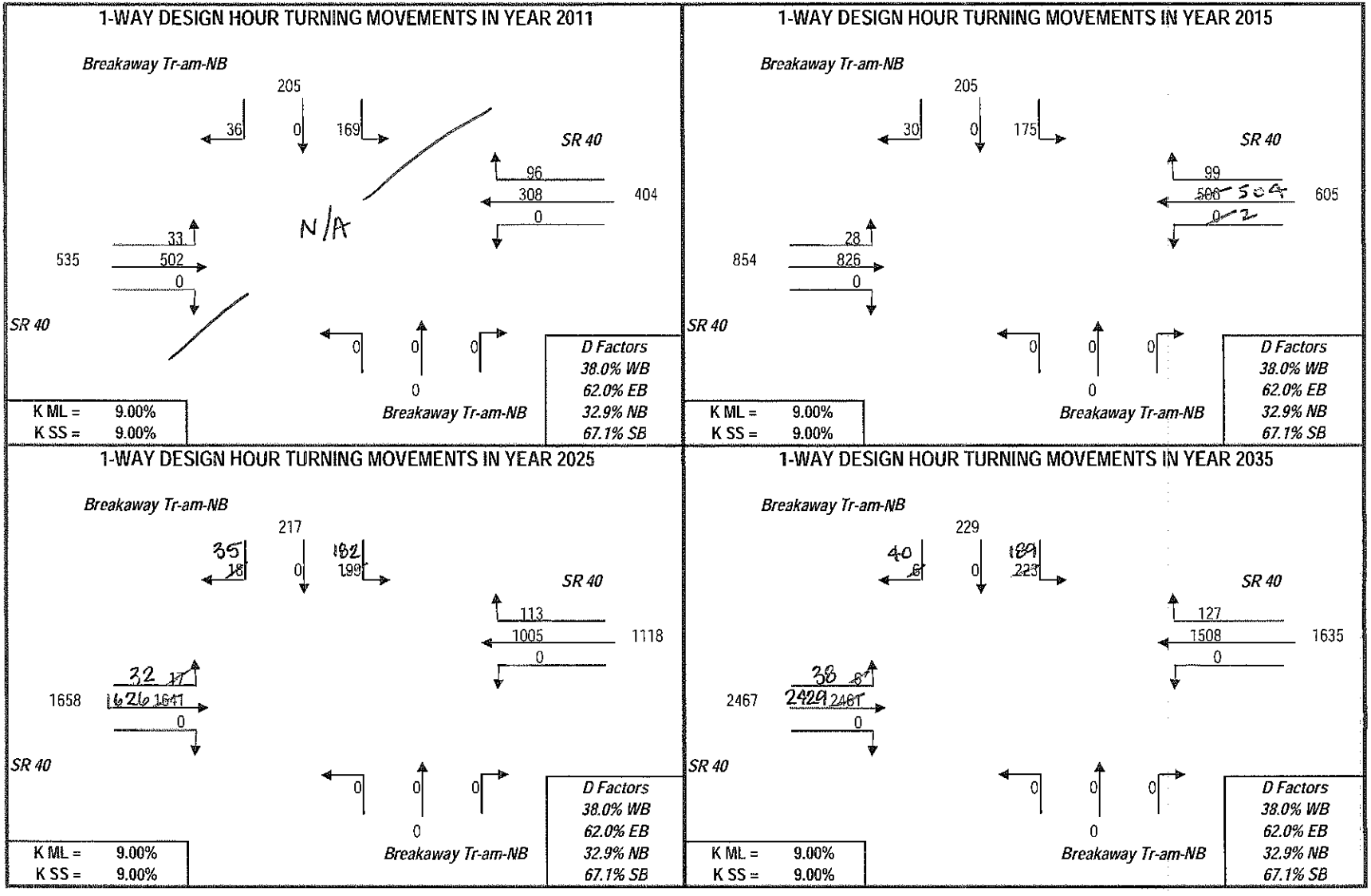
Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2011	9600	11000	3400	0	24800
2035	44200	47700	3800	0	95700

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011	
(EB LT)	*West-to-North*	0%	1	
(EB THRU)	*West-to-East*	100%	578	
(EB RT)	*West-to-South*	0%	0	
(WB LT)	*East-to-South*	0%	1	(must be done manually)
(WB THRU)	*East-to-West*	77%	181	
(WB RT)	*East-to-North*	23%	54	
(SB LT)	*North-to-East*	97%	152	
(SB THRU)	*North-to-South*	0%	0	
(SB RT)	*North-to-West*	3%	5	
(NB LT)	*South-to-West*	0%	0	
(NB THRU)	*South-to-North*	100%	0	
(NB RT)	*South-to-East*	0%	0	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Breakaway Tr-am-NB: Breakaway Tr TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors

Mainline	
9.00%	
Sidestreet	
9.00%	

D Factors

Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
40.5%	Northbound (NB)
59.5%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Side Street Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2015	17800	28200	14200	600	60800
2035	47700	52400	22900	900	122900

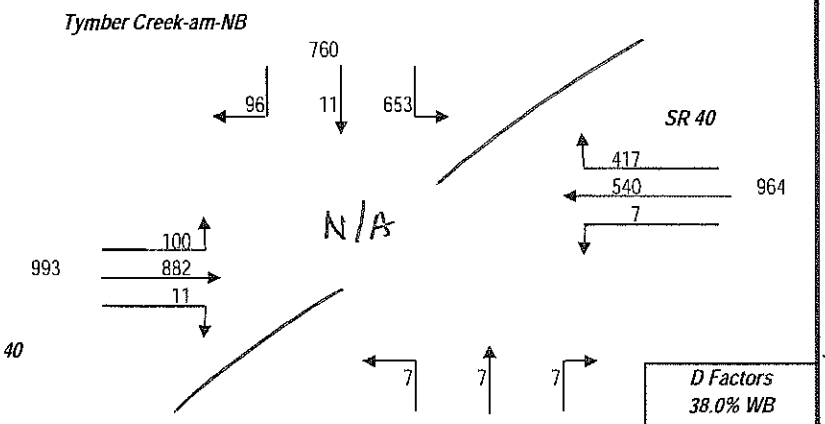
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	93%	93
(EB RT)	*West-to-South*	2%	2
(WB LT)	*East-to-South*	11%	11
(WB THRU)	*East-to-West*	40%	40
(WB RT)	*East-to-North*	49%	49
(SB LT)	*North-to-East*	91%	91
(SB THRU)	*North-to-South*	5%	5
(SB RT)	*North-to-West*	4%	4
(NB LT)	*South-to-West*	25%	25
(NB THRU)	*South-to-North*	31%	31
(NB RT)	*South-to-East*	44%	44

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Tymber Creek-am-NB: Breakaway Tr TO Williamson Blvd

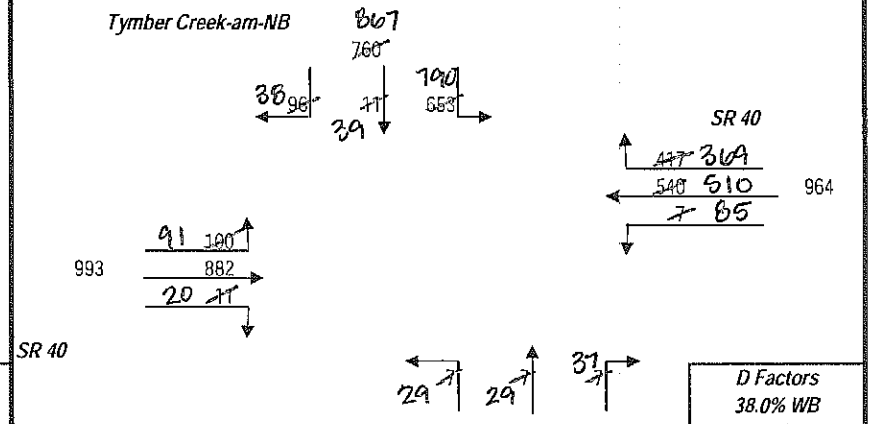
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
40.5%	NB
59.5%	SB

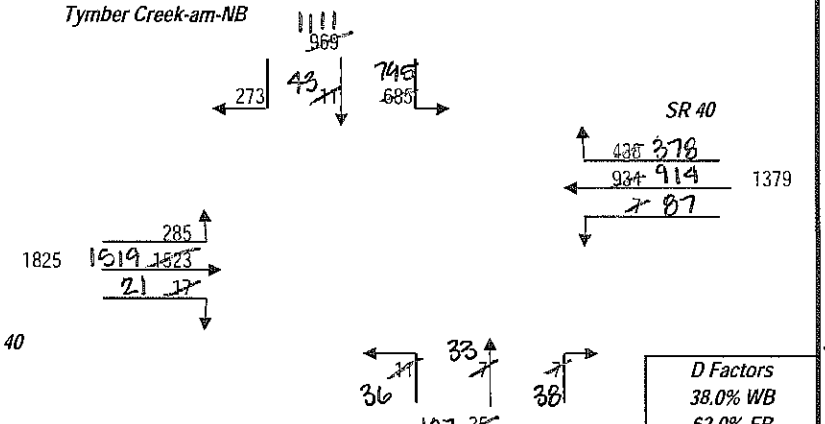
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
40.5%	NB
59.5%	SB

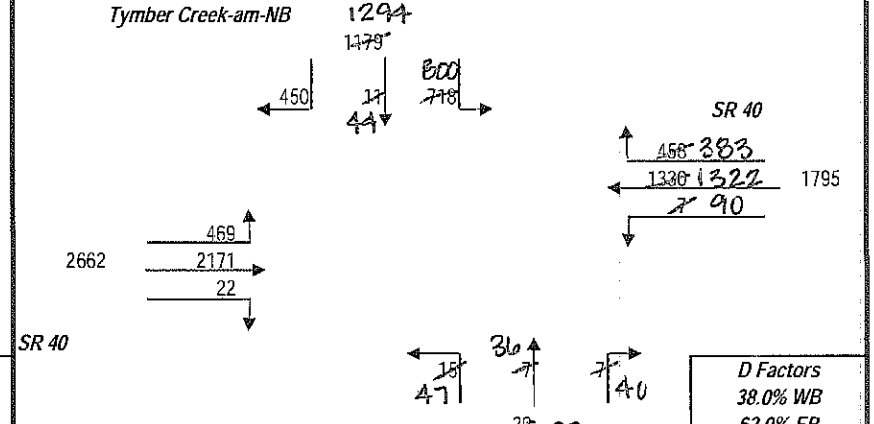
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
40.5%	NB
59.5%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
40.5%	NB
59.5%	SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
38.0%		Westbound (WB)
62.0%		Eastbound (EB)
Sidestreet		
49.5%		Northbound (NB)
50.5%		Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

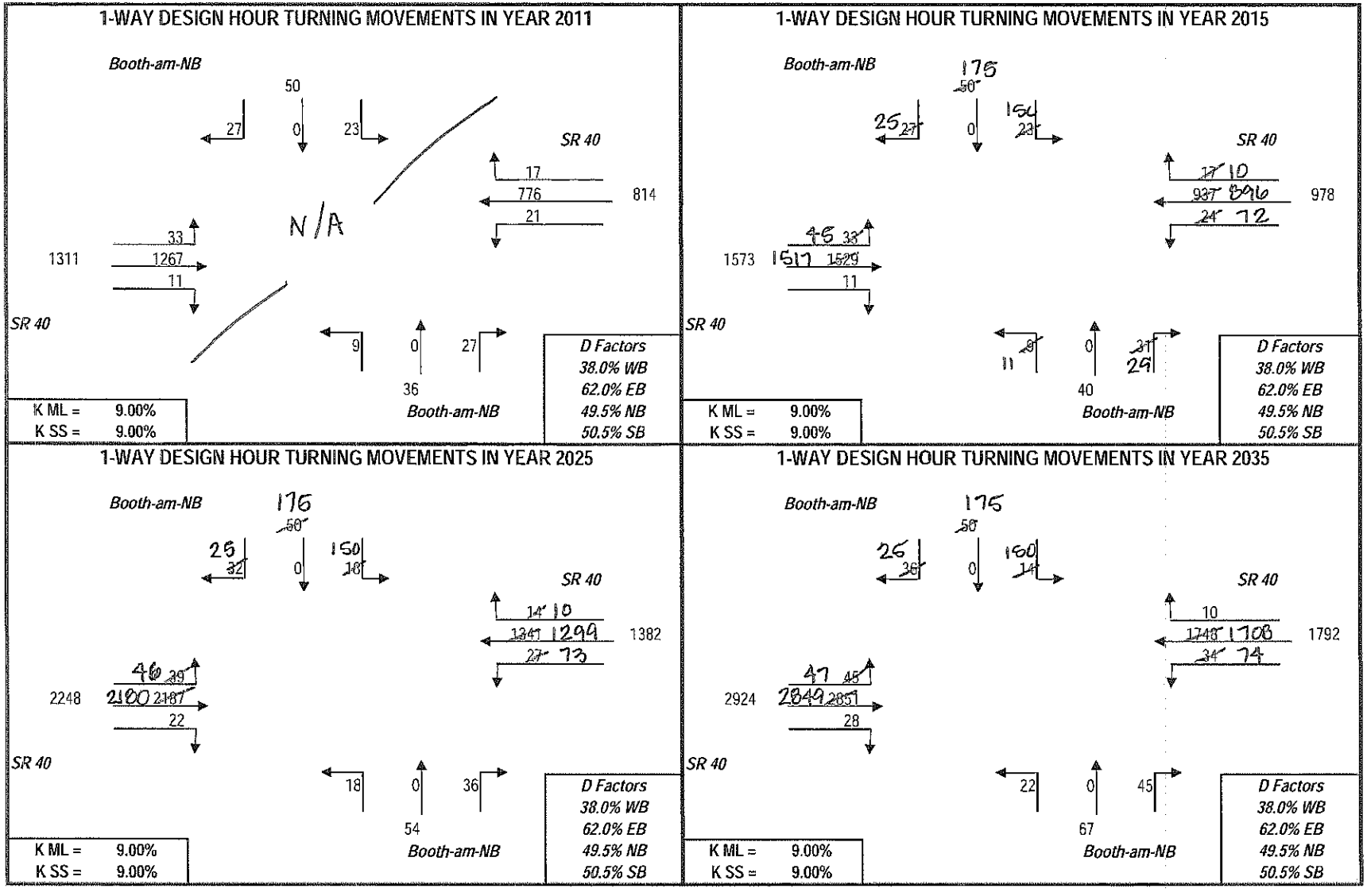
Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
2011	23400	23800	1100	800	49100
2035	52400	52400	1100	1500	107400

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011	
(EB LT)	*West-to-North*	3%	3	
(EB THRU)	*West-to-East*	97%	97	
(EB RT)	*West-to-South*	0%	0	
(WB LT)	*East-to-South*	8%	8	(must be done manually)
(WB THRU)	*East-to-West*	91%	91	
(WB RT)	*East-to-North*	1%	1	
(SB LT)	*North-to-East*	87%	87	
(SB THRU)	*North-to-South*	0%	0	
(SB RT)	*North-to-West*	13%	13	
(NB LT)	*South-to-West*	31%	31	
(NB THRU)	*South-to-North*	0%	0	
(NB RT)	*South-to-East*	69%	69	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Booth-am-NB: Breakaway Tr TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
[illegible]

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors

Mainline	
9.60%	
Sidestreet	
9.60%	

D Factors

Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
55.7%	Northbound (NB)
44.3%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	[illegible]	[illegible]
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

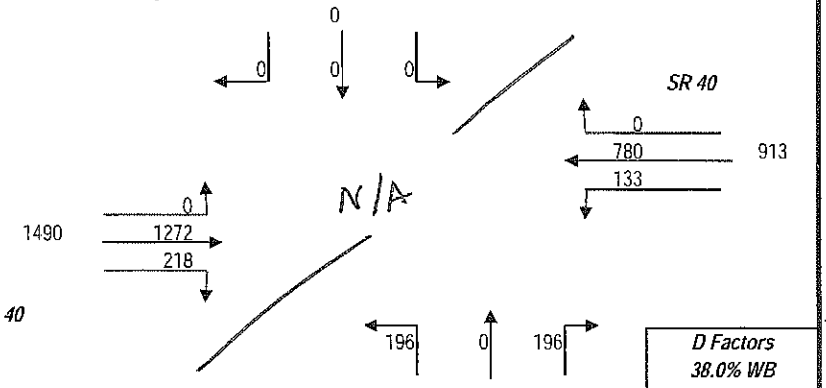
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	26700	26700	0	7800	61200
2035	54200	55800	0	8600	118600

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**	
(EB LT)	*West-to-North*	0%	0	
(EB THRU)	*West-to-East*	97%	97	
(EB RT)	*West-to-South*	3%	3	
(WB LT)	*East-to-South*	14%	14	(must be done manually)
(WB THRU)	*East-to-West*	86%	86	
(WB RT)	*East-to-North*	0%	0	
(SB LT)	*North-to-East*	0%	0	
(SB THRU)	*North-to-South*	100%	100	
(SB RT)	*North-to-West*	0%	0	
(NB LT)	*South-to-West*	23%	23	
(NB THRU)	*South-to-North*	0%	0	
(NB RT)	*South-to-East*	77%	77	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Interchange-am-NB: Breakaway Tr TO Williamson Blvd

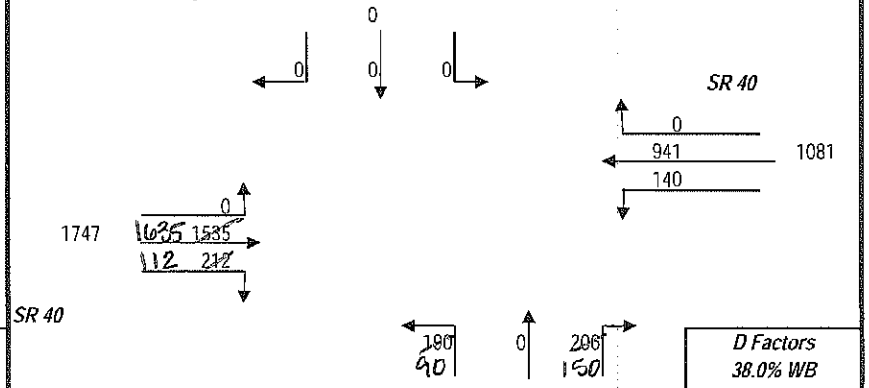
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
55.7%	NB
44.3%	SB

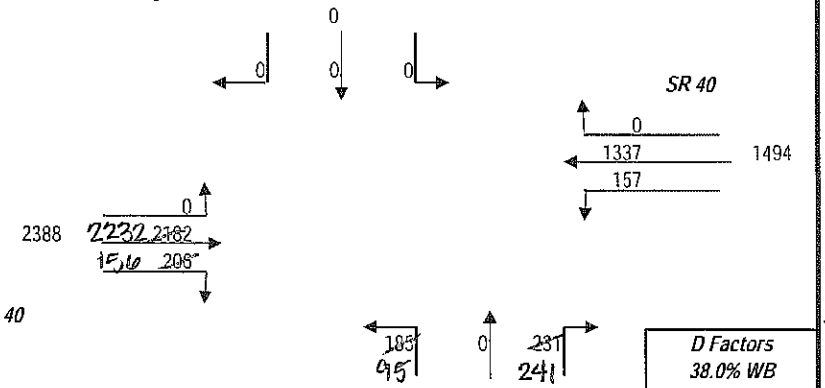
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
55.7%	NB
44.3%	SB

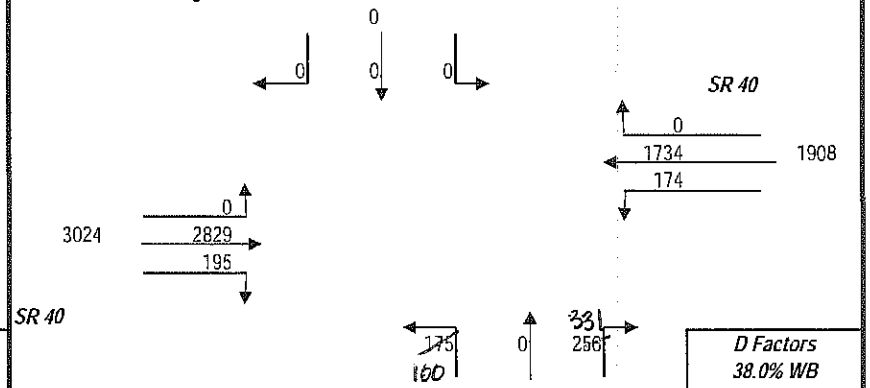
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
55.7%	NB
44.3%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
55.7%	NB
44.3%	SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
45.0%	Northbound (NB)
55.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Side Street Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

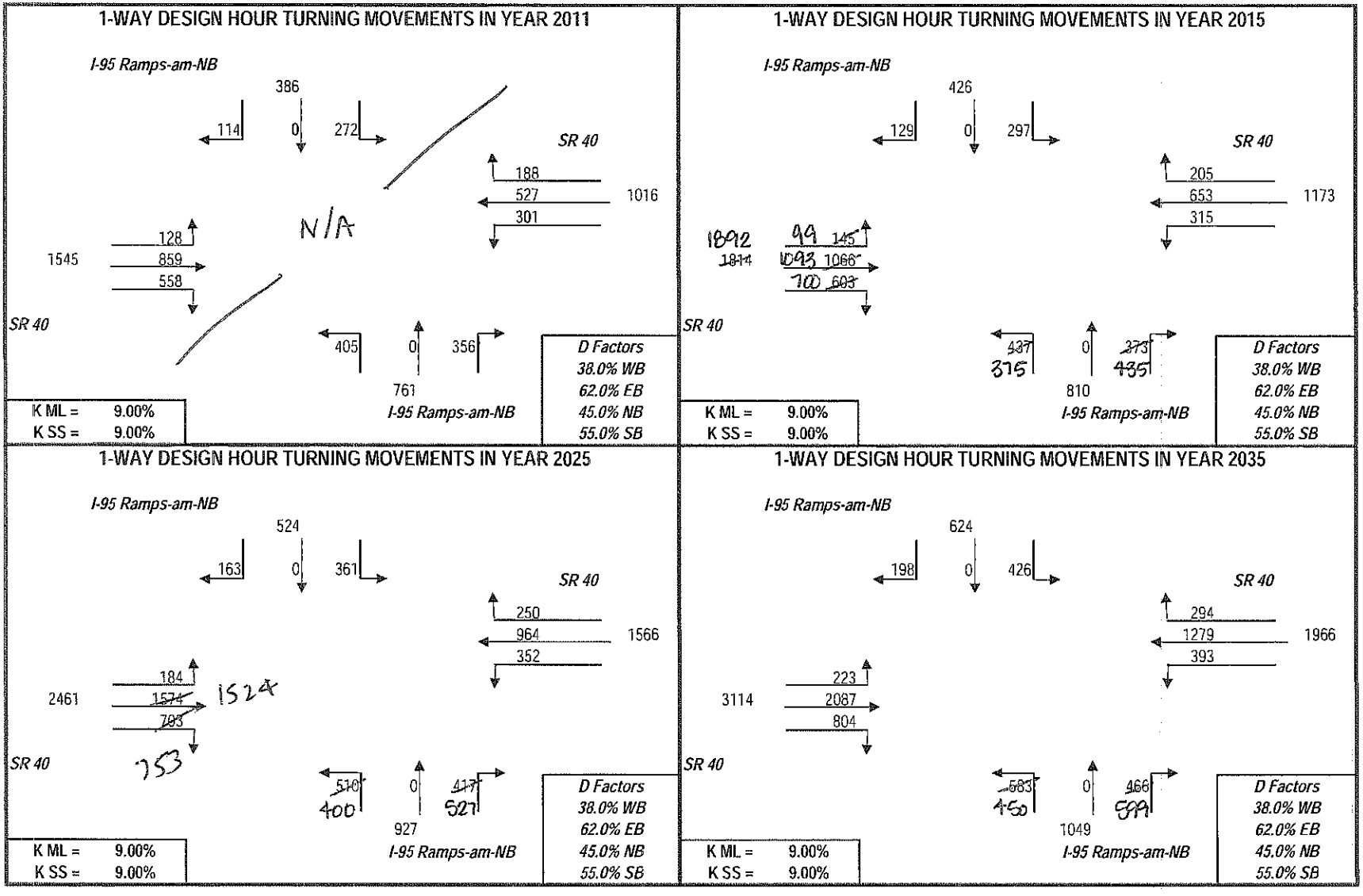
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	27700	29700	7300	19300	84000
2035	55800	57500	12600	25900	151800

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	58%	58
(EB RT)	*West-to-South*	37%	37
(WB LT)	*East-to-South*	34%	34
(WB THRU)	*East-to-West*	52%	52
(WB RT)	*East-to-North*	14%	14
(SB LT)	*North-to-East*	73%	73
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	27%	27
(NB LT)	*South-to-West*	48%	48
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	52%	52

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT I-95 Ramps-am-NB: Breakaway Tr TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
38.0%	Westbound (WB)	
62.0%	Eastbound (EB)	
Sidestreet		
40.0%	Northbound (NB)	
60.0%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

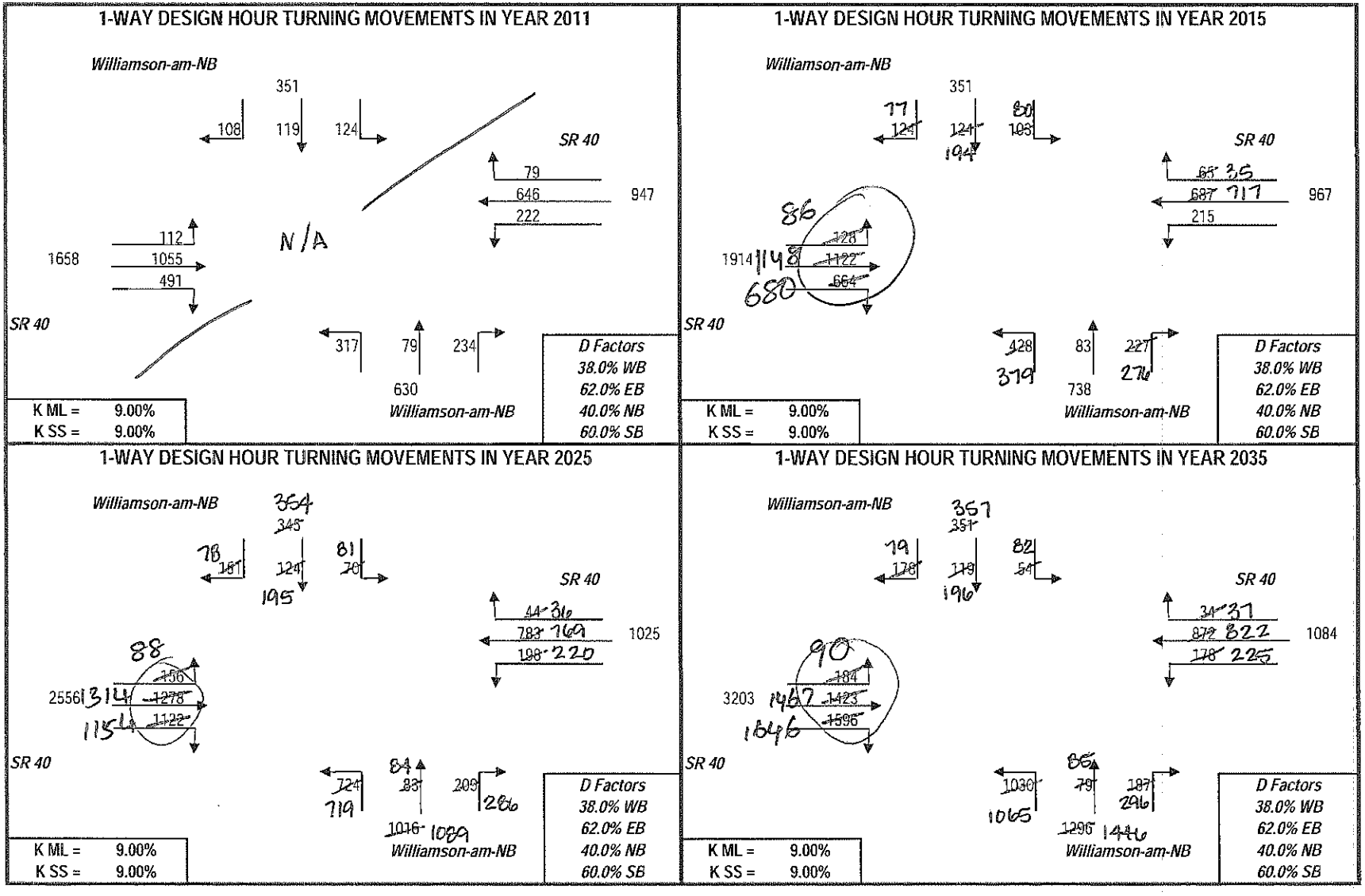
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	29700	27700	6500	17500	81400
2035	57500	31700	6500	36000	131700

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	58%	58
(EB RT)	*West-to-South*	37%	37
(WB LT)	*East-to-South*	20%	20
(WB THRU)	*East-to-West*	76%	76
(WB RT)	*East-to-North*	4%	4
(SB LT)	*North-to-East*	28%	28
(SB THRU)	*North-to-South*	25%	25
(SB RT)	*North-to-West*	47%	47
(NB LT)	*South-to-West*	67%	67
(NB THRU)	*South-to-North*	10%	10
(NB RT)	*South-to-East*	23%	23

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Williamson-am-NB: Breakaway Tr TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South? (Enter Yes or No): (●) Yes ( ) No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
40.0%	Northbound (NB)
60.0%	Southbound (SB)
Sidestreet	
48.5%	Westbound (WB)
51.5%	Eastbound (EB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No): (●) Yes ( ) No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base			
Opening			
Mid			
Design			

Mainline Growth Function: (●) Linear ( ) Exponential ( ) Decaying

Side Street Growth Function: (●) Linear ( ) Exponential ( ) Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

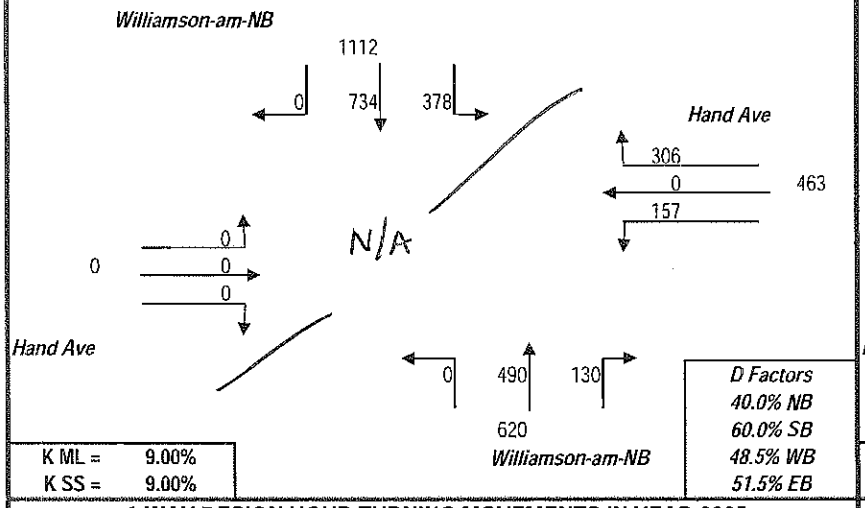
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2015	0	16900	29600	17100	48300
2035	0	23500	35000	32900	92400

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**	
(EB LT)	*West-to-North*	0%	0	
(EB THRU)	*West-to-East*	100%	0	
(EB RT)	*West-to-South*	0%	0	
(WB LT)	*East-to-South*	46%	46	(must be done manually)
(WB THRU)	*East-to-West*	0%	0	
(WB RT)	*East-to-North*	54%	54	
(SB LT)	*North-to-East*	30%	30	
(SB THRU)	*North-to-South*	70%	70	
(SB RT)	*North-to-West*	0%	0	
(NB LT)	*South-to-West*	0%	0	
(NB THRU)	*South-to-North*	70%	70	
(NB RT)	*South-to-East*	30%	30	

Desired Closure: 0.01

PROJECT TRAFFIC FOR Williamson-am-NB AT Hand Ave: SR 40 TO LPGA

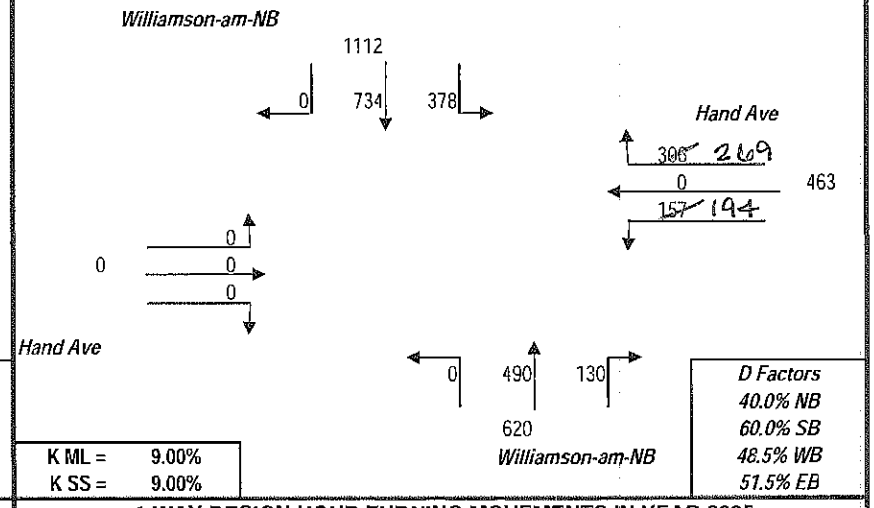
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
40.0% NB
60.0% SB
48.5% WB
51.5% EB

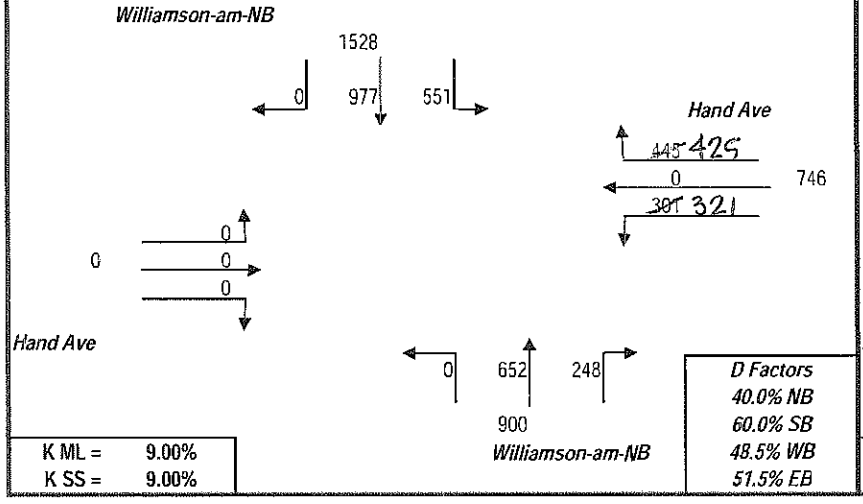
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
40.0% NB
60.0% SB
48.5% WB
51.5% EB

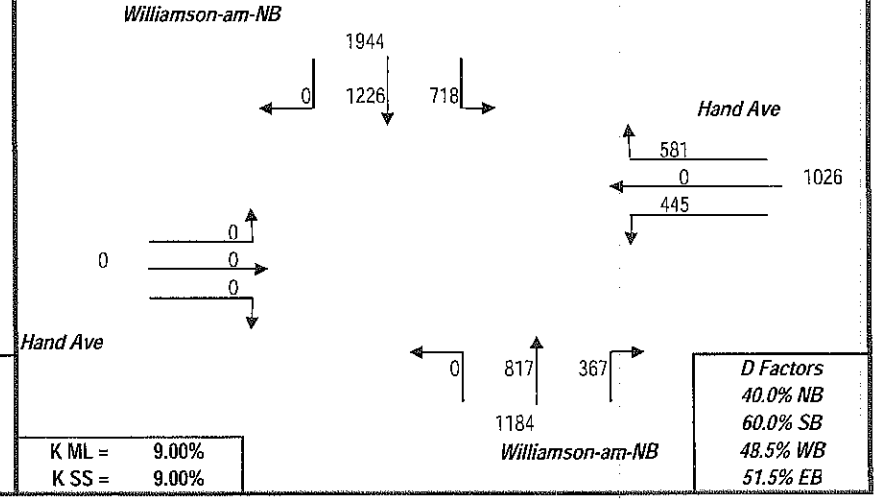
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
40.0% NB
60.0% SB
48.5% WB
51.5% EB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
40.0% NB
60.0% SB
48.5% WB
51.5% EB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
45.5%	Westbound (WB)
54.5%	Eastbound (EB)
Sidestreet	
44.8%	Northbound (NB)
55.2%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

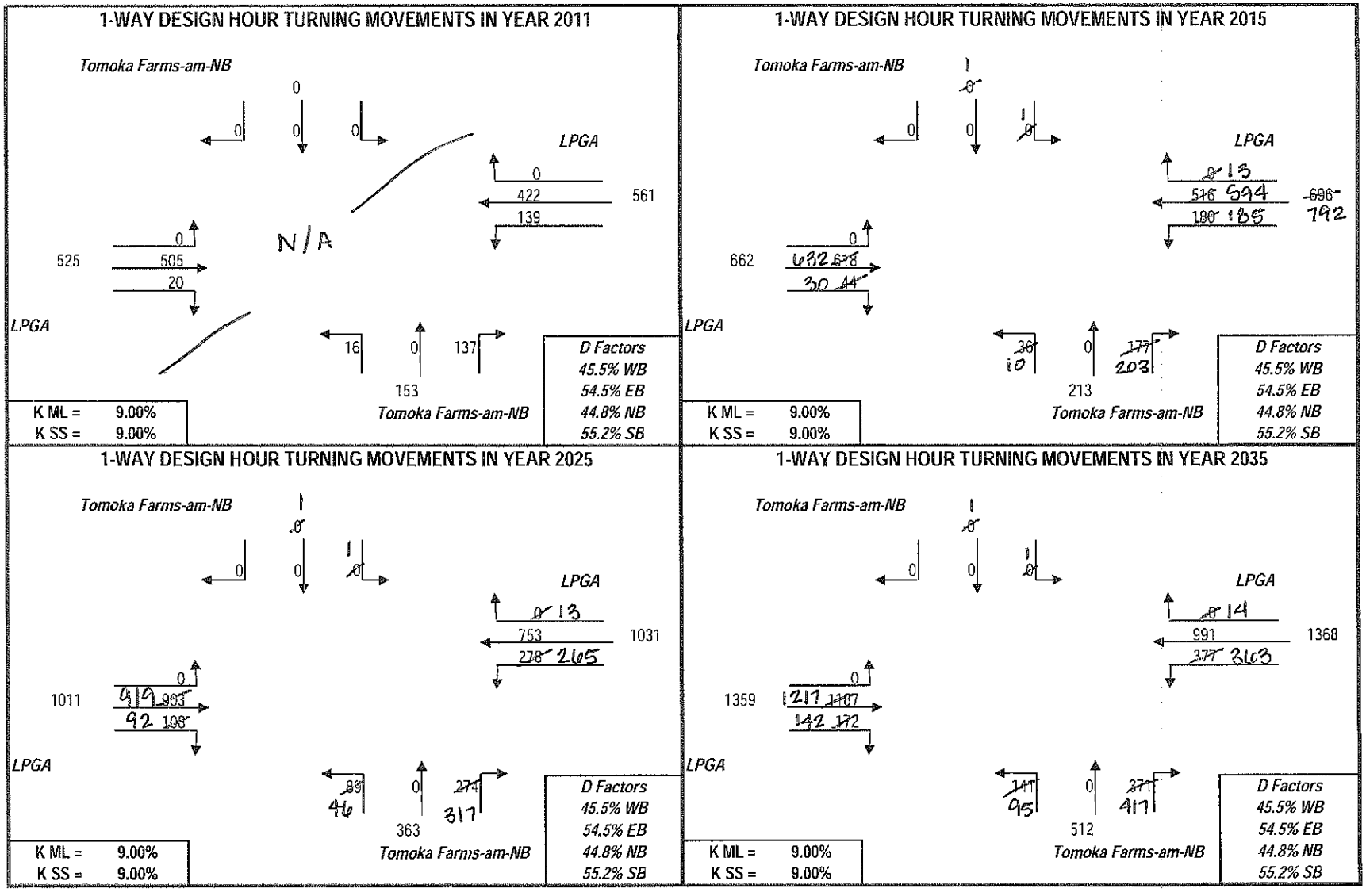
Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
2011	10700	13700	0	3800	28200
2035	27700	33300	0	12700	73700

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011	
(EB LT)	*West-to-North*	0%	0	
(EB THRU)	*West-to-East*	95%	95	
(EB RT)	*West-to-South*	5%	5	
(WB LT)	*East-to-South*	23%	23	(must be done manually)
(WB THRU)	*East-to-West*	75%	75	
(WB RT)	*East-to-North*	2%	2	
(SB LT)	*North-to-East*	0%	0	
(SB THRU)	*North-to-South*	100%	0	
(SB RT)	*North-to-West*	0%	0	
(NB LT)	*South-to-West*	11%	11	
(NB THRU)	*South-to-North*	0%	0	
(NB RT)	*South-to-East*	89%	89	

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT Tomoka Farms-am-NB: Williamson TO Tymber Creek Ext



TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South?

Enter Yes or No
- ○ Yes
- ◉ No

K Factors

Mainline	9.00%
Sidestreet	9.00%

D Factors

Mainline	
45.5%	Westbound (WB)
54.5%	Eastbound (EB)
Sidestreet	
62.4%	Northbound (NB)
62.4%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
- ◉ Yes
- ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Side Street Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2015	17000	29600	14900	9700	71200
2035	33300	47900	23000	15600	119700

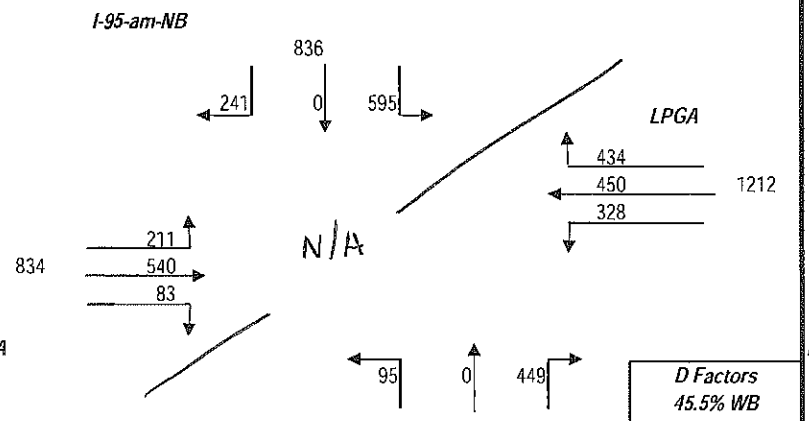
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**
(EB LT)	*West-to-North*	22%	22
(EB THRU)	*West-to-East*	69%	69
(EB RT)	*West-to-South*	9%	9
(WB LT)	*East-to-South*	24%	24
(WB THRU)	*East-to-West*	51%	51
(WB RT)	*East-to-North*	25%	25
(SB LT)	*North-to-East*	79%	79
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	21%	21
(NB LT)	*South-to-West*	15%	15
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	85%	85

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT I-95-am-NB: Williamson TO Tymber Creek Ext

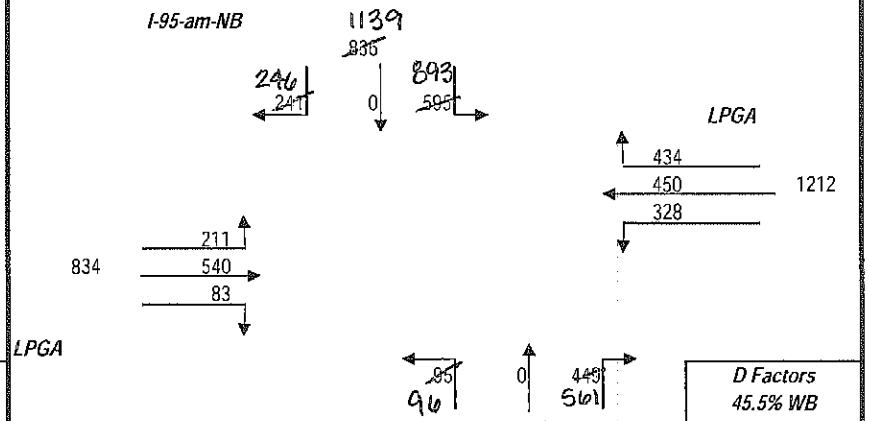
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
62.4%	NB
62.4%	SB

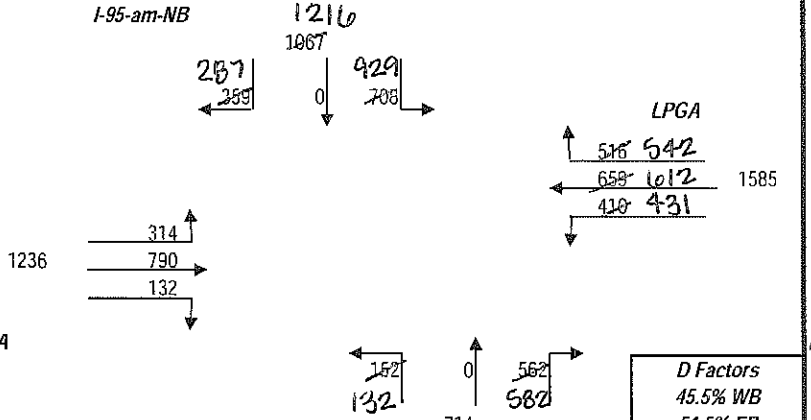
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
62.4%	NB
62.4%	SB

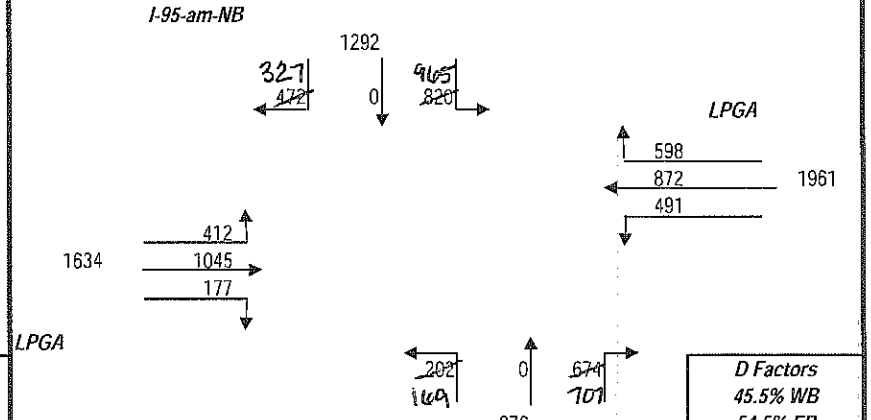
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
62.4%	NB
62.4%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
62.4%	NB
62.4%	SB

TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
45.5%	Westbound (WB)	
54.5%	Eastbound (EB)	
Sidestreet		
40.0%	Northbound (NB)	
60.0%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

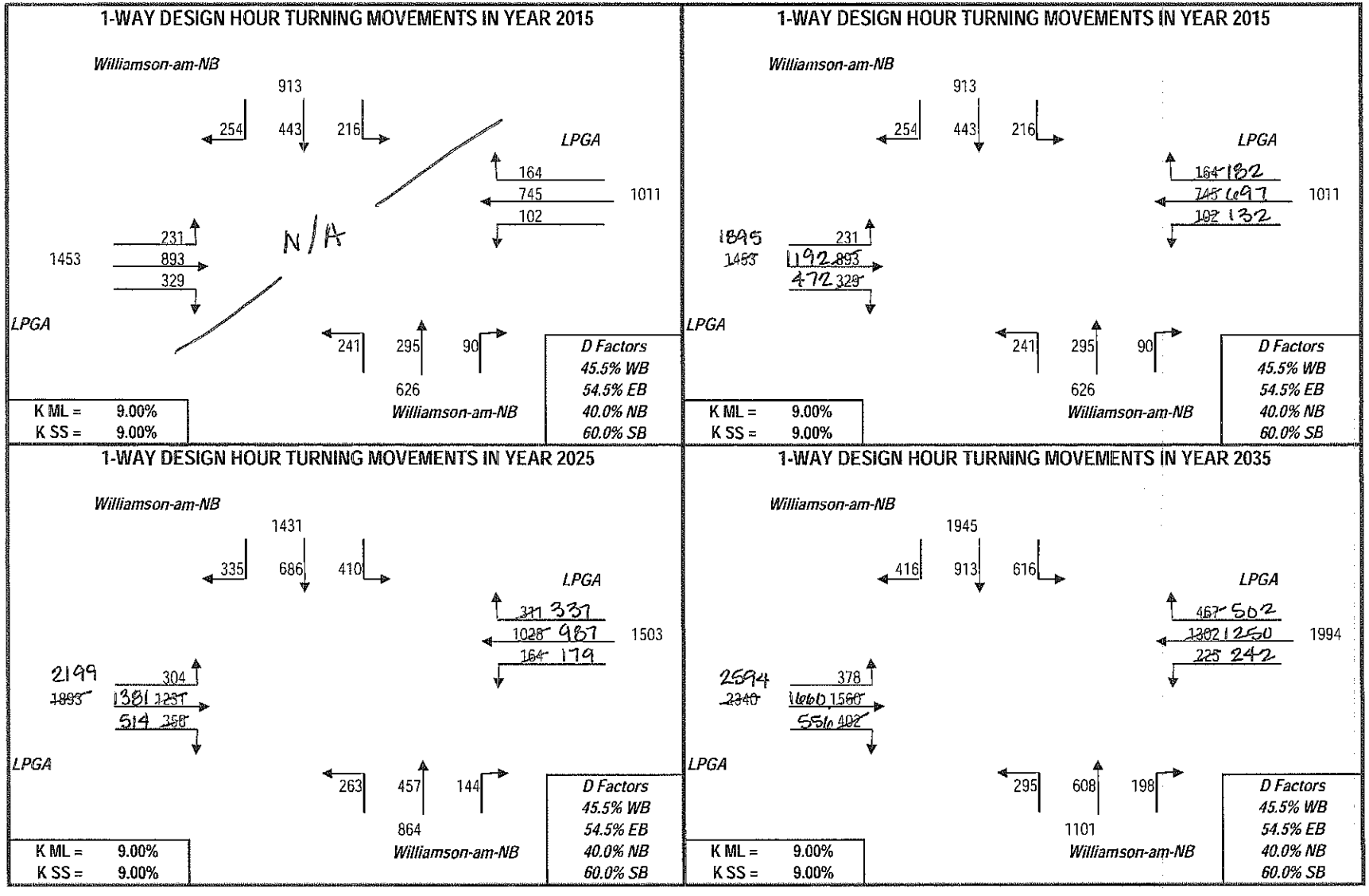
Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2015	29600	24700	16900	17400	88600
2035	47800	48800	36100	30700	163400

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**	
(EB LT)	*West-to-North*	12%	12	
(EB THRU)	*West-to-East*	63%	63	
(EB RT)	*West-to-South*	26%	25	
(WB LT)	*East-to-South*	17%	17	(must be done manually)
(WB THRU)	*East-to-West*	72%	72	
(WB RT)	*East-to-North*	11%	11	
(SB LT)	*North-to-East*	30%	30	
(SB THRU)	*North-to-South*	53%	53	
(SB RT)	*North-to-West*	17%	17	
(NB LT)	*South-to-West*	38%	38	
(NB THRU)	*South-to-North*	44%	44	
(NB RT)	*South-to-East*	18%	18	

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT Williamson-am-NB: Williamson TO Tymber Creek Ext



TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South?

Enter Yes or No
- ○ Yes
- ◉ No

K Factors

Mainline	Sidestreet
9.00%	9.00%

D Factors

Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
62.0%	Northbound (NB)
38.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
- ◉ Yes
- ○ No

If "Yes" go to cell C47 | If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base			
Opening			
Mid			
Design			

Mainline Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Side Street Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

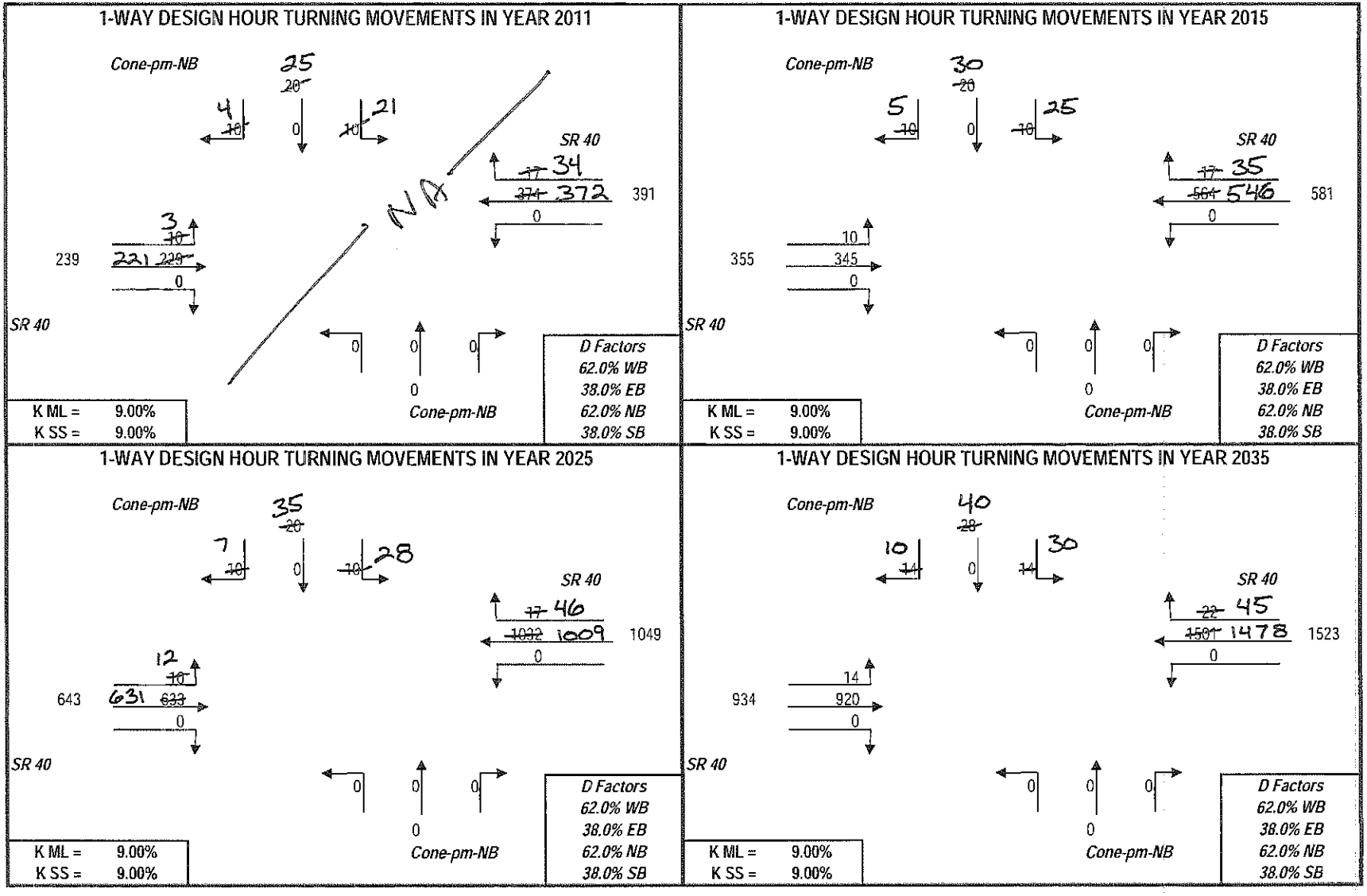
	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
2011	7000	7000	600	0	14600
2035	27300	27300	750	0	55350

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	1%	1
(EB THRU)	*West-to-East*	99%	99
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	94%	94
(WB RT)	*East-to-North*	6%	6
(SB LT)	*North-to-East*	84%	84
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	16%	16
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Cone-pm-NB: Cone Road TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
62.0%	Northbound (NB)
38.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) — Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2026
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2011	11200	11500	1000	0	23700
2035	28100	25300	6900	0	60300

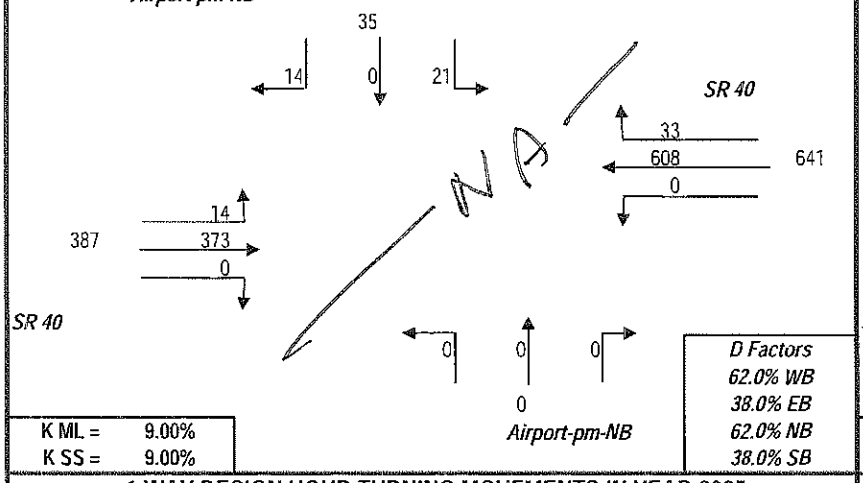
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	20%	20
(EB THRU)	*West-to-East*	80%	80
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	90%	90
(WB RT)	*East-to-North*	10%	10
(SB LT)	*North-to-East*	40%	40
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	60%	60
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Airport-pm-NB: Cone Road TO Williamson Blvd

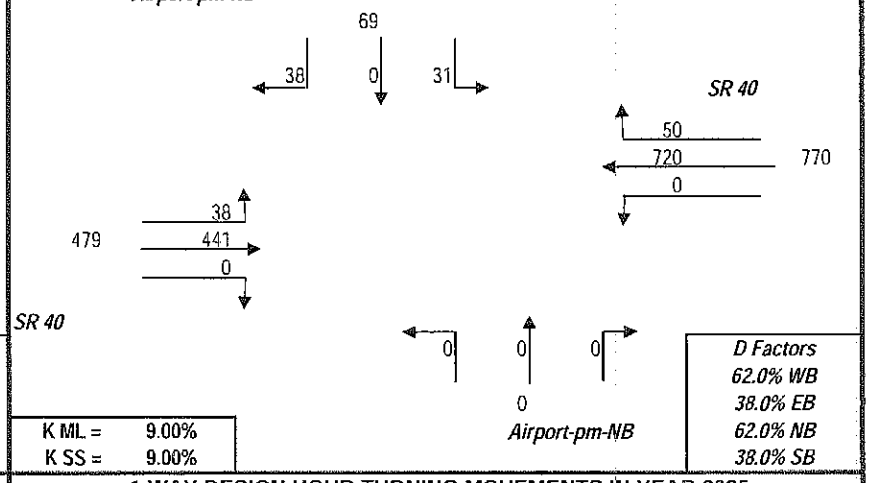
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

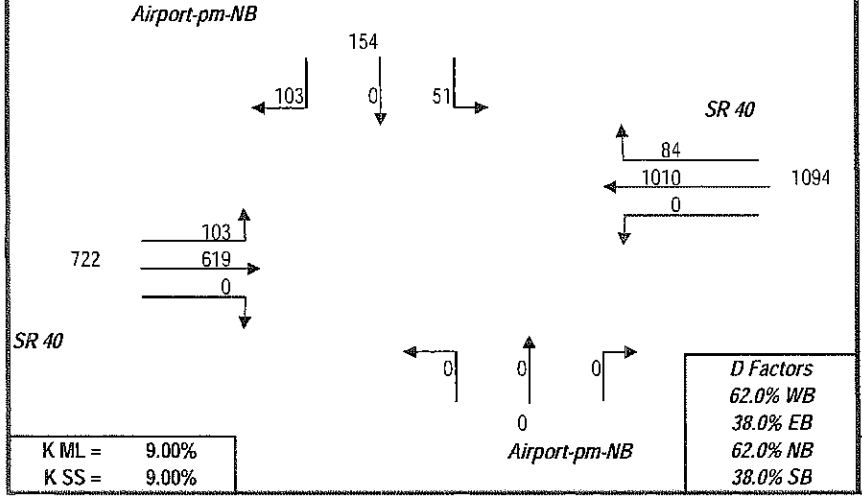
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

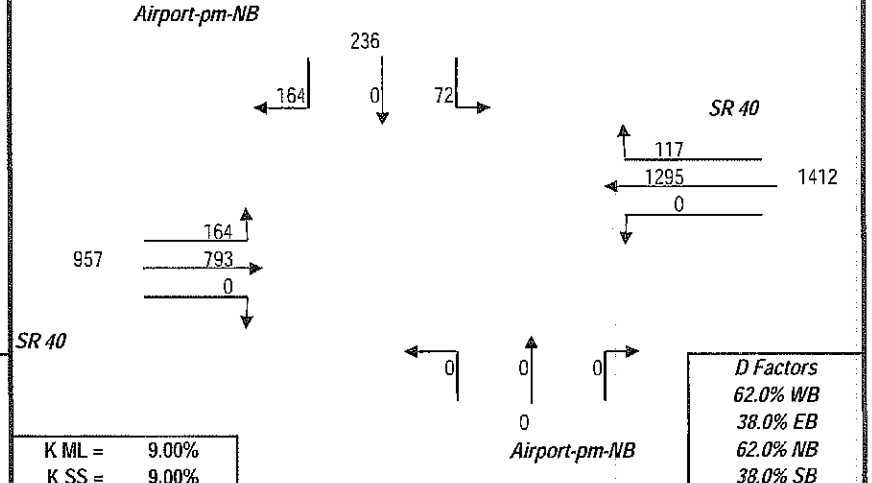
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors

Mainline	
9.00%	
Sidestreet	
9.00%	

D Factors

Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
62.0%	Northbound (NB)
38.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

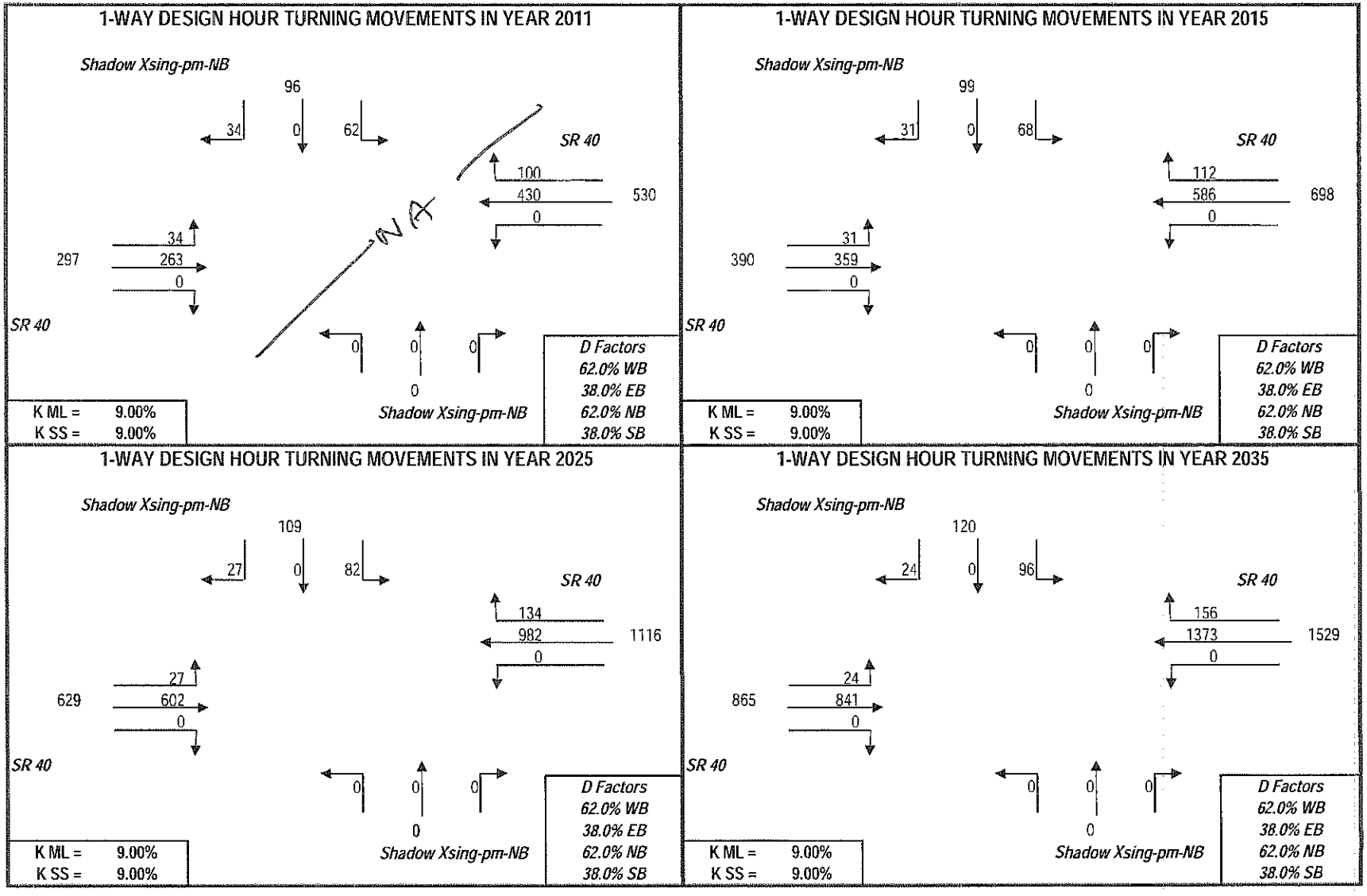
	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
2011	8700	9500	2500	0	21000
2035	25300	27400	3500	0	56200

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	95%	95
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	80%	80
(WB RT)	*East-to-North*	20%	20
(SB LT)	*North-to-East*	78%	78
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	22%	22
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Shadow Xsing-pm-NB: Cone Road TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
62.0%	Westbound (WB)	
38.0%	Eastbound (EB)	
Sidestreet		
62.0%	Northbound (NB)	
38.0%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year		
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

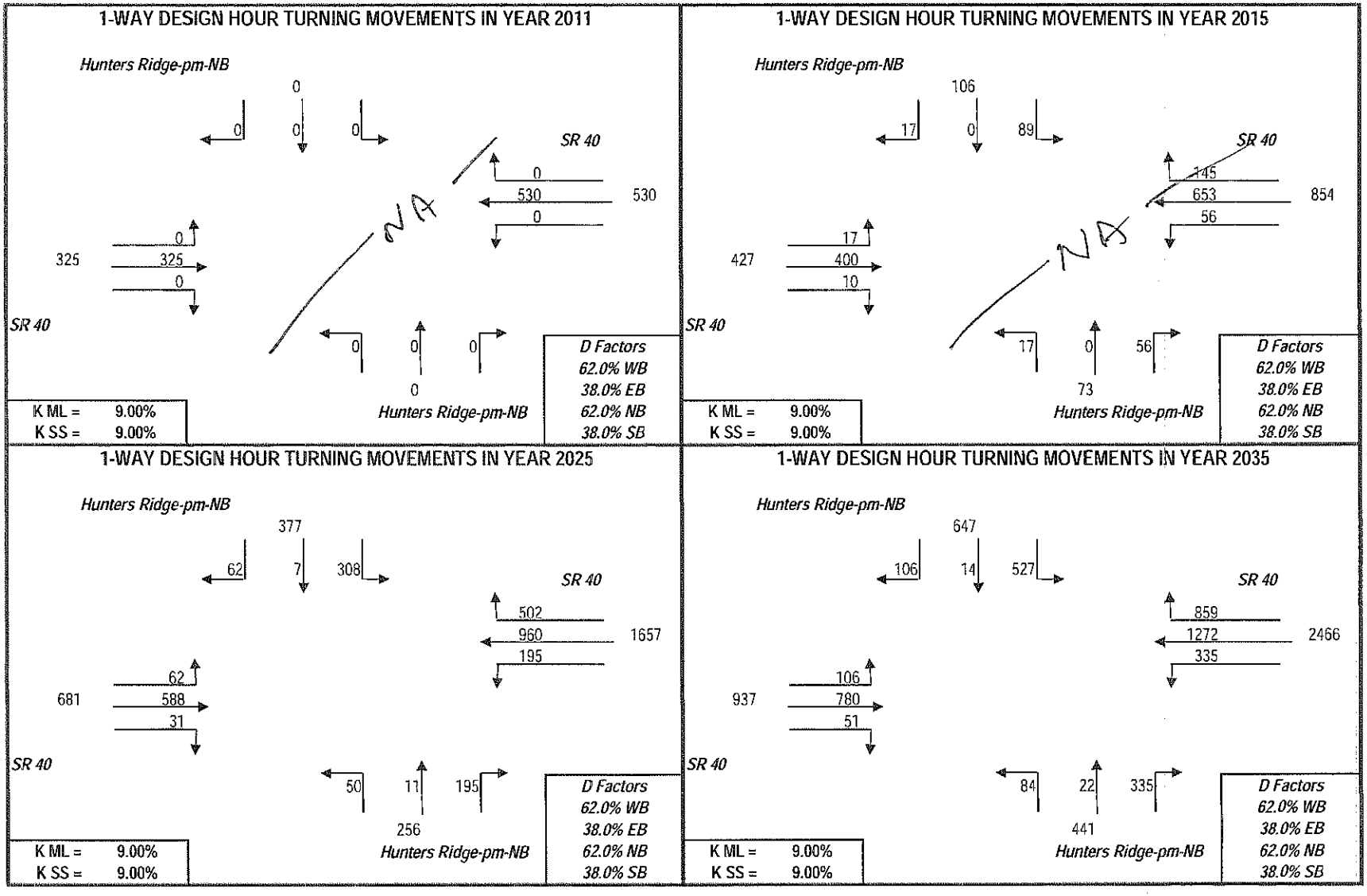
	From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	***TOTAL***
2011	9500	9500	0	0	19000
2035	27400	41200	18900	7900	98400

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	10%	10
(EB THRU)	*West-to-East*	80%	80
(EB RT)	*West-to-South*	10%	10
(WB LT)	*East-to-South*	20%	20
(WB THRU)	*East-to-West*	50%	50
(WB RT)	*East-to-North*	30%	30
(SB LT)	*North-to-East*	70%	70
(SB THRU)	*North-to-South*	5%	5
(SB RT)	*North-to-West*	25%	25
(NB LT)	*South-to-West*	25%	25
(NB THRU)	*South-to-North*	5%	5
(NB RT)	*South-to-East*	70%	70

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Hunters Ridge-pm-NB: Cone Road TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors

Mainline	9.00%
Sidestreet	9.00%

D Factors

Mainline		
62.0%		Westbound (WB)
38.0%		Eastbound (EB)
Sidestreet		
67.1%		Northbound (NB)
32.9%		Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Side Street Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

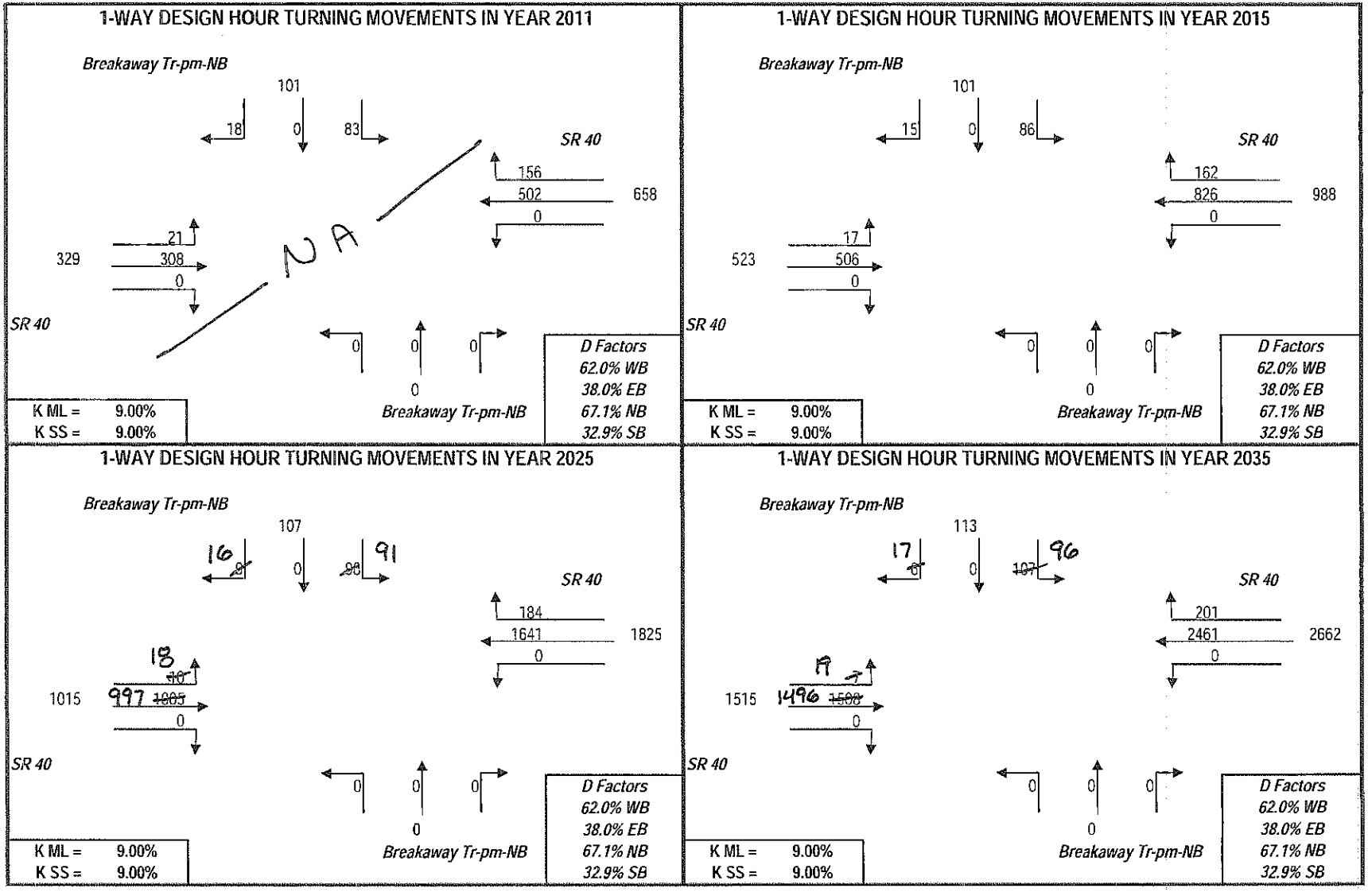
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	8600	11500	3400	0	24800
2035	44200	47700	3800	0	95700

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	3%	0
(EB THRU)	*West-to-East*	97%	97
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	1
(WB THRU)	*East-to-West*	82%	82
(WB RT)	*East-to-North*	18%	18
(SB LT)	*North-to-East*	93%	93
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	7%	7
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	0
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Breakaway Tr-pm-NB: Breakaway Tr TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
Highway:
Intersection:
Area:
Tod:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
62.0%		Westbound (WB)
38.0%		Eastbound (EB)
Sidestreet		
59.5%		Northbound (NB)
40.5%		Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2045

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
2015	17800	26200	14200	600	60800
2035	47700	52400	22000	800	122900

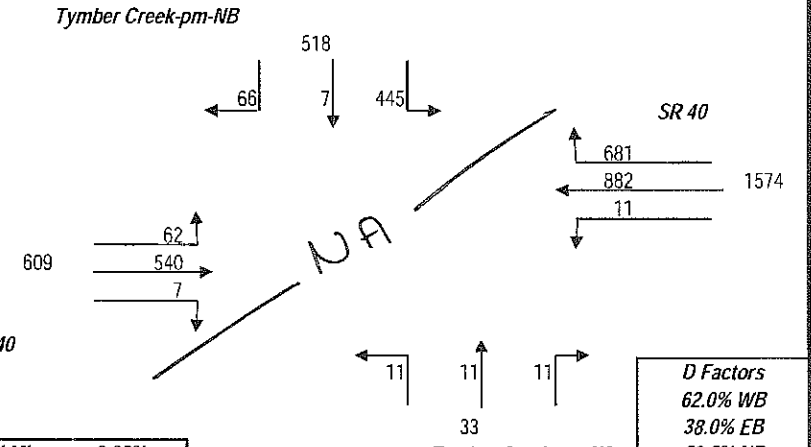
		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2015
(EB LT)	*West-to-North*	10%	10
(EB THRU)	*West-to-East*	86%	86
(EB RT)	*West-to-South*	4%	4
(WB LT)	*East-to-South*	7%	7
(WB THRU)	*East-to-West*	50%	50
(WB RT)	*East-to-North*	43%	43
(SB LT)	*North-to-East*	90%	90
(SB THRU)	*North-to-South*	3%	3
(SB RT)	*North-to-West*	7%	7
(NB LT)	*South-to-West*	40%	40
(NB THRU)	*South-to-North*	38%	38
(NB RT)	*South-to-East*	22%	22

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Tymber Creek-pm-NB: Breakaway Tr TO Williamson Blvd

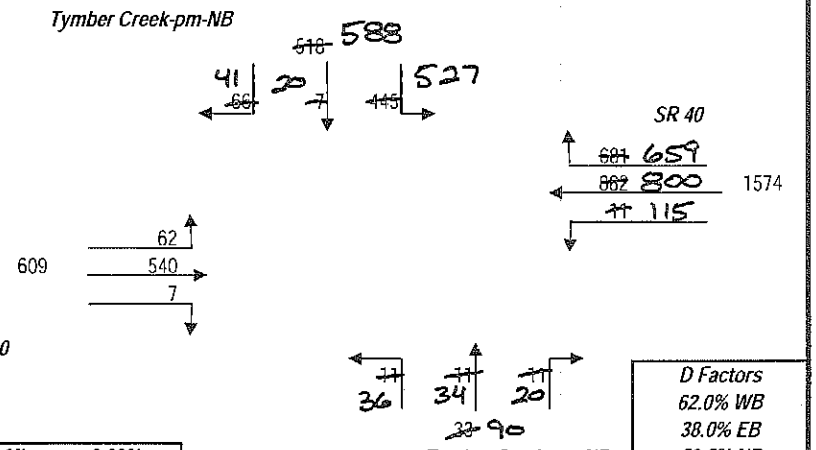
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
59.5% NB
40.5% SB

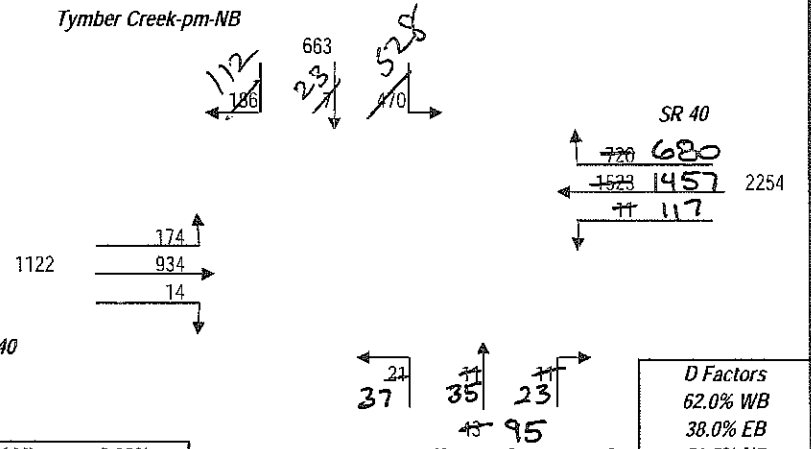
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
59.5% NB
40.5% SB

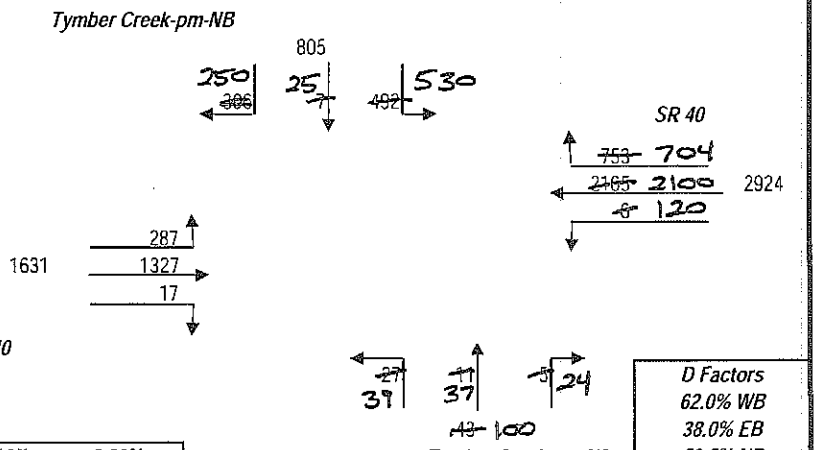
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
59.5% NB
40.5% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
59.5% NB
40.5% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Area:
Tier:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) — ○ Yes ◉ No

K Factors

Mainline	
9.00%	
Sidestreet	
9.00%	

D Factors

Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
50.5%	Northbound (NB)
49.5%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) — ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function — ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function — ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

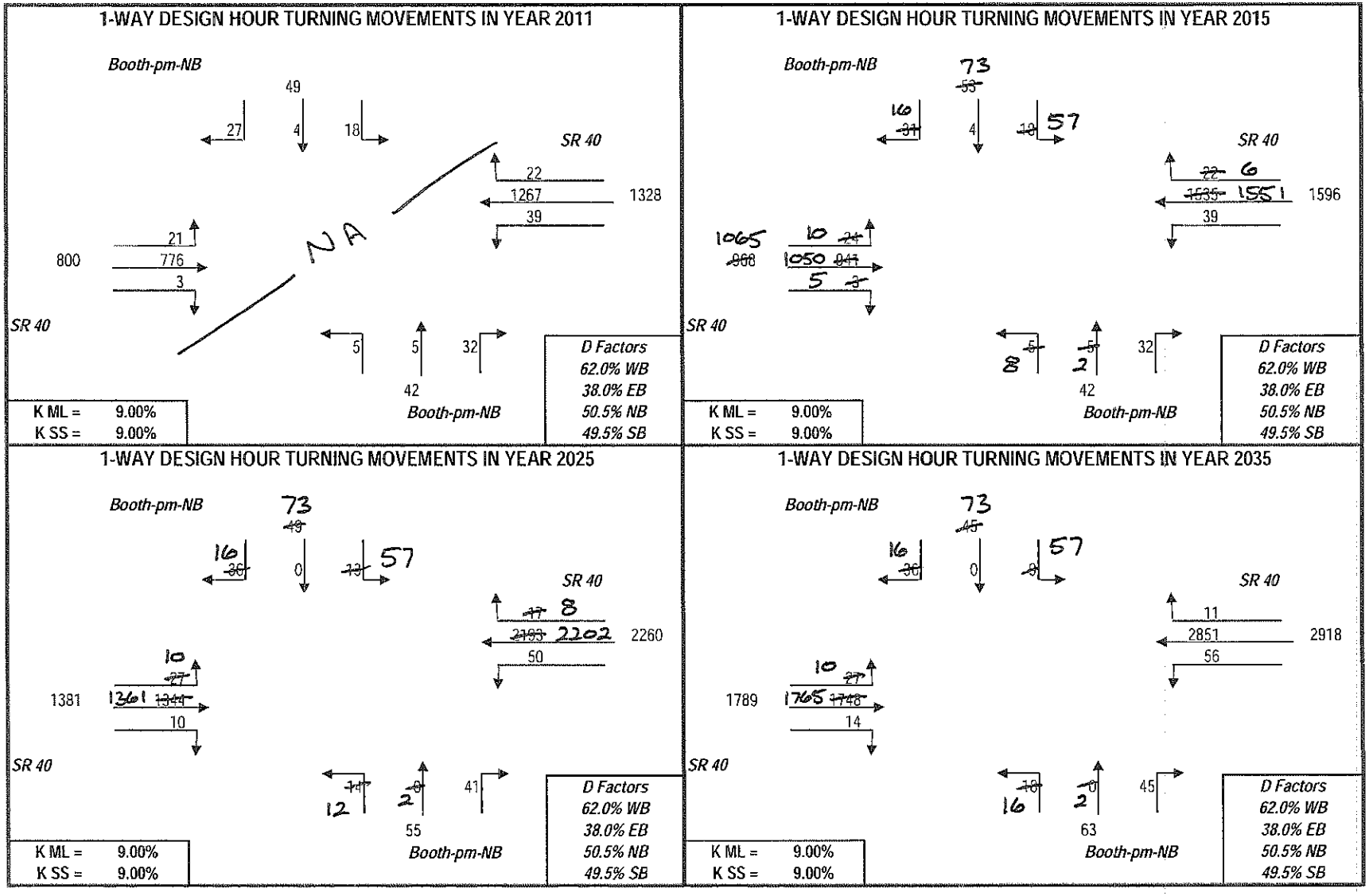
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	26400	23600	1100	800	49100
2035	52400	52400	1100	1500	107400

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	1%	1
(EB THRU)	*West-to-East*	99%	99
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	2%	2
(WB THRU)	*East-to-West*	98%	98
(WB RT)	*East-to-North*	0%	0
(SB LT)	*North-to-East*	79%	79
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	21%	21
(NB LT)	*South-to-West*	21%	21
(NB THRU)	*South-to-North*	5%	5
(NB RT)	*South-to-East*	74%	74

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Booth-pm-NB: Breakaway Tr TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Area:
Tod:
County:

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
62.3%	Westbound (WB)	
38.0%	Eastbound (EB)	
Sidestreet		
44.3%	Northbound (NB)	
55.7%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01)	
		Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
2011	26700	26700	0	7800	61200
2035	54200	54200	0	8600	117000

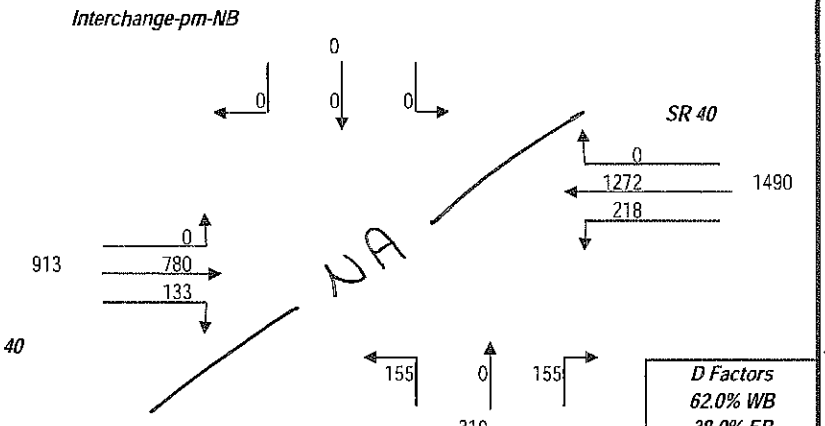
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	0%	0
(EB THRU)	*West-to-East*	97%	97
(EB RT)	*West-to-South*	3%	3
(WB LT)	*East-to-South*	10%	10
(WB THRU)	*East-to-West*	90%	90
(WB RT)	*East-to-North*	0%	0
(SB LT)	*North-to-East*	0%	0
(SB THRU)	*North-to-South*	100%	100
(SB RT)	*North-to-West*	0%	0
(NB LT)	*South-to-West*	34%	34
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	66%	66

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Interchange-pm-NB: Breakaway Tr TO Williamson Blvd

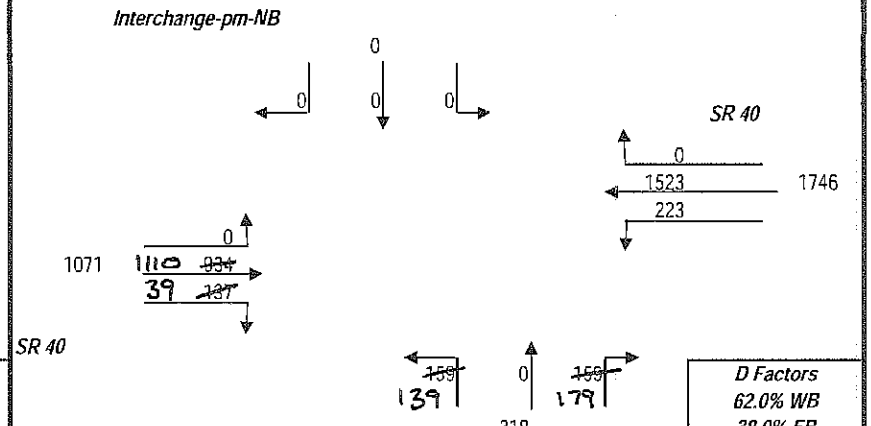
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
44.3% NB
55.7% SB

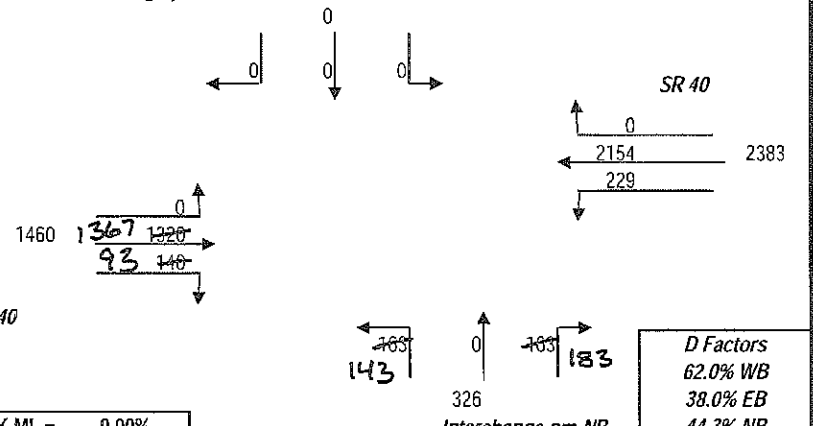
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
44.3% NB
55.7% SB

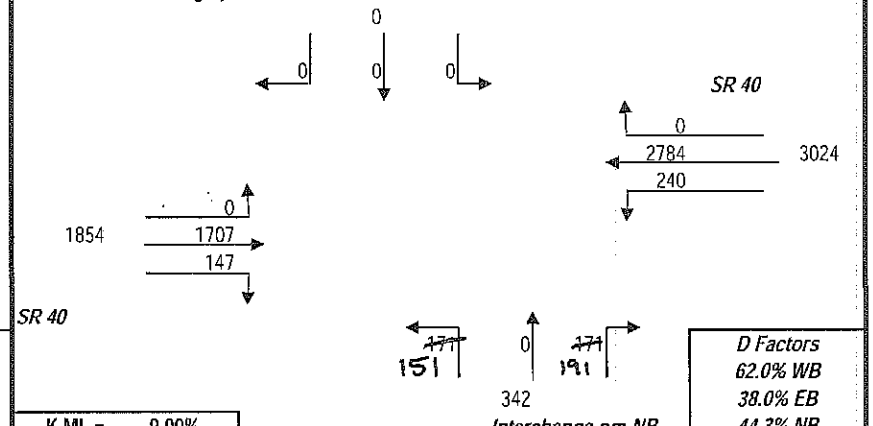
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
44.3% NB
55.7% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
44.3% NB
55.7% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Area:
Tod:
County:

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
62.0%		Westbound (WB)
38.0%		Eastbound (EB)
Sidestreet		
55.0%		Northbound (NB)
45.0%		Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

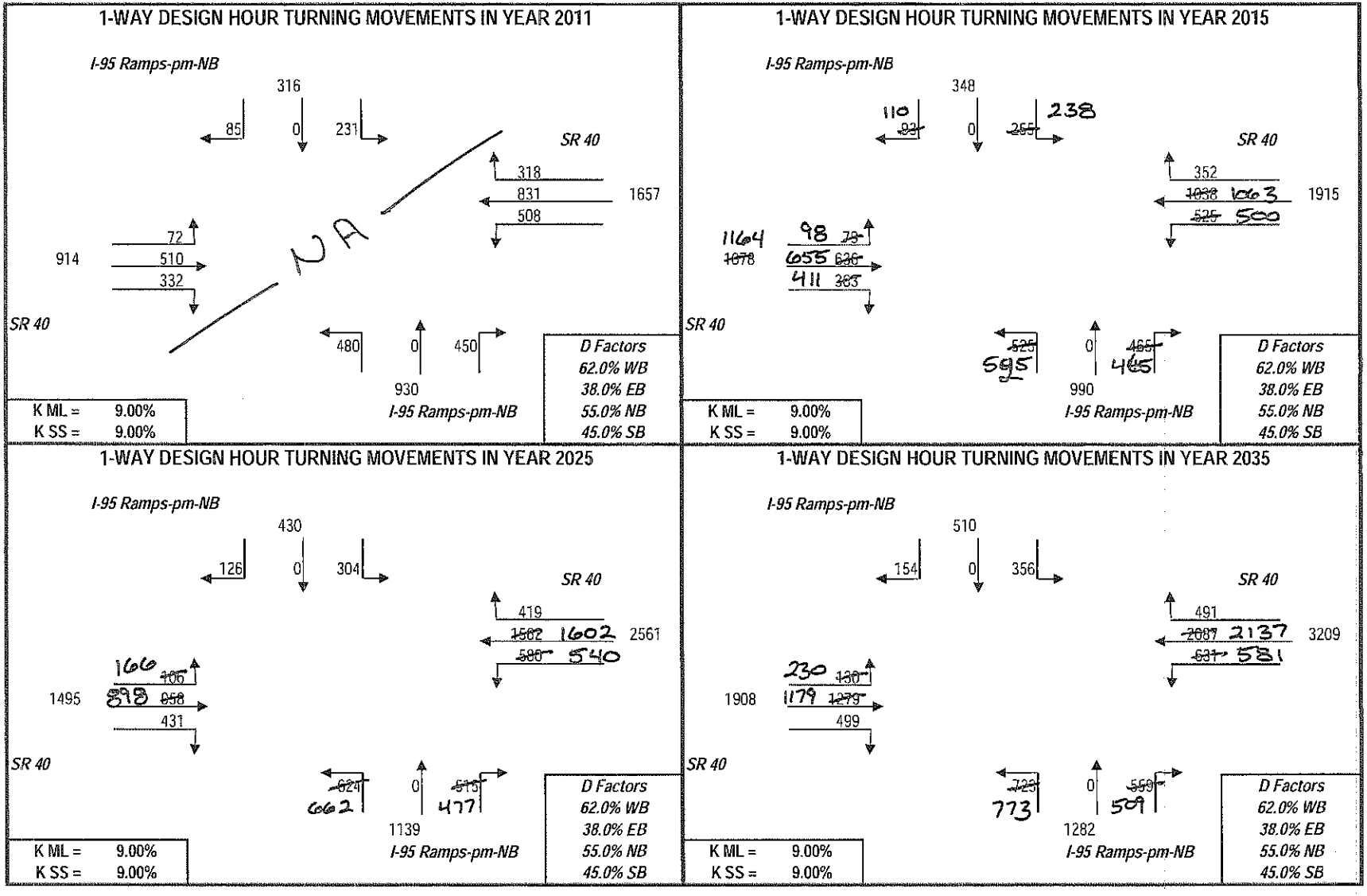
	From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	*TOTAL*
2011	26700	29700	7500	19000	83000
2035	56800	57800	12600	26900	151800

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	9%	9
(EB THRU)	*West-to-East*	57%	57
(EB RT)	*West-to-South*	35%	35
(WB LT)	*East-to-South*	25%	25
(WB THRU)	*East-to-West*	56%	56
(WB RT)	*East-to-North*	19%	19
(SB LT)	*North-to-East*	67%	67
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	33%	33
(NB LT)	*South-to-West*	57%	57
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	43%	43

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT I-95 Ramps-pm-NB: Breakaway Tr TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South?

Enter Yes or No
- ○ Yes
- ◉ No

K Factors

Mainline
8.00%

Sidestreet
9.00%

D Factors

Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
60.0%	Northbound (NB)
70.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
- ◉ Yes
- ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Rate (Lin.-Int.	
Base		Mainline	Side Street
Opening			
Mid			
Design			

Mainline Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Side Street Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	29700	27700	6500	17500	81400
2035	57500	31700	6500	36000	131700

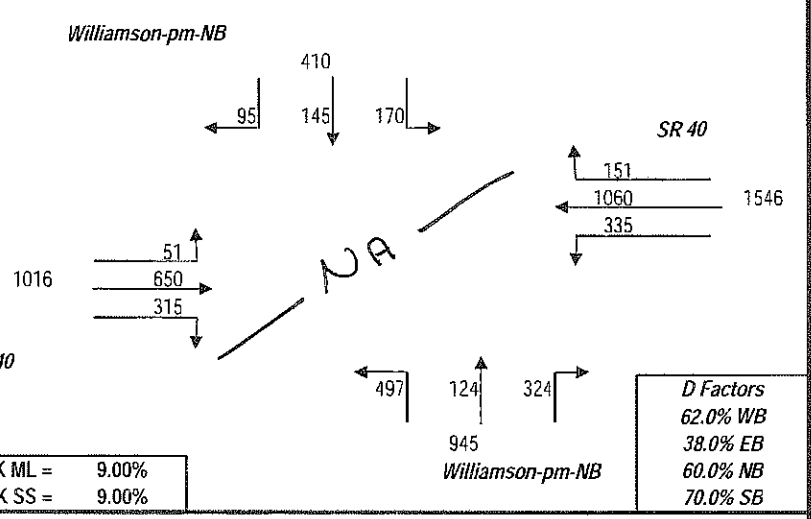
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	9%	9
(EB THRU)	*West-to-East*	62%	62
(EB RT)	*West-to-South*	29%	29
(WB LT)	*East-to-South*	16%	16
(WB THRU)	*East-to-West*	75%	75
(WB RT)	*East-to-North*	9%	9
(SB LT)	*North-to-East*	37%	37
(SB THRU)	*North-to-South*	28%	28
(SB RT)	*North-to-West*	35%	35
(NB LT)	*South-to-West*	68%	68
(NB THRU)	*South-to-North*	15%	15
(NB RT)	*South-to-East*	17%	17

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Williamson-pm-NB: Breakaway Tr TO Williamson Blvd

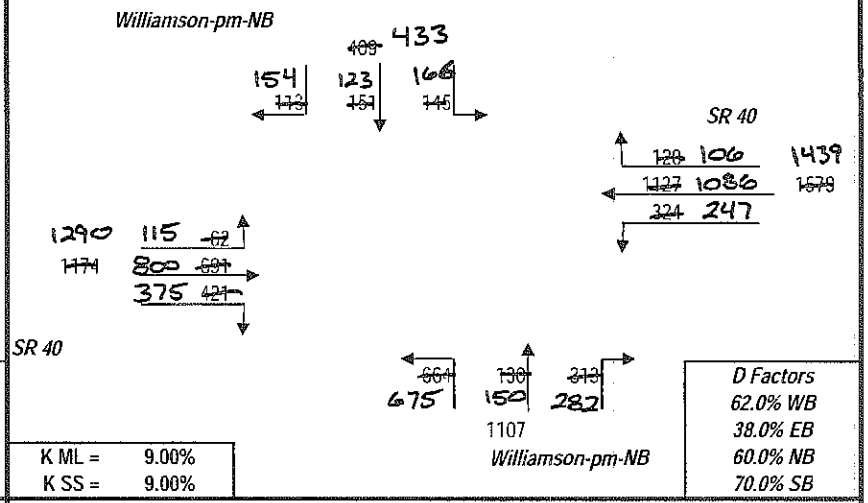
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
60.0% NB
70.0% SB

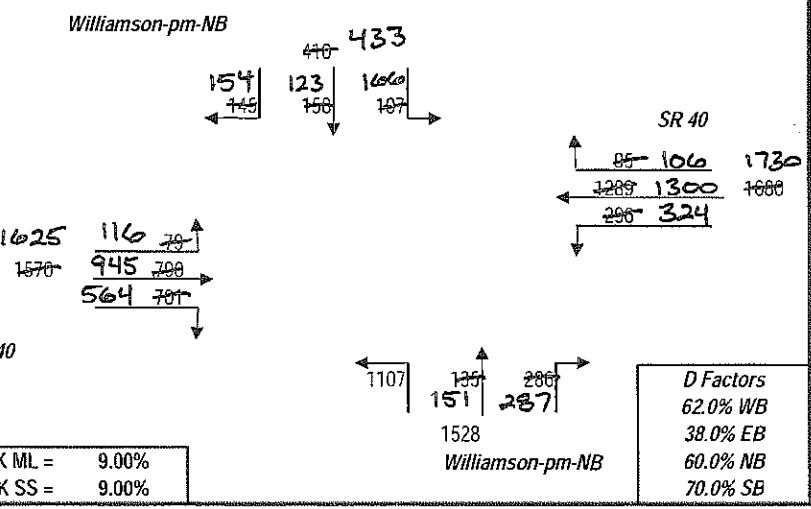
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
60.0% NB
70.0% SB

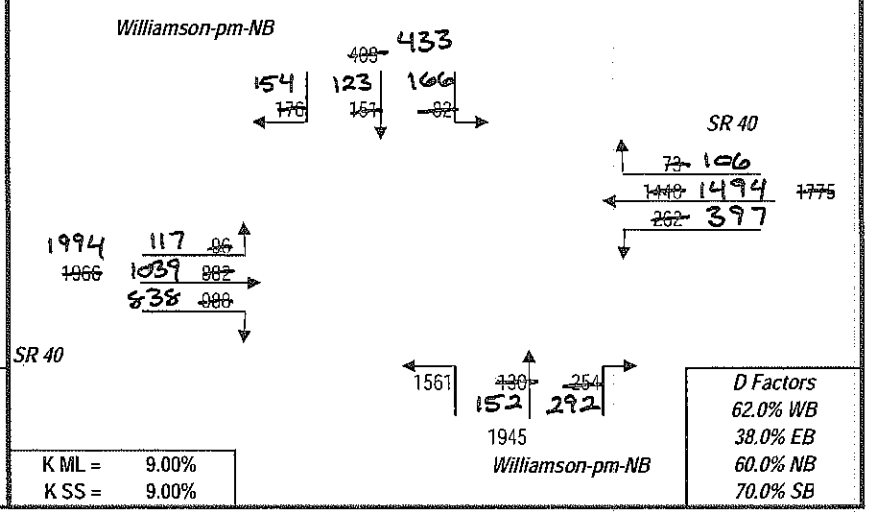
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
60.0% NB
70.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
60.0% NB
70.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ◉ Yes ○ No

K Factors	Mainline	**D Factors**	*Mainline*	
	9.00%		60.0%	Northbound (NB)
	Sidestreet		40.0%	Southbound (SB)
	9.00%		*Sidestreet*	
			51.5%	Westbound (WB)
			48.5%	Eastbound (EB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

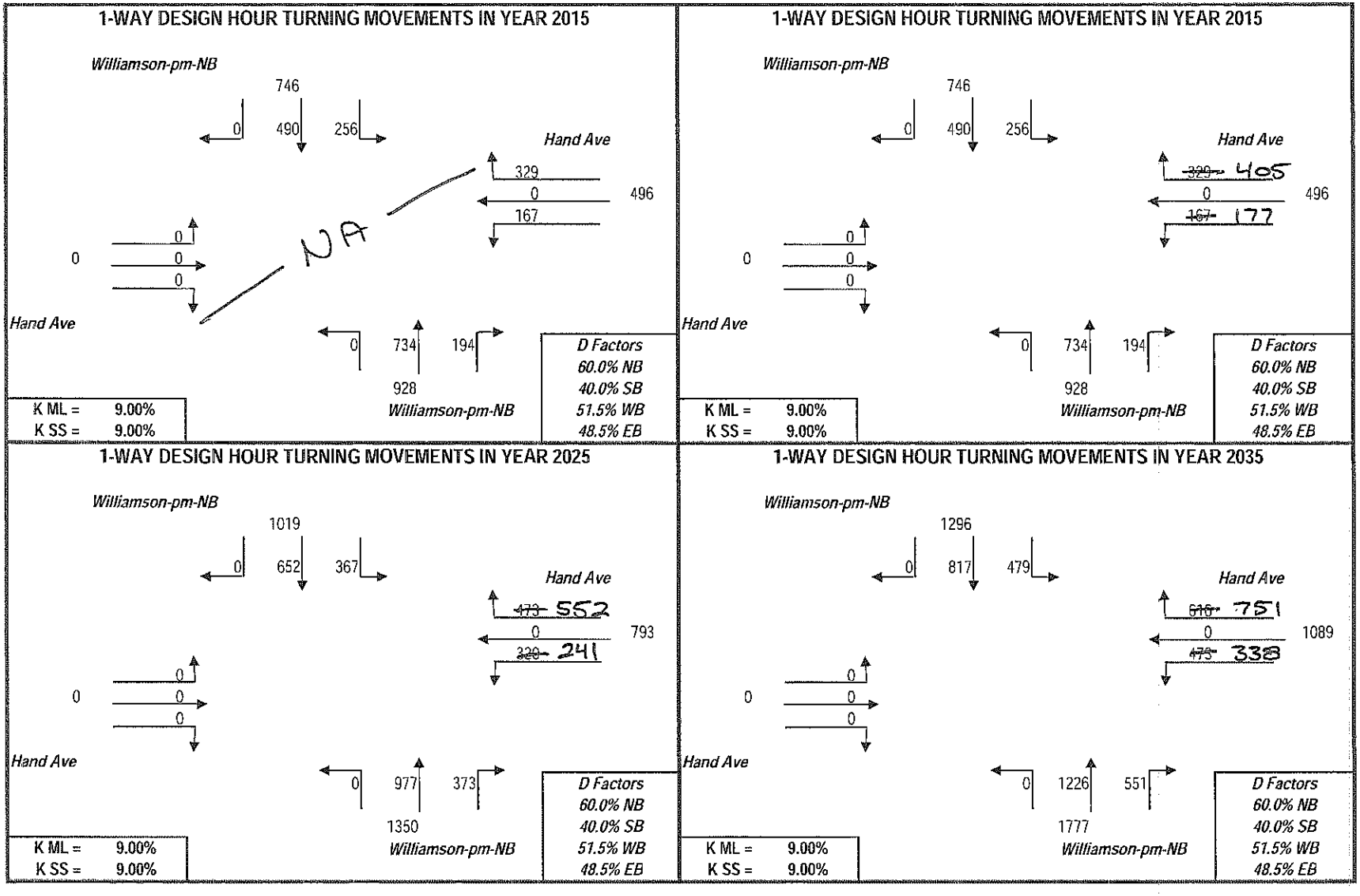
	From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	***TOTAL***
2015	0	19600	28700	17100	48300
2035	0	29500	36000	32900	92400

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**
(EB LT)	*West-to-North*	0%	0
(EB THRU)	*West-to-East*	100%	0
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	30%	30
(WB THRU)	*East-to-West*	0%	0
(WB RT)	*East-to-North*	70%	70
(SB LT)	*North-to-East*	34%	34
(SB THRU)	*North-to-South*	66%	66
(SB RT)	*North-to-West*	0%	0
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	84%	84
(NB RT)	*South-to-East*	16%	16

(must be done manually)

Desired Closure: 0.00

PROJECT TRAFFIC FOR Williamson-pm-NB AT Hand Ave: SR 40 TO LPGA



TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
54.5%	Westbound (WB)	
45.5%	Eastbound (EB)	
Sidestreet		
60.0%	Northbound (NB)	
40.0%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) — Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

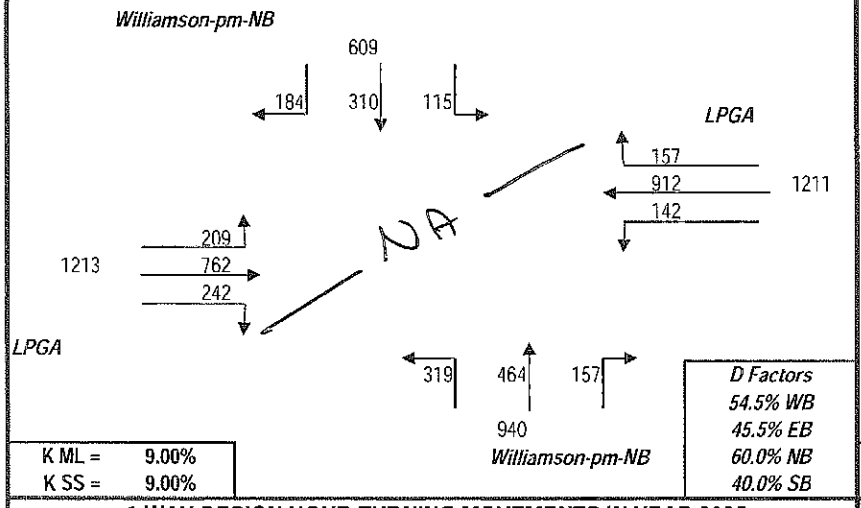
	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
2015	29600	24700	15900	17400	88600
2035	47900	48300	66100	30700	163400

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2015	
(EB LT)	*West-to-North*	19%	19	
(EB THRU)	*West-to-East*	66%	66	
(EB RT)	*West-to-South*	15%	15	
(WB LT)	*East-to-South*	10%	10	(must be done manually)
(WB THRU)	*East-to-West*	80%	80	
(WB RT)	*East-to-North*	10%	10	
(SB LT)	*North-to-East*	22%	22	
(SB THRU)	*North-to-South*	48%	48	
(SB RT)	*North-to-West*	30%	30	
(NB LT)	*South-to-West*	44%	44	
(NB THRU)	*South-to-North*	41%	41	
(NB RT)	*South-to-East*	15%	15	

Oesired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT Williamson-pm-NB: Williamson TO Tymber Creek Ext

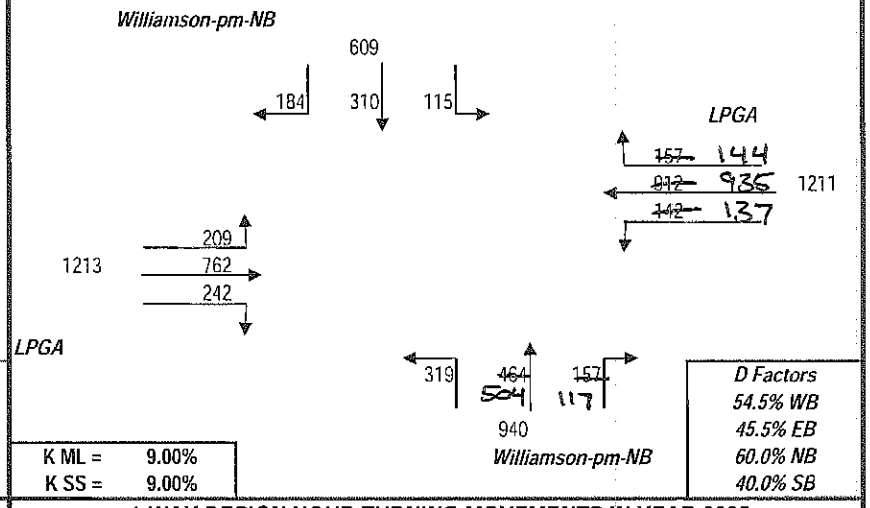
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
60.0% NB
40.0% SB

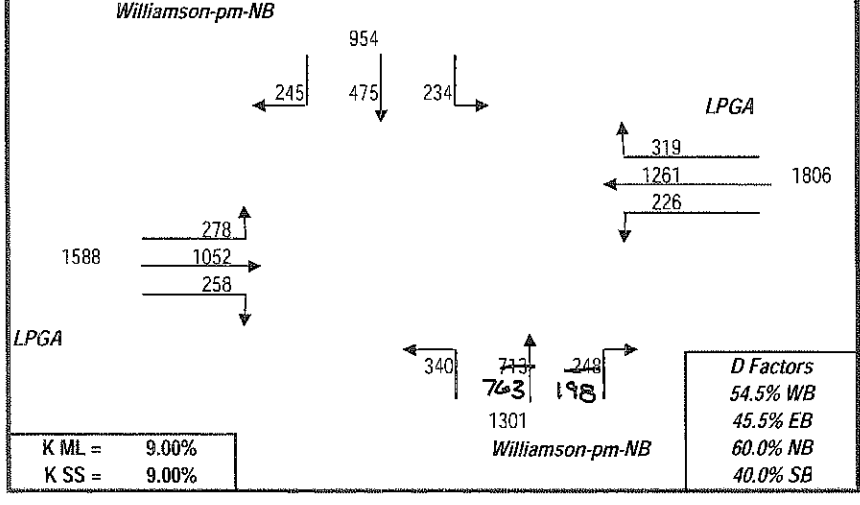
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
60.0% NB
40.0% SB

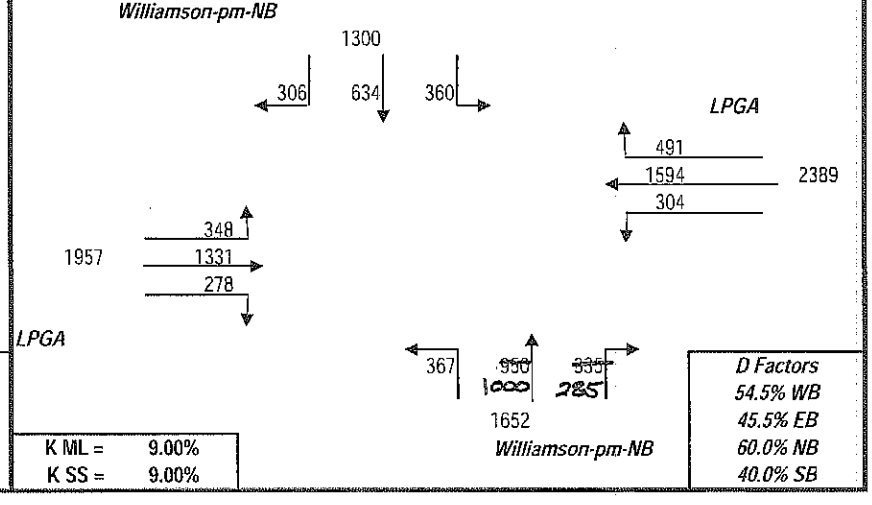
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
60.0% NB
40.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
60.0% NB
40.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
Highway:
Intersection:
Time:
Tod:
County:

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
54.5%	Westbound (WB)	
45.5%	Eastbound (EB)	
Sidestreet		
62.4%	Northbound (NB)	
37.6%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth	Sidestreet Growth
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

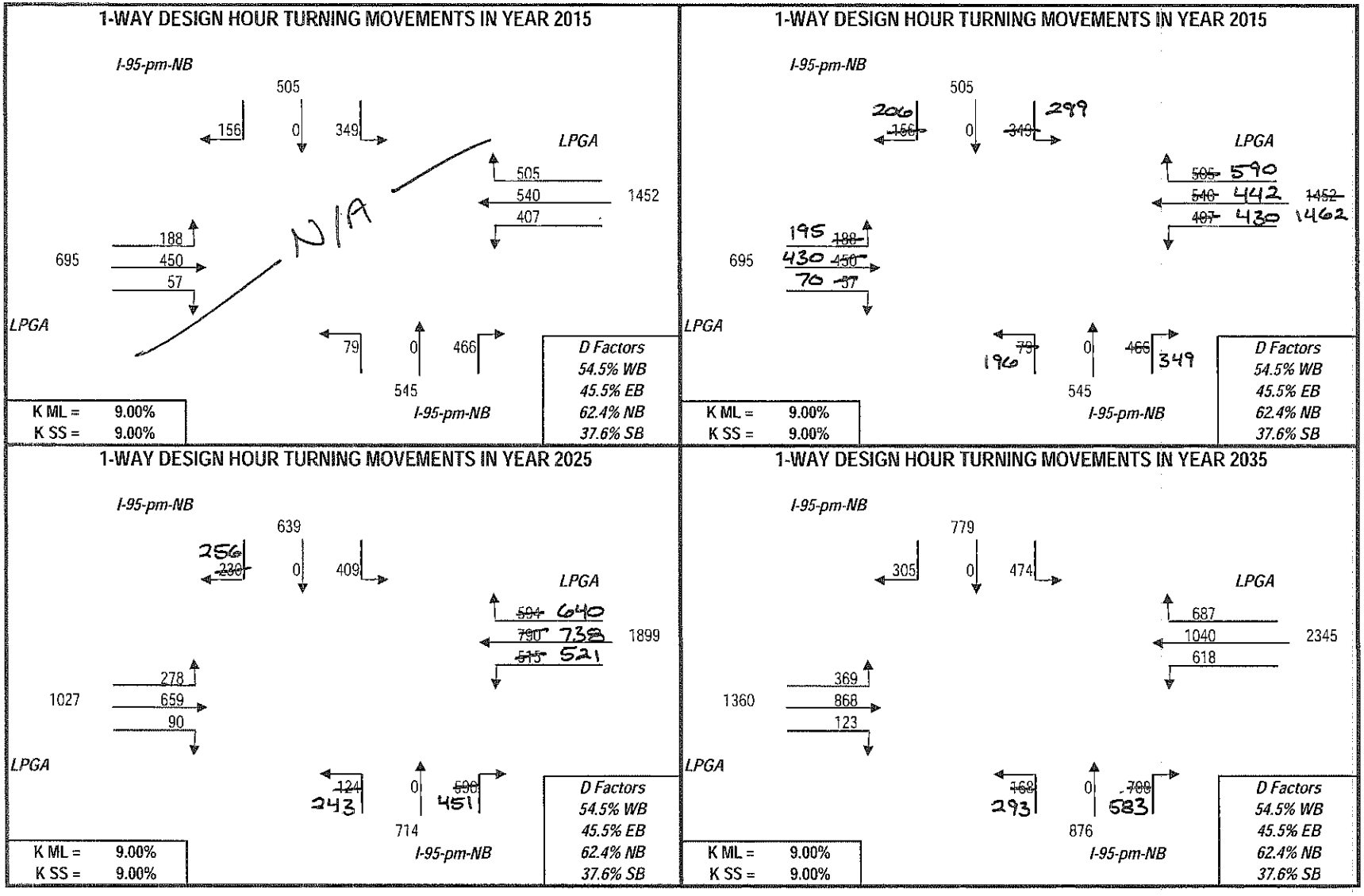
	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
2015	17900	29600	14500	9700	71200
2035	33300	47800	23500	15200	119700

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2015
(EB LT)	*West-to-North*	20%	30
(EB THRU)	*West-to-East*	60%	60
(EB RT)	*West-to-South*	10%	10
(WB LT)	*East-to-South*	30%	30
(WB THRU)	*East-to-West*	30%	30
(WB RT)	*East-to-North*	40%	40
(SB LT)	*North-to-East*	62%	62
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	38%	38
(NB LT)	*South-to-West*	16%	16
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	84%	84

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT I-95-pm-NB: Williamson TO Tymber Creek Ext



TURNS5 ANALYSIS SHEET - INPUT

Location	
Date	
Highway	
Intersection	
Town	
Tip	
County	

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors	Mainline
	9.09%
	Sidestreet
	9.09%

D Factors	*Mainline*	
	54.5%	Westbound (WB)
	45.5%	Eastbound (EB)
	Sidestreet	
	55.2%	Northbound (NB)
	44.8%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) — Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project yeers are calculated by interpolation)

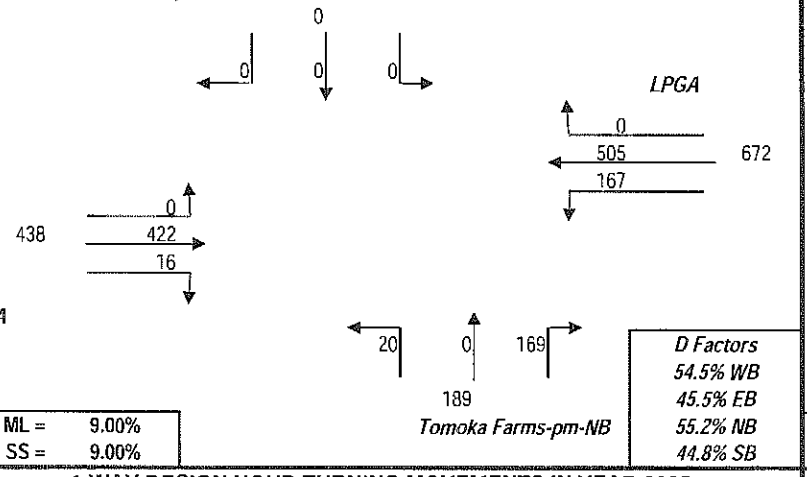
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	15700	13700	0	3800	28200
2035	27700	33300	0	12700	73700

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**	
(EB LT)	*West-to-North*	0%	0	
(EB THRU)	*West-to-East*	99%	99	
(EB RT)	*West-to-South*	1%	1	
(WB LT)	*East-to-South*	15%	15	(must be done manually)
(WB THRU)	*East-to-West*	82%	82	
(WB RT)	*East-to-North*	3%	3	
(SB LT)	*North-to-East*	0%	0	
(SB THRU)	*North-to-South*	100%	0	
(SB RT)	*North-to-West*	0%	0	
(NB LT)	*South-to-West*	8%	8	
(NB THRU)	*South-to-North*	1%	1	
(NB RT)	*South-to-East*	91%	91	

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT Tomoka Farms-pm-NB: Williamson TO Tymber Creek Ext

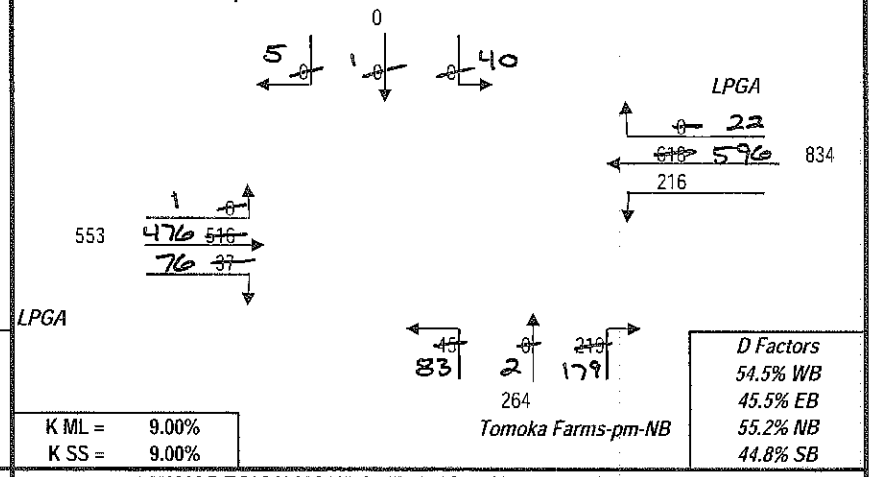
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors	
54.5%	WB
45.5%	EB
55.2%	NB
44.8%	SB

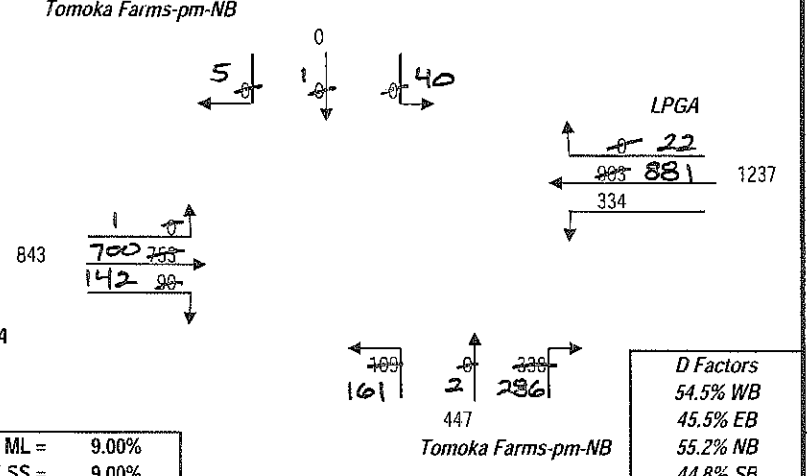
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
54.5%	WB
45.5%	EB
55.2%	NB
44.8%	SB

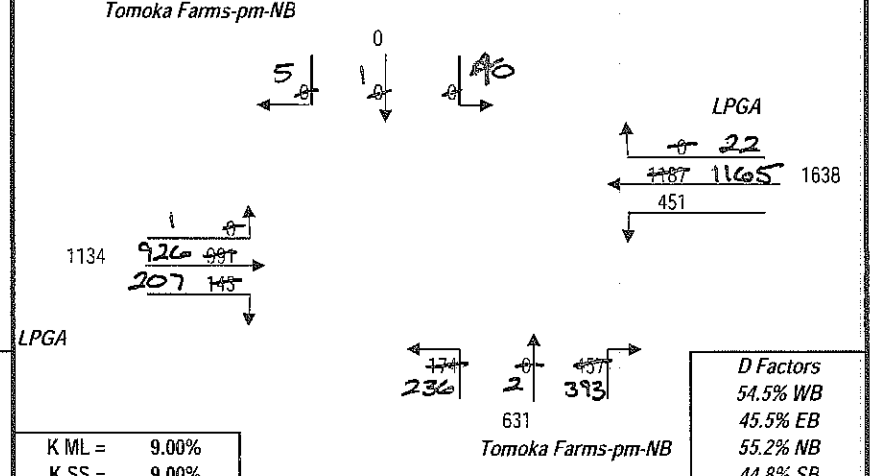
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
54.5%	WB
45.5%	EB
55.2%	NB
44.8%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
54.5%	WB
45.5%	EB
55.2%	NB
44.8%	SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Phase:
Tod:
County:

Is the Mainline Oriented North/South?

Enter Yes or No
- ○ Yes
- ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	38.0%	Westbound (WB)
	62.0%	Eastbound (EB)
	Sidestreet	
	38.0%	Northbound (NB)
	62.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
- ◉ Yes
- ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Side Street Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	7000	7000	600	0	14600
2035	31600	31600	750	0	64350

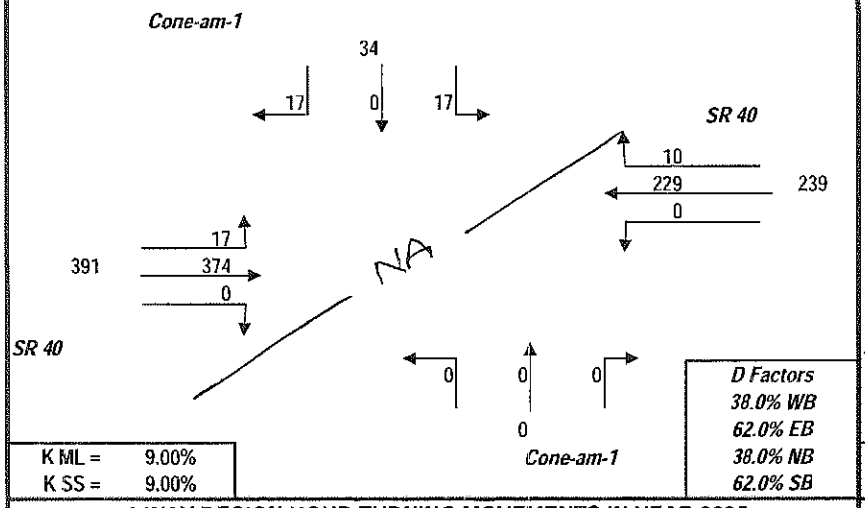
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	1%	1
(EB THRU)	*West-to-East*	99%	99
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	94%	94
(WB RT)	*East-to-North*	6%	6
(SB LT)	*North-to-East*	91%	91
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	9%	9
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Cone-am-1: Cone Road TO Williamson Blvd

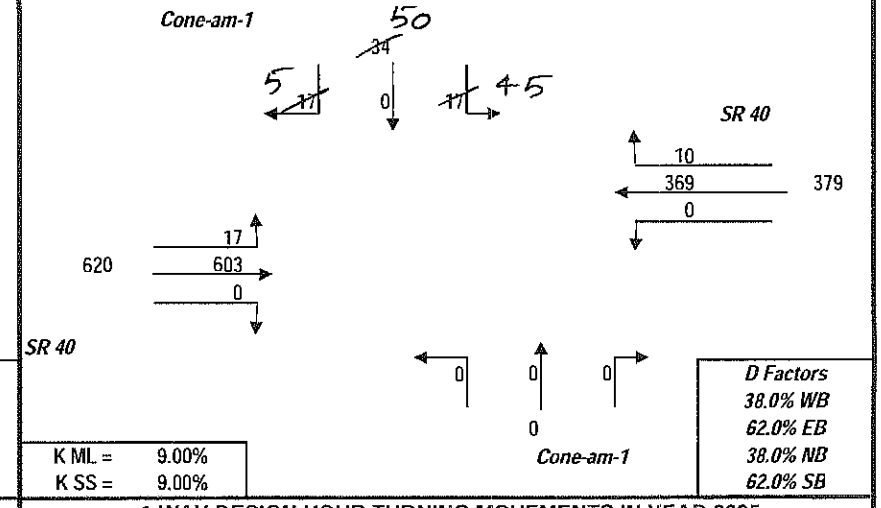
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

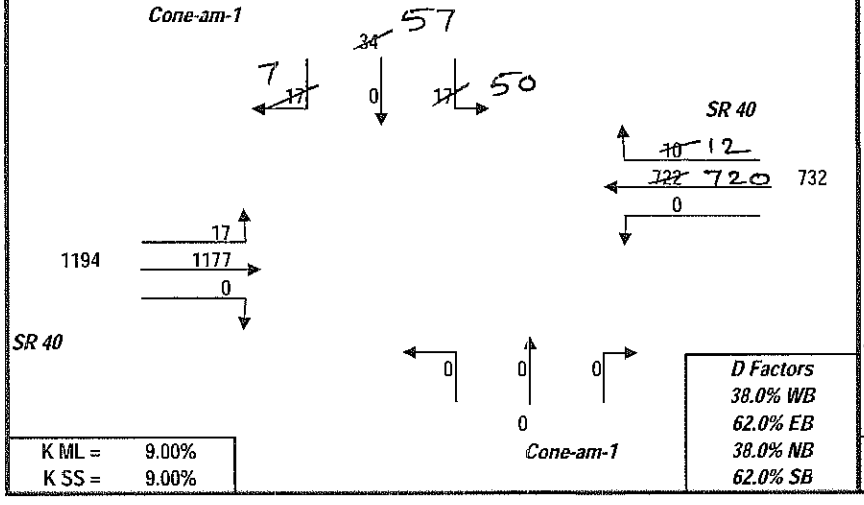
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

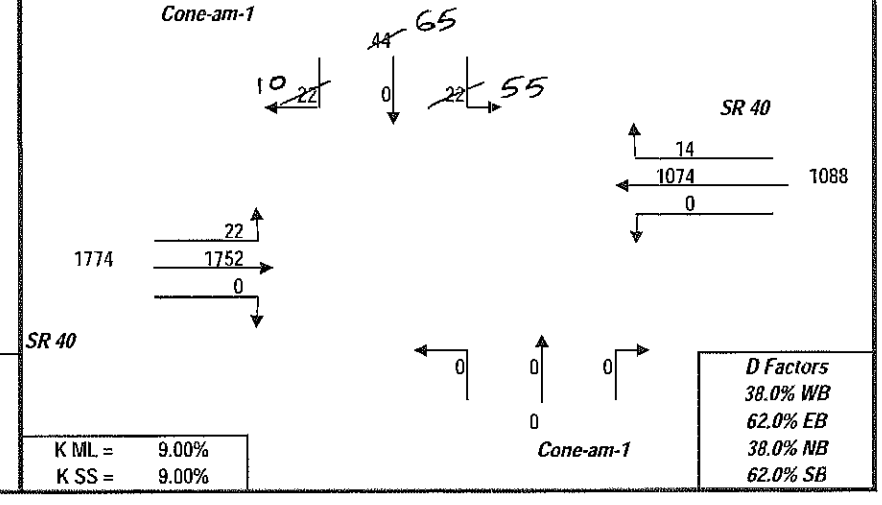
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	38.0%	Westbound (WB)
	62.0%	Eastbound (EB)
	Sidestreet	
	38.0%	Northbound (NB)
	62.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Side Street Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
2015	11900	12600	1000	0	25500
2035	32500	32400	6300	0	71300

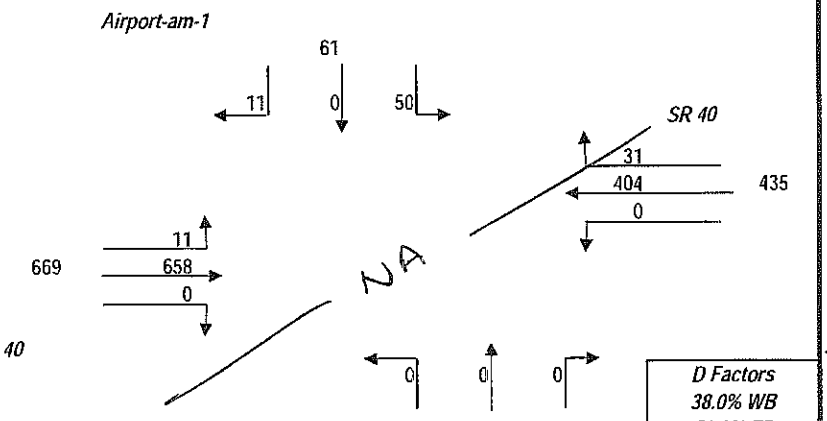
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**
(EB LT)	*West-to-North*	20%	20
(EB THRU)	*West-to-East*	80%	80
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	90%	90
(WB RT)	*East-to-North*	10%	10
(SB LT)	*North-to-East*	40%	40
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	60%	60
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Airport-am-1: Cone Road TO Williamson Blvd

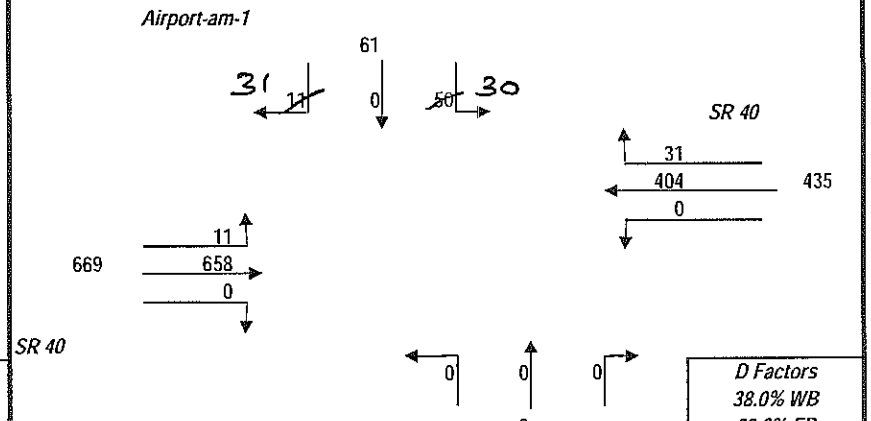
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
38.0%	NB
62.0%	SB

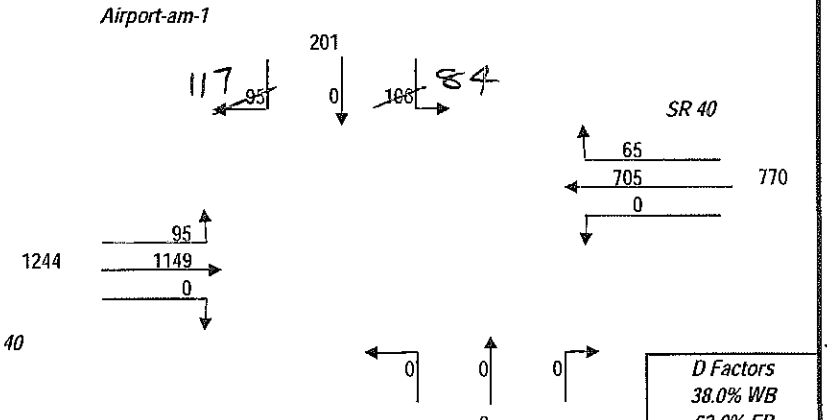
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
38.0%	NB
62.0%	SB

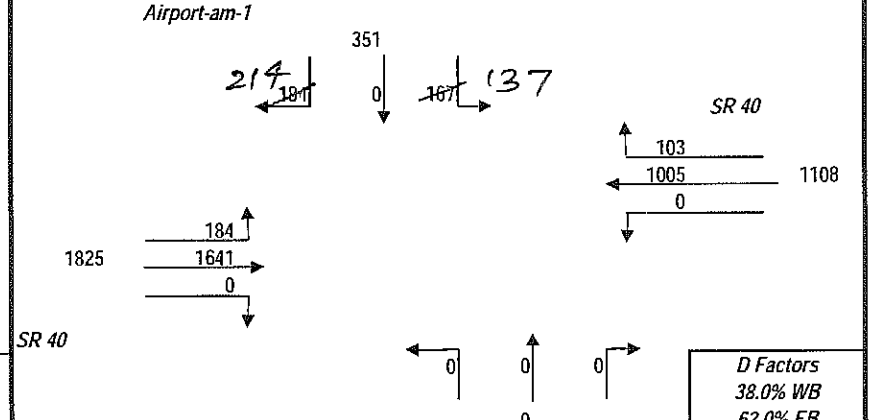
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
38.0%	NB
62.0%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
38.0%	NB
62.0%	SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	38.0%	Westbound (WB)
	62.0%	Eastbound (EB)
	Sidestreet	
	38.0%	Northbound (NB)
	62.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) — Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2055

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
2011	8700	9500	2800	0	21000
2035	52300	34500	3500	0	70300

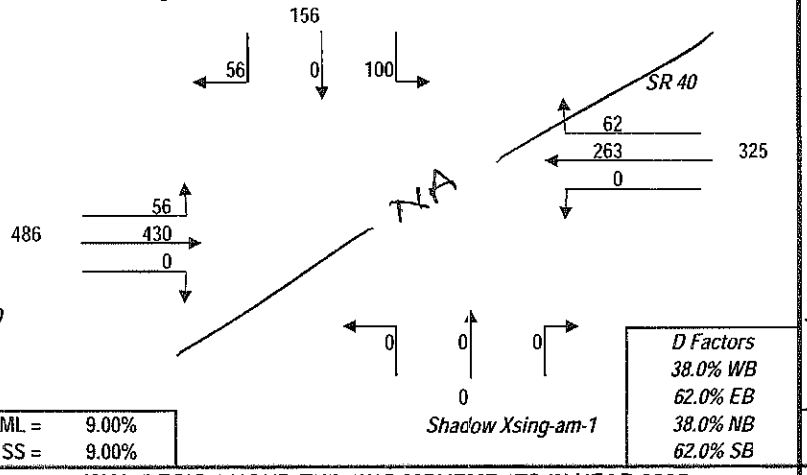
		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	95%	95
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	83%	83
(WB RT)	*East-to-North*	17%	17
(SB LT)	*North-to-East*	93%	93
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	7%	7
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Shadow Xsing-am-1: Cone Road TO Williamson Blvd

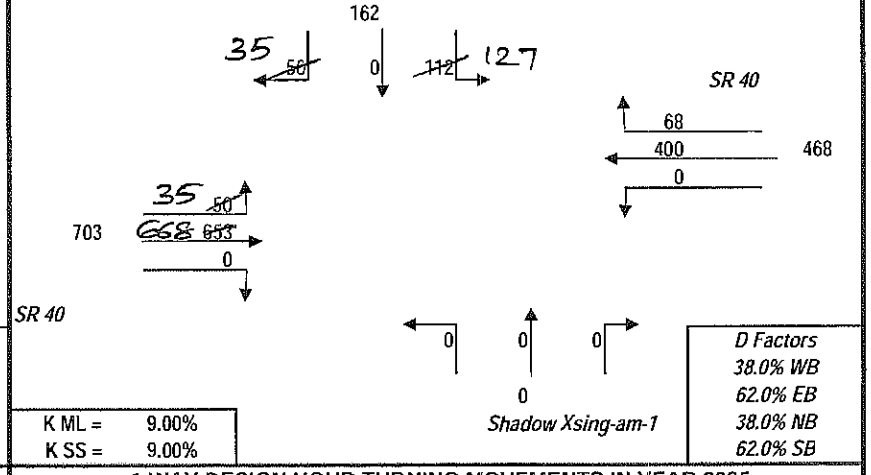
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

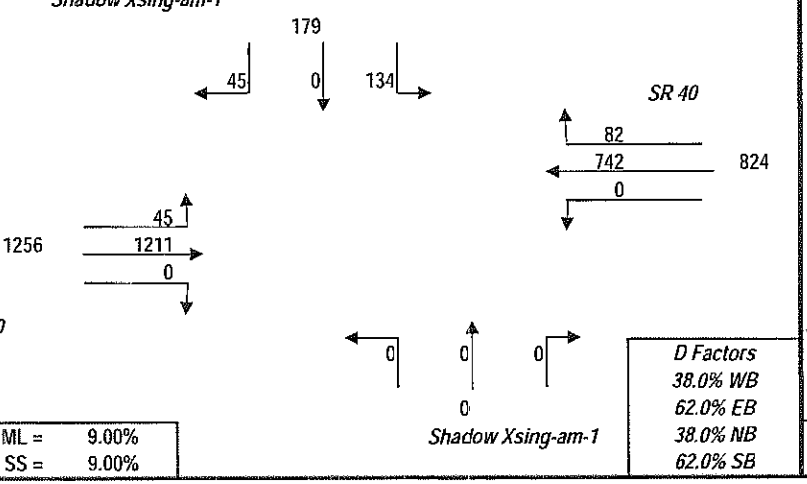
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

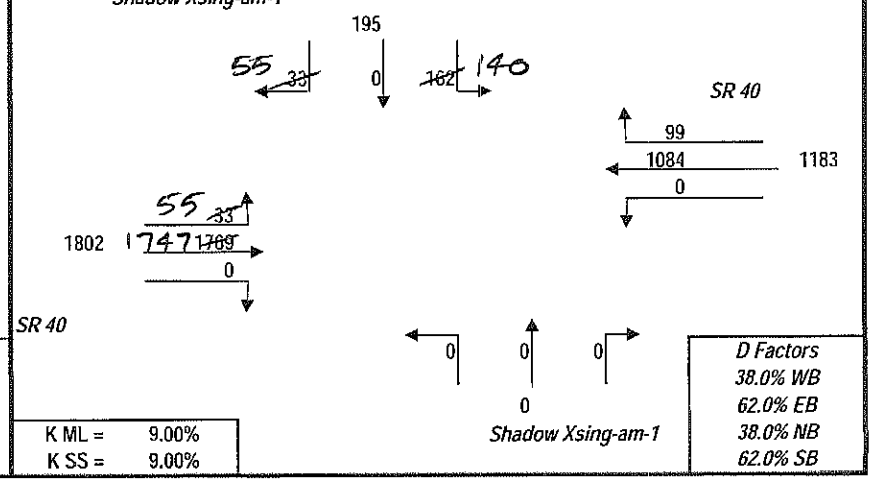
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South?

Enter Yes or No
- ○ Yes
- ◉ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
38.0%	Northbound (NB)
62.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
- ◉ Yes
- ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Side Street Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2011	9500	9500	0	0	19000
2035	34500	52000	19400	7900	113800

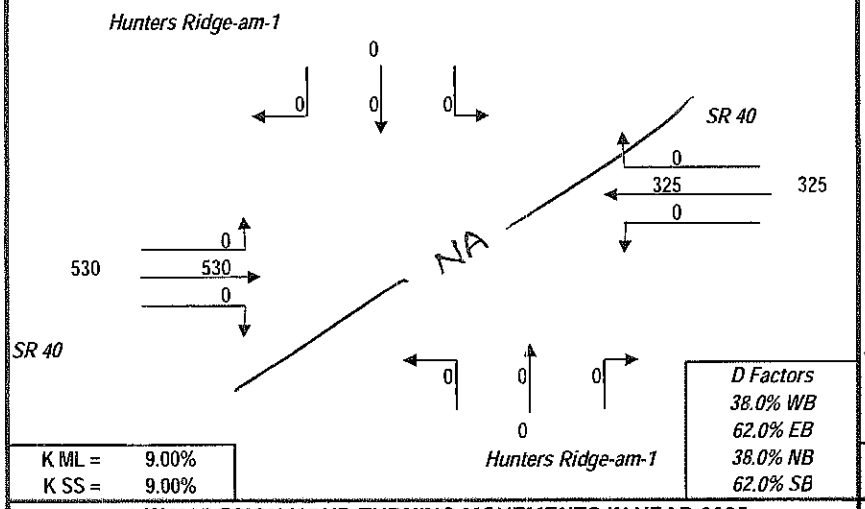
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	85%	85
(EB RT)	*West-to-South*	10%	10
(WB LT)	*East-to-South*	20%	20
(WB THRU)	*East-to-West*	65%	65
(WB RT)	*East-to-North*	15%	15
(SB LT)	*North-to-East*	60%	60
(SB THRU)	*North-to-South*	35%	35
(SB RT)	*North-to-West*	5%	5
(NB LT)	*South-to-West*	25%	25
(NB THRU)	*South-to-North*	5%	5
(NB RT)	*South-to-East*	70%	70

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Hunters Ridge-am-1: Cone Road TO Williamson Blvd

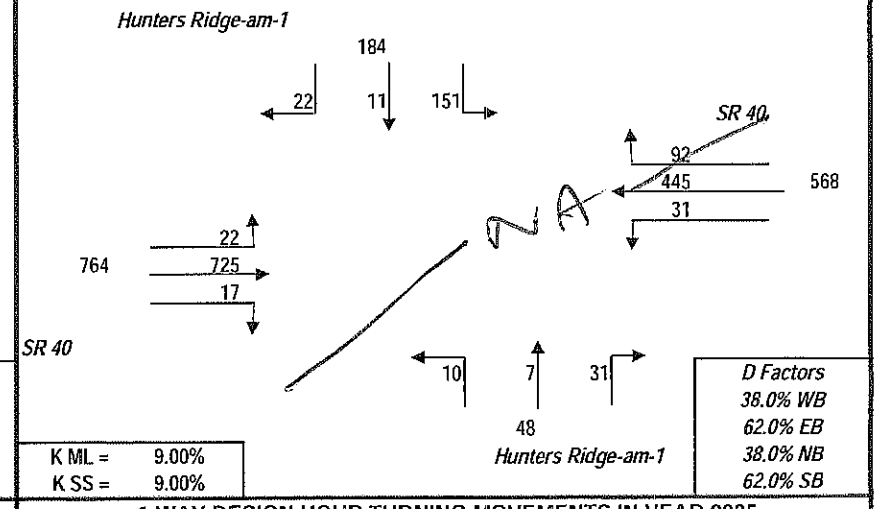
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

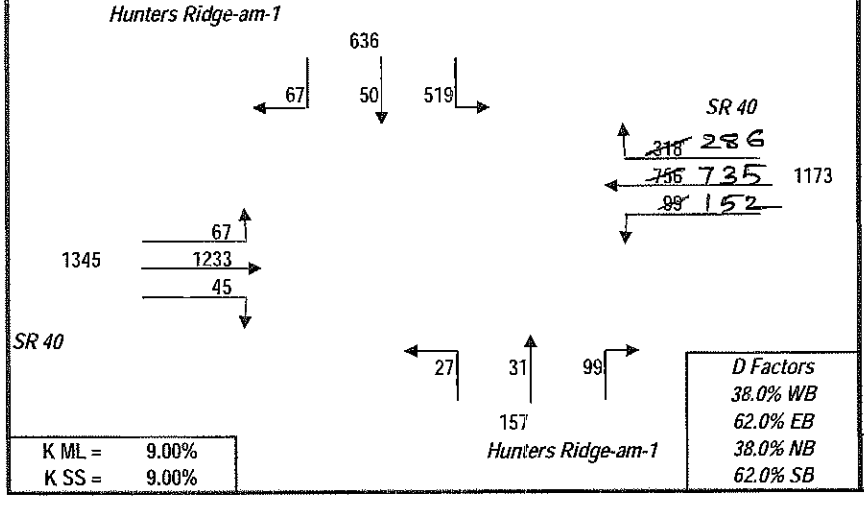
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

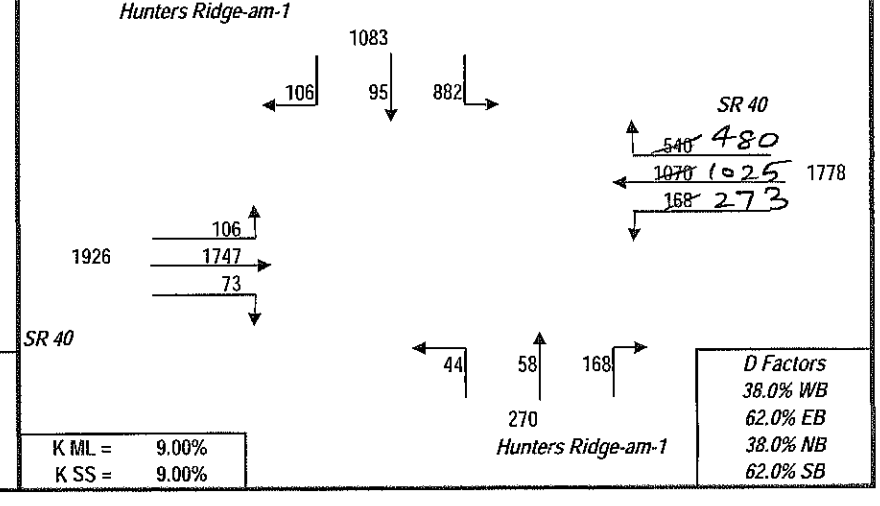
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South? (Enter Yes or No): ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
32.9%	Northbound (NB)
67.1%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Annual Growth Rate
Base		
Opening		
Mid		
Design		

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2011	9600	11800	3400	0	24800
2035	52000	56100	4200	0	112300

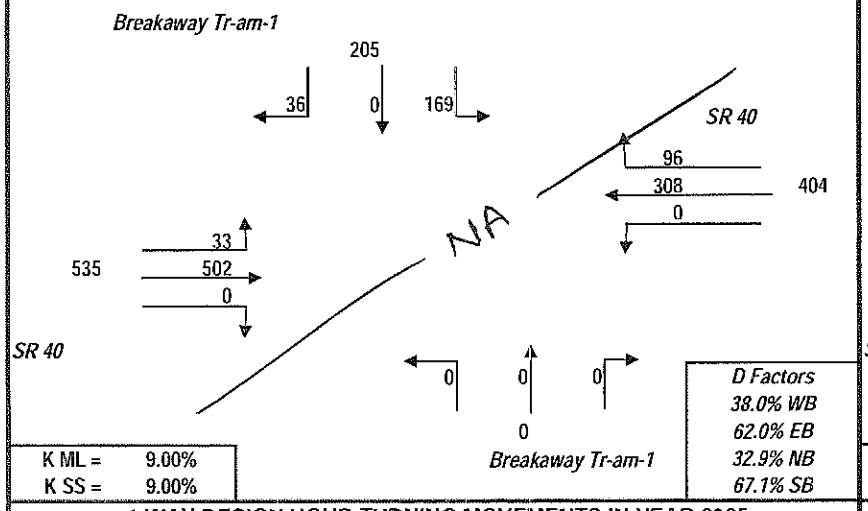
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	0%	1
(EB THRU)	*West-to-East*	100%	573
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	1
(WB THRU)	*East-to-West*	77%	481
(WB RT)	*East-to-North*	23%	54
(SB LT)	*North-to-East*	97%	152
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	3%	5
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	0
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Breakaway Tr-am-1: Breakaway Tr TO Williamson Blvd

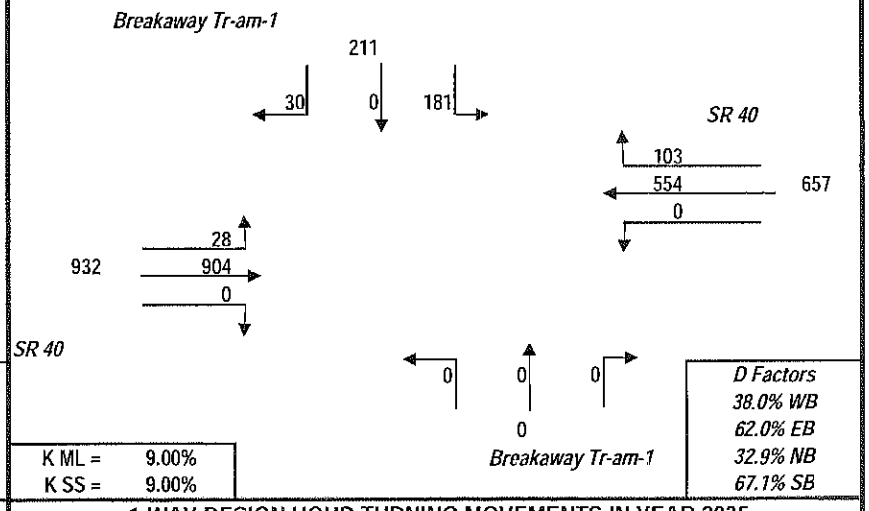
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
32.9%	NB
67.1%	SB

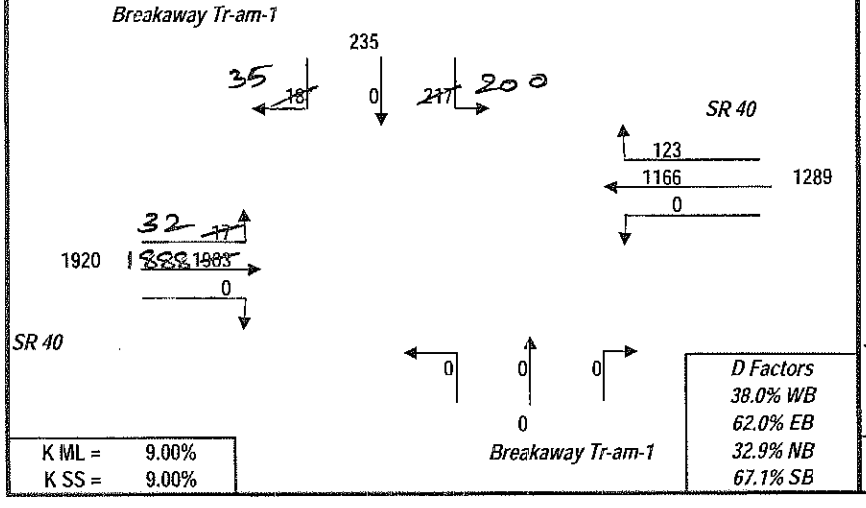
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
32.9%	NB
67.1%	SB

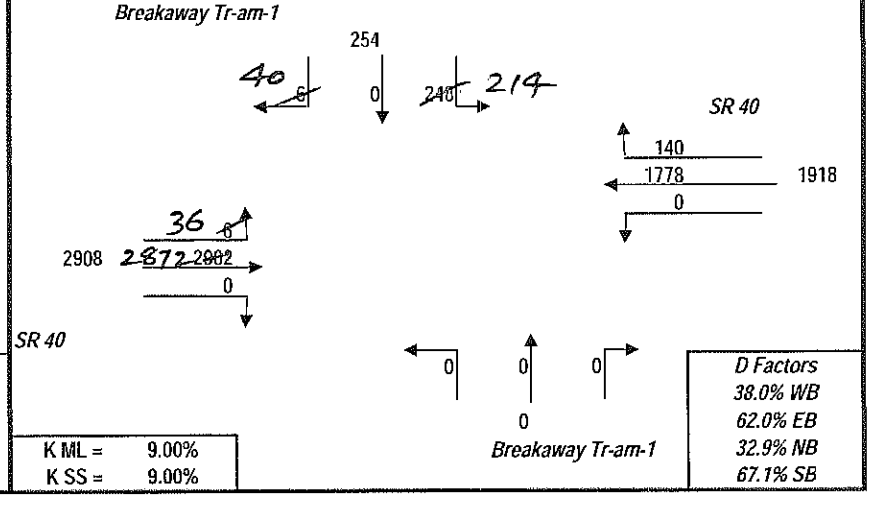
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
32.9%	NB
67.1%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
32.9%	NB
67.1%	SB

TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors	Mainline	D Factors	*Mainline*	
	9.00%		38.0%	Westbound (WB)
	Sidestreet		62.0%	Eastbound (EB)
	9.00%		*Sidestreet*	
			40.5%	Northbound (NB)
			59.5%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) — Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West:	*From East:*	*From North:*	*From South:*	
EB Approach	*WB Approach*	*SB Approach*	*NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West:	*From East:*	*From North:*	*From South:*	
	EB Approach	*WB Approach*	*SB Approach*	*NB Approach*	***TOTAL***
2015	19200	39600	14300	600	64700
2035	55100	66300	22900	800	146100

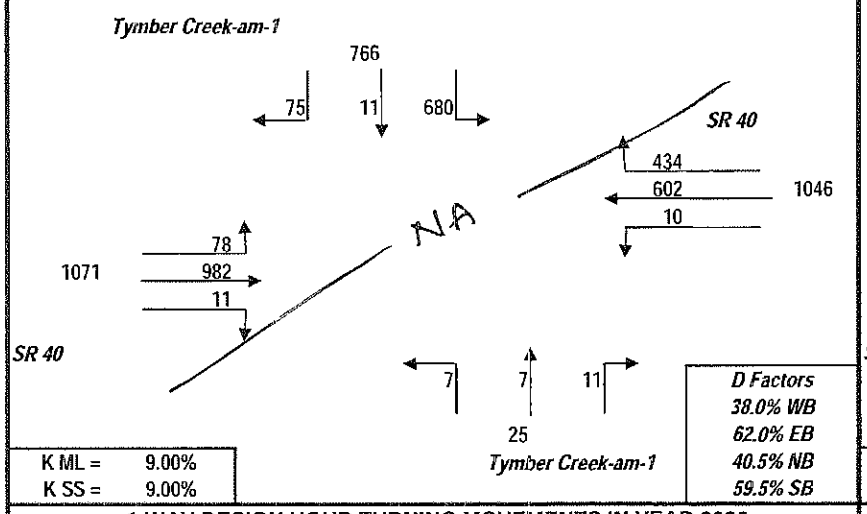
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	93%	93
(EB RT)	*West-to-South*	2%	2
(WB LT)	*East-to-South*	11%	11
(WB THRU)	*East-to-West*	40%	40
(WB RT)	*East-to-North*	49%	49
(SB LT)	*North-to-East*	91%	91
(SB THRU)	*North-to-South*	5%	5
(SB RT)	*North-to-West*	4%	4
(NB LT)	*South-to-West*	25%	25
(NB THRU)	*South-to-North*	31%	31
(NB RT)	*South-to-East*	44%	44

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Tymber Creek-am-1: Breakaway Tr TO Williamson Blvd

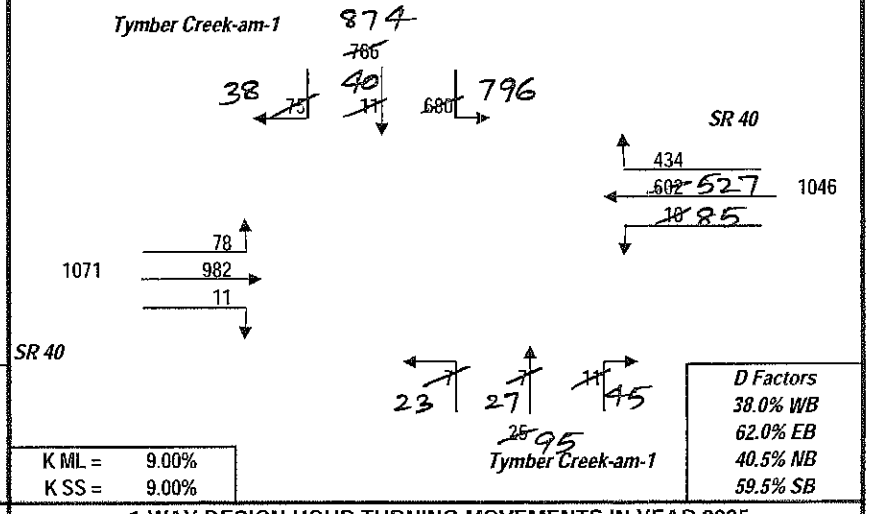
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
40.5% NB
59.5% SB

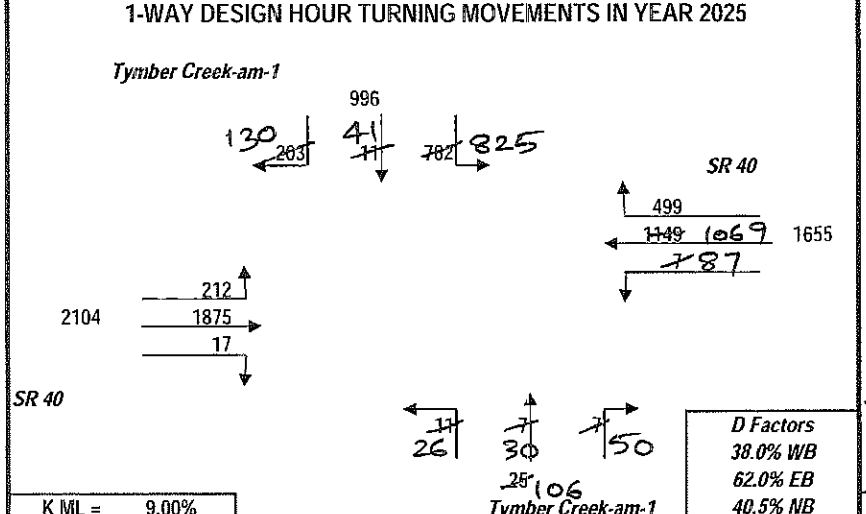
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
40.5% NB
59.5% SB

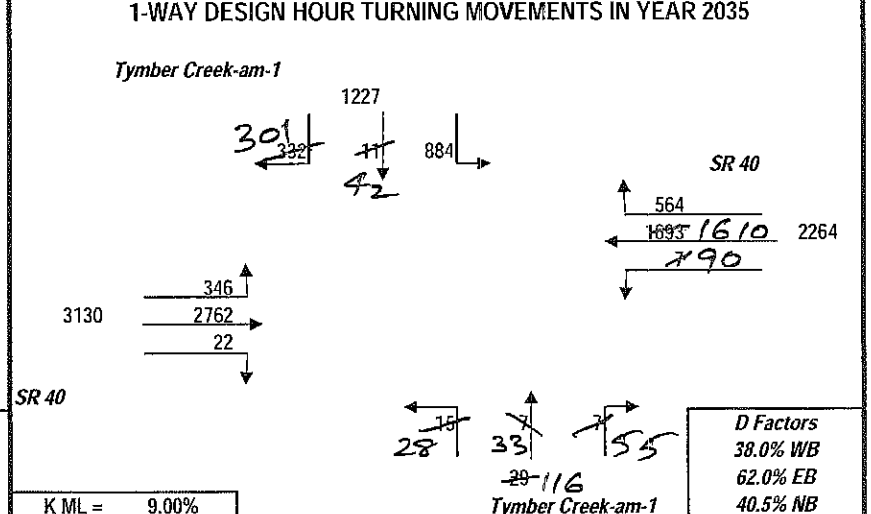
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
40.5% NB
59.5% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
40.5% NB
59.5% SB

TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South? (Enter Yes or No): ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	6.00%

D Factors	*Mainline*	
	38.0%	Westbound (WB)
	62.0%	Eastbound (EB)
	Sidestreet	
	49.5%	Northbound (NB)
	50.5%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No): ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Peak Hour
Base		
Opening		
Mid		
Design		

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

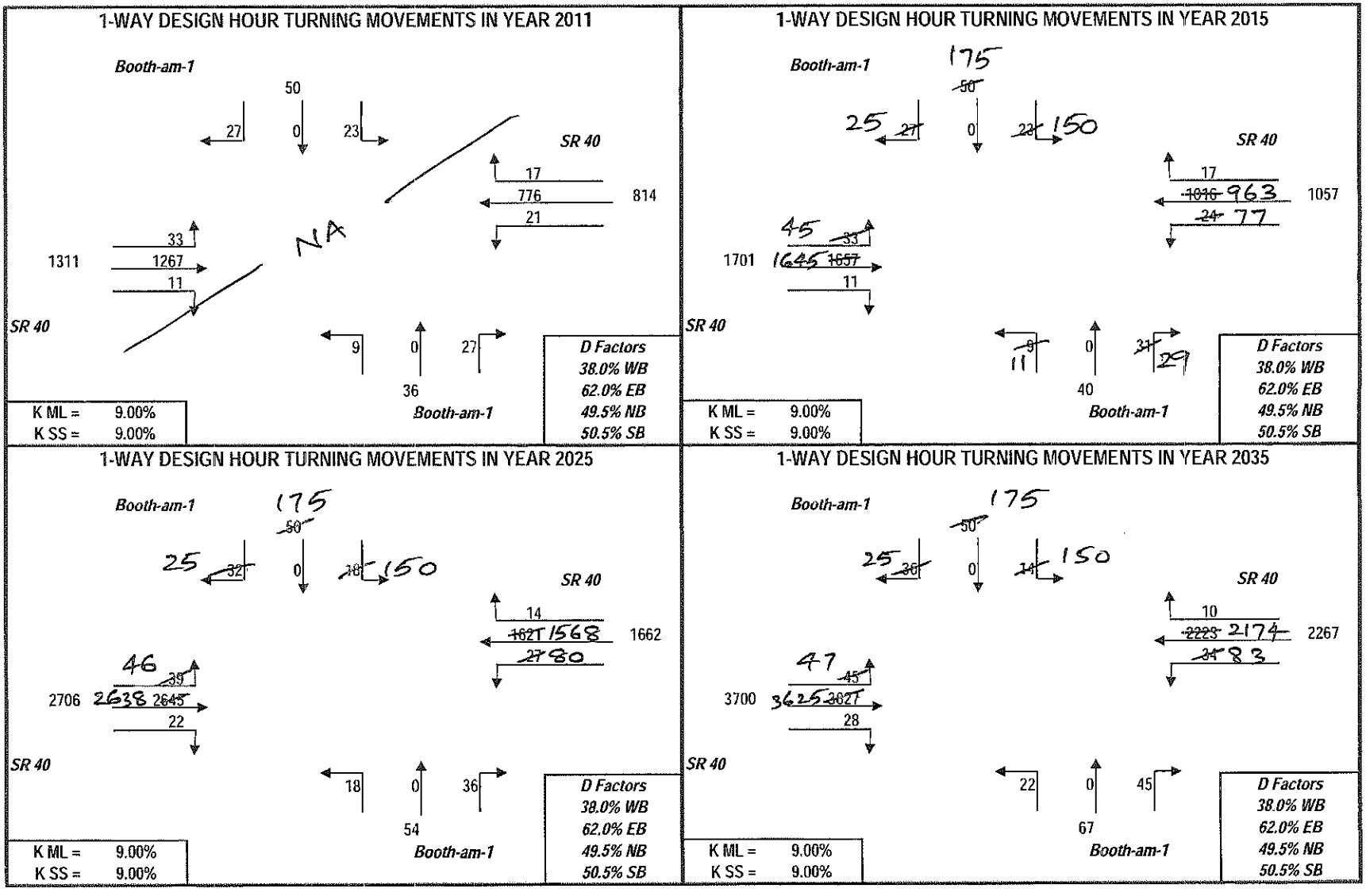
	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
2011	23400	23800	1100	800	49100
2035	66300	66300	1100	1500	135200

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011
(EB LT)	*West-to-North*	3%	3
(EB THRU)	*West-to-East*	97%	97
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	8%	8
(WB THRU)	*East-to-West*	91%	91
(WB RT)	*East-to-North*	1%	1
(SB LT)	*North-to-East*	87%	87
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	13%	13
(NB LT)	*South-to-West*	31%	31
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	69%	69

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Booth-am-1: Breakaway Tr TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? Enter Yes or No — ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	38.0%	Westbound (WB)
	62.0%	Eastbound (EB)
	Sidestreet	
	55.7%	Northbound (NB)
	44.3%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No — ◉ Yes ○ No

If "Yes" go to cell C47 | If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Base	Opening	Mid	Design
Base				
Opening				
Mid				
Design				

Mainline Growth Function — ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function — ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	26700	26700	0	7800	61200
2035	69000	69000	0	8800	146800

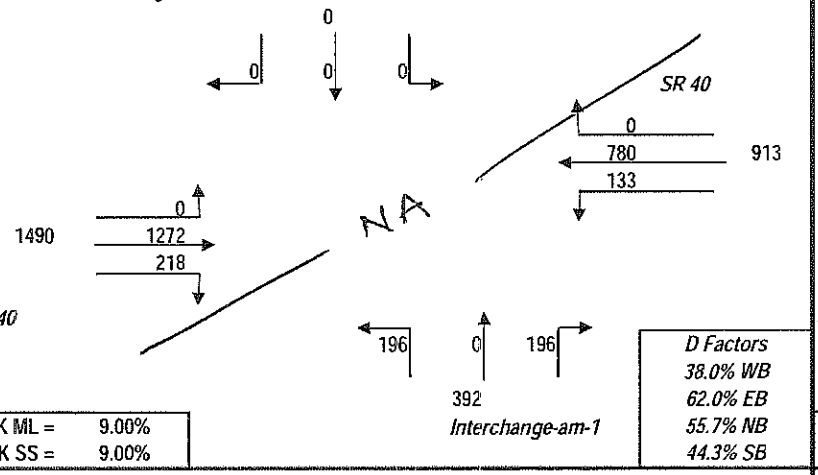
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	0%	0
(EB THRU)	*West-to-East*	97%	97
(EB RT)	*West-to-South*	3%	3
(WB LT)	*East-to-South*	14%	14
(WB THRU)	*East-to-West*	86%	86
(WB RT)	*East-to-North*	0%	0
(SB LT)	*North-to-East*	0%	0
(SB THRU)	*North-to-South*	100%	100
(SB RT)	*North-to-West*	0%	0
(NB LT)	*South-to-West*	23%	23
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	77%	77

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Interchange-am-1: Breakaway Tr TO Williamson Blvd

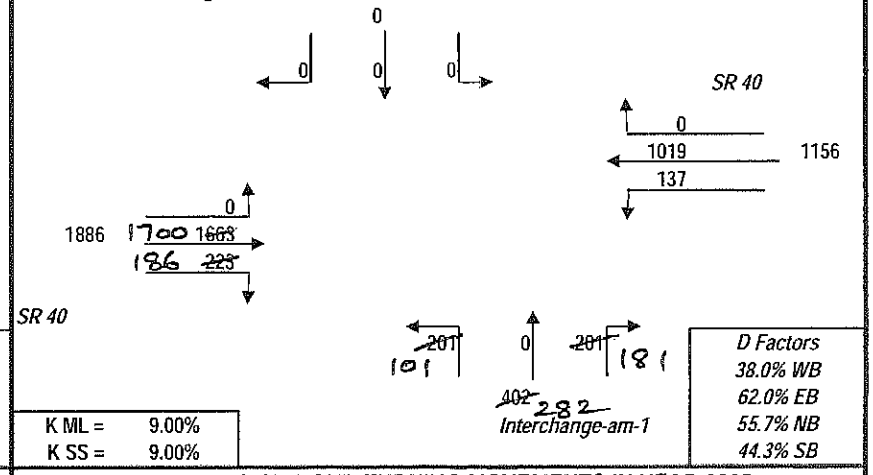
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
55.7% NB
44.3% SB

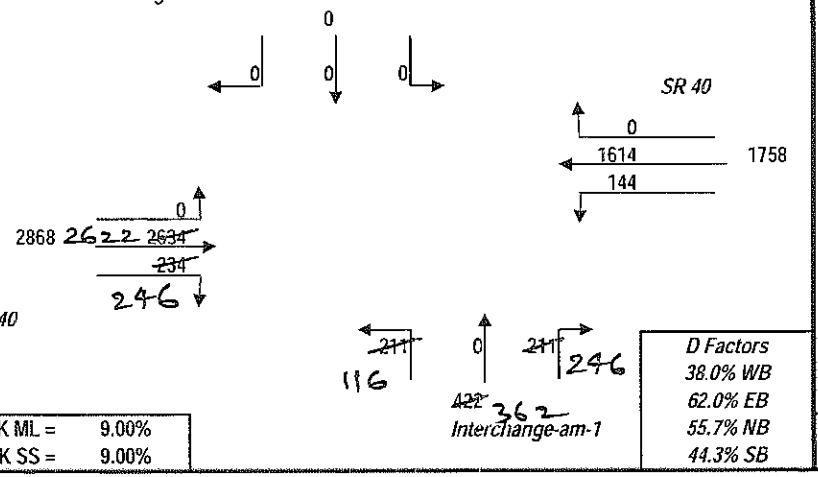
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
55.7% NB
44.3% SB

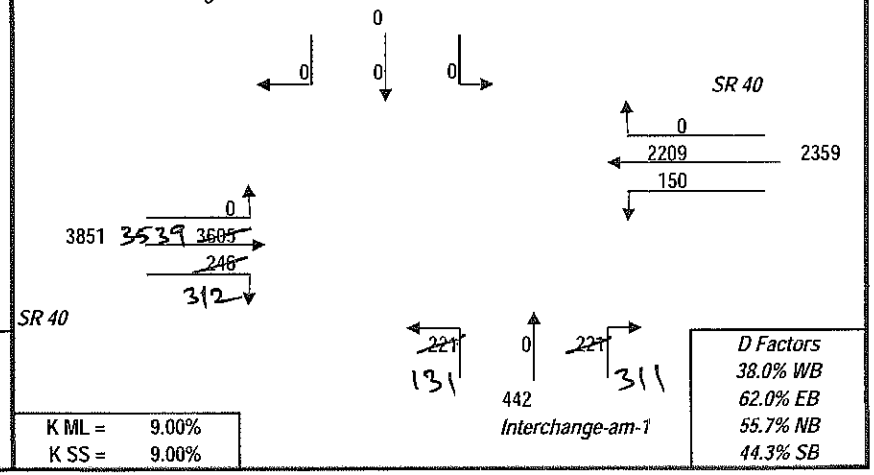
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
55.7% NB
44.3% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
55.7% NB
44.3% SB

TURNS5 ANALYSIS SHEET - INPUT

Project:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	*Mainline*	
	38.0%	Westbound (WB)
	62.0%	Eastbound (EB)
	Sidestreet	
	45.0%	Northbound (NB)
	55.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate
Base		
Opening		
Mid		
Design		

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2011	26700	29700	7800	18800	83000
2035	69000	71300	13500	25900	179800

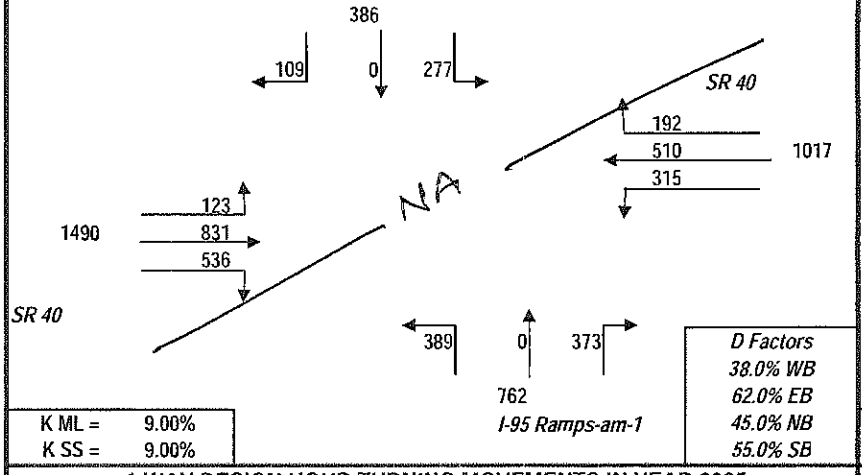
		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011
(EB LT)	*West-to-North*	9%	9
(EB THRU)	*West-to-East*	58%	58
(EB RT)	*West-to-South*	37%	37
(WB LT)	*East-to-South*	34%	34
(WB THRU)	*East-to-West*	52%	52
(WB RT)	*East-to-North*	14%	14
(SB LT)	*North-to-East*	73%	73
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	27%	27
(NB LT)	*South-to-West*	48%	48
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	52%	52

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT I-95 Ramps-am-1: Breakaway Tr TO Williamson Blvd

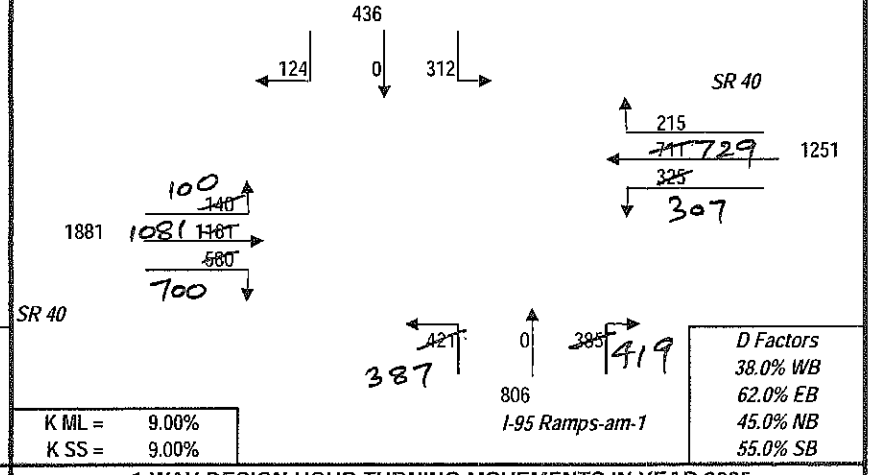
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
45.0% NB
55.0% SB

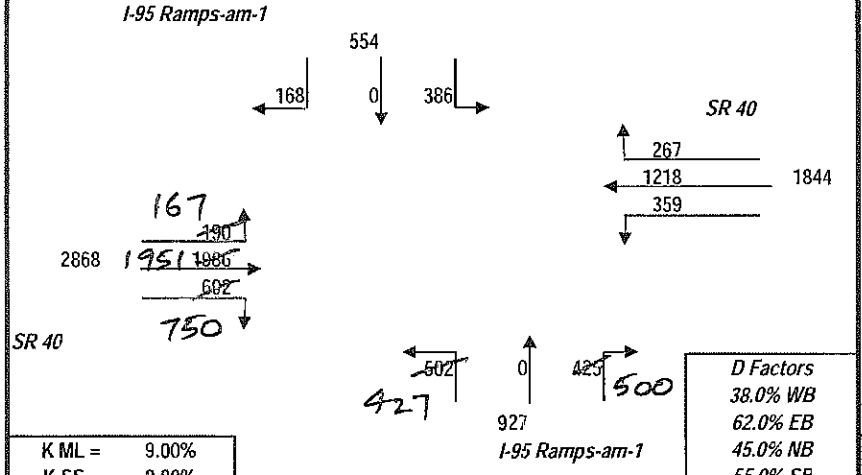
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
45.0% NB
55.0% SB

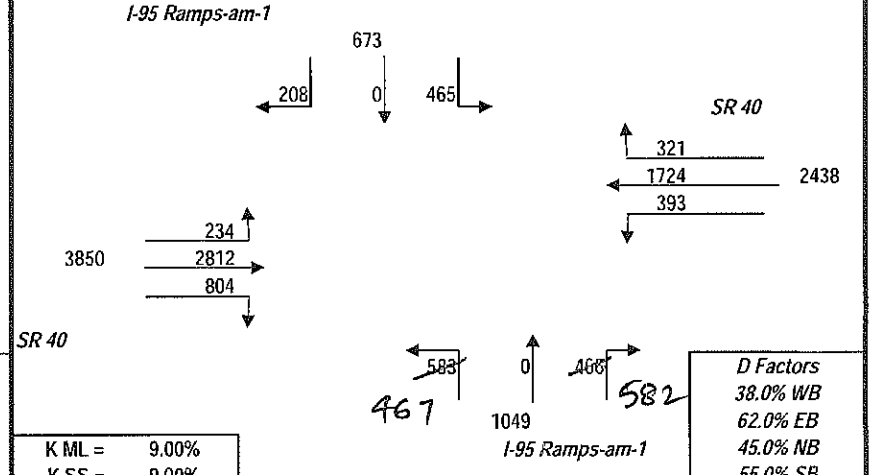
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
45.0% NB
55.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
45.0% NB
55.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Fresno
Tie:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	38.0%	Westbound (WB)
	62.0%	Eastbound (EB)
	Sidestreet	
	40.0%	Northbound (NB)
	60.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2011	29700	27700	6500	17500	81400
2035	71300	36300	6500	41400	155500

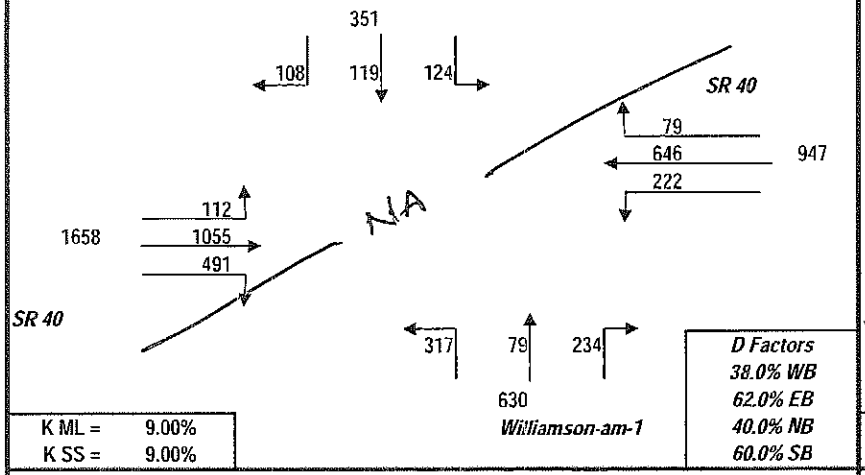
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	58%	58
(EB RT)	*West-to-South*	37%	37
(WB LT)	*East-to-South*	20%	20
(WB THRU)	*East-to-West*	76%	76
(WB RT)	*East-to-North*	4%	4
(SB LT)	*North-to-East*	28%	28
(SB THRU)	*North-to-South*	25%	25
(SB RT)	*North-to-West*	47%	47
(NB LT)	*South-to-West*	67%	67
(NB THRU)	*South-to-North*	10%	10
(NB RT)	*South-to-East*	23%	23

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Williamson-am-1: Breakaway Tr TO Williamson Blvd

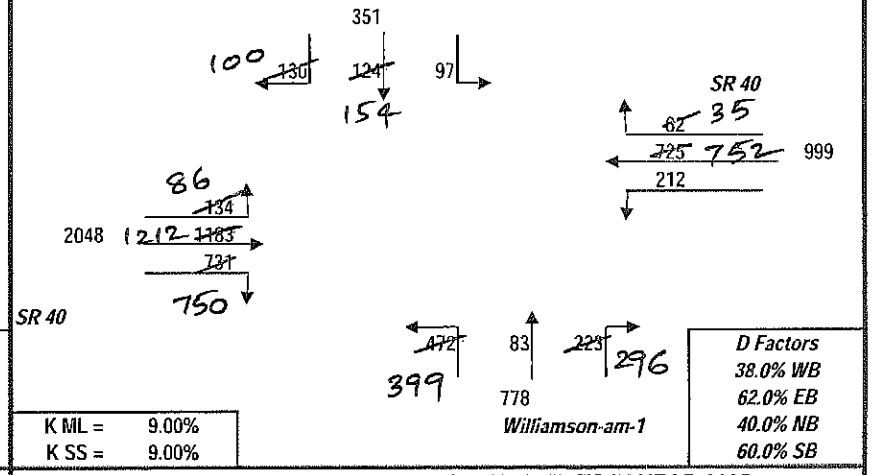
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
40.0% NB
60.0% SB

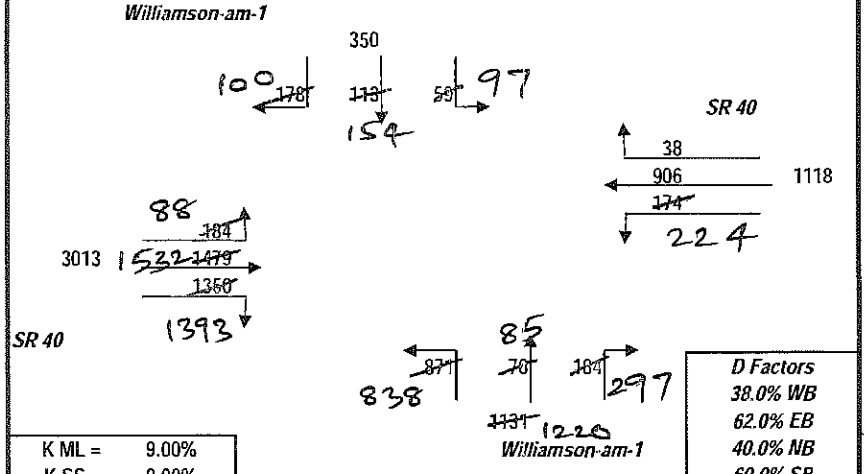
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
40.0% NB
60.0% SB

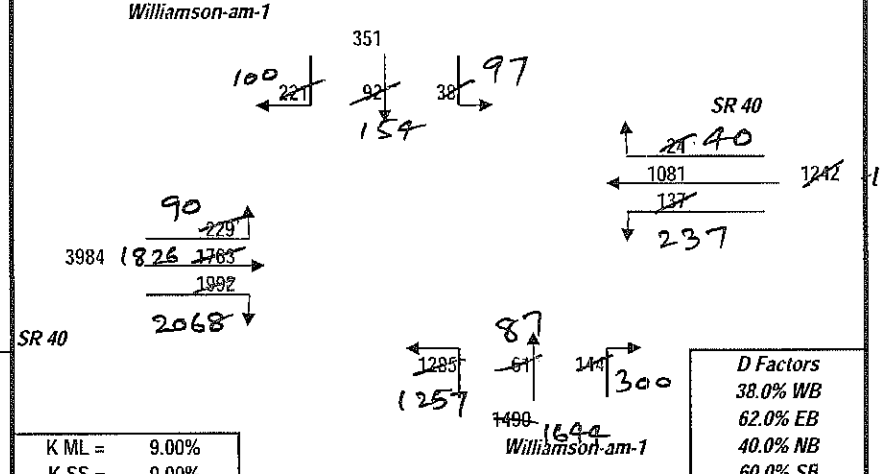
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
40.0% NB
60.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
40.0% NB
60.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Peak:
Tod:
County:

Is the Mainline Oriented North/South? Enter Yes or No: (●) Yes ( ) No

K Factors

Mainline	
9.00%	
Sidestreet	
9.00%	

D Factors

Mainline	
40.0%	Northbound (NB)
60.0%	Southbound (SB)
Sidestreet	
48.5%	Westbound (WB)
51.5%	Eastbound (EB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No: (●) Yes ( ) No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: (●) Linear ( ) Exponential ( ) Decaying

Side Street Growth Function: (●) Linear ( ) Exponential ( ) Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2015	0	19600	21500	17100	49200
2035	0	23700	41400	33000	98100

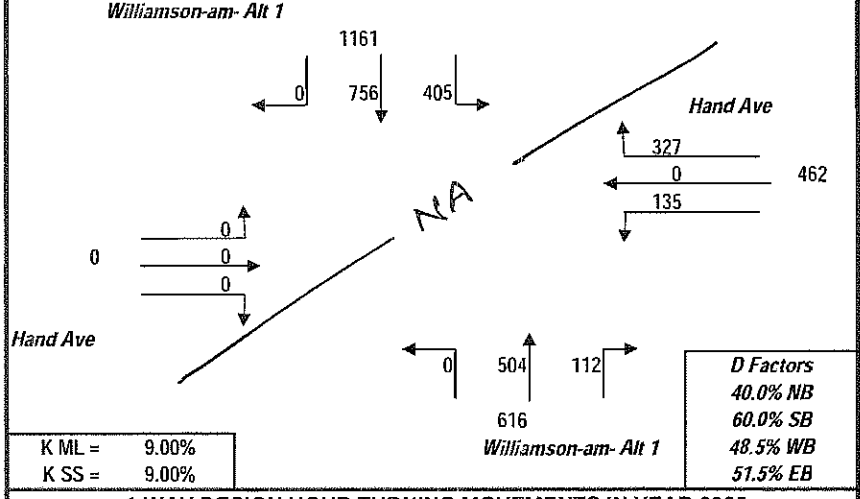
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**
(EB LT)	*West-to-North*	0%	0
(EB THRU)	*West-to-East*	100%	0
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	46%	46
(WB THRU)	*East-to-West*	0%	0
(WB RT)	*East-to-North*	54%	54
(SB LT)	*North-to-East*	30%	30
(SB THRU)	*North-to-South*	70%	70
(SB RT)	*North-to-West*	0%	0
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	70%	70
(NB RT)	*South-to-East*	30%	30

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR Williamson-am- Alt 1 AT Hand Ave: SR 40 TO LPGA

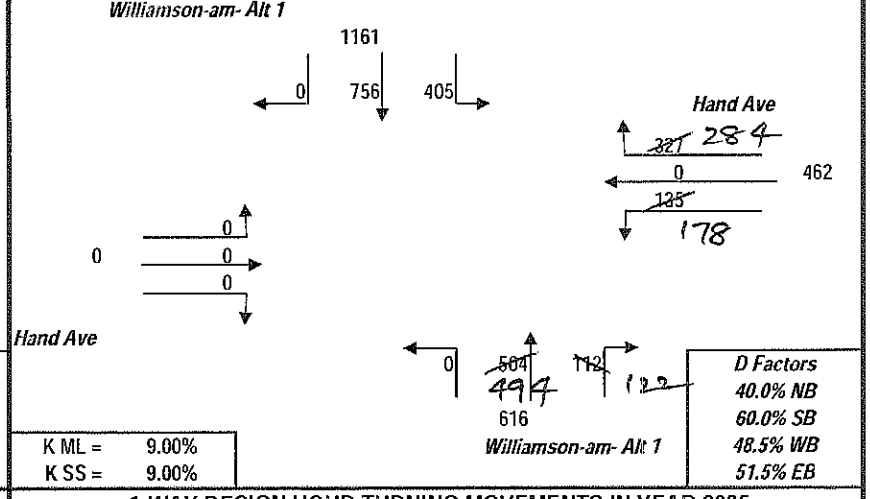
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
40.0%	NB
60.0%	SB
48.5%	WB
51.5%	EB

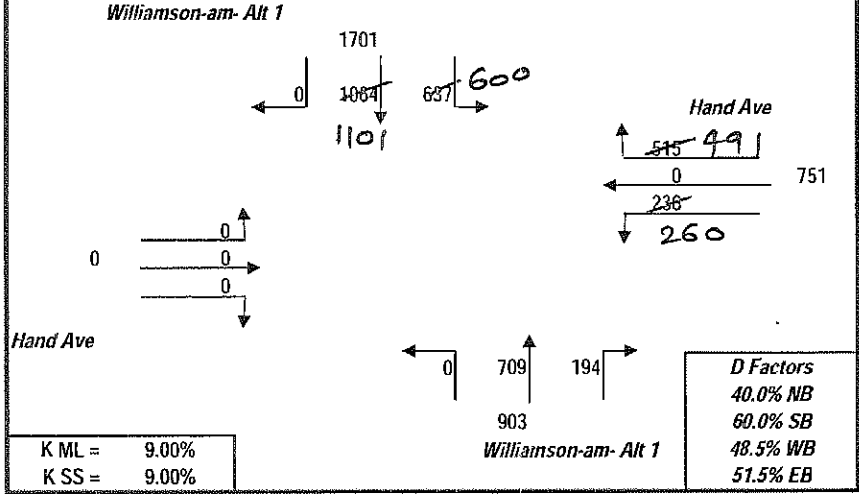
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
40.0%	NB
60.0%	SB
48.5%	WB
51.5%	EB

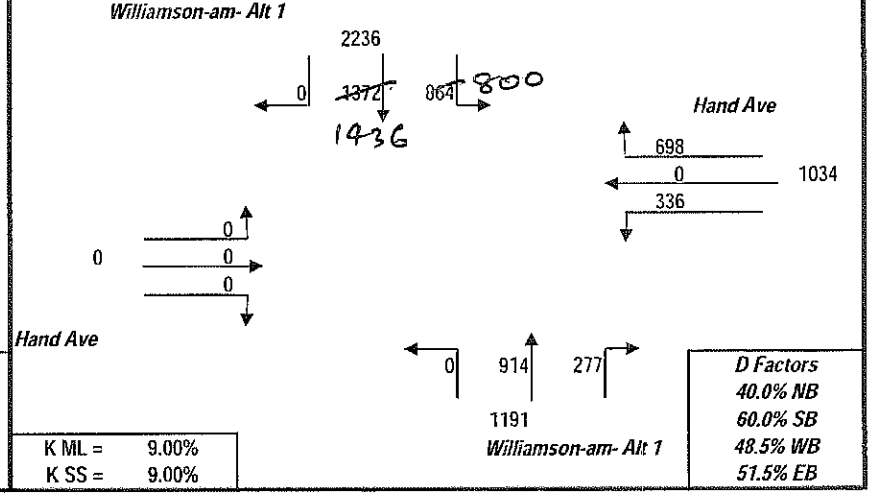
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
40.0%	NB
60.0%	SB
48.5%	WB
51.5%	EB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
40.0%	NB
60.0%	SB
48.5%	WB
51.5%	EB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Phase:
Tip:
County:

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
45.5%	Westbound (WB)
54.5%	Eastbound (EB)
Sidestreet	
44.8%	Northbound (NB)
55.2%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) — Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01)	
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	***TOTAL***
2011	16700	13700	0	3800	28200
2035	27300	32400	0	11400	71100

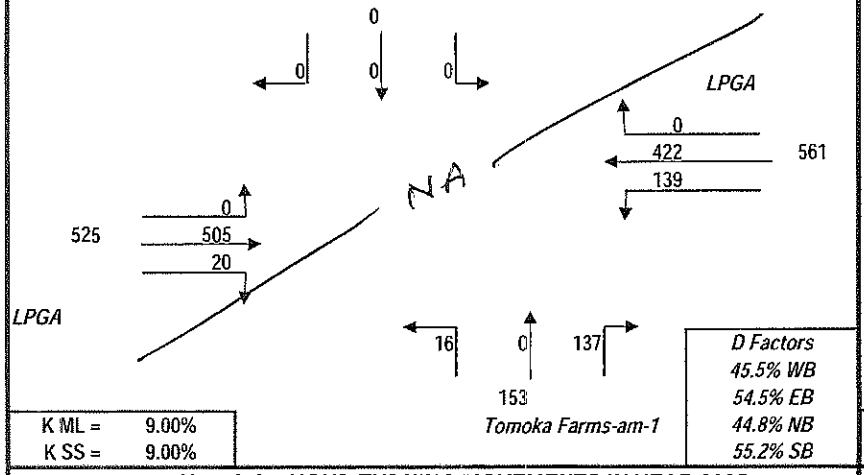
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	0%	0
(EB THRU)	*West-to-East*	95%	95
(EB RT)	*West-to-South*	5%	5
(WB LT)	*East-to-South*	23%	23
(WB THRU)	*East-to-West*	75%	75
(WB RT)	*East-to-North*	2%	2
(SB LT)	*North-to-East*	0%	0
(SB THRU)	*North-to-South*	100%	0
(SB RT)	*North-to-West*	0%	0
(NB LT)	*South-to-West*	11%	11
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	89%	89

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT Tomoka Farms-am-1: Williamson TO Tymber Creek Ext

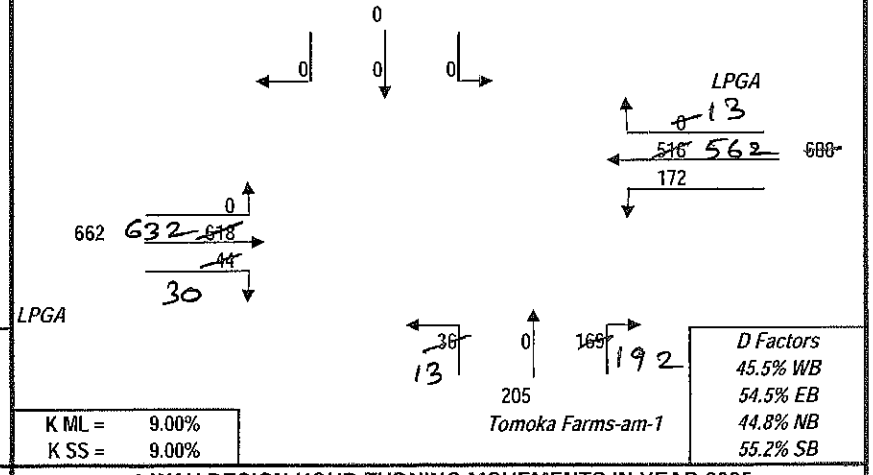
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
44.8%	NB
55.2%	SB

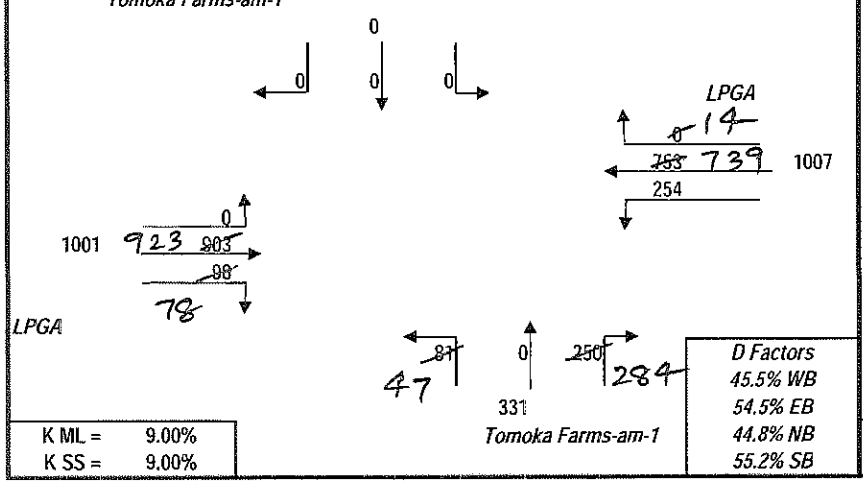
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
44.8%	NB
55.2%	SB

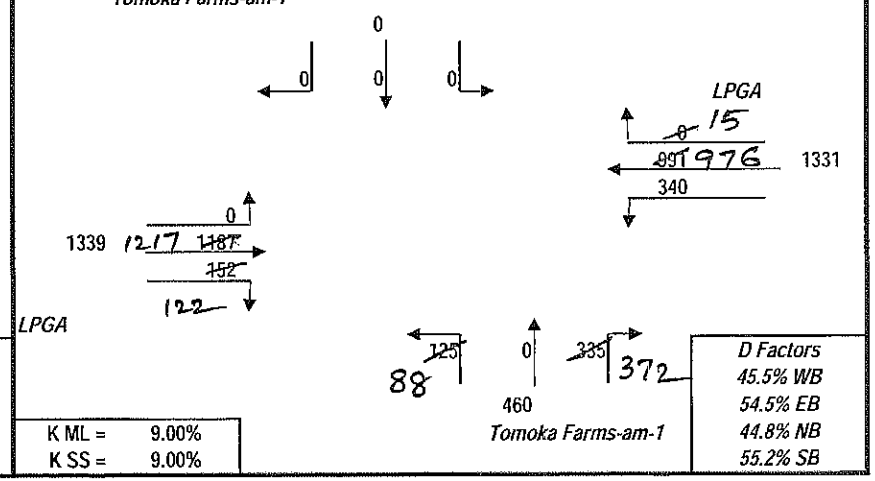
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
44.8%	NB
55.2%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
44.8%	NB
55.2%	SB

TURNS5 ANALYSIS SHEET - INPUT

Project	
Date	
Highway	
Intersection	
From	
To	
County	

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
45.5%	Westbound (WB)	
54.5%	Eastbound (EB)	
Sidestreet		
62.4%	Northbound (NB)	
62.4%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) — Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth	Sidestreet Growth
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2015	16800	29400	14800	9760	70700
2035	32400	46600	22400	15200	116600

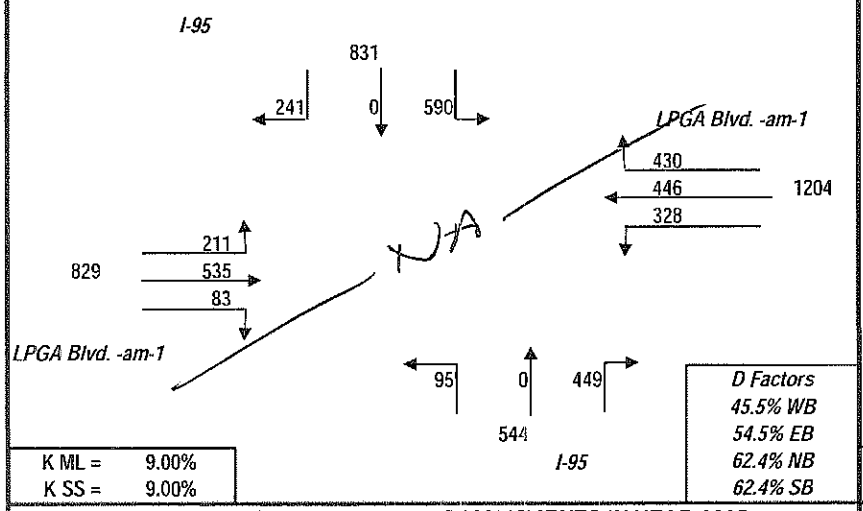
		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2015
(EB LT)	*West-to-North*	22%	22
(EB THRU)	*West-to-East*	69%	69
(EB RT)	*West-to-South*	9%	9
(WB LT)	*East-to-South*	24%	24
(WB THRU)	*East-to-West*	51%	51
(WB RT)	*East-to-North*	25%	25
(SB LT)	*North-to-East*	79%	79
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	21%	21
(NB LT)	*South-to-West*	15%	15
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	85%	85

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA Blvd. -am-1 AT I-95: Williamson TO Tymber Creek Ext

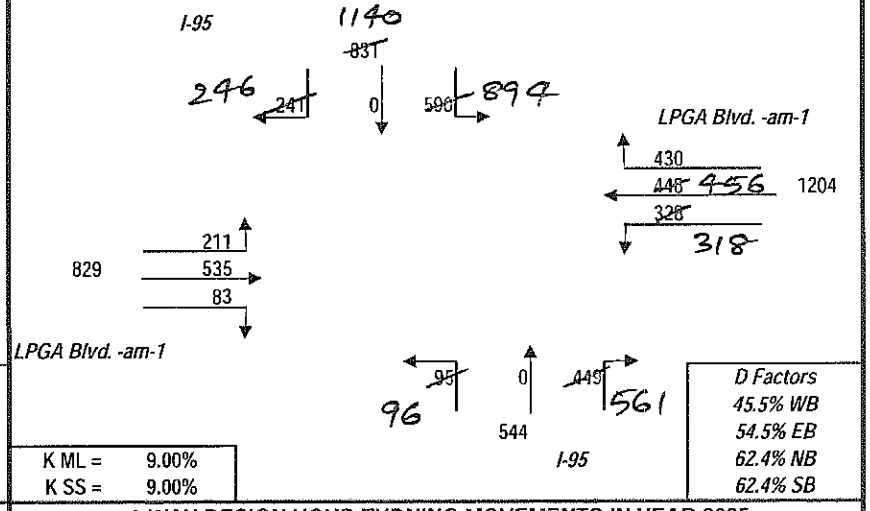
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
62.4%	NB
62.4%	SB

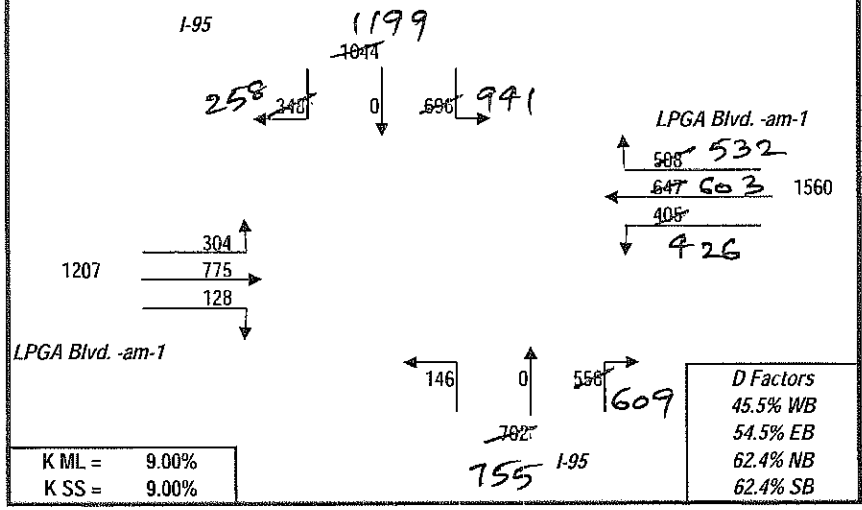
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
62.4%	NB
62.4%	SB

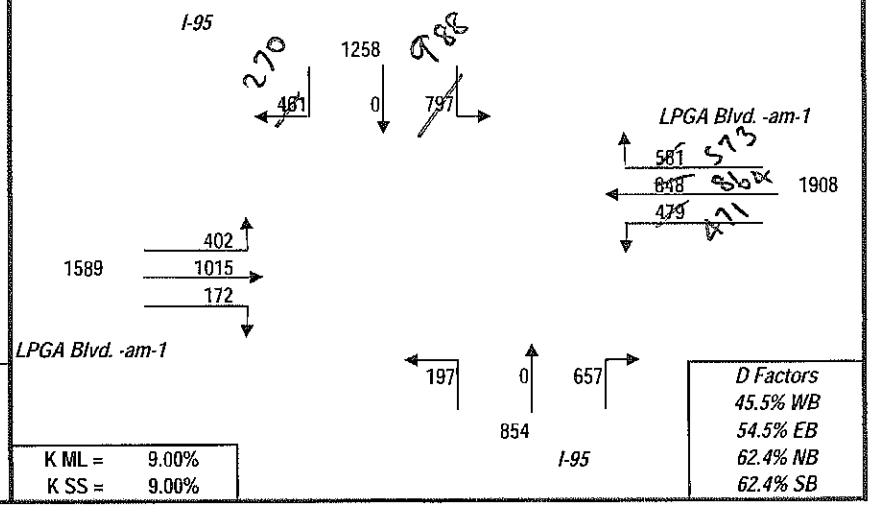
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
62.4%	NB
62.4%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
62.4%	NB
62.4%	SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	45.5%	Westbound (WB)
	54.5%	Eastbound (EB)
	Sidestreet	
	40.0%	Northbound (NB)
	60.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Growth Rate
Base		
Opening		
Mid		
Design		

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

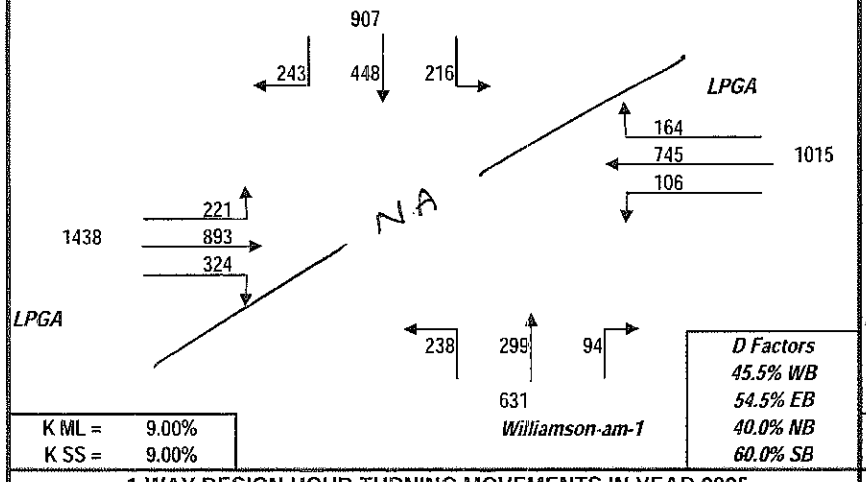
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2015	29400	24800	16800	17500	88500
2035	46600	49000	36000	31300	162900

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**	
(EB LT)	*West-to-North*	12%	12	
(EB THRU)	*West-to-East*	63%	63	
(EB RT)	*West-to-South*	25%	25	
(WB LT)	*East-to-South*	17%	17	(must be done manually)
(WB THRU)	*East-to-West*	72%	72	
(WB RT)	*East-to-North*	11%	11	
(SB LT)	*North-to-East*	30%	30	
(SB THRU)	*North-to-South*	53%	53	
(SB RT)	*North-to-West*	17%	17	
(NB LT)	*South-to-West*	38%	38	
(NB THRU)	*South-to-North*	44%	44	
(NB RT)	*South-to-East*	18%	18	

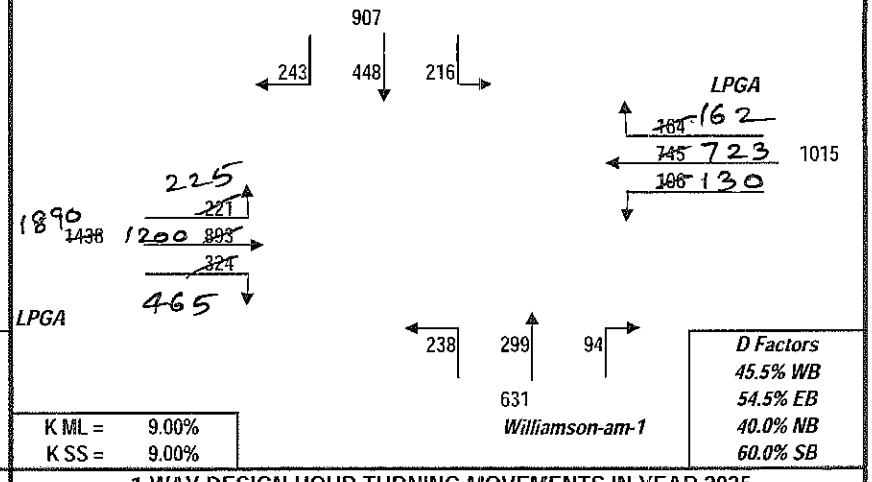
Desired Closure: 0.0

PROJECT TRAFFIC FOR LPGA AT Williamson-am-1: Williamson TO Tymber Creek Ext

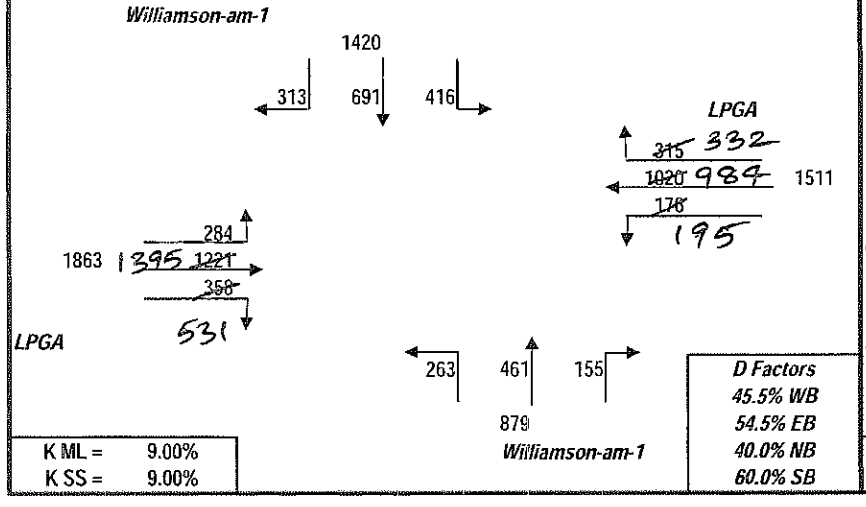
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



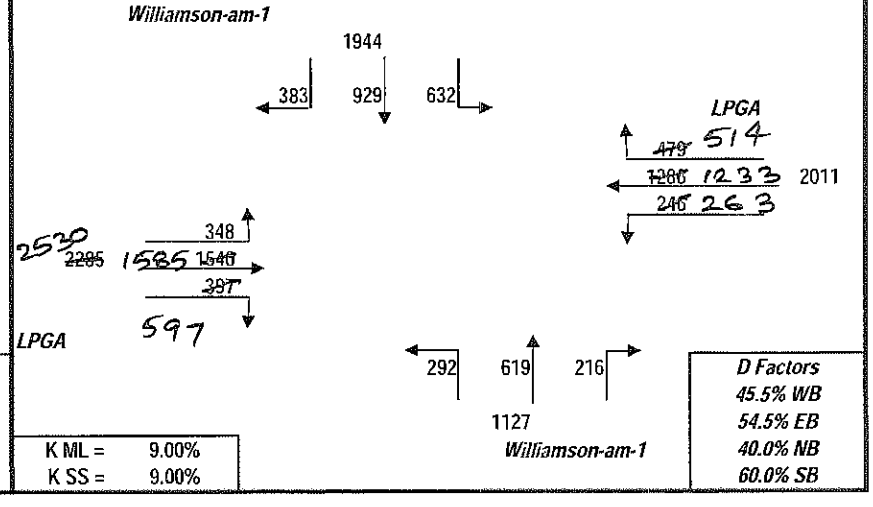
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
62.0%	Northbound (NB)
38.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Side Street Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	7000	7000	600	0	14600
2035	31800	31800	750	0	64350

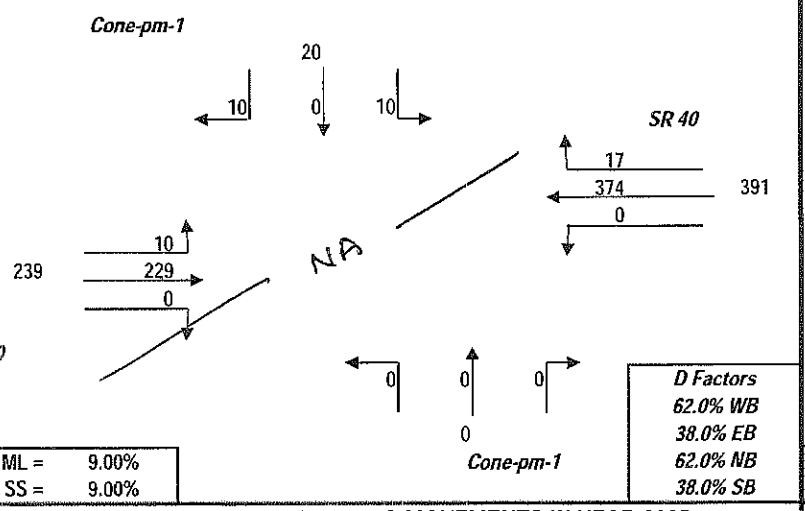
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	1%	1
(EB THRU)	*West-to-East*	99%	99
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	94%	94
(WB RT)	*East-to-North*	6%	6
(SB LT)	*North-to-East*	84%	84
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	16%	16
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Cone-pm-1: Cone Road TO Williamson Blvd

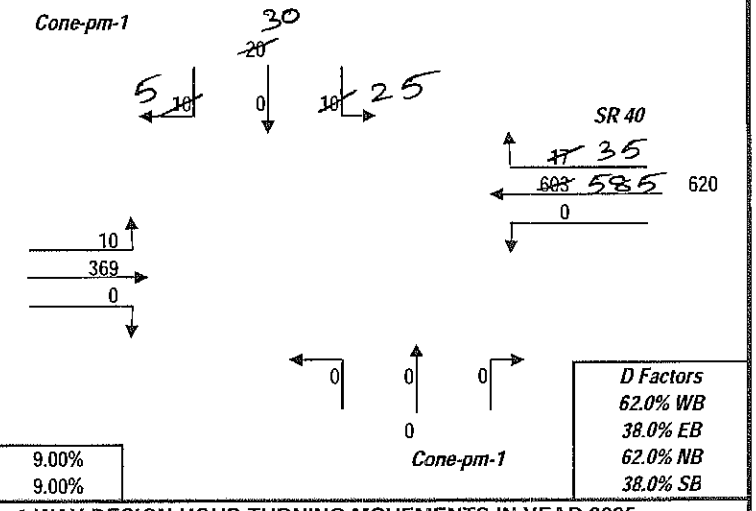
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

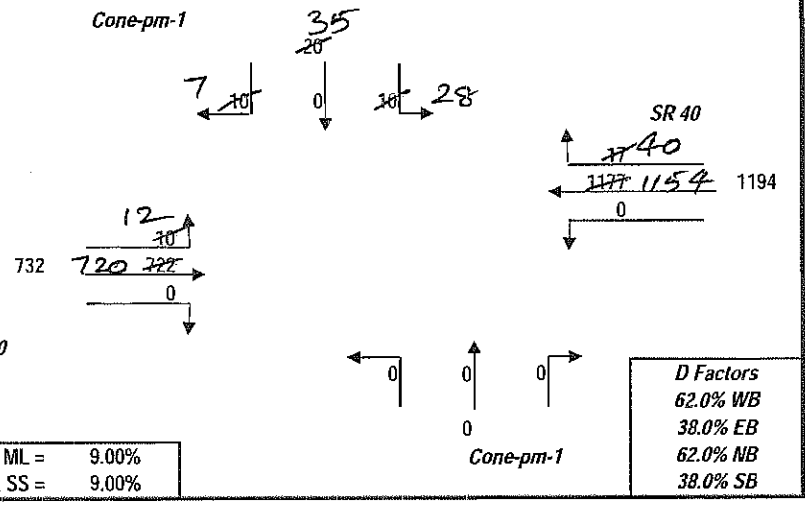
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

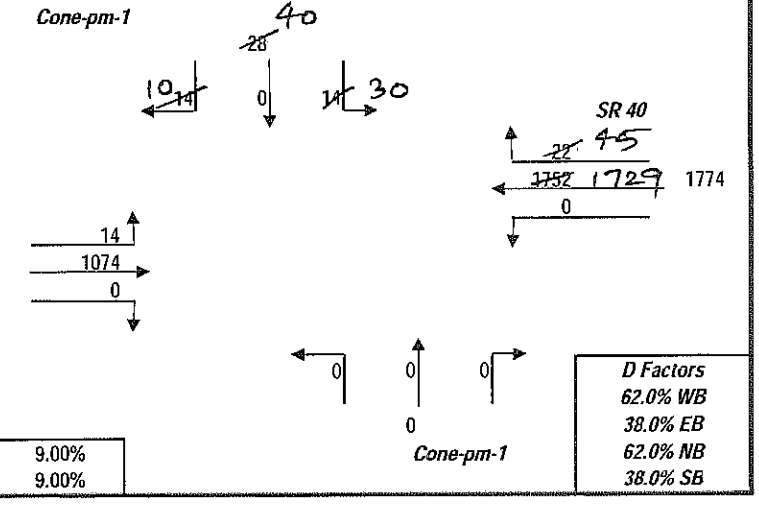
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	Mainline	D Factors	*Mainline*	
	9.00%		62.0%	Westbound (WB)
	Sidestreet		38.0%	Eastbound (EB)
	9.00%		*Sidestreet*	
			62.0%	Northbound (NB)
			38.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01)	
		Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West:	*From East:*	*From North:*	*From South:*	
EB Approach	*WB Approach*	*SB Approach*	*NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

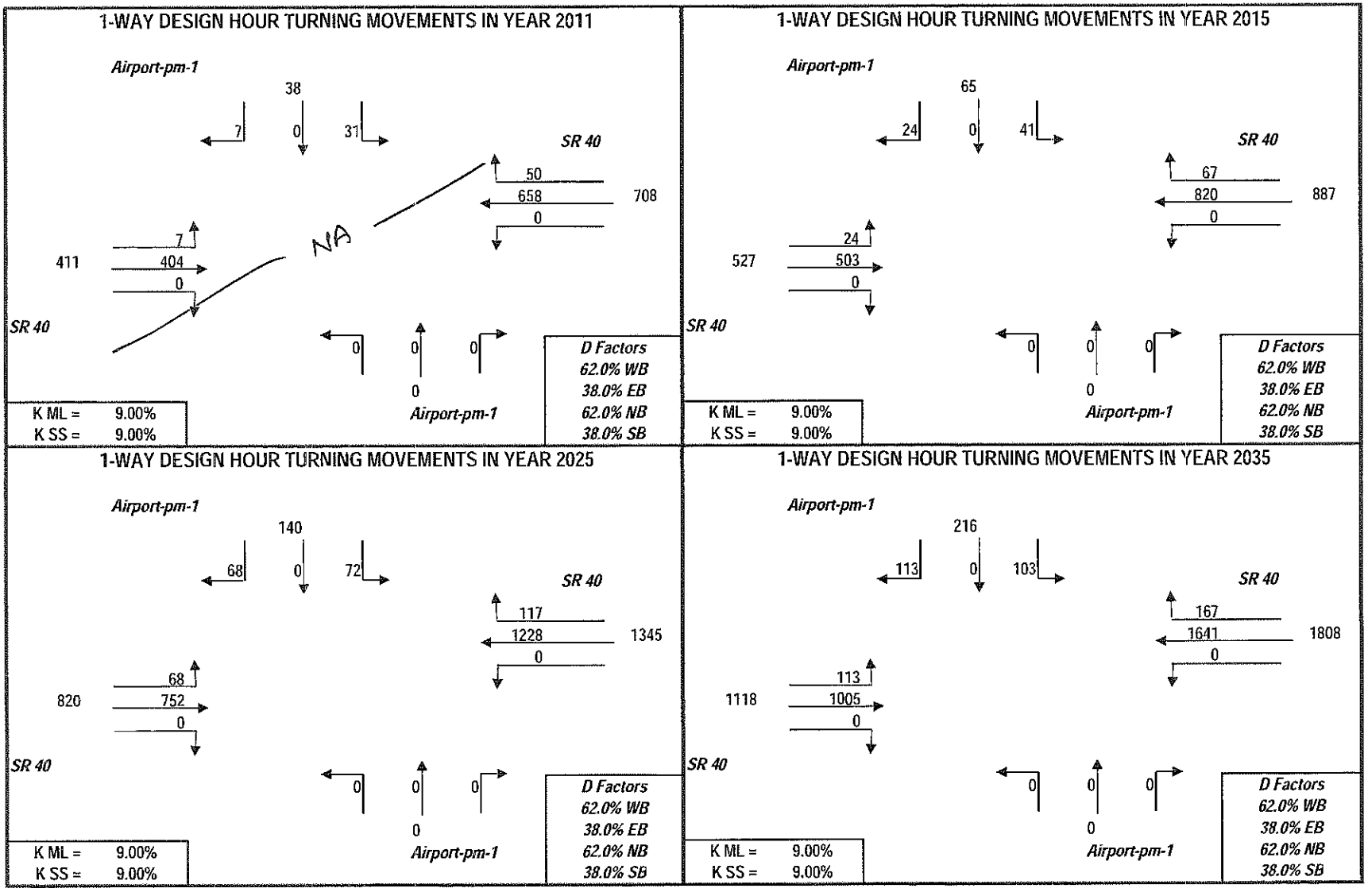
	From West:	*From East:*	*From North:*	*From South:*	
	EB Approach	*WB Approach*	*SB Approach*	*NB Approach*	***TOTAL***
2011	11900	12600	1000	0	25500
2035	32600	32400	6300	0	71300

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	20%	20
(EB THRU)	*West-to-East*	80%	80
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	90%	90
(WB RT)	*East-to-North*	10%	10
(SB LT)	*North-to-East*	40%	40
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	60%	60
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Airport-pm-1: Cone Road TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
62.0%	Northbound (NB)
38.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) — Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth	Sidestreet Growth
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

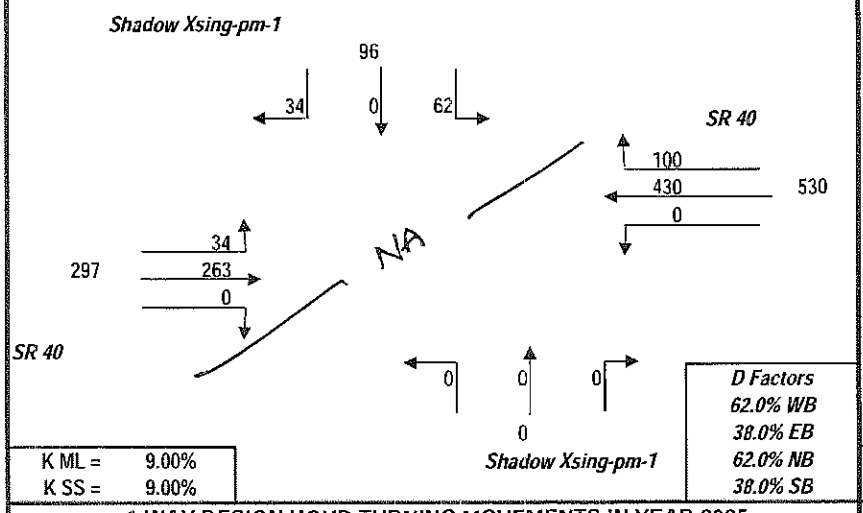
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2011	8700	9500	2800	0	21000
2035	32800	34500	3500	0	70300

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011	
(EB LT)	*West-to-North*	5%	5	
(EB THRU)	*West-to-East*	95%	95	
(EB RT)	*West-to-South*	0%	0	
(WB LT)	*East-to-South*	0%	0	(must be done manually)
(WB THRU)	*East-to-West*	80%	80	
(WB RT)	*East-to-North*	20%	20	
(SB LT)	*North-to-East*	78%	78	
(SB THRU)	*North-to-South*	0%	0	
(SB RT)	*North-to-West*	22%	22	
(NB LT)	*South-to-West*	0%	0	
(NB THRU)	*South-to-North*	100%	100	
(NB RT)	*South-to-East*	0%	0	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Shadow Xsing-pm-1: Cone Road TO Williamson Blvd

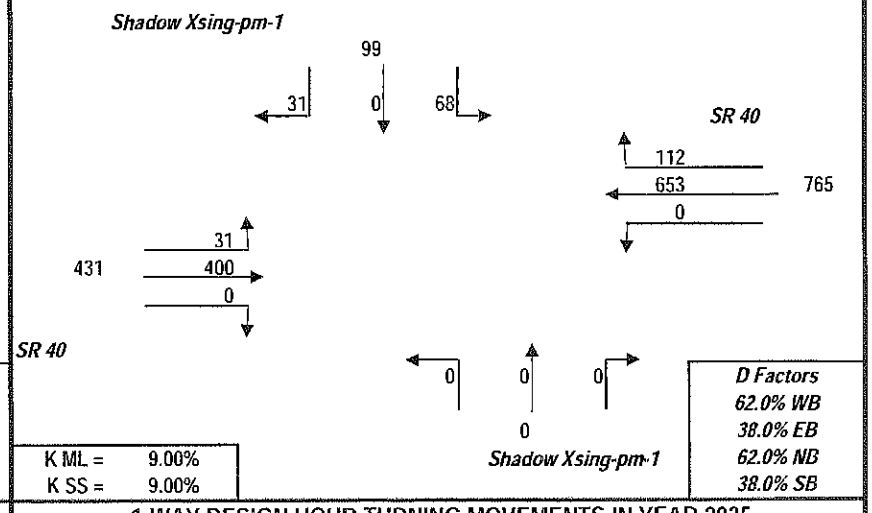
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors	
62.0%	WB
38.0%	EB
62.0%	NB
38.0%	SB

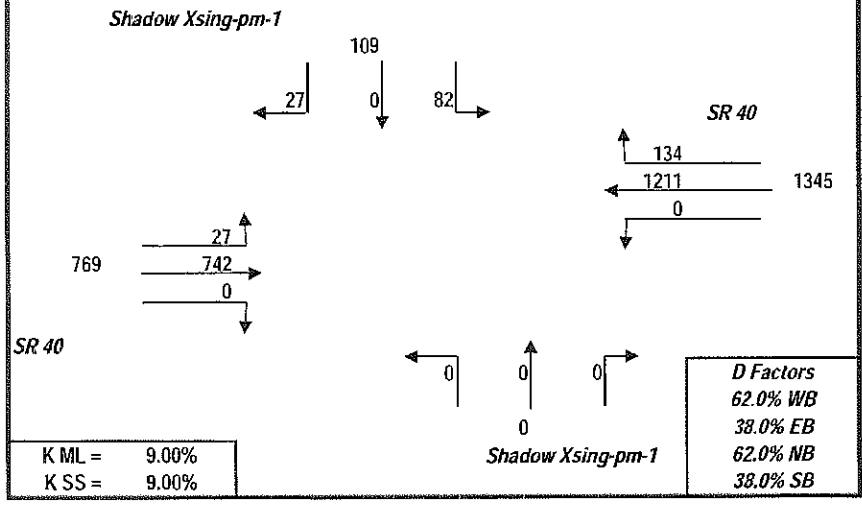
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
62.0%	WB
38.0%	EB
62.0%	NB
38.0%	SB

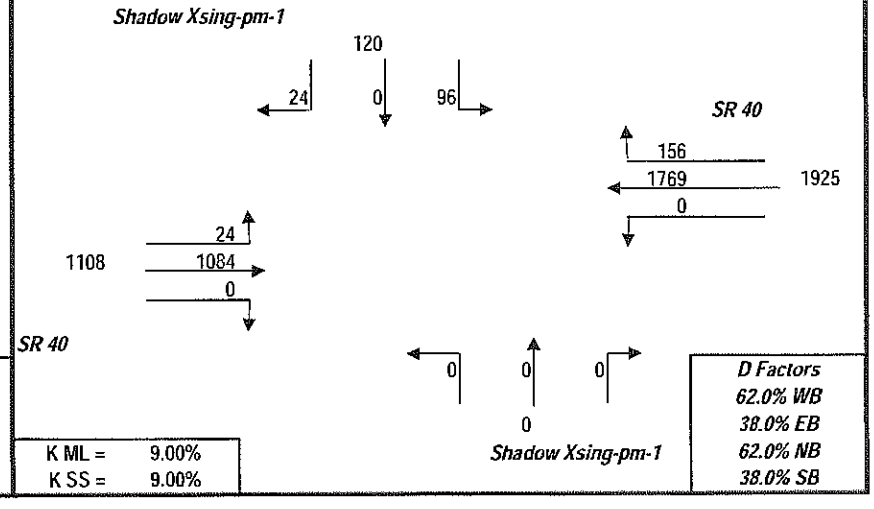
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
62.0%	WB
38.0%	EB
62.0%	NB
38.0%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
62.0%	WB
38.0%	EB
62.0%	NB
38.0%	SB

TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South?

Enter Yes or No
- ○ Yes
- ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
62.0%	Northbound (NB)
38.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
- ◉ Yes
- ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Mainline Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Side Street Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2011	9500	9500	0	0	19000
2035	34500	52000	19400	7900	113800

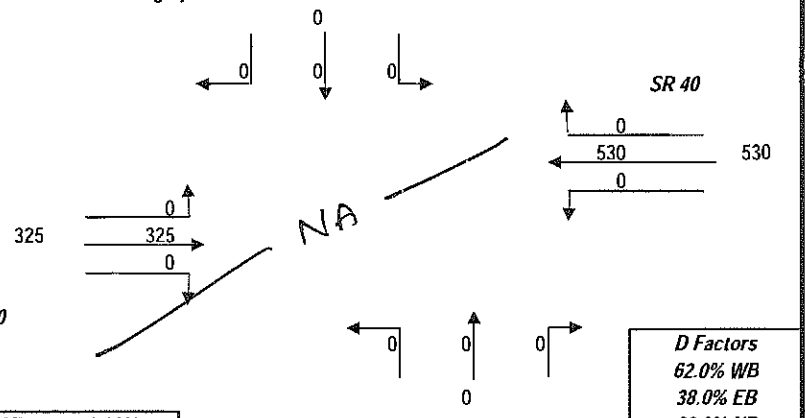
		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011
(EB LT)	*West-to-North*	10%	10
(EB THRU)	*West-to-East*	80%	80
(EB RT)	*West-to-South*	10%	10
(WB LT)	*East-to-South*	20%	20
(WB THRU)	*East-to-West*	50%	50
(WB RT)	*East-to-North*	30%	30
(SB LT)	*North-to-East*	70%	70
(SB THRU)	*North-to-South*	5%	5
(SB RT)	*North-to-West*	25%	25
(NB LT)	*South-to-West*	25%	25
(NB THRU)	*South-to-North*	5%	5
(NB RT)	*South-to-East*	70%	70

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Hunters Ridge-pm-1: Cone Road TO Williamson Blvd

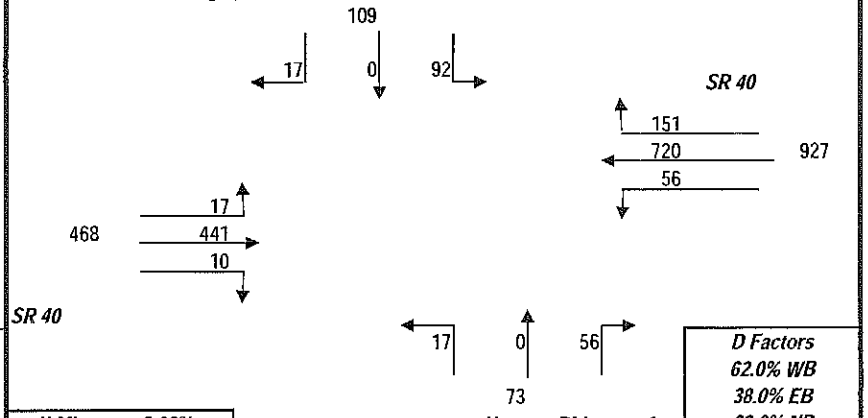
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

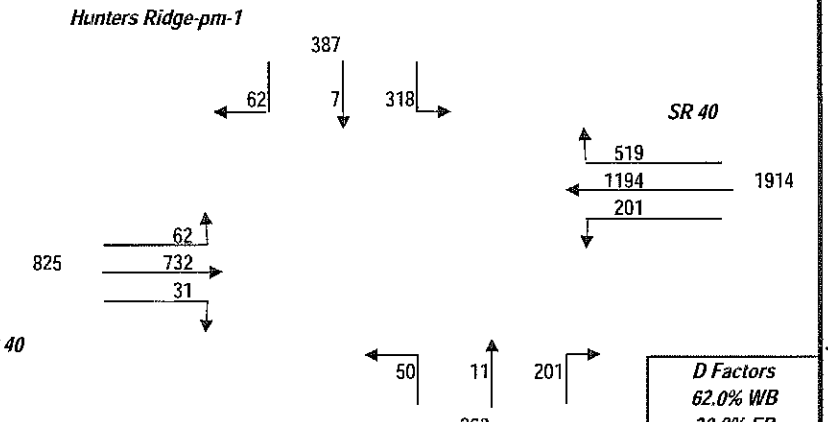
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

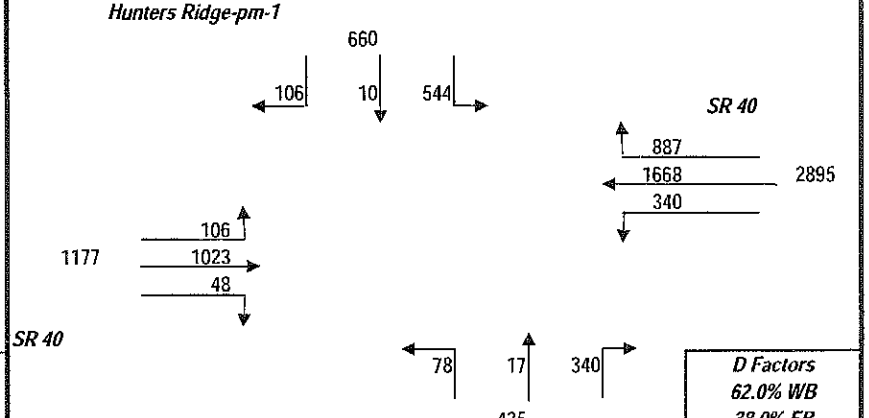
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Project:
Tip:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors

Mainline	
9.00%	
Sidestreet	
9.00%	

D Factors

Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
67.1%	Northbound (NB)
32.9%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Annual Growth Rate
Base		
Opening		
Mid		
Design		

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	9600	11800	3400	0	24800
2035	52600	56100	4200	0	112300

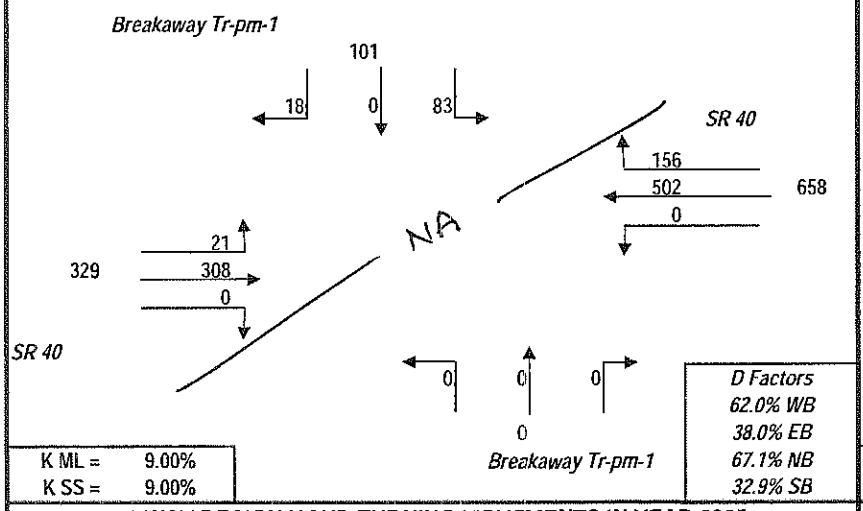
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	3%	3
(EB THRU)	*West-to-East*	97%	97
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	1
(WB THRU)	*East-to-West*	82%	82
(WB RT)	*East-to-North*	18%	16
(SB LT)	*North-to-East*	93%	93
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	7%	7
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	0
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Breakaway Tr-pm-1: Breakaway Tr TO Williamson Blvd

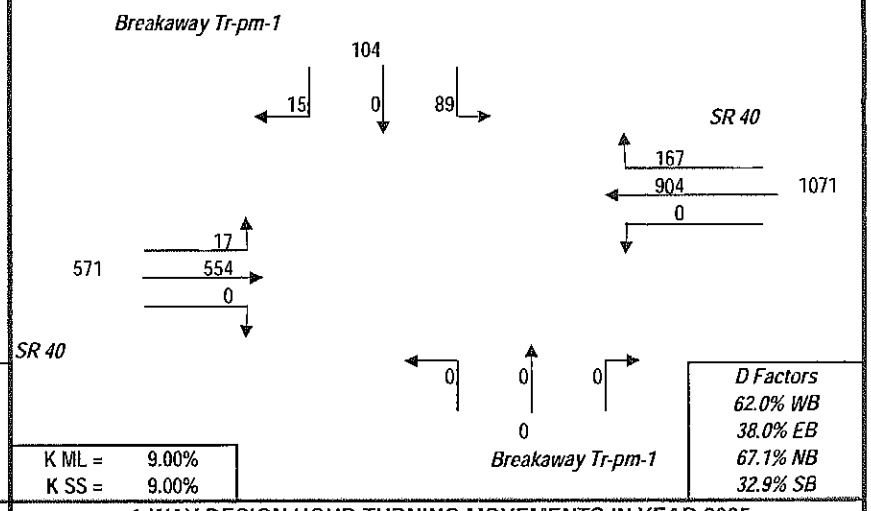
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
67.1% NB
32.9% SB

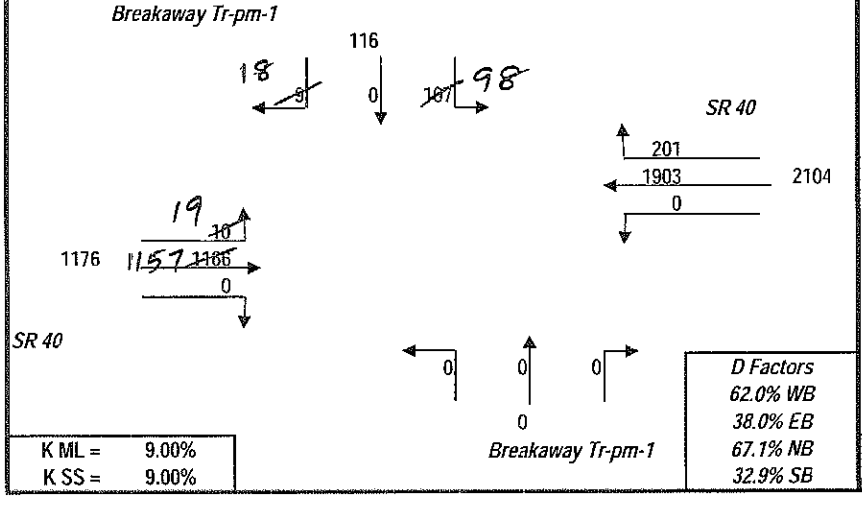
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
67.1% NB
32.9% SB

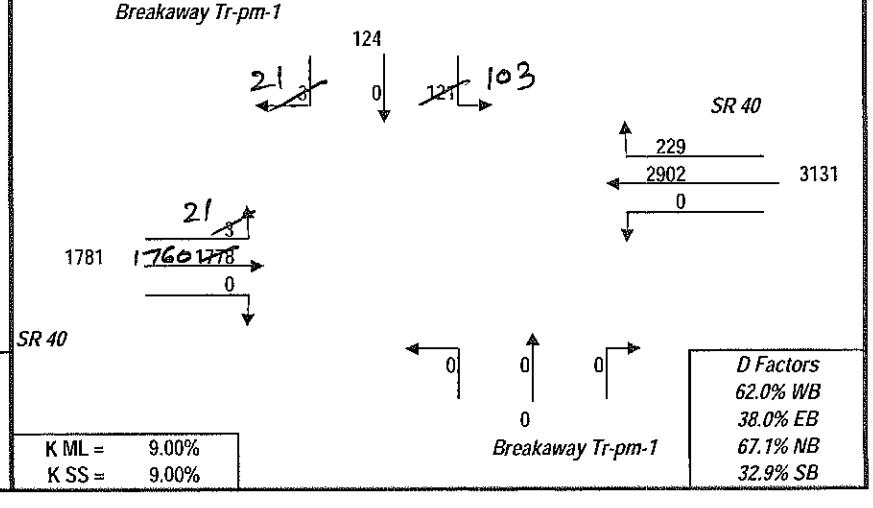
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
67.1% NB
32.9% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
67.1% NB
32.9% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
59.5%	Northbound (NB)
40.5%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Side Street Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2015	19200	30600	14300	600	64700
2035	56100	56300	22900	800	146100

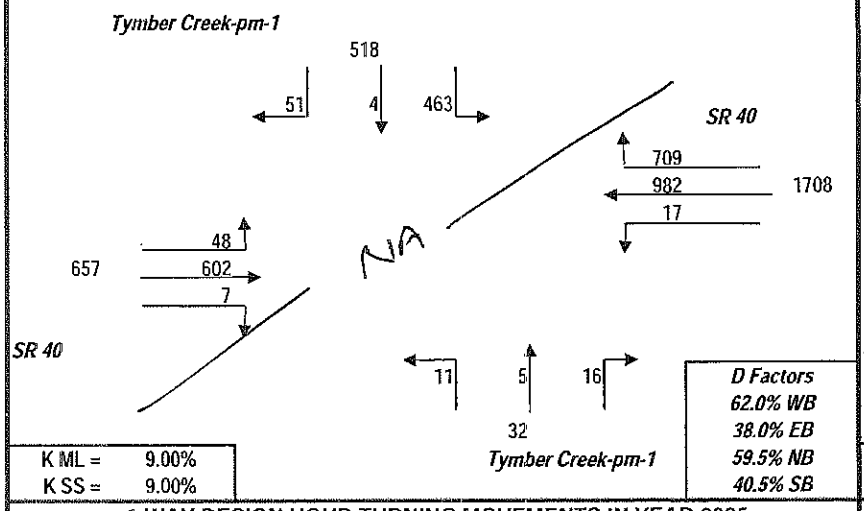
		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2015
(EB LT)	*West-to-North*	10%	10
(EB THRU)	*West-to-East*	86%	86
(EB RT)	*West-to-South*	4%	4
(WB LT)	*East-to-South*	7%	7
(WB THRU)	*East-to-West*	50%	50
(WB RT)	*East-to-North*	43%	43
(SB LT)	*North-to-East*	90%	90
(SB THRU)	*North-to-South*	3%	3
(SB RT)	*North-to-West*	7%	7
(NB LT)	*South-to-West*	40%	40
(NB THRU)	*South-to-North*	38%	38
(NB RT)	*South-to-East*	22%	22

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Tymber Creek-pm-1: Breakaway Tr TO Williamson Blvd

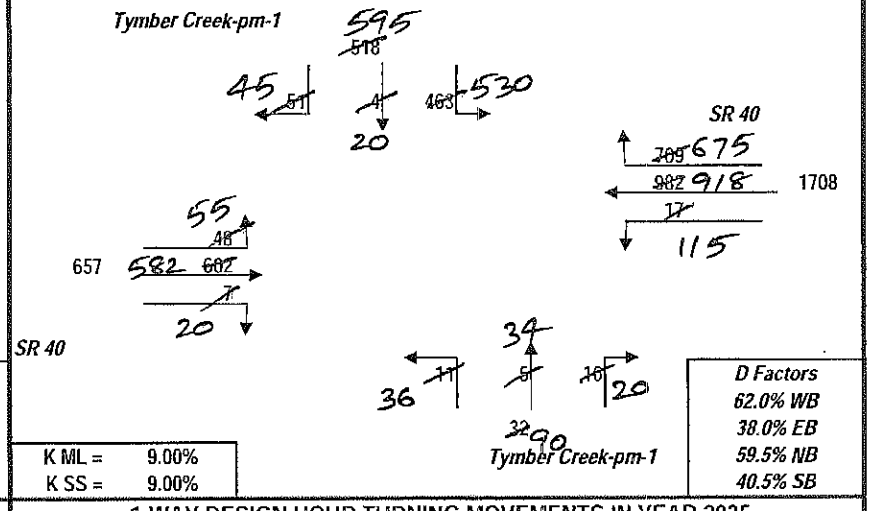
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
59.5% NB
40.5% SB

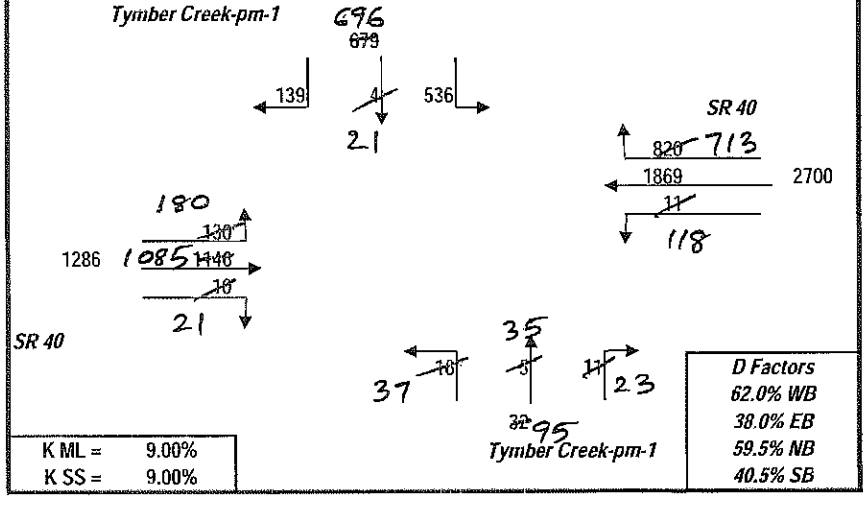
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
59.5% NB
40.5% SB

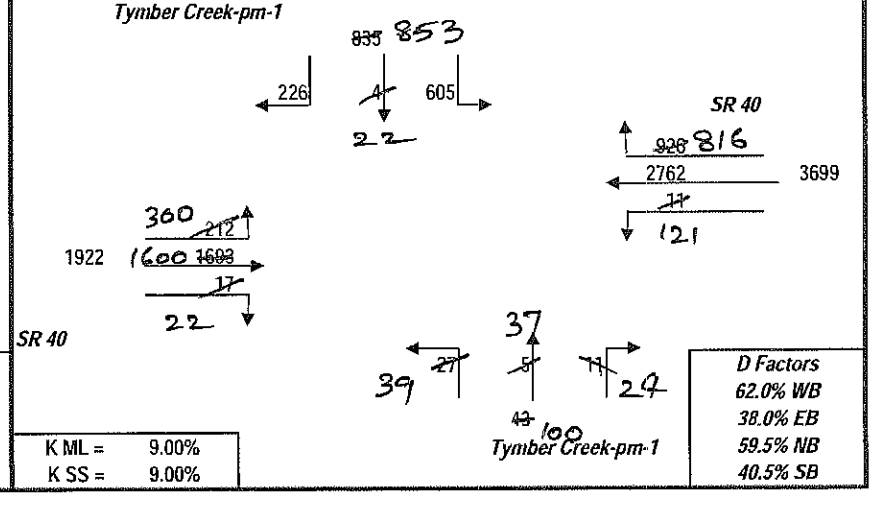
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
59.5% NB
40.5% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
59.5% NB
40.5% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	62.0%	Westbound (WB)
	38.0%	Eastbound (EB)
	Sidestreet	
	50.5%	Northbound (NB)
	49.5%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Side Street Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
2011	23400	23600	1100	800	49100
2035	66300	66300	1100	1500	135200

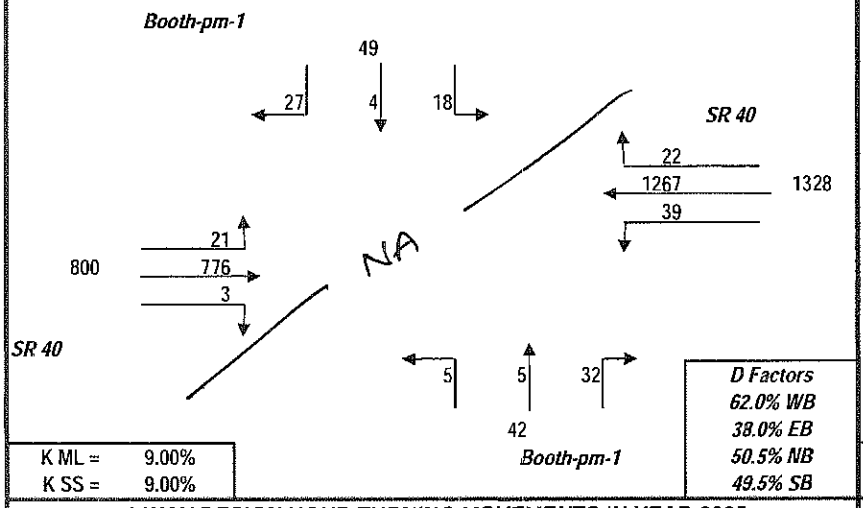
		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011
(EB LT)	*West-to-North*	1%	1
(EB THRU)	*West-to-East*	99%	99
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	2%	2
(WB THRU)	*East-to-West*	98%	98
(WB RT)	*East-to-North*	0%	0
(SB LT)	*North-to-East*	79%	79
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	21%	21
(NB LT)	*South-to-West*	21%	21
(NB THRU)	*South-to-North*	5%	5
(NB RT)	*South-to-East*	74%	74

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Booth-pm-1: Breakaway Tr TO Williamson Blvd

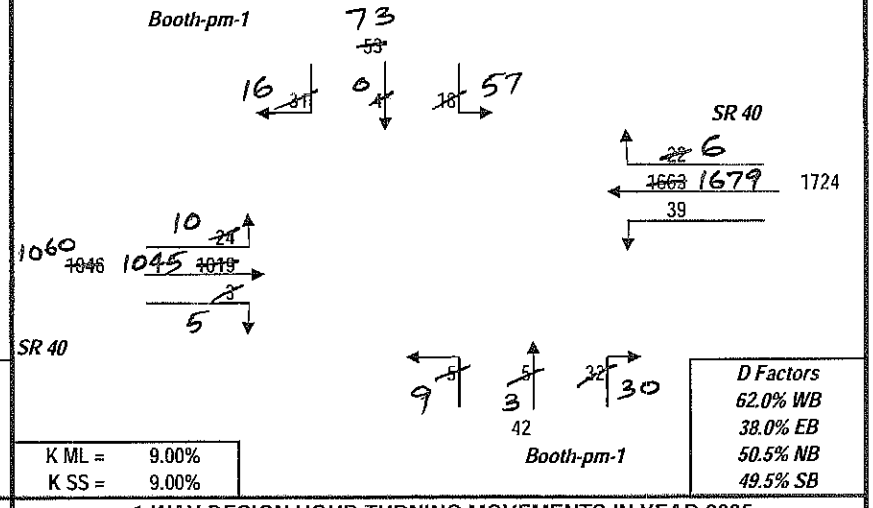
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
50.5% NB
49.5% SB

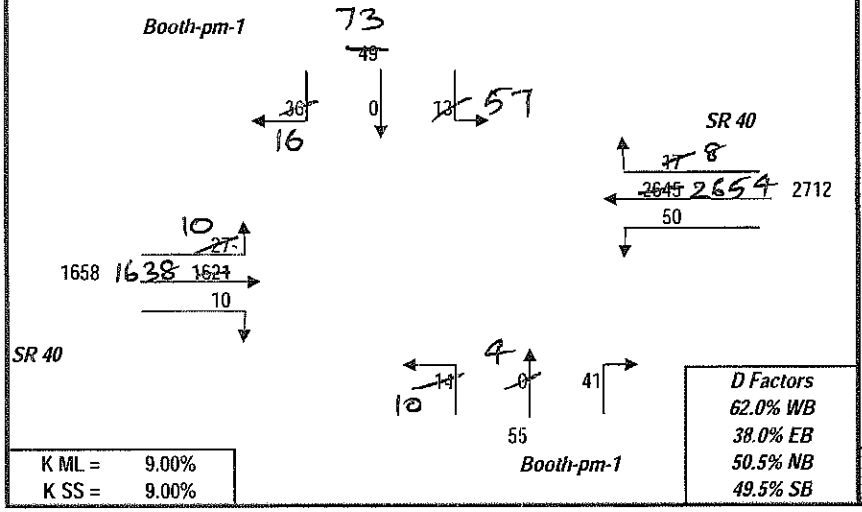
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
50.5% NB
49.5% SB

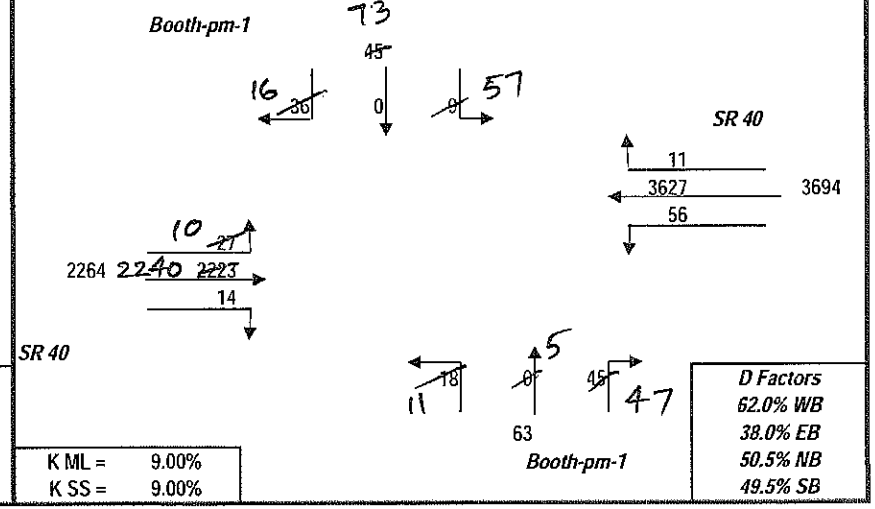
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
50.5% NB
49.5% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
50.5% NB
49.5% SB

TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors	Mainline	D Factors	*Mainline*	
	9.00%		62.0%	Westbound (WB)
	Sidestreet		38.0%	Eastbound (EB)
	9.00%		*Sidestreet*	
			44.3%	Northbound (NB)
			55.7%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) — Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Side Street Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
2011	26700	26700	0	7800	61200
2035	69000	69000	0	8800	146800

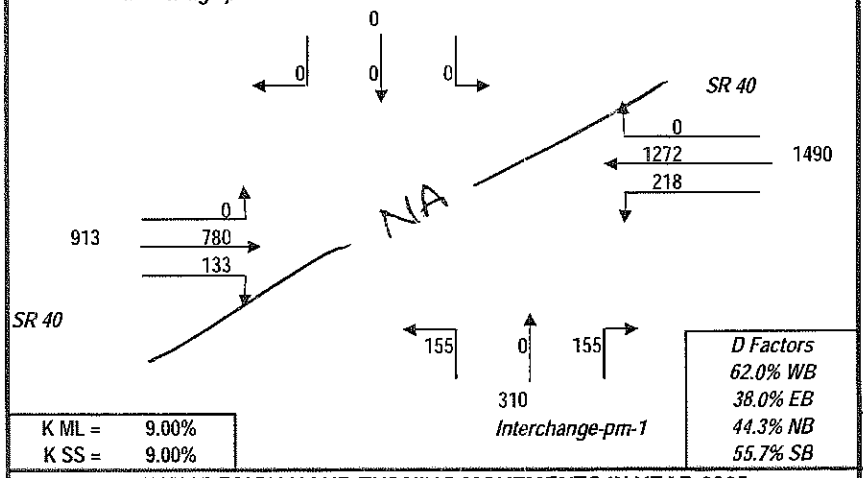
		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011
(EB LT)	*West-to-North*	0%	0
(EB THRU)	*West-to-East*	97%	97
(EB RT)	*West-to-South*	3%	3
(WB LT)	*East-to-South*	10%	10
(WB THRU)	*East-to-West*	90%	90
(WB RT)	*East-to-North*	0%	0
(SB LT)	*North-to-East*	0%	0
(SB THRU)	*North-to-South*	100%	100
(SB RT)	*North-to-West*	0%	0
(NB LT)	*South-to-West*	32%	32
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	68%	68

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Interchange-pm-1: Breakaway Tr TO Williamson Blvd

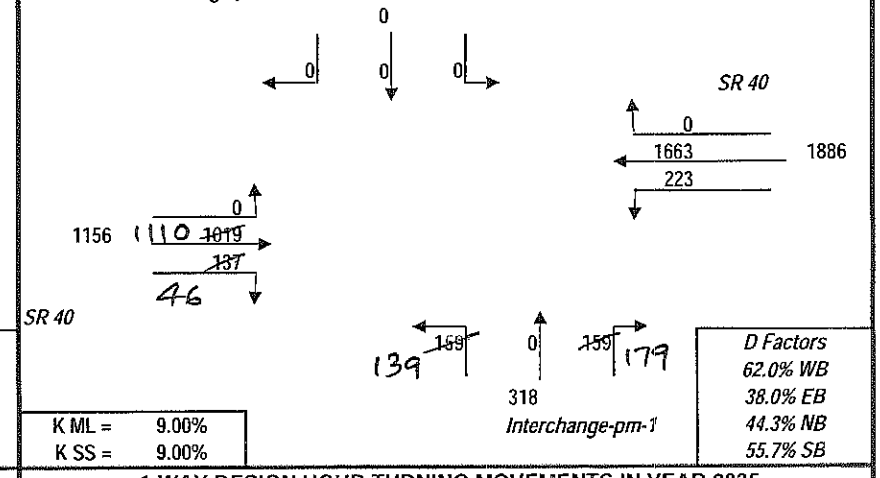
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
44.3% NB
55.7% SB

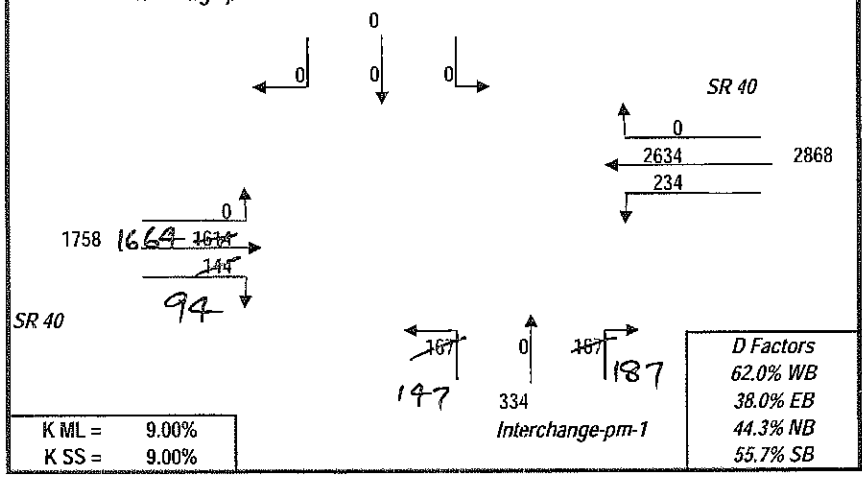
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
44.3% NB
55.7% SB

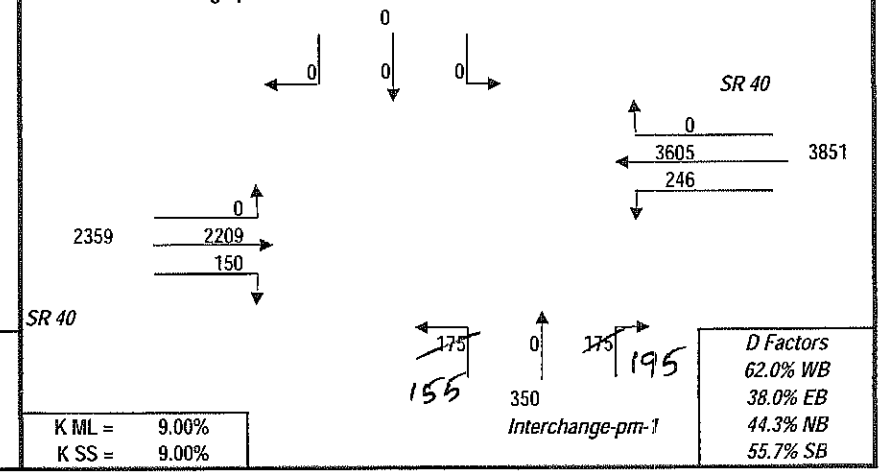
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
44.3% NB
55.7% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
44.3% NB
55.7% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
55.0%	Northbound (NB)
45.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2011	26700	29700	7800	18800	83000
2035	69000	71300	13600	25900	179800

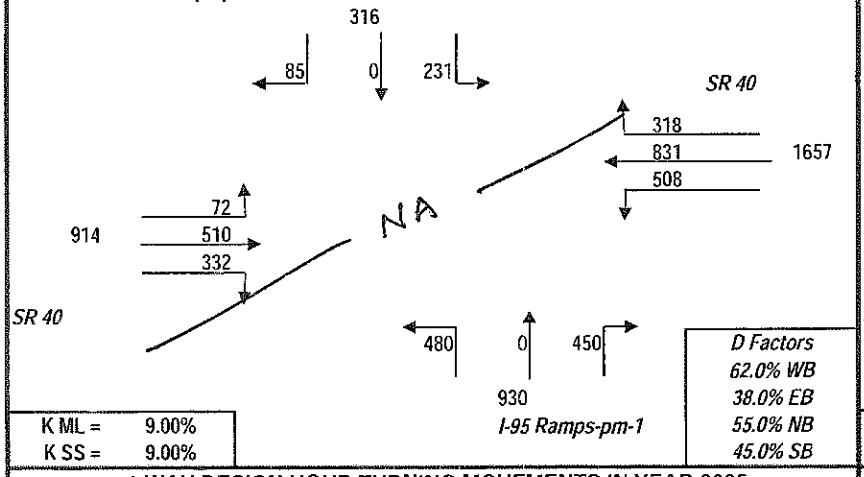
		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011
(EB LT)	*West-to-North*	8%	8
(EB THRU)	*West-to-East*	57%	57
(EB RT)	*West-to-South*	35%	35
(WB LT)	*East-to-South*	25%	25
(WB THRU)	*East-to-West*	56%	56
(WB RT)	*East-to-North*	19%	19
(SB LT)	*North-to-East*	67%	67
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	33%	33
(NB LT)	*South-to-West*	57%	57
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	43%	43

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT I-95 Ramps-pm-1: Breakaway Tr TO Williamson Blvd

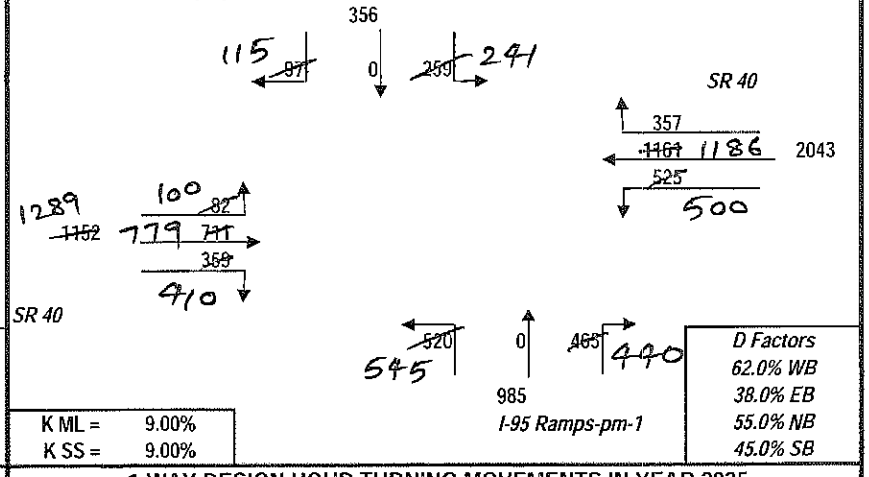
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
55.0% NB
45.0% SB

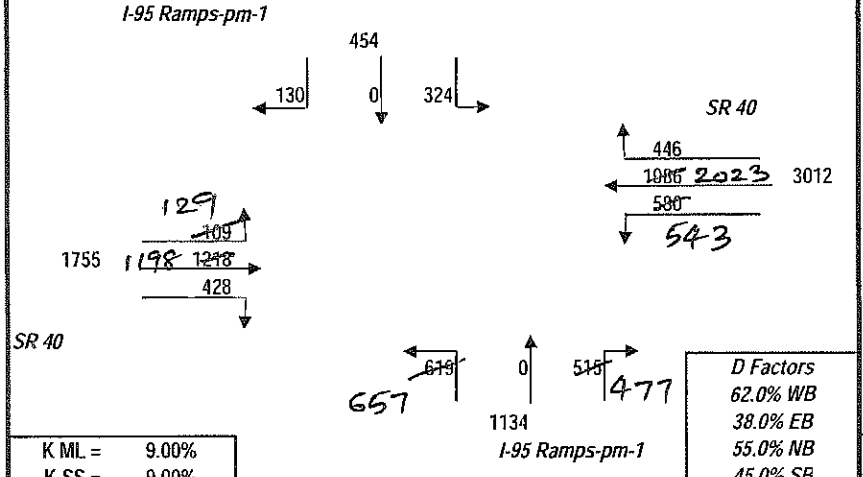
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
55.0% NB
45.0% SB

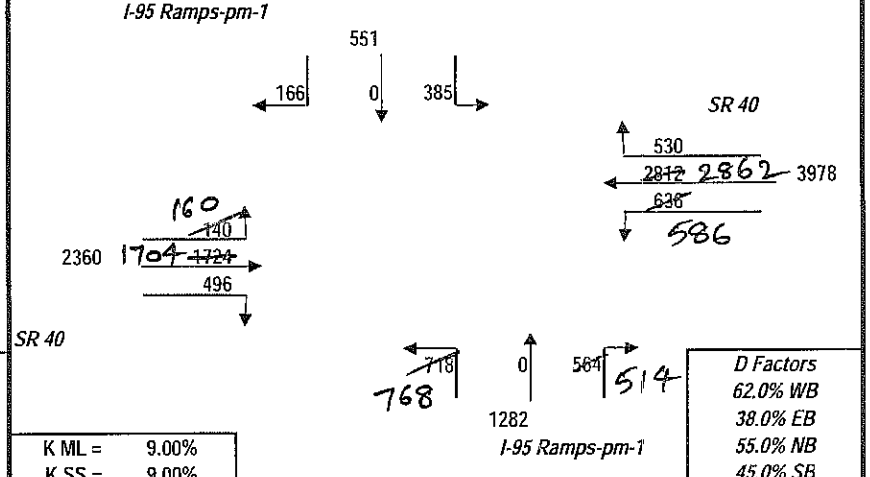
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
55.0% NB
45.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
55.0% NB
45.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Phase:
Tip:
County:

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
60.0%	Northbound (NB)
70.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) — Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Side Street Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

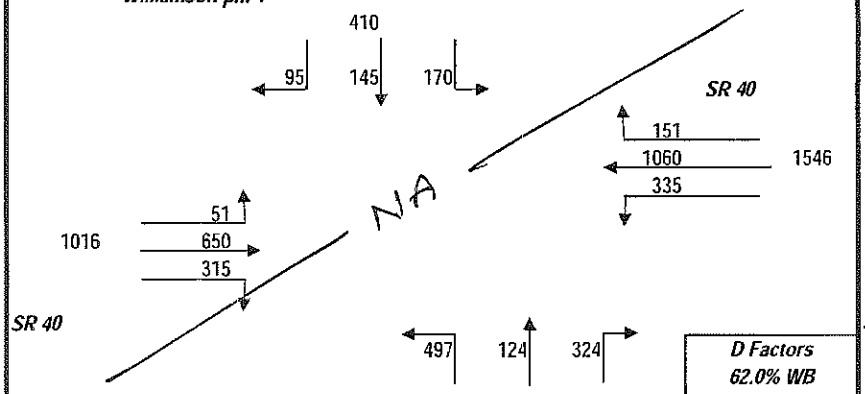
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	29700	27700	6500	17500	81400
2035	71300	36300	6500	41400	155500

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011	
(EB LT)	*West-to-North*	9%	9	
(EB THRU)	*West-to-East*	62%	62	
(EB RT)	*West-to-South*	29%	29	
(WB LT)	*East-to-South*	16%	16	(must be done manually)
(WB THRU)	*East-to-West*	75%	75	
(WB RT)	*East-to-North*	9%	9	
(SB LT)	*North-to-East*	37%	37	
(SB THRU)	*North-to-South*	28%	28	
(SB RT)	*North-to-West*	35%	35	
(NB LT)	*South-to-West*	68%	68	
(NB THRU)	*South-to-North*	15%	15	
(NB RT)	*South-to-East*	17%	17	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Williamson-pm-1: Breakaway Tr TO Williamson Blvd

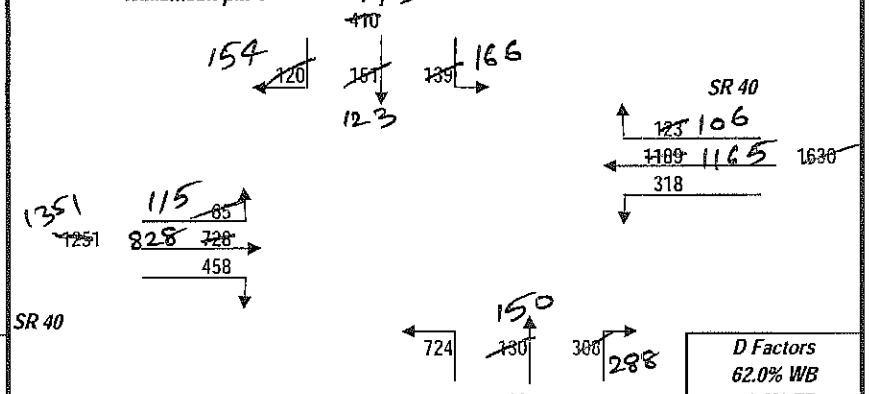
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
60.0% NB
70.0% SB

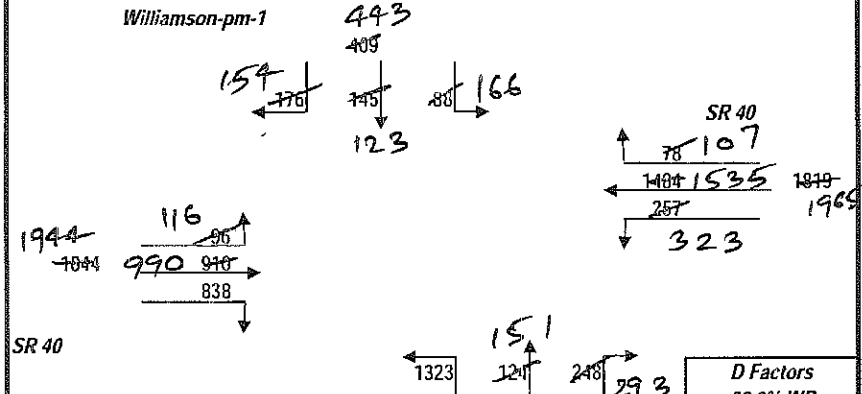
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
60.0% NB
70.0% SB

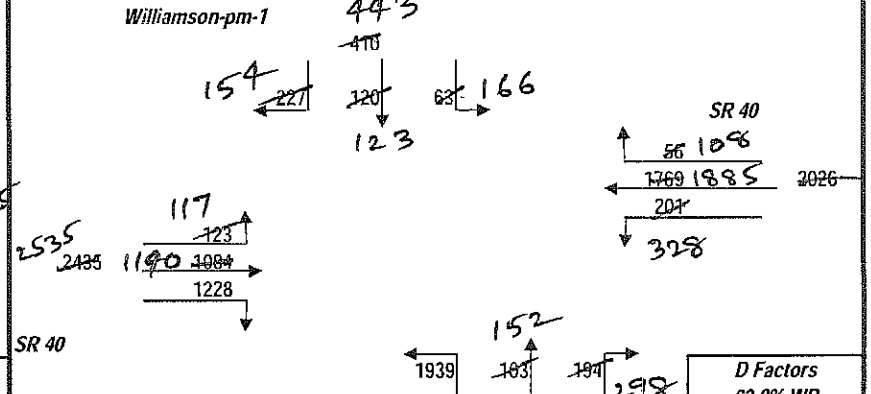
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
60.0% NB
70.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
60.0% NB
70.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) (●) Yes ( ) No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
60.0%	Northbound (NB)	
40.0%	Southbound (SB)	
Sidestreet		
51.5%	Westbound (WB)	
48.5%	Eastbound (EB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) (●) Yes ( ) No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Function	Side Street Growth Function
Base		(●) Linear	(●) Linear
Opening		( ) Exponential	( ) Exponential
Mid		( ) Decaying	( ) Decaying
Design			

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2015	0	10600	21500	17100	49200
2035	0	23700	41400	33000	98100

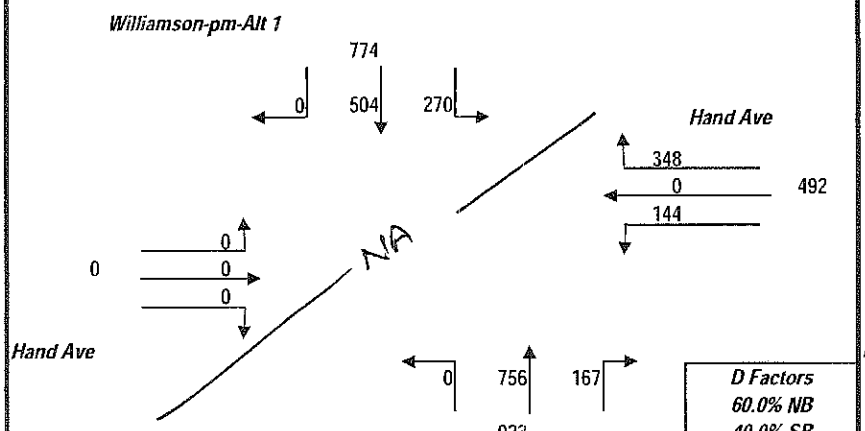
		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2015
(EB LT)	*West-to-North*	0%	0
(EB THRU)	*West-to-East*	100%	0
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	30%	30
(WB THRU)	*East-to-West*	0%	0
(WB RT)	*East-to-North*	70%	70
(SB LT)	*North-to-East*	34%	34
(SB THRU)	*North-to-South*	66%	66
(SB RT)	*North-to-West*	0%	0
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	84%	84
(NB RT)	*South-to-East*	16%	16

(must be done manually)

Desired Closure: 0.00

PROJECT TRAFFIC FOR Williamson-pm-Alt 1 AT Hand Ave: SR 40 TO LPGA

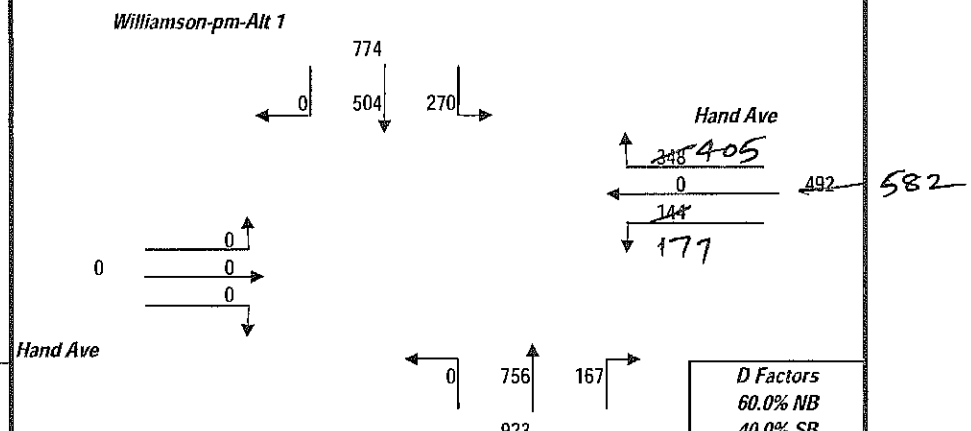
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
60.0% NB
40.0% SB
51.5% WB
48.5% EB

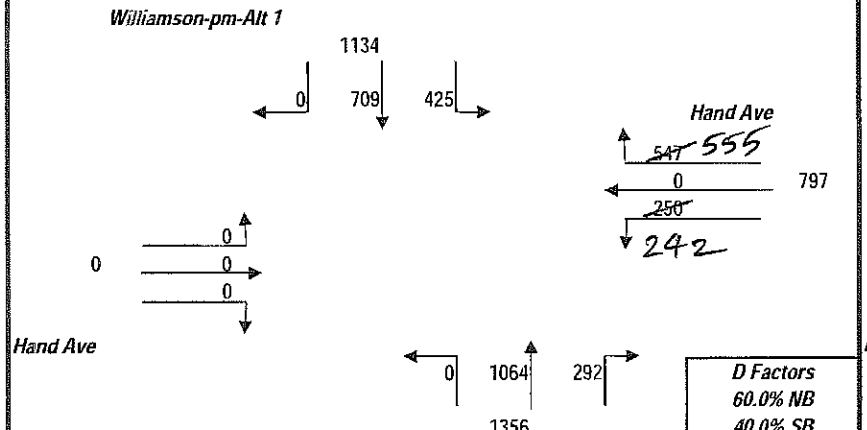
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
60.0% NB
40.0% SB
51.5% WB
48.5% EB

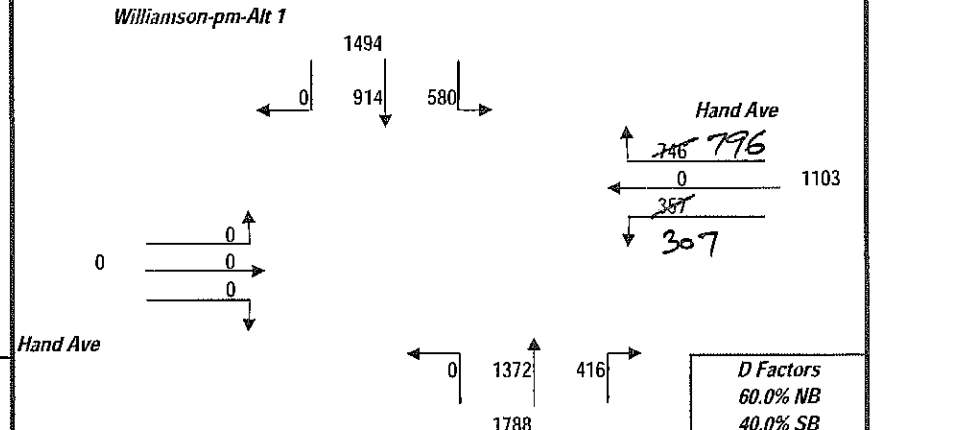
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
60.0% NB
40.0% SB
51.5% WB
48.5% EB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
60.0% NB
40.0% SB
51.5% WB
48.5% EB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Years:
Tx:
County:

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
54.5%	Westbound (WB)
45.5%	Eastbound (EB)
Sidestreet	
55.2%	Northbound (NB)
44.8%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Peak Growth
Base		
Opening		
Mid		
Design		

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

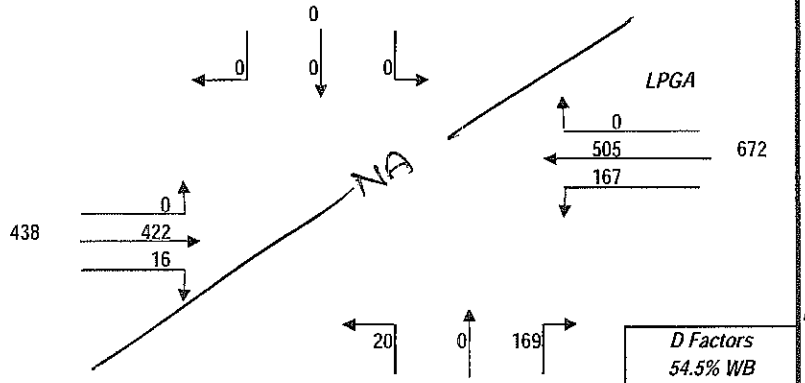
	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
2011	10700	13700	0	3800	28200
2035	27300	32400	0	11400	71100

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011	
(EB LT)	*West-to-North*	0%	0	
(EB THRU)	*West-to-East*	99%	99	
(EB RT)	*West-to-South*	1%	1	
(WB LT)	*East-to-South*	15%	15	(must be done manually)
(WB THRU)	*East-to-West*	82%	82	
(WB RT)	*East-to-North*	3%	3	
(SB LT)	*North-to-East*	0%	0	
(SB THRU)	*North-to-South*	100%	0	
(SB RT)	*North-to-West*	0%	0	
(NB LT)	*South-to-West*	8%	8	
(NB THRU)	*South-to-North*	1%	1	
(NB RT)	*South-to-East*	91%	91	

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT Tomoka Farms-pm-1: Williamson TO Tymber Creek Ext

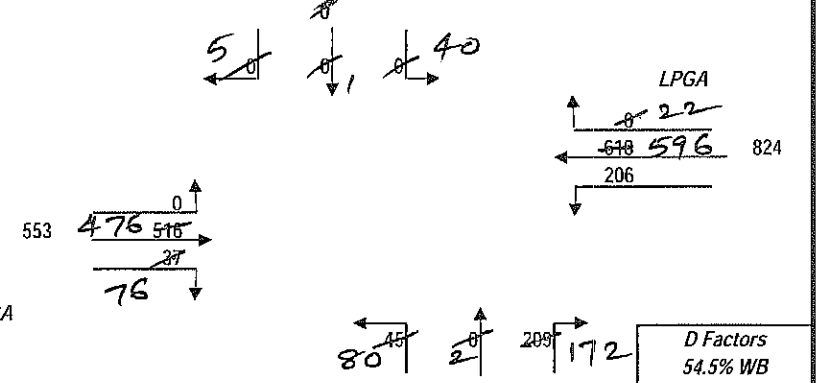
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
55.2% NB
44.8% SB

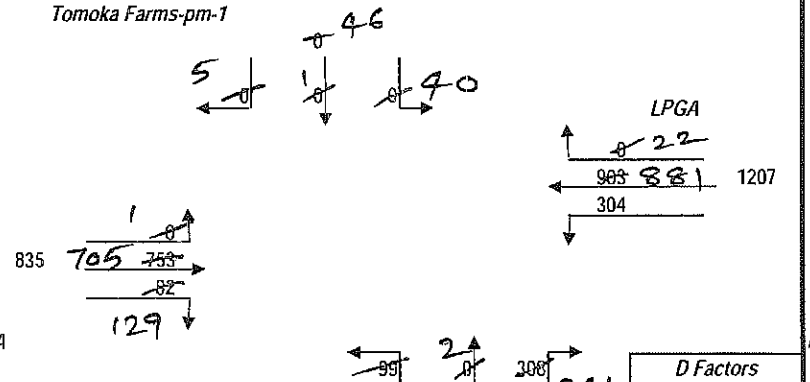
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
55.2% NB
44.8% SB

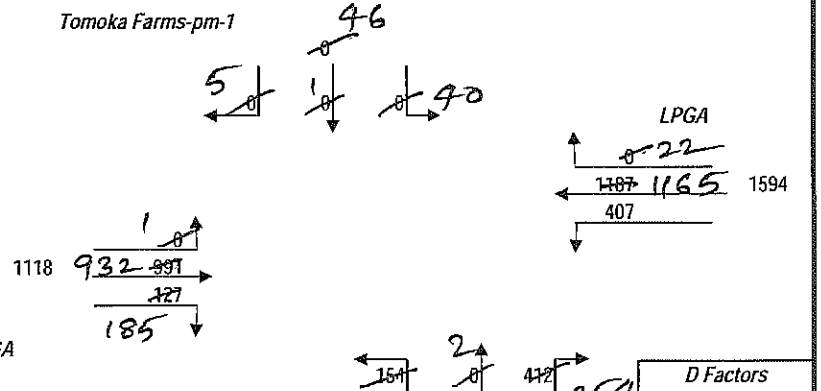
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
55.2% NB
44.8% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
55.2% NB
44.8% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Phase:
Tm:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	54.5%	Westbound (WB)
	45.5%	Eastbound (EB)
	Sidestreet	
	62.4%	Northbound (NB)
	37.6%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01)
Base		
Opening		
Mid		
Design		

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West:	*From East:*	*From North:*	*From South:*	
EB Approach	*WB Approach*	*SB Approach*	*NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West:	*From East:*	*From North:*	*From South:*	
	EB Approach	*WB Approach*	*SB Approach*	*NB Approach*	***TOTAL***
2015	16800	29400	14800	9700	70700
2035	32400	49600	22400	15200	116600

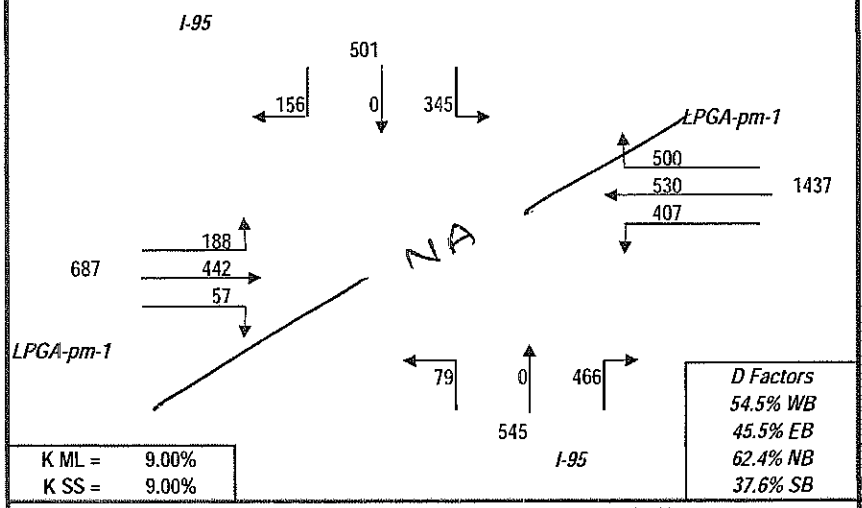
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**
(EB LT)	*West-to-North*	30%	30
(EB THRU)	*West-to-East*	60%	60
(EB RT)	*West-to-South*	10%	10
(WB LT)	*East-to-South*	30%	30
(WB THRU)	*East-to-West*	30%	30
(WB RT)	*East-to-North*	40%	40
(SB LT)	*North-to-East*	62%	62
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	38%	38
(NB LT)	*South-to-West*	16%	16
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	84%	84

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA-pm-1 AT I-95: Williamson TO Tymber Creek Ext

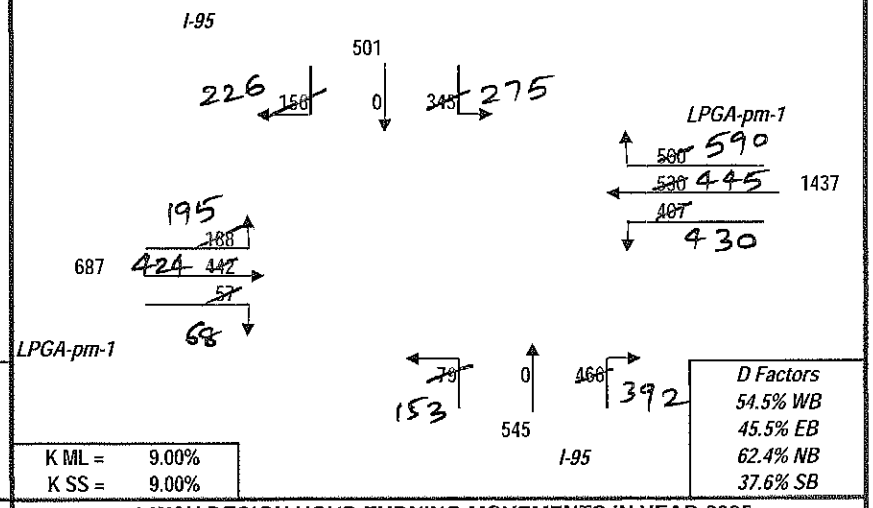
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



D Factors	
54.5%	WB
45.5%	EB
62.4%	NB
37.6%	SB

K ML =	9.00%
K SS =	9.00%

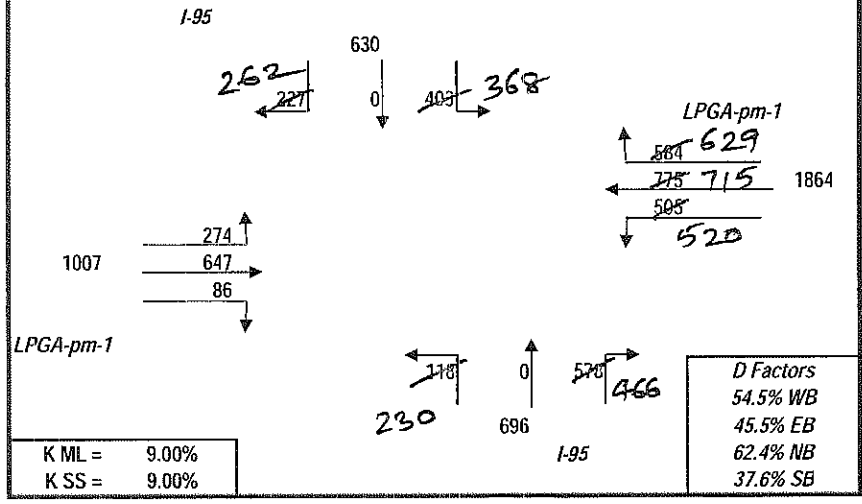
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



D Factors	
54.5%	WB
45.5%	EB
62.4%	NB
37.6%	SB

K ML =	9.00%
K SS =	9.00%

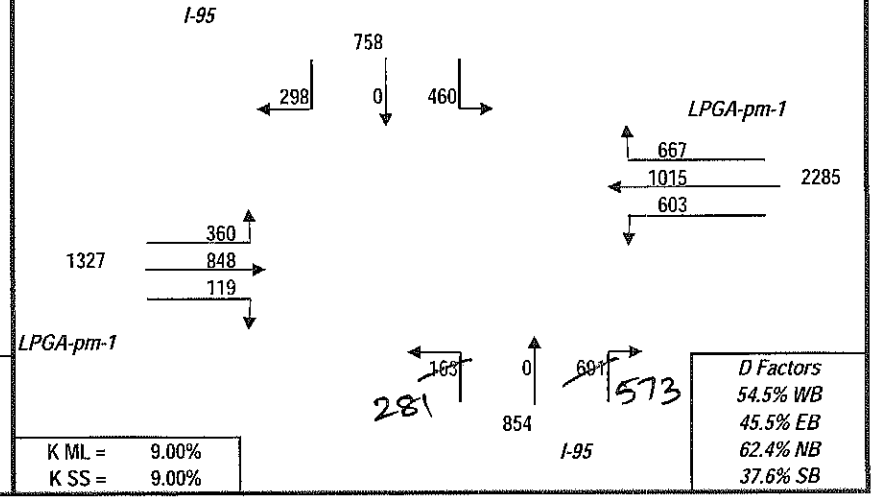
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



D Factors	
54.5%	WB
45.5%	EB
62.4%	NB
37.6%	SB

K ML =	9.00%
K SS =	9.00%

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



D Factors	
54.5%	WB
45.5%	EB
62.4%	NB
37.6%	SB

K ML =	9.00%
K SS =	9.00%

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	Mainline	
	54.5%	Westbound (WB)
	45.5%	Eastbound (EB)
	Sidestreet	
	60.0%	Northbound (NB)
	40.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Rate (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

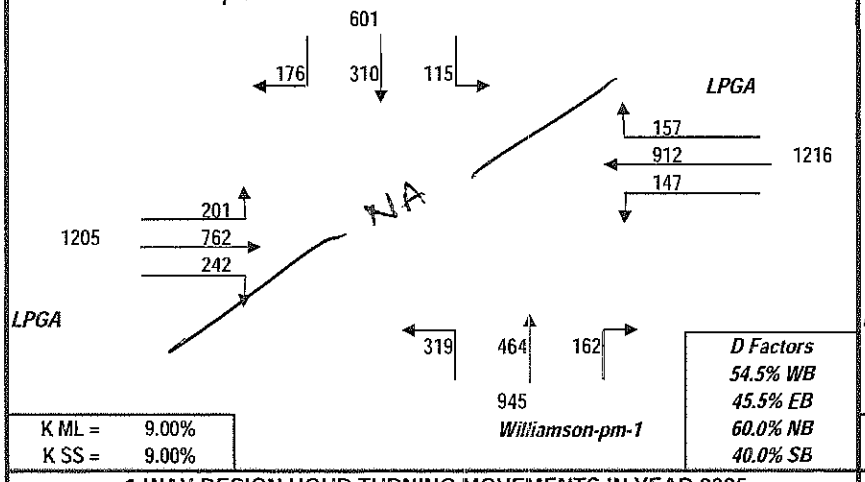
	From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
2015	29400	24800	16800	17500	88500
2035	46800	49000	35000	31300	162900

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2015	
(EB LT)	West-to-North	19%	19	
(EB THRU)	West-to-East	66%	66	
(EB RT)	West-to-South	15%	15	
(WB LT)	East-to-South	10%	10	(must be done manually)
(WB THRU)	East-to-West	80%	80	
(WB RT)	East-to-North	10%	10	
(SB LT)	North-to-East	22%	22	
(SB THRU)	North-to-South	48%	48	
(SB RT)	North-to-West	30%	30	
(NB LT)	South-to-West	44%	44	
(NB THRU)	South-to-North	41%	41	
(NB RT)	South-to-East	15%	15	

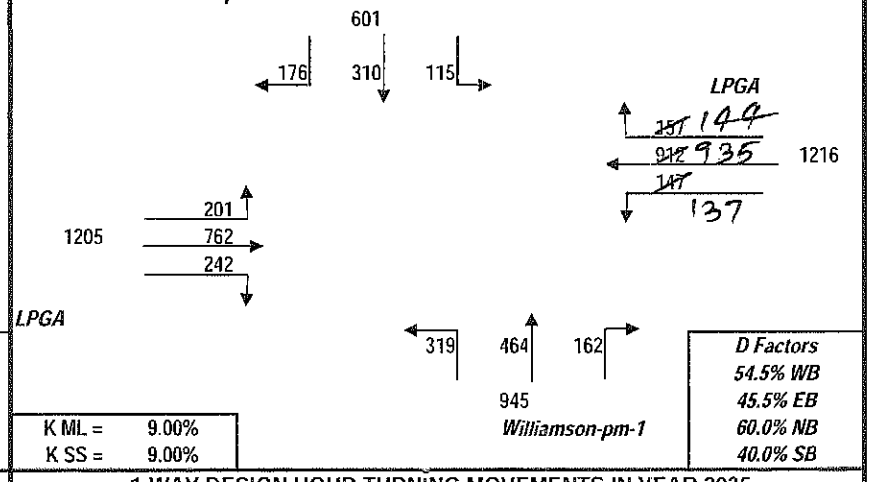
Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT Williamson-pm-1: Williamson TO Tymber Creek Ext

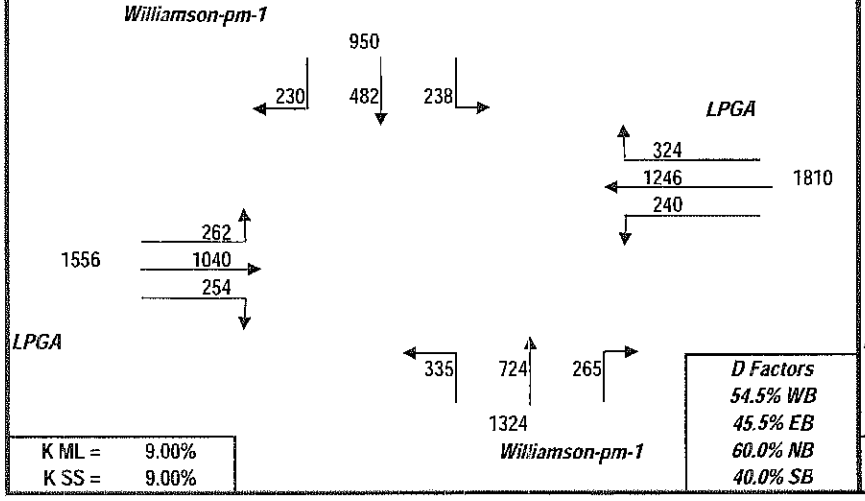
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



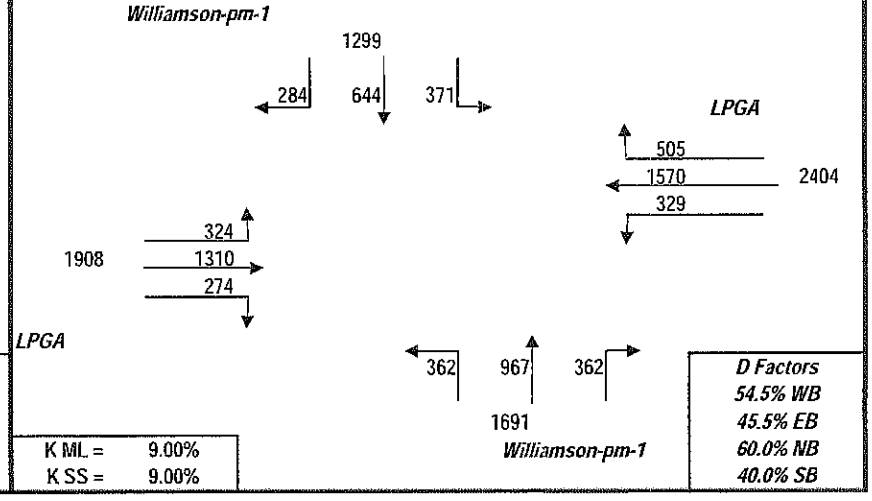
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



TURNS5 ANALYSIS SHEET - INPUT

[redacted]

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
38.0%	Westbound (WB)	
62.0%	Eastbound (EB)	
Sidestreet		
38.0%	Northbound (NB)	
62.0%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) — Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

[redacted]

Base	
Opening	
Mid	
Design	

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

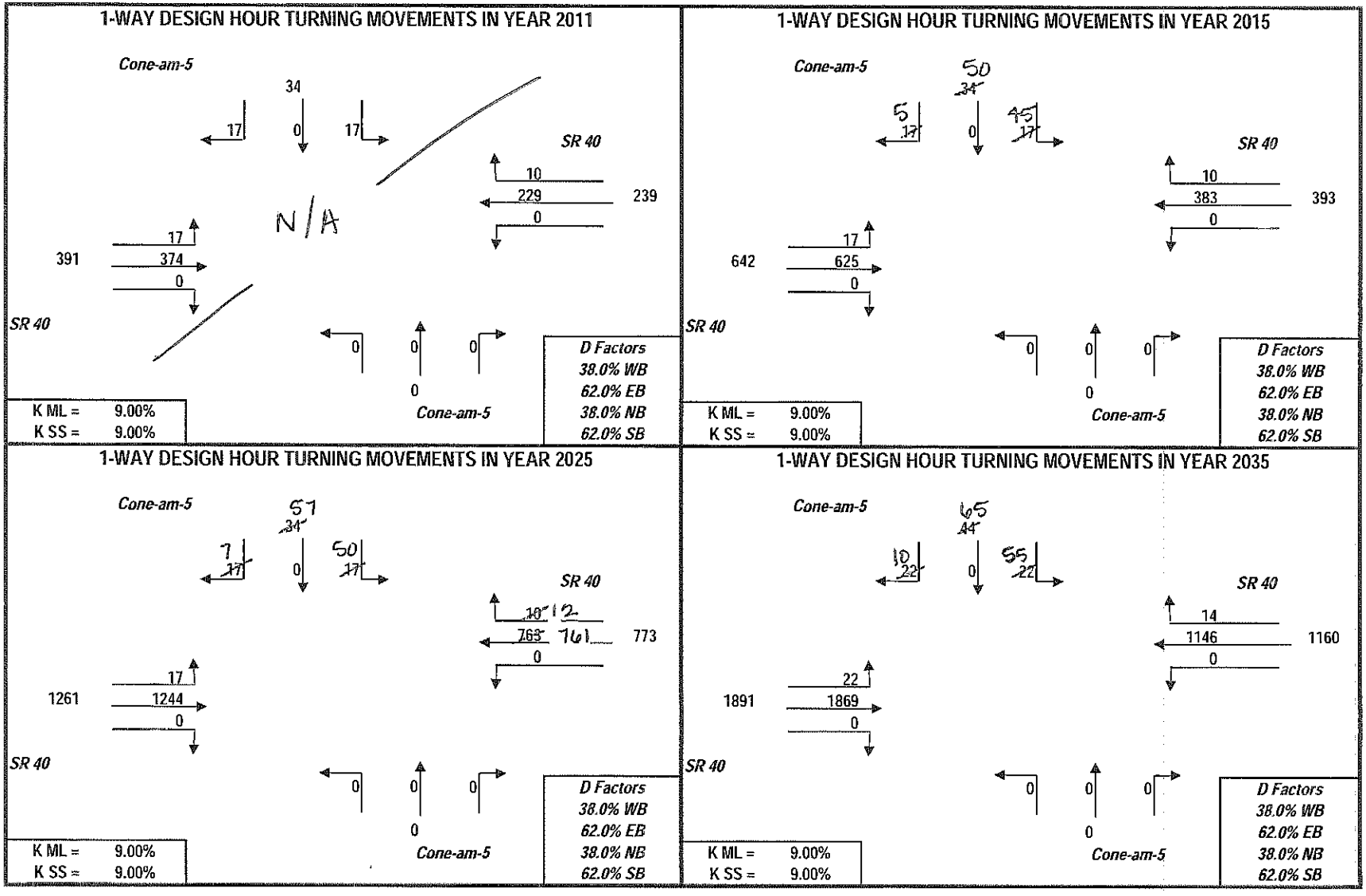
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	7500	7000	600	0	14600
2035	33900	33900	750	0	68550

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011
(EB LT)	*West-to-North*	1%	1
(EB THRU)	*West-to-East*	99%	99
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	94%	94
(WB RT)	*East-to-North*	6%	6
(SB LT)	*North-to-East*	91%	91
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	9%	9
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Cone-am-5: Cone Road TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
38.0%	Northbound (NB)
62.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
2015	12300	12100	1000	0	25400
2035	34800	33400	7300	0	75500

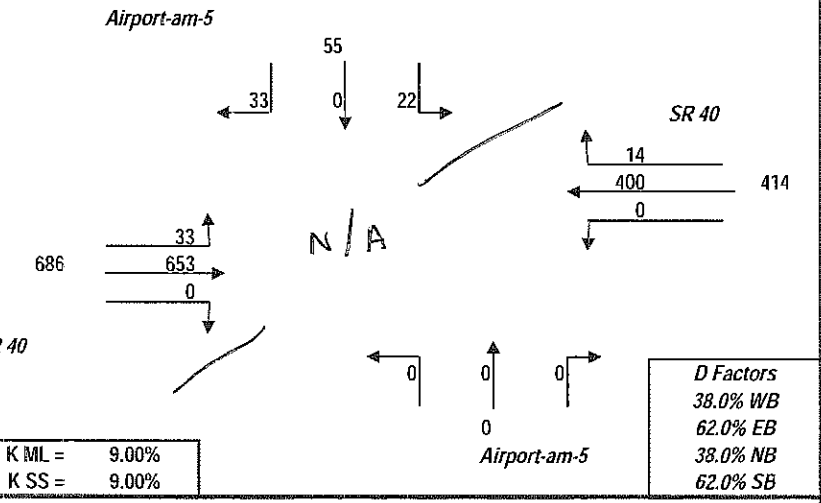
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**
(EB LT)	*West-to-North*	20%	20
(EB THRU)	*West-to-East*	80%	80
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	90%	90
(WB RT)	*East-to-North*	10%	10
(SB LT)	*North-to-East*	40%	40
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	60%	60
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Airport-am-5: Cone Road TO Williamson Blvd

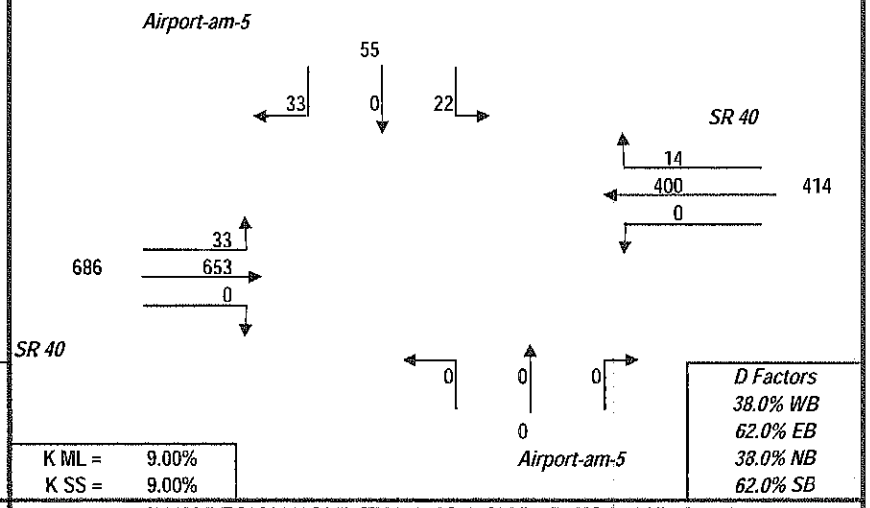
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
38.0%	NB
62.0%	SB

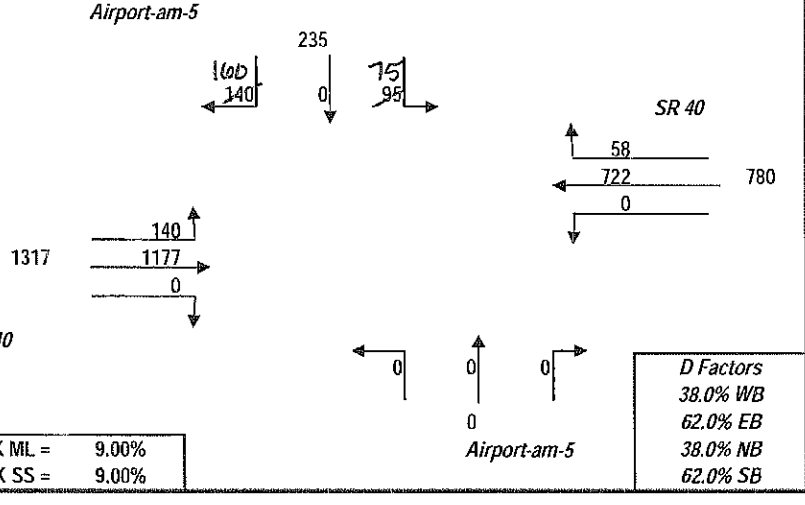
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
38.0%	NB
62.0%	SB

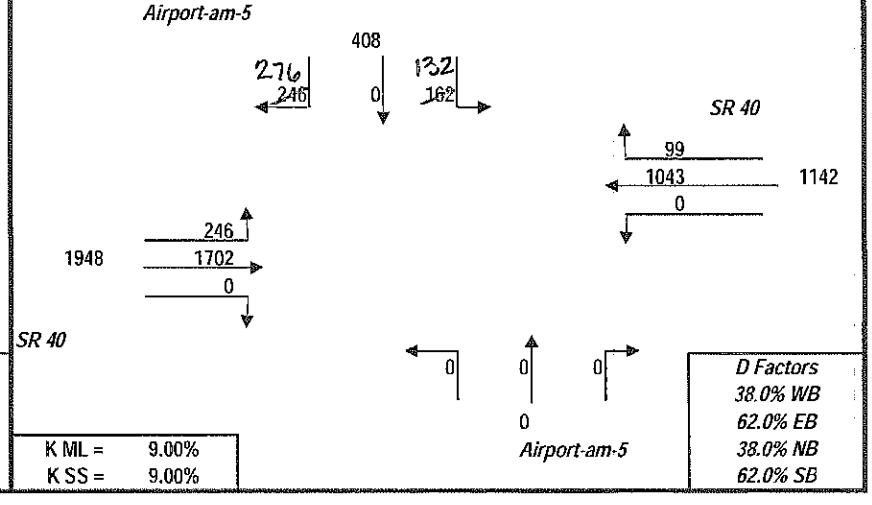
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
38.0%	NB
62.0%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
38.0%	NB
62.0%	SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
38.0%	Northbound (NB)
62.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

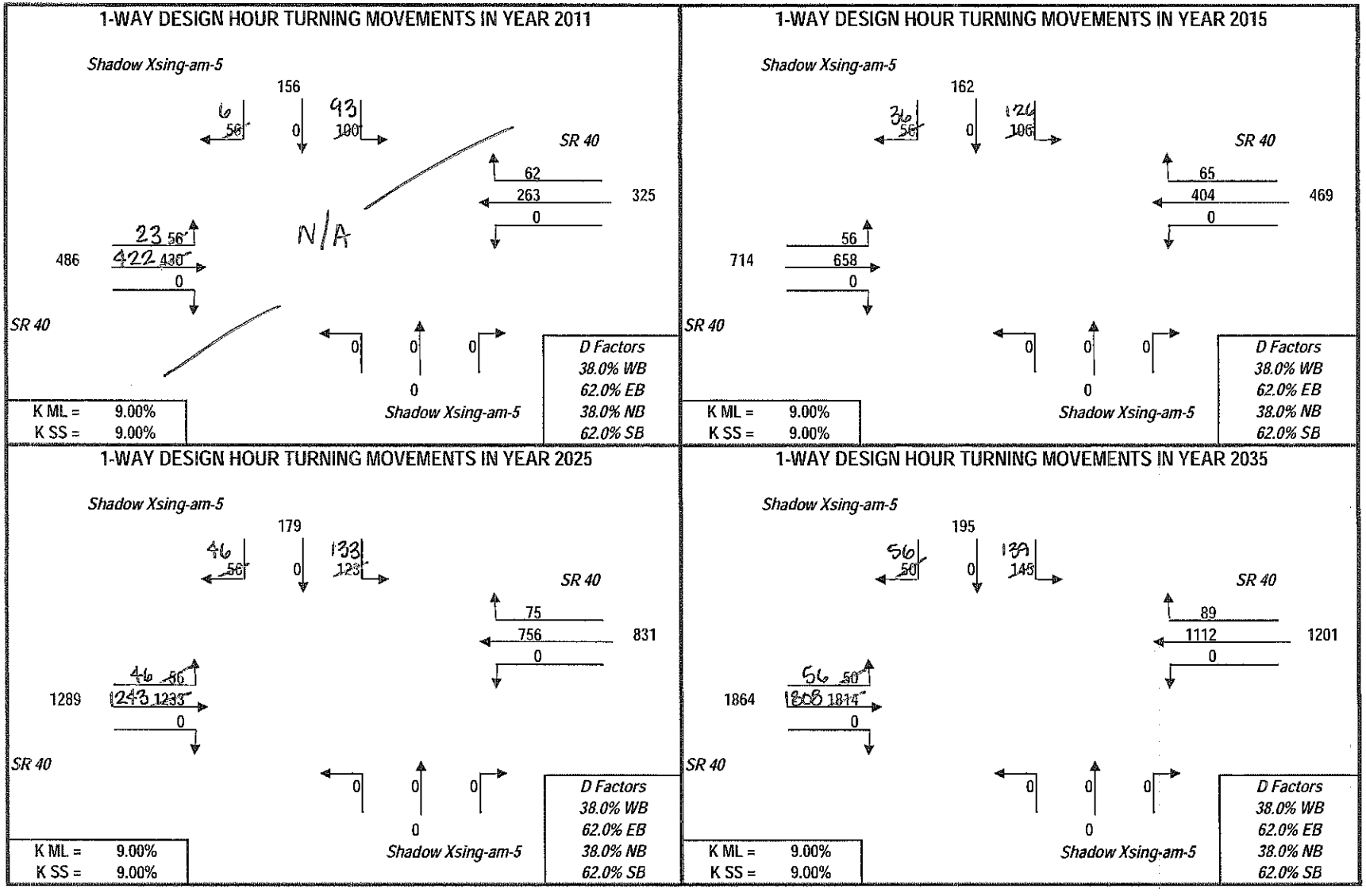
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	8700	9500	2800	0	21000
2035	33400	35000	3500	0	71900

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	95%	95
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	83%	83
(WB RT)	*East-to-North*	17%	17
(SB LT)	*North-to-East*	93%	93
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	7%	7
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Shadow Xsing-am-5: Cone Road TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South?

Enter Yes or No
- ○ Yes
- ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	38.0%	Westbound (WB)
	62.0%	Eastbound (EB)
	Sidestreet	
	38.0%	Northbound (NB)
	62.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
- ◉ Yes
- ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Base Volume	Base Growth
Base			
Opening			
Mid			
Design			

Mainline Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Side Street Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

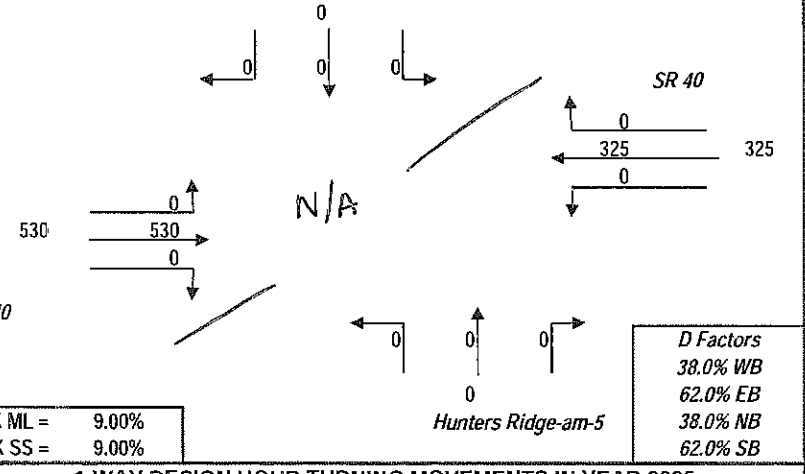
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	9500	9500	0	0	19000
2035	35000	47900	20000	11900	114800

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**	
(EB LT)	*West-to-North*	5%	5	
(EB THRU)	*West-to-East*	85%	85	
(EB RT)	*West-to-South*	10%	10	
(WB LT)	*East-to-South*	20%	20	(must be done manually)
(WB THRU)	*East-to-West*	65%	65	
(WB RT)	*East-to-North*	15%	15	
(SB LT)	*North-to-East*	60%	60	
(SB THRU)	*North-to-South*	35%	5	
(SB RT)	*North-to-West*	5%	5	
(NB LT)	*South-to-West*	25%	25	
(NB THRU)	*South-to-North*	5%	5	
(NB RT)	*South-to-East*	70%	70	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Hunters Ridge-am-5: Cone Road TO Williamson Blvd

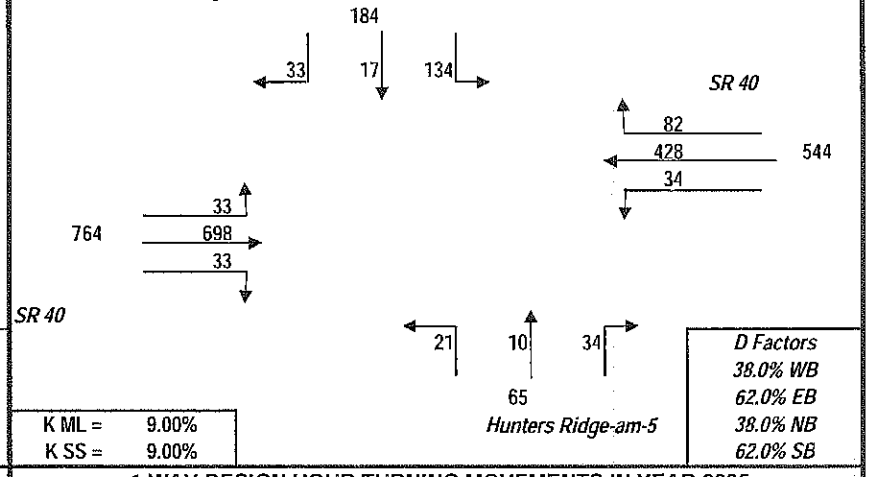
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

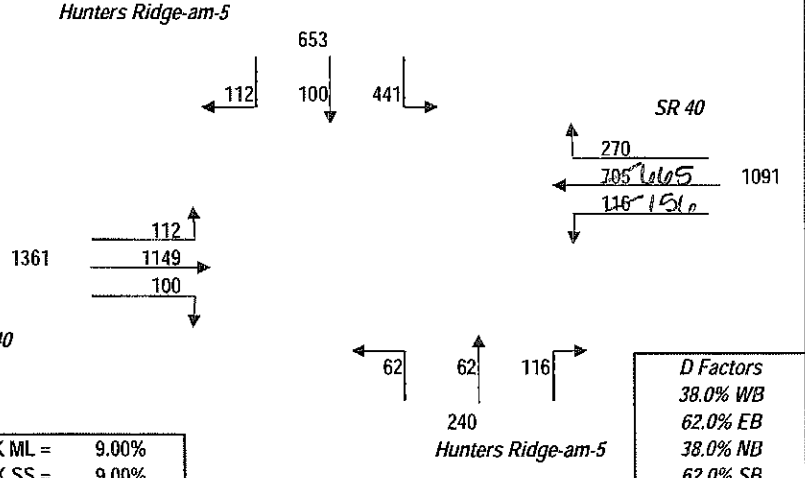
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

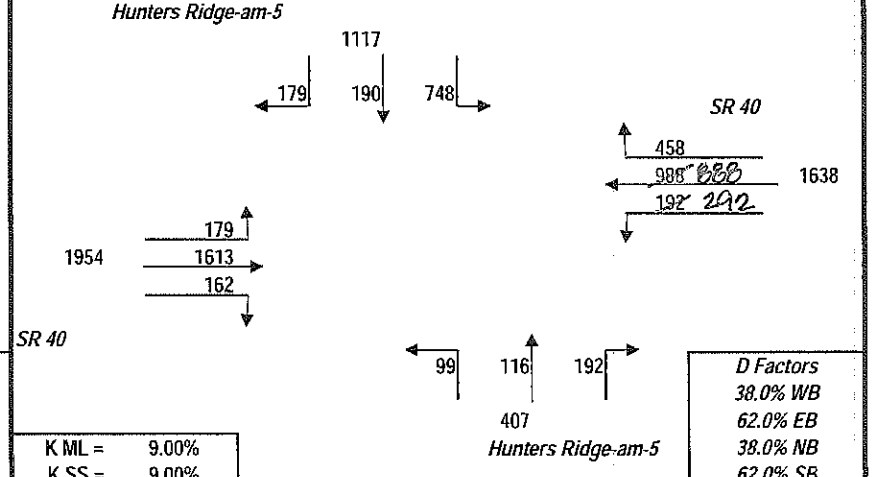
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
38.0% NB
62.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Phase:
Tm:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	38.0%	Westbound (WB)
	62.0%	Eastbound (EB)
	Sidestreet	
	32.9%	Northbound (NB)
	67.1%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Side Street Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
2011	9600	11800	3400	0	24800
2035	47900	50800	4000	0	102700

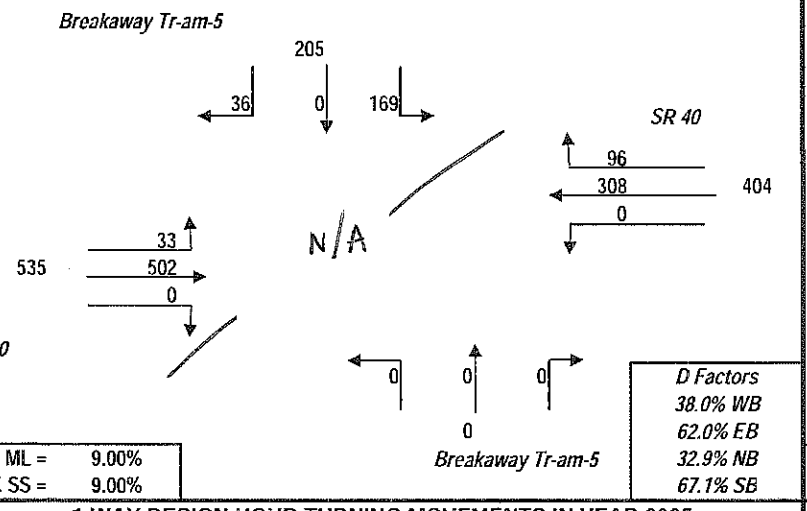
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	0%	1
(EB THRU)	*West-to-East*	100%	578
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	1
(WB THRU)	*East-to-West*	77%	181
(WB RT)	*East-to-North*	23%	54
(SB LT)	*North-to-East*	97%	152
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	3%	5
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	0
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Breakaway Tr-am-5: Breakaway Tr TO Williamson Blvd

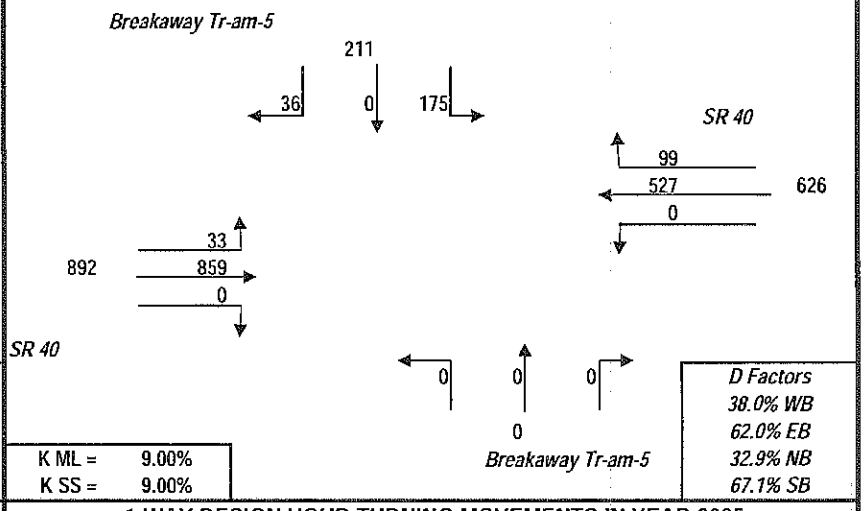
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
32.9% NB
67.1% SB

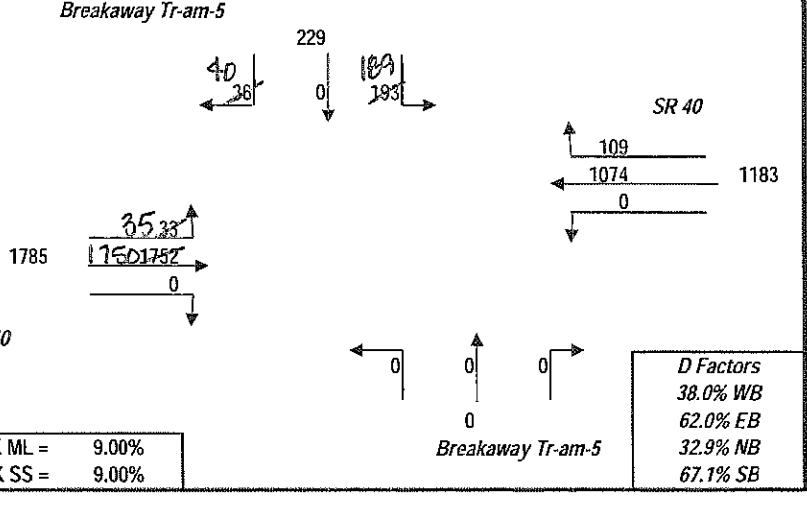
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
32.9% NB
67.1% SB

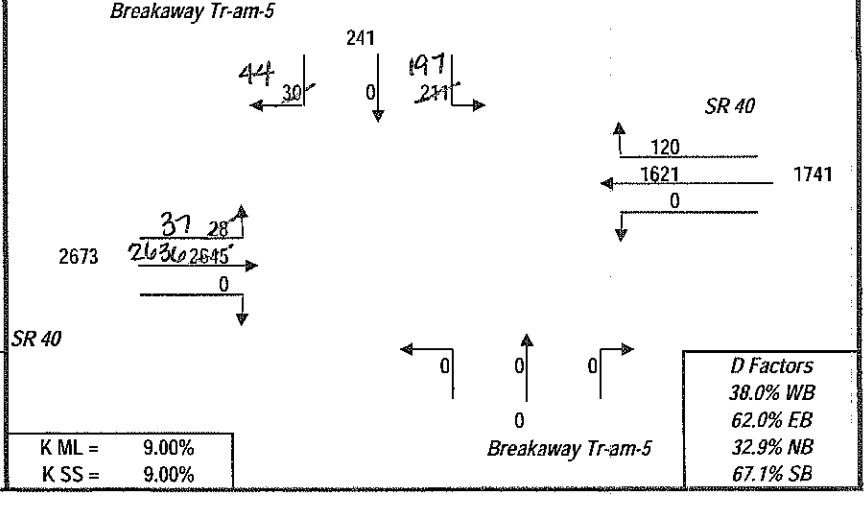
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
32.9% NB
67.1% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
32.9% NB
67.1% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	38.0%	Westbound (WB)
	62.0%	Eastbound (EB)
	Sidestreet	
	40.5%	Northbound (NB)
	59.5%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Side Street Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

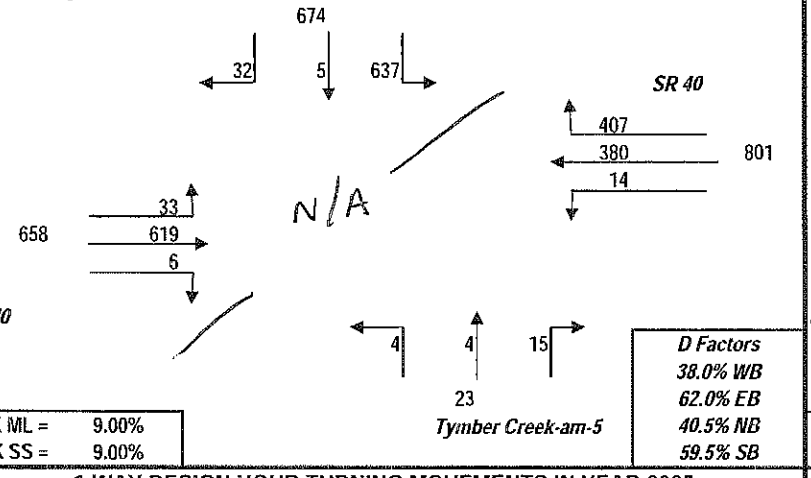
	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
2011	11800	23400	12500	600	48400
2035	50800	61400	25000	7600	144800

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**	
(EB LT)	*West-to-North*	5%	5	
(EB THRU)	*West-to-East*	93%	93	
(EB RT)	*West-to-South*	2%	2	
(WB LT)	*East-to-South*	11%	11	(must be done manually)
(WB THRU)	*East-to-West*	40%	40	
(WB RT)	*East-to-North*	49%	49	
(SB LT)	*North-to-East*	91%	91	
(SB THRU)	*North-to-South*	5%	5	
(SB RT)	*North-to-West*	4%	4	
(NB LT)	*South-to-West*	25%	25	
(NB THRU)	*South-to-North*	31%	31	
(NB RT)	*South-to-East*	44%	44	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Tymber Creek-am-5: Breakaway Tr TO Williamson Blvd

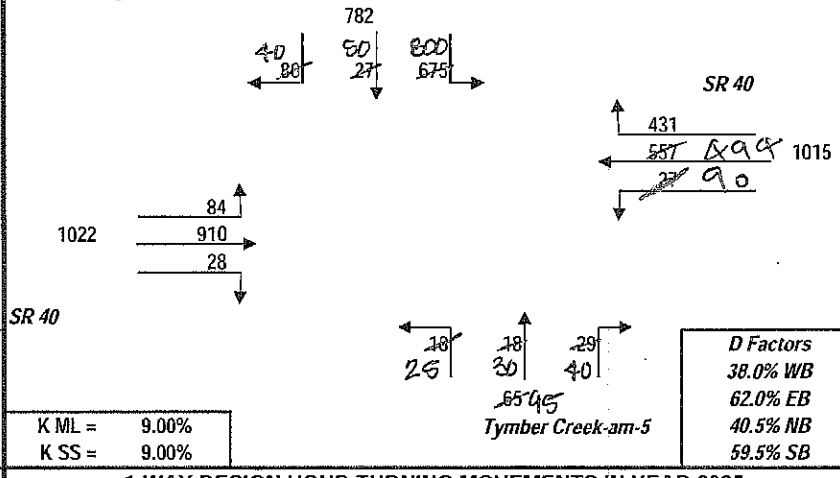
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
40.5% NB
59.5% SB

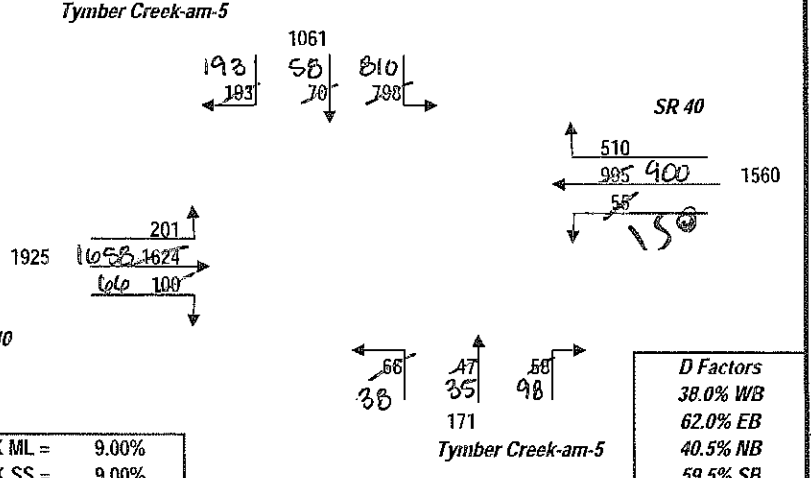
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
40.5% NB
59.5% SB

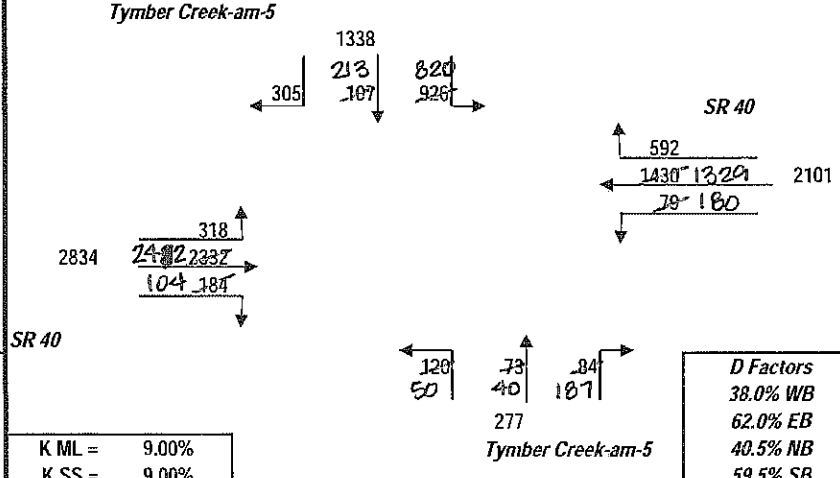
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
40.5% NB
59.5% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
40.5% NB
59.5% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
[redacted]

Is the Mainline Oriented North/South? Enter Yes or No — ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
38.0%	Westbound (WB)	
62.0%	Eastbound (EB)	
Sidestreet		
49.5%	Northbound (NB)	
50.5%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No — ◉ Yes ○ No

If "Yes" go to cell C47 | If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function — ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function — ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project yeers are calculated by interpolation)

	From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	*TOTAL*
2011	23400	23800	1100	800	49100
2035	61400	61400	1100	1500	125400

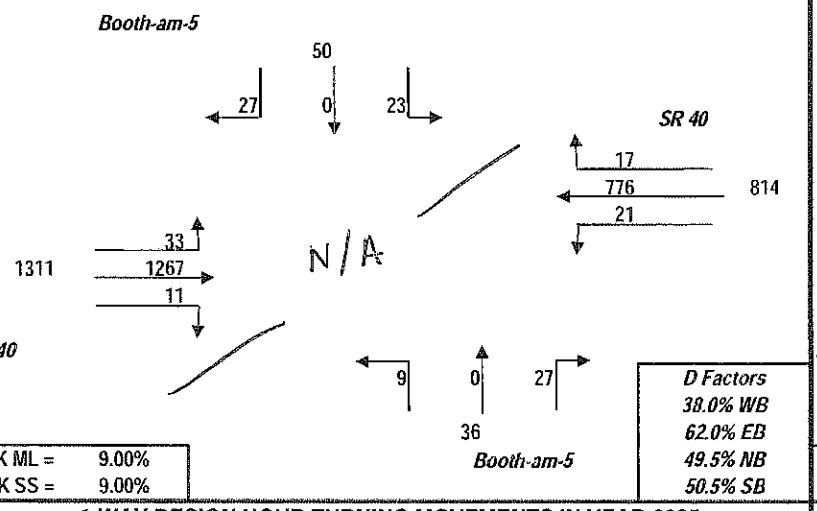
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	3%	3
(EB THRU)	*West-to-East*	97%	97
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	8%	8
(WB THRU)	*East-to-West*	91%	91
(WB RT)	*East-to-North*	1%	1
(SB LT)	*North-to-East*	87%	87
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	13%	13
(NB LT)	*South-to-West*	31%	31
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	69%	69

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Booth-am-5: Breakaway Tr TO Williamson Blvd

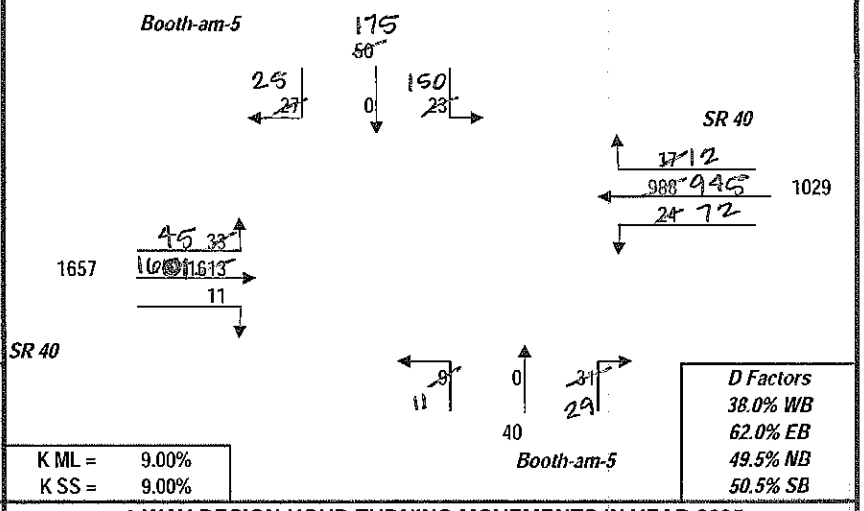
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
49.5% NB
50.5% SB

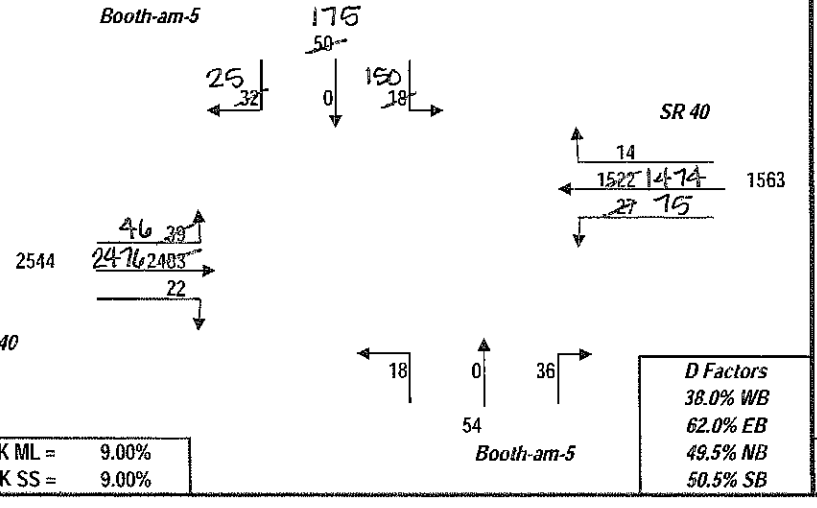
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
49.5% NB
50.5% SB

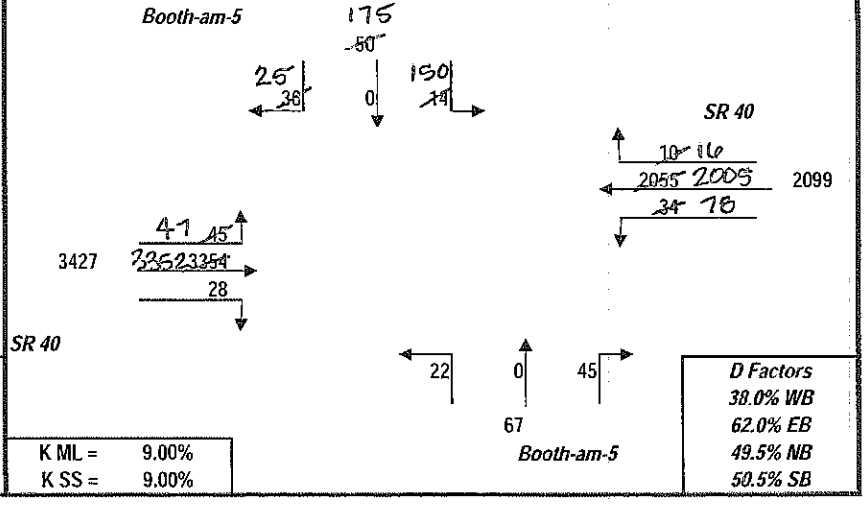
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
49.5% NB
50.5% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
49.5% NB
50.5% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Phase:
Tod:
County:

Is the Mainline Oriented North/South? — Enter Yes or No: ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
38.0%	Westbound (WB)	
62.0%	Eastbound (EB)	
Sidestreet		
55.7%	Northbound (NB)	
44.3%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) — Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Sidestreet Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	26700	26700	0	7900	61200
2035	63900	63900	0	8800	136600

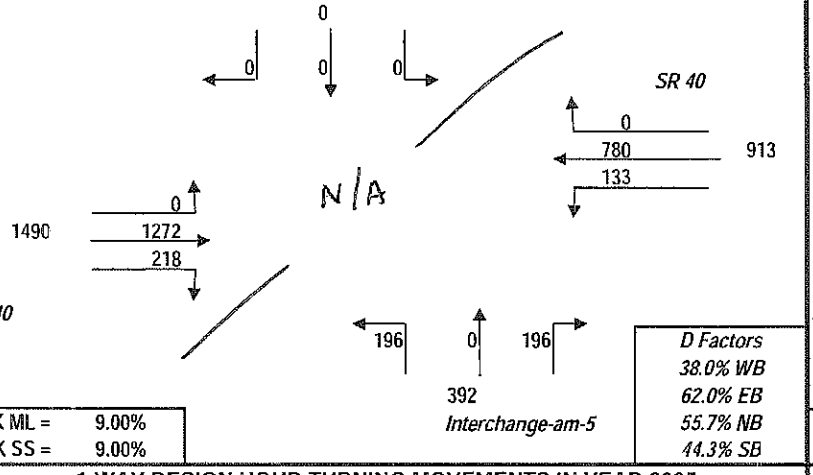
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	0%	0
(EB THRU)	*West-to-East*	97%	97
(EB RT)	*West-to-South*	3%	3
(WB LT)	*East-to-South*	14%	14
(WB THRU)	*East-to-West*	86%	86
(WB RT)	*East-to-North*	0%	0
(SB LT)	*North-to-East*	0%	0
(SB THRU)	*North-to-South*	100%	100
(SB RT)	*North-to-West*	0%	0
(NB LT)	*South-to-West*	23%	23
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	77%	77

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Interchange-am-5: Breakaway Tr TO Williamson Blvd

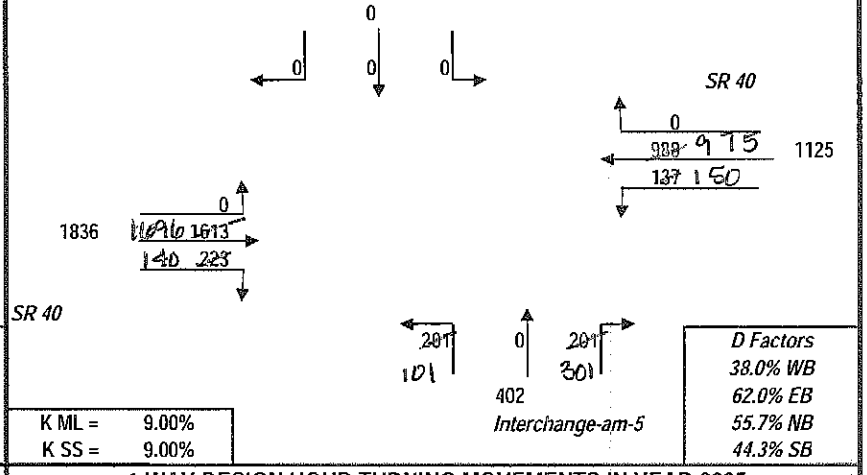
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
55.7% NB
44.3% SB

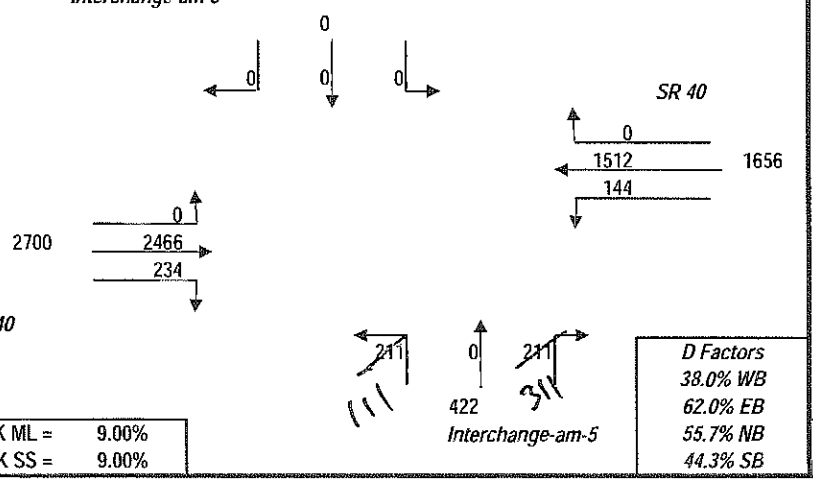
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
55.7% NB
44.3% SB

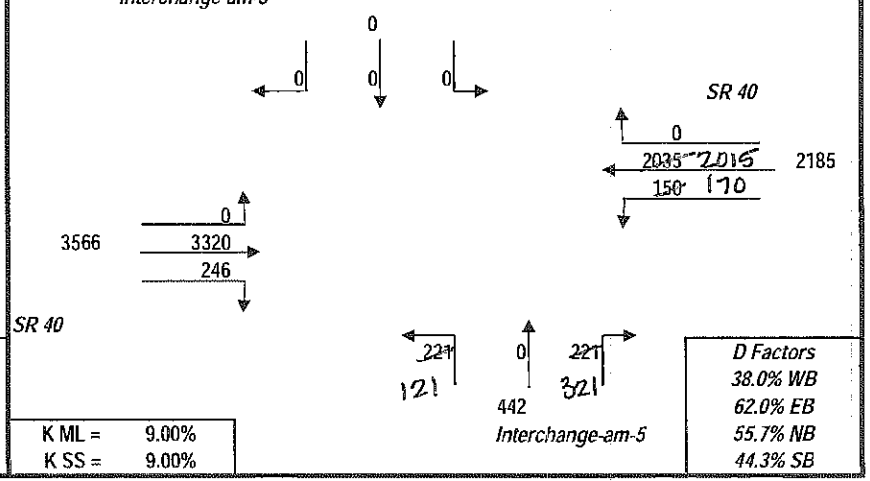
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
55.7% NB
44.3% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
38.0% WB
62.0% EB
55.7% NB
44.3% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11

[redacted]

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
45.0%	Northbound (NB)
55.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline	Side Street
Base	[redacted]		
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	27700	29700	7600	18600	83800
2035	65000	66000	12800	25900	169700

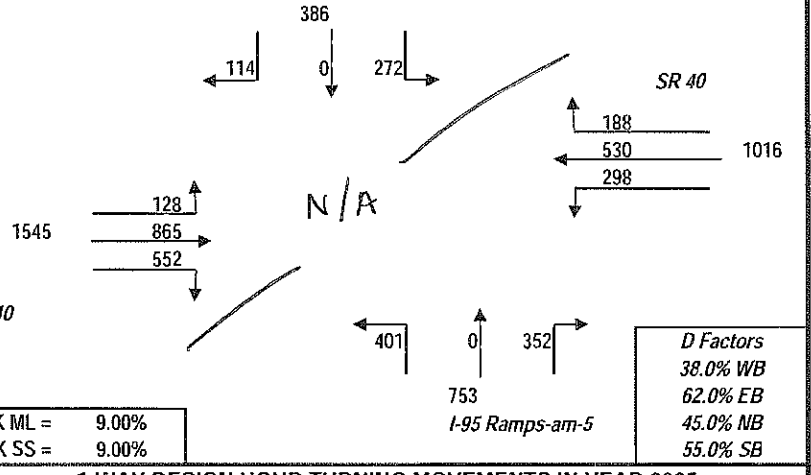
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	58%	58
(EB RT)	*West-to-South*	37%	37
(WB LT)	*East-to-South*	34%	34
(WB THRU)	*East-to-West*	52%	52
(WB RT)	*East-to-North*	14%	14
(SB LT)	*North-to-East*	73%	73
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	27%	27
(NB LT)	*South-to-West*	48%	48
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	52%	52

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT I-95 Ramps-am-5: Breakaway Tr TO Williamson Blvd

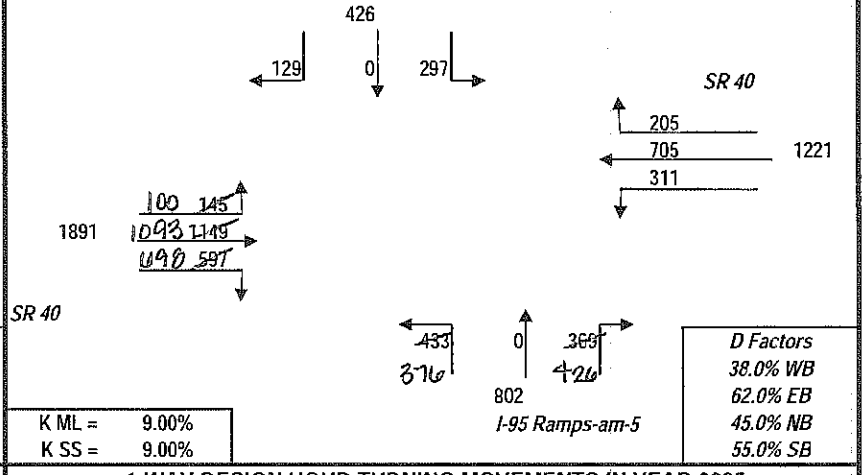
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
45.0%	NB
55.0%	SB

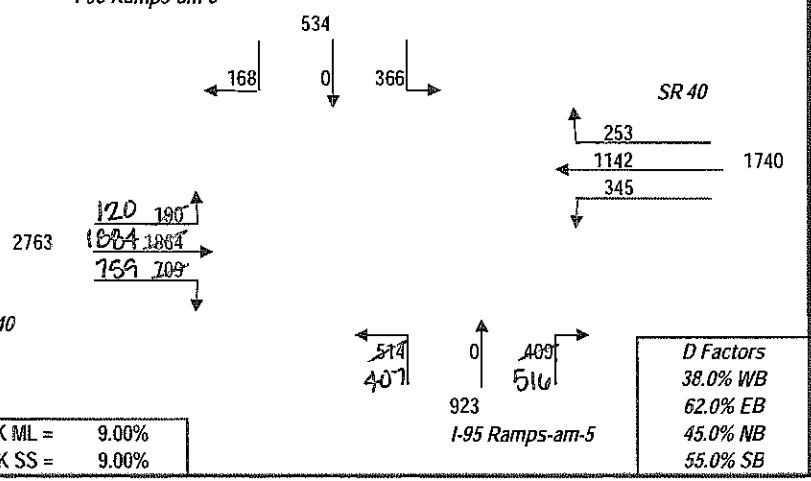
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
45.0%	NB
55.0%	SB

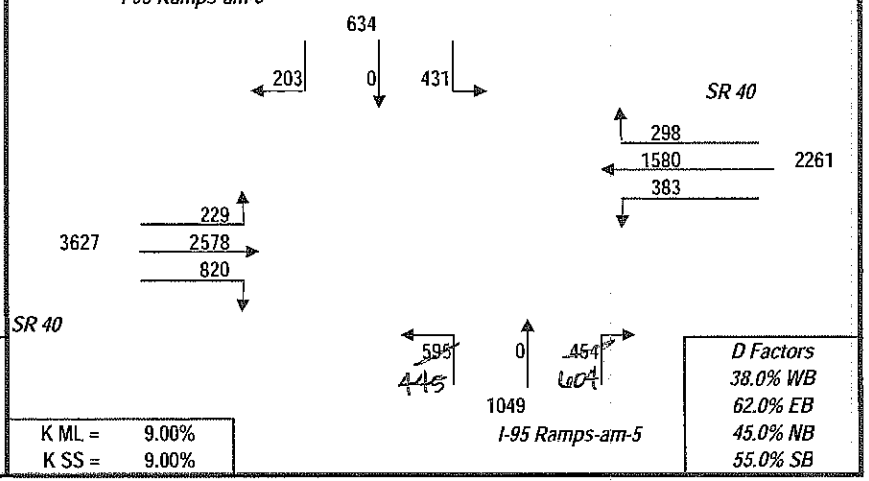
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
45.0%	NB
55.0%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
38.0%	WB
62.0%	EB
45.0%	NB
55.0%	SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
Highway: SR 40
Intersection: Williamson-am-5
From: Breakaway Tr
To: Williamson Blvd
County: Volusia

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors

Mainline	Sidestreet
9.00%	9.00%

D Factors

Mainline	
38.0%	Westbound (WB)
62.0%	Eastbound (EB)
Sidestreet	
40.0%	Northbound (NB)
60.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

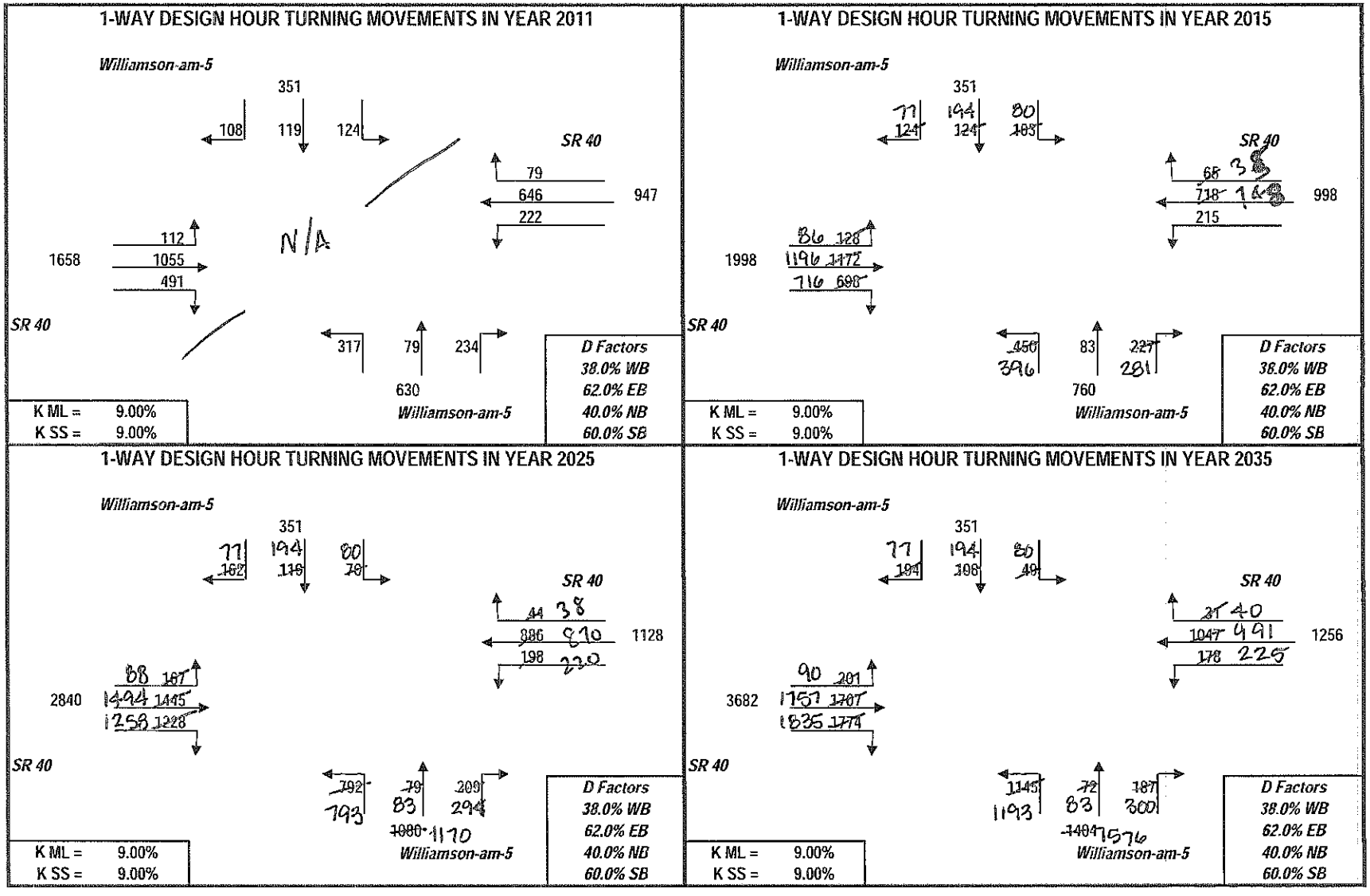
	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
2011	29700	27700	6500	17500	81400
2035	66000	36800	6500	39000	148300

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	58%	58
(EB RT)	*West-to-South*	37%	37
(WB LT)	*East-to-South*	20%	20
(WB THRU)	*East-to-West*	76%	76
(WB RT)	*East-to-North*	4%	4
(SB LT)	*North-to-East*	28%	28
(SB THRU)	*North-to-South*	25%	25
(SB RT)	*North-to-West*	47%	47
(NB LT)	*South-to-West*	67%	67
(NB THRU)	*South-to-North*	10%	10
(NB RT)	*South-to-East*	23%	23

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Williamson-am-5: Breakaway Tr TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Analyst:	PR
Date:	18-Nov-11
Highway:	Williamson-am-5
Intersection:	Hand Ave
From:	SR 40
To:	LPGA
County:	Volusia

Is the Mainline Oriented North/South? (Enter Yes or No) ◉ Yes ○ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
40.0%	Northbound (NB)
60.0%	Southbound (SB)
Sidestreet	
48.5%	Westbound (WB)
51.5%	Eastbound (EB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base	
Opening	
Mid	
Design	

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

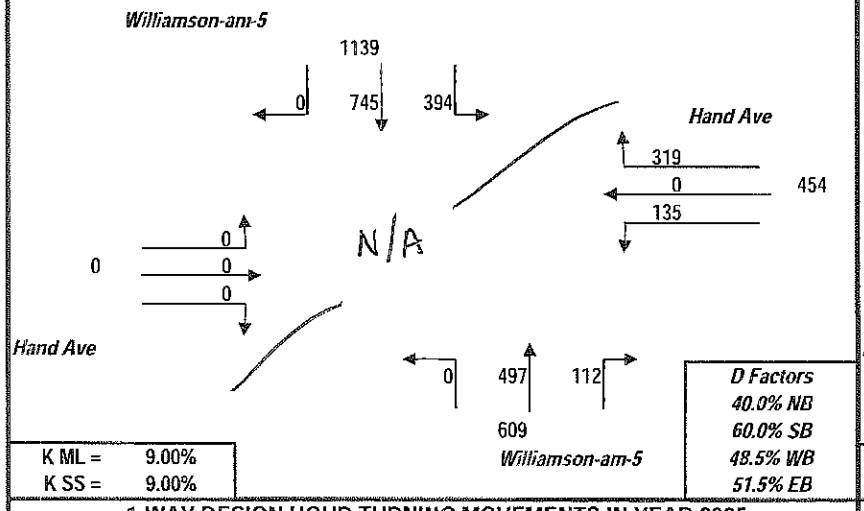
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2015	0	10400	21100	16800	48300
2035	0	22100	39000	31100	92200

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**	
(EB LT)	*West-to-North*	0%	0	
(EB THRU)	*West-to-East*	100%	0	
(EB RT)	*West-to-South*	0%	0	
(WB LT)	*East-to-South*	46%	46	(must be done manually)
(WB THRU)	*East-to-West*	0%	0	
(WB RT)	*East-to-North*	54%	54	
(SB LT)	*North-to-East*	30%	30	
(SB THRU)	*North-to-South*	70%	70	
(SB RT)	*North-to-West*	0%	0	
(NB LT)	*South-to-West*	0%	0	
(NB THRU)	*South-to-North*	70%	70	
(NB RT)	*South-to-East*	30%	30	

Desired Closure: 0.01

PROJECT TRAFFIC FOR Williamson-am-5 AT Hand Ave: SR 40 TO LPGA

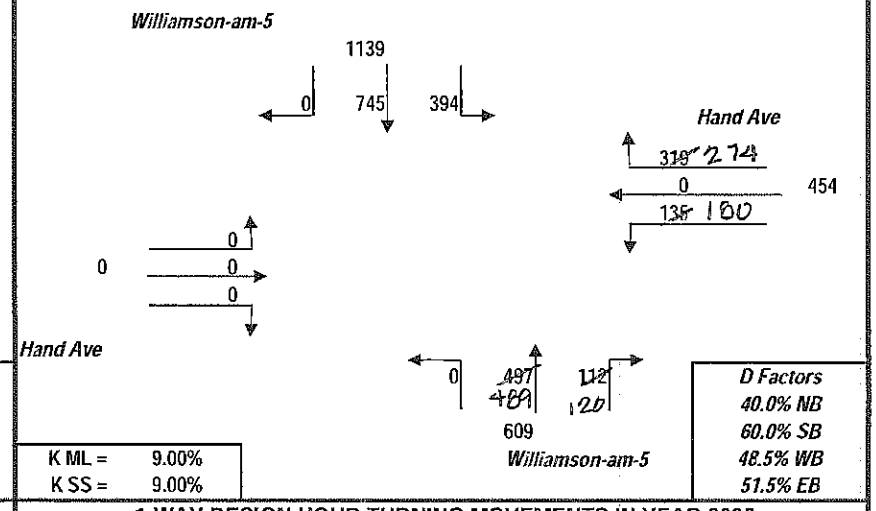
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
40.0% NB
60.0% SB
48.5% WB
51.5% EB

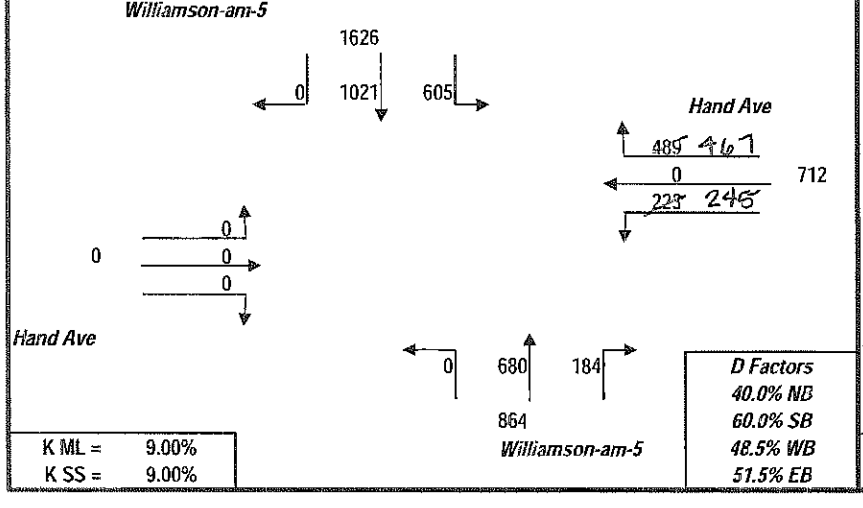
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
40.0% NB
60.0% SB
48.5% WB
51.5% EB

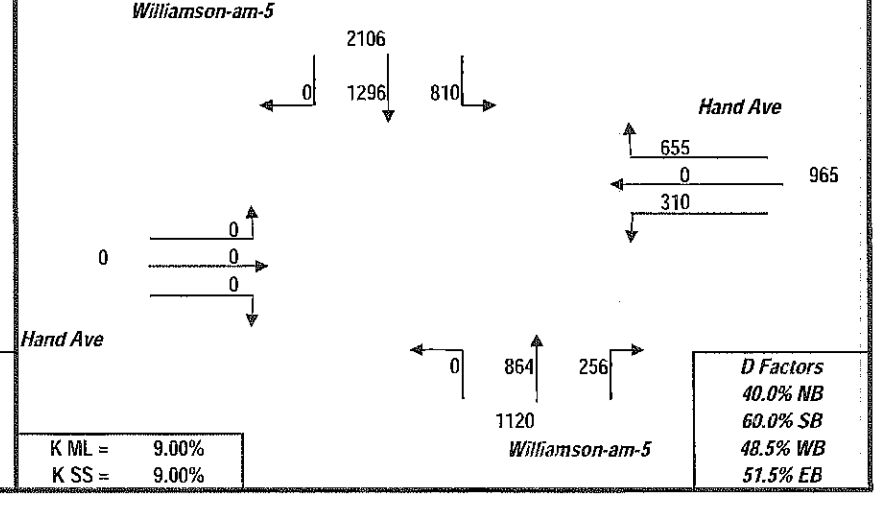
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
40.0% NB
60.0% SB
48.5% WB
51.5% EB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
40.0% NB
60.0% SB
48.5% WB
51.5% EB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
45.5%	Westbound (WB)	
54.5%	Eastbound (EB)	
Sidestreet		
40.5%	Northbound (NB)	
59.5%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

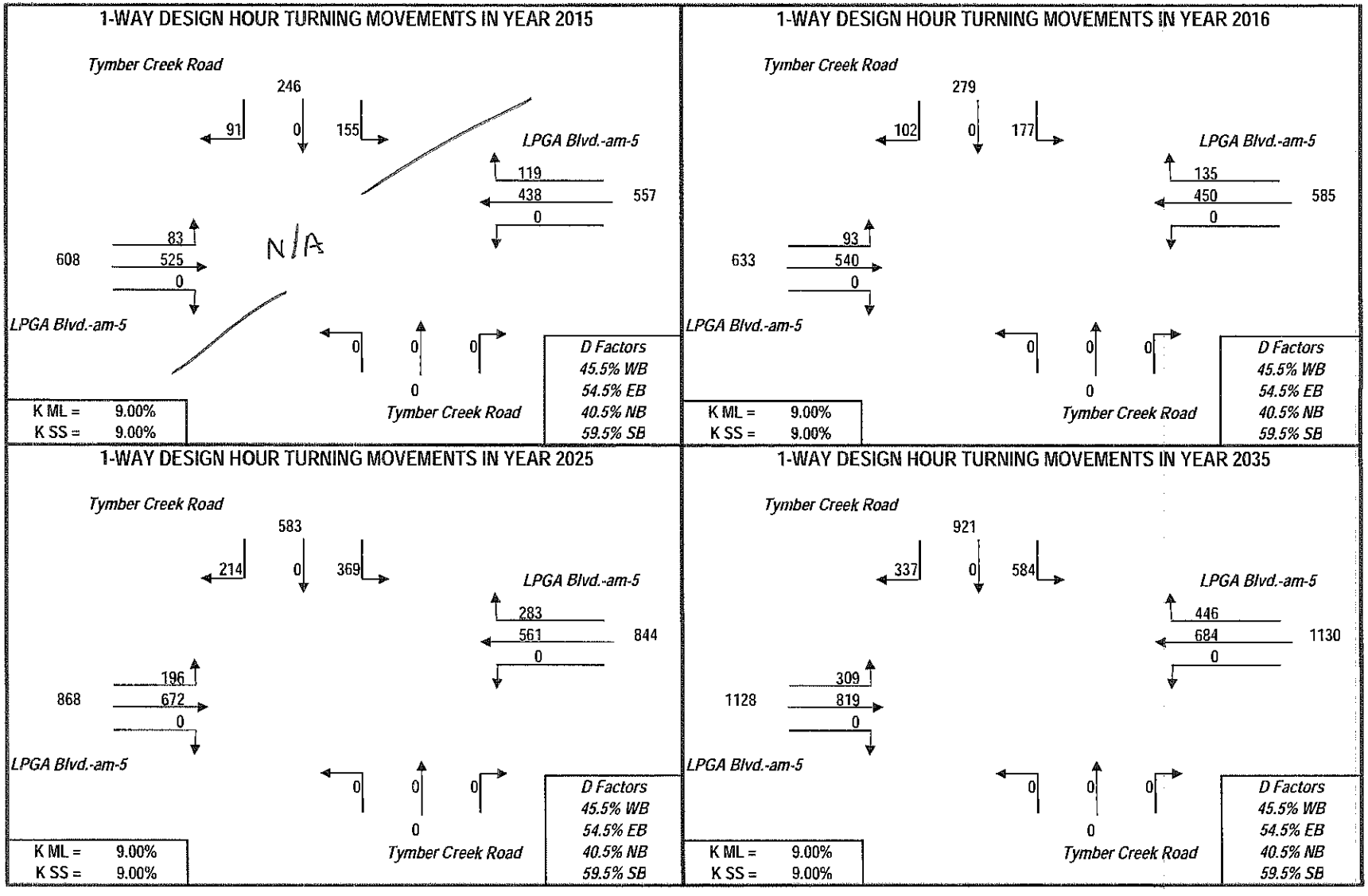
	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	*TOTAL*
2015	12300	13500	4500	0	30300
2035	23000	27600	17200	0	67800

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2015
(EB LT)	*West-to-North*	37%	37
(EB THRU)	*West-to-East*	63%	63
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	0%	0
(WB THRU)	*East-to-West*	78%	78
(WB RT)	*East-to-North*	22%	22
(SB LT)	*North-to-East*	32%	32
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	68%	68
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	100%	100
(NB RT)	*South-to-East*	0%	0

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA Blvd.-am-5 AT Tymber Creek Road: TO



TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
45.5%	Westbound (WB)
54.5%	Eastbound (EB)
Sidestreet	
44.8%	Northbound (NB)
55.2%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
2011	10700	13700	0	3800	28200
2035	27600	29600	0	15900	73100

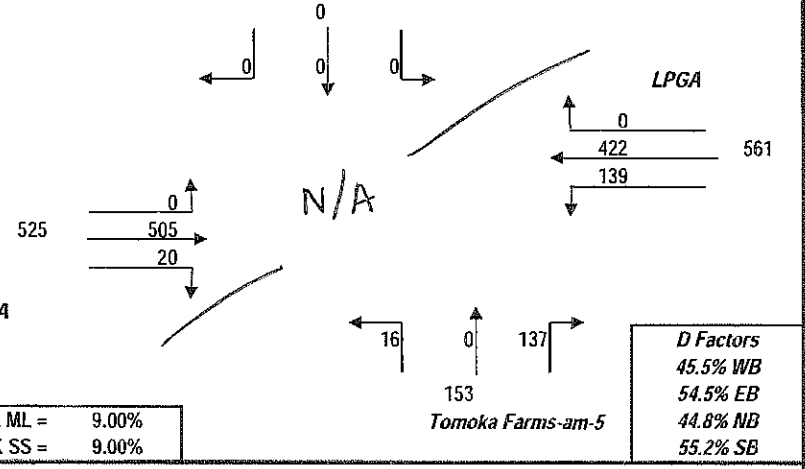
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	0%	0
(EB THRU)	*West-to-East*	95%	95
(EB RT)	*West-to-South*	5%	5
(WB LT)	*East-to-South*	23%	23
(WB THRU)	*East-to-West*	75%	75
(WB RT)	*East-to-North*	2%	2
(SB LT)	*North-to-East*	0%	0
(SB THRU)	*North-to-South*	100%	0
(SB RT)	*North-to-West*	0%	0
(NB LT)	*South-to-West*	11%	11
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	89%	89

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT Tomoka Farms-am-5: Williamson TO Tymber Creek Ext

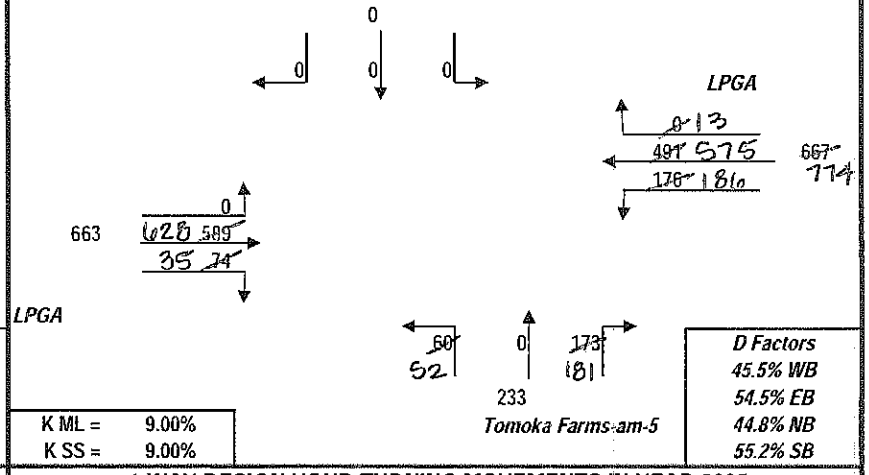
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
44.8%	NB
55.2%	SB

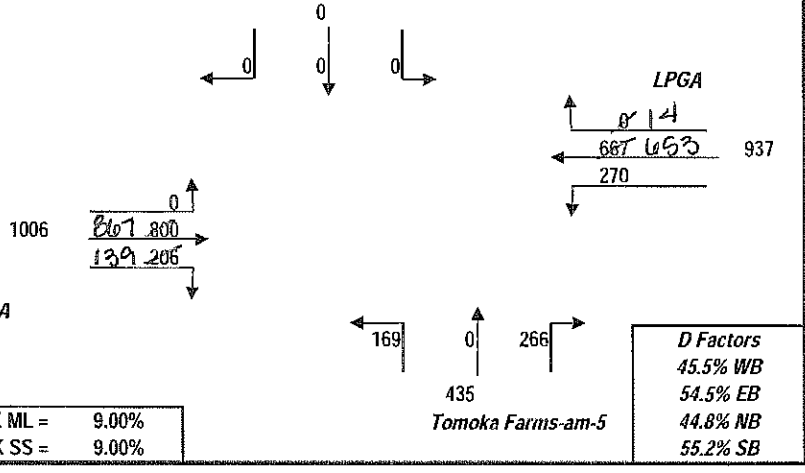
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
44.8%	NB
55.2%	SB

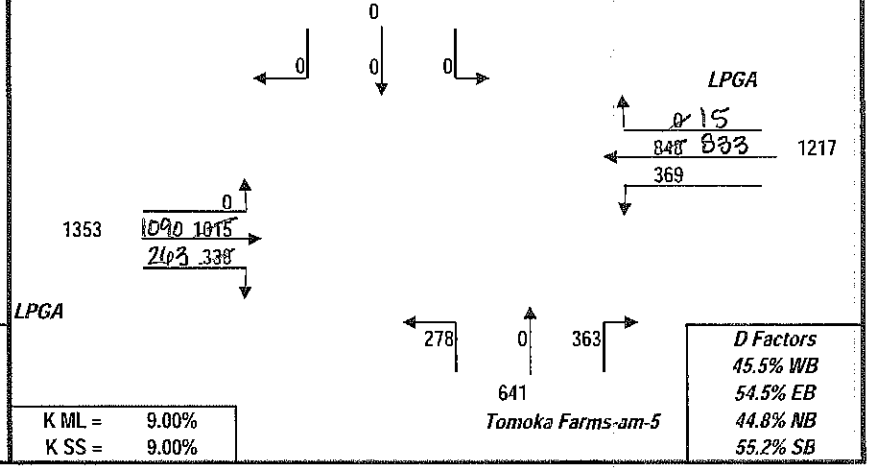
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
44.8%	NB
55.2%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
44.8%	NB
55.2%	SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
Project:
Tel:
County:

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	45.5%	Westbound (WB)
	54.5%	Eastbound (EB)
	Sidestreet	
	62.4%	Northbound (NB)
	62.4%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	*Rate* (1.0% = 0.01)
Base		
Opening		
Mid		
Design		

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	***TOTAL***
2015	16400	29100	14700	9700	69900
2035	29600	44600	21900	15500	111600

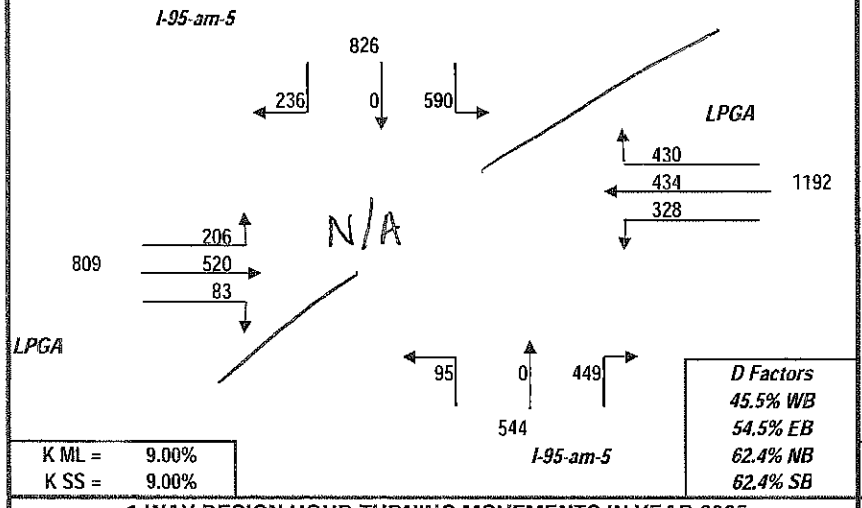
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**
(EB LT)	*West-to-North*	22%	22
(EB THRU)	*West-to-East*	69%	69
(EB RT)	*West-to-South*	9%	9
(WB LT)	*East-to-South*	24%	24
(WB THRU)	*East-to-West*	51%	51
(WB RT)	*East-to-North*	25%	25
(SB LT)	*North-to-East*	79%	79
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	21%	21
(NB LT)	*South-to-West*	15%	15
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	85%	85

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT I-95-am-5: Williamson TO Tymber Creek Ext

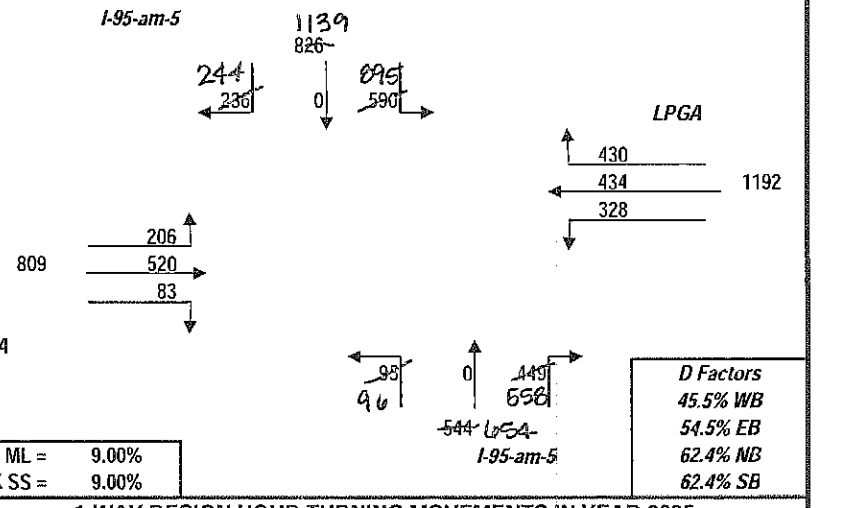
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
62.4%	NB
62.4%	SB

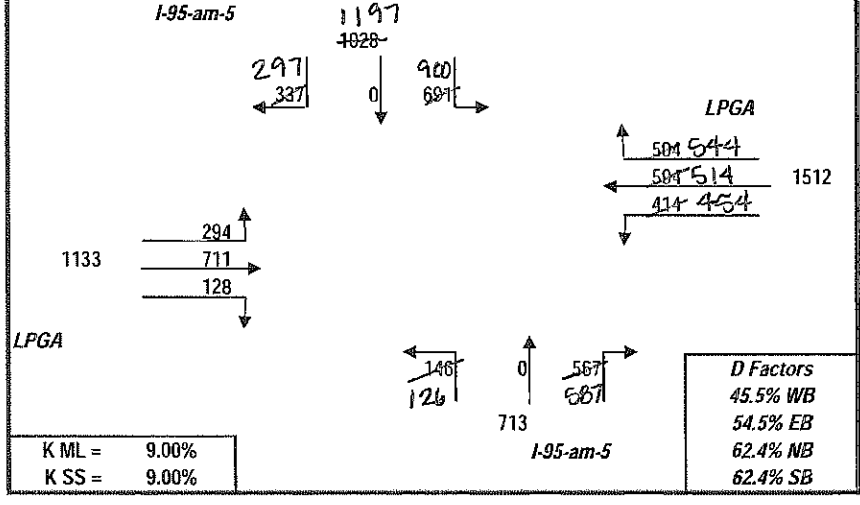
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
62.4%	NB
62.4%	SB

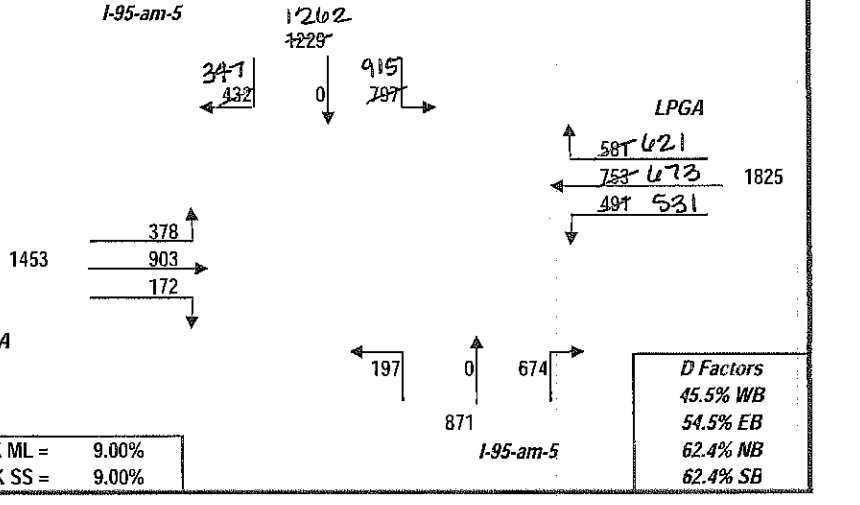
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
62.4%	NB
62.4%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
45.5%	WB
54.5%	EB
62.4%	NB
62.4%	SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No)
- ○ Yes
- ◉ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
45.5%	Westbound (WB)
54.5%	Eastbound (EB)
Sidestreet	
40.0%	Northbound (NB)
60.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

(Enter Yes or No)
- ◉ Yes
- ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Side Street Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

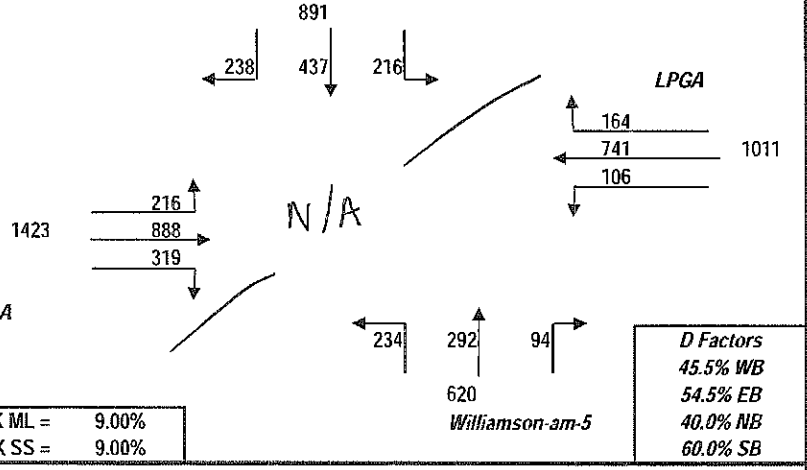
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2015	29100	24700	16500	17200	87500
2035	44600	48700	34200	29900	157400

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**	
(EB LT)	*West-to-North*	12%	12	
(EB THRU)	*West-to-East*	63%	63	
(EB RT)	*West-to-South*	25%	25	
(WB LT)	*East-to-South*	17%	17	(must be done manually)
(WB THRU)	*East-to-West*	72%	72	
(WB RT)	*East-to-North*	11%	11	
(SB LT)	*North-to-East*	30%	30	
(SB THRU)	*North-to-South*	53%	53	
(SB RT)	*North-to-West*	17%	17	
(NB LT)	*South-to-West*	38%	38	
(NB THRU)	*South-to-North*	44%	44	
(NB RT)	*South-to-East*	18%	18	

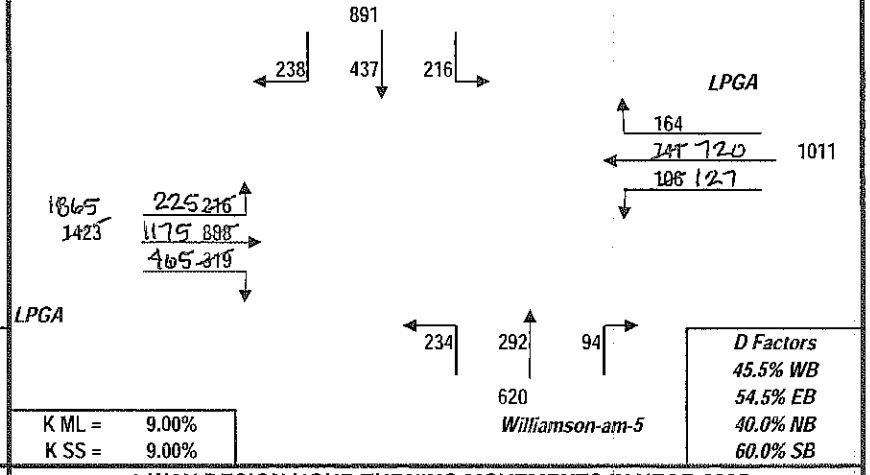
Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT Williamson-am-5: Williamson TO Tymber Creek Ext

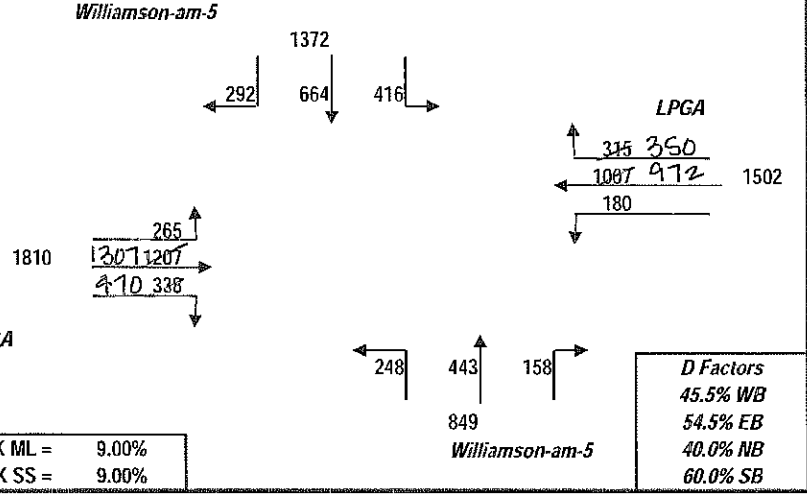
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



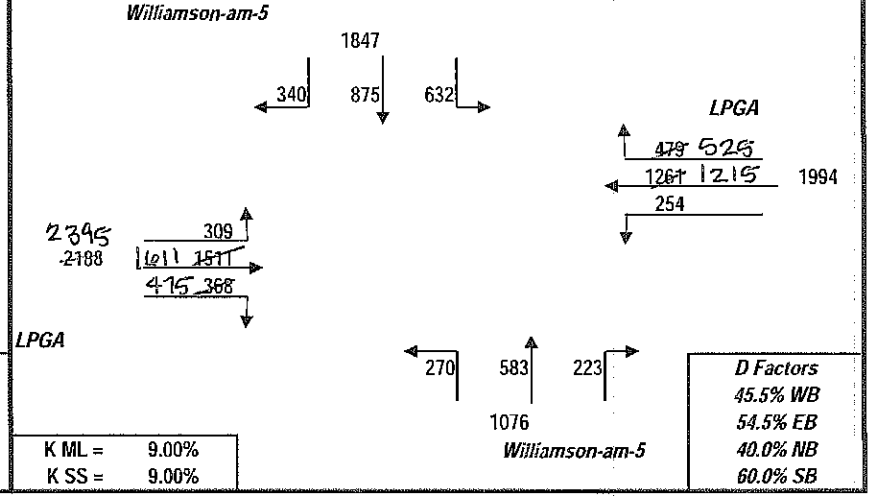
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



TURNS5 ANALYSIS SHEET - INPUT

Analyst:	PR
Date:	18-Nov-11
Highway:	SR 40
Intersection:	Cone-pm-5
From:	Cone Road
To:	Williamson Blvd
County:	Volusia

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
62.0%	Westbound (WB)	
38.0%	Eastbound (EB)	
Sidestreet		
62.0%	Northbound (NB)	
38.0%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Growth Rate
Base		
Opening		
Mid		
Design		

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

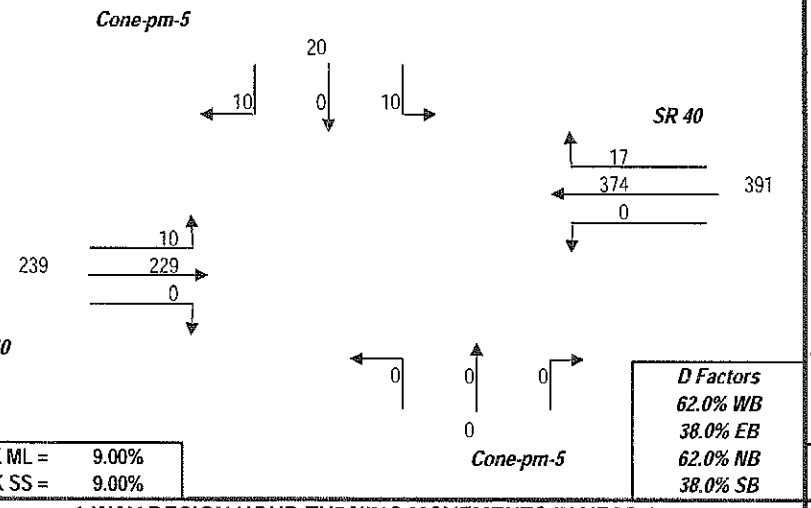
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	7000	7000	600	0	14600
2035	33900	33900	750	0	68550

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**	
(EB LT)	*West-to-North*	1%	1	
(EB THRU)	*West-to-East*	99%	99	
(EB RT)	*West-to-South*	0%	0	
(WB LT)	*East-to-South*	0%	0	(must be done manually)
(WB THRU)	*East-to-West*	94%	94	
(WB RT)	*East-to-North*	6%	6	
(SB LT)	*North-to-East*	84%	84	
(SB THRU)	*North-to-South*	0%	0	
(SB RT)	*North-to-West*	16%	16	
(NB LT)	*South-to-West*	0%	0	
(NB THRU)	*South-to-North*	100%	100	
(NB RT)	*South-to-East*	0%	0	

Desired Closure: 0.01

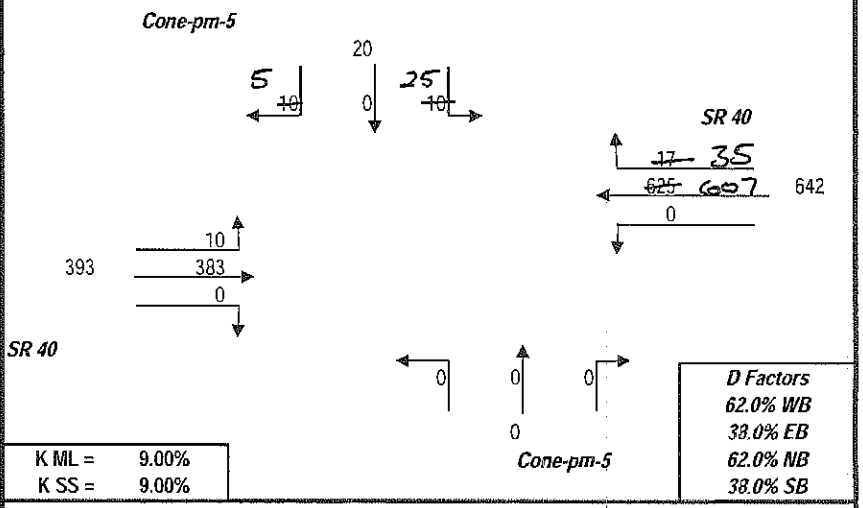
PROJECT TRAFFIC FOR SR 40 AT Cone-pm-5: Cone Road TO Williamson Blvd

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



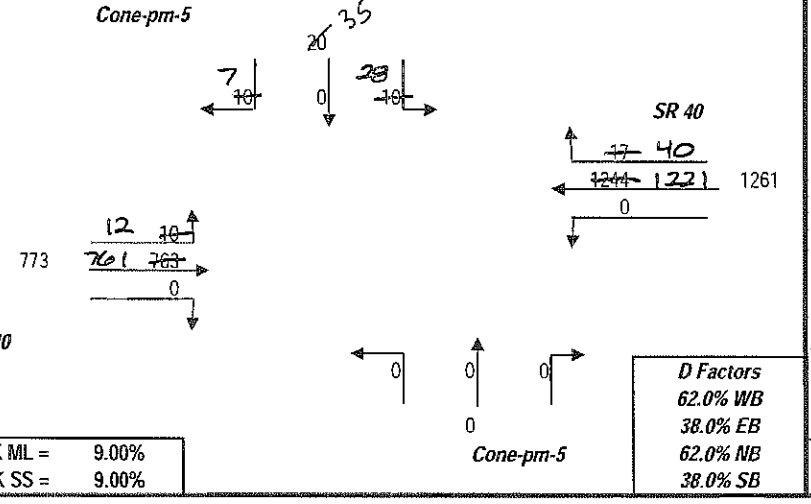
K ML =	9.00%
K SS =	9.00%

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



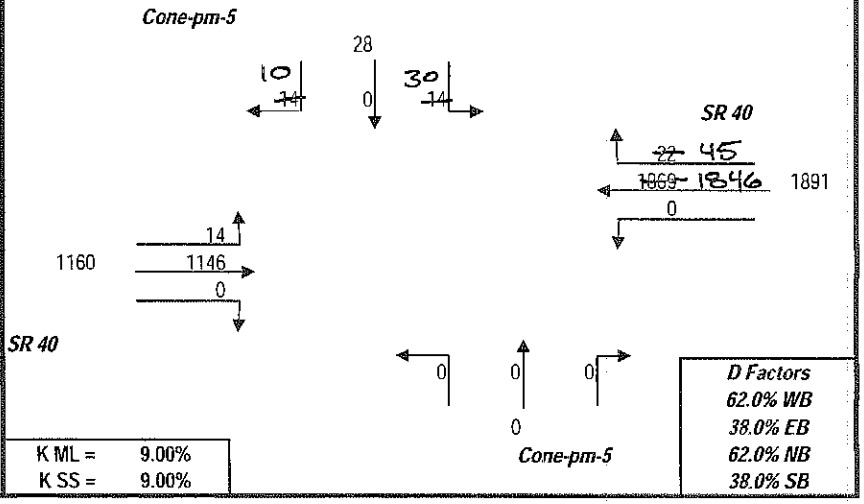
K ML =	9.00%
K SS =	9.00%

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors

Mainline	
9.00%	
Sidestreet	
9.00%	

D Factors

Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
62.0%	Northbound (NB)
38.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

(Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Year	Mainline	Side Street
Base		
Opening		
Mid		
Design		

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

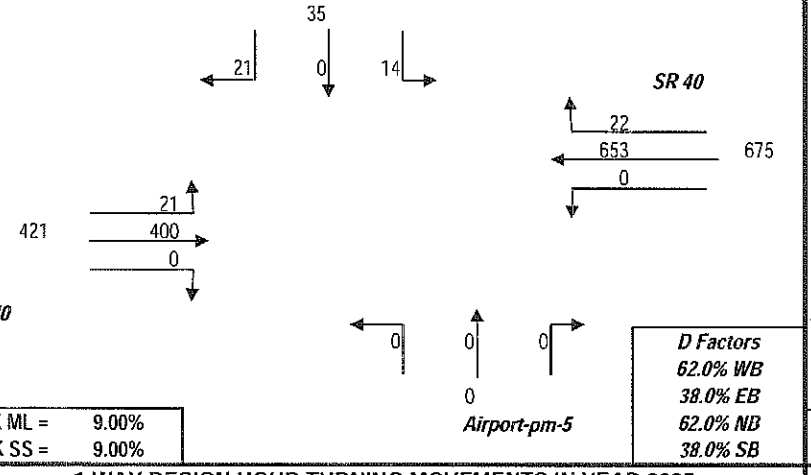
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	12300	12100	1000	0	25400
2035	34500	33400	7600	0	75500

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**	
(EB LT)	*West-to-North*	20%	20	
(EB THRU)	*West-to-East*	80%	80	
(EB RT)	*West-to-South*	0%	0	
(WB LT)	*East-to-South*	0%	0	(must be done manually)
(WB THRU)	*East-to-West*	90%	90	
(WB RT)	*East-to-North*	10%	10	
(SB LT)	*North-to-East*	40%	40	
(SB THRU)	*North-to-South*	0%	0	
(SB RT)	*North-to-West*	60%	60	
(NB LT)	*South-to-West*	0%	0	
(NB THRU)	*South-to-North*	100%	100	
(NB RT)	*South-to-East*	0%	0	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Airport-pm-5: Cone Road TO Williamson Blvd

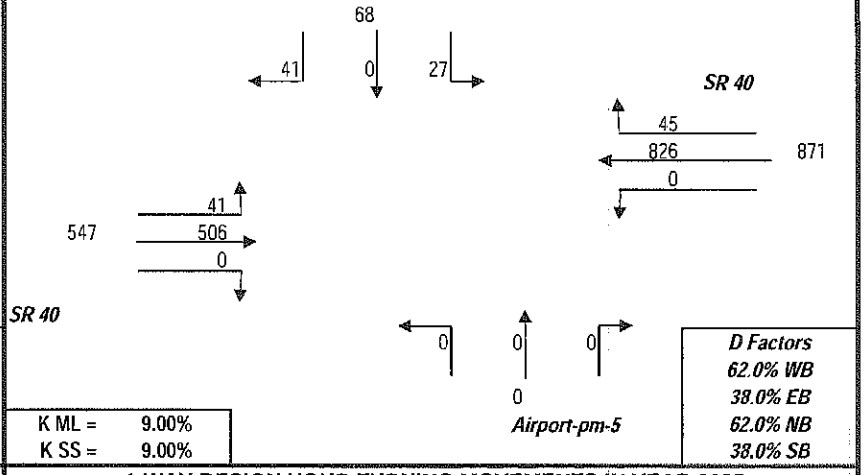
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

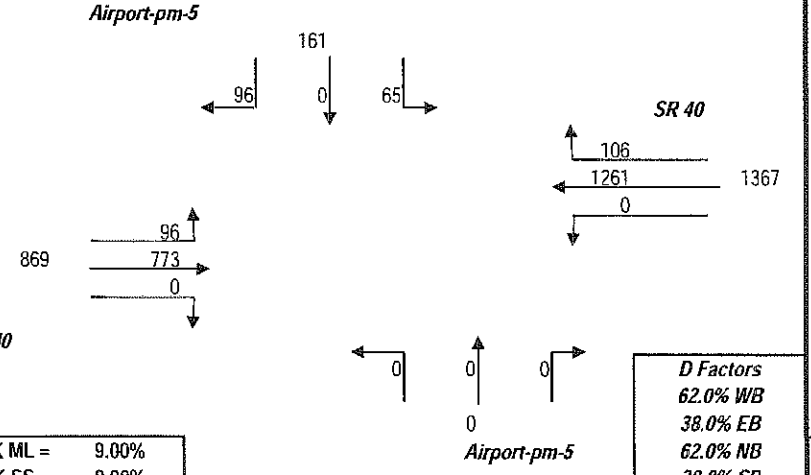
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

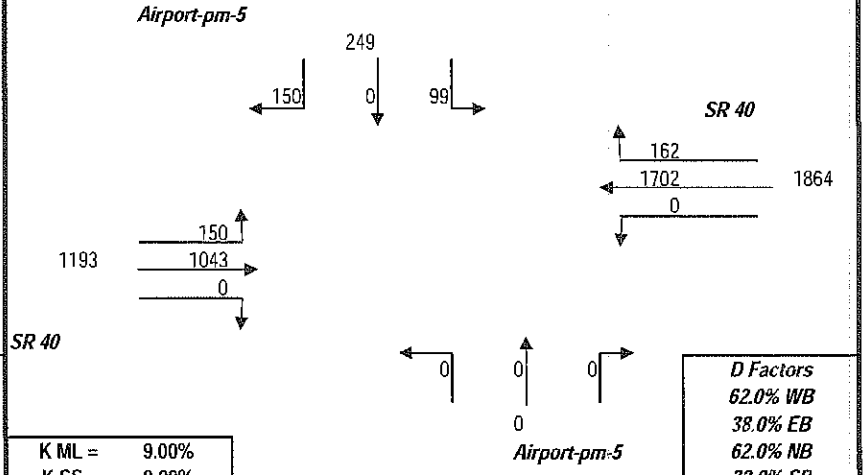
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:	PR
Date:	18-Nov-11
Highway:	SR 40
Intersection:	Shadow Xsing-pm-5
From:	Cone Road
To:	Williamson Blvd
County:	Volusia

Is the Mainline Oriented North/South? Enter Yes or No — ○ Yes ◉ No

K Factors

Mainline	
9.00%	
Sidestreet	
9.00%	

D Factors

Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
62.0%	Northbound (NB)
38.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No — ◉ Yes ○ No

If "Yes" go to cell C47 If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base			
Opening			
Mid			
Design			

Mainline Growth Function — ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function — ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

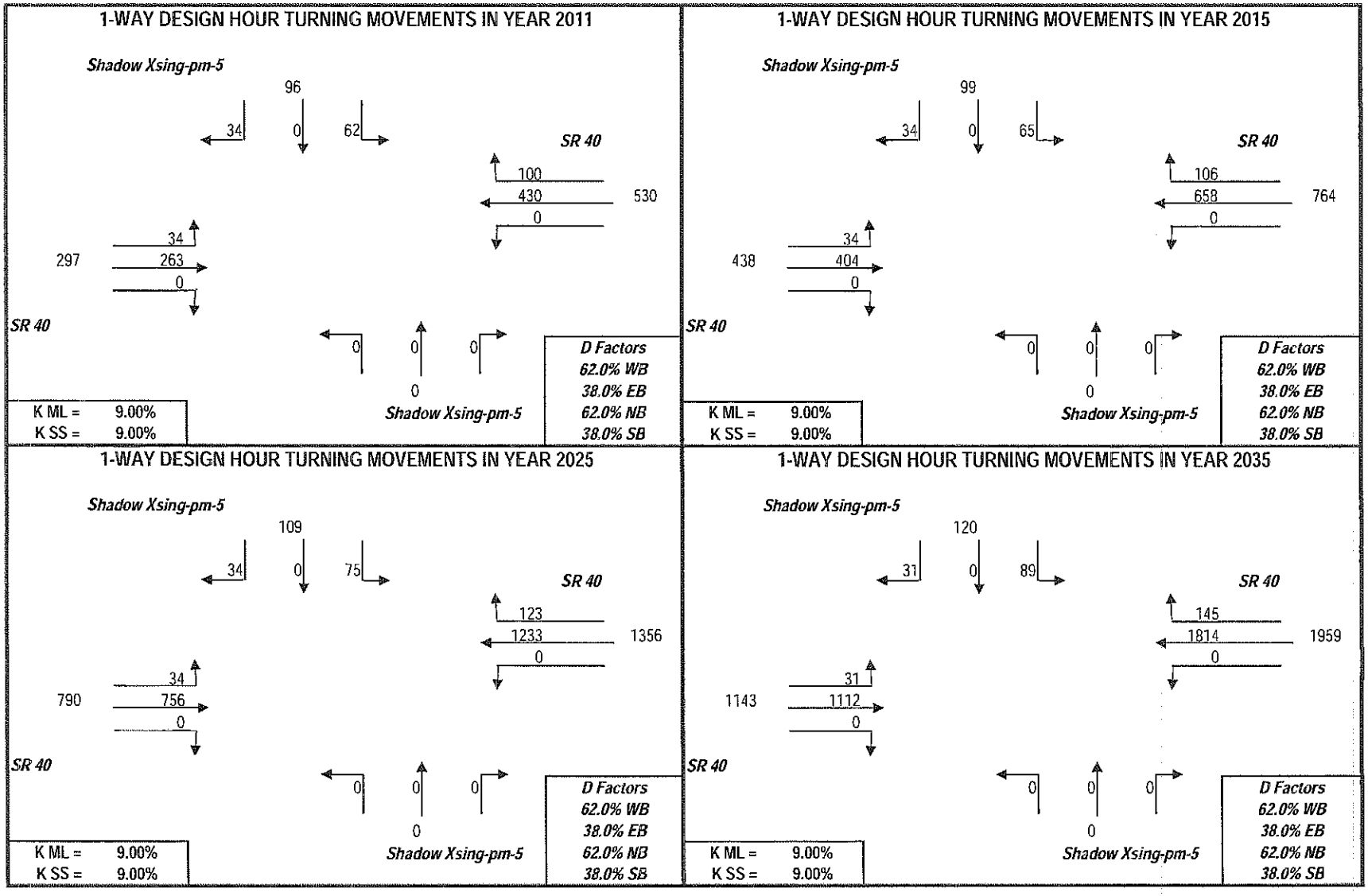
Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	8700	9500	2800	0	21000
2035	33400	35000	3500	0	71900

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**	
(EB LT)	*West-to-North*	5%	5	
(EB THRU)	*West-to-East*	95%	95	
(EB RT)	*West-to-South*	0%	0	
(WB LT)	*East-to-South*	0%	0	(must be done manually)
(WB THRU)	*East-to-West*	80%	80	
(WB RT)	*East-to-North*	20%	20	
(SB LT)	*North-to-East*	78%	78	
(SB THRU)	*North-to-South*	0%	0	
(SB RT)	*North-to-West*	22%	22	
(NB LT)	*South-to-West*	0%	0	
(NB THRU)	*South-to-North*	100%	100	
(NB RT)	*South-to-East*	0%	0	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Shadow Xsing-pm-5: Cone Road TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Analyst:	PR
Date:	18-Nov-11
Highway:	SR 40
Intersection:	Hunters Ridge-pm-5
From:	Cone Road
To:	Williamson Blvd
County:	Volusia

Is the Mainline Oriented North/South? Enter Yes or No: ○ Yes ◉ No

K Factors

Mainline	
9.00%	
Sidestreet	
9.00%	

D Factors

Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
62.0%	Northbound (NB)
38.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base	
Opening	
Mid	
Design	

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

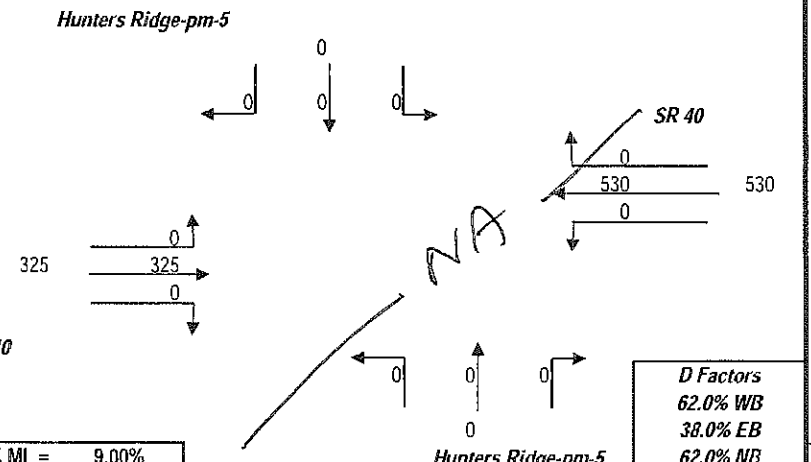
	From West: *EB Approach*	*From East:* *WB Approach*	*From North:* *SB Approach*	*From South:* *NB Approach*	***TOTAL***
2011	9500	9500	0	0	19000
2035	35000	47900	20000	11900	114800

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**	
(EB LT)	*West-to-North*	10%	10	
(EB THRU)	*West-to-East*	80%	80	
(EB RT)	*West-to-South*	10%	10	
(WB LT)	*East-to-South*	20%	20	(must be done manually)
(WB THRU)	*East-to-West*	50%	50	
(WB RT)	*East-to-North*	30%	30	
(SB LT)	*North-to-East*	70%	70	
(SB THRU)	*North-to-South*	5%	5	
(SB RT)	*North-to-West*	25%	25	
(NB LT)	*South-to-West*	25%	25	
(NB THRU)	*South-to-North*	5%	5	
(NB RT)	*South-to-East*	70%	70	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Hunters Ridge-pm-5: Cone Road TO Williamson Blvd

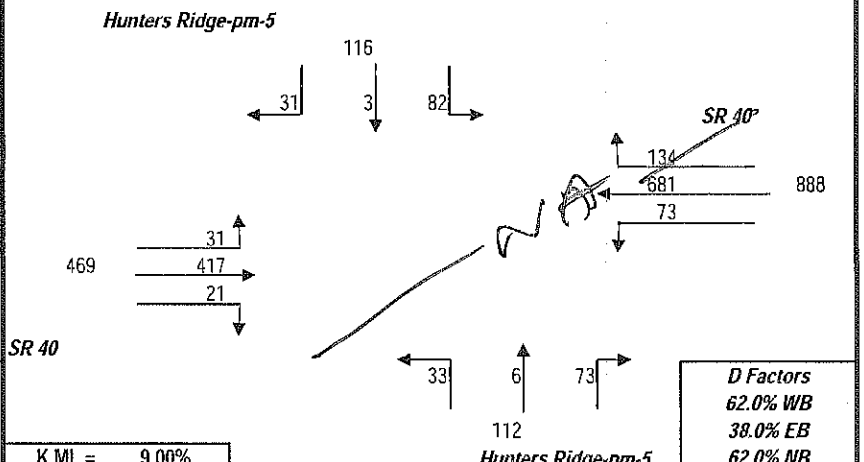
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

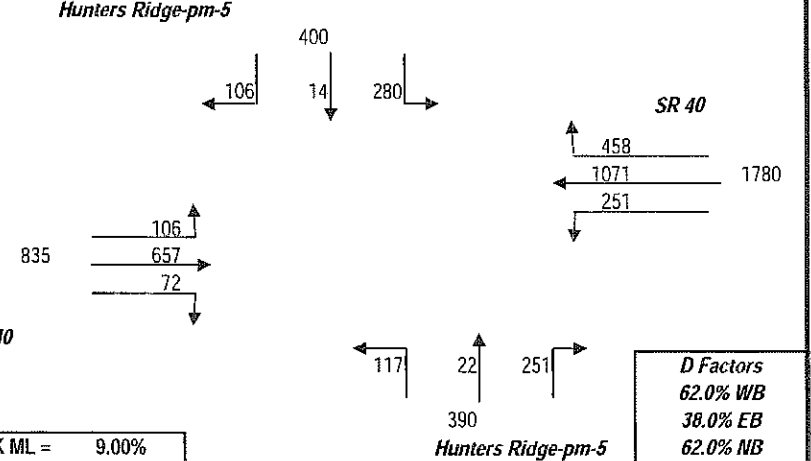
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

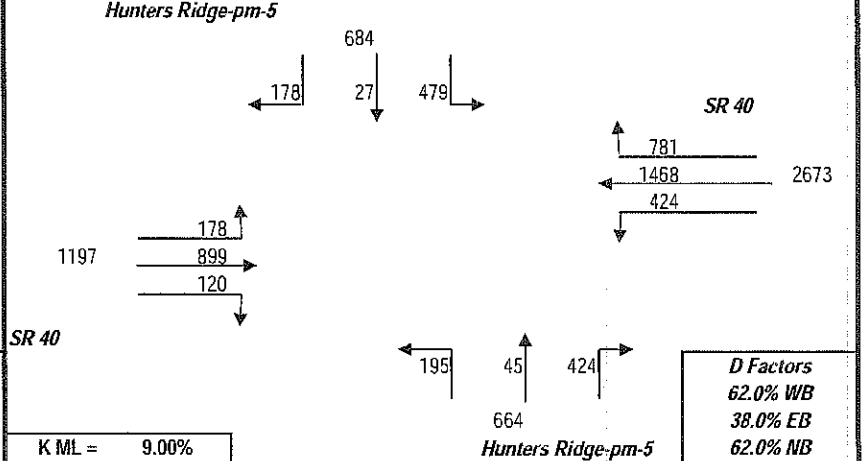
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
62.0% NB
38.0% SB

TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South?

Enter Yes or No
- ○ Yes
- ◉ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
67.1%	Northbound (NB)
32.9%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
- ◉ Yes
- ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Mainline Growth Rate	Sidestreet Growth Rate
Base			
Opening			
Mid			
Design			

Mainline Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Side Street Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

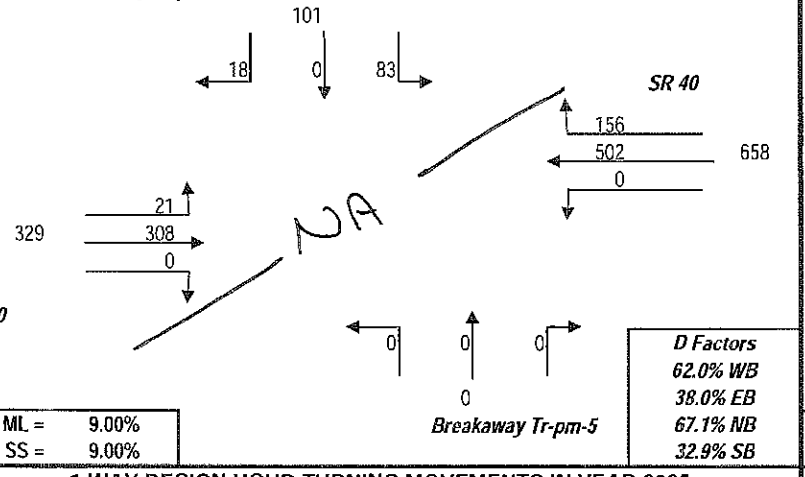
	From West: EB Approach	*From East:* WB Approach	*From North:* SB Approach	*From South:* NB Approach	***TOTAL***
2011	9600	11800	3400	0	24800
2035	47900	50800	4000	0	102700

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011	
(EB LT)	*West-to-North*	3%	3	
(EB THRU)	*West-to-East*	97%	97	
(EB RT)	*West-to-South*	0%	0	
(WB LT)	*East-to-South*	0%	1	(must be done manually)
(WB THRU)	*East-to-West*	82%	32	
(WB RT)	*East-to-North*	18%	16	
(SB LT)	*North-to-East*	93%	93	
(SB THRU)	*North-to-South*	0%	0	
(SB RT)	*North-to-West*	7%	7	
(NB LT)	*South-to-West*	0%	0	
(NB THRU)	*South-to-North*	100%	0	
(NB RT)	*South-to-East*	0%	0	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Breakaway Tr-pm-5: Breakaway Tr TO Williamson Blvd

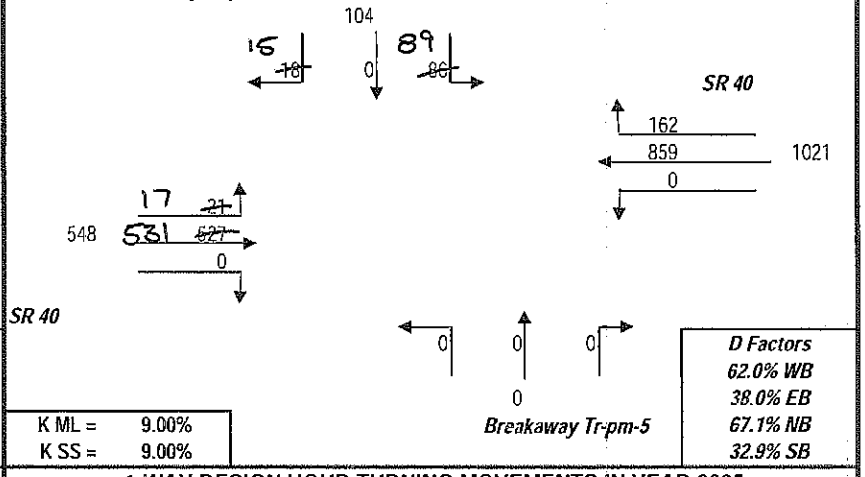
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors	
62.0%	WB
38.0%	EB
67.1%	NB
32.9%	SB

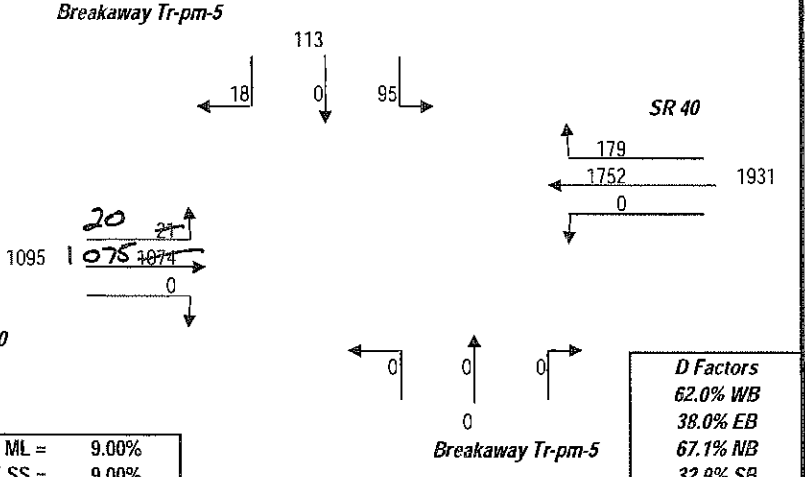
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
62.0%	WB
38.0%	EB
67.1%	NB
32.9%	SB

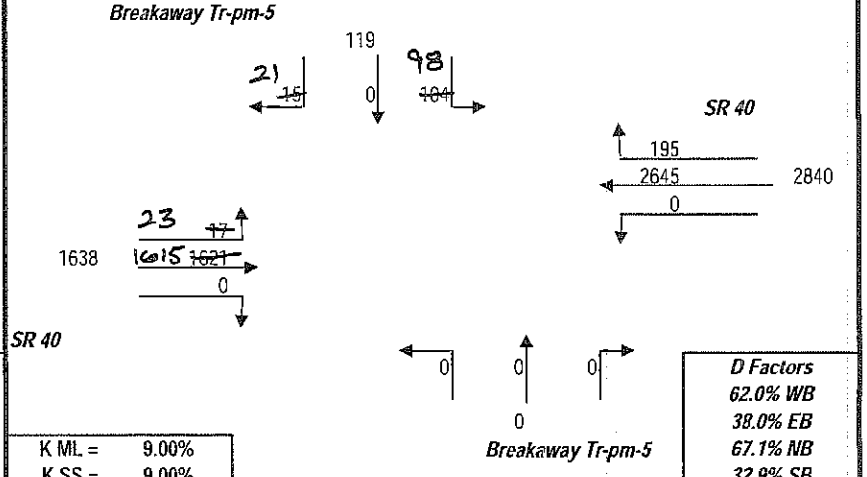
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
62.0%	WB
38.0%	EB
67.1%	NB
32.9%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
62.0%	WB
38.0%	EB
67.1%	NB
32.9%	SB

TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South?

Enter Yes or No
- ○ Yes
- ◉ No

K Factors

Mainline
9.00%
Sidestreet
9.00%

D Factors

Mainline	
62.0%	Westbound (WB)
38.0%	Eastbound (EB)
Sidestreet	
59.5%	Northbound (NB)
40.5%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
- ◉ Yes
- ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Rate (Linear)
Base		
Opening		
Mid		
Design		

Mainline Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Side Street Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	11800	23400	12600	600	48400
2035	50800	61400	25000	7600	144800

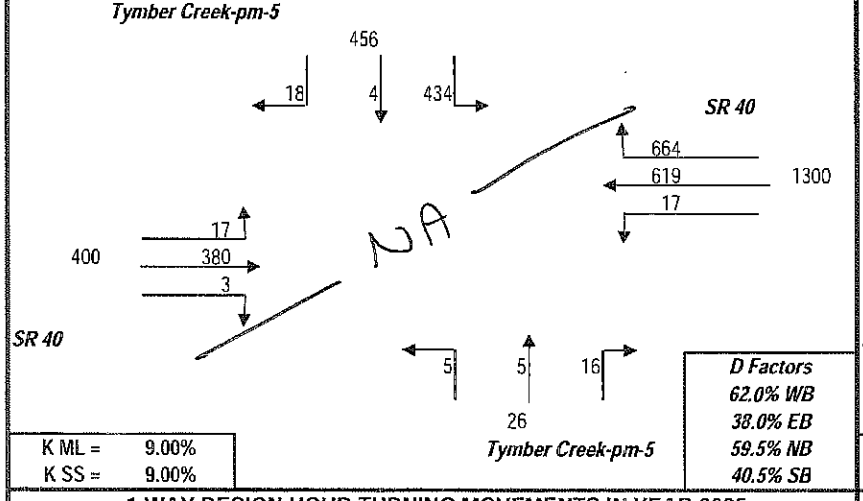
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	10%	10
(EB THRU)	*West-to-East*	86%	86
(EB RT)	*West-to-South*	4%	4
(WB LT)	*East-to-South*	7%	7
(WB THRU)	*East-to-West*	50%	50
(WB RT)	*East-to-North*	43%	43
(SB LT)	*North-to-East*	90%	90
(SB THRU)	*North-to-South*	3%	3
(SB RT)	*North-to-West*	7%	7
(NB LT)	*South-to-West*	40%	40
(NB THRU)	*South-to-North*	38%	38
(NB RT)	*South-to-East*	22%	22

(must be done manually)

Desired Closure: 0.00

PROJECT TRAFFIC FOR SR 40 AT Tymber Creek-pm-5: Breakaway Tr TO Williamson Blvd

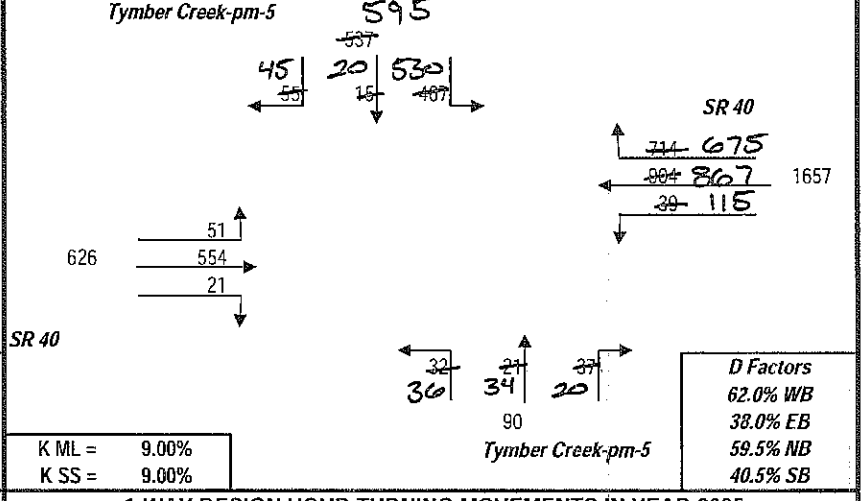
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
59.5% NB
40.5% SB

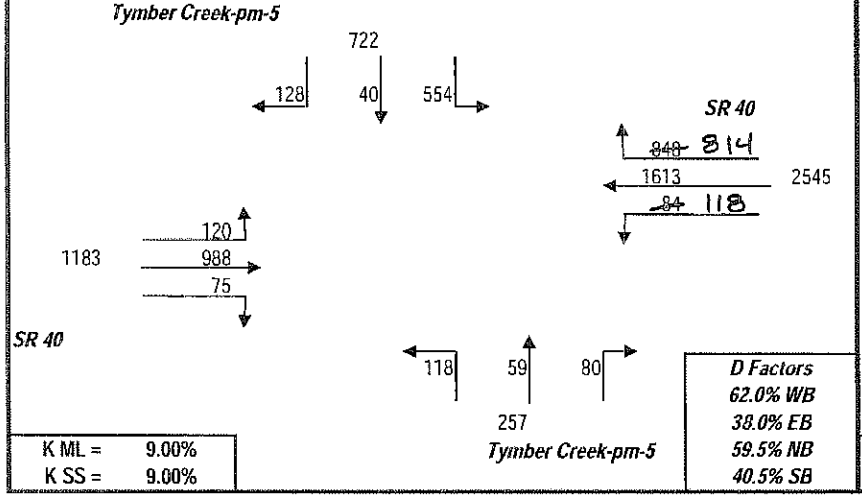
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
59.5% NB
40.5% SB

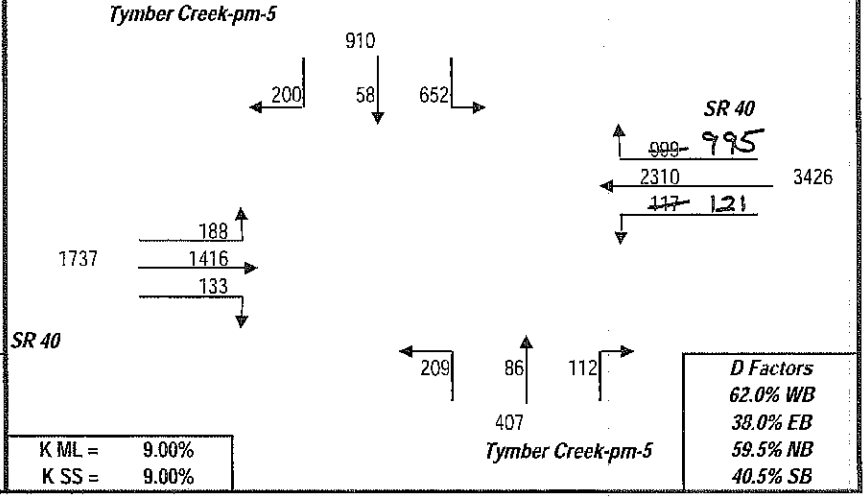
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
59.5% NB
40.5% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
59.5% NB
40.5% SB

TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South? (Enter Yes or No): ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
62.0%	Westbound (WB)	
38.0%	Eastbound (EB)	
Sidestreet		
49.5%	Northbound (NB)	
50.5%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No): ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Rate (Linear)	Rate (Side Street)
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	23400	23600	1100	800	49100
2035	61400	61400	1100	1500	125400

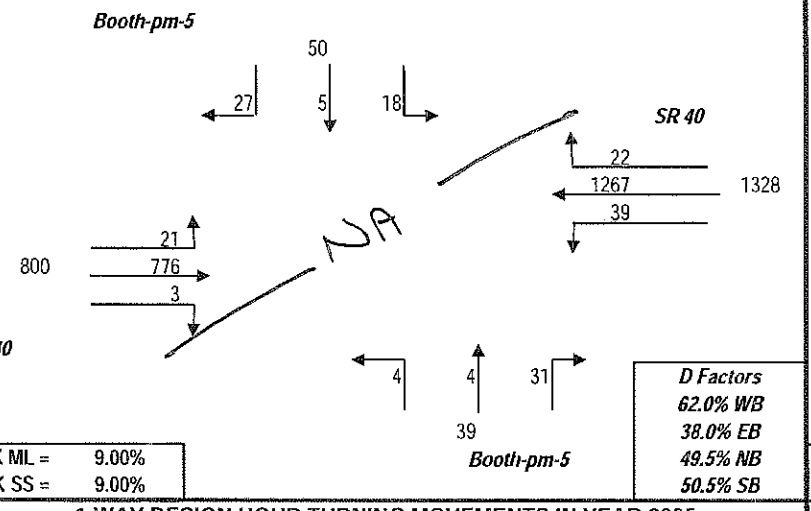
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	1%	1
(EB THRU)	*West-to-East*	99%	99
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	2%	2
(WB THRU)	*East-to-West*	98%	98
(WB RT)	*East-to-North*	0%	0
(SB LT)	*North-to-East*	79%	79
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	21%	21
(NB LT)	*South-to-West*	21%	21
(NB THRU)	*South-to-North*	5%	5
(NB RT)	*South-to-East*	74%	74

(must be done manually)

Desired Closure: 0.10

PROJECT TRAFFIC FOR SR 40 AT Booth-pm-5: Breakaway Tr TO Williamson Blvd

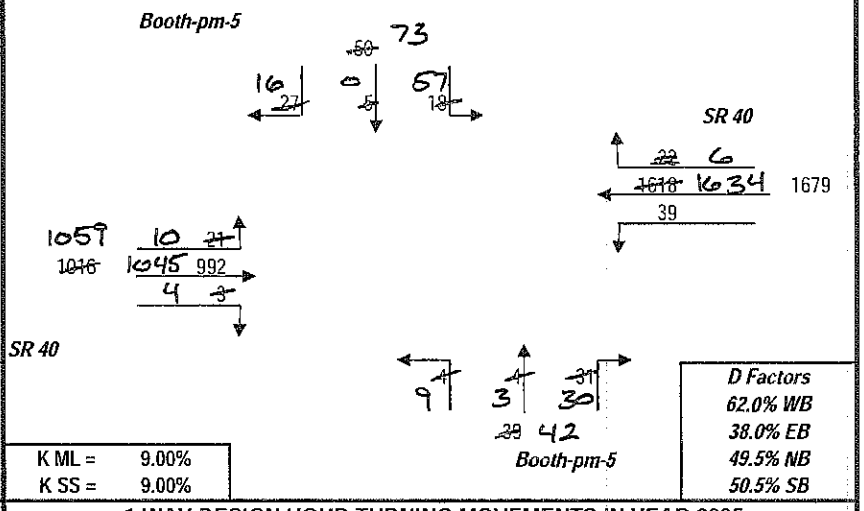
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
49.5% NB
50.5% SB

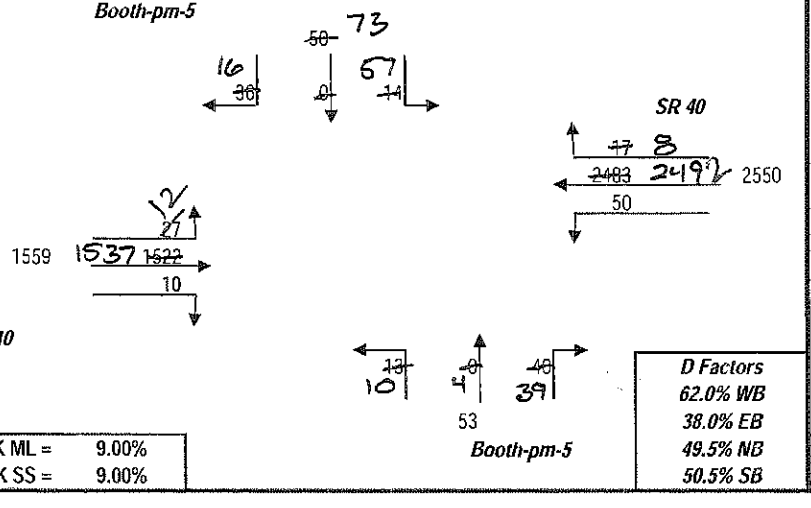
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
49.5% NB
50.5% SB

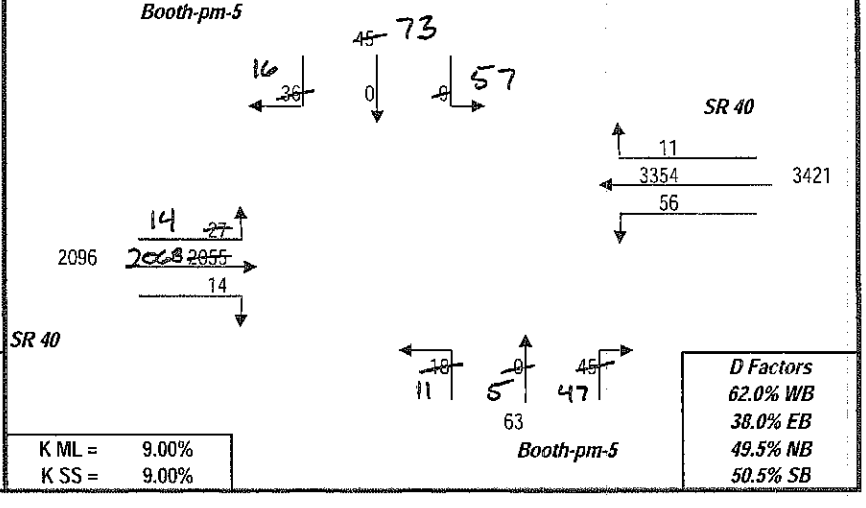
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
49.5% NB
50.5% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
49.5% NB
50.5% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
[redacted]

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors		
Mainline		
62.0%	Westbound (WB)	
38.0%	Eastbound (EB)	
Sidestreet		
44.3%	Northbound (NB)	
55.7%	Southbound (SB)	

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

[redacted]

Base		
Opening		
Mid		
Design		

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

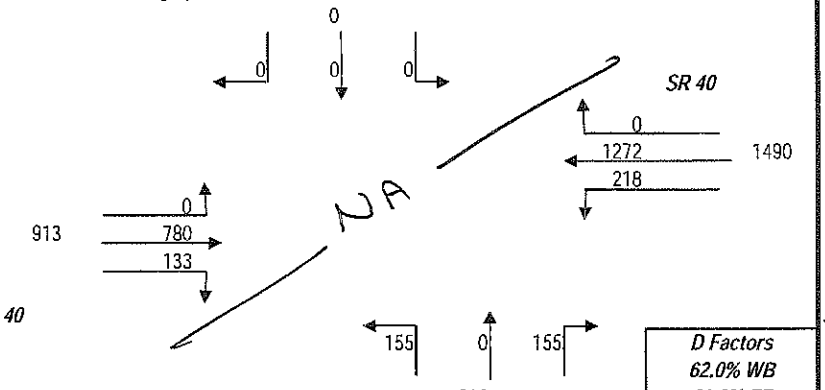
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	26700	26700	0	7800	61200
2035	63900	63900	0	8800	136600

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**	
(EB LT)	*West-to-North*	0%	0	
(EB THRU)	*West-to-East*	97%	97	
(EB RT)	*West-to-South*	3%	3	
(WB LT)	*East-to-South*	10%	10	(must be done manually)
(WB THRU)	*East-to-West*	90%	90	
(WB RT)	*East-to-North*	0%	0	
(SB LT)	*North-to-East*	0%	0	
(SB THRU)	*North-to-South*	100%	100	
(SB RT)	*North-to-West*	0%	0	
(NB LT)	*South-to-West*	34%	34	
(NB THRU)	*South-to-North*	0%	0	
(NB RT)	*South-to-East*	66%	66	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Interchange-pm-5: Breakaway Tr TO Williamson Blvd

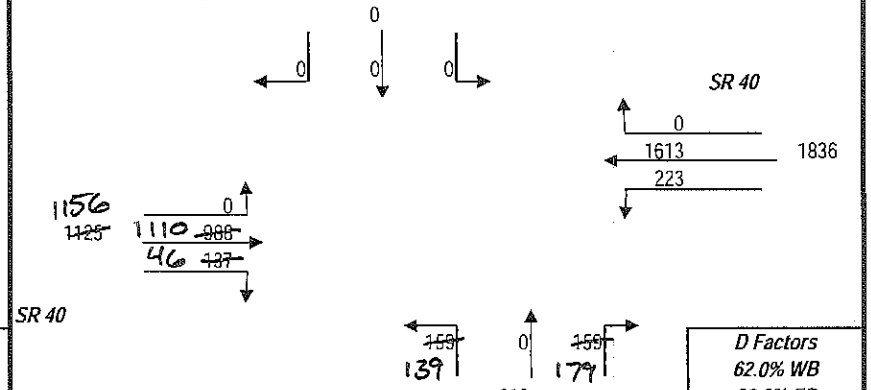
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
44.3% NB
55.7% SB

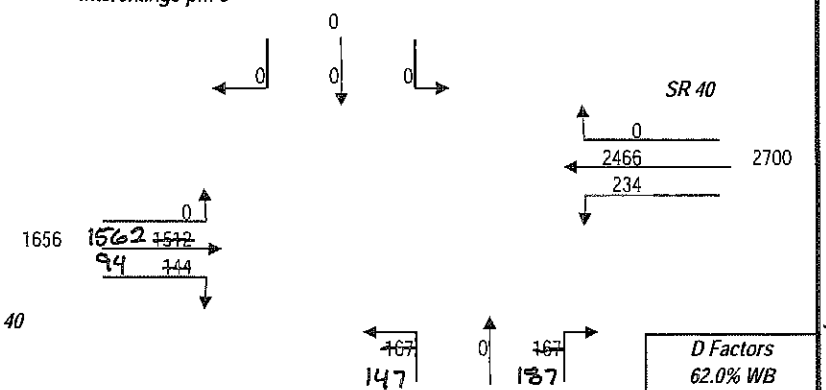
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
44.3% NB
55.7% SB

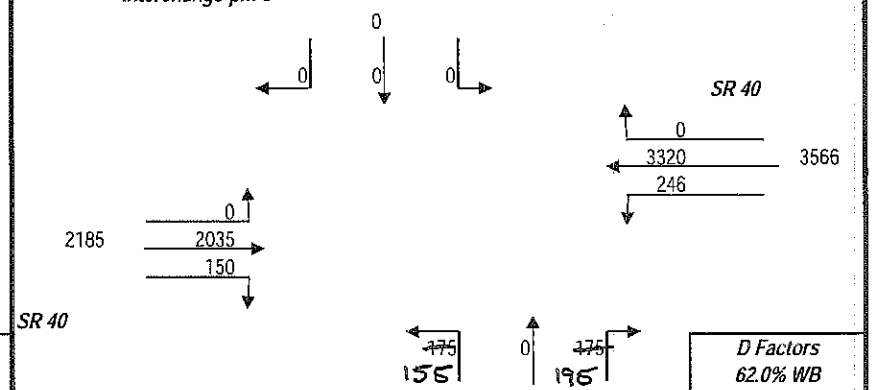
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
44.3% NB
55.7% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
62.0% WB
38.0% EB
44.3% NB
55.7% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date:
Highway:
Intersection:
From:
To:
County:

Is the Mainline Oriented North/South?

Enter Yes or No
- ○ Yes
- ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.09%

D Factors	*Mainline*	
	62.0%	Westbound (WB)
	38.0%	Eastbound (EB)
	Sidestreet	
	55.0%	Northbound (NB)
	45.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
- ◉ Yes
- ○ No

If "Yes" go to cell C47 | If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Growth Rate
Base		
Opening		
Mid		
Design		

Mainline Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Side Street Growth Function
- ◉ Linear
- ○ Exponential
- ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	27700	29700	7800	18600	83800
2035	65900	66000	12800	25900	169700

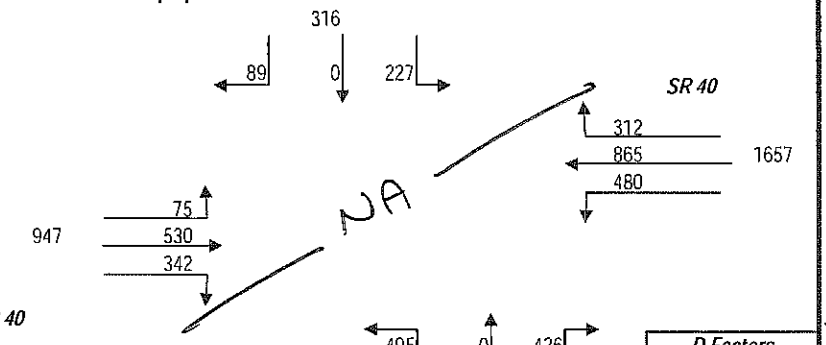
		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2011
(EB LT)	*West-to-North*	5%	5
(EB THRU)	*West-to-East*	57%	57
(EB RT)	*West-to-South*	35%	35
(WB LT)	*East-to-South*	25%	25
(WB THRU)	*East-to-West*	56%	56
(WB RT)	*East-to-North*	19%	19
(SB LT)	*North-to-East*	67%	67
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	33%	33
(NB LT)	*South-to-West*	57%	57
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	43%	43

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT I-95 Ramps-pm-5: Breakaway Tr TO Williamson Blvd

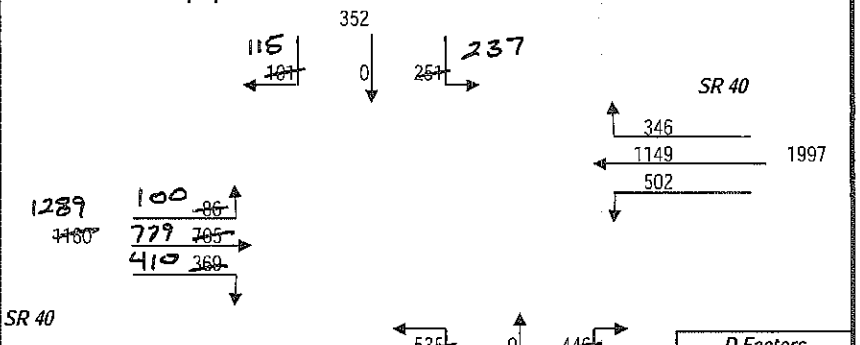
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors	
62.0%	WB
38.0%	EB
55.0%	NB
45.0%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

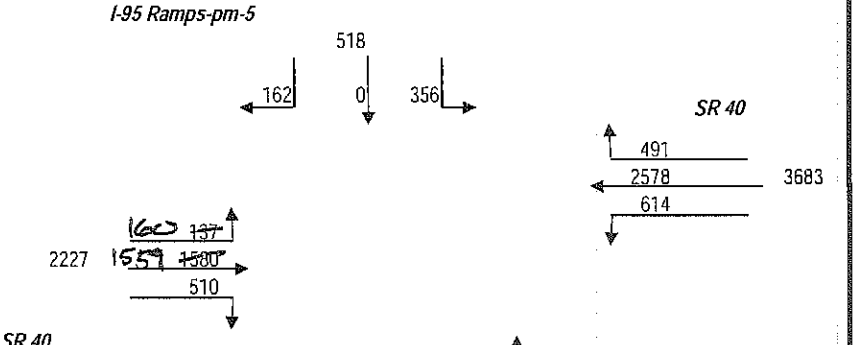
D Factors	
62.0%	WB
38.0%	EB
55.0%	NB
45.0%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025

K ML =	9.00%
K SS =	9.00%

D Factors	
62.0%	WB
38.0%	EB
55.0%	NB
45.0%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
62.0%	WB
38.0%	EB
55.0%	NB
45.0%	SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 18-Nov-11
[illegible]

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	Mainline	D Factors	*Mainline*	
	9.00%		62.0%	Westbound (WB)
	Sidestreet		38.0%	Eastbound (EB)
	9.00%		*Sidestreet*	
			60.0%	Northbound (NB)
			70.0%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

[illegible]

	Year	Mainline	Sidestreet
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West:	*From East:*	*From North:*	*From South:*	
EB Approach	*WB Approach*	*SB Approach*	*NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

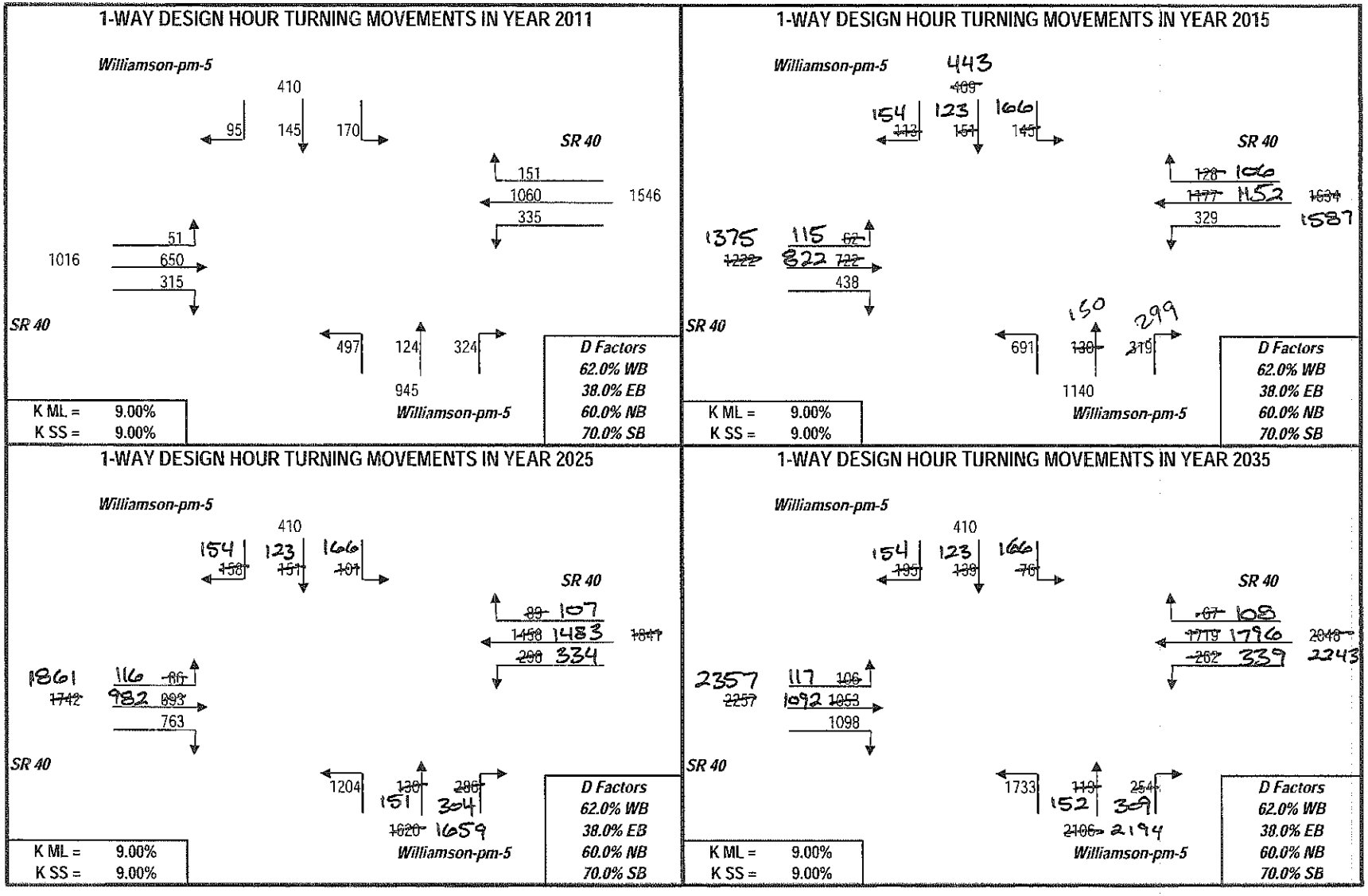
Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West:	*From East:*	*From North:*	*From South:*	
	EB Approach	*WB Approach*	*SB Approach*	*NB Approach*	***TOTAL***
2011	29700	27700	6500	17500	81400
2035	66000	36600	6500	39000	148300

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**	
(EB LT)	*West-to-North*	9%	9	
(EB THRU)	*West-to-East*	62%	62	
(EB RT)	*West-to-South*	29%	29	
(WB LT)	*East-to-South*	16%	16	(must be done manually)
(WB THRU)	*East-to-West*	75%	75	
(WB RT)	*East-to-North*	9%	9	
(SB LT)	*North-to-East*	37%	37	
(SB THRU)	*North-to-South*	28%	28	
(SB RT)	*North-to-West*	35%	35	
(NB LT)	*South-to-West*	68%	68	
(NB THRU)	*South-to-North*	15%	15	
(NB RT)	*South-to-East*	17%	17	

Desired Closure: 0.01

PROJECT TRAFFIC FOR SR 40 AT Williamson-pm-5: Breakaway Tr TO Williamson Blvd



TURNS5 ANALYSIS SHEET - INPUT

Analyst:	PR
Date:	18-Nov-11
Highway:	Williamson-pm-5
Intersection:	Hand Ave
From:	SR 40
To:	LPGA
County:	Volusia

Is the Mainline Oriented North/South? Enter Yes or No — (●) Yes ( ) No

K Factors

Mainline	Sidestreet
9.00%	9.00%

D Factors

Mainline	
60.0%	Northbound (NB)
40.0%	Southbound (SB)
Sidestreet	
51.5%	Westbound (WB)
48.5%	Eastbound (EB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) Enter Yes or No — (●) Yes ( ) No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base	
Opening	
Mid	
Design	

Mainline Growth Function — (●) Linear ( ) Exponential ( ) Decaying

Side Street Growth Function — (●) Linear ( ) Exponential ( ) Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2015	0	10400	21100	16800	48300
2035	0	22100	39000	31100	92200

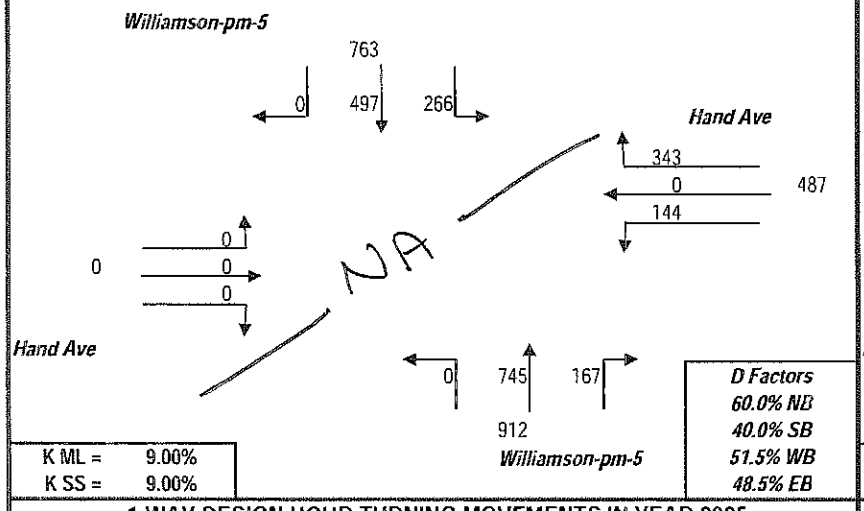
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**
(EB LT)	*West-to-North*	0%	0
(EB THRU)	*West-to-East*	100%	0
(EB RT)	*West-to-South*	0%	0
(WB LT)	*East-to-South*	30%	30
(WB THRU)	*East-to-West*	0%	0
(WB RT)	*East-to-North*	70%	70
(SB LT)	*North-to-East*	34%	34
(SB THRU)	*North-to-South*	66%	66
(SB RT)	*North-to-West*	0%	0
(NB LT)	*South-to-West*	0%	0
(NB THRU)	*South-to-North*	84%	84
(NB RT)	*South-to-East*	16%	16

(must be done manually)

Desired Closure: 0.00

PROJECT TRAFFIC FOR Williamson-pm-5 AT Hand Ave: SR 40 TO LPGA

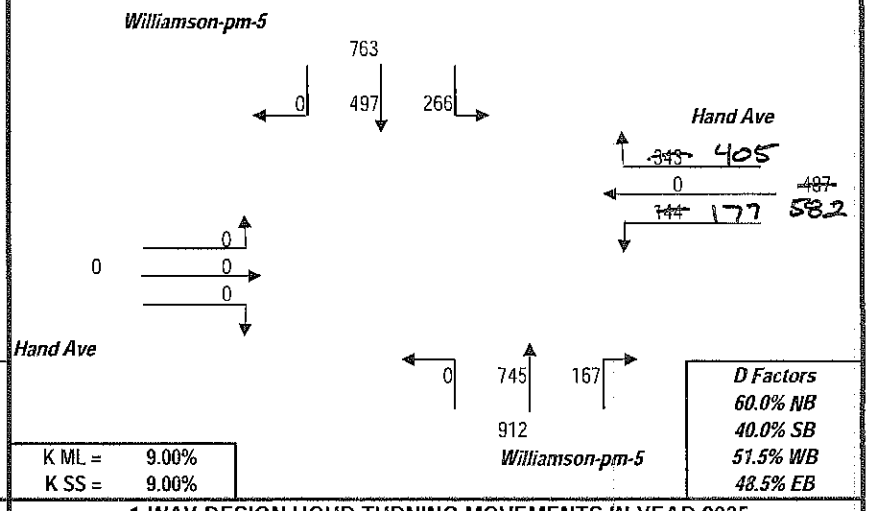
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
60.0% NB
40.0% SB
51.5% WB
48.5% EB

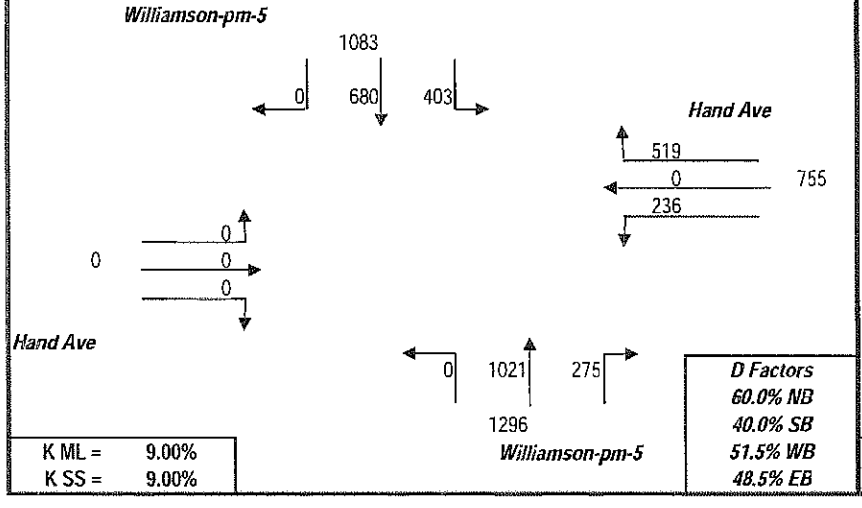
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
60.0% NB
40.0% SB
51.5% WB
48.5% EB

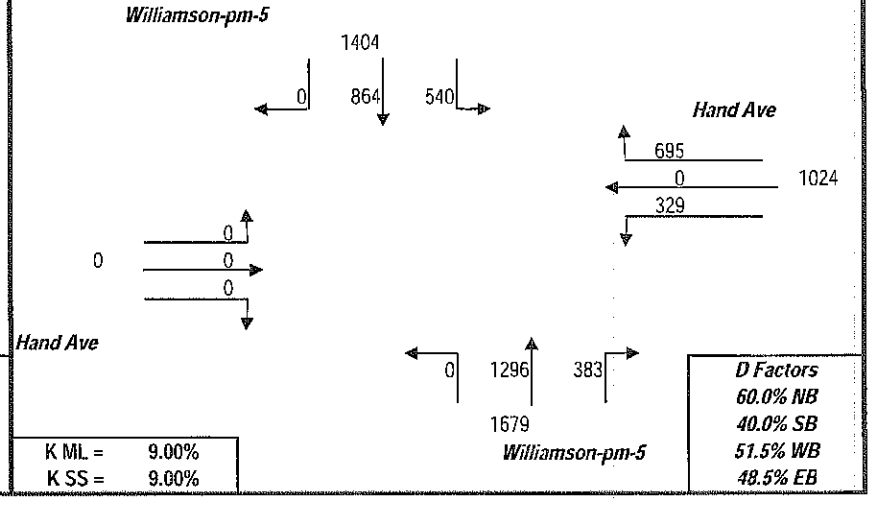
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
60.0% NB
40.0% SB
51.5% WB
48.5% EB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
60.0% NB
40.0% SB
51.5% WB
48.5% EB

TURNS5 ANALYSIS SHEET - INPUT

Is the Mainline Oriented North/South? (Enter Yes or No): ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
54.5%	Westbound (WB)
45.5%	Eastbound (EB)
Sidestreet	
59.5%	Northbound (NB)
40.5%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No): ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Annual Growth Rate
Base		
Opening		
Mid		
Design		

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2016
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

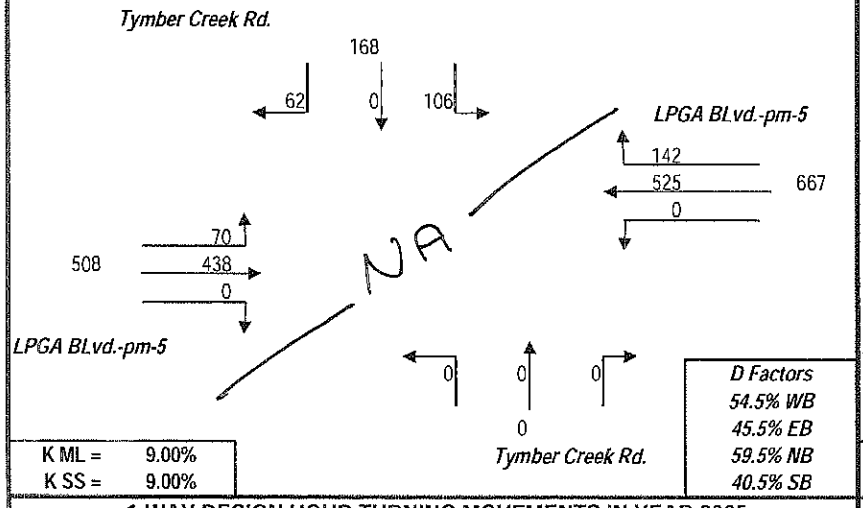
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2015	12300	13500	4500	0	30300
2035	23000	27600	17200	0	67800

		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**	
(EB LT)	*West-to-North*	37%	37	
(EB THRU)	*West-to-East*	63%	63	
(EB RT)	*West-to-South*	0%	0	
(WB LT)	*East-to-South*	0%	0	(must be done manually)
(WB THRU)	*East-to-West*	78%	78	
(WB RT)	*East-to-North*	22%	22	
(SB LT)	*North-to-East*	32%	32	
(SB THRU)	*North-to-South*	0%	0	
(SB RT)	*North-to-West*	68%	68	
(NB LT)	*South-to-West*	0%	0	
(NB THRU)	*South-to-North*	100%	100	
(NB RT)	*South-to-East*	0%	0	

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA BLvd.-pm-5 AT Tymber Creek Rd.: TO

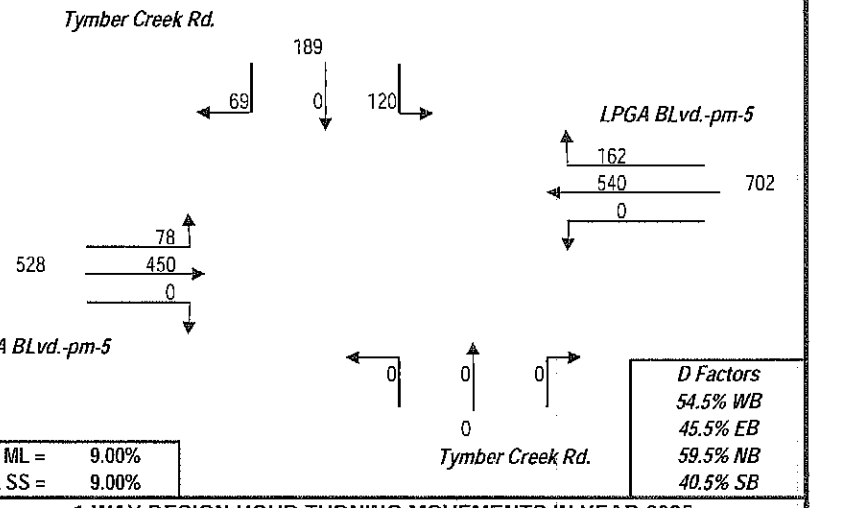
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
54.5%	WB
45.5%	EB
59.5%	NB
40.5%	SB

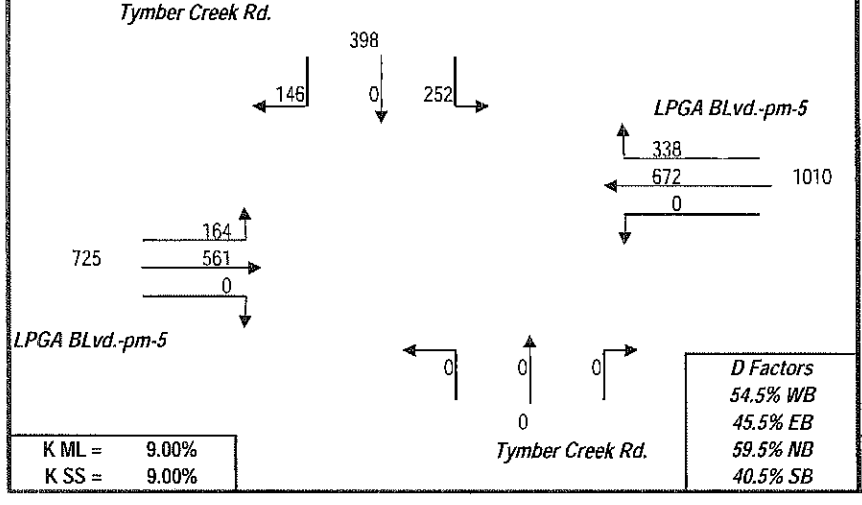
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2016



K ML =	9.00%
K SS =	9.00%

D Factors	
54.5%	WB
45.5%	EB
59.5%	NB
40.5%	SB

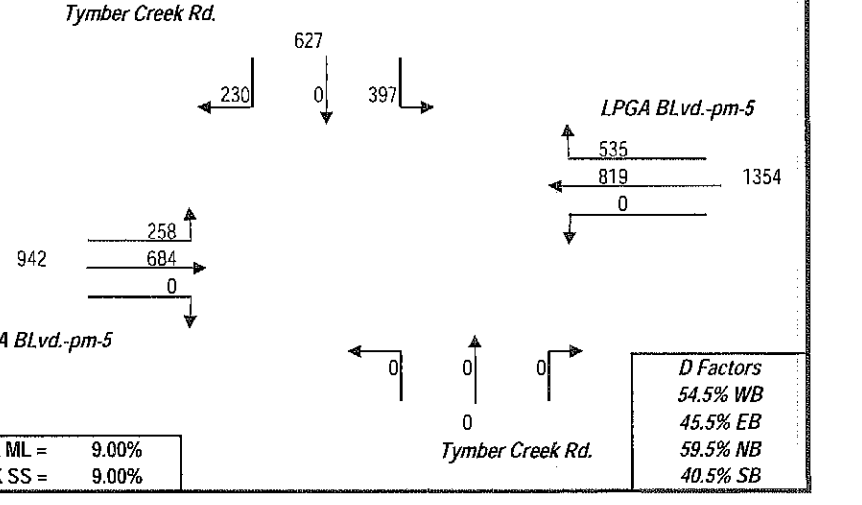
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
54.5%	WB
45.5%	EB
59.5%	NB
40.5%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
54.5%	WB
45.5%	EB
59.5%	NB
40.5%	SB

TURNS5 ANALYSIS SHEET - INPUT

[redacted]

Is the Mainline Oriented North/South? (Enter Yes or No): ○ Yes ◉ No

K Factors	
Mainline	9.00%
Sidestreet	9.00%

D Factors	
Mainline	
54.5%	Westbound (WB)
45.5%	Eastbound (EB)
Sidestreet	
55.2%	Northbound (NB)
44.8%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No: ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Rate (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2011
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2011	10700	13700	0	3800	28200
2035	27600	29600	0	15900	73100

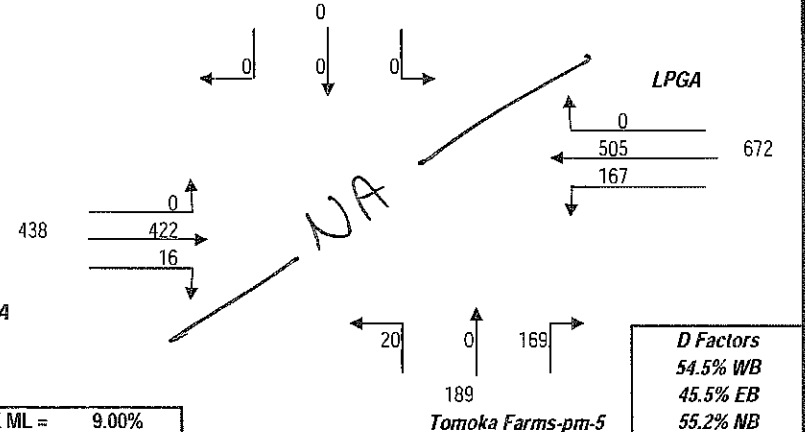
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2011**
(EB LT)	*West-to-North*	0%	0
(EB THRU)	*West-to-East*	99%	99
(EB RT)	*West-to-South*	1%	1
(WB LT)	*East-to-South*	15%	15
(WB THRU)	*East-to-West*	82%	82
(WB RT)	*East-to-North*	3%	3
(SB LT)	*North-to-East*	0%	0
(SB THRU)	*North-to-South*	100%	0
(SB RT)	*North-to-West*	0%	0
(NB LT)	*South-to-West*	8%	8
(NB THRU)	*South-to-North*	1%	1
(NB RT)	*South-to-East*	91%	91

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT Tomoka Farms-pm-5: Williamson TO Tymber Creek Ext

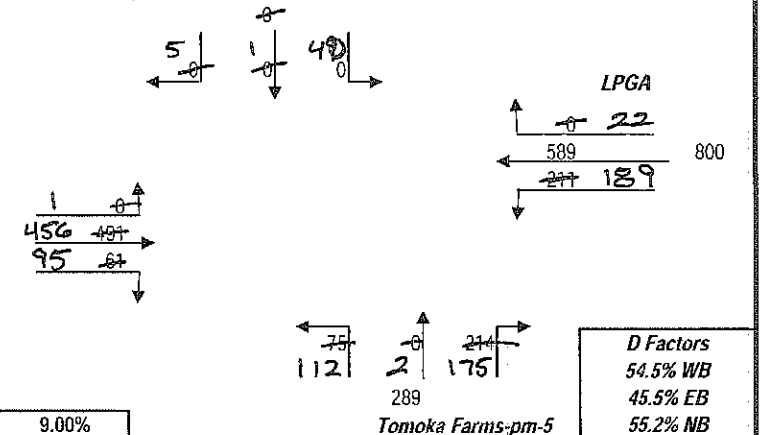
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2011



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
55.2% NB
44.8% SB

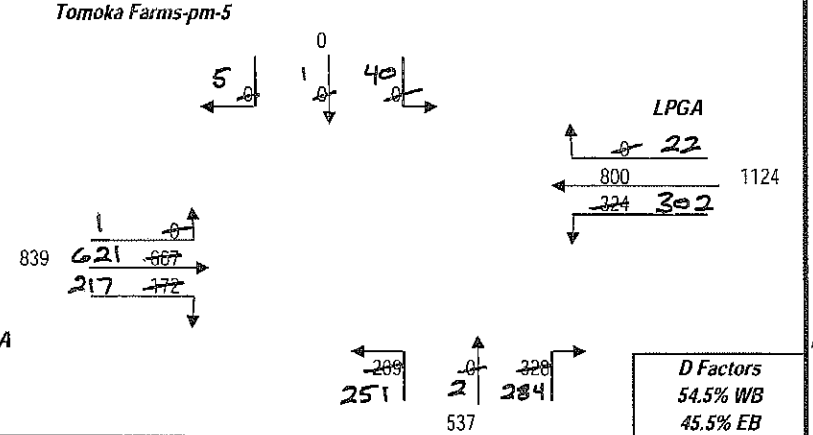
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
55.2% NB
44.8% SB

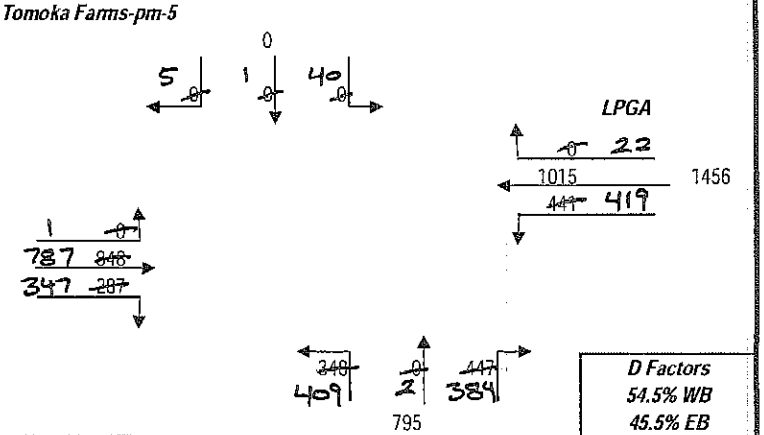
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
55.2% NB
44.8% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
55.2% NB
44.8% SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst:	PR
Date:	18-Nov-11
Highway:	LPGA
Intersection:	I-95-pm-5
From:	Williamson
To:	Tymber Creek Ext
County:	Volusia

Is the Mainline Oriented North/South? (Enter Yes or No) ○ Yes ◉ No

K Factors	Mainline
	9.00%
	Sidestreet
	9.00%

D Factors	*Mainline*	
	54.5%	Westbound (WB)
	45.5%	Eastbound (EB)
	Sidestreet	
	62.4%	Northbound (NB)
	37.6%	Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) ◉ Yes ○ No

If "Yes" go to cell C47 — If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base			
Opening			
Mid			
Design			

Mainline Growth Function: ◉ Linear ○ Exponential ○ Decaying

Side Street Growth Function: ◉ Linear ○ Exponential ○ Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	***TOTAL***
2015	16400	29100	14700	9700	69900
2035	29600	44600	21900	15500	111600

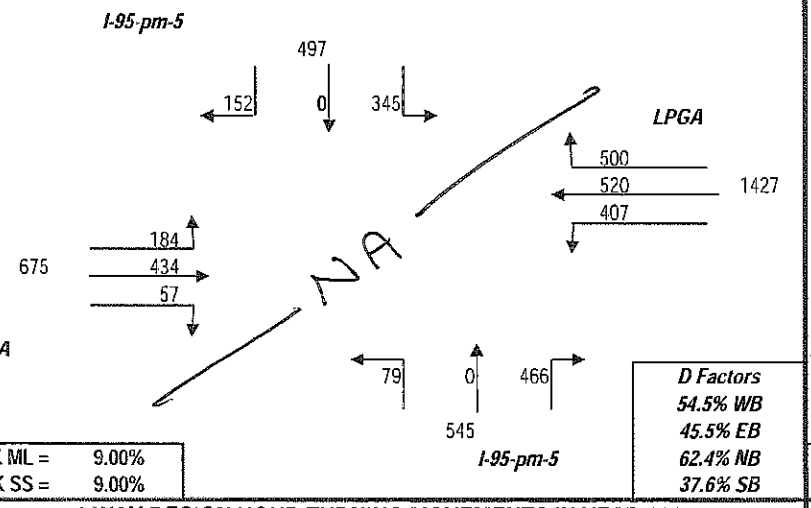
		1st Guess Turning %'s for AADT Balancing	**Actual/Counted Traffic for 2015**
(EB LT)	*West-to-North*	30%	30
(EB THRU)	*West-to-East*	60%	60
(EB RT)	*West-to-South*	10%	10
(WB LT)	*East-to-South*	30%	30
(WB THRU)	*East-to-West*	30%	30
(WB RT)	*East-to-North*	40%	40
(SB LT)	*North-to-East*	62%	62
(SB THRU)	*North-to-South*	0%	0
(SB RT)	*North-to-West*	38%	38
(NB LT)	*South-to-West*	16%	16
(NB THRU)	*South-to-North*	0%	0
(NB RT)	*South-to-East*	84%	84

(must be done manually)

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT I-95-pm-5: Williamson TO Tymber Creek Ext

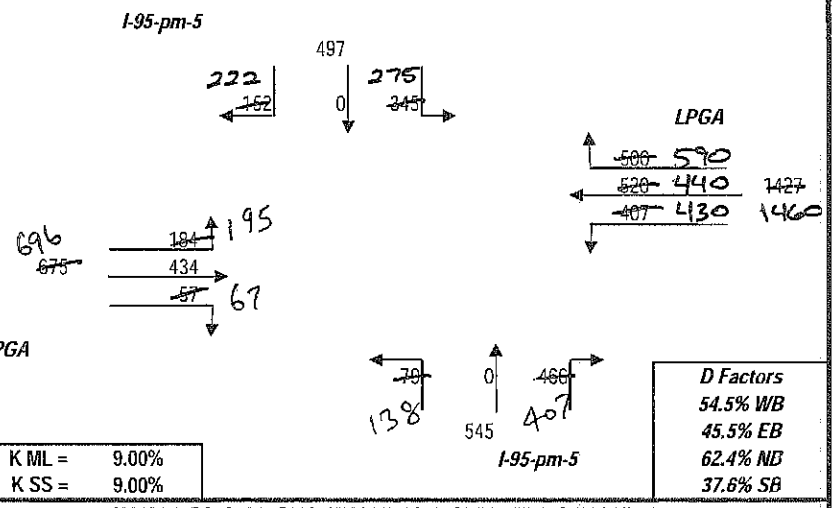
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
54.5%	WB
45.5%	EB
62.4%	NB
37.6%	SB

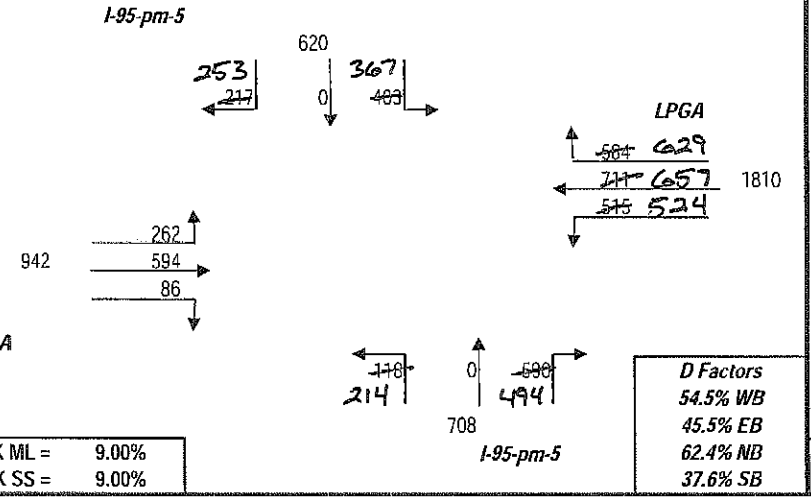
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors	
54.5%	WB
45.5%	EB
62.4%	NB
37.6%	SB

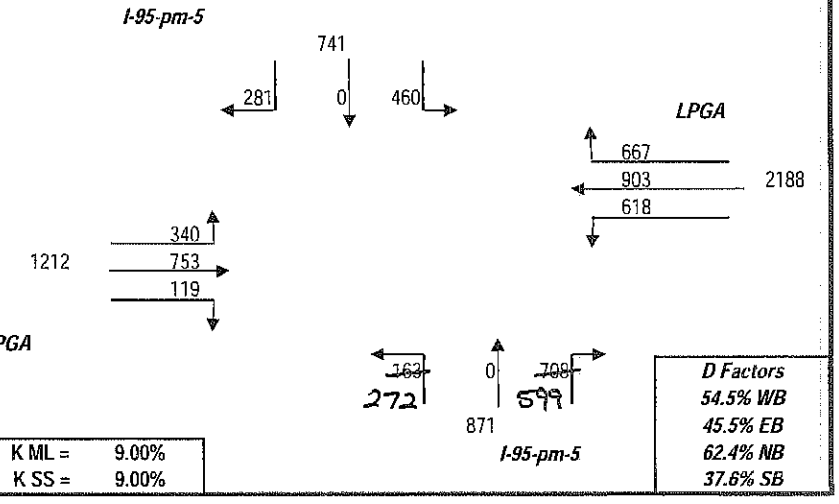
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors	
54.5%	WB
45.5%	EB
62.4%	NB
37.6%	SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors	
54.5%	WB
45.5%	EB
62.4%	NB
37.6%	SB

TURNS5 ANALYSIS SHEET - INPUT

Analyst: PR
Date: 22-Nov-11
Highway: LPGA
Intersection: Williamson-pm-5
From: Williamson
To: Tymber Creek Ext
County: Volusia

Is the Mainline Oriented North/South? (Enter Yes or No) — Yes / No: No

K Factors
Mainline: 9.00%
Sidestreet: 9.00%

D Factors
Mainline
54.5% Westbound (WB)
45.5% Eastbound (EB)
Sidestreet
60.0% Northbound (NB)
40.0% Southbound (SB)

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N) (Enter Yes or No) — Yes / No: Yes

If "Yes" go to cell C47 If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

	Year	Rate (1.0% = 0.01) Mainline	Side Street
Base			
Opening			
Mid			
Design			

Mainline Growth Function: Linear / Exponential / Decaying
Side Street Growth Function: Linear / Exponential / Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
0	0	0	0	0

Enter Project and Model Years

	Year
Base	2015
Opening	2015
Mid	2025
Design	2035
Model	2035

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

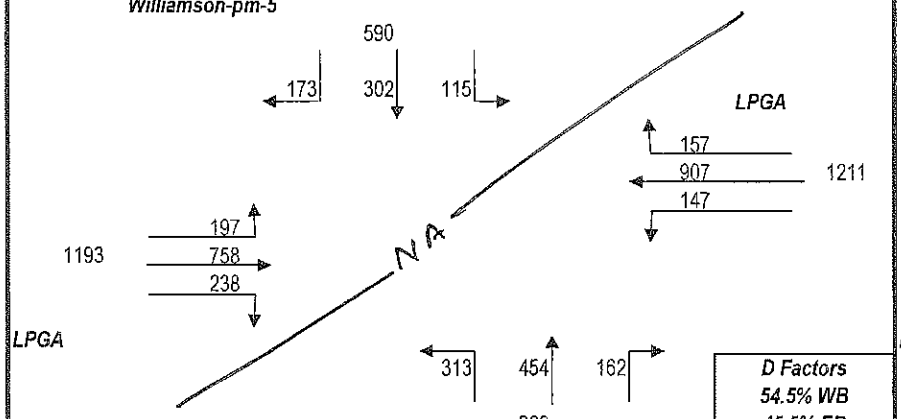
	From West: EB Approach	*From East: WB Approach*	*From North: SB Approach*	*From South: NB Approach*	*TOTAL*
2015	29100	24700	16500	17200	87500
2035	44600	48700	34200	29900	157400

		1st Guess Turning %'s for AADT Balancing	Actual/Counted Traffic for 2015	
(EB LT)	*West-to-North*	19%	19	
(EB THRU)	*West-to-East*	66%	66	
(EB RT)	*West-to-South*	15%	15	
(WB LT)	*East-to-South*	10%	10	(must be done manually)
(WB THRU)	*East-to-West*	80%	80	
(WB RT)	*East-to-North*	10%	10	
(SB LT)	*North-to-East*	22%	22	
(SB THRU)	*North-to-South*	48%	48	
(SB RT)	*North-to-West*	30%	30	
(NB LT)	*South-to-West*	44%	44	
(NB THRU)	*South-to-North*	41%	41	
(NB RT)	*South-to-East*	15%	15	

Desired Closure: 0.01

PROJECT TRAFFIC FOR LPGA AT Williamson-pm-5: Williamson TO Tymber Creek Ext

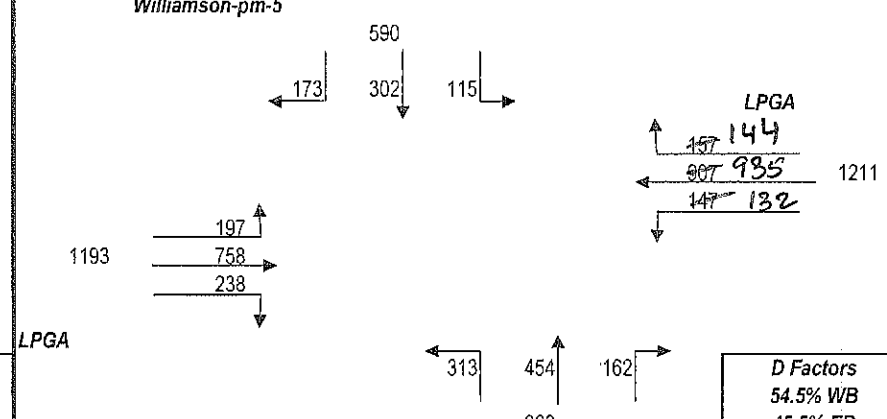
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
60.0% NB
40.0% SB

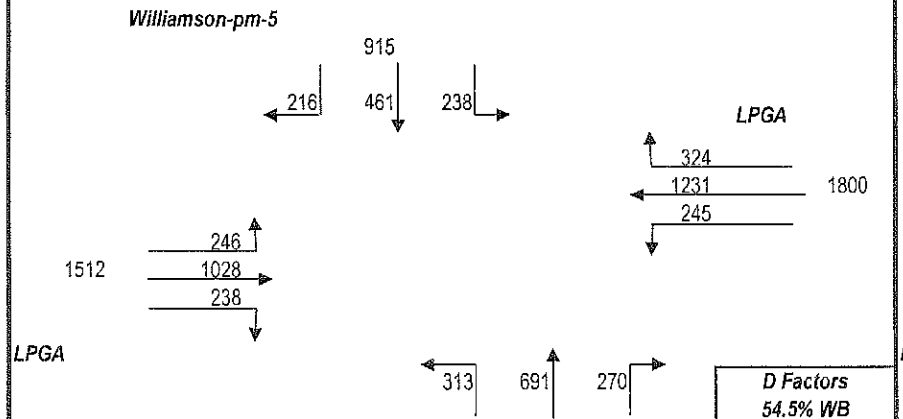
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2015



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
60.0% NB
40.0% SB

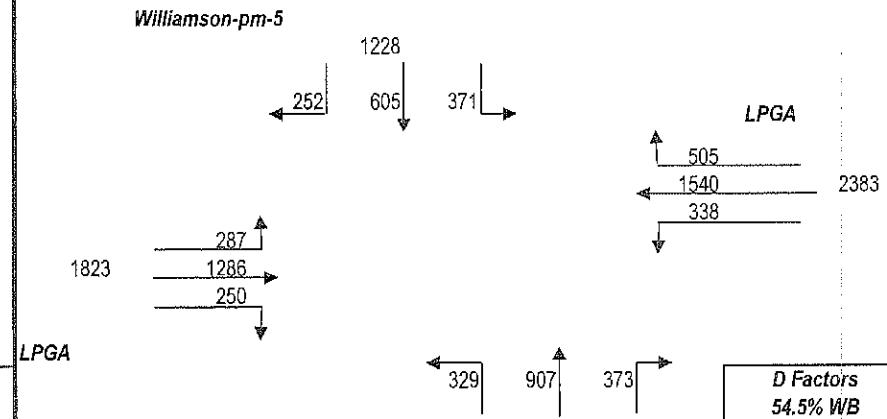
1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2025



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
60.0% NB
40.0% SB

1-WAY DESIGN HOUR TURNING MOVEMENTS IN YEAR 2035



K ML =	9.00%
K SS =	9.00%

D Factors
54.5% WB
45.5% EB
60.0% NB
40.0% SB

Appendix P

Signal Warrant Analysis Sheets (2015 & 2025) for LPGA Boulevard & Tomoka Farms Road

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Daytona Beach** Engineer: **SK**
County: **Volusia** Date: **June 21, 2011**

Major Street: **LPGA Blvd EB** Lanes: **1** Critical Approach Speed: **45**
Minor Street: **LPGA Blvd WB Left** Lanes: **1**
Comments: **Design Year 2015 - No Build**

Volume Level Criteria

1. Is the critical speed of major street traffic > 70 km/h (40 mph) ? ☟ Yes ☐ No
2. Is the intersection in a built-up area of isolated community of <10,000 population? ☐ Yes ☟ No

If Question 1 or 2 above is answered "Yes", then use "70%" volume level ☟ 70% ☐ 100%

WARRANT 1 - EIGHT-HOUR VEHICULAR VOLUME

Applicable: ☟ Yes ☐ No
Satisfied: ☐ Yes ☟ No

Warrant 1 is satisfied if Condition A or Condition B is "100%" satisfied.
Warrant is also satisfied if both Condition A and Condition B are "80%" satisfied for major streets 40 mph or less, or "56%" satisfied for major streets greater than 40 mph.

Condition A - Minimum Vehicular Volume

100% (70%) Satisfied: ☐ Yes ☟ No
56% or 80% Satisfied: ☐ Yes ☟ No

(volumes in veh/hr)	Minimum Requirements (80% Shown in Brackets)				Eight Highest Hours							
Approach Lanes	1		2 or more		7-8AM	8-9AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM
Volume Level	100%	70%	100%	70%								
Both Approaches on Major Street	500 (400) [280]	350	600 (480) [336]	420	751	600	411	433	492	604	567	647
Highest Approach on Minor Street	150 (120) [84]	105	200 (160) [112]	140	74	192	77	83	95	109	109	117

Record 8 highest hours and the corresponding volumes in boxes provided. Condition is 100% satisfied if the minimum volumes are met for eight hours. Condition is 80% satisfied if (parenthetical) volumes are met for eight hours. Condition is 56% satisfied if [bracketed] volumes are met for eight hours.

Condition B - Interruption of Continuous Traffic

Condition B is intended for application where the traffic volume is so heavy that traffic on the minor street suffers excessive delay.

Applicable: ☐ Yes ☐ No
Excessive Delay: ☐ Yes ☐ No
100% (70%) Satisfied: ☐ Yes ☐ No
56% or 80% Satisfied: ☐ Yes ☐ No

(volumes in veh/hr)	Minimum Requirements (80% Shown in Brackets)				Eight Highest Hours							
Approach Lanes	1		2 or more		7-8AM	8-9AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM
Volume Level	100%	70%	100%	70%								
Both Approaches on Major Street	750 (600) [420]	525	900 (720) [504]	630	751	600	411	433	492	604	567	647
Highest Approach on Minor Street	75 (60) [42]	53	100 (80) [56]	70	74	192	77	83	95	109	109	117

Record 8 highest hours and the corresponding volumes in boxes provided. Condition is 100% satisfied if the minimum volumes are met for eight hours. Condition is 80% satisfied if (parenthetical) volumes are met for eight hours. Condition is 56% satisfied if [bracketed] volumes are met for eight hours.

Source: Revised from NCHRP Report 457

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Daytona Beach** Engineer: **SK**
County: **Volusia** Date: **June 21, 2011**

Major Street: **LPGA Blvd EB** Lanes: **1** Critical Approach Speed: **45**
Minor Street: **LPGA Blvd WB Left** Lanes: **1**
Comments: **Design Year 2025 - No Build**

Volume Level Criteria

1. Is the critical speed of major street traffic > 70 km/h (40 mph) ? ☑ Yes ☐ No
2. Is the intersection in a built-up area of isolated community of <10,000 population? ☐ Yes ☑ No

If Question 1 or 2 above is answered "Yes", then use "70%" volume level ☑ 70% ☐ 100%

WARRANT 1 - EIGHT-HOUR VEHICULAR VOLUME

Applicable: ☑ Yes ☐ No
Satisfied: ☑ Yes ☐ No

Warrant 1 is satisfied if Condition A or Condition B is "100%" satisfied.
Warrant is also satisfied if both Condition A and Condition B are "80%" satisfied for major streets 40 mph or less, or "56%" satisfied for major streets greater than 40 mph.

Condition A - Minimum Vehicular Volume

100% (70%) Satisfied: ☑ Yes ☐ No
56% or 80% Satisfied: ☑ Yes ☐ No

(volumes in veh/hr)	Minimum Requirements (80% Shown in Brackets)				Eight Highest Hours							
Approach Lanes	1		2 or more		7-8AM	8-9AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM
Volume Level	100%	70%	100%	70%								
Both Approaches on Major Street	500 (400) [280]	350	600 (480) [336]	420	1,149	918	628	663	752	923	867	989
Highest Approach on Minor Street	150 (120) [84]	105	200 (160) [112]	140	110	286	115	124	142	162	162	175

Record 8 highest hours and the corresponding volumes in boxes provided. Condition is 100% satisfied if the minimum volumes are met for eight hours . Condition is 80% satisfied if (parenthetical) volumes are met for eight hours. Condition is 56% satisfied if [bracketed] volumes are met for eight hours.

Condition B - Interruption of Continuous Traffic

Condition B is intended for application where the traffic volume is so heavy that traffic on the minor street suffers excessive delay.

Applicable: ☐ Yes ☐ No
Excessive Delay: ☐ Yes ☐ No
100% (70%) Satisfied: ☐ Yes ☐ No
56% or 80% Satisfied: ☐ Yes ☐ No

(volumes in veh/hr)	Minimum Requirements (80% Shown in Brackets)				Eight Highest Hours							
Approach Lanes	1		2 or more		7-8AM	8-9AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM
Volume Level	100%	70%	100%	70%								
Both Approaches on Major Street	750 (600) [420]	525	900 (720) [504]	630	1,149	918	628	663	752	923	867	989
Highest Approach on Minor Street	75 (60) [42]	53	100 (80) [56]	70	110	286	115	124	142	162	162	175

Record 8 highest hours and the corresponding volumes in boxes provided. Condition is 100% satisfied if the minimum volumes are met for eight hours . Condition is 80% satisfied if (parenthetical) volumes are met for eight hours. Condition is 56% satisfied if [bracketed] volumes are met for eight hours.

Source: Revised from NCHRP Report 457

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Ormond Beach** Engineer: **SK**
County: **Volusia** Date: **November 15, 2011**

Major Street: **SR 40** Lanes: **3** Critical Approach Speed: **>40**
Minor Street: **Cone Road** Lanes: **1**
Comments: **Design Year 2035 - Alt 5**

Volume Level Criteria

1. Is the critical speed of major street traffic > 70 km/h (40 mph) ? ☟ Yes ☐ No
2. Is the intersection in a built-up area of isolated community of <10,000 population? ☐ Yes ☟ No

If Question 1 or 2 above is answered "Yes", then use "70%" volume level ☟ 70% ☐ 100%

WARRANT 1 - EIGHT-HOUR VEHICULAR VOLUME

Applicable: ☟ Yes ☐ No
Satisfied: ☐ Yes ☟ No

Warrant 1 is satisfied if Condition A or Condition B is "100%" satisfied.
Warrant is also satisfied if both Condition A and Condition B are "80%" satisfied for major streets 40 mph or less, or "56%" satisfied for major streets greater than 40 mph.

Condition A - Minimum Vehicular Volume

100% (70%) Satisfied: ☐ Yes ☟ No
56% or 80% Satisfied: ☐ Yes ☟ No

(volumes in veh/hr)	Minimum Requirements (80% Shown in Brackets)				Eight Highest Hours							
Approach Lanes	1		2 or more		7-8AM	8-9AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM
Volume Level	100%	70%	100%	70%								
Both Approaches on Major Street		350	600 (480) [336]	420	1,320	2,615	2,292	1,737	1,855	1,794	2,097	2,892
Highest Approach on Minor Street	150 (120) [84]	105	200 (160) [112]	140	26	52	38	23	24	23	24	33

Record 8 highest hours and the corresponding volumes in boxes provided. Condition is 100% satisfied if the minimum volumes are met for eight hours. Condition is 80% satisfied if (parenthetical) volumes are met for eight hours. Condition is 56% satisfied if [bracketed] volumes are met for eight hours.

Condition B - Interruption of Continuous Traffic

Condition B is intended for application where the traffic volume is so heavy that traffic on the minor street suffers excessive delay.

Applicable: ☐ Yes ☟ No
Excessive Delay: ☐ Yes ☐ No
100% (70%) Satisfied: ☐ Yes ☐ No
56% or 80% Satisfied: ☐ Yes ☐ No

(volumes in veh/hr)	Minimum Requirements (80% Shown in Brackets)				Eight Highest Hours							
Approach Lanes	1		2 or more		7-8AM	8-9AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM
Volume Level	100%	70%	100%	70%								
Both Approaches on Major Street	750 (600) [420]	525	900 (720) [504]	630	1,320	2,615	2,292	1,737	1,855	1,794	2,097	2,892
Highest Approach on Minor Street	75 (60) [42]	53	100 (80) [56]	70	26	52	38	23	24	23	24	33

Record 8 highest hours and the corresponding volumes in boxes provided. Condition is 100% satisfied if the minimum volumes are met for eight hours. Condition is 80% satisfied if (parenthetical) volumes are met for eight hours. Condition is 56% satisfied if [bracketed] volumes are met for eight hours.

Source: Revised from NCHRP Report 457

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Ormond Beach** Engineer: **SK**
County: **Volusia** Date: **November 15, 2011**

Major Street: **SR 40** Lanes: **3** Critical Approach Speed: **>40**
Minor Street: **Shadow Crossing Blvd** Lanes: **1**
Comments: **Design Year 2035 - Alt 5**

Volume Level Criteria

1. Is the critical speed of major street traffic > 70 km/h (40 mph) ? ☟ Yes ☐ No
2. Is the intersection in a built-up area of isolated community of <10,000 population? ☐ Yes ☟ No

If Question 1 or 2 above is answered "Yes", then use "70%" volume level ☟ 70% ☐ 100%

WARRANT 1 - EIGHT-HOUR VEHICULAR VOLUME

Applicable: ☟ Yes ☐ No
Satisfied: ☐ Yes ☟ No

Warrant 1 is satisfied if Condition A or Condition B is "100%" satisfied.
Warrant is also satisfied if both Condition A and Condition B are "80%" satisfied for major streets 40 mph or less, or "56%" satisfied for major streets greater than 40 mph.

Condition A - Minimum Vehicular Volume

100% (70%) Satisfied: ☐ Yes ☟ No
56% or 80% Satisfied: ☐ Yes ☟ No

(volumes in veh/hr)	Minimum Requirements (80% Shown in Brackets)				Eight Highest Hours							
Approach Lanes	1		2 or more		7-8AM	8-9AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM
Volume Level	100%	70%	100%	70%								
Both Approaches on Major Street	500 (400) [280]	350	600 (480) [336]	420	2,529	2,227	1,871	1,805	2,107	2,749	2,980	2,691
Highest Approach on Minor Street	150 (120) [84]	105	200 (160) [112]	140	94	104	80	77	69	71	89	70

Record 8 highest hours and the corresponding volumes in boxes provided. Condition is 100% satisfied if the minimum volumes are met for eight hours. Condition is 80% satisfied if (parenthetical) volumes are met for eight hours. Condition is 56% satisfied if [bracketed] volumes are met for eight hours.

Condition B - Interruption of Continuous Traffic

Condition B is intended for application where the traffic volume is so heavy that traffic on the minor street suffers excessive delay.

Applicable: ☐ Yes ☟ No
Excessive Delay: ☐ Yes ☐ No
100% (70%) Satisfied: ☐ Yes ☐ No
56% or 80% Satisfied: ☐ Yes ☐ No

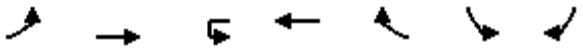
(volumes in veh/hr)	Minimum Requirements (80% Shown in Brackets)				Eight Highest Hours							
Approach Lanes	1		2 or more		7-8AM	8-9AM	12-1 PM	1-2 PM	2-3 PM	3-4 PM	4-5 PM	5-6 PM
Volume Level	100%	70%	100%	70%								
Both Approaches on Major Street	750 (600) [420]	525	900 (720) [504]	630	2,529	2,227	1,871	1,805	2,107	2,749	2,980	2,691
Highest Approach on Minor Street	75 (60) [42]	53	100 (80) [56]	70	94	104	80	77	69	71	89	70

Record 8 highest hours and the corresponding volumes in boxes provided. Condition is 100% satisfied if the minimum volumes are met for eight hours. Condition is 80% satisfied if (parenthetical) volumes are met for eight hours. Condition is 56% satisfied if [bracketed] volumes are met for eight hours.

Source: Revised from NCHRP Report 457

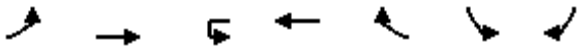
Appendix Q

Synchro Output Sheets (Intersection & Roadway Analysis) - No Build Alternative



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	10	571	0	345	10	45	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3424	0	1777	0
Flt Permitted	0.950					0.957	
Satd. Flow (perm)	1719	3438	1810	3424	0	1777	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	11	601	0	374	0	52	0
Sign Control		Free		Free		Stop	

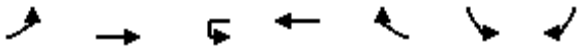
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	10	571	0	345	10	45	5
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	601	0	363	11	47	5
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	374		0			690	187
vC1, stage 1 conf vol						368	
vC2, stage 2 conf vol						322	
vCu, unblocked vol	374		0			690	187
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	99		0			92	99
cM capacity (veh/h)	1160		0			570	827

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	11	301	301	242	132	0	53
Volume Left	11	0	0	0	0	0	47
Volume Right	0	0	0	0	11	0	5
cSH	1160	1700	1700	1700	1700	1700	589
Volume to Capacity	0.01	0.18	0.18	0.14	0.08	0.00	0.09
Queue Length 95th (ft)	1	0	0	0	0	0	6
Control Delay (s)	8.1	0.0	0.0	0.0	0.0	0.0	11.7
Lane LOS	A						B
Approach Delay (s)	0.1			0.0			11.7
Approach LOS							B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	25.8%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	22	608	0	373	21	33	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3411	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3411	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	23	640	0	415	0	35	23
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	22	608	0	373	21	33	22
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	23	640	0	393	22	35	23
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	415		0			770	207
vC1, stage 1 conf vol						404	
vC2, stage 2 conf vol						366	
vCu, unblocked vol	415		0			770	207
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	98		0			93	97
cM capacity (veh/h)	1120		0			533	802

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	23	320	320	262	153	0	58
Volume Left	23	0	0	0	0	0	35
Volume Right	0	0	0	0	22	0	23
cSH	1120	1700	1700	1700	1700	1700	889
Volume to Capacity	0.02	0.19	0.19	0.15	0.09	0.00	0.07
Queue Length 95th (ft)	1	0	0	0	0	0	4
Control Delay (s)	8.3	0.0	0.0	0.0	0.0	0.0	11.2
Lane LOS	A						B
Approach Delay (s)	0.3			0.0			11.2
Approach LOS							B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	28.3%	ICU Level of Service	A
Analysis Period (min)	15		

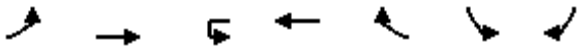
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	20	616	0	359	68	142	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1772	0
Flt Permitted	0.950					0.958	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1772	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	21	648	0	378	72	170	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	20	616	0	359	68	142	20
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	21	648	0	378	72	149	21
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	378		0			744	189
vC1, stage 1 conf vol						378	
vC2, stage 2 conf vol						366	
vCu, unblocked vol	378		0			744	189
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	98		0			73	97
cM capacity (veh/h)	1156		0			545	824

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	21	324	324	189	189	72	0	171
Volume Left	21	0	0	0	0	0	0	149
Volume Right	0	0	0	0	0	72	0	21
cSH	1156	1700	1700	1700	1700	1700	1700	568
Volume to Capacity	0.02	0.19	0.19	0.11	0.11	0.04	0.00	0.30
Queue Length 95th (ft)	1	0	0	0	0	0	0	25
Control Delay (s)	8.2	0.0	0.0	0.0	0.0	0.0	0.0	14.0
Lane LOS	A							B
Approach Delay (s)	0.3			0.0				14.0
Approach LOS								B

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	32.8%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	28	826	2	504	99	175	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1719	3438	1538	1787	1599
Flt Permitted	0.455		0.312			0.950	
Satd. Flow (perm)	823	3438	565	3438	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					104		32
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	29	869	2	531	104	184	32
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		6		2		8	
Permitted Phases	6		2		2		8
Total Split (s)	83.0	83.0	83.0	83.0	83.0	17.0	17.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	4.0
Act Effct Green (s)	18.1	18.1	18.1	18.1	18.1	9.9	9.9
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.48	0.26	0.26
v/c Ratio	0.07	0.53	0.01	0.32	0.13	0.40	0.07
Control Delay	6.4	8.6	5.5	7.0	2.2	14.9	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.4	8.6	5.5	7.0	2.2	14.9	5.9
LOS	A	A	A	A	A	B	A
Approach Delay		8.5		6.2		13.5	
Approach LOS		A		A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 38.1			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 8.3		Intersection LOS: A	
Intersection Capacity Utilization 41.3%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	6	85	882	20	45	40	510	369	29	29	37	790
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		1		0		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	1719	3428	0	0	1719	3438	1538	1787	1723	0	3303
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	1719	3428	0	0	1719	3438	1538	1787	1723	0	3303
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2					388		32		
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	95	949	0	0	89	537	388	31	70	0	832
Turn Type	Prot	Prot	NA		Prot	Prot	NA	Perm	Split	NA		Split
Protected Phases	1	1	6		5	5	2		8	8		4
Permitted Phases								2				
Total Split (s)	36.0	36.0	92.0	0.0	10.0	10.0	66.0	66.0	14.0	14.0	0.0	34.0
Total Lost Time (s)	5.0	5.0	6.0	4.0	5.0	5.0	6.0	6.0	6.0	6.0	4.0	6.0
Act Effct Green (s)		11.8	36.4			5.1	29.7	29.7	8.1	8.1		28.4
Actuated g/C Ratio		0.12	0.37			0.05	0.30	0.30	0.08	0.08		0.29
v/c Ratio		0.46	0.74			1.00	0.51	0.53	0.21	0.41		0.87
Control Delay		49.9	30.8			146.6	30.9	5.7	50.0	36.7		46.0
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
Total Delay		49.9	30.8			146.6	30.9	5.7	50.0	36.7		46.0
LOS		D	C			F	C	A	D	D		D
Approach Delay			32.6				31.4			40.8		
Approach LOS			C				C			D		

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 97.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 35.8		Intersection LOS: D	
Intersection Capacity Utilization 73.1%		ICU Level of Service D	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	39	38
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1792	1524
Flt Permitted		
Satd. Flow (perm)	1792	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		40
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	41	40
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	34.0	34.0
Total Lost Time (s)	6.0	6.0
Act Effct Green (s)	28.4	28.4
Actuated g/C Ratio	0.29	0.29
v/c Ratio	0.08	0.08
Control Delay	30.1	10.3
Queue Delay	0.0	0.0
Total Delay	30.1	10.3
LOS	C	B
Approach Delay	43.7	
Approach LOS	D	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	45	1517	11	8	64	806	10	101	0	29	150	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		0		300		325	0		0	0	
Storage Lanes	1		0		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	3435	0	0	1719	3438	1538	1787	1599	0	1787	1610
Flt Permitted	0.333				0.069			0.740			0.737	
Satd. Flow (perm)	603	3435	0	0	125	3438	1538	1392	1599	0	1386	1610
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		1					11		152			26
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	1609	0	0	75	848	11	106	31	0	158	27
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2		2	4			8	
Total Split (s)	11.2	77.0	0.0	15.0	15.0	80.8	80.8	28.0	28.0	0.0	28.0	28.0
Total Lost Time (s)	5.7	7.0	4.0	5.7	5.7	7.0	7.0	5.0	5.0	4.0	5.0	5.0
Act Effct Green (s)	79.1	77.8			68.1	66.8	66.8	18.9	18.9		18.9	18.9
Actuated g/C Ratio	0.66	0.65			0.57	0.56	0.56	0.16	0.16		0.16	0.16
v/c Ratio	0.08	0.72			0.43	0.44	0.01	0.48	0.08		0.72	0.10
Control Delay	10.7	18.2			25.9	22.9	12.9	52.7	0.4		66.4	15.7
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	10.7	18.2			25.9	22.9	12.9	52.7	0.4		66.4	15.7
LOS	B	B			C	C	B	D	A		E	B
Approach Delay		18.0				23.0			40.9			59.0
Approach LOS		B				C			D			E

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 64 (53%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 23.3		Intersection LOS: C	

Lane Group	SBR
Lane Configurations	
Volume (vph)	25
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	4.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 76.2% ICU Level of Service D
Analysis Period (min) 15

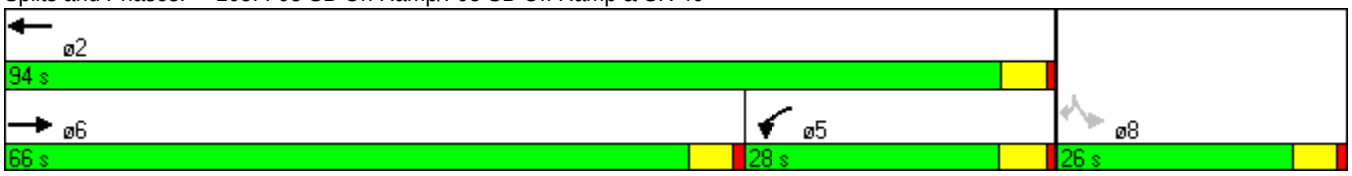
Splits and Phases: 103: Booth Rd & SR 40

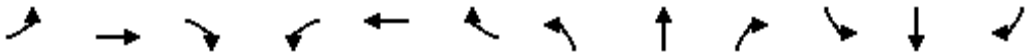
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1192	700	315	1028	0	0	0	0	297	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		0	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5882	0	3335	3438	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	5882	0	3335	3438	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		179										136
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1992	0	332	1082	0	0	0	0	313	0	136
Turn Type		NA		Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases										8		8
Total Split (s)	0.0	66.0	0.0	28.0	94.0	0.0	0.0	0.0	0.0	26.0	0.0	26.0
Total Lost Time (s)	4.0	5.0	4.0	5.3	5.0	4.0	4.0	4.0	4.0	5.0	4.0	5.0
Act Effct Green (s)		69.4		18.1	92.7					17.3		17.3
Actuated g/C Ratio		0.58		0.15	0.77					0.14		0.14
v/c Ratio		0.57		0.66	0.41					0.65		0.40
Control Delay		9.2		50.8	5.0					54.9		10.9
Queue Delay		0.0		0.0	0.1					0.0		0.0
Total Delay		9.2		50.8	5.1					54.9		10.9
LOS		A		D	A					D		B
Approach Delay		9.2			15.8							
Approach LOS		A			B							

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 94 (78%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 15.4	Intersection LOS: B

Intersection Capacity Utilization 59.2% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



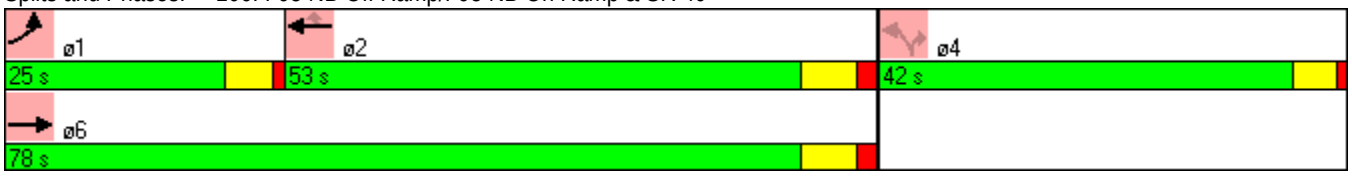


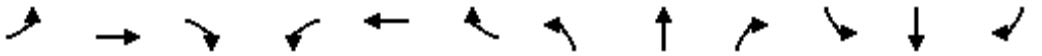
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	1390	0	0	968	205	375	0	435	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	6225	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	6225	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						216			69			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	104	1463	0	0	1019	216	395	0	458	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	25.0	78.0	0.0	0.0	53.0	53.0	42.0	0.0	42.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	7.0	4.0	4.0	7.0	7.0	5.0	4.0	5.0	4.0	4.0	4.0
Act Effct Green (s)	13.5	82.5			63.7	63.7	25.5		25.5			
Actuated g/C Ratio	0.11	0.69			0.53	0.53	0.21		0.21			
v/c Ratio	0.54	0.43			0.31	0.24	0.56		0.73			
Control Delay	70.1	2.6			7.7	1.9	44.5		43.5			
Queue Delay	0.0	0.1			0.0	0.0	0.0		0.0			
Total Delay	70.1	2.7			7.7	1.9	44.5		43.5			
LOS	E	A			A	A	D		D			
Approach Delay		7.2			6.7							
Approach LOS		A			A							

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 8 (7%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 15.6	Intersection LOS: B

Intersection Capacity Utilization 59.2% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



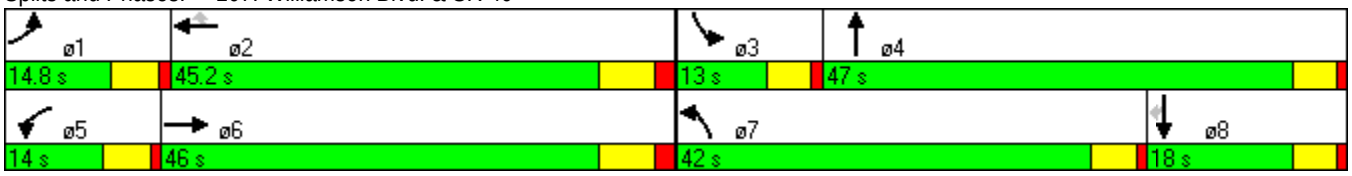


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	1148	680	215	717	35	379	83	276	80	194	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	1538	3335	3438	1538	3367	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	1538	3335	3438	1538	3367	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			372			37			291			63
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	1208	716	226	755	37	399	87	291	84	204	81
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			Free			2			Free			8
Total Split (s)	14.8	46.0	0.0	14.0	45.2	45.2	42.0	47.0	0.0	13.0	18.0	18.0
Total Lost Time (s)	5.3	7.0	4.0	5.3	7.0	7.0	5.0	5.0	4.0	5.0	5.0	5.0
Act Effct Green (s)	10.8	43.3	120.0	12.8	45.3	45.3	19.6	33.7	120.0	8.0	22.0	22.0
Actuated g/C Ratio	0.09	0.36	1.00	0.11	0.38	0.38	0.16	0.28	1.00	0.07	0.18	0.18
v/c Ratio	0.59	0.97	0.47	0.64	0.58	0.06	0.72	0.17	0.19	0.38	0.61	0.24
Control Delay	72.4	52.0	1.3	60.4	33.3	9.1	55.2	31.9	0.3	58.7	53.2	15.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.4	52.0	1.3	60.4	33.3	9.1	55.2	31.9	0.3	58.7	53.2	15.9
LOS	E	D	A	E	C	A	E	C	A	E	D	B
Approach Delay		34.9			38.5			32.0			46.3	
Approach LOS		C			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 86 (72%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 36.2		Intersection LOS: D	

Intersection Capacity Utilization 77.5% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	378	734	3	487	130	194	269
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		250		250	0	250
Storage Lanes	1		0		0	0	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1736	3471	0	3364	0	1770	1583
Flt Permitted	0.237			0.951		0.950	
Satd. Flow (perm)	433	3471	0	3199	0	1770	1583
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)				43			283
Link Speed (mph)		40		40		50	
Link Distance (ft)		1131		525		528	
Travel Time (s)		19.3		8.9		7.2	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	398	773	0	653	0	204	283
Turn Type	pm+pt	NA	Perm	NA		NA	custom
Protected Phases	1	6		2		8	8
Permitted Phases	6		2				8
Total Split (s)	26.0	65.0	39.0	39.0	0.0	25.0	25.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	4.0	5.0	5.0
Act Effct Green (s)	37.0	37.0		18.3		12.7	12.7
Actuated g/C Ratio	0.61	0.61		0.30		0.21	0.21
v/c Ratio	0.71	0.36		0.65		0.55	0.51
Control Delay	16.0	6.4		21.3		29.5	7.2
Queue Delay	0.0	0.0		0.0		0.0	0.0
Total Delay	16.0	6.4		21.3		29.5	7.2
LOS	B	A		C		C	A
Approach Delay		9.7		21.3		16.5	
Approach LOS		A		C		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 60.3			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 14.4		Intersection LOS: B	
Intersection Capacity Utilization 61.9%		ICU Level of Service B	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	11	220	1192	472	132	697	182	241	295	90	216	443
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		0	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3367	3471	1553	3367	3471	1553	3367	3350	0	3367	3280
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3367	3471	1553	3367	3471	1553	3367	3350	0	3367	3280
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				308			192		27			76
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			1302
Travel Time (s)			32.8			34.7			9.9			17.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	244	1255	497	139	734	192	254	406	0	227	733
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2					
Total Split (s)	21.0	21.0	68.0	68.0	13.0	60.0	60.0	18.0	39.0	0.0	20.0	41.0
Total Lost Time (s)	5.0	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0	4.0	5.0	7.0
Act Effct Green (s)		14.0	55.5	55.5	8.0	49.5	49.5	12.6	30.1		13.3	30.8
Actuated g/C Ratio		0.11	0.42	0.42	0.06	0.38	0.38	0.10	0.23		0.10	0.23
v/c Ratio		0.68	0.85	0.60	0.67	0.56	0.27	0.78	0.51		0.66	0.89
Control Delay		67.8	41.3	13.5	79.2	34.8	4.8	76.8	44.7		68.2	57.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay		67.8	41.3	13.5	79.2	34.8	4.8	76.8	44.7		68.2	57.5
LOS		E	D	B	E	C	A	E	D		E	E
Approach Delay			37.6			35.2			57.0			60.0
Approach LOS			D			D			E			E

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 131.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 44.4		Intersection LOS: D	
Intersection Capacity Utilization 84.4%		ICU Level of Service E	

Lane Group	SBR
Lane Configurations	
Volume (vph)	254
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	4.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

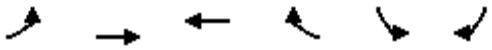
Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1433	0	0	778	96	561
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						214
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1508	0	0	819	101	591
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	118.0	0.0	0.0	118.0	22.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	41.7			41.7	8.3	57.9
Actuated g/C Ratio	0.72			0.72	0.14	1.00
v/c Ratio	0.60			0.33	0.21	0.38
Control Delay	7.1			4.7	25.2	0.7
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	7.1			4.7	25.2	0.7
LOS	A			A	C	A
Approach Delay	7.1			4.7	4.3	
Approach LOS	A			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 57.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 5.8		Intersection LOS: A	
Intersection Capacity Utilization 57.1%		ICU Level of Service B	

Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd

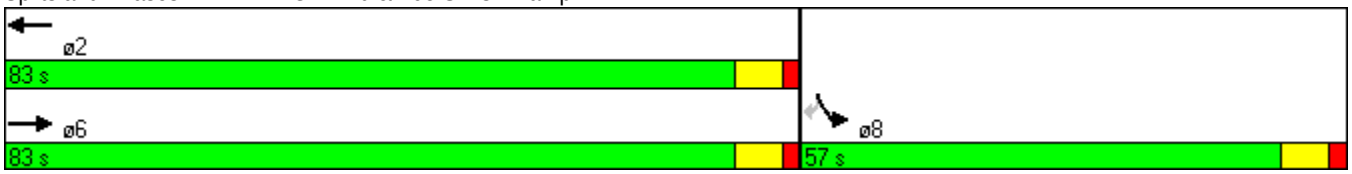


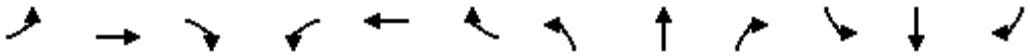
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	751	546	0	893	246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						259
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	791	575	0	940	259
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	83.0	83.0	0.0	57.0	57.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		27.2	27.2		25.9	25.9
Actuated g/C Ratio		0.40	0.40		0.38	0.38
v/c Ratio		0.57	0.41		0.73	0.34
Control Delay		18.0	16.0		22.3	3.7
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		18.0	16.0		22.3	3.7
LOS		B	B		C	A
Approach Delay		18.0	16.0		18.3	
Approach LOS		B	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 67.7			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 17.7		Intersection LOS: B	
Intersection Capacity Utilization 81.5%		ICU Level of Service D	

Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	632	30	185	594	13	10	0	203	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	0		1	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1827	1553	1736	1823	0	1787	1881	1599	0	1787	0
Flt Permitted				0.950			0.950				0.950	
Satd. Flow (perm)	0	1827	1553	1736	1823	0	1787	1881	1599	0	1787	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	4%	4%	0%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	665	32	195	639	0	11	0	214	0	1	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 78.6%		ICU Level of Service D	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	632	30	185	594	13	10	0	203	1	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	665	32	195	625	14	11	0	214	1	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1057							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	639			697			1680	1694	665	1901	1718	632
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	470			697			1715	1732	665	1979	1761	461
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			78			79	100	54	94	100	100
cM capacity (veh/h)	921			890			50	58	462	17	55	503

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1
Volume Total	665	32	195	639	11	0	214	1
Volume Left	0	0	195	0	11	0	0	1
Volume Right	0	32	0	14	0	0	214	0
cSH	921	1700	890	1700	50	1700	462	17
Volume to Capacity	0.00	0.02	0.22	0.38	0.21	0.00	0.46	0.06
Queue Length 95th (ft)	0	0	17	0	14	0	48	4
Control Delay (s)	0.0	0.0	10.2	0.0	96.2	0.0	19.3	225.7
Lane LOS			B		F	A	C	F
Approach Delay (s)	0.0		2.4		23.0			225.7
Approach LOS					C			F

Intersection Summary				
Average Delay	4.2			
Intersection Capacity Utilization	78.6%	ICU Level of Service	D	
Analysis Period (min)	15			

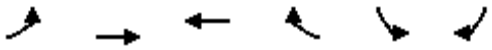
Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	17	1032	0	631	12	50	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3428	0	1773	0
Flt Permitted	0.950					0.958	
Satd. Flow (perm)	1719	3438	1810	3428	0	1773	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	18	1086	0	677	0	60	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.5%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	17	1032	0	631	12	50	7
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	18	1086	0	664	13	53	7
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	677		0			1249	338
vC1, stage 1 conf vol						671	
vC2, stage 2 conf vol						579	
vCu, unblocked vol	677		0			1249	338
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	98		0			86	99
cM capacity (veh/h)	891		0			373	660

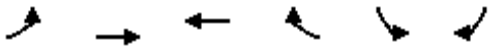
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	18	543	543	443	234	0	60
Volume Left	18	0	0	0	0	0	53
Volume Right	0	0	0	0	13	0	7
cSH	891	1700	1700	1700	1700	1700	395
Volume to Capacity	0.02	0.32	0.32	0.26	0.14	0.00	0.15
Queue Length 95th (ft)	1	0	0	0	0	0	11
Control Delay (s)	9.1	0.0	0.0	0.0	0.0	0.0	15.8
Lane LOS	A						C
Approach Delay (s)	0.1			0.0			15.8
Approach LOS							C

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	38.5%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	145	954	585	48	78	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			0	0	300
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	1719	3438	3400	0	1787	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1719	3438	3400	0	1787	1599
Link Speed (mph)		60	60		60	
Link Distance (ft)		836	1751		1900	
Travel Time (s)		9.5	19.9		21.6	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	153	1004	667	0	82	153
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.1%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	145	954	585	48	78	145
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	153	1004	616	51	82	153
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						15
Median type		Raised	Raised			
Median storage veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	666				1448	333
vC1, stage 1 conf vol					641	
vC2, stage 2 conf vol					807	
vCu, unblocked vol	666				1448	333
tC, single (s)	4.2				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	83				71	77
cM capacity (veh/h)	899				284	666

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	153	502	502	411	256	235
Volume Left	153	0	0	0	0	82
Volume Right	0	0	0	0	51	153
cSH	899	1700	1700	1700	1700	813
Volume to Capacity	0.17	0.30	0.30	0.24	0.15	0.29
Queue Length 95th (ft)	12	0	0	0	0	24
Control Delay (s)	9.8	0.0	0.0	0.0	0.0	15.8
Lane LOS	A					C
Approach Delay (s)	1.3			0.0		15.8
Approach LOS						C

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	40.1%	ICU Level of Service	A
Analysis Period (min)	15		

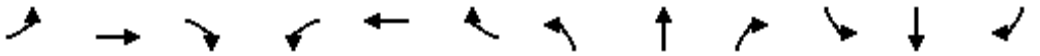
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	30	997	0	602	82	149	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1764	0
Flt Permitted	0.950					0.960	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1764	0
Link Speed (mph)		60		60		60	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		16.6	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	32	1049	0	634	86	189	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	30	997	0	602	82	149	30
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	32	1049	0	634	86	157	32
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	634		0			1222	317
vC1, stage 1 conf vol						634	
vC2, stage 2 conf vol						588	
vCu, unblocked vol	634		0			1222	317
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	97		0			59	95
cM capacity (veh/h)	925		0			379	682

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	32	525	525	317	317	86	0	188
Volume Left	32	0	0	0	0	0	0	157
Volume Right	0	0	0	0	0	86	0	32
cSH	925	1700	1700	1700	1700	1700	1700	409
Volume to Capacity	0.03	0.31	0.31	0.19	0.19	0.05	0.00	0.46
Queue Length 95th (ft)	2	0	0	0	0	0	0	47
Control Delay (s)	9.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1
Lane LOS	A							C
Approach Delay (s)	0.3			0.0				21.1
Approach LOS								C

Intersection Summary				
Average Delay	2.1			
Intersection Capacity Utilization	44.3%	ICU Level of Service		A
Analysis Period (min)	15			

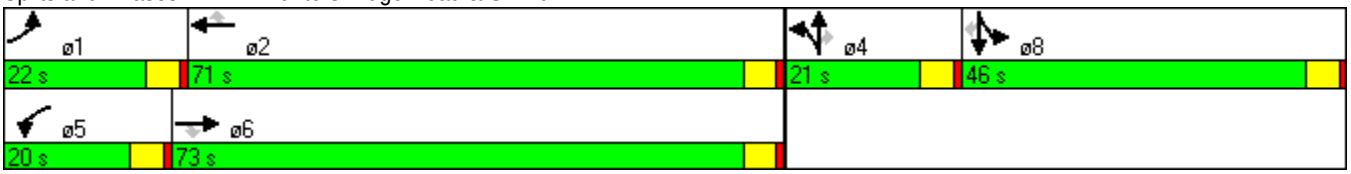


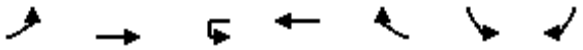
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	61	1004	45	200	616	200	27	34	96	497	56	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		300	300		300	300		300	300		300
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	3438	1538	3335	3438	1538	1787	1881	1599	3467	1881	1599
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	1538	3335	3438	1538	1787	1881	1599	3467	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			47			211			101			64
Link Speed (mph)		60			60			60			60	
Link Distance (ft)		1961			4435			1868			1392	
Travel Time (s)		22.3			50.4			21.2			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	64	1057	47	211	648	211	28	36	101	523	59	64
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Total Split (s)	22.0	73.0	73.0	20.0	71.0	71.0	21.0	21.0	21.0	46.0	46.0	46.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	11.6	51.3	51.3	14.2	56.5	56.5	17.1	17.1	17.1	42.3	42.3	42.3
Actuated g/C Ratio	0.08	0.36	0.36	0.10	0.40	0.40	0.12	0.12	0.12	0.30	0.30	0.30
v/c Ratio	0.45	0.85	0.08	0.63	0.47	0.28	0.13	0.16	0.36	0.50	0.10	0.12
Control Delay	73.9	48.2	7.5	71.0	33.1	4.4	61.3	61.6	14.7	44.3	39.9	9.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.9	48.2	7.5	71.0	33.1	4.4	61.3	61.6	14.7	44.3	39.9	9.9
LOS	E	D	A	E	C	A	E	E	B	D	D	A
Approach Delay		48.0			34.9			32.8			40.5	
Approach LOS		D			C			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 141			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 41.0		Intersection LOS: D	
Intersection Capacity Utilization 64.3%		ICU Level of Service C	

Analysis Period (min) 15

Splits and Phases: 117: Hunters Ridge Road & SR 40





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	32	1626	5	1000	113	182	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1719	3438	1538	1787	1599
Flt Permitted	0.242		0.091			0.950	
Satd. Flow (perm)	438	3438	165	3438	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					119		37
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	34	1712	5	1053	119	192	37
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		6		2		8	
Permitted Phases	6		2		2		8
Total Split (s)	83.0	83.0	83.0	83.0	83.0	17.0	17.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	44.1	44.1	44.1	44.1	44.1	12.0	12.0
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.68	0.19	0.19
v/c Ratio	0.11	0.73	0.04	0.45	0.11	0.58	0.11
Control Delay	4.2	8.3	4.0	5.1	0.9	35.4	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	4.2	8.3	4.0	5.1	0.9	35.4	11.5
LOS	A	A	A	A	A	D	B
Approach Delay		8.2		4.7		31.5	
Approach LOS		A		A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 64.4			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 8.6		Intersection LOS: A	
Intersection Capacity Utilization 61.7%		ICU Level of Service B	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	21	264	1519	21	46	41	914	378	36	33	38	795
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		1		0		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	1719	3431	0	0	1719	3438	1538	1787	1731	0	3303
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	1719	3431	0	0	1719	3438	1538	1787	1731	0	3303
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			2					398		28		
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	300	1621	0	0	91	962	398	38	75	0	837
Turn Type	Prot	Prot	NA		Prot	Prot	NA	Perm	Split	NA		Split
Protected Phases	1	1	6		5	5	2		8	8		4
Permitted Phases								2				
Total Split (s)	36.0	36.0	92.0	0.0	10.0	10.0	66.0	66.0	14.0	14.0	0.0	34.0
Total Lost Time (s)	3.0	4.0	4.0	2.0	3.0	4.0	4.0	4.0	4.0	4.0	2.0	4.0
Act Effct Green (s)		28.9	79.0			6.0	56.1	56.1	10.1	10.1		30.2
Actuated g/C Ratio		0.20	0.56			0.04	0.40	0.40	0.07	0.07		0.21
v/c Ratio		0.85	0.84			1.23	0.70	0.47	0.30	0.50		1.19
Control Delay		77.2	30.7			234.6	39.1	4.4	72.2	55.5		145.4
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
Total Delay		77.2	30.7			234.6	39.1	4.4	72.2	55.5		145.4
LOS		E	C			F	D	A	E	E		F
Approach Delay			38.0				41.8			61.1		
Approach LOS			D				D			E		

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 141.3			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.23			
Intersection Signal Delay: 57.4		Intersection LOS: E	
Intersection Capacity Utilization 86.8%		ICU Level of Service E	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	43	273
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1792	1524
Flt Permitted		
Satd. Flow (perm)	1792	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		287
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	45	287
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	34.0	34.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	30.2	30.2
Actuated g/C Ratio	0.21	0.21
v/c Ratio	0.12	0.52
Control Delay	49.2	8.9
Queue Delay	0.0	0.0
Total Delay	49.2	8.9
LOS	D	A
Approach Delay	108.2	
Approach LOS	F	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	46	2180	22	8	65	1204	10	113	0	36	150	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		0		300		325	300		0	0	
Storage Lanes	1		0		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	3435	0	0	1719	3438	1538	1787	1599	0	1787	1610
Flt Permitted	0.199				0.040			0.740			0.732	
Satd. Flow (perm)	360	3435	0	0	72	3438	1538	1392	1599	0	1377	1610
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		2					11		61			26
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	2318	0	0	76	1267	11	119	38	0	158	27
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2		2	4			8	
Total Split (s)	10.8	122.3	0.0	10.7	10.7	122.2	122.2	17.0	17.0	0.0	17.0	17.0
Total Lost Time (s)	4.7	5.0	2.0	3.7	4.7	5.0	5.0	3.0	4.0	2.0	3.0	4.0
Act Effct Green (s)	117.6	117.3			110.1	109.8	109.8	14.0	13.0		14.0	13.0
Actuated g/C Ratio	0.78	0.78			0.73	0.73	0.73	0.09	0.09		0.09	0.09
v/c Ratio	0.11	0.86			0.64	0.50	0.01	0.92	0.20		1.22	0.17
Control Delay	4.8	15.5			40.3	21.4	7.6	125.1	7.5		205.5	24.3
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	4.8	15.5			40.3	21.4	7.6	125.1	7.5		205.5	24.3
LOS	A	B			D	C	A	F	A		F	C
Approach Delay		15.3				22.4			96.6			179.0
Approach LOS		B				C			F			F

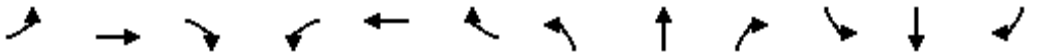
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 60 (40%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.22			
Intersection Signal Delay: 28.2		Intersection LOS: C	

Lane Group	SBR
Lane Configurations	
Volume (vph)	25
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 83.4% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

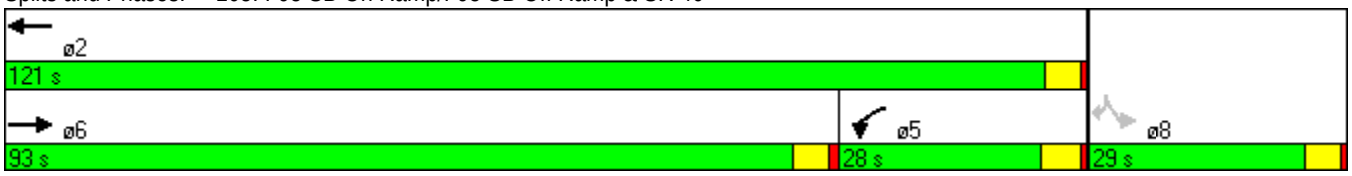


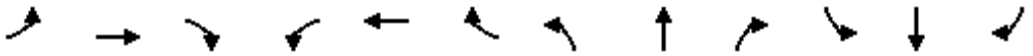
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1708	753	352	1364	0	0	0	0	361	0	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		0	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5938	0	3335	3438	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	5938	0	3335	3438	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		130										95
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2591	0	371	1436	0	0	0	0	380	0	172
Turn Type		NA		Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases										8		8
Total Split (s)	0.0	93.0	0.0	28.0	121.0	0.0	0.0	0.0	0.0	29.0	0.0	29.0
Total Lost Time (s)	4.0	4.0	3.0	4.3	4.0	4.0	2.0	4.0	2.0	4.0	4.0	4.0
Act Effct Green (s)		92.5		22.2	119.0					23.0		23.0
Actuated g/C Ratio		0.62		0.15	0.79					0.15		0.15
v/c Ratio		0.70		0.75	0.53					0.74		0.54
Control Delay		13.2		59.4	3.9					70.1		32.5
Queue Delay		0.0		0.0	0.1					0.0		0.0
Total Delay		13.2		59.4	4.0					70.1		32.5
LOS		B		E	A					E		C
Approach Delay		13.2			15.4							
Approach LOS		B			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 108 (72%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 19.0		Intersection LOS: B	

Intersection Capacity Utilization 68.0% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



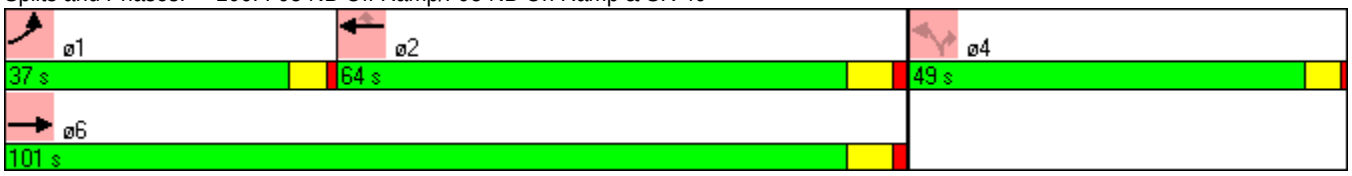


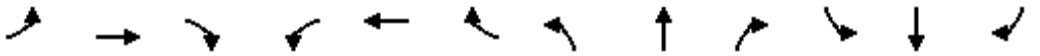
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	184	1885	0	0	1316	250	400	0	527	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	6225	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	6225	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						263			28			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	194	1984	0	0	1385	263	421	0	555	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	37.0	101.0	0.0	0.0	64.0	64.0	49.0	0.0	49.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	2.0	4.0	4.0	2.0	4.0
Act Effct Green (s)	24.0	102.9			74.6	74.6	38.1		38.1			
Actuated g/C Ratio	0.16	0.69			0.50	0.50	0.25		0.25			
v/c Ratio	0.70	0.59			0.45	0.29	0.50		0.78			
Control Delay	82.0	4.9			13.2	4.6	49.2		57.3			
Queue Delay	0.0	0.2			0.0	0.0	0.0		0.0			
Total Delay	82.0	5.1			13.2	4.6	49.2		57.3			
LOS	F	A			B	A	D		E			
Approach Delay		11.9			11.8							
Approach LOS		B			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 138 (92%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 20.4		Intersection LOS: C	

Intersection Capacity Utilization 68.0% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



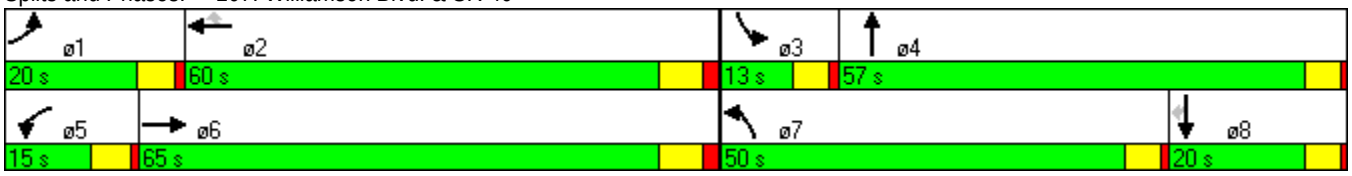


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	1314	1154	220	769	36	719	84	286	81	195	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	1538	3335	3438	1538	3367	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	1538	3335	3438	1538	3367	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			441			38			301			51
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		8%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	93	1383	1215	232	809	38	757	88	301	85	205	82
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			Free			2			Free			8
Total Split (s)	20.0	65.0	0.0	15.0	60.0	60.0	50.0	57.0	0.0	13.0	20.0	20.0
Total Lost Time (s)	4.3	5.0	2.0	4.3	5.0	5.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	13.5	60.0	150.0	11.3	57.9	57.9	40.0	52.4	150.0	9.0	21.4	21.4
Actuated g/C Ratio	0.09	0.40	1.00	0.08	0.39	0.39	0.27	0.35	1.00	0.06	0.14	0.14
v/c Ratio	0.60	1.01	0.79	0.92	0.61	0.06	0.84	0.14	0.19	0.42	0.79	0.31
Control Delay	81.2	69.2	8.4	107.4	40.0	9.0	61.2	33.9	0.3	74.7	83.0	29.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.2	69.2	8.4	107.4	40.0	9.0	61.2	33.9	0.3	74.7	83.0	29.8
LOS	F	E	A	F	D	A	E	C	A	E	F	C
Approach Delay		42.2			53.4			43.1			69.4	
Approach LOS		D			D			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 80 (53%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay: 46.6		Intersection LOS: D	

Intersection Capacity Utilization 87.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	551	977	5	647	248	321	425
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		250		250	300	0
Storage Lanes	2		0		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	3367	3471	0	3471	1553	3433	1583
Flt Permitted	0.950			0.947		0.950	
Satd. Flow (perm)	3367	3471	0	3287	1553	3433	1583
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					261		447
Link Speed (mph)		40		40		50	
Link Distance (ft)		1131		525		528	
Travel Time (s)		19.3		8.9		7.2	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	580	1028	0	686	261	338	447
Turn Type	Prot	NA	Perm	NA	Perm	NA	custom
Protected Phases	1	6		2		8	8
Permitted Phases			2		2		8
Total Split (s)	27.0	63.0	36.0	36.0	36.0	27.0	27.0
Total Lost Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	17.9	45.0		22.9	22.9	14.2	14.2
Actuated g/C Ratio	0.26	0.67		0.34	0.34	0.21	0.21
v/c Ratio	0.65	0.45		0.62	0.37	0.47	0.65
Control Delay	27.4	6.2		22.1	4.4	27.2	8.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	27.4	6.2		22.1	4.4	27.2	8.1
LOS	C	A		C	A	C	A
Approach Delay		13.9		17.2		16.3	
Approach LOS		B		B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 67.6			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 15.4		Intersection LOS: B	
Intersection Capacity Utilization 64.2%		ICU Level of Service C	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	16	288	1381	514	179	987	337	263	457	144	410	686
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		0	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3367	3471	1553	3367	3471	1553	3367	3346	0	3367	3301
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3367	3471	1553	3367	3471	1553	3367	3346	0	3367	3301
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				225			355		27			57
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			1302
Travel Time (s)			32.8			34.7			9.9			17.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	320	1454	541	188	1039	355	277	633	0	432	1075
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2					
Total Split (s)	21.0	21.0	69.0	69.0	13.0	61.0	61.0	17.0	41.0	0.0	27.0	51.0
Total Lost Time (s)	3.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	2.0	4.0	5.0
Act Effct Green (s)		16.8	64.0	64.0	9.0	56.2	56.2	13.0	36.6		22.4	46.0
Actuated g/C Ratio		0.11	0.43	0.43	0.06	0.37	0.37	0.09	0.24		0.15	0.31
v/c Ratio		0.85	0.98	0.68	0.93	0.80	0.44	0.95	0.76		0.86	1.02
Control Delay		85.5	61.6	24.4	116.4	47.6	4.8	108.2	57.1		79.2	81.3
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay		85.5	61.6	24.4	116.4	47.6	4.8	108.2	57.1		79.2	81.3
LOS		F	E	C	F	D	A	F	E		E	F
Approach Delay			56.2			46.1			72.7			80.7
Approach LOS			E			D			E			F

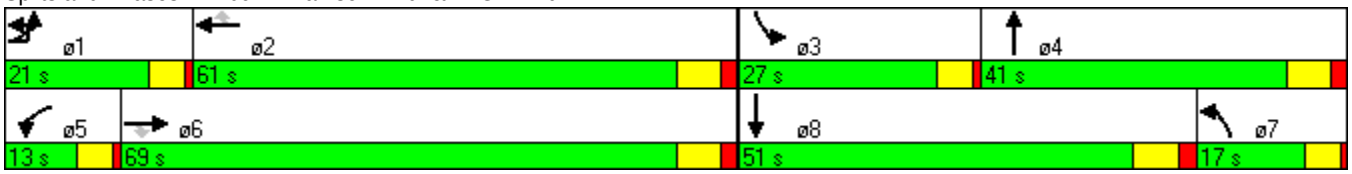
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 61.9		Intersection LOS: E	
Intersection Capacity Utilization 95.5%		ICU Level of Service F	

Lane Group	SBR
Lane Configurations	
Volume (vph)	335
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	2.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

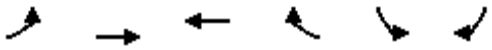


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1719	0	0	1043	132	582
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						185
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1809	0	0	1098	139	613
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	118.0	0.0	0.0	118.0	22.0	0.0
Total Lost Time (s)	5.0	2.0	2.0	5.0	4.0	2.0
Act Effct Green (s)	117.9			117.9	13.1	140.0
Actuated g/C Ratio	0.84			0.84	0.09	1.00
v/c Ratio	0.62			0.38	0.44	0.39
Control Delay	5.1			3.1	63.9	0.8
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	5.1			3.1	63.9	0.8
LOS	A			A	E	A
Approach Delay	5.1			3.1	12.4	
Approach LOS	A			A	B	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 15 (11%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 6.0	Intersection LOS: A

Intersection Capacity Utilization 61.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd

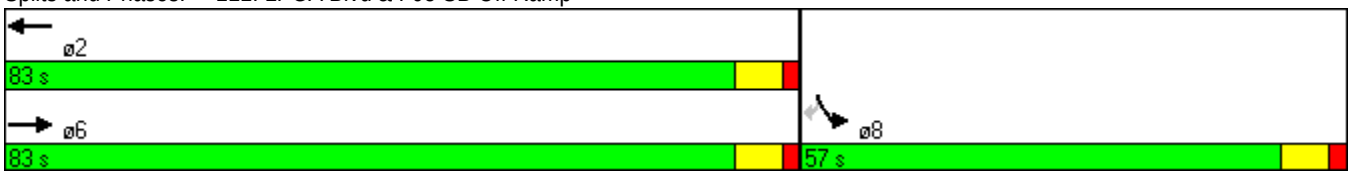


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	1104	744	0	929	287
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						173
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1162	783	0	978	302
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	83.0	83.0	0.0	57.0	57.0
Total Lost Time (s)	2.0	5.0	5.0	2.0	5.0	5.0
Act Effct Green (s)		80.9	80.9		49.1	49.1
Actuated g/C Ratio		0.58	0.58		0.35	0.35
v/c Ratio		0.58	0.39		0.83	0.46
Control Delay		15.2	16.1		47.9	15.7
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		15.2	16.1		47.9	15.7
LOS		B	B		D	B
Approach Delay		15.2	16.1		40.3	
Approach LOS		B	B		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 25.4		Intersection LOS: C	

Intersection Capacity Utilization 95.4% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

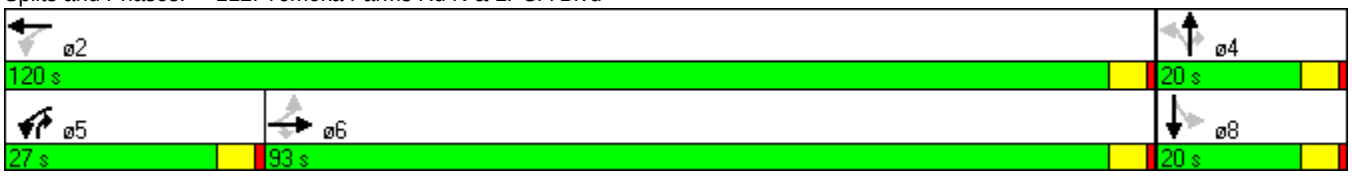


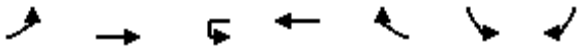
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	919	92	265	753	13	46	0	317	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	0		1	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1827	1553	1736	1823	0	1787	1881	1599	0	1787	0
Flt Permitted				0.163			0.757				0.757	
Satd. Flow (perm)	0	1827	1553	298	1823	0	1424	1881	1599	0	1424	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			97		3				147			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	4%	4%	0%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	967	97	279	807	0	48	0	334	0	1	0
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm		pm+ov	Perm	NA	
Protected Phases		6		5	2			4	5		8	
Permitted Phases	6		6	2			4		4	8		
Total Split (s)	93.0	93.0	93.0	27.0	120.0	0.0	20.0	20.0	27.0	20.0	20.0	0.0
Total Lost Time (s)	3.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	2.0
Act Effct Green (s)		99.1	97.1	120.0	120.8		16.0		32.9		14.1	
Actuated g/C Ratio		0.71	0.69	0.86	0.86		0.11		0.24		0.10	
v/c Ratio		0.75	0.09	0.65	0.51		0.29		0.68		0.01	
Control Delay		19.9	2.0	30.5	6.1		62.2		32.6		55.0	
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay		19.9	2.0	30.5	6.1		62.2		32.6		55.0	
LOS		B	A	C	A		E		C		D	
Approach Delay		18.3			12.4						55.0	
Approach LOS		B			B						D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 110 (79%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 18.5		Intersection LOS: B	

Intersection Capacity Utilization 111.3% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 112: Tomoka Farms Rd N & LPGA Blvd





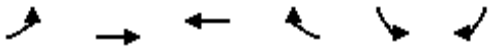
Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	22	1501	0	920	14	55	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3431	0	1766	0
Flt Permitted	0.950					0.960	
Satd. Flow (perm)	1719	3438	1810	3431	0	1766	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	23	1580	0	983	0	69	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	22	1501	0	920	14	55	10
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	23	1580	0	968	15	58	11
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	983		0			1812	492
vC1, stage 1 conf vol						976	
vC2, stage 2 conf vol						836	
vCu, unblocked vol	983		0			1812	492
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	97		0			77	98
cM capacity (veh/h)	680		0			249	525

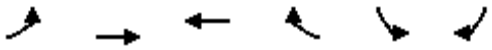
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	23	790	790	646	338	0	68
Volume Left	23	0	0	0	0	0	58
Volume Right	0	0	0	0	15	0	11
cSH	680	1700	1700	1700	1700	1700	271
Volume to Capacity	0.03	0.46	0.46	0.38	0.20	0.00	0.25
Queue Length 95th (ft)	2	0	0	0	0	0	19
Control Delay (s)	10.5	0.0	0.0	0.0	0.0	0.0	22.7
Lane LOS	B						C
Approach Delay (s)	0.2			0.0			22.7
Approach LOS							C

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	268	1295	793	72	117	268
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			0	0	300
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	1719	3438	3393	0	1787	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1719	3438	3393	0	1787	1599
Link Speed (mph)		60	60		60	
Link Distance (ft)		836	1751		1900	
Travel Time (s)		9.5	19.9		21.6	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	282	1363	911	0	123	282
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	268	1295	793	72	117	268
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	282	1363	835	76	123	282
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						15
Median type		Raised	Raised			
Median storage veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	911				2118	455
vC1, stage 1 conf vol					873	
vC2, stage 2 conf vol					1246	
vCu, unblocked vol	911				2118	455
tC, single (s)	4.2				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	61				7	49
cM capacity (veh/h)	725				132	555

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	282	682	682	556	354	405
Volume Left	282	0	0	0	0	123
Volume Right	0	0	0	0	76	282
cSH	725	1700	1700	1700	1700	434
Volume to Capacity	0.39	0.40	0.40	0.33	0.21	0.93
Queue Length 95th (ft)	37	0	0	0	0	213
Control Delay (s)	13.1	0.0	0.0	0.0	0.0	50.7
Lane LOS	B					F
Approach Delay (s)	2.2			0.0		50.7
Approach LOS						F

Intersection Summary			
Average Delay	8.2		
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		

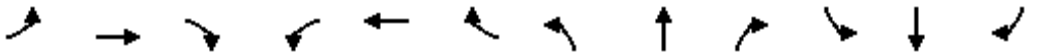
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	40	1372	0	841	96	155	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1759	0
Flt Permitted	0.950					0.962	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1759	0
Link Speed (mph)		60		60		60	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		16.6	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	42	1444	0	885	101	205	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.6%		ICU Level of Service B	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	40	1372	0	841	96	155	40
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	42	1444	0	885	101	163	42
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	885		0			1692	443
vC1, stage 1 conf vol						885	
vC2, stage 2 conf vol						806	
vCu, unblocked vol	885		0			1692	443
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	94		0			39	93
cM capacity (veh/h)	742		0			268	565

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	42	722	722	443	443	101	0	205
Volume Left	42	0	0	0	0	0	0	163
Volume Right	0	0	0	0	0	101	0	42
cSH	742	1700	1700	1700	1700	1700	1700	301
Volume to Capacity	0.06	0.42	0.42	0.26	0.26	0.06	0.00	0.68
Queue Length 95th (ft)	4	0	0	0	0	0	0	93
Control Delay (s)	10.1	0.0	0.0	0.0	0.0	0.0	0.0	39.2
Lane LOS	B							E
Approach Delay (s)	0.3			0.0				39.2
Approach LOS								E

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		

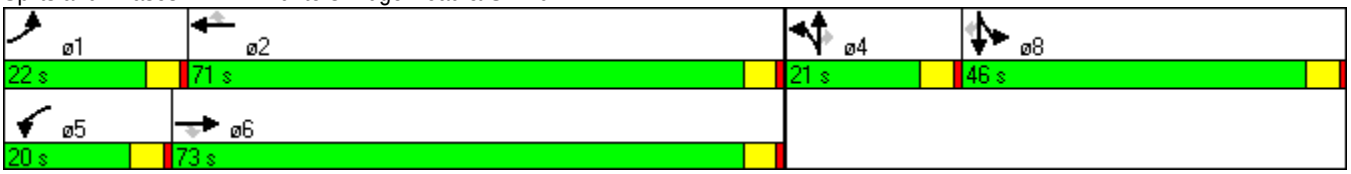


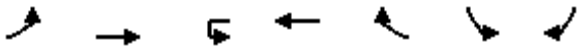
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	1362	67	300	834	377	41	68	161	843	112	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		300	300		300	300		300	300		300
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	3438	1538	3335	3438	1538	1787	1881	1599	3467	1881	1599
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	1538	3335	3438	1538	1787	1881	1599	3467	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			60			397			144			105
Link Speed (mph)		60			60			60			60	
Link Distance (ft)		1961			4435			1868			1392	
Travel Time (s)		22.3			50.4			21.2			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	1434	71	316	878	397	43	72	169	887	118	105
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Total Split (s)	22.0	73.0	73.0	20.0	71.0	71.0	21.0	21.0	21.0	46.0	46.0	46.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	15.2	68.7	68.7	16.0	69.5	69.5	17.0	17.0	17.0	42.0	42.0	42.0
Actuated g/C Ratio	0.10	0.43	0.43	0.10	0.44	0.44	0.11	0.11	0.11	0.26	0.26	0.26
v/c Ratio	0.64	0.97	0.10	0.95	0.59	0.44	0.23	0.36	0.57	0.97	0.24	0.21
Control Delay	87.1	61.4	8.2	107.3	36.6	4.2	68.9	72.0	22.4	81.7	48.0	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.1	61.4	8.2	107.3	36.6	4.2	68.9	72.0	22.4	81.7	48.0	8.5
LOS	F	E	A	F	D	A	E	E	C	F	D	A
Approach Delay		60.7			42.6			42.0			71.2	
Approach LOS		E			D			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 160			
Actuated Cycle Length: 159.7			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 55.8		Intersection LOS: E	
Intersection Capacity Utilization 86.9%		ICU Level of Service E	

Analysis Period (min) 15

Splits and Phases: 117: Hunters Ridge Road & SR 40





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	38	2429	8	1500	127	189	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1719	3438	1538	1787	1599
Flt Permitted	0.132		0.051			0.950	
Satd. Flow (perm)	239	3438	92	3438	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					134		42
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	40	2557	8	1579	134	199	42
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		6		2		8	
Permitted Phases	6		2		2		8
Total Split (s)	83.0	83.0	83.0	83.0	83.0	17.0	17.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	78.1	78.1	78.1	78.1	78.1	12.7	12.7
Actuated g/C Ratio	0.79	0.79	0.79	0.79	0.79	0.13	0.13
v/c Ratio	0.21	0.94	0.11	0.58	0.11	0.87	0.17
Control Delay	5.6	17.7	6.0	5.1	0.6	76.4	14.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.6	17.7	6.0	5.1	0.6	76.4	14.0
LOS	A	B	A	A	A	E	B
Approach Delay		17.5		4.7		65.6	
Approach LOS		B		A		E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 98.8			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 15.2		Intersection LOS: B	
Intersection Capacity Utilization 84.3%		ICU Level of Service E	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	35	434	2171	22	48	42	1322	383	47	36	40	800
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		1		0		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	1719	3435	0	0	1719	3438	1538	1787	1733	0	3303
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	1719	3435	0	0	1719	3438	1538	1787	1733	0	3303
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1					403		12		
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	494	2308	0	0	95	1392	403	49	80	0	842
Turn Type	Prot	Prot	NA		Prot	Prot	NA	Perm	Split	NA		Split
Protected Phases	1	1	6		5	5	2		8	8		4
Permitted Phases								2				
Total Split (s)	36.0	36.0	92.0	0.0	10.0	10.0	66.0	66.0	14.0	14.0	0.0	34.0
Total Lost Time (s)	3.0	4.0	4.0	2.0	3.0	4.0	4.0	4.0	4.0	4.0	2.0	4.0
Act Effct Green (s)		32.0	88.0			6.0	62.0	62.0	10.0	10.0		30.0
Actuated g/C Ratio		0.21	0.59			0.04	0.41	0.41	0.07	0.07		0.20
v/c Ratio		1.35	1.14			1.38	0.98	0.46	0.41	0.63		1.27
Control Delay		216.9	101.9			286.8	62.6	4.3	78.1	79.6		181.9
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
Total Delay		216.9	101.9			286.8	62.6	4.3	78.1	79.6		181.9
LOS		F	F			F	E	A	E	E		F
Approach Delay			122.1				61.5			79.0		
Approach LOS			F				E			E		

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.38			
Intersection Signal Delay: 103.2		Intersection LOS: F	
Intersection Capacity Utilization 110.4%		ICU Level of Service H	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	44	450
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1792	1524
Flt Permitted		
Satd. Flow (perm)	1792	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		334
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	46	474
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	34.0	34.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	30.0	30.0
Actuated g/C Ratio	0.20	0.20
v/c Ratio	0.13	0.83
Control Delay	50.5	29.9
Queue Delay	0.0	0.0
Total Delay	50.5	29.9
LOS	D	C
Approach Delay	124.6	
Approach LOS	F	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	47	2849	28	9	65	1608	10	122	0	45	150	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		0		300		325	300		0	0	
Storage Lanes	1		0		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	3436	0	0	1729	3438	1538	1787	1599	0	1787	1610
Flt Permitted	0.123				0.036			0.740			0.726	
Satd. Flow (perm)	223	3436	0	0	66	3438	1538	1392	1599	0	1366	1610
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		2					11		46			26
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	3028	0	0	77	1693	11	128	47	0	158	27
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2		2	4			8	
Total Split (s)	10.8	122.3	0.0	10.7	10.7	122.2	122.2	17.0	17.0	0.0	17.0	17.0
Total Lost Time (s)	4.7	5.0	2.0	3.7	4.7	5.0	5.0	3.0	4.0	2.0	3.0	4.0
Act Effct Green (s)	117.6	117.3			119.7	119.4	119.4	14.0	13.0		14.0	13.0
Actuated g/C Ratio	0.78	0.78			0.80	0.80	0.80	0.09	0.09		0.09	0.09
v/c Ratio	0.21	1.13			0.65	0.62	0.01	0.98	0.26		1.24	0.17
Control Delay	7.1	81.4			41.5	18.2	3.7	141.1	20.9		212.3	24.3
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	7.1	81.4			41.5	18.2	3.7	141.1	20.9		212.3	24.3
LOS	A	F			D	B	A	F	C		F	C
Approach Delay		80.2				19.1			108.8			184.9
Approach LOS		F				B			F			F

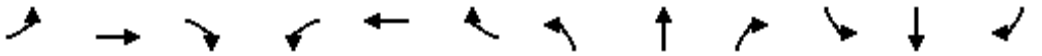
Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 60 (40%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.24	
Intersection Signal Delay: 64.0	Intersection LOS: E

Lane Group	SBR
Lane Configurations	
Volume (vph)	25
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 102.1% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

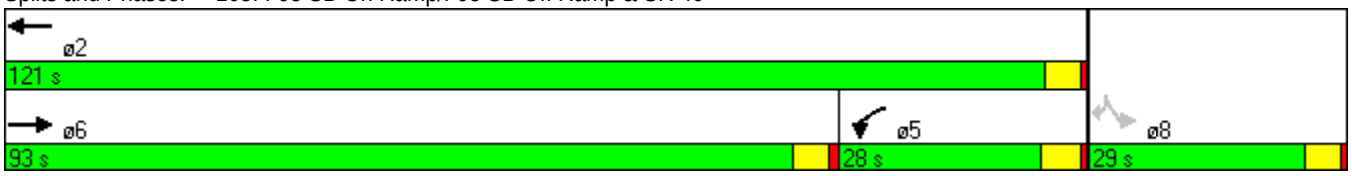


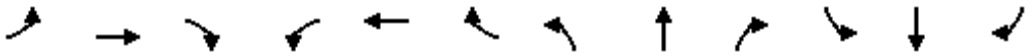
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2310	804	393	1729	0	0	0	0	426	0	198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		0	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5982	0	3335	3438	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	5982	0	3335	3438	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		103										48
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3278	0	414	1820	0	0	0	0	448	0	208
Turn Type		NA		Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases										8		8
Total Split (s)	0.0	93.0	0.0	28.0	121.0	0.0	0.0	0.0	0.0	29.0	0.0	29.0
Total Lost Time (s)	4.0	4.0	3.0	4.3	4.0	4.0	2.0	4.0	2.0	4.0	4.0	4.0
Act Effct Green (s)		90.4		23.0	117.6					24.4		24.4
Actuated g/C Ratio		0.60		0.15	0.78					0.16		0.16
v/c Ratio		0.90		0.81	0.67					0.83		0.72
Control Delay		15.9		53.2	7.1					74.4		60.1
Queue Delay		0.2		0.0	0.2					0.0		0.0
Total Delay		16.1		53.2	7.3					74.4		60.1
LOS		B		D	A					E		E
Approach Delay		16.1			15.8							
Approach LOS		B			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 108 (72%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 21.7		Intersection LOS: C	

Intersection Capacity Utilization 80.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



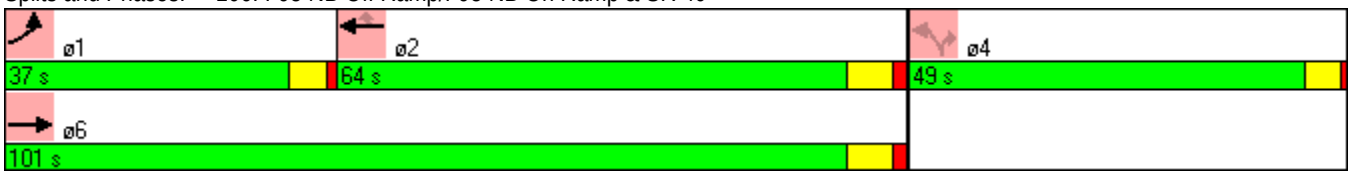


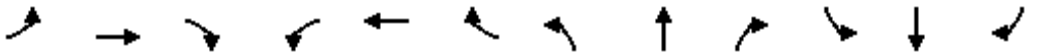
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	223	2513	0	0	1672	294	450	0	599	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	6225	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	6225	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						309			6			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	235	2645	0	0	1760	309	474	0	631	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	37.0	101.0	0.0	0.0	64.0	64.0	49.0	0.0	49.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	2.0	4.0	4.0	2.0	4.0
Act Effct Green (s)	26.9	99.1			67.8	67.8	41.9		41.9			
Actuated g/C Ratio	0.18	0.66			0.45	0.45	0.28		0.28			
v/c Ratio	0.76	0.81			0.63	0.36	0.51		0.83			
Control Delay	77.0	6.2			16.7	4.6	47.0		60.2			
Queue Delay	0.0	1.0			0.0	0.0	0.0		0.0			
Total Delay	77.0	7.2			16.7	4.6	47.1		60.2			
LOS	E	A			B	A	D		E			
Approach Delay		12.9			14.9							
Approach LOS		B			B							

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 138 (92%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 21.2	Intersection LOS: C

Intersection Capacity Utilization 80.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



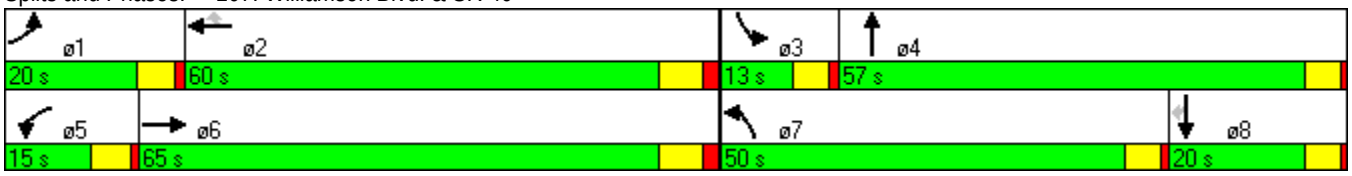


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	1467	1646	225	822	37	1065	85	296	82	196	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	1538	3335	3438	1538	3367	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	1538	3335	3438	1538	3367	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			563			37			299			52
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		2%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	1482	1663	227	830	37	1076	86	299	83	198	80
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			Free			2			Free			8
Total Split (s)	20.0	65.0	0.0	15.0	60.0	60.0	50.0	57.0	0.0	13.0	20.0	20.0
Total Lost Time (s)	4.3	5.0	2.0	4.3	5.0	5.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	13.4	60.0	150.0	10.7	57.3	57.3	46.0	53.0	150.0	9.0	16.0	16.0
Actuated g/C Ratio	0.09	0.40	1.00	0.07	0.38	0.38	0.31	0.35	1.00	0.06	0.11	0.11
v/c Ratio	0.59	1.08	1.08	0.95	0.63	0.06	1.04	0.13	0.19	0.41	1.02	0.38
Control Delay	74.1	89.9	60.8	115.7	40.8	9.1	89.3	33.7	0.3	74.4	133.0	31.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	74.1	89.9	60.8	115.7	40.8	9.1	89.3	33.7	0.3	74.4	133.0	31.3
LOS	E	F	E	F	D	A	F	C	A	E	F	C
Approach Delay		74.5			55.2			67.8			97.0	
Approach LOS		E			E			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 80 (53%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 70.8		Intersection LOS: E	

Intersection Capacity Utilization 102.1% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	718	1226	6	811	367	445	581
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		250		250	300	0
Storage Lanes	2		0		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	3367	3471	0	3471	1553	3433	1583
Flt Permitted	0.950			0.944		0.950	
Satd. Flow (perm)	3367	3471	0	3277	1553	3433	1583
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					386		478
Link Speed (mph)		40		40		50	
Link Distance (ft)		1131		525		528	
Travel Time (s)		19.3		8.9		7.2	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	756	1291	0	860	386	468	612
Turn Type	Prot	NA	Perm	NA	Perm	NA	custom
Protected Phases	1	6		2		8	8
Permitted Phases			2		2		8
Total Split (s)	27.0	63.0	36.0	36.0	36.0	27.0	27.0
Total Lost Time (s)	4.0	4.0	3.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	21.9	54.5		28.5	28.5	18.5	18.5
Actuated g/C Ratio	0.27	0.67		0.35	0.35	0.23	0.23
v/c Ratio	0.83	0.55		0.75	0.48	0.60	0.84
Control Delay	38.9	8.5		28.5	4.6	32.1	19.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	38.9	8.5		28.5	4.6	32.1	19.2
LOS	D	A		C	A	C	B
Approach Delay		19.7		21.1		24.8	
Approach LOS		B		C		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 81.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 21.4		Intersection LOS: C	
Intersection Capacity Utilization 79.2%		ICU Level of Service D	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	20	358	1660	556	242	1250	502	295	608	198	616	913
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		0	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3367	3471	1553	3367	3471	1553	3367	3343	0	3367	3308
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3367	3471	1553	3367	3471	1553	3367	3343	0	3367	3308
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				187			472		27			51
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			1302
Travel Time (s)			32.8			34.7			9.9			17.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	398	1747	585	255	1316	528	311	848	0	648	1399
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2					
Total Split (s)	20.0	20.0	70.0	70.0	12.0	62.0	62.0	16.0	38.0	0.0	30.0	52.0
Total Lost Time (s)	3.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	2.0	4.0	5.0
Act Effct Green (s)		16.0	65.0	65.0	8.0	57.0	57.0	12.0	33.0		26.0	47.0
Actuated g/C Ratio		0.11	0.43	0.43	0.05	0.38	0.38	0.08	0.22		0.17	0.31
v/c Ratio		1.11	1.16	0.75	1.42	1.00	0.60	1.16	1.12		1.11	1.31
Control Delay		139.3	119.1	30.6	264.5	70.3	7.7	161.9	121.4		126.4	183.7
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay		139.3	119.1	30.6	264.5	70.3	7.7	161.9	121.4		126.4	183.7
LOS		F	F	C	F	E	A	F	F		F	F
Approach Delay			103.1			78.1			132.3			165.5
Approach LOS			F			E			F			F

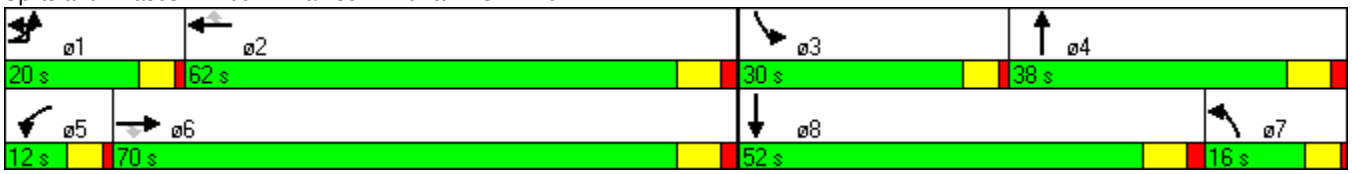
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.42			
Intersection Signal Delay: 116.7		Intersection LOS: F	
Intersection Capacity Utilization 114.8%		ICU Level of Service H	

Lane Group	SBR
Lane Configurations	
Volume (vph)	416
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	2.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

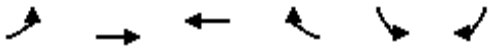


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	2010	0	0	1363	169	707
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						165
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2116	0	0	1435	178	744
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	118.0	0.0	0.0	118.0	22.0	0.0
Total Lost Time (s)	5.0	2.0	2.0	5.0	4.0	2.0
Act Effct Green (s)	116.3			116.3	14.7	140.0
Actuated g/C Ratio	0.83			0.83	0.10	1.00
v/c Ratio	0.73			0.50	0.50	0.48
Control Delay	4.4			4.3	63.8	1.1
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	4.4			4.3	63.8	1.1
LOS	A			A	E	A
Approach Delay	4.4			4.3	13.2	
Approach LOS	A			A	B	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 128 (91%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 6.2	Intersection LOS: A

Intersection Capacity Utilization 69.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd

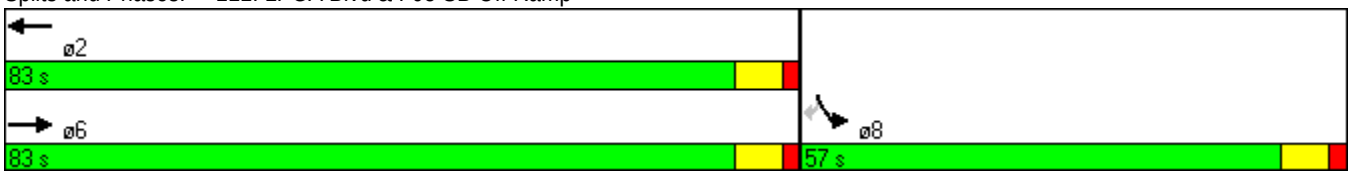


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	1457	1041	0	965	327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						80
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1534	1096	0	1016	344
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	83.0	83.0	0.0	57.0	57.0
Total Lost Time (s)	2.0	5.0	5.0	2.0	5.0	5.0
Act Effct Green (s)		80.9	80.9		49.1	49.1
Actuated g/C Ratio		0.58	0.58		0.35	0.35
v/c Ratio		0.77	0.55		0.86	0.58
Control Delay		18.1	20.2		50.5	31.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		18.1	20.2		50.5	31.6
LOS		B	C		D	C
Approach Delay		18.1	20.2		45.7	
Approach LOS		B	C		D	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 28.1	Intersection LOS: C

Intersection Capacity Utilization 109.9% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

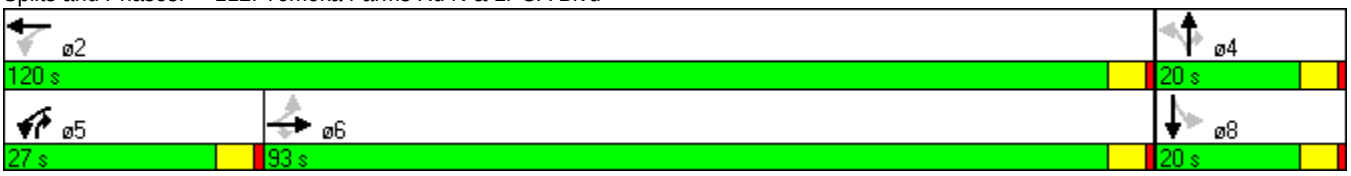


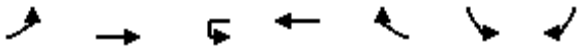
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1217	142	363	991	14	95	0	417	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	0		1	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1827	1553	1736	1824	0	1787	1881	1599	0	1787	0
Flt Permitted				0.043			0.757				0.757	
Satd. Flow (perm)	0	1827	1553	79	1824	0	1424	1881	1599	0	1424	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			136		2				74			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	4%	4%	0%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1281	149	382	1058	0	100	0	439	0	1	0
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm		pm+ov	Perm	NA	
Protected Phases		6		5	2			4	5		8	
Permitted Phases	6		6	2			4		4	8		
Total Split (s)	93.0	93.0	93.0	27.0	120.0	0.0	20.0	20.0	27.0	20.0	20.0	0.0
Total Lost Time (s)	3.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	2.0
Act Effct Green (s)		89.0	87.0	116.0	116.0		16.0		43.0		16.0	
Actuated g/C Ratio		0.64	0.62	0.83	0.83		0.11		0.31		0.11	
v/c Ratio		1.10	0.15	1.13	0.70		0.61		0.81		0.01	
Control Delay		85.5	2.4	129.3	12.7		76.0		49.9		55.0	
Queue Delay		0.0	0.0	0.0	0.0		0.0		0.0		0.0	
Total Delay		85.5	2.4	129.3	12.7		76.0		49.9		55.0	
LOS		F	A	F	B		E		D		D	
Approach Delay		76.8			43.6						55.0	
Approach LOS		E			D						D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 110 (79%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.13			
Intersection Signal Delay: 59.3		Intersection LOS: E	

Intersection Capacity Utilization 139.6% ICU Level of Service H
Analysis Period (min) 15

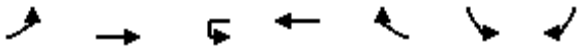
Splits and Phases: 112: Tomoka Farms Rd N & LPGA Blvd





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	10	345	0	546	35	25	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3407	0	1766	0
Flt Permitted	0.950					0.960	
Satd. Flow (perm)	1719	3438	1810	3407	0	1766	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	11	363	0	612	0	31	0
Sign Control		Free		Free		Stop	

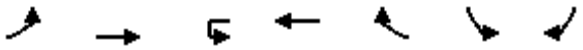
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.2%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	10	345	0	546	35	25	5
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	363	0	575	37	26	5
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	612		0			796	306
vC1, stage 1 conf vol						593	
vC2, stage 2 conf vol						203	
vCu, unblocked vol	612		0			796	306
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	99		0			95	99
cM capacity (veh/h)	943		0			486	693

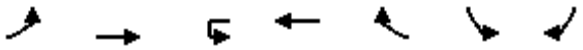
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	11	182	182	383	228	0	32
Volume Left	11	0	0	0	0	0	26
Volume Right	0	0	0	0	37	0	5
cSH	943	1700	1700	1700	1700	1700	511
Volume to Capacity	0.01	0.11	0.11	0.23	0.13	0.00	0.06
Queue Length 95th (ft)	1	0	0	0	0	0	4
Control Delay (s)	8.9	0.0	0.0	0.0	0.0	0.0	12.5
Lane LOS	A						B
Approach Delay (s)	0.2			0.0			12.5
Approach LOS							B

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	26.2%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	38	441	0	720	50	31	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3404	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3404	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	40	464	0	811	0	33	40
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 38.2%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	38	441	0	720	50	31	38
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	40	464	0	758	53	33	40
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	811		0			1096	405
vC1, stage 1 conf vol						784	
vC2, stage 2 conf vol						312	
vCu, unblocked vol	811		0			1096	405
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	95		0			91	93
cM capacity (veh/h)	792		0			378	598

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	40	232	232	505	305	0	73
Volume Left	40	0	0	0	0	0	33
Volume Right	0	0	0	0	53	0	40
cSH	792	1700	1700	1700	1700	1700	841
Volume to Capacity	0.05	0.14	0.14	0.30	0.18	0.00	0.09
Queue Length 95th (ft)	3	0	0	0	0	0	6
Control Delay (s)	9.8	0.0	0.0	0.0	0.0	0.0	13.2
Lane LOS	A						B
Approach Delay (s)	0.8			0.0			13.2
Approach LOS							B

Intersection Summary				
Average Delay	1.0			
Intersection Capacity Utilization	38.2%	ICU Level of Service		A
Analysis Period (min)	15			

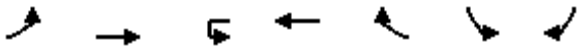
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	31	359	0	586	112	68	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1743	0
Flt Permitted	0.950					0.967	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1743	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	33	378	0	617	118	105	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	31	359	0	586	112	68	31
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	33	378	0	617	118	72	33
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	617		0			871	308
vC1, stage 1 conf vol						617	
vC2, stage 2 conf vol						254	
vCu, unblocked vol	617		0			871	308
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	97		0			85	95
cM capacity (veh/h)	939		0			462	690

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	33	189	189	308	308	118	0	104
Volume Left	33	0	0	0	0	0	0	72
Volume Right	0	0	0	0	0	118	0	33
cSH	939	1700	1700	1700	1700	1700	1700	516
Volume to Capacity	0.03	0.11	0.11	0.18	0.18	0.07	0.00	0.20
Queue Length 95th (ft)	2	0	0	0	0	0	0	15
Control Delay (s)	9.0	0.0	0.0	0.0	0.0	0.0	0.0	13.7
Lane LOS	A							B
Approach Delay (s)	0.7			0.0				13.7
Approach LOS								B

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	35.2%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	17	506	0	826	162	86	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1787	1599
Flt Permitted	0.326					0.950	
Satd. Flow (perm)	590	3438	1810	3438	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					171		16
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	18	533	0	869	171	91	16
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		6		2		8	
Permitted Phases	6		2		2		8
Total Split (s)	83.0	83.0	83.0	83.0	83.0	17.0	17.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	4.0
Act Effct Green (s)	22.8	22.8		22.8	22.8	8.7	8.7
Actuated g/C Ratio	0.71	0.71		0.71	0.71	0.27	0.27
v/c Ratio	0.04	0.22		0.36	0.15	0.19	0.04
Control Delay	4.9	4.3		5.0	1.5	13.3	7.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	4.9	4.3		5.0	1.5	13.3	7.7
LOS	A	A		A	A	B	A
Approach Delay		4.3		4.4		12.5	
Approach LOS		A		A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 32.1			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.36			
Intersection Signal Delay: 4.9		Intersection LOS: A	
Intersection Capacity Utilization 38.3%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	5	57	540	7	43	72	800	659	36	34	20	527
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		1		0		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	1719	3431	0	0	1719	3438	1538	1787	1778	0	3303
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	1719	3431	0	0	1719	3438	1538	1787	1778	0	3303
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1					694		15		
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	65	575	0	0	121	842	694	38	57	0	555
Turn Type	Prot	Prot	NA		Prot	Prot	NA	Perm	Split	NA		Split
Protected Phases	1	1	6		5	5	2		8	8		4
Permitted Phases								2				
Total Split (s)	36.0	36.0	92.0	0.0	10.0	10.0	66.0	66.0	14.0	14.0	0.0	34.0
Total Lost Time (s)	5.0	5.0	6.0	4.0	5.0	5.0	6.0	6.0	6.0	6.0	4.0	6.0
Act Effct Green (s)		11.2	27.7			22.3	43.5	43.5	8.9	8.9		25.9
Actuated g/C Ratio		0.11	0.26			0.21	0.41	0.41	0.08	0.08		0.25
v/c Ratio		0.35	0.63			0.33	0.59	0.66	0.25	0.35		0.68
Control Delay		57.0	40.2			39.6	27.7	5.2	59.7	49.8		44.8
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
Total Delay		57.0	40.2			39.6	27.7	5.2	59.7	49.8		44.8
LOS		E	D			D	C	A	E	D		D
Approach Delay			41.9				19.1			53.7		
Approach LOS			D				B			D		

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 104.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 29.8		Intersection LOS: C	
Intersection Capacity Utilization 65.8%		ICU Level of Service C	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	20	41
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1792	1524
Flt Permitted		
Satd. Flow (perm)	1792	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		43
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	21	43
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	34.0	34.0
Total Lost Time (s)	6.0	6.0
Act Effct Green (s)	25.9	25.9
Actuated g/C Ratio	0.25	0.25
v/c Ratio	0.05	0.11
Control Delay	38.6	12.6
Queue Delay	0.0	0.0
Total Delay	38.6	12.6
LOS	D	B
Approach Delay	42.4	
Approach LOS	D	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	10	1050	5	13	24	1412	6	147	2	32	57	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		0		300		325	0		0	0	
Storage Lanes	1		0		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	3435	0	0	1719	3438	1538	1787	1614	0	1787	1599
Flt Permitted	0.150				0.201			0.746			0.734	
Satd. Flow (perm)	271	3435	0	0	364	3438	1538	1403	1614	0	1381	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		1					6		34			94
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1110	0	0	39	1486	6	155	36	0	60	17
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2		2	4			8	
Total Split (s)	11.0	94.0	0.0	12.0	12.0	95.0	95.0	34.0	34.0	0.0	34.0	34.0
Total Lost Time (s)	5.7	7.0	4.0	5.7	5.7	7.0	7.0	5.0	5.0	4.0	5.0	5.0
Act Effct Green (s)	101.1	96.5			103.3	102.0	102.0	21.6	21.6		21.6	21.6
Actuated g/C Ratio	0.72	0.69			0.74	0.73	0.73	0.15	0.15		0.15	0.15
v/c Ratio	0.04	0.47			0.12	0.59	0.01	0.72	0.13		0.28	0.05
Control Delay	9.7	12.1			11.0	18.5	10.5	73.9	16.3		53.7	0.3
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	9.7	12.1			11.0	18.5	10.5	73.9	16.3		53.7	0.3
LOS	A	B			B	B	B	E	B		D	A
Approach Delay		12.1				18.3			63.0			41.9
Approach LOS		B				B			E			D

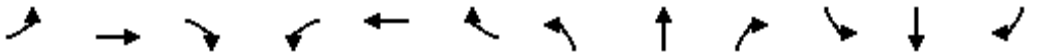
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 92 (66%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 19.4		Intersection LOS: B	

Lane Group	SBR
Lane Configurations	
Volume (vph)	16
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	4.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 63.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

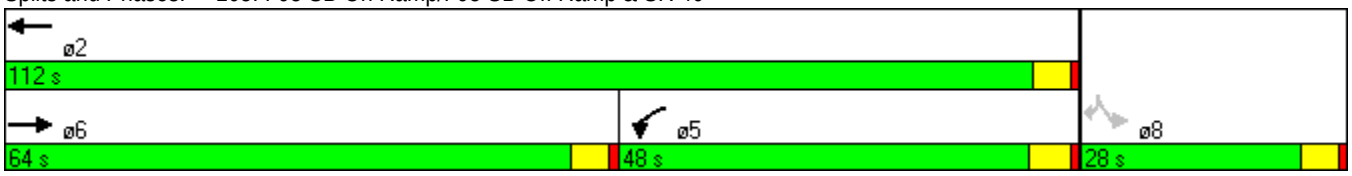


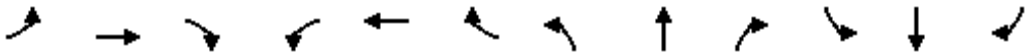
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	753	411	500	1588	0	0	0	0	238	0	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		0	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5895	0	3335	3438	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	5895	0	3335	3438	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		122										58
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1226	0	526	1672	0	0	0	0	251	0	116
Turn Type		NA		Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases										8		8
Total Split (s)	0.0	64.0	0.0	48.0	112.0	0.0	0.0	0.0	0.0	28.0	0.0	28.0
Total Lost Time (s)	4.0	5.0	4.0	5.3	5.0	4.0	4.0	4.0	4.0	5.0	4.0	5.0
Act Effct Green (s)		79.3		28.7	113.3					16.7		16.7
Actuated g/C Ratio		0.57		0.20	0.81					0.12		0.12
v/c Ratio		0.36		0.77	0.60					0.63		0.49
Control Delay		10.9		49.5	6.2					65.7		36.4
Queue Delay		0.0		0.0	0.4					0.0		0.0
Total Delay		10.9		49.5	6.6					65.7		36.4
LOS		B		D	A					E		D
Approach Delay		10.9			16.9							
Approach LOS		B			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 120 (86%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 18.8		Intersection LOS: B	

Intersection Capacity Utilization 59.0% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



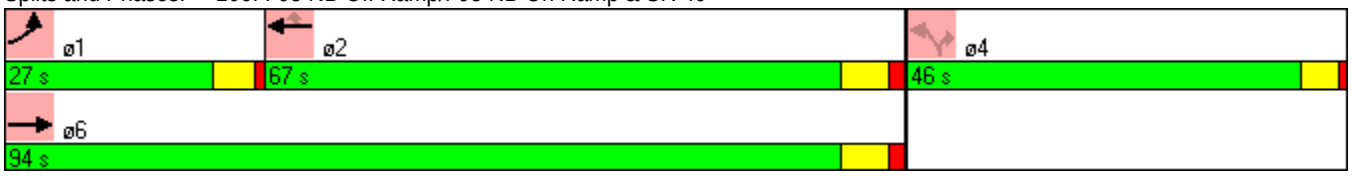


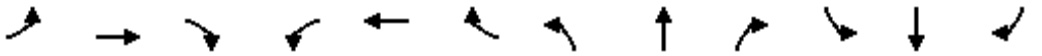
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	893	0	0	1563	352	525	0	465	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	6225	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	6225	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						371			262			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	940	0	0	1645	371	553	0	489	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	27.0	94.0	0.0	0.0	67.0	67.0	46.0	0.0	46.0	0.0	0.0	0.0
Total Lost Time (s)	5.3	7.0	4.0	4.0	7.0	7.0	5.0	4.0	5.0	4.0	4.0	4.0
Act Effct Green (s)	14.6	96.1			76.1	76.1	31.9		31.9			
Actuated g/C Ratio	0.10	0.69			0.54	0.54	0.23		0.23			
v/c Ratio	0.58	0.28			0.49	0.37	0.73		0.60			
Control Delay	56.8	18.2			11.3	3.8	55.4		24.0			
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			
Total Delay	56.8	18.2			11.3	3.8	55.4		24.0			
LOS	E	B			B	A	E		C			
Approach Delay		22.0			9.9							
Approach LOS		C			A							

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 138 (99%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 20.8		Intersection LOS: C	

Intersection Capacity Utilization 59.0% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



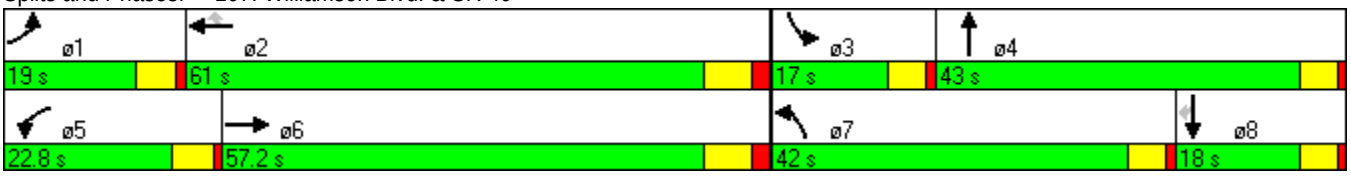


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	800	375	247	1086	106	675	150	282	166	123	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	1538	3335	3438	1538	3367	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	1538	3335	3438	1538	3367	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			252			112			297			162
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	842	395	260	1143	112	711	158	297	175	129	162
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			Free			2			Free			8
Total Split (s)	19.0	57.2	0.0	22.8	61.0	61.0	42.0	43.0	0.0	17.0	18.0	18.0
Total Lost Time (s)	5.3	7.0	4.0	5.3	7.0	7.0	5.0	5.0	4.0	5.0	5.0	5.0
Act Effct Green (s)	12.9	55.6	140.0	15.5	58.2	58.2	33.6	35.4	140.0	11.3	13.0	13.0
Actuated g/C Ratio	0.09	0.40	1.00	0.11	0.42	0.42	0.24	0.25	1.00	0.08	0.09	0.09
v/c Ratio	0.77	0.62	0.26	0.71	0.80	0.16	0.88	0.34	0.19	0.65	0.76	0.56
Control Delay	104.1	22.3	0.4	70.7	42.0	5.2	64.1	44.4	0.3	73.8	88.6	16.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	104.1	22.3	0.4	70.7	42.0	5.2	64.1	44.4	0.3	73.8	88.6	16.2
LOS	F	C	A	E	D	A	E	D	A	E	F	B
Approach Delay		23.3			44.2			45.2			57.9	
Approach LOS		C			D			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 90 (64%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 39.6		Intersection LOS: D	

Intersection Capacity Utilization 80.9% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	256	490	734	194	177	405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			250	0	250
Storage Lanes	1			0	0	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	1736	3471	3364	0	1770	1583
Flt Permitted	0.146				0.950	
Satd. Flow (perm)	267	3471	3364	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			44			394
Link Speed (mph)		40	40		50	
Link Distance (ft)		1131	525		528	
Travel Time (s)		19.3	8.9		7.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	269	516	977	0	186	426
Turn Type	pm+pt	NA	NA		NA	custom
Protected Phases	1	6	2		8	8
Permitted Phases	6					8
Total Split (s)	21.0	62.0	41.0	0.0	28.0	28.0
Total Lost Time (s)	5.0	5.0	5.0	4.0	5.0	5.0
Act Effct Green (s)	41.7	41.7	25.6		12.9	12.9
Actuated g/C Ratio	0.64	0.64	0.39		0.20	0.20
v/c Ratio	0.65	0.23	0.72		0.53	0.68
Control Delay	17.3	5.4	20.2		31.6	10.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	17.3	5.4	20.2		31.6	10.5
LOS	B	A	C		C	B
Approach Delay		9.5	20.2		16.9	
Approach LOS		A	C		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 65.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 15.8		Intersection LOS: B	
Intersection Capacity Utilization 63.0%		ICU Level of Service B	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	25	184	762	242	137	935	144	319	504	117	115	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		0	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3367	3471	1553	3367	3471	1553	3367	3374	0	3367	3277
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3367	3471	1553	3367	3471	1553	3367	3374	0	3367	3277
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				255			152		19			82
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			1302
Travel Time (s)			32.8			34.7			9.9			17.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	220	802	255	144	984	152	336	654	0	121	520
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2					
Total Split (s)	21.0	21.0	68.0	68.0	13.0	60.0	60.0	18.0	39.0	0.0	20.0	41.0
Total Lost Time (s)	5.0	5.0	7.0	7.0	5.0	7.0	7.0	5.0	7.0	4.0	5.0	7.0
Act Effct Green (s)		12.9	45.7	45.7	8.1	40.8	40.8	15.4	27.6		9.8	22.1
Actuated g/C Ratio		0.11	0.39	0.39	0.07	0.35	0.35	0.13	0.24		0.08	0.19
v/c Ratio		0.59	0.59	0.33	0.61	0.80	0.24	0.75	0.80		0.42	0.75
Control Delay		58.4	29.5	3.9	68.0	40.2	5.2	62.4	50.1		58.8	45.6
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay		58.4	29.5	3.9	68.0	40.2	5.2	62.4	50.1		58.8	45.6
LOS		E	C	A	E	D	A	E	D		E	D
Approach Delay			29.3			39.1			54.3			48.1
Approach LOS			C			D			D			D

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 115.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 41.1		Intersection LOS: D	
Intersection Capacity Utilization 75.4%		ICU Level of Service D	

Lane Group	SBR
Lane Configurations	
Volume (vph)	184
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	4.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

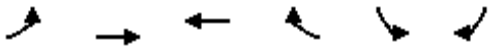
Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	729	0	0	872	196	349
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						367
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	767	0	0	918	206	367
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	118.0	0.0	0.0	118.0	22.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	21.0			21.0	8.5	42.6
Actuated g/C Ratio	0.49			0.49	0.20	1.00
v/c Ratio	0.45			0.54	0.31	0.24
Control Delay	7.8			8.6	17.2	0.4
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	7.8			8.6	17.2	0.4
LOS	A			A	B	A
Approach Delay	7.8			8.6	6.4	
Approach LOS	A			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 42.6			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 7.8		Intersection LOS: A	
Intersection Capacity Utilization 41.6%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd

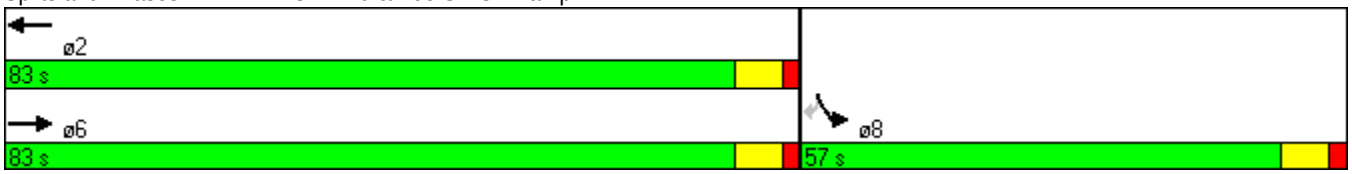


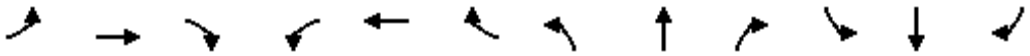
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	625	638	0	299	206
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						216
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	658	672	0	315	217
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	83.0	83.0	0.0	57.0	57.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		16.9	16.9		10.0	10.0
Actuated g/C Ratio		0.41	0.41		0.24	0.24
v/c Ratio		0.46	0.47		0.38	0.40
Control Delay		10.2	10.3		14.7	5.3
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		10.2	10.3		14.7	5.3
LOS		B	B		B	A
Approach Delay		10.2	10.3		10.9	
Approach LOS		B	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 41			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay: 10.4		Intersection LOS: B	
Intersection Capacity Utilization 42.1%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp





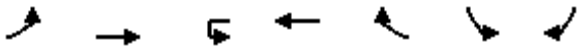
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	476	76	216	596	22	83	2	179	40	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	0		1	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1827	1553	1736	1818	0	1787	1881	1599	0	1777	0
Flt Permitted				0.950			0.950				0.958	
Satd. Flow (perm)	0	1827	1553	1736	1818	0	1787	1881	1599	0	1777	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	501	80	227	650	0	87	2	188	0	48	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 77.0%		ICU Level of Service D	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	476	76	216	596	22	83	2	179	40	1	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	0	501	80	227	627	23	87	2	188	42	1	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1057							
pX, platoon unblocked	0.82						0.82	0.82		0.82	0.82	0.82
vC, conflicting volume	651			581			1589	1606	501	1784	1675	639
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	470			581			1608	1629	501	1845	1712	456
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			77			0	97	67	0	98	99
cM capacity (veh/h)	909			983			56	65	572	26	58	500

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1
Volume Total	501	80	227	651	87	2	188	48
Volume Left	0	0	227	0	87	0	0	42
Volume Right	0	80	0	23	0	0	188	5
cSH	909	1700	983	1700	56	65	572	29
Volume to Capacity	0.00	0.05	0.23	0.38	1.56	0.03	0.33	1.67
Queue Length 95th (ft)	0	0	18	0	160	2	29	113
Control Delay (s)	0.0	0.0	9.8	0.0	439.9	62.3	14.4	619.5
Lane LOS			A		F	F	B	F
Approach Delay (s)	0.0		2.5		148.5			619.5
Approach LOS					F			F

Intersection Summary				
Average Delay	41.2			
Intersection Capacity Utilization	77.0%	ICU Level of Service		D
Analysis Period (min)	15			



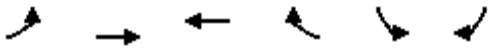
Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	12	631	0	1009	40	28	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3417	0	1761	0
Flt Permitted	0.950					0.961	
Satd. Flow (perm)	1719	3438	1810	3417	0	1761	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	13	664	0	1104	0	36	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	12	631	0	1009	40	28	7
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	13	664	0	1062	42	29	7
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1104		0			1441	552
vC1, stage 1 conf vol						1083	
vC2, stage 2 conf vol						357	
vCu, unblocked vol	1104		0			1441	552
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	98		0			89	98
cM capacity (veh/h)	611		0			271	480

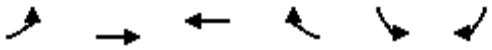
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	13	332	332	708	396	0	37
Volume Left	13	0	0	0	0	0	29
Volume Right	0	0	0	0	42	0	7
cSH	611	1700	1700	1700	1700	1700	297
Volume to Capacity	0.02	0.20	0.20	0.42	0.23	0.00	0.12
Queue Length 95th (ft)	1	0	0	0	0	0	8
Control Delay (s)	11.0	0.0	0.0	0.0	0.0	0.0	18.9
Lane LOS	B						C
Approach Delay (s)	0.2			0.0			18.9
Approach LOS							C

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	103	619	1010	84	51	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			0	0	300
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	1719	3438	3400	0	1787	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1719	3438	3400	0	1787	1599
Link Speed (mph)		60	60		35	
Link Distance (ft)		836	1751		1900	
Travel Time (s)		9.5	19.9		37.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	108	652	1151	0	54	108
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.6%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	103	619	1010	84	51	103
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	108	652	1063	88	54	108
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						15
Median type		Raised	Raised			
Median storage veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1152				1650	576
vC1, stage 1 conf vol					1107	
vC2, stage 2 conf vol					543	
vCu, unblocked vol	1152				1650	576
tC, single (s)	4.2				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	81				78	77
cM capacity (veh/h)	586				240	463

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	108	326	326	709	443	162
Volume Left	108	0	0	0	0	54
Volume Right	0	0	0	0	88	108
cSH	586	1700	1700	1700	1700	692
Volume to Capacity	0.19	0.19	0.19	0.42	0.26	0.23
Queue Length 95th (ft)	13	0	0	0	0	18
Control Delay (s)	12.5	0.0	0.0	0.0	0.0	18.1
Lane LOS	B					C
Approach Delay (s)	1.8			0.0		18.1
Approach LOS						C

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		

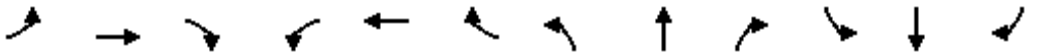
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	27	602	0	982	134	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1754	0
Flt Permitted	0.950					0.964	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1754	0
Link Speed (mph)		60		60		60	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		16.6	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	28	634	0	1034	141	114	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	27	602	0	982	134	82	27
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	28	634	0	1034	141	86	28
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1034		0			1407	517
vC1, stage 1 conf vol						1034	
vC2, stage 2 conf vol						374	
vCu, unblocked vol	1034		0			1407	517
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	96		0			70	94
cM capacity (veh/h)	650		0			284	506

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	28	317	317	517	517	141	0	115
Volume Left	28	0	0	0	0	0	0	86
Volume Right	0	0	0	0	0	141	0	28
cSH	650	1700	1700	1700	1700	1700	1700	319
Volume to Capacity	0.04	0.19	0.19	0.30	0.30	0.08	0.00	0.36
Queue Length 95th (ft)	3	0	0	0	0	0	0	32
Control Delay (s)	10.8	0.0	0.0	0.0	0.0	0.0	0.0	22.5
Lane LOS	B							C
Approach Delay (s)	0.5			0.0				22.5
Approach LOS								C

Intersection Summary				
Average Delay	1.5			
Intersection Capacity Utilization	40.0%	ICU Level of Service		A
Analysis Period (min)	15			

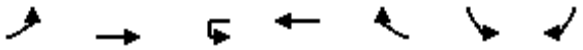


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	588	31	195	960	502	50	11	195	308	7	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		300	300		300	300		300	300		300
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	3438	1538	3335	3438	1538	1787	1881	1599	3467	1881	1599
Flt Permitted	0.176			0.289			0.950			0.950		
Satd. Flow (perm)	318	3438	1538	1015	3438	1538	1787	1881	1599	3467	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			33			528			205			65
Link Speed (mph)		60			60			60			60	
Link Distance (ft)		1961			4435			1868			1392	
Travel Time (s)		22.3			50.4			21.2			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	619	33	205	1011	528	53	12	205	324	7	65
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases	6		6	2		2			4			8
Total Split (s)	11.0	46.0	46.0	19.0	54.0	54.0	22.0	22.0	22.0	23.0	23.0	23.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	38.5	31.3	31.3	43.9	36.6	36.6	11.9	11.9	11.9	14.6	14.6	14.6
Actuated g/C Ratio	0.46	0.37	0.37	0.52	0.44	0.44	0.14	0.14	0.14	0.17	0.17	0.17
v/c Ratio	0.25	0.48	0.06	0.26	0.67	0.55	0.21	0.05	0.51	0.54	0.02	0.20
Control Delay	12.0	21.1	6.3	10.3	22.1	3.8	39.2	37.9	11.0	37.1	33.6	11.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.0	21.1	6.3	10.3	22.1	3.8	39.2	37.9	11.0	37.1	33.6	11.0
LOS	B	C	A	B	C	A	D	D	B	D	C	B
Approach Delay		19.6			15.2			17.7			32.7	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 83.8			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 18.6		Intersection LOS: B	
Intersection Capacity Utilization 56.2%		ICU Level of Service B	

Analysis Period (min) 15

Splits and Phases: 117: Hunters Ridge Road & SR 40



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	18	997	0	1641	184	91	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1787	1599
Flt Permitted	0.102					0.950	
Satd. Flow (perm)	185	3438	1810	3438	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					194		17
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	19	1049	0	1727	194	96	17
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		6		2		8	
Permitted Phases	6		2		2		8
Total Split (s)	76.0	76.0	76.0	76.0	76.0	24.0	24.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	47.6	47.6		47.6	47.6	11.3	11.3
Actuated g/C Ratio	0.78	0.78		0.78	0.78	0.19	0.19
v/c Ratio	0.13	0.39		0.64	0.16	0.29	0.05
Control Delay	5.2	3.7		5.8	0.8	31.6	15.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	5.2	3.7		5.8	0.8	31.6	15.6
LOS	A	A		A	A	C	B
Approach Delay		3.7		5.3		29.2	
Approach LOS		A		A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 60.8			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 5.6		Intersection LOS: A	
Intersection Capacity Utilization 58.7%		ICU Level of Service B	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	14	160	934	14	43	74	1457	680	37	35	23	528
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		1		0		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	1719	3431	0	0	1719	3438	1538	1787	1770	0	3303
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	1719	3431	0	0	1719	3438	1538	1787	1770	0	3303
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1					660		17		
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	183	998	0	0	123	1534	716	39	61	0	556
Turn Type	Prot	Prot	NA		Prot	Prot	NA	Perm	Split	NA		Split
Protected Phases	1	1	6		5	5	2		8	8		4
Permitted Phases								2				
Total Split (s)	35.0	35.0	78.0	0.0	13.0	13.0	56.0	56.0	14.0	14.0	0.0	45.0
Total Lost Time (s)	3.0	4.0	4.0	2.0	3.0	4.0	4.0	4.0	4.0	4.0	2.0	4.0
Act Effct Green (s)		21.1	50.3			23.9	53.1	53.1	10.2	10.2		31.7
Actuated g/C Ratio		0.16	0.39			0.19	0.41	0.41	0.08	0.08		0.25
v/c Ratio		0.65	0.74			0.39	1.08	0.70	0.27	0.39		0.68
Control Delay		63.3	37.4			57.6	86.9	8.3	67.4	55.7		49.4
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
Total Delay		63.3	37.4			57.6	86.9	8.3	67.4	55.7		49.4
LOS		E	D			E	F	A	E	E		D
Approach Delay			41.4				61.7			60.2		
Approach LOS			D				E			E		

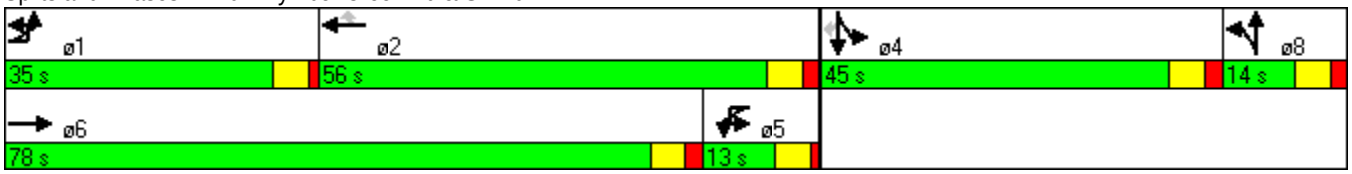
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 128.7			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 53.0		Intersection LOS: D	
Intersection Capacity Utilization 81.6%		ICU Level of Service D	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	23	112
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1792	1524
Flt Permitted		
Satd. Flow (perm)	1792	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		118
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	24	118
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	45.0	45.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	31.7	31.7
Actuated g/C Ratio	0.25	0.25
v/c Ratio	0.05	0.25
Control Delay	39.4	8.2
Queue Delay	0.0	0.0
Total Delay	39.4	8.2
LOS	D	A
Approach Delay	42.1	
Approach LOS	D	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	10	1361	10	16	34	2059	8	155	2	41	57	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		0		300		325	300		0	0	
Storage Lanes	1		0		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	3435	0	0	1719	3438	1538	1787	1612	0	1787	1614
Flt Permitted	0.045				0.131			0.746			0.728	
Satd. Flow (perm)	81	3435	0	0	237	3438	1538	1403	1612	0	1370	1614
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		1					8		43			17
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1444	0	0	53	2167	8	163	45	0	60	18
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2		2	4			8	
Total Split (s)	10.7	112.2	0.0	10.8	10.8	112.3	112.3	27.0	27.0	0.0	27.0	27.0
Total Lost Time (s)	4.7	5.0	2.0	3.7	4.7	5.0	5.0	3.0	4.0	2.0	3.0	4.0
Act Effct Green (s)	114.2	110.1			115.2	114.9	114.9	22.8	21.8		22.8	21.8
Actuated g/C Ratio	0.76	0.73			0.77	0.77	0.77	0.15	0.15		0.15	0.15
v/c Ratio	0.08	0.57			0.21	0.82	0.01	0.77	0.17		0.29	0.07
Control Delay	9.6	10.9			6.8	20.4	3.8	83.6	17.2		59.6	23.1
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	9.6	10.9			6.8	20.4	3.8	83.6	17.2		59.6	23.1
LOS	A	B			A	C	A	F	B		E	C
Approach Delay		10.9				20.0			69.3			51.2
Approach LOS		B				C			E			D

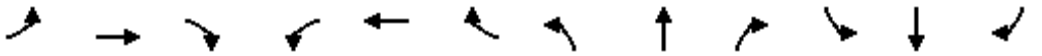
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 95 (63%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 19.9		Intersection LOS: B	

Lane Group	SBR
Lane Configurations	
Volume (vph)	16
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 79.7% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

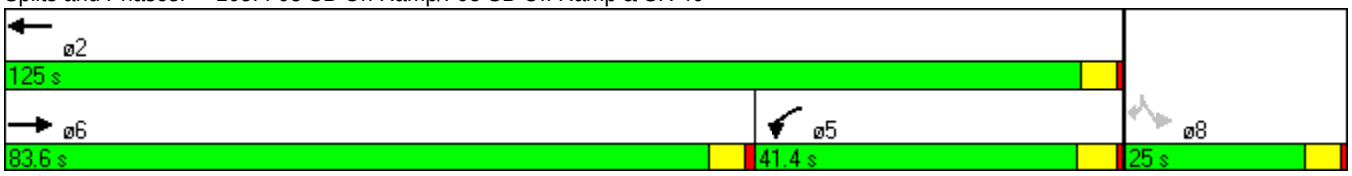


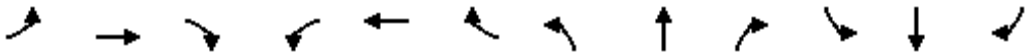
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1064	431	540	2264	0	0	0	0	304	0	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		0	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5957	0	3335	3438	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	5957	0	3335	3438	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		104										20
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1574	0	568	2383	0	0	0	0	320	0	133
Turn Type		NA		Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases										8		8
Total Split (s)	0.0	83.6	0.0	41.4	125.0	0.0	0.0	0.0	0.0	25.0	0.0	25.0
Total Lost Time (s)	4.0	4.0	3.0	4.3	4.0	4.0	2.0	4.0	2.0	4.0	4.0	4.0
Act Effct Green (s)		66.2		51.7	122.2					19.8		19.8
Actuated g/C Ratio		0.44		0.34	0.81					0.13		0.13
v/c Ratio		0.59		0.49	0.85					0.73		0.60
Control Delay		25.1		32.1	15.1					72.5		63.8
Queue Delay		0.0		0.0	1.0					0.0		0.0
Total Delay		25.1		32.1	16.1					72.5		63.8
LOS		C		C	B					E		E
Approach Delay		25.1			19.2							
Approach LOS		C			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 144 (96%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 25.7		Intersection LOS: C	

Intersection Capacity Utilization 77.9% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



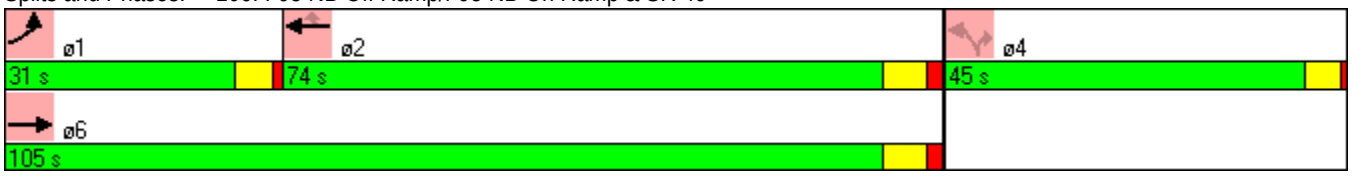


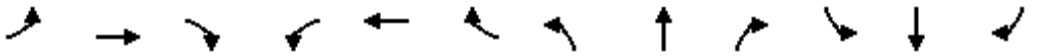
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	166	1202	0	0	2142	419	662	0	477	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	6225	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	6225	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						441			154			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	175	1265	0	0	2255	441	697	0	502	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	31.0	105.0	0.0	0.0	74.0	74.0	45.0	0.0	45.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	2.0	4.0	4.0	2.0	4.0
Act Effct Green (s)	21.8	102.3			76.2	76.2	38.7		38.7			
Actuated g/C Ratio	0.15	0.68			0.51	0.51	0.26		0.26			
v/c Ratio	0.70	0.38			0.71	0.44	0.81		0.62			
Control Delay	71.9	6.7			18.8	2.3	60.4		36.6			
Queue Delay	0.0	0.2			0.1	0.0	0.6		0.0			
Total Delay	71.9	7.0			18.9	2.3	61.0		36.6			
LOS	E	A			B	A	E		D			
Approach Delay		14.8			16.2							
Approach LOS		B			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 20 (13%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 23.6		Intersection LOS: C	

Intersection Capacity Utilization 77.9% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



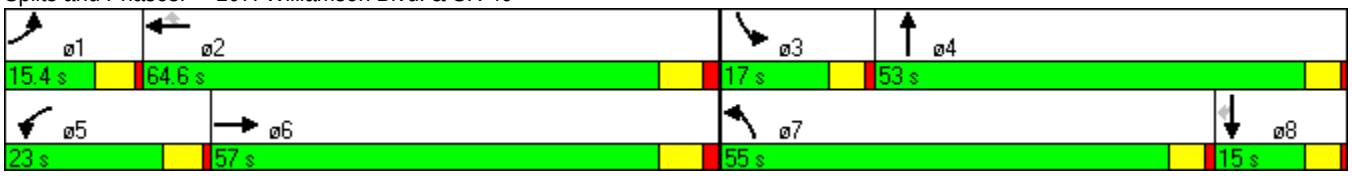


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	945	564	324	1300	106	1107	151	287	166	123	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	1538	3335	3438	1538	3367	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	1538	3335	3438	1538	3367	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			299			112			302			111
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	995	594	341	1368	112	1165	159	302	175	129	162
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Free	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			Free			2			Free			8
Total Split (s)	15.4	57.0	0.0	23.0	64.6	64.6	55.0	53.0	0.0	17.0	15.0	15.0
Total Lost Time (s)	4.3	5.0	2.0	4.3	5.0	5.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	11.1	52.4	150.0	18.3	59.6	59.6	51.0	49.6	150.0	12.4	11.0	11.0
Actuated g/C Ratio	0.07	0.35	1.00	0.12	0.40	0.40	0.34	0.33	1.00	0.08	0.07	0.07
v/c Ratio	0.96	0.83	0.39	0.84	1.00	0.16	1.02	0.26	0.19	0.63	0.96	0.75
Control Delay	143.9	36.8	0.9	82.4	69.4	5.2	79.4	38.5	0.3	76.9	136.0	44.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	143.9	36.8	0.9	82.4	69.4	5.2	79.4	38.5	0.3	76.9	136.0	44.4
LOS	F	D	A	F	E	A	E	D	A	E	F	D
Approach Delay		32.0			67.9			60.7			82.0	
Approach LOS		C			E			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 128 (85%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 56.1		Intersection LOS: E	

Intersection Capacity Utilization 95.0% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	367	652	977	373	241	552
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			250	300	0
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	3367	3471	3471	1553	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3367	3471	3471	1553	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				393		301
Link Speed (mph)		40	40		50	
Link Distance (ft)		1131	525		528	
Travel Time (s)		19.3	8.9		7.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	386	686	1028	393	254	581
Turn Type	Prot	NA	NA	Perm	NA	custom
Protected Phases	1	6	2		8	8
Permitted Phases				2		8
Total Split (s)	17.0	58.0	41.0	41.0	32.0	32.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	12.8	49.2	32.2	32.2	22.4	22.4
Actuated g/C Ratio	0.16	0.62	0.40	0.40	0.28	0.28
v/c Ratio	0.71	0.32	0.73	0.46	0.26	0.88
Control Delay	43.0	8.5	24.5	3.8	23.5	29.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.0	8.5	24.5	3.8	23.5	29.7
LOS	D	A	C	A	C	C
Approach Delay		20.9	18.8		27.8	
Approach LOS		C	B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 79.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 21.7		Intersection LOS: C	
Intersection Capacity Utilization 67.9%		ICU Level of Service C	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	33	245	1052	258	226	1261	319	340	763	198	234	475
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		0	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3367	3471	1553	3367	3471	1553	3367	3364	0	3367	3294
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3367	3471	1553	3367	3471	1553	3367	3364	0	3367	3294
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				272			227		23			62
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			1302
Travel Time (s)			32.8			34.7			9.9			17.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	293	1107	272	238	1327	336	358	1011	0	246	758
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2					
Total Split (s)	17.0	17.0	63.0	63.0	16.0	62.0	62.0	23.0	46.0	0.0	15.0	38.0
Total Lost Time (s)	3.0	4.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0	2.0	4.0	5.0
Act Effct Green (s)		13.0	57.9	57.9	12.0	56.9	56.9	18.2	41.0		11.0	32.8
Actuated g/C Ratio		0.09	0.41	0.41	0.09	0.41	0.41	0.13	0.29		0.08	0.23
v/c Ratio		0.94	0.77	0.34	0.82	0.94	0.44	0.82	1.01		0.93	0.93
Control Delay		99.5	39.7	4.0	85.5	53.4	11.1	74.9	78.4		103.0	65.8
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay		99.5	39.7	4.0	85.5	53.4	11.1	74.9	78.4		103.0	65.8
LOS		F	D	A	F	D	B	E	E		F	E
Approach Delay			44.4			49.9			77.5			75.0
Approach LOS			D			D			E			E

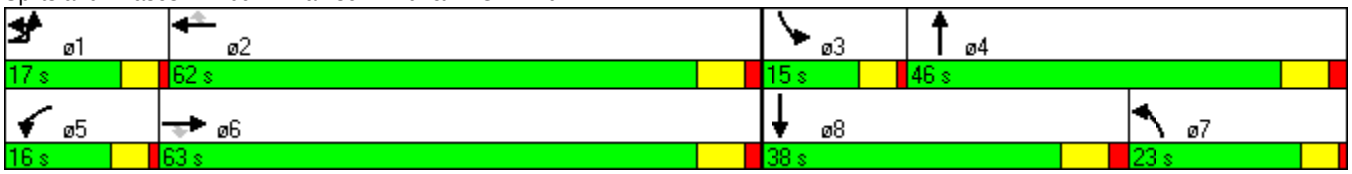
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 139.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay: 58.9		Intersection LOS: E	
Intersection Capacity Utilization 91.9%		ICU Level of Service F	

Lane Group	SBR
Lane Configurations	
Volume (vph)	245
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	2.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

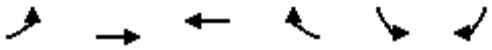


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1068	0	0	1259	243	451
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						334
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1124	0	0	1325	256	475
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	109.0	0.0	0.0	109.0	31.0	0.0
Total Lost Time (s)	5.0	2.0	2.0	5.0	4.0	2.0
Act Effct Green (s)	113.1			113.1	17.9	140.0
Actuated g/C Ratio	0.81			0.81	0.13	1.00
v/c Ratio	0.40			0.47	0.59	0.31
Control Delay	4.7			5.1	63.1	0.5
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	4.7			5.1	63.1	0.5
LOS	A			A	E	A
Approach Delay	4.7			5.1	22.4	
Approach LOS	A			A	C	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 128 (91%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 8.9	Intersection LOS: A

Intersection Capacity Utilization 49.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	937	981	0	409	256
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						102
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	986	1033	0	431	269
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	86.0	86.0	0.0	54.0	54.0
Total Lost Time (s)	2.0	5.0	5.0	2.0	5.0	5.0
Act Effct Green (s)		103.6	103.6		26.4	26.4
Actuated g/C Ratio		0.74	0.74		0.19	0.19
v/c Ratio		0.38	0.40		0.68	0.72
Control Delay		6.7	6.7		57.9	42.9
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		6.7	6.7		57.9	42.9
LOS		A	A		E	D
Approach Delay		6.7	6.7		52.1	
Approach LOS		A	A		D	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 18.4	Intersection LOS: B

Intersection Capacity Utilization 85.7% ICU Level of Service E
Analysis Period (min) 15

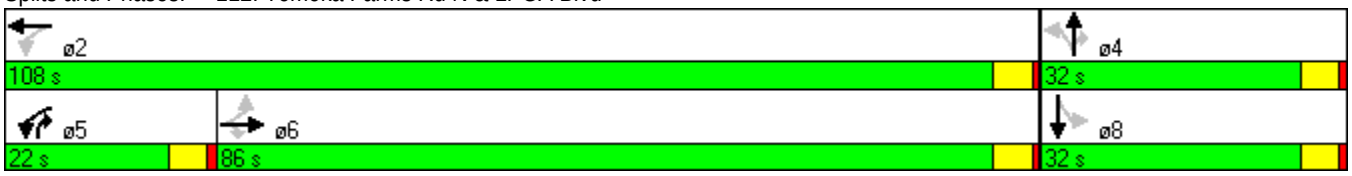
Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	700	142	334	881	22	161	2	286	40	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	0		1	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1827	1553	1736	1820	0	1787	1881	1599	0	1777	0
Flt Permitted		0.999		0.244			0.750				0.781	
Satd. Flow (perm)	0	1825	1553	446	1820	0	1411	1881	1599	0	1449	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			149		2				211		4	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	738	149	352	950	0	169	2	301	0	48	0
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases		6		5	2			4	5		8	
Permitted Phases	6		6	2			4		4	8		
Total Split (s)	86.0	86.0	86.0	22.0	108.0	0.0	32.0	32.0	22.0	32.0	32.0	0.0
Total Lost Time (s)	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	2.0
Act Effct Green (s)		90.3	90.3	109.4	109.4		22.6	22.6	41.7		22.6	
Actuated g/C Ratio		0.64	0.64	0.78	0.78		0.16	0.16	0.30		0.16	
v/c Ratio		0.63	0.14	0.72	0.67		0.74	0.01	0.48		0.20	
Control Delay		19.4	2.2	18.5	12.5		74.7	46.0	13.5		47.0	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay		19.4	2.2	18.5	12.5		74.7	46.0	13.5		47.0	
LOS		B	A	B	B		E	D	B		D	
Approach Delay		16.5			14.1			35.5			47.0	
Approach LOS		B			B			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 110 (79%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 19.2		Intersection LOS: B	

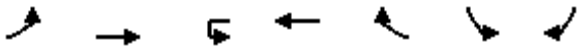
Intersection Capacity Utilization 107.1% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 112: Tomoka Farms Rd N & LPGA Blvd



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	14	920	0	1478	45	30	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3424	0	1750	0
Flt Permitted	0.950					0.964	
Satd. Flow (perm)	1719	3438	1810	3424	0	1750	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	15	968	0	1603	0	43	0
Sign Control		Free		Free		Stop	

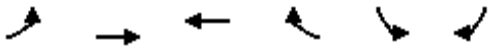
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 52.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	14	920	0	1478	45	30	10
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	15	968	0	1556	47	32	11
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1603		0			2093	802
vC1, stage 1 conf vol						1579	
vC2, stage 2 conf vol						514	
vCu, unblocked vol	1603		0			2093	802
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	96		0			79	97
cM capacity (veh/h)	390		0			148	329

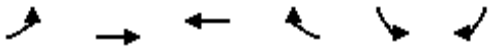
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	15	484	484	1037	566	0	42
Volume Left	15	0	0	0	0	0	32
Volume Right	0	0	0	0	47	0	11
cSH	390	1700	1700	1700	1700	1700	172
Volume to Capacity	0.04	0.28	0.28	0.61	0.33	0.00	0.24
Queue Length 95th (ft)	2	0	0	0	0	0	18
Control Delay (s)	14.6	0.0	0.0	0.0	0.0	0.0	32.6
Lane LOS	B						D
Approach Delay (s)	0.2			0.0			32.6
Approach LOS							D

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	164	793	1295	117	72	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			0	0	300
Storage Lanes	1			0	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	1719	3438	3397	0	1787	1599
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1719	3438	3397	0	1787	1599
Link Speed (mph)		60	60		35	
Link Distance (ft)		836	1751		1900	
Travel Time (s)		9.5	19.9		37.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	173	835	1486	0	76	173
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.6%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	164	793	1295	117	72	164
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	173	835	1363	123	76	173
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						15
Median type		Raised	Raised			
Median storage veh)		2	2			
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1486				2187	743
vC1, stage 1 conf vol					1425	
vC2, stage 2 conf vol					763	
vCu, unblocked vol	1486				2187	743
tC, single (s)	4.2				6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)	2.2				3.5	3.3
p0 queue free %	60				49	52
cM capacity (veh/h)	434				148	360

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	SB 1
Volume Total	173	417	417	909	578	248
Volume Left	173	0	0	0	0	76
Volume Right	0	0	0	0	123	173
cSH	434	1700	1700	1700	1700	484
Volume to Capacity	0.40	0.25	0.25	0.53	0.34	0.51
Queue Length 95th (ft)	38	0	0	0	0	58
Control Delay (s)	18.7	0.0	0.0	0.0	0.0	32.6
Lane LOS	C					D
Approach Delay (s)	3.2			0.0		32.6
Approach LOS						D

Intersection Summary			
Average Delay	4.1		
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		

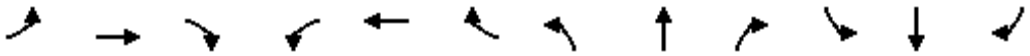
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	24	841	0	1373	156	96	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1759	0
Flt Permitted	0.950					0.961	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1759	0
Link Speed (mph)		60		60		60	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		16.6	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	25	885	0	1445	164	126	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.4%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	24	841	0	1373	156	96	24
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	25	885	0	1445	164	101	25
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1445		0			1938	723
vC1, stage 1 conf vol						1445	
vC2, stage 2 conf vol						493	
vCu, unblocked vol	1445		0			1938	723
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	94		0			42	93
cM capacity (veh/h)	450		0			174	371

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	25	443	443	723	723	164	0	126
Volume Left	25	0	0	0	0	0	0	101
Volume Right	0	0	0	0	0	164	0	25
cSH	450	1700	1700	1700	1700	1700	1700	195
Volume to Capacity	0.06	0.26	0.26	0.43	0.43	0.10	0.00	0.65
Queue Length 95th (ft)	4	0	0	0	0	0	0	77
Control Delay (s)	13.5	0.0	0.0	0.0	0.0	0.0	0.0	52.4
Lane LOS	B							F
Approach Delay (s)	0.4			0.0				52.4
Approach LOS								F

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		

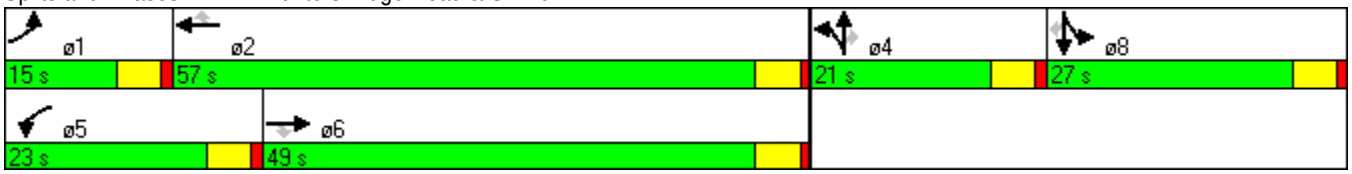


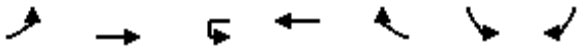
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	780	51	335	1272	859	84	22	335	527	14	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		300	300		300	300		300	300		300
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	3438	1538	3335	3438	1538	1787	1881	1599	3467	1881	1599
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	1538	3335	3438	1538	1787	1881	1599	3467	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			54			842			218			112
Link Speed (mph)		60			60			60			60	
Link Distance (ft)		1961			4435			1868			1392	
Travel Time (s)		22.3			50.4			21.2			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	821	54	353	1339	904	88	23	353	555	15	112
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Total Split (s)	15.0	49.0	49.0	23.0	57.0	57.0	21.0	21.0	21.0	27.0	27.0	27.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	10.7	45.2	45.2	17.5	52.0	52.0	17.0	17.0	17.0	23.0	23.0	23.0
Actuated g/C Ratio	0.09	0.38	0.38	0.15	0.44	0.44	0.14	0.14	0.14	0.19	0.19	0.19
v/c Ratio	0.72	0.63	0.09	0.72	0.89	0.79	0.34	0.09	0.85	0.82	0.04	0.28
Control Delay	78.9	32.7	6.8	57.2	39.4	8.4	50.6	45.8	38.5	57.7	40.1	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.9	32.7	6.8	57.2	39.4	8.4	50.6	45.8	38.5	57.7	40.1	9.4
LOS	E	C	A	E	D	A	D	D	D	E	D	A
Approach Delay		36.6			31.1			41.2			49.3	
Approach LOS		D			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 118.7			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 35.8		Intersection LOS: D	
Intersection Capacity Utilization 77.4%		ICU Level of Service D	

Analysis Period (min) 15

Splits and Phases: 117: Hunters Ridge Road & SR 40





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	19	1496	0	2461	201	96	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1787	1599
Flt Permitted	0.053					0.950	
Satd. Flow (perm)	96	3438	1810	3438	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					212		12
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	20	1575	0	2591	212	101	18
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm
Protected Phases		6		2		8	
Permitted Phases	6		2		2		8
Total Split (s)	83.0	83.0	83.0	83.0	83.0	17.0	17.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	76.4	76.4		76.4	76.4	10.8	10.8
Actuated g/C Ratio	0.84	0.84		0.84	0.84	0.12	0.12
v/c Ratio	0.25	0.54		0.89	0.16	0.47	0.09
Control Delay	11.0	4.0		13.0	0.6	48.8	24.7
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	11.0	4.0		13.0	0.6	48.8	24.7
LOS	B	A		B	A	D	C
Approach Delay		4.1		12.1		45.1	
Approach LOS		A		B		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 90.6			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 10.1		Intersection LOS: B	
Intersection Capacity Utilization 81.4%		ICU Level of Service D	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	23	264	1327	17	44	76	2100	704	39	37	24	530
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		1		0		1		1	1		0	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	1719	3431	0	0	1719	3438	1538	1787	1770	0	3303
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	1719	3431	0	0	1719	3438	1538	1787	1770	0	3303
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)			1					567		16		
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	302	1415	0	0	126	2211	741	41	64	0	558
Turn Type	Prot	Prot	NA		Prot	Prot	NA	Perm	Split	NA		Split
Protected Phases	1	1	6		5	5	2		8	8		4
Permitted Phases								2				
Total Split (s)	26.0	26.0	89.0	0.0	21.0	21.0	84.0	84.0	14.0	14.0	0.0	26.0
Total Lost Time (s)	3.0	4.0	4.0	2.0	3.0	4.0	4.0	4.0	4.0	4.0	2.0	4.0
Act Effct Green (s)		22.0	77.0			25.2	80.1	80.1	10.0	10.0		22.0
Actuated g/C Ratio		0.15	0.52			0.17	0.54	0.54	0.07	0.07		0.15
v/c Ratio		1.18	0.79			0.43	1.18	0.68	0.34	0.47		1.13
Control Delay		164.2	31.8			64.0	119.2	8.6	74.9	63.4		136.0
Queue Delay		0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0
Total Delay		164.2	31.8			64.0	119.2	8.6	74.9	63.4		136.0
LOS		F	C			E	F	A	E	E		F
Approach Delay			55.1				90.3			67.9		
Approach LOS			E				F			E		

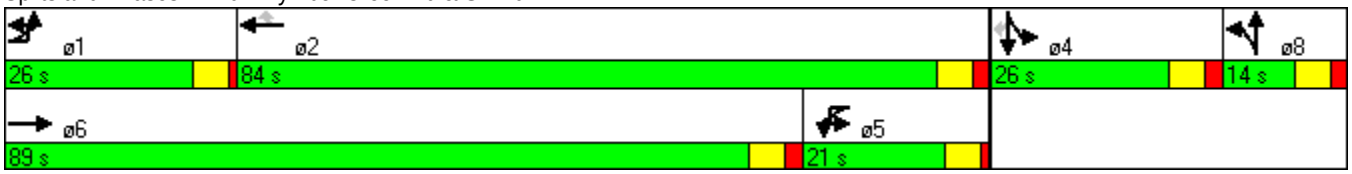
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 147.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.18			
Intersection Signal Delay: 80.4		Intersection LOS: F	
Intersection Capacity Utilization 109.4%		ICU Level of Service H	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	25	250
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1792	1524
Flt Permitted		
Satd. Flow (perm)	1792	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		226
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	26	263
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	26.0	26.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	22.0	22.0
Actuated g/C Ratio	0.15	0.15
v/c Ratio	0.10	0.63
Control Delay	56.6	18.5
Queue Delay	0.0	0.0
Total Delay	56.6	18.5
LOS	E	B
Approach Delay	97.0	
Approach LOS	F	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	10	1765	14	18	38	2700	11	167	2	45	57	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		0		300		325	300		0	0	
Storage Lanes	1		0		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	3435	0	0	1719	3438	1538	1787	1610	0	1787	1599
Flt Permitted	0.038				0.061			0.746			0.725	
Satd. Flow (perm)	69	3435	0	0	110	3438	1538	1403	1610	0	1364	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)		2					12		47			43
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1873	0	0	59	2842	12	176	49	0	60	17
Turn Type	pm+pt	NA		pm+pt	pm+pt	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases	6			2	2		2	4			8	
Total Split (s)	10.7	118.6	0.0	11.4	11.4	119.3	119.3	20.0	20.0	0.0	20.0	20.0
Total Lost Time (s)	4.7	5.0	2.0	3.7	4.7	5.0	5.0	3.0	4.0	2.0	3.0	4.0
Act Effct Green (s)	113.4	109.5			114.6	114.3	114.3	23.4	22.4		23.4	22.4
Actuated g/C Ratio	0.76	0.73			0.76	0.76	0.76	0.16	0.15		0.16	0.15
v/c Ratio	0.09	0.75			0.38	1.08	0.01	0.80	0.17		0.28	0.06
Control Delay	8.5	14.4			7.2	56.3	2.5	86.3	18.3		62.4	0.4
Queue Delay	0.0	0.0			0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	8.5	14.4			7.2	56.3	2.5	86.3	18.3		62.4	0.4
LOS	A	B			A	E	A	F	B		E	A
Approach Delay		14.4				55.1			71.5			48.7
Approach LOS		B				E			E			D

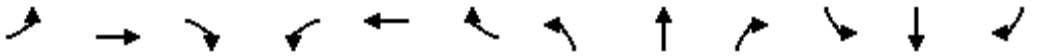
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 128 (85%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 40.7		Intersection LOS: D	

Lane Group	SBR
Lane Configurations	
Volume (vph)	16
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 98.1% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

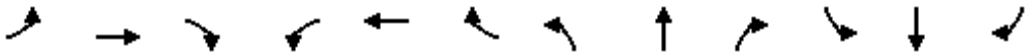


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1409	499	581	2910	0	0	0	0	356	0	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		0	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	5982	0	3335	3438	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	5982	0	3335	3438	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		97										7
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2008	0	612	3063	0	0	0	0	375	0	162
Turn Type		NA		Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases										8		8
Total Split (s)	0.0	88.4	0.0	41.6	130.0	0.0	0.0	0.0	0.0	20.0	0.0	20.0
Total Lost Time (s)	4.0	4.0	3.0	4.3	4.0	4.0	2.0	4.0	2.0	4.0	4.0	4.0
Act Effct Green (s)		76.8		44.9	126.0					16.0		16.0
Actuated g/C Ratio		0.51		0.30	0.84					0.11		0.11
v/c Ratio		0.65		0.61	1.06					1.05		0.95
Control Delay		19.6		37.3	51.1					124.8		120.1
Queue Delay		0.0		0.6	36.4					0.0		0.0
Total Delay		19.6		37.9	87.6					124.8		120.1
LOS		B		D	F					F		F
Approach Delay		19.6			79.3							
Approach LOS		B			E							

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 128 (85%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 63.8	Intersection LOS: E

Intersection Capacity Utilization 104.4% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40

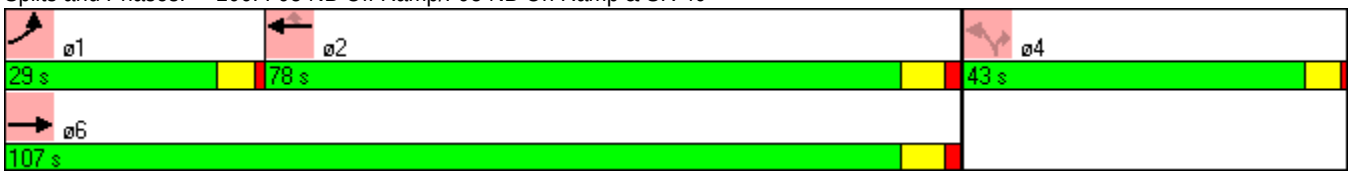


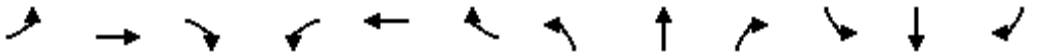
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	230	1535	0	0	2718	491	773	0	509	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	6225	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	6225	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						517			79			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	242	1616	0	0	2861	517	814	0	536	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	29.0	107.0	0.0	0.0	78.0	78.0	43.0	0.0	43.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	2.0	4.0	4.0	2.0	4.0
Act Effct Green (s)	24.0	102.0			73.7	73.7	39.0		39.0			
Actuated g/C Ratio	0.16	0.68			0.49	0.49	0.26		0.26			
v/c Ratio	0.88	0.48			0.94	0.51	0.94		0.70			
Control Delay	89.3	1.7			28.3	1.7	73.1		48.3			
Queue Delay	0.0	0.2			6.9	0.0	188.2		0.0			
Total Delay	89.3	1.8			35.2	1.7	261.3		48.3			
LOS	F	A			D	A	F		D			
Approach Delay		13.2			30.1							
Approach LOS		B			C							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 55.4		Intersection LOS: E	

Intersection Capacity Utilization 104.4% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



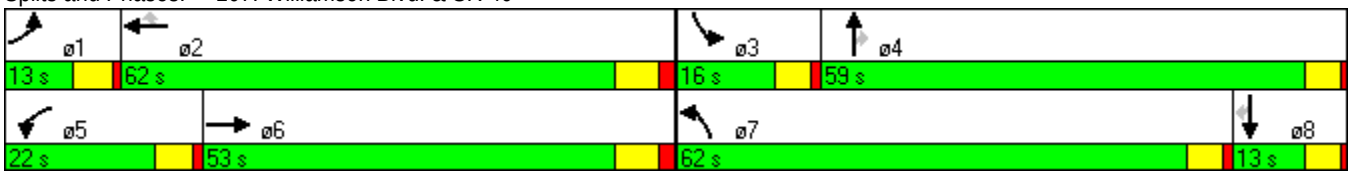


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	1039	838	397	1494	106	1561	152	292	166	123	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	1538	3335	3438	1538	3367	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	1538	3335	3438	1538	3367	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			405			103			201			81
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	1049	846	401	1509	107	1577	154	295	168	124	156
Turn Type	Prot	NA	Free	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			Free			2			4			8
Total Split (s)	13.0	53.0	0.0	22.0	62.0	62.0	62.0	59.0	59.0	16.0	13.0	13.0
Total Lost Time (s)	4.3	5.0	2.0	4.3	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	8.7	48.0	150.0	17.7	57.0	57.0	58.0	55.3	55.3	11.7	9.0	9.0
Actuated g/C Ratio	0.06	0.32	1.00	0.12	0.38	0.38	0.39	0.37	0.37	0.08	0.06	0.06
v/c Ratio	1.18	0.95	0.55	1.02	1.16	0.17	1.21	0.23	0.42	0.64	1.13	0.92
Control Delay	200.5	59.9	1.9	113.8	120.7	6.4	142.4	33.9	12.9	78.9	184.3	84.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	200.5	59.9	1.9	113.8	120.7	6.4	142.4	33.9	12.9	78.9	184.3	84.3
LOS	F	E	A	F	F	A	F	C	B	E	F	F
Approach Delay		43.8			113.3			115.3			109.9	
Approach LOS		D			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 114 (76%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.21			
Intersection Signal Delay: 92.2		Intersection LOS: F	

Intersection Capacity Utilization 113.4% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	479	817	1226	551	338	751
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			250	300	0
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	3367	3471	3471	1553	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3367	3471	3471	1553	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				580		457
Link Speed (mph)		40	40		50	
Link Distance (ft)		1131	525		528	
Travel Time (s)		19.3	8.9		7.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	504	860	1291	580	356	791
Turn Type	Prot	NA	NA	Perm	NA	custom
Protected Phases	1	6	2		8	8
Permitted Phases				2		8
Total Split (s)	27.0	63.0	36.0	36.0	27.0	27.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	18.6	54.7	32.0	32.0	23.0	23.0
Actuated g/C Ratio	0.22	0.64	0.37	0.37	0.27	0.27
v/c Ratio	0.69	0.39	0.99	0.61	0.39	1.04
Control Delay	36.1	8.0	52.4	5.1	27.6	59.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.1	8.0	52.4	5.1	27.6	59.5
LOS	D	A	D	A	C	E
Approach Delay		18.4	37.8		49.6	
Approach LOS		B	D		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 85.7			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 34.8		Intersection LOS: C	
Intersection Capacity Utilization 87.1%		ICU Level of Service E	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	42	306	1331	278	304	1594	491	367	1000	285	360	634
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		0	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3367	3471	1553	3367	3471	1553	3367	3357	0	3367	3301
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3367	3471	1553	3367	3471	1553	3367	3357	0	3367	3301
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				277			239		25			54
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			1302
Travel Time (s)			32.8			34.7			9.9			17.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	366	1401	293	320	1678	517	386	1353	0	379	989
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2					
Total Split (s)	17.0	17.0	65.0	65.0	17.0	65.0	65.0	21.0	50.0	0.0	18.0	47.0
Total Lost Time (s)	3.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	2.0	4.0	5.0
Act Effct Green (s)		13.0	60.0	60.0	13.0	60.0	60.0	17.0	45.0		14.0	42.0
Actuated g/C Ratio		0.09	0.40	0.40	0.09	0.40	0.40	0.11	0.30		0.09	0.28
v/c Ratio		1.25	1.01	0.37	1.10	1.21	0.68	1.01	1.32		1.21	1.03
Control Delay		192.0	70.8	5.3	141.8	140.4	23.9	113.4	191.3		174.1	85.4
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay		192.0	70.8	5.3	141.8	140.4	23.9	113.4	191.3		174.1	85.4
LOS		F	E	A	F	F	C	F	F		F	F
Approach Delay			83.0			116.6			174.0			110.0
Approach LOS			F			F			F			F

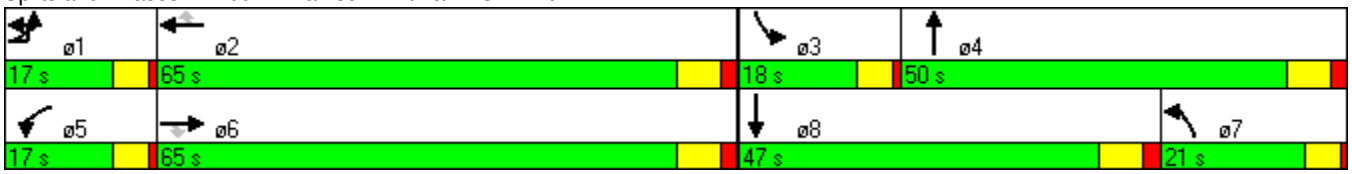
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.32			
Intersection Signal Delay: 119.4		Intersection LOS: F	
Intersection Capacity Utilization 116.0%		ICU Level of Service H	

Lane Group	SBR
Lane Configurations	
Volume (vph)	306
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	2.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

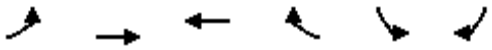


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1342	0	0	1658	293	583
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						261
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1413	0	0	1745	308	614
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	113.0	0.0	0.0	113.0	27.0	0.0
Total Lost Time (s)	5.0	2.0	2.0	5.0	4.0	2.0
Act Effct Green (s)	111.0			111.0	20.0	140.0
Actuated g/C Ratio	0.79			0.79	0.14	1.00
v/c Ratio	0.51			0.63	0.64	0.40
Control Delay	6.1			7.7	62.6	0.8
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	6.1			7.7	62.6	0.8
LOS	A			A	E	A
Approach Delay	6.1			7.7	21.4	
Approach LOS	A			A	C	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 128 (91%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay: 10.2	Intersection LOS: B

Intersection Capacity Utilization 61.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	1237	1333	0	474	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						47
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1302	1403	0	499	321
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	89.0	89.0	0.0	51.0	51.0
Total Lost Time (s)	2.0	5.0	5.0	2.0	5.0	5.0
Act Effct Green (s)		96.5	96.5		33.5	33.5
Actuated g/C Ratio		0.69	0.69		0.24	0.24
v/c Ratio		0.54	0.59		0.62	0.79
Control Delay		9.9	11.1		50.1	55.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		9.9	11.1		50.1	55.6
LOS		A	B		D	E
Approach Delay		9.9	11.1		52.3	
Approach LOS		A	B		D	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 20.2	Intersection LOS: C

Intersection Capacity Utilization 103.0% ICU Level of Service G
Analysis Period (min) 15

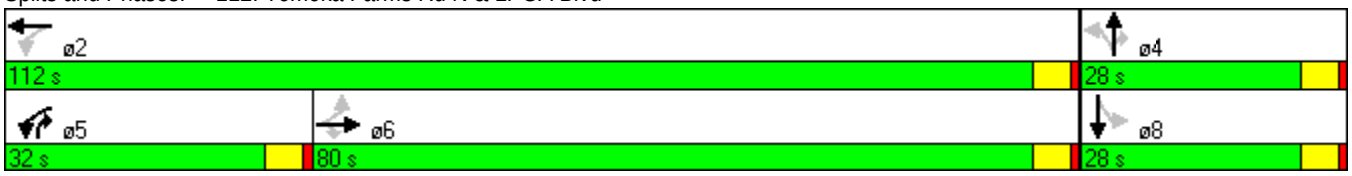
Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	926	207	451	1165	22	236	2	393	40	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	0		1	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1827	1553	1736	1821	0	1787	1881	1599	0	1777	0
Flt Permitted		0.999		0.050			0.749				0.784	
Satd. Flow (perm)	0	1825	1553	91	1821	0	1409	1881	1599	0	1454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			210		2				101		4	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	976	218	475	1249	0	248	2	414	0	48	0
Turn Type	Perm	NA	Perm	pm+pt	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases		6		5	2			4	5		8	
Permitted Phases	6		6	2			4		4	8		
Total Split (s)	80.0	80.0	80.0	32.0	112.0	0.0	28.0	28.0	32.0	28.0	28.0	0.0
Total Lost Time (s)	3.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	2.0
Act Effct Green (s)		76.0	74.0	108.0	108.0		24.0	24.0	56.0		24.0	
Actuated g/C Ratio		0.54	0.53	0.77	0.77		0.17	0.17	0.40		0.17	
v/c Ratio		0.98	0.24	1.19	0.89		1.02	0.01	0.59		0.19	
Control Delay		56.9	3.0	147.4	22.8		120.5	48.0	28.4		48.0	
Queue Delay		0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay		56.9	3.0	147.4	22.8		120.5	48.0	28.4		48.0	
LOS		E	A	F	C		F	D	C		D	
Approach Delay		47.0			57.1			62.8			48.0	
Approach LOS		D			E			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 110 (79%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.19			
Intersection Signal Delay: 54.7		Intersection LOS: D	

Intersection Capacity Utilization 135.4% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 112: Tomoka Farms Rd N & LPGA Blvd



Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/14/2011
Analysis Period: AM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Breakway Trail
Analysis Year: 2015 No Build
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	854	vph	534	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	225		141	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	462	pcphpl	289	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	462	pcphpl	289	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	7.7	pc/mi/ln	4.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: AM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Hunters Ridge Blvd
Analysis Year: 2025 No Build
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1146	vph	704	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	302		185	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	620	pcphpl	381	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	620	pcphpl	381	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	10.3	pc/mi/ln	6.3	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: AM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Hunters Ridge Blvd
Analysis Year: 2035 No Build
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1556	vph	975	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	409		257	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	842	pcphpl	528	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	842	pcphpl	528	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	B		A	
Density, D	14.0	pc/mi/ln	8.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/14/2011
Analysis Period: PM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Breakway Trail
Analysis Year: 2015 No Build
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	523	vph	839	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	138		221	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	283	pcphpl	454	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	283	pcphpl	454	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	4.7	pc/mi/ln	7.6	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: PM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Hunters Ridge Blvd
Analysis Year: 2025 No Build
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	684	vph	1116	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	180		294	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	370	pcphpl	604	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	370	pcphpl	604	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	6.2	pc/mi/ln	10.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: PM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Hunters Ridge Blvd
Analysis Year: 2035 No Build
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	950	vph	1529	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	250		402	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	514	pcphpl	828	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	514	pcphpl	828	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		B	
Density, D	8.6	pc/mi/ln	13.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-95 SB Off Ramp	II	39	101.8	18.0	119.8	1.11	33.4	B
I-95 NB Off Ramp	II	45	28.7	7.1	35.8	0.29	29.1	B
Williamson Blvd.	II	45	42.2	41.3	83.5	0.46	20.0	D
Total	II		172.7	66.4	239.1	1.87	28.1	B

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	34.8	74.3	0.43	21.0	D
I-95 NB Off Ramp	II	45	42.2	4.7	46.9	0.46	35.6	A
I-95 SB Off Ramp	II	45	28.7	16.0	44.7	0.29	23.3	C
Total	II		110.4	55.5	165.9	1.19	25.8	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Breakaway Tr	I	58	278.0	8.6	286.6	4.46	56.1	A
Tymber Creek Rd	I	50	71.5	30.8	102.3	0.99	35.0	B
Booth Rd	I	50	38.1	18.2	56.3	0.53	33.8	C
I-95 SB On Ramp	I	45	27.1	9.2	36.3	0.26	25.9	D
I-95 NB Off Ramp	I	45	7.9	2.6	10.5	0.08	26.1	D
Williamson Blvd.	I	45	15.3	52.0	67.3	0.15	7.9	F
Total	I		437.9	121.4	559.3	6.47	41.7	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	33.3	72.2	0.43	21.3	D
I-95 NB On Ramp	I	45	15.3	7.7	23.0	0.15	23.1	D
I-95 SB Off Ramp	I	45	7.9	5.0	12.9	0.08	21.2	D
Booth Rd	I	47	27.1	22.9	50.0	0.26	18.8	E
Tymber Creek Rd	I	50	38.1	30.9	69.0	0.53	27.6	C
Breakaway Tr	I	50	71.5	7.0	78.5	0.99	45.6	A
Total	I		198.8	106.8	305.6	2.43	28.7	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	44.7	57.4	0.11	6.9	F
Hand Ave	I	48	154.1	21.3	175.4	2.07	42.5	A
SR 40	I	40	56.3	31.9	88.2	0.62	25.5	D
Total	I		223.1	97.9	321.0	2.81	31.5	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	53.2	76.2	0.20	9.4	F
Hand Ave	I	40	56.3	6.4	62.7	0.62	35.9	B
LPGA Blvd	I	50	149.1	57.5	206.6	2.07	36.1	B
Total	I		228.4	117.1	345.5	2.90	30.2	C

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tomoka Farms Rd N	II	38	85.8	19.9	105.7	0.91	31.1	B
I-95 SB Off Ramp	II	45	21.8	15.2	37.0	0.20	19.5	D
I-95 NB Off Ramp	II	45	28.7	5.1	33.8	0.29	30.8	B
Williamson Blvd.	II	45	42.2	61.6	103.8	0.46	16.1	E
Total	II		178.5	101.8	280.3	1.87	24.0	C

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	47.6	87.1	0.43	17.9	D
I-95 NB Off Ramp	II	45	42.2	3.1	45.3	0.46	36.8	A
I-95 SB Off Ramp	II	45	28.7	16.1	44.8	0.29	23.3	C
Tomoka Farms Rd N	II	45	21.8	6.1	27.9	0.20	25.8	C
Total	II		132.2	72.9	205.1	1.39	24.3	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hunters Ridge Road	I	60	217.5	48.2	265.7	3.62	49.1	A
Breakaway Tr	I	50	60.5	8.3	68.8	0.84	44.0	A
Tymber Creek Rd	I	50	71.5	30.7	102.2	0.99	35.0	B
Booth Rd	I	50	38.1	15.5	53.6	0.53	35.5	B
I-95 SB On Ramp	I	45	27.1	13.2	40.3	0.26	23.3	D
I-95 NB Off Ramp	I	45	7.9	4.9	12.8	0.08	21.4	D
Williamson Blvd.	I	45	15.3	69.2	84.5	0.15	6.3	F
Total	I		437.9	190.0	627.9	6.47	37.1	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	40.0	78.9	0.43	19.5	E
I-95 NB On Ramp	I	45	15.3	13.2	28.5	0.15	18.6	E
I-95 SB Off Ramp	I	45	7.9	3.9	11.8	0.08	23.2	D
Booth Rd	I	47	27.1	21.4	48.5	0.26	19.4	E
Tymber Creek Rd	I	50	38.1	39.1	77.2	0.53	24.6	D
Breakaway Tr	I	50	71.5	5.1	76.6	0.99	46.7	A
Hunters Ridge Road	I	60	50.4	33.1	83.5	0.84	36.2	B
Total	I		249.2	155.8	405.0	3.27	29.1	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	57.1	69.8	0.11	5.7	F
Hand Ave	I	48	154.1	22.1	176.2	2.07	42.3	A
SR 40	I	40	56.3	33.9	90.2	0.62	24.9	D
Total	I		223.1	113.1	336.2	2.81	30.0	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	83.0	106.0	0.20	6.8	F
Hand Ave	I	40	56.3	6.2	62.5	0.62	36.0	B
LPGA Blvd	I	50	149.1	81.3	230.4	2.07	32.4	C
Total	I		228.4	170.5	398.9	2.90	26.1	D

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tomoka Farms Rd N	II	38	85.8	85.5	171.3	0.91	19.2	D
I-95 SB Off Ramp	II	45	21.8	18.1	39.9	0.20	18.1	D
I-95 NB Off Ramp	II	45	28.7	4.4	33.1	0.29	31.5	B
Williamson Blvd.	II	45	42.2	119.1	161.3	0.46	10.3	F
Total	II		178.5	227.1	405.6	1.87	16.6	E

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	70.3	109.8	0.43	14.2	E
I-95 NB Off Ramp	II	45	42.2	4.3	46.5	0.46	35.9	A
I-95 SB Off Ramp	II	45	28.7	20.2	48.9	0.29	21.3	D
Tomoka Farms Rd N	II	45	21.8	12.7	34.5	0.20	20.9	D
Total	II		132.2	107.5	239.7	1.39	20.8	D

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hunters Ridge Road	I	60	217.5	61.4	278.9	3.62	46.8	A
Breakaway Tr	I	50	60.5	17.7	78.2	0.84	38.7	B
Tymber Creek Rd	I	50	71.5	101.9	173.4	0.99	20.6	E
Booth Rd	I	50	38.1	81.4	119.5	0.53	15.9	F
I-95 SB On Ramp	I	45	27.1	15.9	43.0	0.26	21.8	D
I-95 NB Off Ramp	I	45	7.9	6.2	14.1	0.08	19.4	E
Williamson Blvd.	I	45	15.3	89.9	105.2	0.15	5.0	F
Total	I		437.9	374.4	812.3	6.47	28.7	C

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	40.8	79.7	0.43	19.3	E
I-95 NB On Ramp	I	45	15.3	16.7	32.0	0.15	16.6	E
I-95 SB Off Ramp	I	45	7.9	7.1	15.0	0.08	18.3	E
Booth Rd	I	47	27.1	18.2	45.3	0.26	20.7	E
Tymber Creek Rd	I	50	38.1	62.6	100.7	0.53	18.9	E
Breakaway Tr	I	50	71.5	5.1	76.6	0.99	46.7	A
Hunters Ridge Road	I	60	50.4	36.6	87.0	0.84	34.8	B
Total	I		249.2	187.1	436.3	3.27	27.0	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	II	40	12.7	121.4	134.1	0.11	3.0	F
Hand Ave	II	45	164.6	28.5	193.1	2.07	38.6	A
SR 40	II	40	56.3	33.7	90.0	0.62	25.0	C
Total	II		233.6	183.6	417.2	2.81	24.2	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	133.0	156.0	0.20	4.6	F
Hand Ave	I	40	56.3	8.5	64.8	0.62	34.7	B
LPGA Blvd	I	50	149.1	183.7	332.8	2.07	22.4	D
Total	I		228.4	325.2	553.6	2.89	18.8	E

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-95 SB Off Ramp	II	39	101.8	10.2	112.0	1.11	35.8	A
I-95 NB Off Ramp	II	45	28.7	7.8	36.5	0.29	28.6	B
Williamson Blvd.	II	45	42.2	29.5	71.7	0.46	23.3	C
Total	II		172.7	47.5	220.2	1.87	30.5	B

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	40.2	79.7	0.43	19.6	D
I-95 NB Off Ramp	II	45	42.2	8.6	50.8	0.46	32.8	B
I-95 SB Off Ramp	II	45	28.7	10.3	39.0	0.29	26.7	C
Total	II		110.4	59.1	169.5	1.19	25.2	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Breakaway Tr	I	58	278.0	4.3	282.3	4.46	56.9	A
Tymber Creek Rd	I	50	71.5	40.2	111.7	0.99	32.0	C
Booth Rd	I	50	38.1	12.1	50.2	0.53	37.9	B
I-95 SB On Ramp	I	45	27.1	10.9	38.0	0.26	24.7	D
I-95 NB Off Ramp	I	45	7.9	18.2	26.1	0.08	10.5	F
Williamson Blvd.	I	45	15.3	22.3	37.6	0.15	14.1	F
Total	I		437.9	108.0	545.9	6.47	42.7	A

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	42.0	80.9	0.43	19.0	E
I-95 NB On Ramp	I	45	15.3	11.3	26.6	0.15	19.9	E
I-95 SB Off Ramp	I	45	7.9	6.2	14.1	0.08	19.4	E
Booth Rd	I	47	27.1	18.5	45.6	0.26	20.6	E
Tymber Creek Rd	I	50	38.1	27.7	65.8	0.53	28.9	C
Breakaway Tr	I	50	71.5	5.0	76.5	0.99	46.8	A
Total	I		198.8	110.7	309.5	2.43	28.3	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	50.1	62.8	0.11	6.3	F
Hand Ave	I	48	154.1	20.2	174.3	2.07	42.8	A
SR 40	I	40	56.3	44.4	100.7	0.62	22.3	D
Total	I		223.1	114.7	337.8	2.81	29.9	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	88.6	111.6	0.20	6.4	F
Hand Ave	I	40	56.3	5.4	61.7	0.62	36.5	B
LPGA Blvd	I	50	149.1	45.6	194.7	2.07	38.3	B
Total	I		228.4	139.6	368.0	2.90	28.3	C

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tomoka Farms Rd N	II	38	85.8	19.4	105.2	0.91	31.2	B
I-95 SB Off Ramp	II	45	21.8	6.7	28.5	0.20	25.3	C
I-95 NB Off Ramp	II	45	28.7	4.7	33.4	0.29	31.2	B
Williamson Blvd.	II	45	42.2	39.7	81.9	0.46	20.4	D
Total	II		178.5	70.5	249.0	1.87	27.0	C

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	53.4	92.9	0.43	16.8	E
I-95 NB Off Ramp	II	45	42.2	5.1	47.3	0.46	35.3	A
I-95 SB Off Ramp	II	45	28.7	6.7	35.4	0.29	29.4	B
Tomoka Farms Rd N	II	45	21.8	12.5	34.3	0.20	21.0	D
Total	II		132.2	77.7	209.9	1.39	23.8	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hunters Ridge Road	I	60	217.5	21.1	238.6	3.62	54.7	A
Breakaway Tr	I	50	60.5	3.7	64.2	0.84	47.1	A
Tymber Creek Rd	I	50	71.5	37.4	108.9	0.99	32.9	C
Booth Rd	I	50	38.1	10.9	49.0	0.53	38.8	B
I-95 SB On Ramp	I	45	27.1	25.1	52.2	0.26	18.0	E
I-95 NB Off Ramp	I	45	7.9	6.7	14.6	0.08	18.8	E
Williamson Blvd.	I	45	15.3	36.8	52.1	0.15	10.2	F
Total	I		437.9	141.7	579.6	6.47	40.2	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	69.4	108.3	0.43	14.2	F
I-95 NB On Ramp	I	45	15.3	18.8	34.1	0.15	15.6	F
I-95 SB Off Ramp	I	45	7.9	15.1	23.0	0.08	11.9	F
Booth Rd	I	47	27.1	20.4	47.5	0.26	19.8	E
Tymber Creek Rd	I	50	38.1	86.9	125.0	0.53	15.2	F
Breakaway Tr	I	50	71.5	5.8	77.3	0.99	46.3	A
Hunters Ridge Road	I	60	50.4	22.1	72.5	0.84	41.7	B
Total	I		249.2	238.5	487.7	3.27	24.2	D

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	78.4	91.1	0.11	4.3	F
Hand Ave	I	48	154.1	24.5	178.6	2.07	41.7	B
SR 40	I	40	56.3	38.5	94.8	0.62	23.7	D
Total	I		223.1	141.4	364.5	2.81	27.7	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	136.0	159.0	0.20	4.5	F
Hand Ave	I	40	56.3	8.5	64.8	0.62	34.7	B
LPGA Blvd	I	50	149.1	65.8	214.9	2.07	34.7	B
Total	I		228.4	210.3	438.7	2.90	23.8	D

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tomoka Farms Rd N	II	38	85.8	56.9	142.7	0.91	23.0	C
I-95 SB Off Ramp	II	45	21.8	9.9	31.7	0.20	22.7	C
I-95 NB Off Ramp	II	45	28.7	6.1	34.8	0.29	30.0	B
Williamson Blvd.	II	45	42.2	70.8	113.0	0.46	14.8	E
Total	II		178.5	143.7	322.2	1.87	20.8	D

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	140.4	179.9	0.43	8.7	F
I-95 NB Off Ramp	II	45	42.2	7.7	49.9	0.46	33.4	B
I-95 SB Off Ramp	II	45	28.7	11.1	39.8	0.29	26.2	C
Tomoka Farms Rd N	II	45	21.8	22.8	44.6	0.20	16.2	E
Total	II		132.2	182.0	314.2	1.39	15.9	E

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hunters Ridge Road	I	60	217.5	32.7	250.2	3.62	52.2	A
Breakaway Tr	I	50	60.5	4.0	64.5	0.84	46.9	A
Tymber Creek Rd	I	50	71.5	31.8	103.3	0.99	34.6	B
Booth Rd	I	50	38.1	14.4	52.5	0.53	36.2	B
I-95 SB On Ramp	I	45	27.1	19.6	46.7	0.26	20.1	E
I-95 NB Off Ramp	I	45	7.9	1.7	9.6	0.08	28.6	C
Williamson Blvd.	I	45	15.3	59.9	75.2	0.15	7.1	F
Total	I		437.9	164.1	602.0	6.47	38.7	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	120.7	159.6	0.43	9.6	F
I-95 NB On Ramp	I	45	15.3	28.3	43.6	0.15	12.2	F
I-95 SB Off Ramp	I	45	7.9	51.1	59.0	0.08	4.6	F
Booth Rd	I	47	27.1	56.3	83.4	0.26	11.3	F
Tymber Creek Rd	I	50	38.1	119.2	157.3	0.53	12.1	F
Breakaway Tr	I	50	71.5	13.0	84.5	0.99	42.3	A
Hunters Ridge Road	I	60	50.4	39.4	89.8	0.84	33.7	C
Total	I		249.2	428.0	677.2	3.27	17.4	E

Arterial Level of Service: NW Williamson Blvd.

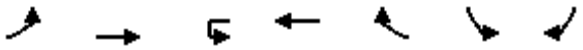
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	II	40	12.7	191.3	204.0	0.11	1.9	F
Hand Ave	II	45	164.6	52.4	217.0	2.07	34.3	B
SR 40	II	40	56.3	33.9	90.2	0.62	24.9	C
Total	II		233.6	277.6	511.2	2.81	19.8	D

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	184.3	207.3	0.20	3.5	F
Hand Ave	I	40	56.3	8.0	64.3	0.62	35.0	B
LPGA Blvd	I	50	149.1	85.4	234.5	2.07	31.8	C
Total	I		228.4	277.7	506.1	2.89	20.6	E

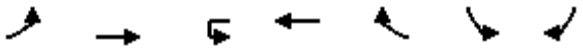
Appendix R

Synchro Output Sheets (Intersection & Roadway Analysis) - Build Alternative 1



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	17	603	0	369	10	45	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3424	0	1777	0
Flt Permitted	0.950					0.957	
Satd. Flow (perm)	1719	3438	1810	3424	0	1777	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	18	635	0	399	0	52	0
Sign Control		Free		Free		Stop	

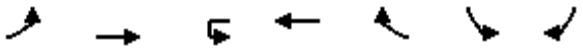
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 26.7%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	17	603	0	369	10	45	5
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	18	635	0	388	11	47	5
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	399		0			747	199
vC1, stage 1 conf vol						394	
vC2, stage 2 conf vol						353	
vCu, unblocked vol	399		0			747	199
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	98		0			91	99
cM capacity (veh/h)	1135		0			544	811

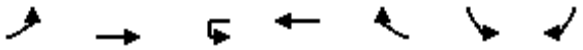
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	18	317	317	259	140	0	53
Volume Left	18	0	0	0	0	0	47
Volume Right	0	0	0	0	11	0	5
cSH	1135	1700	1700	1700	1700	1700	563
Volume to Capacity	0.02	0.19	0.19	0.15	0.08	0.00	0.09
Queue Length 95th (ft)	1	0	0	0	0	0	6
Control Delay (s)	8.2	0.0	0.0	0.0	0.0	0.0	12.1
Lane LOS	A						B
Approach Delay (s)	0.2			0.0			12.1
Approach LOS							B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	26.7%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	11	658	0	404	31	30	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3400	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3400	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	12	693	0	458	0	32	33
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.2%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	11	658	0	404	31	30	31
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	12	693	0	425	33	32	33
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	458		0			811	229
vC1, stage 1 conf vol						442	
vC2, stage 2 conf vol						369	
vCu, unblocked vol	458		0			811	229
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	99		0			94	96
cM capacity (veh/h)	1078		0			519	777

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	12	346	346	284	174	0	64
Volume Left	12	0	0	0	0	0	32
Volume Right	0	0	0	0	33	0	33
cSH	1078	1700	1700	1700	1700	1700	1055
Volume to Capacity	0.01	0.20	0.20	0.17	0.10	0.00	0.06
Queue Length 95th (ft)	1	0	0	0	0	0	4
Control Delay (s)	8.4	0.0	0.0	0.0	0.0	0.0	11.1
Lane LOS	A						B
Approach Delay (s)	0.1			0.0			11.1
Approach LOS							B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	28.2%	ICU Level of Service	A
Analysis Period (min)	15		

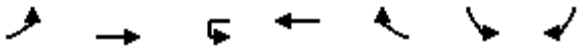
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	35	668	0	400	68	127	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1757	0
Flt Permitted	0.950					0.962	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1757	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	37	703	0	421	72	171	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	35	668	0	400	68	127	35
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	37	703	0	421	72	134	37
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	421		0			846	211
vC1, stage 1 conf vol						421	
vC2, stage 2 conf vol						425	
vCu, unblocked vol	421		0			846	211
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	97		0			73	95
cM capacity (veh/h)	1113		0			499	798

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	37	352	352	211	211	72	0	171
Volume Left	37	0	0	0	0	0	0	134
Volume Right	0	0	0	0	0	72	0	37
cSH	1113	1700	1700	1700	1700	1700	1700	543
Volume to Capacity	0.03	0.21	0.21	0.12	0.12	0.04	0.00	0.31
Queue Length 95th (ft)	2	0	0	0	0	0	0	27
Control Delay (s)	8.3	0.0	0.0	0.0	0.0	0.0	0.0	14.6
Lane LOS	A							B
Approach Delay (s)	0.4			0.0				14.6
Approach LOS								B

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	41.0%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	28	904	3	551	103	181	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	4940	1719	4940	1538	1787	1599
Flt Permitted	0.950		0.950			0.950	
Satd. Flow (perm)	1719	4940	1719	4940	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					108		32
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	29	952	3	580	108	191	32
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8	
Permitted Phases					2		8
Total Split (s)	15.0	45.0	12.0	42.0	42.0	33.0	33.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	7.6	22.5	6.9	22.2	22.2	10.7	10.7
Actuated g/C Ratio	0.18	0.52	0.16	0.52	0.52	0.25	0.25
v/c Ratio	0.10	0.37	0.01	0.23	0.13	0.43	0.08
Control Delay	18.1	7.8	19.3	7.5	3.2	17.3	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.1	7.8	19.3	7.5	3.2	17.3	6.9
LOS	B	A	B	A	A	B	A
Approach Delay		8.1		6.9		15.8	
Approach LOS		A		A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 43.1			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 8.6		Intersection LOS: A	
Intersection Capacity Utilization 40.0%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	6	72	982	11	45	40	527	434	23	27	45	796
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		2		1		1		2	1		1	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	3335	4940	1538	0	1719	4940	2707	1787	1881	1599	3099
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	3335	4940	1538	0	1719	4940	2707	1787	1881	1599	3099
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				12				457			47	
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												30%
Lane Group Flow (vph)	0	82	1034	12	0	89	555	457	24	28	47	587
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Prot	Split	NA	Perm	Split
Protected Phases	1	1	6		5	5	2	2	8	8		4
Permitted Phases				6							8	
Total Split (s)	10.0	10.0	29.0	29.0	13.0	13.0	32.0	32.0	14.0	14.0	14.0	34.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		6.6	24.6	24.6		9.4	26.7	26.7	11.0	11.0	11.0	26.5
Actuated g/C Ratio		0.08	0.31	0.31		0.12	0.34	0.34	0.14	0.14	0.14	0.33
v/c Ratio		0.29	0.67	0.02		0.43	0.33	0.38	0.10	0.11	0.18	0.57
Control Delay		42.9	29.3	12.6		45.4	22.7	3.4	37.1	37.2	13.4	26.1
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		42.9	29.3	12.6		45.4	22.7	3.4	37.1	37.2	13.4	26.1
LOS		D	C	B		D	C	A	D	D	B	C
Approach Delay			30.1				16.5			25.8		
Approach LOS			C				B			C		

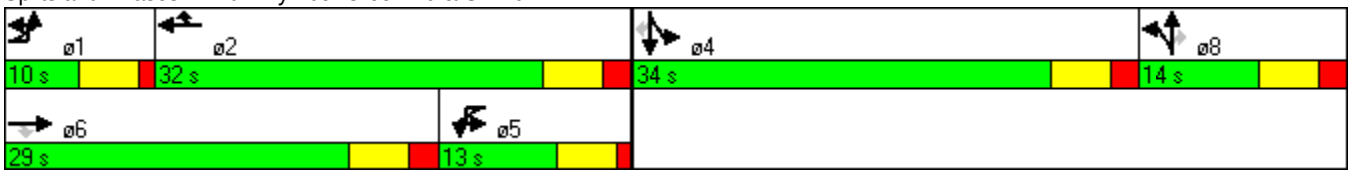
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 79.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 24.3		Intersection LOS: C	
Intersection Capacity Utilization 59.1%		ICU Level of Service B	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	40	38
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1564	1524
Flt Permitted	0.959	
Satd. Flow (perm)	1564	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		40
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	293	40
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	34.0	34.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	26.5	26.5
Actuated g/C Ratio	0.33	0.33
v/c Ratio	0.56	0.07
Control Delay	29.1	7.3
Queue Delay	0.0	0.0
Total Delay	29.1	7.3
LOS	C	A
Approach Delay	26.3	
Approach LOS	C	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	45	1645	11	9	68	862	17	111	0	29	150	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		250		300		325	0		250	0	
Storage Lanes	1		1		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	4940	1538	0	1728	4940	1538	1787	1599	0	1787	1599
Flt Permitted	0.950				0.950			0.740			0.737	
Satd. Flow (perm)	1719	4940	1538	0	1728	4940	1538	1392	1599	0	1386	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			12				18		144			264
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	1732	12	0	81	907	18	117	31	0	158	26
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases			6				2	4			8	
Total Split (s)	17.0	81.0	81.0	22.0	22.0	86.0	86.0	37.0	37.0	0.0	37.0	37.0
Total Lost Time (s)	4.7	5.0	5.0	5.7	4.7	5.0	5.0	4.0	4.0	3.0	5.0	4.0
Act Effct Green (s)	10.2	90.3	90.3		12.9	95.3	95.3	23.1	23.1		22.1	23.1
Actuated g/C Ratio	0.07	0.64	0.64		0.09	0.68	0.68	0.16	0.16		0.16	0.16
v/c Ratio	0.38	0.54	0.01		0.51	0.27	0.02	0.51	0.08		0.72	0.05
Control Delay	69.5	15.6	5.9		75.1	7.1	4.4	59.9	0.4		73.7	0.2
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	69.5	15.6	5.9		75.1	7.1	4.4	59.9	0.4		73.7	0.2
LOS	E	B	A		E	A	A	E	A		E	A
Approach Delay		16.9				12.5			47.4			63.3
Approach LOS		B				B			D			E

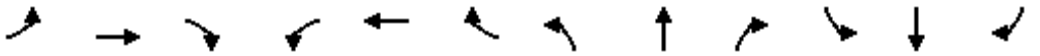
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 82 (59%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 19.7		Intersection LOS: B	

Lane Group	SBR
Lane Configurations	
Volume (vph)	25
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 62.4% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

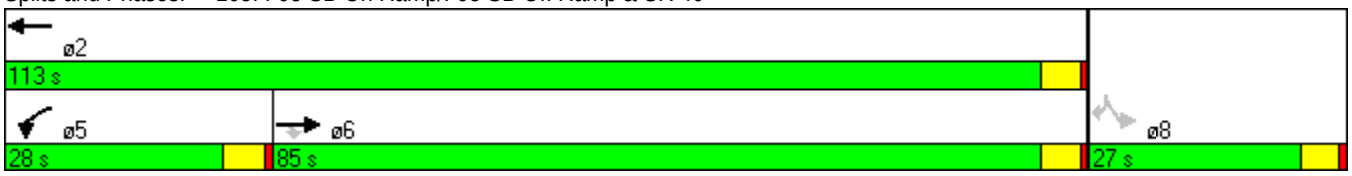


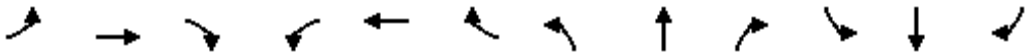
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1181	700	307	1116	0	0	0	0	312	0	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			581									131
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1243	737	323	1175	0	0	0	0	328	0	131
Turn Type		NA	Perm	Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases			6							8		8
Total Split (s)	0.0	85.0	85.0	28.0	113.0	0.0	0.0	0.0	0.0	27.0	0.0	27.0
Total Lost Time (s)	4.0	4.0	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		87.0	87.0	20.3	111.7					20.3		20.3
Actuated g/C Ratio		0.62	0.62	0.14	0.80					0.14		0.14
v/c Ratio		0.32	0.63	0.67	0.30					0.68		0.39
Control Delay		5.9	4.2	59.0	4.3					63.9		11.5
Queue Delay		0.0	0.0	0.0	0.1					0.0		0.0
Total Delay		5.9	4.2	59.0	4.4					63.9		11.5
LOS		A	A	E	A					E		B
Approach Delay		5.3			16.2							
Approach LOS		A			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 102 (73%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 14.5		Intersection LOS: B	

Intersection Capacity Utilization 71.3% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



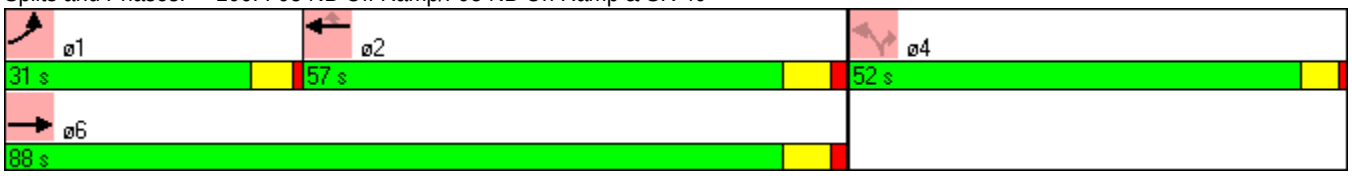


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	1393	0	0	1036	215	387	0	419	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						226			69			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	1466	0	0	1091	226	407	0	441	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	31.0	88.0	0.0	0.0	57.0	57.0	52.0	0.0	52.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	15.8	102.0			81.9	81.9	29.0		29.0			
Actuated g/C Ratio	0.11	0.73			0.58	0.58	0.21		0.21			
v/c Ratio	0.54	0.41			0.25	0.23	0.59		0.72			
Control Delay	69.3	5.3			5.9	1.6	53.0		49.5			
Queue Delay	0.0	0.1			0.0	0.0	0.0		0.0			
Total Delay	69.3	5.4			5.9	1.6	53.0		49.5			
LOS	E	A			A	A	D		D			
Approach Delay		9.6			5.2							
Approach LOS		A			A							

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 8 (6%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 17.5		Intersection LOS: B	

Intersection Capacity Utilization 71.3% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	1212	750	212	752	35	399	83	296	97	154	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4905	0	4894	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4905	0	4894	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			198		6				312			89
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		5%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	1276	789	223	829	0	420	87	312	102	162	105
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases									Free			8
Total Split (s)	19.4	61.4	103.4	16.6	58.6	0.0	42.0	42.0	0.0	20.0	20.0	20.0
Total Lost Time (s)	4.3	4.0	5.0	4.3	4.0	1.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	13.0	66.4	93.7	14.3	67.8		24.3	24.3	140.0	18.6	18.6	18.6
Actuated g/C Ratio	0.09	0.47	0.67	0.10	0.48		0.17	0.17	1.00	0.13	0.13	0.13
v/c Ratio	0.57	0.78	0.42	0.65	0.35		0.49	0.27	0.20	0.23	0.67	0.37
Control Delay	81.2	32.2	7.2	69.8	24.4		53.6	50.9	0.3	54.5	70.9	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.2	32.2	7.2	69.8	24.4		53.6	50.9	0.3	54.5	70.9	17.8
LOS	F	C	A	E	C		D	D	A	D	E	B
Approach Delay		25.1			34.0			33.0			51.3	
Approach LOS		C			C			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 96 (69%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 30.9		Intersection LOS: C	

Intersection Capacity Utilization 68.8%
ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40

Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	405	756	4	494	122	178	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		250		250	150	0
Storage Lanes	2		0		1	2	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	3367	3471	0	3472	1553	3433	1583
Flt Permitted	0.950			0.948		0.950	
Satd. Flow (perm)	3367	3471	0	3292	1553	3433	1583
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					128		299
Link Speed (mph)		40		40		35	
Link Distance (ft)		1131		1488		528	
Travel Time (s)		19.3		25.4		10.3	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	0%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	426	796	0	524	128	187	299
Turn Type	Prot	NA	Perm	NA	Perm	NA	custom
Protected Phases	1	6		2		8	8
Permitted Phases			2		2		8
Total Split (s)	28.0	61.0	33.0	33.0	33.0	29.0	29.0
Total Lost Time (s)	4.0	4.0	5.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	13.5	33.9		16.2	16.2	10.1	10.1
Actuated g/C Ratio	0.26	0.65		0.31	0.31	0.19	0.19
v/c Ratio	0.49	0.35		0.51	0.22	0.28	0.55
Control Delay	19.7	4.8		17.4	4.7	20.9	7.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	19.7	4.8		17.4	4.7	20.9	7.6
LOS	B	A		B	A	C	A
Approach Delay		10.0		14.9		12.7	
Approach LOS		A		B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 52.3			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 11.9		Intersection LOS: B	
Intersection Capacity Utilization 49.7%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave Ext

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	12	213	1200	465	130	723	162	238	299	94	216	448
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		1	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3367	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3367	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				307			171			99		
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			6363
Travel Time (s)			32.8			34.7			9.9			86.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	237	1263	489	137	761	171	251	315	99	227	472
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2			4		
Total Split (s)	20.0	20.0	77.0	77.0	14.0	71.0	71.0	16.0	29.0	29.0	30.0	43.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		14.3	59.1	59.1	9.8	54.6	54.6	12.3	24.1	24.1	15.1	26.9
Actuated g/C Ratio		0.11	0.47	0.47	0.08	0.44	0.44	0.10	0.19	0.19	0.12	0.22
v/c Ratio		0.61	0.77	0.54	0.52	0.50	0.22	0.76	0.47	0.26	0.56	0.63
Control Delay		62.4	30.8	10.3	66.5	26.8	3.8	72.3	49.4	11.0	59.2	49.3
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		62.4	30.8	10.3	66.5	26.8	3.8	72.3	49.4	11.0	59.2	49.3
LOS		E	C	B	E	C	A	E	D	B	E	D
Approach Delay			29.5			28.2			52.3			42.7
Approach LOS			C			C			D			D

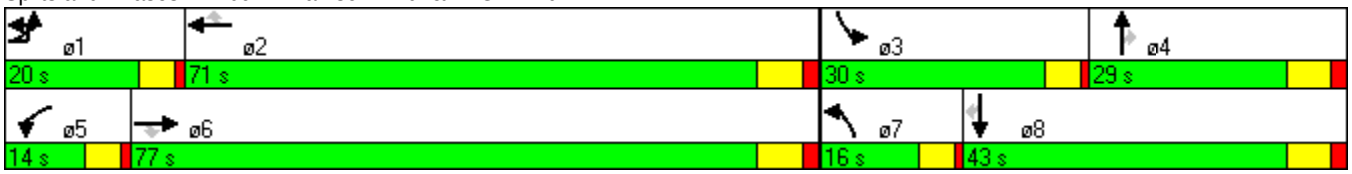
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 124.5			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 35.1		Intersection LOS: D	
Intersection Capacity Utilization 69.8%		ICU Level of Service C	

Lane Group	SBR
Lane Configurations	
Volume (vph)	243
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	1
Taper Length (ft)	
Satd. Flow (prot)	1553
Flt Permitted	
Satd. Flow (perm)	1553
Right Turn on Red	Yes
Satd. Flow (RTOR)	198
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	256
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Total Split (s)	43.0
Total Lost Time (s)	4.0
Act Effct Green (s)	26.9
Actuated g/C Ratio	0.22
v/c Ratio	0.52
Control Delay	15.8
Queue Delay	0.0
Total Delay	15.8
LOS	B
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

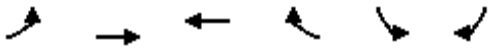


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1429	0	0	774	96	561
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						214
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1504	0	0	815	101	591
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	100.0	0.0	0.0	100.0	20.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	41.3			41.3	8.3	57.5
Actuated g/C Ratio	0.72			0.72	0.14	1.00
v/c Ratio	0.60			0.33	0.21	0.38
Control Delay	7.1			4.8	25.0	0.7
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	7.1			4.8	25.0	0.7
LOS	A			A	C	A
Approach Delay	7.1			4.8	4.3	
Approach LOS	A			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 57.5			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 5.8		Intersection LOS: A	
Intersection Capacity Utilization 57.0%		ICU Level of Service B	

Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	746	552	0	894	246
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						259
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	785	581	0	941	259
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	71.0	71.0	0.0	49.0	49.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		25.4	25.4		24.9	24.9
Actuated g/C Ratio		0.39	0.39		0.38	0.38
v/c Ratio		0.58	0.43		0.73	0.34
Control Delay		18.1	16.1		21.3	3.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		18.1	16.1		21.3	3.6
LOS		B	B		C	A
Approach Delay		18.1	16.1		17.5	
Approach LOS		B	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 64.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 17.3		Intersection LOS: B	
Intersection Capacity Utilization 80.8%		ICU Level of Service D	

Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

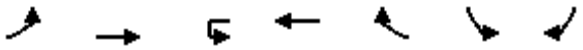
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	632	30	172	562	13	13	1	192	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	1553	1736	1821	0	1787	1881	1599	0	1787	0
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	1736	1827	1553	1736	1821	0	1787	1881	1599	0	1787	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	665	32	181	606	0	14	1	202	0	1	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.5%		ICU Level of Service B	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	632	30	172	562	13	13	1	192	1	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	1	665	32	181	592	14	14	1	202	1	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1057							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	605			697			1621	1635	665	1831	1659	598
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	440			697			1643	1660	665	1892	1689	432
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			80			76	98	56	95	100	100
cM capacity (veh/h)	936			890			57	66	462	21	63	528

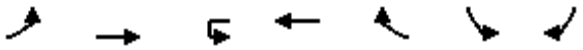
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1
Volume Total	1	665	32	181	605	14	1	202	1
Volume Left	1	0	0	181	0	14	0	0	1
Volume Right	0	0	32	0	14	0	0	202	0
cSH	936	1700	1700	890	1700	57	66	462	21
Volume to Capacity	0.00	0.39	0.02	0.20	0.36	0.24	0.02	0.44	0.05
Queue Length 95th (ft)	0	0	0	15	0	16	1	44	3
Control Delay (s)	8.8	0.0	0.0	10.1	0.0	87.0	60.6	18.7	183.6
Lane LOS	A			B		F	F	C	F
Approach Delay (s)	0.0			2.3		23.2			183.6
Approach LOS						C			F

Intersection Summary				
Average Delay	4.2			
Intersection Capacity Utilization	58.5%	ICU Level of Service		B
Analysis Period (min)	15			



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	17	1177	0	720	12	50	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3428	0	1773	0
Flt Permitted	0.950					0.958	
Satd. Flow (perm)	1719	3438	1810	3428	0	1773	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	18	1239	0	771	0	60	0
Sign Control		Free		Free		Stop	

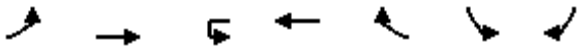
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.5%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	17	1177	0	720	12	50	7
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	18	1239	0	758	13	53	7
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	771		0			1419	385
vC1, stage 1 conf vol						764	
vC2, stage 2 conf vol						655	
vCu, unblocked vol	771		0			1419	385
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	98		0			84	99
cM capacity (veh/h)	821		0			330	616

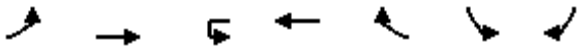
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	18	619	619	505	265	0	60
Volume Left	18	0	0	0	0	0	53
Volume Right	0	0	0	0	13	0	7
cSH	821	1700	1700	1700	1700	1700	350
Volume to Capacity	0.02	0.36	0.36	0.30	0.16	0.00	0.17
Queue Length 95th (ft)	1	0	0	0	0	0	12
Control Delay (s)	9.5	0.0	0.0	0.0	0.0	0.0	17.4
Lane LOS	A						C
Approach Delay (s)	0.1			0.0			17.4
Approach LOS							C

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	42.5%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	95	1149	0	705	65	84	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3393	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3393	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	100	1209	0	810	0	88	123
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.7%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	95	1149	0	705	65	84	117
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	100	1209	0	742	68	88	123
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	811		0			1581	405
vC1, stage 1 conf vol						776	
vC2, stage 2 conf vol						805	
vCu, unblocked vol	811		0			1581	405
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	87		0			68	79
cM capacity (veh/h)	792		0			276	598

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	100	605	605	495	316	0	212
Volume Left	100	0	0	0	0	0	88
Volume Right	0	0	0	0	68	0	123
cSH	792	1700	1700	1700	1700	1700	660
Volume to Capacity	0.13	0.36	0.36	0.29	0.19	0.00	0.32
Queue Length 95th (ft)	9	0	0	0	0	0	28
Control Delay (s)	10.2	0.0	0.0	0.0	0.0	0.0	17.4
Lane LOS	B						C
Approach Delay (s)	0.8			0.0			17.4
Approach LOS							C

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	49.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	45	1211	0	742	82	134	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1752	0
Flt Permitted	0.950					0.964	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1752	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	47	1275	0	781	86	188	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	45	1211	0	742	82	134	45
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	47	1275	0	781	86	141	47
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	781		0			1513	391
vC1, stage 1 conf vol						781	
vC2, stage 2 conf vol						732	
vCu, unblocked vol	781		0			1513	391
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	94		0			54	92
cM capacity (veh/h)	813		0			304	611

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	47	637	637	391	391	86	0	188
Volume Left	47	0	0	0	0	0	0	141
Volume Right	0	0	0	0	0	86	0	47
cSH	813	1700	1700	1700	1700	1700	1700	348
Volume to Capacity	0.06	0.37	0.37	0.23	0.23	0.05	0.00	0.54
Queue Length 95th (ft)	4	0	0	0	0	0	0	61
Control Delay (s)	9.7	0.0	0.0	0.0	0.0	0.0	0.0	27.0
Lane LOS	A							D
Approach Delay (s)	0.3			0.0				27.0
Approach LOS								D

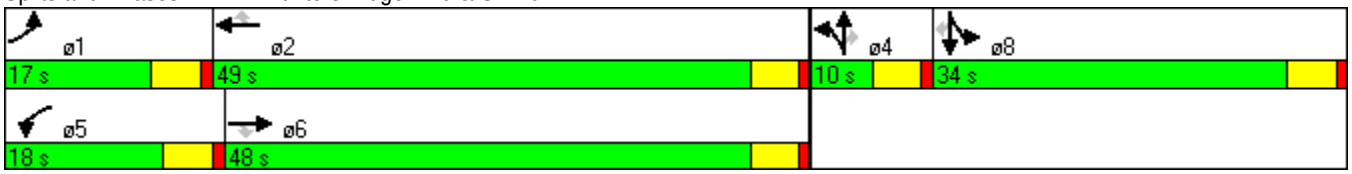
Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

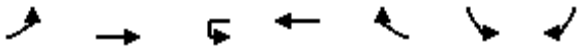
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	67	1233	45	152	735	286	27	31	99	519	50	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		300	300		300	0		300	300		0
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			47			301			104			71
Link Speed (mph)		60			60			35			35	
Link Distance (ft)		1961			4435			1868			1392	
Travel Time (s)		22.3			50.4			36.4			27.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	71	1298	47	160	774	301	28	33	104	546	53	71
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Total Split (s)	17.0	48.0	48.0	18.0	49.0	49.0	10.0	10.0	10.0	34.0	34.0	34.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	10.1	33.2	33.2	10.9	37.3	37.3	6.3	6.3	6.3	21.5	21.5	21.5
Actuated g/C Ratio	0.12	0.39	0.39	0.13	0.43	0.43	0.07	0.07	0.07	0.25	0.25	0.25
v/c Ratio	0.35	0.68	0.08	0.38	0.36	0.36	0.21	0.24	0.49	0.63	0.11	0.16
Control Delay	45.2	24.9	6.3	41.1	19.4	3.8	49.1	49.4	18.6	33.6	28.6	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.2	24.9	6.3	41.1	19.4	3.8	49.1	49.4	18.6	33.6	28.6	8.4
LOS	D	C	A	D	B	A	D	D	B	C	C	A
Approach Delay		25.3			18.4			29.9			30.6	
Approach LOS		C			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 85.8			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 24.1		Intersection LOS: C	
Intersection Capacity Utilization 59.6%		ICU Level of Service B	

Analysis Period (min) 15

Splits and Phases: 117: Hunters Ridge Blvd & SR 40





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	32	1888	6	1160	123	200	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	4940	1719	4940	1538	1787	1599
Flt Permitted	0.950		0.950			0.950	
Satd. Flow (perm)	1719	4940	1719	4940	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					129		37
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	34	1987	6	1221	129	211	37
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8	
Permitted Phases					2		8
Total Split (s)	15.0	45.0	12.0	42.0	42.0	33.0	33.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	8.0	39.0	7.0	36.2	36.2	13.2	13.2
Actuated g/C Ratio	0.13	0.63	0.11	0.58	0.58	0.21	0.21
v/c Ratio	0.15	0.64	0.03	0.42	0.14	0.56	0.10
Control Delay	29.7	9.9	30.5	9.6	2.9	29.3	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.7	9.9	30.5	9.6	2.9	29.3	9.1
LOS	C	A	C	A	A	C	A
Approach Delay		10.2		9.1		26.3	
Approach LOS		B		A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 62.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 10.9		Intersection LOS: B	
Intersection Capacity Utilization 54.2%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	16	196	1875	17	46	41	1069	499	26	30	50	825
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		2		1		1		2	1		1	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	3342	4940	1538	0	1763	4940	2707	1787	1881	1599	3099
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	3342	4940	1538	0	1763	4940	2707	1787	1881	1599	3099
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				18				525			25	
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												30%
Lane Group Flow (vph)	0	223	1974	18	0	91	1125	525	27	32	53	608
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Prot	Split	NA	Perm	Split
Protected Phases	1	1	6		5	5	2	2	8	8		4
Permitted Phases				6							8	
Total Split (s)	28.0	28.0	89.0	89.0	12.0	12.0	73.0	73.0	14.0	14.0	14.0	35.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		16.7	76.5	76.5		8.2	67.9	67.9	10.2	10.2	10.2	31.3
Actuated g/C Ratio		0.12	0.55	0.55		0.06	0.49	0.49	0.07	0.07	0.07	0.23
v/c Ratio		0.55	0.72	0.02		0.88	0.47	0.33	0.21	0.23	0.38	0.87
Control Delay		64.8	25.2	5.5		126.7	24.6	2.2	69.8	70.3	48.7	67.6
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		64.8	25.2	5.5		126.7	24.6	2.2	69.8	70.3	48.7	67.6
LOS		E	C	A		F	C	A	E	E	D	E
Approach Delay			29.0				23.2			60.0		
Approach LOS			C				C			E		

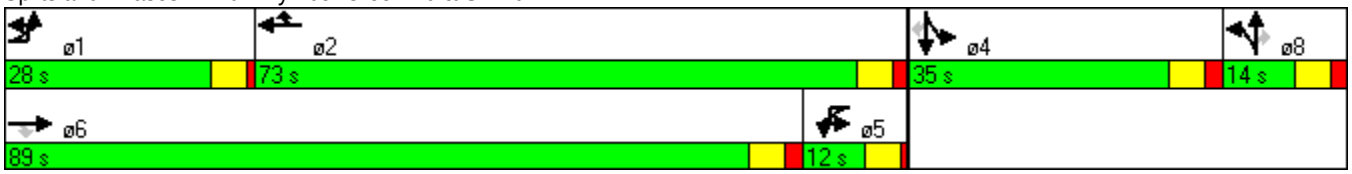
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 138.7			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 34.6		Intersection LOS: C	
Intersection Capacity Utilization 77.0%		ICU Level of Service D	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	41	130
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1564	1524
Flt Permitted	0.959	
Satd. Flow (perm)	1564	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		137
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	303	137
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	35.0	35.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	31.3	31.3
Actuated g/C Ratio	0.23	0.23
v/c Ratio	0.86	0.30
Control Delay	77.1	9.4
Queue Delay	0.0	0.0
Total Delay	77.1	9.4
LOS	E	A
Approach Delay	62.7	
Approach LOS	E	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	46	2638	22	9	71	1452	14	134	0	36	150	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		250		300		325	0		250	0	
Storage Lanes	1		1		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	4940	1538	0	1728	4940	1538	1787	1599	0	1787	1599
Flt Permitted	0.950				0.950			0.740			0.732	
Satd. Flow (perm)	1719	4940	1538	0	1728	4940	1538	1392	1599	0	1377	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			21				15		85			140
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	2777	23	0	84	1528	15	141	38	0	158	26
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases			6				2	4			8	
Total Split (s)	14.6	102.0	102.0	18.0	18.0	105.4	105.4	30.0	30.0	0.0	30.0	30.0
Total Lost Time (s)	4.7	5.0	5.0	5.7	4.7	5.0	5.0	4.0	4.0	3.0	5.0	4.0
Act Effct Green (s)	9.2	101.5	101.5		12.1	106.6	106.6	22.7	22.7		21.7	22.7
Actuated g/C Ratio	0.06	0.68	0.68		0.08	0.71	0.71	0.15	0.15		0.14	0.15
v/c Ratio	0.45	0.83	0.02		0.60	0.44	0.01	0.67	0.12		0.79	0.07
Control Delay	81.6	21.7	3.8		80.5	9.1	5.8	75.4	0.8		88.2	0.4
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	81.6	21.7	3.8		80.5	9.1	5.8	75.4	0.8		88.2	0.4
LOS	F	C	A		F	A	A	E	A		F	A
Approach Delay		22.6				12.8			59.6			75.8
Approach LOS		C				B			E			E

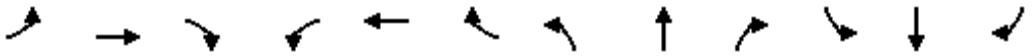
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 110 (73%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 22.7		Intersection LOS: C	

Lane Group	SBR
Lane Configurations	
Volume (vph)	25
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 81.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

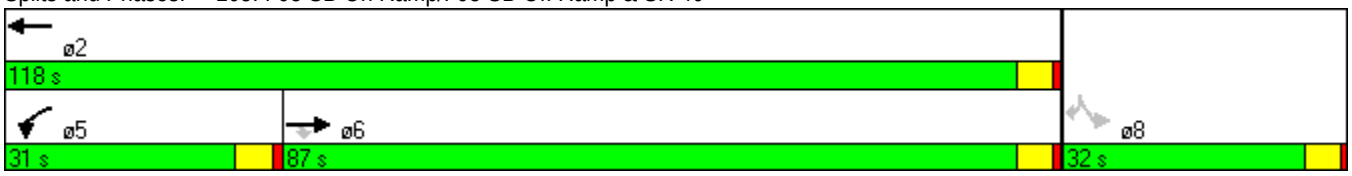


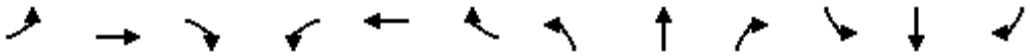
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2118	750	359	1645	0	0	0	0	386	0	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			590									51
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2229	789	378	1732	0	0	0	0	406	0	177
Turn Type		NA	Perm	Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases			6							8		8
Total Split (s)	0.0	87.0	87.0	31.0	118.0	0.0	0.0	0.0	0.0	32.0	0.0	32.0
Total Lost Time (s)	4.0	4.0	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		89.2	89.2	23.5	117.0					25.0		25.0
Actuated g/C Ratio		0.59	0.59	0.16	0.78					0.17		0.17
v/c Ratio		0.60	0.68	0.72	0.45					0.73		0.59
Control Delay		7.9	3.9	73.3	9.6					67.3		48.8
Queue Delay		0.0	0.0	0.0	0.1					0.0		0.0
Total Delay		7.9	3.9	73.3	9.7					67.3		48.8
LOS		A	A	E	A					E		D
Approach Delay		6.9			21.1							
Approach LOS		A			C							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 144 (96%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 17.7		Intersection LOS: B	

Intersection Capacity Utilization 77.9% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



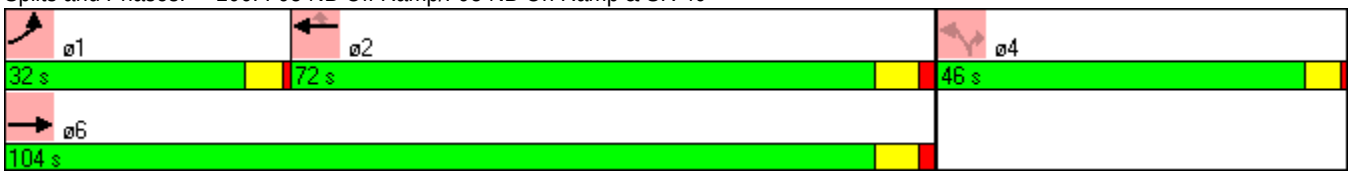


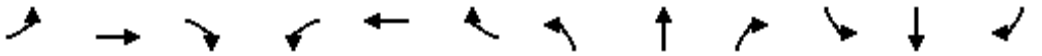
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	167	2337	0	0	1577	267	427	0	500	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						281			11			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	176	2460	0	0	1660	281	449	0	526	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	32.0	104.0	0.0	0.0	72.0	72.0	46.0	0.0	46.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	22.1	104.2			77.8	77.8	36.8		36.8			
Actuated g/C Ratio	0.15	0.69			0.52	0.52	0.25		0.25			
v/c Ratio	0.70	0.72			0.44	0.30	0.55		0.78			
Control Delay	91.1	8.5			18.6	4.3	51.5		60.1			
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			
Total Delay	91.1	8.6			18.6	4.3	51.5		60.1			
LOS	F	A			B	A	D		E			
Approach Delay		14.1			16.6							
Approach LOS		B			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 16 (11%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 22.3		Intersection LOS: C	

Intersection Capacity Utilization 77.9% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	1532	1393	224	906	38	838	85	297	97	154	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4910	0	4894	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4910	0	4894	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			121		5				313			81
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		5%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	93	1613	1466	236	994	0	882	89	313	102	162	105
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases									Free			8
Total Split (s)	20.1	74.0	116.0	16.0	69.9	0.0	42.0	42.0	0.0	18.0	18.0	18.0
Total Lost Time (s)	4.3	4.0	5.0	4.3	4.0	1.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	13.5	70.0	111.0	11.7	68.2		38.0	38.0	150.0	14.0	14.0	14.0
Actuated g/C Ratio	0.09	0.47	0.74	0.08	0.45		0.25	0.25	1.00	0.09	0.09	0.09
v/c Ratio	0.60	1.01	0.72	0.91	0.44		0.71	0.19	0.20	0.32	0.95	0.48
Control Delay	81.0	52.3	6.6	104.1	28.9		54.8	45.3	0.3	66.7	122.6	27.4
Queue Delay	0.0	0.0	0.1	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.0	52.3	6.7	104.1	28.9		54.8	45.3	0.3	66.7	122.6	27.4
LOS	F	D	A	F	C		D	D	A	E	F	C
Approach Delay		32.1			43.3			40.8			80.0	
Approach LOS		C			D			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 130 (87%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay: 39.1		Intersection LOS: D	

Intersection Capacity Utilization 86.4% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40

Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	600	1101	5	704	194	260	491
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		250		250	150	0
Storage Lanes	2		0		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	3367	3471	0	3472	1553	3433	1583
Flt Permitted	0.950			0.946		0.950	
Satd. Flow (perm)	3367	3471	0	3285	1553	3433	1583
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					204		517
Link Speed (mph)		40		40		35	
Link Distance (ft)		1131		1488		528	
Travel Time (s)		19.3		25.4		10.3	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	0%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	632	1159	0	746	204	274	517
Turn Type	Prot	NA	Perm	NA	Perm	NA	custom
Protected Phases	1	6		2		8	8
Permitted Phases			2		2		8
Total Split (s)	30.0	64.0	34.0	34.0	34.0	26.0	26.0
Total Lost Time (s)	4.0	4.0	5.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	19.4	47.3		23.7	23.7	13.5	13.5
Actuated g/C Ratio	0.28	0.68		0.34	0.34	0.20	0.20
v/c Ratio	0.67	0.49		0.66	0.31	0.41	0.71
Control Delay	27.3	6.3		23.8	4.7	27.9	9.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	27.3	6.3		23.8	4.7	27.9	9.1
LOS	C	A		C	A	C	A
Approach Delay		13.7		19.7		15.6	
Approach LOS		B		B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 69.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 15.7		Intersection LOS: B	
Intersection Capacity Utilization 67.5%		ICU Level of Service C	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave Ext

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	15	269	1395	531	195	984	332	263	461	155	416	691
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		1	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3370	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3370	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				258			349			148		
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			6363
Travel Time (s)			32.8			34.7			9.9			86.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	299	1468	559	205	1036	349	277	485	163	438	727
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2			4		
Total Split (s)	23.0	23.0	72.0	72.0	16.0	65.0	65.0	17.0	30.0	30.0	32.0	45.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		17.7	67.3	67.3	11.9	61.5	61.5	13.0	26.8	26.8	24.6	38.4
Actuated g/C Ratio		0.12	0.46	0.46	0.08	0.42	0.42	0.09	0.18	0.18	0.17	0.26
v/c Ratio		0.74	0.92	0.66	0.75	0.71	0.41	0.93	0.76	0.40	0.78	0.80
Control Delay		74.1	48.1	20.0	83.9	39.2	4.2	102.3	66.2	13.4	68.6	58.1
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		74.1	48.1	20.0	83.9	39.2	4.2	102.3	66.2	13.4	68.6	58.1
LOS		E	D	B	F	D	A	F	E	B	E	E
Approach Delay			44.7			37.3			67.7			54.4
Approach LOS			D			D			E			D

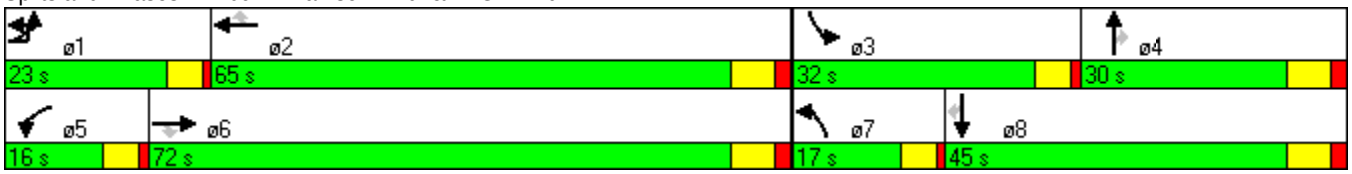
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 146.6			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 48.5		Intersection LOS: D	
Intersection Capacity Utilization 84.1%		ICU Level of Service E	

Lane Group	SBR
Lane Configurations	
Volume (vph)	313
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	1
Taper Length (ft)	
Satd. Flow (prot)	1553
Flt Permitted	
Satd. Flow (perm)	1553
Right Turn on Red	Yes
Satd. Flow (RTOR)	172
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	329
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Total Split (s)	45.0
Total Lost Time (s)	4.0
Act Effct Green (s)	38.4
Actuated g/C Ratio	0.26
v/c Ratio	0.62
Control Delay	27.4
Queue Delay	0.0
Total Delay	27.4
LOS	C
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

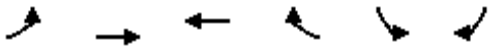


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1716	0	0	1029	146	609
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						168
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1806	0	0	1083	154	641
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	102.0	0.0	0.0	102.0	18.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	96.1			96.1	10.9	120.0
Actuated g/C Ratio	0.80			0.80	0.09	1.00
v/c Ratio	0.65			0.39	0.50	0.41
Control Delay	5.2			4.1	57.5	0.8
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	5.2			4.1	57.5	0.8
LOS	A			A	E	A
Approach Delay	5.2			4.1	11.8	
Approach LOS	A			A	B	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 95 (79%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 6.3	Intersection LOS: A

Intersection Capacity Utilization 64.9% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd

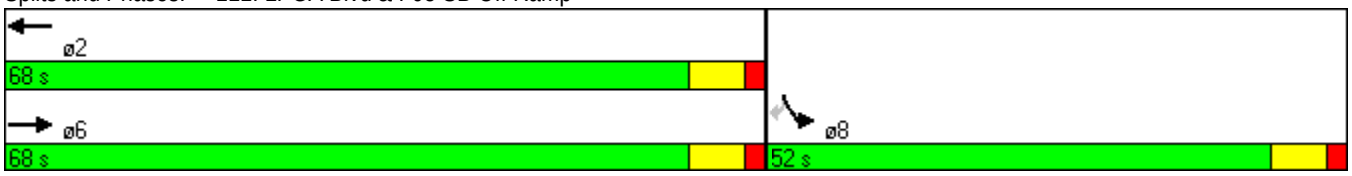


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	1079	749	0	941	258
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						141
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1136	788	0	991	272
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	68.0	68.0	0.0	52.0	52.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		64.6	64.6		41.4	41.4
Actuated g/C Ratio		0.54	0.54		0.34	0.34
v/c Ratio		0.61	0.42		0.85	0.43
Control Delay		16.4	19.3		44.3	15.5
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		16.4	19.3		44.3	15.5
LOS		B	B		D	B
Approach Delay		16.4	19.3		38.1	
Approach LOS		B	B		D	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 25.7	Intersection LOS: C

Intersection Capacity Utilization 98.0% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

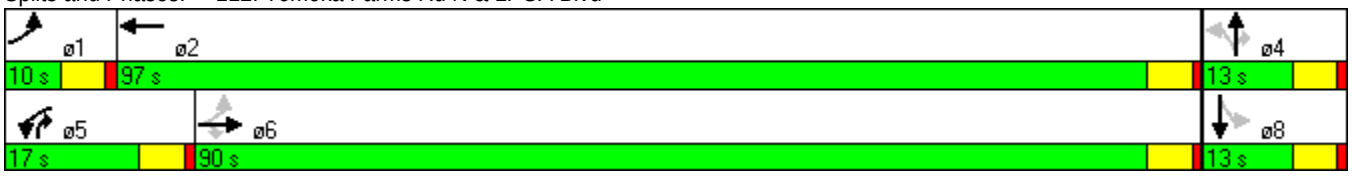


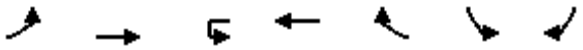
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	923	78	254	739	14	47	1	284	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	1553	3367	1821	0	1787	1881	1599	0	1787	0
Flt Permitted	0.357			0.950			0.757				0.757	
Satd. Flow (perm)	652	1827	1553	3367	1821	0	1424	1881	1599	0	1424	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82		3				184			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	972	82	267	793	0	49	1	299	0	1	0
Turn Type	pm+pt	NA	Perm	Prot	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6		6				4		4	8		
Total Split (s)	10.0	90.0	90.0	17.0	97.0	0.0	13.0	13.0	17.0	13.0	13.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	4.0	3.0
Act Effct Green (s)	94.9	88.8	88.8	12.8	104.4		9.0	9.0	23.2		9.0	
Actuated g/C Ratio	0.79	0.74	0.74	0.11	0.87		0.08	0.08	0.19		0.08	
v/c Ratio	0.00	0.72	0.07	0.74	0.50		0.46	0.01	0.65		0.01	
Control Delay	2.0	13.4	1.2	66.3	6.5		67.5	52.0	23.4		52.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	2.0	13.4	1.2	66.3	6.5		67.5	52.0	23.4		52.0	
LOS	A	B	A	E	A		E	D	C		D	
Approach Delay		12.4			21.6			29.7			52.0	
Approach LOS		B			C			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 86 (72%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 18.8		Intersection LOS: B	

Intersection Capacity Utilization 82.8% ICU Level of Service E
Analysis Period (min) 15

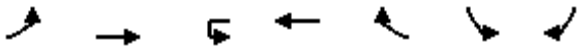
Splits and Phases: 112: Tomoka Farms Rd N & LPGA Blvd





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	22	1752	0	1074	14	55	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3431	0	1766	0
Flt Permitted	0.950					0.960	
Satd. Flow (perm)	1719	3438	1810	3431	0	1766	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	23	1844	0	1146	0	69	0
Sign Control		Free		Free		Stop	

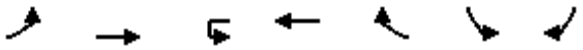
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 58.8%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	22	1752	0	1074	14	55	10
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	23	1844	0	1131	15	58	11
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1145		0			2106	573
vC1, stage 1 conf vol						1138	
vC2, stage 2 conf vol						968	
vCu, unblocked vol	1145		0			2106	573
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	96		0			72	98
cM capacity (veh/h)	589		0			203	465

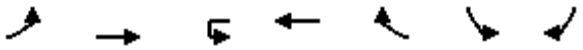
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	23	922	922	754	392	0	68
Volume Left	23	0	0	0	0	0	58
Volume Right	0	0	0	0	15	0	11
cSH	589	1700	1700	1700	1700	1700	223
Volume to Capacity	0.04	0.54	0.54	0.44	0.23	0.00	0.31
Queue Length 95th (ft)	2	0	0	0	0	0	25
Control Delay (s)	11.4	0.0	0.0	0.0	0.0	0.0	28.2
Lane LOS	B						D
Approach Delay (s)	0.1			0.0			28.2
Approach LOS							D

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	184	1641	0	1005	103	137	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3390	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3390	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	194	1727	0	1166	0	144	225
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	184	1641	0	1005	103	137	214
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	194	1727	0	1058	108	144	225
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1166		0			2363	583
vC1, stage 1 conf vol						1112	
vC2, stage 2 conf vol						1251	
vCu, unblocked vol	1166		0			2363	583
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	66		0			0	51
cM capacity (veh/h)	578		0			132	458

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	194	864	864	705	461	0	369
Volume Left	194	0	0	0	0	0	144
Volume Right	0	0	0	0	108	0	225
cSH	578	1700	1700	1700	1700	1700	338
Volume to Capacity	0.34	0.51	0.51	0.41	0.27	0.00	1.09
Queue Length 95th (ft)	29	0	0	0	0	0	278
Control Delay (s)	14.3	0.0	0.0	0.0	0.0	0.0	79.0
Lane LOS	B						F
Approach Delay (s)	1.4			0.0			79.0
Approach LOS							F

Intersection Summary			
Average Delay	9.2		
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	55	1747	0	1084	99	140	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1746	0
Flt Permitted	0.950					0.965	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1746	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	58	1839	0	1141	104	205	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 66.1%		ICU Level of Service C	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	55	1747	0	1084	99	140	55
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	58	1839	0	1141	104	147	58
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1141		0			2176	571
vC1, stage 1 conf vol						1141	
vC2, stage 2 conf vol						1035	
vCu, unblocked vol	1141		0			2176	571
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	90		0			22	88
cM capacity (veh/h)	591		0			189	467

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	58	919	919	571	571	104	0	205
Volume Left	58	0	0	0	0	0	0	147
Volume Right	0	0	0	0	0	104	0	58
cSH	591	1700	1700	1700	1700	1700	1700	227
Volume to Capacity	0.10	0.54	0.54	0.34	0.34	0.06	0.00	0.90
Queue Length 95th (ft)	6	0	0	0	0	0	0	150
Control Delay (s)	11.8	0.0	0.0	0.0	0.0	0.0	0.0	82.5
Lane LOS	B							F
Approach Delay (s)	0.4			0.0				82.5
Approach LOS								F

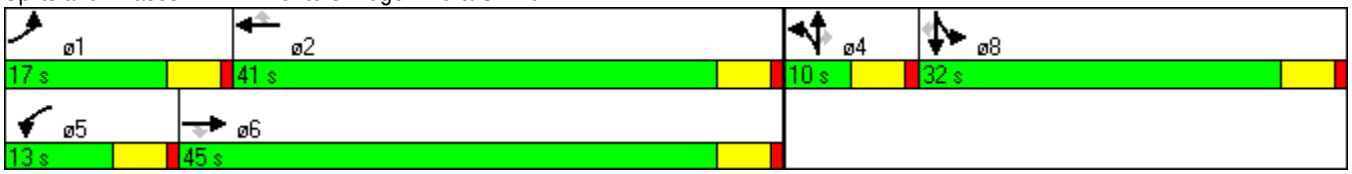
Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		

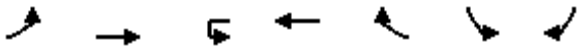
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	1747	73	273	1025	480	44	58	168	882	95	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		300	300		300	0		300	300		0
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			77			505			128			112
Link Speed (mph)		60			60			35			35	
Link Distance (ft)		1961			4435			1868			1392	
Travel Time (s)		22.3			50.4			36.4			27.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	1839	77	287	1079	505	46	61	177	928	100	112
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Total Split (s)	17.0	45.0	45.0	13.0	41.0	41.0	10.0	10.0	10.0	32.0	32.0	32.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	11.6	41.0	41.0	9.0	38.4	38.4	6.0	6.0	6.0	28.0	28.0	28.0
Actuated g/C Ratio	0.12	0.41	0.41	0.09	0.38	0.38	0.06	0.06	0.06	0.28	0.28	0.28
v/c Ratio	0.56	0.91	0.11	0.96	0.57	0.56	0.43	0.54	0.82	0.96	0.19	0.21
Control Delay	52.8	35.7	4.8	88.6	26.0	4.7	58.1	63.9	44.8	56.2	28.6	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.8	35.7	4.8	88.6	26.0	4.7	58.1	63.9	44.8	56.2	28.6	6.4
LOS	D	D	A	F	C	A	E	E	D	E	C	A
Approach Delay		35.4			29.9			51.1			48.9	
Approach LOS		D			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 37.2		Intersection LOS: D	
Intersection Capacity Utilization 83.4%		ICU Level of Service E	

Analysis Period (min) 15

Splits and Phases: 117: Hunters Ridge Blvd & SR 40





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	36	2873	10	1768	140	214	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	4940	1719	4940	1538	1787	1599
Flt Permitted	0.950		0.950			0.950	
Satd. Flow (perm)	1719	4940	1719	4940	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					147		42
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	38	3024	11	1861	147	225	42
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8	
Permitted Phases					2		8
Total Split (s)	15.0	45.0	12.0	42.0	42.0	33.0	33.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	8.2	45.8	7.1	40.7	40.7	14.0	14.0
Actuated g/C Ratio	0.12	0.65	0.10	0.58	0.58	0.20	0.20
v/c Ratio	0.19	0.94	0.06	0.65	0.15	0.63	0.12
Control Delay	32.9	20.3	33.2	13.6	2.7	34.5	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.9	20.3	33.2	13.6	2.7	34.5	9.0
LOS	C	C	C	B	A	C	A
Approach Delay		20.5		12.9		30.5	
Approach LOS		C		B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 70			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 18.1		Intersection LOS: B	
Intersection Capacity Utilization 74.0%		ICU Level of Service D	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	26	320	2762	22	48	42	1610	564	28	33	55	884
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		2		1		1		2	1		1	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	3347	4940	1538	0	1764	4940	2707	1787	1881	1599	3099
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	3347	4940	1538	0	1764	4940	2707	1787	1881	1599	3099
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				19				594			18	
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												30%
Lane Group Flow (vph)	0	364	2907	23	0	95	1695	594	29	35	58	652
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Prot	Split	NA	Perm	Split
Protected Phases	1	1	6		5	5	2	2	8	8		4
Permitted Phases				6							8	
Total Split (s)	28.0	28.0	89.0	89.0	12.0	12.0	73.0	73.0	14.0	14.0	14.0	35.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		21.8	85.1	85.1		8.0	71.3	71.3	10.0	10.0	10.0	31.0
Actuated g/C Ratio		0.15	0.58	0.58		0.05	0.48	0.48	0.07	0.07	0.07	0.21
v/c Ratio		0.73	1.02	0.03		0.99	0.71	0.37	0.24	0.27	0.46	1.00
Control Delay		69.5	52.5	6.4		157.2	32.8	2.3	71.6	72.5	61.0	92.3
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		69.5	52.5	6.4		157.2	32.8	2.3	71.6	72.5	61.0	92.3
LOS		E	D	A		F	C	A	E	E	E	F
Approach Delay			54.1				30.2			66.8		
Approach LOS			D				C			E		

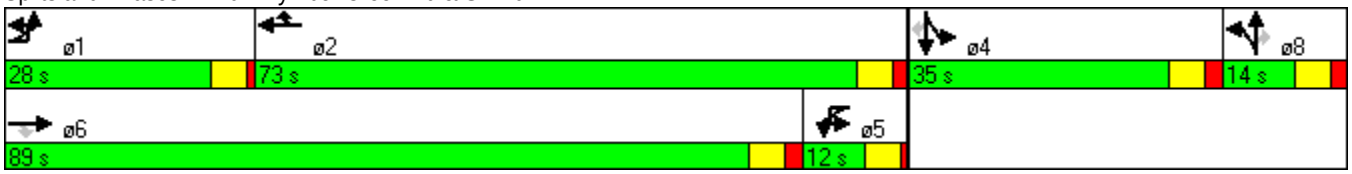
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 147.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 50.2		Intersection LOS: D	
Intersection Capacity Utilization 95.4%		ICU Level of Service F	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	42	301
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1564	1524
Flt Permitted	0.959	
Satd. Flow (perm)	1564	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		279
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	323	317
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	35.0	35.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	31.0	31.0
Actuated g/C Ratio	0.21	0.21
v/c Ratio	0.98	0.59
Control Delay	102.1	13.5
Queue Delay	0.0	0.0
Total Delay	102.1	13.5
LOS	F	B
Approach Delay	75.5	
Approach LOS	E	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	47	3625	28	9	74	2043	10	153	0	45	150	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		250		300		325	0		250	0	
Storage Lanes	1		1		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	4940	1538	0	1728	4940	1538	1787	1599	0	1787	1599
Flt Permitted	0.950				0.950			0.740			0.726	
Satd. Flow (perm)	1719	4940	1538	0	1728	4940	1538	1392	1599	0	1366	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			26				11		57			88
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	3816	29	0	87	2151	11	161	47	0	158	26
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases			6				2	4			8	
Total Split (s)	14.7	116.0	116.0	13.0	13.0	114.3	114.3	21.0	21.0	0.0	21.0	21.0
Total Lost Time (s)	4.7	5.0	5.0	5.7	4.7	5.0	5.0	4.0	4.0	3.0	5.0	4.0
Act Effct Green (s)	9.2	111.0	111.0		8.3	112.4	112.4	17.0	17.0		16.0	17.0
Actuated g/C Ratio	0.06	0.74	0.74		0.06	0.75	0.75	0.11	0.11		0.11	0.11
v/c Ratio	0.46	1.04	0.03		0.91	0.58	0.01	1.02	0.20		1.08	0.10
Control Delay	82.1	48.2	2.0		119.8	9.1	4.7	140.3	12.4		158.4	0.8
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	82.1	48.2	2.0		119.8	9.1	4.7	140.3	12.4		158.4	0.8
LOS	F	D	A		F	A	A	F	B		F	A
Approach Delay		48.3				13.4			111.4			136.1
Approach LOS		D				B			F			F

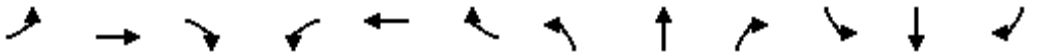
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 110 (73%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 40.8		Intersection LOS: D	

Lane Group	SBR
Lane Configurations	
Volume (vph)	25
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 92.7% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

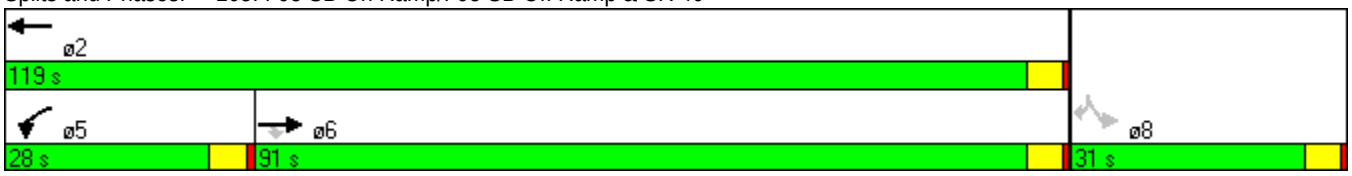


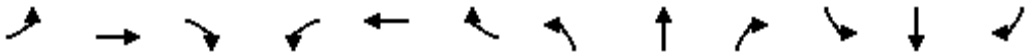
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	3046	804	393	2191	0	0	0	0	465	0	208
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			571									18
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	3206	846	414	2306	0	0	0	0	489	0	219
Turn Type		NA	Perm	Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases			6							8		8
Total Split (s)	0.0	91.0	91.0	28.0	119.0	0.0	0.0	0.0	0.0	31.0	0.0	31.0
Total Lost Time (s)	4.0	4.0	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		88.5	88.5	23.0	115.8					26.2		26.2
Actuated g/C Ratio		0.59	0.59	0.15	0.77					0.17		0.17
v/c Ratio		0.87	0.74	0.81	0.60					0.84		0.77
Control Delay		16.2	3.1	76.0	10.6					73.4		72.4
Queue Delay		0.0	0.0	0.0	0.2					0.0		0.0
Total Delay		16.2	3.1	76.0	10.8					73.4		72.4
LOS		B	A	E	B					E		E
Approach Delay		13.4			20.8							
Approach LOS		B			C							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 144 (96%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 21.7		Intersection LOS: C	

Intersection Capacity Utilization 91.2% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



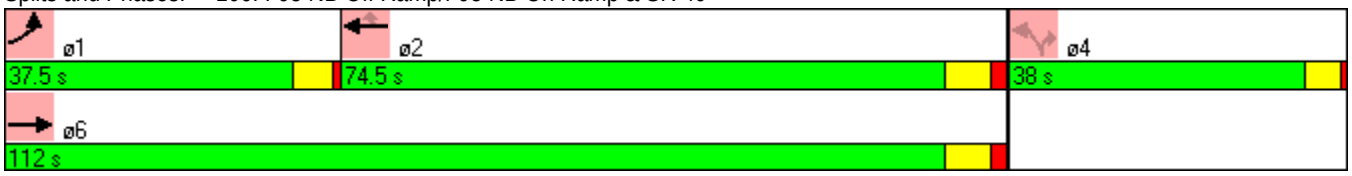


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	234	3277	0	0	2117	321	467	0	582	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						338			2			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	246	3449	0	0	2228	338	492	0	613	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	37.5	112.0	0.0	0.0	74.5	74.5	38.0	0.0	38.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	27.7	107.0			75.0	75.0	34.0		34.0			
Actuated g/C Ratio	0.18	0.71			0.50	0.50	0.23		0.23			
v/c Ratio	0.77	0.98			0.61	0.36	0.65		1.00			
Control Delay	87.0	18.3			26.5	4.9	57.3		92.5			
Queue Delay	0.0	27.1			0.0	0.0	0.0		0.0			
Total Delay	87.0	45.4			26.5	4.9	57.3		92.5			
LOS	F	D			C	A	E		F			
Approach Delay		48.2			23.7							
Approach LOS		D			C							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 16 (11%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 43.9		Intersection LOS: D	

Intersection Capacity Utilization 91.2% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	1826	2068	237	1081	40	1257	87	300	97	154	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4915	0	4894	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4915	0	4894	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			85		5				303			80
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		5%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	1844	2089	239	1132	0	1270	88	303	98	156	101
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases									Free			8
Total Split (s)	20.0	77.0	119.0	15.0	72.0	0.0	42.0	42.0	0.0	16.0	16.0	16.0
Total Lost Time (s)	4.3	4.0	5.0	4.3	4.0	1.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	13.4	73.0	114.0	10.7	70.3		38.0	38.0	150.0	12.0	12.0	12.0
Actuated g/C Ratio	0.09	0.49	0.76	0.07	0.47		0.25	0.25	1.00	0.08	0.08	0.08
v/c Ratio	0.59	1.10	1.01	1.00	0.49		1.02	0.19	0.20	0.36	1.07	0.51
Control Delay	72.9	85.7	22.9	127.2	28.5		86.2	45.3	0.3	69.5	156.6	29.1
Queue Delay	0.0	3.7	3.5	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.9	89.4	26.4	127.2	28.5		86.2	45.3	0.3	69.5	156.6	29.1
LOS	E	F	C	F	C		F	D	A	E	F	C
Approach Delay		56.3			45.7			68.3			96.3	
Approach LOS		E			D			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 130 (87%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 59.0		Intersection LOS: E	

Intersection Capacity Utilization 102.8% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40

Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	800	1436	7	907	277	336	698
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		250		250	150	0
Storage Lanes	2		0		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	3367	3471	0	3472	1553	3433	1583
Flt Permitted	0.950			0.939		0.950	
Satd. Flow (perm)	3367	3471	0	3260	1553	3433	1583
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					292		517
Link Speed (mph)		40		40		35	
Link Distance (ft)		1131		1488		528	
Travel Time (s)		19.3		25.4		10.3	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	0%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	842	1512	0	962	292	354	735
Turn Type	Prot	NA	Perm	NA	Perm	NA	custom
Protected Phases	1	6		2		8	8
Permitted Phases			2		2		8
Total Split (s)	30.0	64.0	34.0	34.0	34.0	26.0	26.0
Total Lost Time (s)	4.0	4.0	5.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	24.7	57.6		28.9	28.9	20.3	20.3
Actuated g/C Ratio	0.29	0.67		0.34	0.34	0.24	0.24
v/c Ratio	0.87	0.65		0.88	0.41	0.44	0.96
Control Delay	40.8	10.2		38.4	4.7	30.3	34.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	40.8	10.2		38.4	4.7	30.3	34.9
LOS	D	B		D	A	C	C
Approach Delay		21.1		30.6		33.4	
Approach LOS		C		C		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 86			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 26.5		Intersection LOS: C	
Intersection Capacity Utilization 84.6%		ICU Level of Service E	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave Ext

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	18	330	1585	597	263	1233	514	292	619	216	632	929
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		1	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3370	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3370	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				240			422			135		
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			6363
Travel Time (s)			32.8			34.7			9.9			86.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	366	1668	628	277	1298	541	307	652	227	665	978
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2			4		
Total Split (s)	23.0	23.0	72.0	72.0	16.0	65.0	65.0	17.0	30.0	30.0	32.0	45.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		18.8	68.0	68.0	12.0	61.2	61.2	13.0	26.0	26.0	28.0	41.0
Actuated g/C Ratio		0.13	0.45	0.45	0.08	0.41	0.41	0.09	0.17	0.17	0.19	0.27
v/c Ratio		0.87	1.06	0.75	1.03	0.92	0.61	1.05	1.08	0.60	1.06	1.03
Control Delay		84.9	79.9	26.8	128.3	53.0	10.5	130.5	117.8	29.9	109.1	89.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		84.9	79.9	26.8	128.3	53.0	10.5	130.5	117.8	29.9	109.1	89.9
LOS		F	E	C	F	D	B	F	F	C	F	F
Approach Delay			68.0			52.0			104.3			86.4
Approach LOS			E			D			F			F

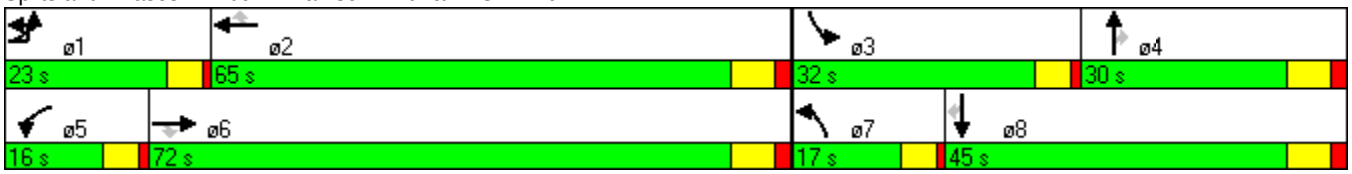
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 73.9		Intersection LOS: E	
Intersection Capacity Utilization 99.8%		ICU Level of Service F	

Lane Group	SBR
Lane Configurations	
Volume (vph)	383
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	1
Taper Length (ft)	
Satd. Flow (prot)	1553
Flt Permitted	
Satd. Flow (perm)	1553
Right Turn on Red	Yes
Satd. Flow (RTOR)	152
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	403
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Total Split (s)	45.0
Total Lost Time (s)	4.0
Act Effct Green (s)	41.0
Actuated g/C Ratio	0.27
v/c Ratio	0.75
Control Delay	40.5
Queue Delay	0.0
Total Delay	40.5
LOS	D
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

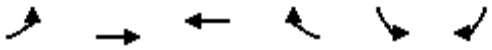


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	2003	0	0	1335	197	657
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						149
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2108	0	0	1405	207	692
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	102.0	0.0	0.0	102.0	18.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	95.2			95.2	11.8	120.0
Actuated g/C Ratio	0.79			0.79	0.10	1.00
v/c Ratio	0.77			0.51	0.63	0.45
Control Delay	5.6			5.2	60.6	0.9
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	5.6			5.2	60.6	0.9
LOS	A			A	E	A
Approach Delay	5.6			5.2	14.7	
Approach LOS	A			A	B	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 7.3	Intersection LOS: A

Intersection Capacity Utilization 72.9% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd

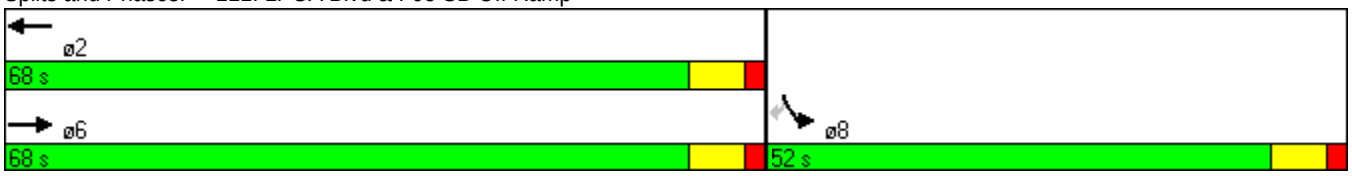


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	1417	1061	0	988	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						58
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1492	1117	0	1040	284
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	68.0	68.0	0.0	52.0	52.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		64.0	64.0		42.0	42.0
Actuated g/C Ratio		0.53	0.53		0.35	0.35
v/c Ratio		0.81	0.60		0.88	0.49
Control Delay		20.6	19.2		46.2	26.5
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		20.6	19.2		46.2	26.5
LOS		C	B		D	C
Approach Delay		20.6	19.2		42.0	
Approach LOS		C	B		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 27.4		Intersection LOS: C	

Intersection Capacity Utilization 111.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

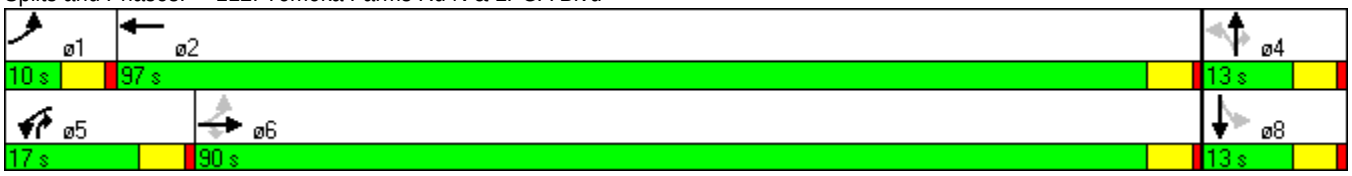


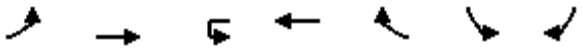
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	1217	122	340	976	15	88	1	372	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	1553	3367	1823	0	1787	1881	1599	0	1787	0
Flt Permitted	0.233			0.950			0.757				0.757	
Satd. Flow (perm)	426	1827	1553	3367	1823	0	1424	1881	1599	0	1424	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			128		2				102			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	1281	128	358	1043	0	93	1	392	0	1	0
Turn Type	pm+pt	NA	Perm	Prot	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6		6				4		4	8		
Total Split (s)	10.0	90.0	90.0	17.0	97.0	0.0	13.0	13.0	17.0	13.0	13.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	4.0	3.0
Act Effct Green (s)	92.0	86.0	86.0	13.0	101.0		9.0	9.0	26.0		9.0	
Actuated g/C Ratio	0.77	0.72	0.72	0.11	0.84		0.08	0.08	0.22		0.08	
v/c Ratio	0.00	0.98	0.11	0.98	0.68		0.87	0.01	0.92		0.01	
Control Delay	2.0	37.5	1.1	88.7	13.4		112.5	52.0	62.1		52.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	2.0	37.5	1.1	88.7	13.4		112.5	52.0	62.1		52.0	
LOS	A	D	A	F	B		F	D	E		D	
Approach Delay		34.2			32.7			71.7			52.0	
Approach LOS		C			C			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 86 (72%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 39.1		Intersection LOS: D	

Intersection Capacity Utilization 103.8% ICU Level of Service G
Analysis Period (min) 15

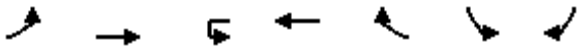
Splits and Phases: 112: Tomoka Farms Rd N & LPGA Blvd





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	10	369	0	585	35	25	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3411	0	1766	0
Flt Permitted	0.950					0.960	
Satd. Flow (perm)	1719	3438	1810	3411	0	1766	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	11	388	0	653	0	31	0
Sign Control		Free		Free		Stop	

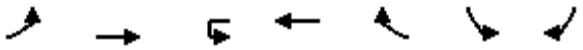
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	10	369	0	585	35	25	5
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	388	0	616	37	26	5
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	653		0			849	326
vC1, stage 1 conf vol						634	
vC2, stage 2 conf vol						215	
vCu, unblocked vol	653		0			849	326
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	99		0			94	99
cM capacity (veh/h)	910		0			462	672

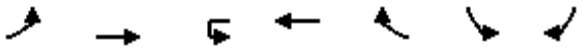
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	11	194	194	411	242	0	32
Volume Left	11	0	0	0	0	0	26
Volume Right	0	0	0	0	37	0	5
cSH	910	1700	1700	1700	1700	1700	488
Volume to Capacity	0.01	0.11	0.11	0.24	0.14	0.00	0.06
Queue Length 95th (ft)	1	0	0	0	0	0	4
Control Delay (s)	9.0	0.0	0.0	0.0	0.0	0.0	12.9
Lane LOS	A						B
Approach Delay (s)	0.2			0.0			12.9
Approach LOS							B

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	27.3%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	24	503	0	820	67	41	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3400	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3400	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	25	529	0	934	0	43	25
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	24	503	0	820	67	41	24
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	25	529	0	863	71	43	25
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	934		0			1214	467
vC1, stage 1 conf vol						898	
vC2, stage 2 conf vol						315	
vCu, unblocked vol	934		0			1214	467
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	96		0			87	95
cM capacity (veh/h)	711		0			335	545

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	25	265	265	575	358	0	68
Volume Left	25	0	0	0	0	0	43
Volume Right	0	0	0	0	71	0	25
cSH	711	1700	1700	1700	1700	1700	531
Volume to Capacity	0.04	0.16	0.16	0.34	0.21	0.00	0.13
Queue Length 95th (ft)	2	0	0	0	0	0	9
Control Delay (s)	10.3	0.0	0.0	0.0	0.0	0.0	15.3
Lane LOS	B						C
Approach Delay (s)	0.5			0.0			15.3
Approach LOS							C

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	34.8%	ICU Level of Service	A
Analysis Period (min)	15		

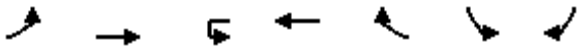
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	31	400	0	653	112	68	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1743	0
Flt Permitted	0.950					0.967	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1743	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	33	421	0	687	118	105	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	31	400	0	653	112	68	31
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	33	421	0	687	118	72	33
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	687		0			963	344
vC1, stage 1 conf vol						687	
vC2, stage 2 conf vol						276	
vCu, unblocked vol	687		0			963	344
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	96		0			83	95
cM capacity (veh/h)	883		0			426	655

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	33	211	211	344	344	118	0	104
Volume Left	33	0	0	0	0	0	0	72
Volume Right	0	0	0	0	0	118	0	33
cSH	883	1700	1700	1700	1700	1700	1700	478
Volume to Capacity	0.04	0.12	0.12	0.20	0.20	0.07	0.00	0.22
Queue Length 95th (ft)	2	0	0	0	0	0	0	16
Control Delay (s)	9.2	0.0	0.0	0.0	0.0	0.0	0.0	14.6
Lane LOS	A							B
Approach Delay (s)	0.7			0.0				14.6
Approach LOS								B

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	17	554	0	904	167	89	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	4940	1810	4940	1538	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	4940	1810	4940	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					176		16
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	18	583	0	952	176	94	16
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8	
Permitted Phases					2		8
Total Split (s)	15.0	45.0	12.0	42.0	42.0	33.0	33.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	7.4	30.4		28.5	28.5	9.1	9.1
Actuated g/C Ratio	0.17	0.69		0.65	0.65	0.21	0.21
v/c Ratio	0.06	0.17		0.30	0.17	0.25	0.05
Control Delay	18.0	3.6		6.0	2.1	17.8	9.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	18.0	3.6		6.0	2.1	17.8	9.5
LOS	B	A		A	A	B	A
Approach Delay		4.1		5.4		16.6	
Approach LOS		A		A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 44.1			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 5.6		Intersection LOS: A	
Intersection Capacity Utilization 30.8%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	5	50	582	20	43	72	918	675	36	34	20	530
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		2		1		1		2	1		1	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	3343	4940	1538	0	1750	4940	2707	1787	1881	1599	3099
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	3343	4940	1538	0	1750	4940	2707	1787	1881	1599	3099
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				21				711			21	
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												31%
Lane Group Flow (vph)	0	58	613	21	0	121	966	711	38	36	21	385
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Prot	Split	NA	Perm	Split
Protected Phases	1	1	6		5	5	2	2	8	8		4
Permitted Phases				6							8	
Total Split (s)	10.0	10.0	29.0	29.0	13.0	13.0	32.0	32.0	14.0	14.0	14.0	34.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		6.6	22.1	22.1		11.3	28.0	28.0	10.9	10.9	10.9	20.4
Actuated g/C Ratio		0.09	0.31	0.31		0.16	0.39	0.39	0.15	0.15	0.15	0.28
v/c Ratio		0.19	0.41	0.04		0.44	0.51	0.48	0.14	0.13	0.08	0.44
Control Delay		38.7	24.7	10.8		40.5	21.1	3.1	35.3	35.1	16.2	24.9
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		38.7	24.7	10.8		40.5	21.1	3.1	35.3	35.1	16.2	24.9
LOS		D	C	B		D	C	A	D	D	B	C
Approach Delay			25.5				15.3			31.0		
Approach LOS			C				B			C		

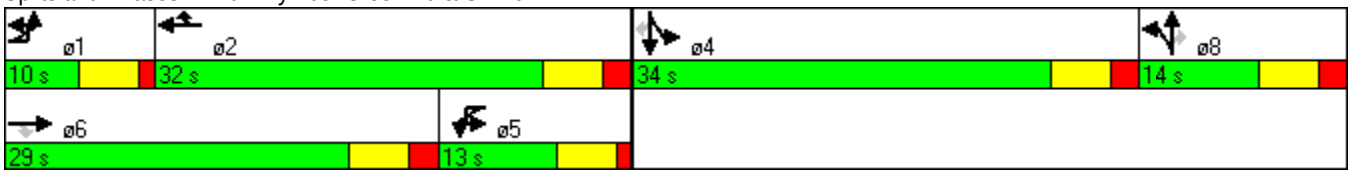
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 72.4			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 19.7		Intersection LOS: B	
Intersection Capacity Utilization 48.7%		ICU Level of Service A	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	20	45
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1561	1524
Flt Permitted	0.957	
Satd. Flow (perm)	1561	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		47
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	194	47
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	34.0	34.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	20.4	20.4
Actuated g/C Ratio	0.28	0.28
v/c Ratio	0.44	0.10
Control Delay	27.5	7.4
Queue Delay	0.0	0.0
Total Delay	27.5	7.4
LOS	C	A
Approach Delay	24.4	
Approach LOS	C	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	10	1045	5	12	27	1540	6	148	3	30	57	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		250		300		325	0		250	0	
Storage Lanes	1		1		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	4940	1538	0	1745	4940	1538	1787	1623	0	1787	1599
Flt Permitted	0.950				0.950			0.746			0.734	
Satd. Flow (perm)	1719	4940	1538	0	1745	4940	1538	1403	1623	0	1381	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			5				6		32			120
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1100	5	0	41	1621	6	156	35	0	60	17
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases			6				2	4			8	
Total Split (s)	13.0	80.0	80.0	18.0	18.0	85.0	85.0	42.0	42.0	0.0	42.0	42.0
Total Lost Time (s)	4.7	5.0	5.0	5.7	4.7	5.0	5.0	4.0	4.0	3.0	5.0	4.0
Act Effct Green (s)	7.5	96.1	96.1		9.7	102.9	102.9	22.8	22.8		21.8	22.8
Actuated g/C Ratio	0.05	0.69	0.69		0.07	0.74	0.74	0.16	0.16		0.16	0.16
v/c Ratio	0.12	0.32	0.00		0.34	0.45	0.01	0.68	0.12		0.28	0.05
Control Delay	65.4	10.5	6.4		92.5	2.4	0.3	69.6	16.8		53.4	0.2
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	65.4	10.5	6.4		92.5	2.4	0.3	69.6	16.8		53.4	0.2
LOS	E	B	A		F	A	A	E	B		D	A
Approach Delay		11.0				4.6			59.9			41.7
Approach LOS		B				A			E			D

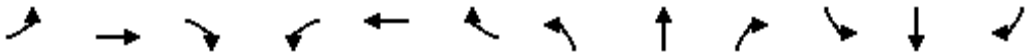
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 82 (59%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 11.3		Intersection LOS: B	

Lane Group	SBR
Lane Configurations	
Volume (vph)	16
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 54.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

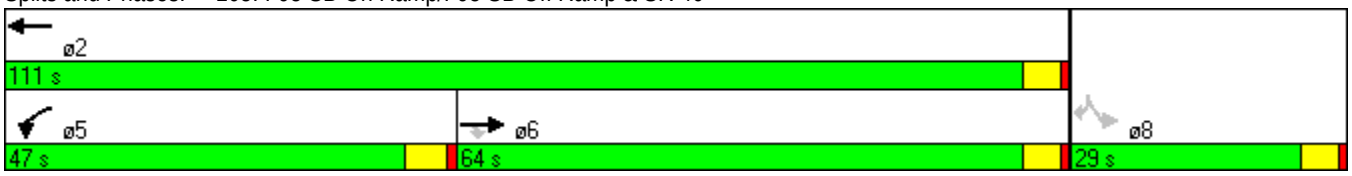


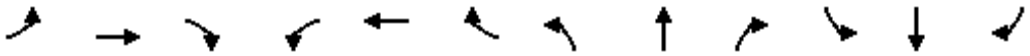
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	879	410	500	1731	0	0	0	0	241	0	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			432									44
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	925	432	526	1822	0	0	0	0	254	0	121
Turn Type		NA	Perm	Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases			6							8		8
Total Split (s)	0.0	64.0	64.0	47.0	111.0	0.0	0.0	0.0	0.0	29.0	0.0	29.0
Total Lost Time (s)	4.0	4.0	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		80.2	80.2	29.7	114.1					17.9		17.9
Actuated g/C Ratio		0.57	0.57	0.21	0.82					0.13		0.13
v/c Ratio		0.26	0.41	0.75	0.45					0.60		0.51
Control Delay		10.3	2.3	40.5	14.2					63.3		43.3
Queue Delay		0.0	0.0	0.0	0.5					0.0		0.0
Total Delay		10.3	2.3	40.5	14.6					63.3		43.3
LOS		B	A	D	B					E		D
Approach Delay		7.7			20.4							
Approach LOS		A			C							

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 102 (73%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 19.5		Intersection LOS: B	

Intersection Capacity Utilization 56.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



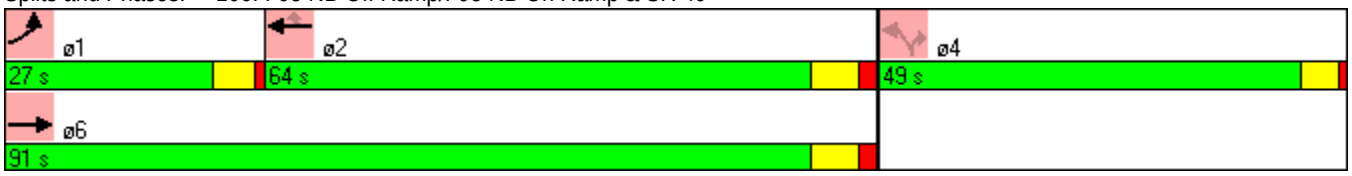


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	1020	0	0	1686	357	545	0	440	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						376			190			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	1074	0	0	1775	376	574	0	463	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	27.0	91.0	0.0	0.0	64.0	64.0	49.0	0.0	49.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	15.8	97.1			77.0	77.0	33.9		33.9			
Actuated g/C Ratio	0.11	0.69			0.55	0.55	0.24		0.24			
v/c Ratio	0.54	0.31			0.44	0.37	0.71		0.58			
Control Delay	64.1	14.5			16.5	7.1	53.2		29.1			
Queue Delay	0.0	0.4			0.1	0.0	0.0		0.0			
Total Delay	64.1	14.9			16.5	7.1	53.2		29.1			
LOS	E	B			B	A	D		C			
Approach Delay		19.2			14.9							
Approach LOS		B			B							

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 8 (6%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.71	
Intersection Signal Delay: 22.6	Intersection LOS: C

Intersection Capacity Utilization 56.8% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40

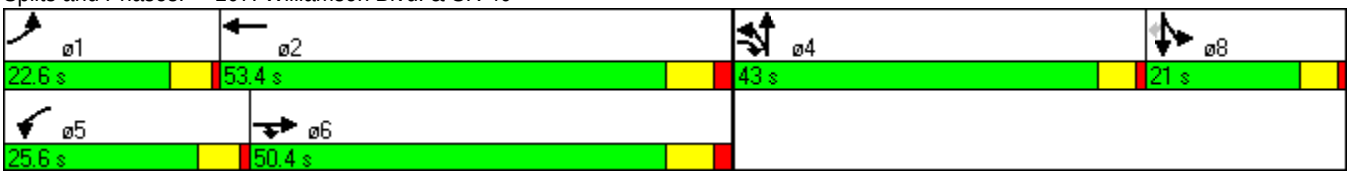


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	828	458	318	1165	106	724	150	288	166	123	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4876	0	4894	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4876	0	4894	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			284		12				303			162
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		5%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	872	482	335	1338	0	762	158	303	175	129	162
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases									Free			8
Total Split (s)	22.6	50.4	93.4	25.6	53.4	0.0	43.0	43.0	0.0	21.0	21.0	21.0
Total Lost Time (s)	4.3	4.0	5.0	4.3	4.0	1.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	15.4	55.9	92.3	19.3	59.8		33.4	33.4	140.0	15.1	15.1	15.1
Actuated g/C Ratio	0.11	0.40	0.66	0.14	0.43		0.24	0.24	1.00	0.11	0.11	0.11
v/c Ratio	0.64	0.64	0.26	0.73	0.64		0.65	0.36	0.20	0.48	0.65	0.52
Control Delay	83.6	35.0	2.0	67.5	34.8		50.4	45.8	0.3	62.9	75.6	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.6	35.0	2.0	67.5	34.8		50.4	45.8	0.3	62.9	75.6	14.3
LOS	F	C	A	E	C		D	D	A	E	E	B
Approach Delay		28.2			41.4			37.4			49.5	
Approach LOS		C			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 96 (69%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 37.1		Intersection LOS: D	

Intersection Capacity Utilization 66.0% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	270	504	756	167	177	405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			250	150	0
Storage Lanes	2			1	2	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	3367	3471	3471	1553	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3367	3471	3471	1553	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				176		426
Link Speed (mph)		40	40		35	
Link Distance (ft)		1131	1488		528	
Travel Time (s)		19.3	25.4		10.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	284	531	796	176	186	426
Turn Type	Prot	NA	NA	Perm	NA	custom
Protected Phases	1	6	2		8	8
Permitted Phases				2		8
Total Split (s)	28.0	61.0	33.0	33.0	29.0	29.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	11.6	36.8	21.1	21.1	10.7	10.7
Actuated g/C Ratio	0.21	0.66	0.38	0.38	0.19	0.19
v/c Ratio	0.41	0.23	0.61	0.25	0.28	0.66
Control Delay	22.8	4.3	16.8	3.7	22.1	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.8	4.3	16.8	3.7	22.1	8.4
LOS	C	A	B	A	C	A
Approach Delay		10.7	14.4		12.5	
Approach LOS		B	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 55.8			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 12.7		Intersection LOS: B	
Intersection Capacity Utilization 52.6%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave Ext

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	24	177	762	242	137	935	144	319	464	162	115	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		1	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3375	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3375	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				255			152			171		
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			6363
Travel Time (s)			32.8			34.7			9.9			86.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	211	802	255	144	984	152	336	488	171	121	326
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2			4		
Total Split (s)	20.0	20.0	77.0	77.0	14.0	71.0	71.0	16.0	29.0	29.0	30.0	43.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		13.1	44.7	44.7	9.8	41.4	41.4	12.3	23.2	23.2	10.6	21.5
Actuated g/C Ratio		0.13	0.43	0.43	0.09	0.40	0.40	0.12	0.22	0.22	0.10	0.21
v/c Ratio		0.50	0.54	0.31	0.46	0.72	0.22	0.85	0.63	0.36	0.36	0.46
Control Delay		49.5	23.7	3.3	53.6	30.3	4.1	68.2	43.0	8.5	50.1	40.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		49.5	23.7	3.3	53.6	30.3	4.1	68.2	43.0	8.5	50.1	40.0
LOS		D	C	A	D	C	A	E	D	A	D	D
Approach Delay			23.9			29.8			45.6			34.7
Approach LOS			C			C			D			C

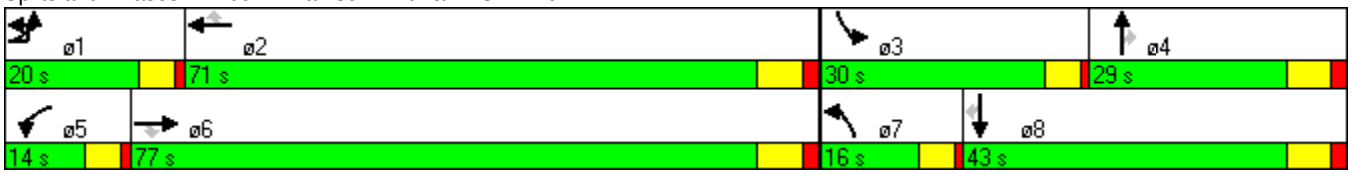
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 104.6			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 32.5		Intersection LOS: C	
Intersection Capacity Utilization 64.9%		ICU Level of Service C	

Lane Group	SBR
Lane Configurations	
Volume (vph)	176
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	1
Taper Length (ft)	
Satd. Flow (prot)	1553
Flt Permitted	
Satd. Flow (perm)	1553
Right Turn on Red	Yes
Satd. Flow (RTOR)	139
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	185
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Total Split (s)	43.0
Total Lost Time (s)	4.0
Act Effct Green (s)	21.5
Actuated g/C Ratio	0.21
v/c Ratio	0.43
Control Delay	15.2
Queue Delay	0.0
Total Delay	15.2
LOS	B
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

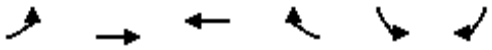


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	699	0	0	875	153	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						413
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	736	0	0	921	161	413
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	91.0	0.0	0.0	91.0	29.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	22.8			22.8	8.3	44.3
Actuated g/C Ratio	0.51			0.51	0.19	1.00
v/c Ratio	0.41			0.51	0.25	0.27
Control Delay	7.4			8.3	16.7	0.4
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	7.4			8.3	16.7	0.4
LOS	A			A	B	A
Approach Delay	7.4			8.3	5.0	
Approach LOS	A			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 44.3			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 7.2		Intersection LOS: A	
Intersection Capacity Utilization 41.7%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd

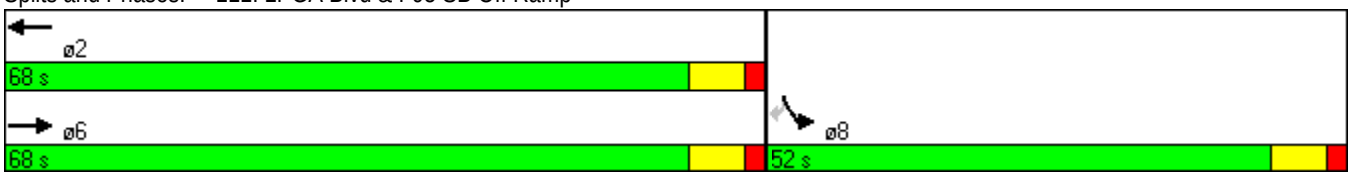


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	619	598	0	275	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						216
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	652	629	0	289	238
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	68.0	68.0	0.0	52.0	52.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		16.3	16.3		9.5	9.5
Actuated g/C Ratio		0.41	0.41		0.24	0.24
v/c Ratio		0.46	0.44		0.36	0.44
Control Delay		10.1	9.9		14.3	6.3
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		10.1	9.9		14.3	6.3
LOS		B	A		B	A
Approach Delay		10.1	9.9		10.7	
Approach LOS		B	A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 39.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 10.2		Intersection LOS: B	
Intersection Capacity Utilization 42.2%		ICU Level of Service A	

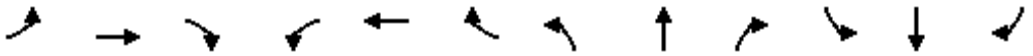
Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	476	76	206	596	22	80	2	172	40	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	1553	1736	1818	0	1787	1881	1599	0	1777	0
Flt Permitted	0.950			0.950			0.950				0.958	
Satd. Flow (perm)	1736	1827	1553	1736	1818	0	1787	1881	1599	0	1777	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	501	80	217	650	0	84	2	181	0	48	0
Sign Control		Free			Free			Stop			Stop	

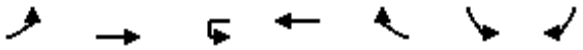
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.7%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	476	76	206	596	22	80	2	172	40	1	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	1	501	80	217	627	23	84	2	181	42	1	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1057							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	651			581			1570	1587	501	1758	1656	639
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	493			581			1583	1604	501	1806	1685	480
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			78			0	97	68	0	98	99
cM capacity (veh/h)	894			983			60	70	572	29	62	496

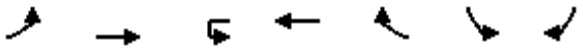
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1
Volume Total	1	501	80	217	651	84	2	181	48
Volume Left	1	0	0	217	0	84	0	0	42
Volume Right	0	0	80	0	23	0	0	181	5
cSH	894	1700	1700	983	1700	60	70	572	33
Volume to Capacity	0.00	0.29	0.05	0.22	0.38	1.39	0.03	0.32	1.49
Queue Length 95th (ft)	0	0	0	17	0	146	2	27	107
Control Delay (s)	9.0	0.0	0.0	9.7	0.0	365.9	58.3	14.2	518.8
Lane LOS	A			A		F	F	B	F
Approach Delay (s)	0.0			2.4		125.3			518.8
Approach LOS						F			F

Intersection Summary				
Average Delay	34.4			
Intersection Capacity Utilization	55.7%	ICU Level of Service		B
Analysis Period (min)	15			



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	12	720	0	1154	40	28	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3421	0	1761	0
Flt Permitted	0.950					0.961	
Satd. Flow (perm)	1719	3438	1810	3421	0	1761	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	13	758	0	1257	0	36	0
Sign Control		Free		Free		Stop	

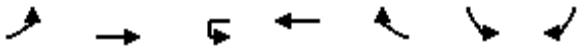
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.2%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	12	720	0	1154	40	28	7
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	13	758	0	1215	42	29	7
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		1		1			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1257		0			1640	628
vC1, stage 1 conf vol						1236	
vC2, stage 2 conf vol						404	
vCu, unblocked vol	1257		0			1640	628
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	98		0			84	98
cM capacity (veh/h)	533		0			189	428

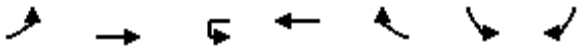
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	13	379	379	810	447	0	37
Volume Left	13	0	0	0	0	0	29
Volume Right	0	0	0	0	42	0	7
cSH	533	1700	1700	1700	1700	1700	213
Volume to Capacity	0.02	0.22	0.22	0.48	0.26	0.00	0.17
Queue Length 95th (ft)	2	0	0	0	0	0	15
Control Delay (s)	11.9	0.0	0.0	0.0	0.0	0.0	25.4
Lane LOS	B						D
Approach Delay (s)	0.2			0.0			25.4
Approach LOS							D

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	68	752	0	1228	117	72	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3393	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3393	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	72	792	0	1416	0	76	72
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.4%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	68	752	0	1228	117	72	68
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	72	792	0	1293	123	76	72
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							12
Median type		Raised		Raised			
Median storage veh)		1		1			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1416		0			1893	708
vC1, stage 1 conf vol						1354	
vC2, stage 2 conf vol						539	
vCu, unblocked vol	1416		0			1893	708
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	85		0			50	81
cM capacity (veh/h)	462		0			151	380

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	72	396	396	862	554	0	147
Volume Left	72	0	0	0	0	0	76
Volume Right	0	0	0	0	123	0	72
cSH	462	1700	1700	1700	1700	1700	293
Volume to Capacity	0.15	0.23	0.23	0.51	0.33	0.00	0.50
Queue Length 95th (ft)	14	0	0	0	0	0	66
Control Delay (s)	14.2	0.0	0.0	0.0	0.0	0.0	34.3
Lane LOS	B						D
Approach Delay (s)	1.2			0.0			34.3
Approach LOS							D

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		

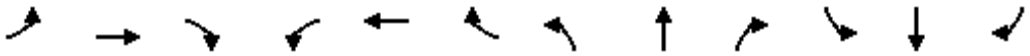
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	27	742	0	1211	134	82	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1754	0
Flt Permitted	0.950					0.964	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1754	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	28	781	0	1275	141	114	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.3%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	27	742	0	1211	134	82	27
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	28	781	0	1275	141	86	28
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		1		1			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1275		0			1722	637
vC1, stage 1 conf vol						1275	
vC2, stage 2 conf vol						447	
vCu, unblocked vol	1275		0			1722	637
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	95		0			51	93
cM capacity (veh/h)	525		0			176	422

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	28	391	391	637	637	141	0	115
Volume Left	28	0	0	0	0	0	0	86
Volume Right	0	0	0	0	0	141	0	28
cSH	525	1700	1700	1700	1700	1700	1700	206
Volume to Capacity	0.05	0.23	0.23	0.37	0.37	0.08	0.00	0.56
Queue Length 95th (ft)	4	0	0	0	0	0	0	75
Control Delay (s)	12.3	0.0	0.0	0.0	0.0	0.0	0.0	42.4
Lane LOS	B							E
Approach Delay (s)	0.4			0.0				42.4
Approach LOS								E

Intersection Summary			
Average Delay	2.2		
Intersection Capacity Utilization	46.3%	ICU Level of Service	A
Analysis Period (min)	15		

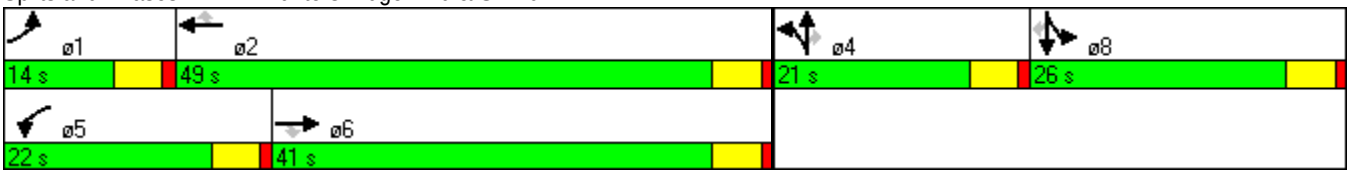


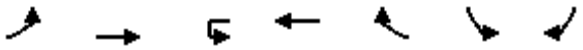
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	731	31	201	1194	519	50	11	201	318	7	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		300	300		300	0		300	300		0
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			33			546			212			65
Link Speed (mph)		60			60			35			35	
Link Distance (ft)		1961			4435			1868			1392	
Travel Time (s)		22.3			50.4			36.4			27.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	65	769	33	212	1257	546	53	12	212	335	7	65
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Total Split (s)	14.0	41.0	41.0	22.0	49.0	49.0	21.0	21.0	21.0	26.0	26.0	26.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	9.1	29.6	29.6	12.1	35.7	35.7	9.5	9.5	9.5	15.4	15.4	15.4
Actuated g/C Ratio	0.11	0.36	0.36	0.15	0.43	0.43	0.11	0.11	0.11	0.18	0.18	0.18
v/c Ratio	0.35	0.44	0.06	0.44	0.59	0.56	0.26	0.06	0.57	0.52	0.02	0.19
Control Delay	45.5	21.8	7.7	38.5	20.8	4.2	41.6	39.1	12.7	36.1	33.0	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.5	21.8	7.7	38.5	20.8	4.2	41.6	39.1	12.7	36.1	33.0	10.6
LOS	D	C	A	D	C	A	D	D	B	D	C	B
Approach Delay		23.0			18.2			19.3			32.0	
Approach LOS		C			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 83.3			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 21.0		Intersection LOS: C	
Intersection Capacity Utilization 53.0%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 117: Hunters Ridge Blvd & SR 40





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	19	1157	0	1903	201	98	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	4940	1810	4940	1538	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	4940	1810	4940	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					212		19
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	20	1218	0	2003	212	103	19
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8	
Permitted Phases					2		8
Total Split (s)	15.0	45.0	12.0	42.0	42.0	33.0	33.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	7.4	44.6		42.5	42.5	9.5	9.5
Actuated g/C Ratio	0.13	0.77		0.73	0.73	0.16	0.16
v/c Ratio	0.09	0.32		0.55	0.18	0.35	0.07
Control Delay	25.8	3.4		6.9	1.6	26.9	11.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	25.8	3.4		6.9	1.6	26.9	11.8
LOS	C	A		A	A	C	B
Approach Delay		3.8		6.4		24.6	
Approach LOS		A		A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 58.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 6.1		Intersection LOS: A	
Intersection Capacity Utilization 50.1%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	14	166	1085	21	43	75	1869	713	37	35	23	536
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		2		1		1		2	1		1	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	3342	4940	1538	0	1749	4940	2707	1787	1881	1599	3099
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	3342	4940	1538	0	1749	4940	2707	1787	1881	1599	3099
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				22				751			24	
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												31%
Lane Group Flow (vph)	0	190	1142	22	0	124	1967	751	39	37	24	389
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Prot	Split	NA	Perm	Split
Protected Phases	1	1	6		5	5	2	2	8	8		4
Permitted Phases				6							8	
Total Split (s)	17.0	17.0	82.0	82.0	23.0	23.0	88.0	88.0	14.0	14.0	14.0	31.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		12.7	49.0	49.0		47.1	83.4	83.4	10.1	10.1	10.1	25.3
Actuated g/C Ratio		0.09	0.34	0.34		0.33	0.58	0.58	0.07	0.07	0.07	0.18
v/c Ratio		0.65	0.68	0.04		0.22	0.69	0.40	0.31	0.28	0.18	0.72
Control Delay		75.9	43.1	10.2		40.8	23.9	1.6	73.9	72.6	25.9	64.9
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		75.9	43.1	10.2		40.8	23.9	1.6	73.9	72.6	25.9	64.9
LOS		E	D	B		D	C	A	E	E	C	E
Approach Delay			47.1				18.7			61.9		
Approach LOS			D				B			E		

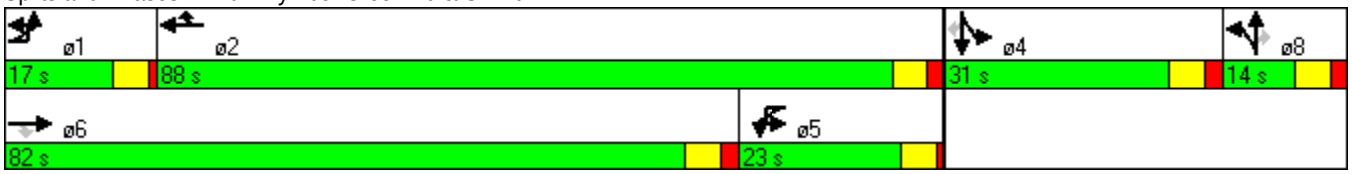
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 144.3			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 32.7		Intersection LOS: C	
Intersection Capacity Utilization 69.9%		ICU Level of Service C	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	21	139
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1561	1524
Flt Permitted	0.957	
Satd. Flow (perm)	1561	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		146
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	197	146
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	31.0	31.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	25.3	25.3
Actuated g/C Ratio	0.18	0.18
v/c Ratio	0.72	0.38
Control Delay	72.8	10.6
Queue Delay	0.0	0.0
Total Delay	72.8	10.6
LOS	E	B
Approach Delay	56.2	
Approach LOS	E	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	10	1638	10	16	34	2507	8	157	4	41	57	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		250		300		325	0		250	0	
Storage Lanes	1		1		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	4940	1538	0	1746	4940	1538	1787	1623	0	1787	1599
Flt Permitted	0.950				0.950			0.746			0.726	
Satd. Flow (perm)	1719	4940	1538	0	1746	4940	1538	1403	1623	0	1366	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			11				8		43			57
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1724	11	0	53	2639	8	165	47	0	60	17
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases			6				2	4			8	
Total Split (s)	10.7	112.5	112.5	15.5	15.5	117.3	117.3	22.0	22.0	0.0	22.0	22.0
Total Lost Time (s)	4.7	5.0	5.0	5.7	4.7	5.0	5.0	4.0	4.0	3.0	5.0	4.0
Act Effct Green (s)	6.1	108.5	108.5		9.7	116.3	116.3	20.4	20.4		19.4	20.4
Actuated g/C Ratio	0.04	0.72	0.72		0.06	0.78	0.78	0.14	0.14		0.13	0.14
v/c Ratio	0.16	0.48	0.01		0.47	0.69	0.01	0.86	0.18		0.34	0.06
Control Delay	74.8	9.6	2.8		94.4	11.4	2.6	100.5	20.0		66.8	0.4
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	74.8	9.6	2.8		94.4	11.4	2.6	100.5	20.0		66.8	0.4
LOS	E	A	A		F	B	A	F	C		E	A
Approach Delay		10.0				13.0			82.6			52.1
Approach LOS		A				B			F			D

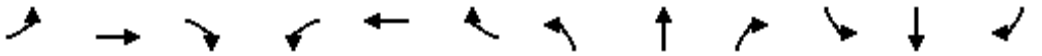
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 32 (21%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 15.6		Intersection LOS: B	

Lane Group	SBR
Lane Configurations	
Volume (vph)	16
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 71.3% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

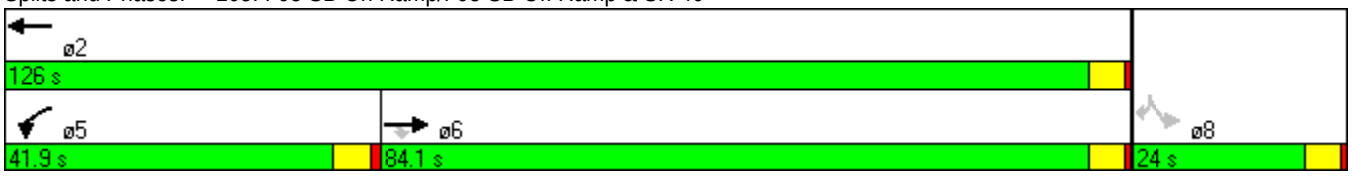


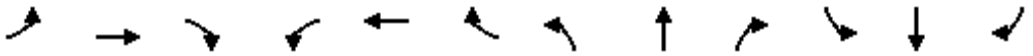
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1327	428	543	2680	0	0	0	0	324	0	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			406									9
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1397	451	572	2821	0	0	0	0	341	0	137
Turn Type		NA	Perm	Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases			6							8		8
Total Split (s)	0.0	84.1	84.1	41.9	126.0	0.0	0.0	0.0	0.0	24.0	0.0	24.0
Total Lost Time (s)	4.0	4.0	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		85.7	85.7	32.5	122.5					19.5		19.5
Actuated g/C Ratio		0.57	0.57	0.22	0.82					0.13		0.13
v/c Ratio		0.39	0.43	0.79	0.70					0.79		0.66
Control Delay		17.2	3.2	85.9	7.5					76.8		73.8
Queue Delay		0.0	0.0	3.0	0.2					0.0		0.0
Total Delay		17.2	3.2	88.9	7.8					76.8		73.8
LOS		B	A	F	A					E		E
Approach Delay		13.8			21.4							
Approach LOS		B			C							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 14 (9%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 23.5		Intersection LOS: C	

Intersection Capacity Utilization 67.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



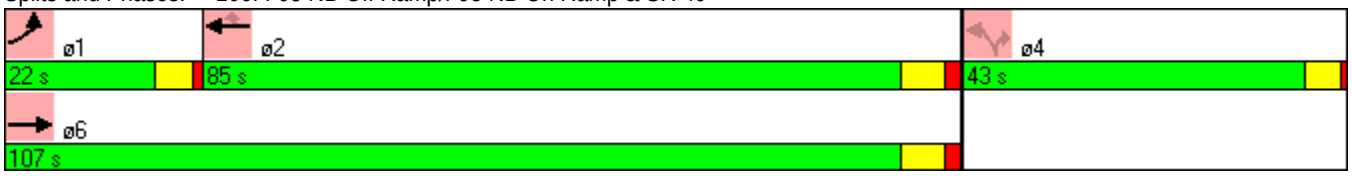


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	1522	0	0	2566	446	657	0	477	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						469			81			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	1602	0	0	2701	469	692	0	502	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	22.0	107.0	0.0	0.0	85.0	85.0	43.0	0.0	43.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	16.5	103.6			82.8	82.8	37.4		37.4			
Actuated g/C Ratio	0.11	0.69			0.55	0.55	0.25		0.25			
v/c Ratio	0.72	0.47			0.67	0.44	0.83		0.68			
Control Delay	89.4	11.9			15.0	3.4	63.0		47.4			
Queue Delay	0.0	0.1			0.0	0.0	1.9		0.0			
Total Delay	89.4	12.0			15.0	3.4	65.0		47.4			
LOS	F	B			B	A	E		D			
Approach Delay		18.1			13.3							
Approach LOS		B			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 148 (99%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 23.3		Intersection LOS: C	

Intersection Capacity Utilization 67.7% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40

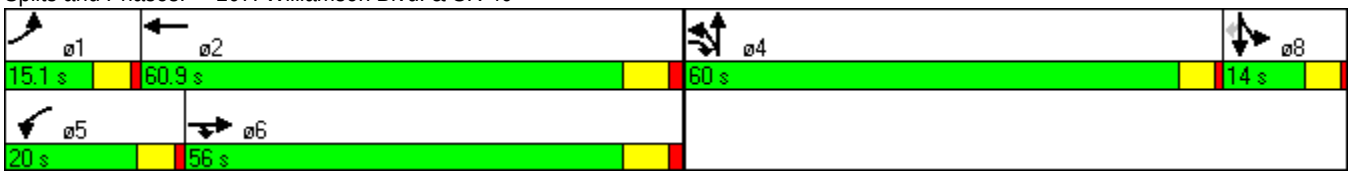


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	990	838	323	1535	107	1323	151	293	166	123	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4891	0	4894	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4891	0	4894	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82		8				308			98
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		5%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	1042	882	340	1729	0	1393	159	308	175	129	162
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases									Free			8
Total Split (s)	15.1	56.0	116.0	20.0	60.9	0.0	60.0	60.0	0.0	14.0	14.0	14.0
Total Lost Time (s)	4.3	4.0	5.0	4.3	4.0	1.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	10.8	52.0	110.7	15.7	56.9		55.7	55.7	150.0	10.3	10.3	10.3
Actuated g/C Ratio	0.07	0.35	0.74	0.10	0.38		0.37	0.37	1.00	0.07	0.07	0.07
v/c Ratio	0.98	0.87	0.44	0.97	0.93		0.77	0.23	0.20	0.76	1.02	0.82
Control Delay	141.1	47.6	7.6	108.0	54.3		44.8	33.5	0.3	89.0	153.1	58.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	141.1	47.6	7.6	108.0	54.3		44.8	33.5	0.3	89.0	153.1	58.0
LOS	F	D	A	F	D		D	C	A	F	F	E
Approach Delay		35.9			63.1			36.5			96.0	
Approach LOS		D			E			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 104 (69%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 49.2		Intersection LOS: D	

Intersection Capacity Utilization 83.9% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	425	709	1064	292	242	555
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			250	150	0
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	3367	3471	3471	1553	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3367	3471	3471	1553	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				307		511
Link Speed (mph)		40	40		35	
Link Distance (ft)		1131	1488		528	
Travel Time (s)		19.3	25.4		10.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	447	746	1120	307	255	584
Turn Type	Prot	NA	NA	Perm	NA	custom
Protected Phases	1	6	2		8	8
Permitted Phases				2		8
Total Split (s)	30.0	64.0	34.0	34.0	26.0	26.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	15.8	49.5	29.6	29.6	13.9	13.9
Actuated g/C Ratio	0.22	0.69	0.41	0.41	0.19	0.19
v/c Ratio	0.60	0.31	0.78	0.37	0.38	0.81
Control Delay	29.4	5.3	25.0	3.9	27.1	14.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.4	5.3	25.0	3.9	27.1	14.8
LOS	C	A	C	A	C	B
Approach Delay		14.3	20.5		18.6	
Approach LOS		B	C		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 71.6			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 17.9		Intersection LOS: B	
Intersection Capacity Utilization 70.4%		ICU Level of Service C	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave Ext

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	31	231	1040	254	240	1246	324	335	724	265	238	482
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		1	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3375	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3375	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				267			293			164		
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			6363
Travel Time (s)			32.8			34.7			9.9			86.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	276	1095	267	253	1312	341	353	762	279	251	507
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2			4		
Total Split (s)	14.0	14.0	58.0	58.0	17.0	61.0	61.0	22.0	38.0	38.0	17.0	33.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		10.0	52.3	52.3	12.7	55.0	55.0	17.2	33.1	33.1	12.7	28.5
Actuated g/C Ratio		0.08	0.41	0.41	0.10	0.43	0.43	0.14	0.26	0.26	0.10	0.22
v/c Ratio		1.03	0.77	0.34	0.75	0.87	0.41	0.77	0.84	0.53	0.74	0.65
Control Delay		120.7	36.5	3.9	70.5	40.4	5.8	65.6	54.4	20.5	70.3	49.6
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		120.7	36.5	3.9	70.5	40.4	5.8	65.6	54.4	20.5	70.3	49.6
LOS		F	D	A	E	D	A	E	D	C	E	D
Approach Delay			45.3			38.2			50.5			50.5
Approach LOS			D			D			D			D

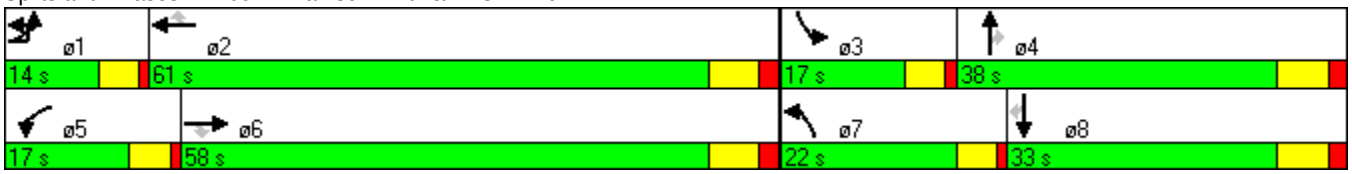
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 126.8			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay: 45.1		Intersection LOS: D	
Intersection Capacity Utilization 82.1%		ICU Level of Service E	

Lane Group	SBR
Lane Configurations	
Volume (vph)	230
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	1
Taper Length (ft)	
Satd. Flow (prot)	1553
Flt Permitted	
Satd. Flow (perm)	1553
Right Turn on Red	Yes
Satd. Flow (RTOR)	98
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	242
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Total Split (s)	33.0
Total Lost Time (s)	4.0
Act Effct Green (s)	28.5
Actuated g/C Ratio	0.22
v/c Ratio	0.57
Control Delay	31.8
Queue Delay	0.0
Total Delay	31.8
LOS	C
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

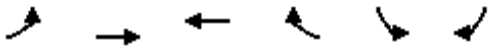


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1015	0	0	1235	230	466
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						338
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1068	0	0	1300	242	491
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	93.0	0.0	0.0	93.0	27.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	93.1			93.1	13.9	120.0
Actuated g/C Ratio	0.78			0.78	0.12	1.00
v/c Ratio	0.40			0.48	0.62	0.32
Control Delay	5.0			5.8	57.4	0.5
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	5.0			5.8	57.4	0.5
LOS	A			A	E	A
Approach Delay	5.0			5.8	19.3	
Approach LOS	A			A	B	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 8.7	Intersection LOS: A

Intersection Capacity Utilization 51.6% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	921	945	0	368	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						107
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	969	995	0	387	276
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	75.0	75.0	0.0	45.0	45.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		85.0	85.0		21.0	21.0
Actuated g/C Ratio		0.71	0.71		0.18	0.18
v/c Ratio		0.39	0.40		0.66	0.77
Control Delay		6.9	6.5		50.8	42.0
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		6.9	6.5		50.8	42.0
LOS		A	A		D	D
Approach Delay		6.9	6.5		47.2	
Approach LOS		A	A		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 16.9		Intersection LOS: B	

Intersection Capacity Utilization 88.9% ICU Level of Service E
Analysis Period (min) 15

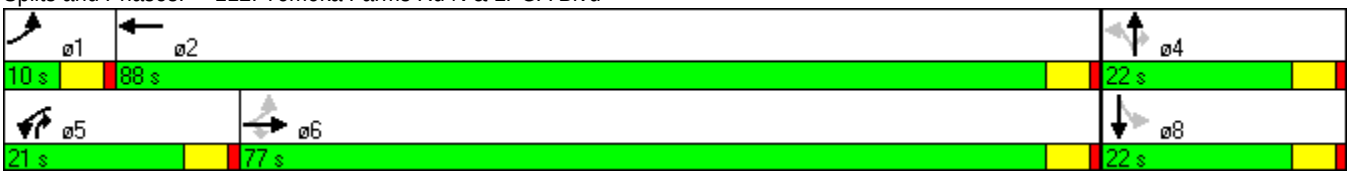
Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

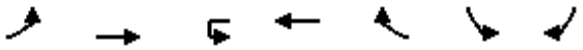
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	705	129	304	881	22	144	2	261	40	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	1553	3367	1820	0	1787	1881	1599	0	1777	0
Flt Permitted	0.248			0.950			0.759				0.772	
Satd. Flow (perm)	453	1827	1553	3367	1820	0	1428	1881	1599	0	1432	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			136		2				222		4	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	742	136	320	950	0	152	2	275	0	48	0
Turn Type	pm+pt	NA	Perm	Prot	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6		6				4		4	8		
Total Split (s)	10.0	77.0	77.0	21.0	88.0	0.0	22.0	22.0	21.0	22.0	22.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	4.0	3.0
Act Effct Green (s)	81.6	75.4	75.4	16.0	93.4		16.6	16.6	36.6		16.6	
Actuated g/C Ratio	0.68	0.63	0.63	0.13	0.78		0.14	0.14	0.30		0.14	
v/c Ratio	0.00	0.65	0.13	0.71	0.67		0.77	0.01	0.43		0.24	
Control Delay	4.0	17.9	1.9	64.3	7.6		74.6	43.5	9.3		45.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	4.0	17.9	1.9	64.3	7.6		74.6	43.5	9.3		45.4	
LOS	A	B	A	E	A		E	D	A		D	
Approach Delay		15.4			21.9			32.6			45.4	
Approach LOS		B			C			C			D	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 86 (72%), Referenced to phase 2:WBT and 6:EBTL, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 21.9	Intersection LOS: C

Intersection Capacity Utilization 71.1% ICU Level of Service C
Analysis Period (min) 15

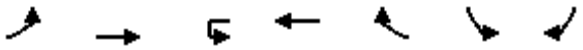
Splits and Phases: 112: Tomoka Farms Rd N & LPGA Blvd





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	14	1074	0	1729	45	30	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3424	0	1750	0
Flt Permitted	0.950					0.964	
Satd. Flow (perm)	1719	3438	1810	3424	0	1750	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	15	1131	0	1867	0	43	0
Sign Control		Free		Free		Stop	

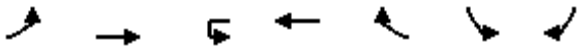
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	14	1074	0	1729	45	30	10
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	15	1131	0	1820	47	32	11
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1867		0			2438	934
vC1, stage 1 conf vol						1844	
vC2, stage 2 conf vol						595	
vCu, unblocked vol	1867		0			2438	934
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	95		0			71	96
cM capacity (veh/h)	307		0			107	269

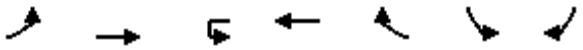
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	15	565	565	1213	654	0	42
Volume Left	15	0	0	0	0	0	32
Volume Right	0	0	0	0	47	0	11
cSH	307	1700	1700	1700	1700	1700	126
Volume to Capacity	0.05	0.33	0.33	0.71	0.38	0.00	0.33
Queue Length 95th (ft)	3	0	0	0	0	0	27
Control Delay (s)	17.3	0.0	0.0	0.0	0.0	0.0	47.2
Lane LOS	C						E
Approach Delay (s)	0.2			0.0			47.2
Approach LOS							E

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	59.2%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	113	1005	0	1641	167	103	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3390	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3390	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	119	1058	0	1903	0	108	119
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 72.6%		ICU Level of Service C	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	113	1005	0	1641	167	103	113
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	119	1058	0	1727	176	108	119
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1903		0			2582	952
vC1, stage 1 conf vol						1815	
vC2, stage 2 conf vol						767	
vCu, unblocked vol	1903		0			2582	952
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	60		0			0	55
cM capacity (veh/h)	297		0			102	262

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	119	529	529	1152	752	0	227
Volume Left	119	0	0	0	0	0	108
Volume Right	0	0	0	0	176	0	119
cSH	297	1700	1700	1700	1700	1700	214
Volume to Capacity	0.40	0.31	0.31	0.68	0.44	0.00	1.06
Queue Length 95th (ft)	37	0	0	0	0	0	203
Control Delay (s)	25.0	0.0	0.0	0.0	0.0	0.0	104.1
Lane LOS	C						F
Approach Delay (s)	2.5			0.0			104.1
Approach LOS							F

Intersection Summary			
Average Delay	8.1		
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	24	1084	0	1769	156	96	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1759	0
Flt Permitted	0.950					0.961	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1759	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	25	1141	0	1862	164	126	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.3%		ICU Level of Service B	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	24	1084	0	1769	156	96	24
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	25	1141	0	1862	164	101	25
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1862		0			2483	931
vC1, stage 1 conf vol						1862	
vC2, stage 2 conf vol						621	
vCu, unblocked vol	1862		0			2483	931
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	92		0			3	91
cM capacity (veh/h)	308		0			104	270

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	25	571	571	931	931	164	0	126
Volume Left	25	0	0	0	0	0	0	101
Volume Right	0	0	0	0	0	164	0	25
cSH	308	1700	1700	1700	1700	1700	1700	119
Volume to Capacity	0.08	0.34	0.34	0.55	0.55	0.10	0.00	1.06
Queue Length 95th (ft)	5	0	0	0	0	0	0	147
Control Delay (s)	17.7	0.0	0.0	0.0	0.0	0.0	0.0	170.5
Lane LOS	C							F
Approach Delay (s)	0.4			0.0				170.5
Approach LOS								F

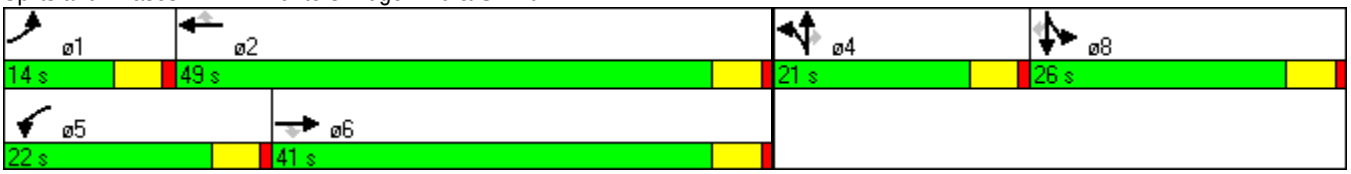
Intersection Summary			
Average Delay	6.6		
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

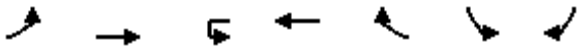
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	1023	48	340	1668	887	78	17	340	544	10	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		300	300		300	0		300	300		0
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			51			868			204			112
Link Speed (mph)		60			60			35			35	
Link Distance (ft)		1961			4435			1868			1392	
Travel Time (s)		22.3			50.4			36.4			27.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	1077	51	358	1756	934	82	18	358	573	11	112
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Total Split (s)	14.0	41.0	41.0	22.0	49.0	49.0	21.0	21.0	21.0	26.0	26.0	26.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	9.8	38.4	38.4	16.5	45.1	45.1	15.1	15.1	15.1	21.1	21.1	21.1
Actuated g/C Ratio	0.09	0.36	0.36	0.15	0.42	0.42	0.14	0.14	0.14	0.20	0.20	0.20
v/c Ratio	0.71	0.61	0.09	0.70	0.84	0.81	0.33	0.07	0.89	0.84	0.03	0.28
Control Delay	73.4	30.8	7.4	51.2	33.2	9.6	45.3	40.6	44.8	53.9	35.8	9.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.4	30.8	7.4	51.2	33.2	9.6	45.3	40.6	44.8	53.9	35.8	9.0
LOS	E	C	A	D	C	A	D	D	D	D	D	A
Approach Delay		33.7			28.1			44.7			46.4	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 107.1			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 33.1		Intersection LOS: C	
Intersection Capacity Utilization 75.0%		ICU Level of Service D	

Analysis Period (min) 15

Splits and Phases: 117: Hunters Ridge Blvd & SR 40





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	21	1760	0	2902	229	103	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	4940	1810	4940	1538	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	4940	1810	4940	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					239		22
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	22	1853	0	3055	241	108	22
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8	
Permitted Phases					2		8
Total Split (s)	15.0	45.0	12.0	42.0	42.0	33.0	33.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	7.5	46.2		44.0	44.0	9.6	9.6
Actuated g/C Ratio	0.12	0.76		0.73	0.73	0.16	0.16
v/c Ratio	0.10	0.49		0.85	0.20	0.38	0.08
Control Delay	26.0	4.4		13.6	1.6	27.4	11.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	26.0	4.4		13.6	1.6	27.4	11.5
LOS	C	A		B	A	C	B
Approach Delay		4.6		12.7		24.7	
Approach LOS		A		B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 60.5			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 10.1		Intersection LOS: B	
Intersection Capacity Utilization 69.4%		ICU Level of Service C	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	24	276	1600	22	45	76	2762	816	39	37	24	605
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		2		1		1		2	1		1	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	3343	4940	1538	0	1750	4940	2707	1787	1881	1599	3099
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	3343	4940	1538	0	1750	4940	2707	1787	1881	1599	3099
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				23				859			25	
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												31%
Lane Group Flow (vph)	0	316	1684	23	0	127	2907	859	41	39	25	440
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Prot	Split	NA	Perm	Split
Protected Phases	1	1	6		5	5	2	2	8	8		4
Permitted Phases				6							8	
Total Split (s)	17.0	17.0	82.0	82.0	23.0	23.0	88.0	88.0	14.0	14.0	14.0	31.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		13.0	69.7	69.7		27.5	84.2	84.2	10.0	10.0	10.0	26.2
Actuated g/C Ratio		0.09	0.48	0.48		0.19	0.58	0.58	0.07	0.07	0.07	0.18
v/c Ratio		1.06	0.72	0.03		0.39	1.02	0.45	0.34	0.30	0.19	0.79
Control Delay		131.1	32.1	6.2		60.7	54.5	1.7	74.8	73.4	25.4	69.4
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		131.1	32.1	6.2		60.7	54.5	1.7	74.8	73.4	25.4	69.4
LOS		F	C	A		E	D	A	E	E	C	E
Approach Delay			47.3				43.0			62.5		
Approach LOS			D				D			E		

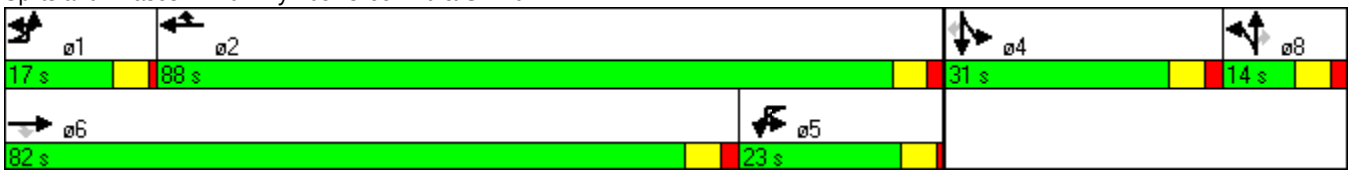
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 146.4			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 47.0		Intersection LOS: D	
Intersection Capacity Utilization 95.9%		ICU Level of Service F	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	22	226
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1561	1524
Flt Permitted	0.957	
Satd. Flow (perm)	1561	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		136
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	220	238
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	31.0	31.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	26.2	26.2
Actuated g/C Ratio	0.18	0.18
v/c Ratio	0.79	0.62
Control Delay	78.2	31.3
Queue Delay	0.0	0.0
Total Delay	78.2	31.3
LOS	E	C
Approach Delay	61.5	
Approach LOS	E	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	10	2240	14	18	38	3472	11	166	5	47	57	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		250		300		325	0		250	0	
Storage Lanes	1		1		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	4940	1538	0	1746	4940	1538	1787	1625	0	1787	1599
Flt Permitted	0.950				0.950			0.746			0.718	
Satd. Flow (perm)	1719	4940	1538	0	1746	4940	1538	1403	1625	0	1351	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			15				12		47			50
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	2358	15	0	59	3655	12	175	54	0	60	17
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases			6				2	4			8	
Total Split (s)	10.7	112.5	112.5	15.5	15.5	117.3	117.3	22.0	22.0	0.0	22.0	22.0
Total Lost Time (s)	4.7	5.0	5.0	5.7	4.7	5.0	5.0	4.0	4.0	3.0	5.0	4.0
Act Effct Green (s)	6.0	110.8	110.8		9.9	118.7	118.7	18.0	18.0		17.0	18.0
Actuated g/C Ratio	0.04	0.74	0.74		0.07	0.79	0.79	0.12	0.12		0.11	0.12
v/c Ratio	0.16	0.65	0.01		0.51	0.93	0.01	1.04	0.23		0.39	0.07
Control Delay	74.9	11.4	2.5		78.9	14.0	1.3	142.7	21.2		70.0	0.6
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	74.9	11.4	2.5		78.9	14.0	1.3	142.7	21.2		70.0	0.6
LOS	E	B	A		E	B	A	F	C		E	A
Approach Delay		11.6				15.0			114.0			54.7
Approach LOS		B				B			F			D

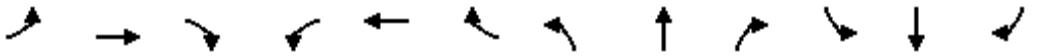
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 22 (15%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 17.7		Intersection LOS: B	

Lane Group	SBR
Lane Configurations	
Volume (vph)	16
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 90.4% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

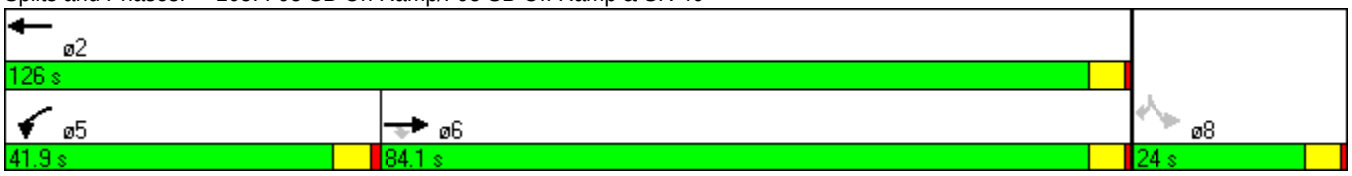


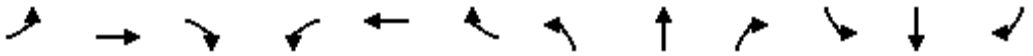
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1864	496	586	3630	0	0	0	0	385	0	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			399									1
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1962	522	617	3821	0	0	0	0	405	0	175
Turn Type		NA	Perm	Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases			6							8		8
Total Split (s)	0.0	84.1	84.1	41.9	126.0	0.0	0.0	0.0	0.0	24.0	0.0	24.0
Total Lost Time (s)	4.0	4.0	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		83.6	83.6	34.1	122.0					20.0		20.0
Actuated g/C Ratio		0.56	0.56	0.23	0.81					0.13		0.13
v/c Ratio		0.57	0.50	0.81	0.95					0.91		0.85
Control Delay		18.7	4.9	81.4	17.6					89.0		96.1
Queue Delay		0.0	0.0	0.3	8.3					0.0		0.0
Total Delay		18.7	4.9	81.6	25.9					89.0		96.1
LOS		B	A	F	C					F		F
Approach Delay		15.8			33.7							
Approach LOS		B			C							

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 14 (9%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.95	
Intersection Signal Delay: 32.2	Intersection LOS: C

Intersection Capacity Utilization 87.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



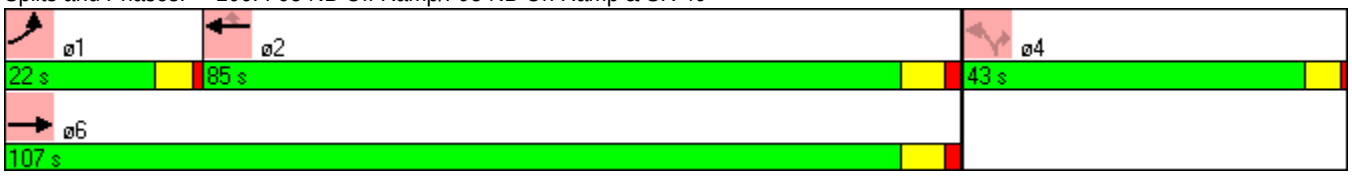


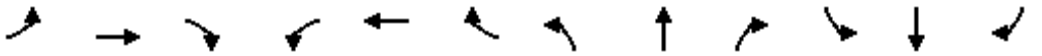
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	160	2089	0	0	3448	530	768	0	514	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						558			23			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	168	2199	0	0	3629	558	808	0	541	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	22.0	107.0	0.0	0.0	85.0	85.0	43.0	0.0	43.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	17.4	102.0			80.3	80.3	39.0		39.0			
Actuated g/C Ratio	0.12	0.68			0.54	0.54	0.26		0.26			
v/c Ratio	0.84	0.65			0.92	0.52	0.93		0.75			
Control Delay	96.8	13.9			18.6	1.8	72.0		56.3			
Queue Delay	0.0	0.1			0.1	0.0	43.6		0.0			
Total Delay	96.8	14.0			18.7	1.8	115.6		56.3			
LOS	F	B			B	A	F		E			
Approach Delay		19.9			16.4							
Approach LOS		B			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 148 (99%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 30.3		Intersection LOS: C	

Intersection Capacity Utilization 87.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



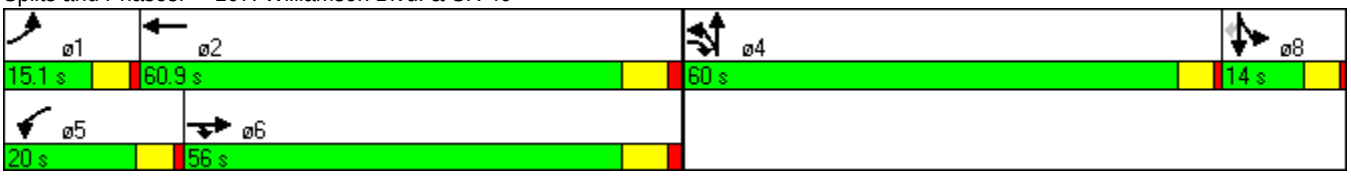


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	1140	1228	328	1885	108	1939	152	298	166	123	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4900	0	4894	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4900	0	4894	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			91		7				301			95
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		5%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	1152	1240	331	2013	0	1959	154	301	168	124	156
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases									Free			8
Total Split (s)	15.1	56.0	116.0	20.0	60.9	0.0	60.0	60.0	0.0	14.0	14.0	14.0
Total Lost Time (s)	4.3	4.0	5.0	4.3	4.0	1.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	10.8	52.0	111.0	15.7	56.9		56.0	56.0	150.0	10.0	10.0	10.0
Actuated g/C Ratio	0.07	0.35	0.74	0.10	0.38		0.37	0.37	1.00	0.07	0.07	0.07
v/c Ratio	0.95	0.97	0.61	0.95	1.08		1.07	0.23	0.19	0.75	1.02	0.81
Control Delay	124.4	62.1	9.4	102.6	90.1		87.9	33.3	0.3	89.1	152.7	58.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	124.4	62.1	9.4	102.6	90.1		87.9	33.3	0.3	89.1	152.7	58.0
LOS	F	E	A	F	F		F	C	A	F	F	E
Approach Delay		39.0			91.8			73.5			95.9	
Approach LOS		D			F			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 104 (69%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 69.1		Intersection LOS: E	

Intersection Capacity Utilization 102.4% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	580	914	1372	416	307	796
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			250	150	0
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	3367	3471	3471	1553	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3367	3471	3471	1553	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				438		506
Link Speed (mph)		40	40		35	
Link Distance (ft)		1131	1488		528	
Travel Time (s)		19.3	25.4		10.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	611	962	1444	438	323	838
Turn Type	Prot	NA	NA	Perm	NA	custom
Protected Phases	1	6	2		8	8
Permitted Phases				2		8
Total Split (s)	30.0	64.0	34.0	34.0	26.0	26.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	21.1	55.2	30.0	30.0	22.0	22.0
Actuated g/C Ratio	0.25	0.65	0.35	0.35	0.26	0.26
v/c Ratio	0.73	0.43	1.18	0.53	0.36	1.07
Control Delay	35.1	8.0	117.5	4.9	28.0	66.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.1	8.0	117.5	4.9	28.0	66.8
LOS	D	A	F	A	C	E
Approach Delay		18.5	91.3		56.0	
Approach LOS		B	F		E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 85.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.18			
Intersection Signal Delay: 57.6		Intersection LOS: E	
Intersection Capacity Utilization 93.9%		ICU Level of Service F	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave Ext

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	39	285	1310	274	329	1570	505	362	967	362	371	644
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		1	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3375	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3375	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				284			277			158		
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			6363
Travel Time (s)			32.8			34.7			9.9			86.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	341	1379	288	346	1653	532	381	1018	381	391	678
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2			4		
Total Split (s)	15.0	15.0	58.0	58.0	17.0	60.0	60.0	22.0	38.0	38.0	17.0	33.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		11.0	54.0	54.0	13.0	56.0	56.0	17.7	34.0	34.0	13.0	29.3
Actuated g/C Ratio		0.08	0.42	0.42	0.10	0.43	0.43	0.14	0.26	0.26	0.10	0.23
v/c Ratio		1.19	0.96	0.36	1.03	1.11	0.64	0.83	1.12	0.73	1.16	0.87
Control Delay		165.6	52.5	4.1	112.8	93.3	17.1	71.1	112.9	34.2	150.5	61.1
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		165.6	52.5	4.1	112.8	93.3	17.1	71.1	112.9	34.2	150.5	61.1
LOS		F	D	A	F	F	B	E	F	C	F	E
Approach Delay			64.7			80.0			87.1			82.7
Approach LOS			E			E			F			F

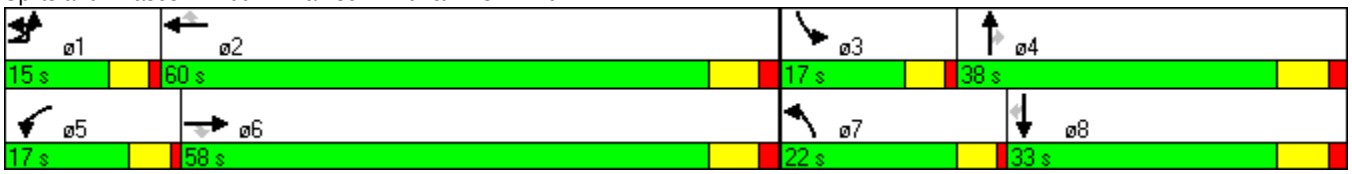
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.19			
Intersection Signal Delay: 78.1		Intersection LOS: E	
Intersection Capacity Utilization 103.3%		ICU Level of Service G	

Lane Group	SBR
Lane Configurations	
Volume (vph)	284
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	1
Taper Length (ft)	
Satd. Flow (prot)	1553
Flt Permitted	
Satd. Flow (perm)	1553
Right Turn on Red	Yes
Satd. Flow (RTOR)	88
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	299
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Total Split (s)	33.0
Total Lost Time (s)	4.0
Act Effct Green (s)	29.3
Actuated g/C Ratio	0.23
v/c Ratio	0.71
Control Delay	43.1
Queue Delay	0.0
Total Delay	43.1
LOS	D
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

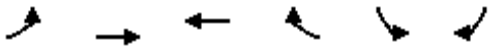


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1308	0	0	1618	281	573
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						282
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1377	0	0	1703	296	603
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	93.0	0.0	0.0	93.0	27.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	91.2			91.2	15.8	120.0
Actuated g/C Ratio	0.76			0.76	0.13	1.00
v/c Ratio	0.52			0.65	0.67	0.39
Control Delay	5.6			8.6	57.0	0.7
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	5.6			8.6	57.0	0.7
LOS	A			A	E	A
Approach Delay	5.6			8.6	19.2	
Approach LOS	A			A	B	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 9.9	Intersection LOS: A

Intersection Capacity Utilization 63.6% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	1208	1296	0	460	298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						43
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1272	1364	0	484	314
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	75.0	75.0	0.0	45.0	45.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		78.6	78.6		27.4	27.4
Actuated g/C Ratio		0.66	0.66		0.23	0.23
v/c Ratio		0.56	0.60		0.63	0.81
Control Delay		9.9	10.2		44.6	53.0
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		9.9	10.2		44.6	53.0
LOS		A	B		D	D
Approach Delay		9.9	10.2		47.9	
Approach LOS		A	B		D	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 18.9	Intersection LOS: B

Intersection Capacity Utilization 104.2% ICU Level of Service G
Analysis Period (min) 15

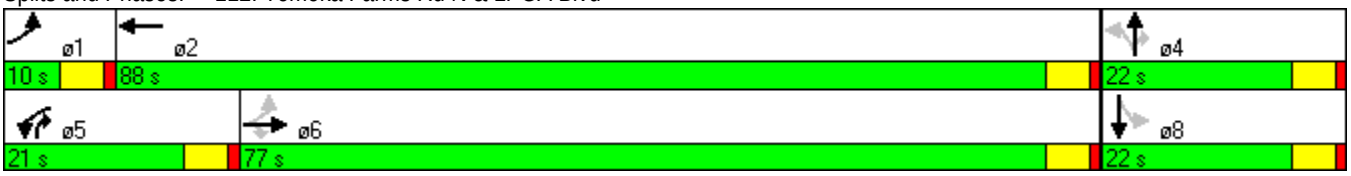
Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	932	185	407	1165	22	210	2	354	40	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	1553	3367	1821	0	1787	1881	1599	0	1777	0
Flt Permitted	0.063			0.950			0.756				0.777	
Satd. Flow (perm)	115	1827	1553	3367	1821	0	1422	1881	1599	0	1441	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			195		2				130		4	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	981	195	428	1249	0	221	2	373	0	48	0
Turn Type	pm+pt	NA	Perm	Prot	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6		6				4		4	8		
Total Split (s)	10.0	77.0	77.0	21.0	88.0	0.0	22.0	22.0	21.0	22.0	22.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	4.0	3.0
Act Effct Green (s)	79.0	73.0	73.0	17.0	92.0		18.0	18.0	39.0		18.0	
Actuated g/C Ratio	0.66	0.61	0.61	0.14	0.77		0.15	0.15	0.32		0.15	
v/c Ratio	0.01	0.88	0.19	0.90	0.89		1.04	0.01	0.61		0.22	
Control Delay	4.0	31.2	1.8	71.3	22.4		121.7	43.5	26.7		44.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	4.0	31.2	1.8	71.3	22.4		121.7	43.5	26.7		44.7	
LOS	A	C	A	E	C		F	D	C		D	
Approach Delay		26.3			34.9			62.0			44.7	
Approach LOS		C			C			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 86 (72%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 36.8		Intersection LOS: D	

Intersection Capacity Utilization 89.2% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 112: Tomoka Farms Rd N & LPGA Blvd



Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: AM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Breakway Trail
Analysis Year: 2015 Alt 1
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	932	vph	579	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	245		152	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	504	pcphpl	313	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	504	pcphpl	313	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	8.4	pc/mi/ln	5.2	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: AM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Hunters Ridge Blvd
Analysis Year: 2025 Alt 1
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1345	vph	850	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	354		224	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	728	pcphpl	460	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	728	pcphpl	460	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	B		A	
Density, D	12.1	pc/mi/ln	7.7	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: AM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Hunters Ridge Blvd
Analysis Year: 2035 Alt 1
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1926	vph	1220	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	507		321	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	1043	pcphpl	660	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	1043	pcphpl	660	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	B		A	
Density, D	17.4	pc/mi/ln	11.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: PM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Breakway Trail
Analysis Year: 2015 Alt 1
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	571	vph	914	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	150		241	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	309	pcphpl	495	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	309	pcphpl	495	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	5.2	pc/mi/ln	8.3	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: PM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Hunters Ridge Blvd
Analysis Year: 2025 Alt 1
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	824	vph	1345	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	217		354	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	446	pcphpl	728	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	446	pcphpl	728	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		B	
Density, D	7.4	pc/mi/ln	12.1	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: PM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Hunters Ridge Blvd
Analysis Year: 2035 Alt 1
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1180	vph	1925	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	311		507	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	639	pcphpl	1042	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	639	pcphpl	1042	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		B	
Density, D	10.6	pc/mi/ln	17.4	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-95 SB Off Ramp	II	45	89.0	18.1	107.1	1.11	37.4	A
I-95 NB Off Ramp	II	45	28.7	7.1	35.8	0.29	29.1	B
Williamson Blvd.	II	45	42.2	30.8	73.0	0.46	22.9	C
Total	II		159.9	56.0	215.9	1.87	31.1	B

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	26.8	66.3	0.43	23.5	C
I-95 NB Off Ramp	II	45	42.2	4.8	47.0	0.46	35.5	A
I-95 SB Off Ramp	II	45	28.7	16.1	44.8	0.29	23.3	C
Total	II		110.4	47.7	158.1	1.19	27.0	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Breakaway Tr	I	53	301.2	7.8	309.0	4.46	52.0	A
Tymber Creek Rd	I	50	71.5	29.3	100.8	0.99	35.5	B
Booth Rd	I	50	38.1	15.6	53.7	0.53	35.4	B
I-95 SB On Ramp	I	45	27.1	5.9	33.0	0.26	28.5	C
I-95 NB Off Ramp	I	45	7.9	5.3	13.2	0.08	20.8	E
Williamson Blvd.	I	45	15.3	32.2	47.5	0.15	11.2	F
Total	I		461.1	96.1	557.2	6.47	41.8	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	24.4	63.3	0.43	24.3	D
I-95 NB On Ramp	I	45	15.3	5.9	21.2	0.15	25.0	D
I-95 SB Off Ramp	I	45	7.9	4.3	12.2	0.08	22.5	D
Booth Rd	I	47	27.1	7.1	34.2	0.26	27.5	C
Tymber Creek Rd	I	50	38.1	22.7	60.8	0.53	31.3	C
Breakaway Tr	I	50	71.5	7.5	79.0	0.99	45.3	A
Total	I		198.8	71.9	270.7	2.43	32.4	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	49.4	62.1	0.11	6.4	F
Hand Ave Ext	I	48	154.2	17.4	171.6	2.07	43.4	A
SR 40	I	40	56.3	50.9	107.2	0.62	21.0	E
Total	I		223.2	117.7	340.9	2.81	29.6	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	70.9	93.9	0.20	7.7	F
Hand Ave Ext	I	40	56.3	4.8	61.1	0.62	36.8	B
LPGA Blvd	I	50	149.1	49.3	198.4	2.07	37.6	B
Total	I		228.4	125.0	353.4	2.89	29.5	C

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tomoka Farms Rd N	II	45	73.0	13.4	86.4	0.91	38.0	A
I-95 SB Off Ramp	II	45	21.8	16.4	38.2	0.20	18.9	D
I-95 NB Off Ramp	II	45	28.7	5.2	33.9	0.29	30.8	B
Williamson Blvd.	II	45	42.2	48.1	90.3	0.46	18.5	D
Total	II		165.7	83.1	248.8	1.87	27.0	C

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	39.2	78.7	0.43	19.8	D
I-95 NB Off Ramp	II	45	42.2	4.1	46.3	0.46	36.0	A
I-95 SB Off Ramp	II	45	28.7	19.3	48.0	0.29	21.7	D
Tomoka Farms Rd N	II	45	21.8	6.5	28.3	0.20	25.5	C
Total	II		132.2	69.1	201.3	1.39	24.8	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hunters Ridge Blvd	I	54	240.7	24.9	265.6	3.62	49.1	A
Breakaway Tr	I	50	60.5	9.9	70.4	0.84	43.0	A
Tymber Creek Rd	I	50	71.5	25.2	96.7	0.99	37.0	B
Booth Rd	I	50	38.1	21.7	59.8	0.53	31.8	C
I-95 SB On Ramp	I	45	27.1	7.9	35.0	0.26	26.8	D
I-95 NB Off Ramp	I	45	7.9	8.5	16.4	0.08	16.7	E
Williamson Blvd.	I	45	15.3	52.3	67.6	0.15	7.8	F
Total	I		461.1	150.4	611.5	6.47	38.1	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	28.9	67.8	0.43	22.7	D
I-95 NB On Ramp	I	45	15.3	18.6	33.9	0.15	15.6	F
I-95 SB Off Ramp	I	45	7.9	9.6	17.5	0.08	15.7	F
Booth Rd	I	47	27.1	9.1	36.2	0.26	25.9	D
Tymber Creek Rd	I	50	38.1	24.6	62.7	0.53	30.4	C
Breakaway Tr	I	50	71.5	9.6	81.1	0.99	44.1	A
Hunters Ridge Blvd	I	60	50.4	19.4	69.8	0.84	43.3	A
Total	I		249.2	119.8	369.0	3.27	31.9	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	66.2	78.9	0.11	5.0	F
Hand Ave Ext	I	48	154.2	23.8	178.0	2.07	41.9	B
SR 40	I	40	56.3	45.3	101.6	0.62	22.1	D
Total	I		223.2	135.3	358.5	2.81	28.2	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	122.6	145.6	0.20	4.9	F
Hand Ave Ext	I	40	56.3	6.3	62.6	0.62	35.9	B
LPGA Blvd	I	50	149.1	58.1	207.2	2.07	36.0	B
Total	I		228.4	187.0	415.4	2.89	25.1	D

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tomoka Farms Rd N	II	45	73.0	37.5	110.5	0.91	29.7	B
I-95 SB Off Ramp	II	45	21.8	20.6	42.4	0.20	17.0	E
I-95 NB Off Ramp	II	45	28.7	5.6	34.3	0.29	30.4	B
Williamson Blvd.	II	45	42.2	79.9	122.1	0.46	13.7	E
Total	II		165.7	143.6	309.3	1.87	21.7	D

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	53.0	92.5	0.43	16.9	E
I-95 NB Off Ramp	II	45	42.2	5.2	47.4	0.46	35.2	A
I-95 SB Off Ramp	II	45	28.7	19.2	47.9	0.29	21.8	D
Tomoka Farms Rd N	II	45	21.8	13.4	35.2	0.20	20.5	D
Total	II		132.2	90.8	223.0	1.39	22.4	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hunters Ridge Blvd	I	54	240.7	35.7	276.4	3.62	47.2	A
Breakaway Tr	I	50	60.5	20.3	80.8	0.84	37.4	B
Tymber Creek Rd	I	50	71.5	52.5	124.0	0.99	28.9	C
Booth Rd	I	50	38.1	48.2	86.3	0.53	22.1	D
I-95 SB On Ramp	I	45	27.1	16.2	43.3	0.26	21.7	D
I-95 NB Off Ramp	I	45	7.9	18.3	26.2	0.08	10.5	F
Williamson Blvd.	I	45	15.3	85.7	101.0	0.15	5.3	F
Total	I		461.1	276.9	738.0	6.47	31.6	C

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	28.5	67.4	0.43	22.8	D
I-95 NB On Ramp	I	45	15.3	26.5	41.8	0.15	12.7	F
I-95 SB Off Ramp	I	45	7.9	10.6	18.5	0.08	14.8	F
Booth Rd	I	47	27.1	9.1	36.2	0.26	25.9	D
Tymber Creek Rd	I	50	38.1	32.8	70.9	0.53	26.8	D
Breakaway Tr	I	50	71.5	13.6	85.1	0.99	42.0	A
Hunters Ridge Blvd	I	60	50.4	26.0	76.4	0.84	39.6	B
Total	I		249.2	147.1	396.3	3.27	29.7	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	117.8	130.5	0.11	3.0	F
Hand Ave Ext	I	48	154.2	38.4	192.6	2.07	38.7	B
SR 40	I	40	56.3	45.3	101.6	0.62	22.1	D
Total	I		223.2	201.5	424.7	2.81	23.8	D

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	156.6	179.6	0.20	4.0	F
Hand Ave Ext	I	40	56.3	10.2	66.5	0.62	33.8	C
LPGA Blvd	I	50	149.1	89.9	239.0	2.07	31.2	C
Total	I		228.4	256.7	485.1	2.89	21.5	D

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-95 SB Off Ramp	II	45	89.0	10.1	99.1	1.11	40.4	A
I-95 NB Off Ramp	II	45	28.7	7.4	36.1	0.29	28.9	B
Williamson Blvd.	II	45	42.2	23.7	65.9	0.46	25.3	C
Total	II		159.9	41.2	201.1	1.87	33.4	B

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	30.3	69.8	0.43	22.4	C
I-95 NB Off Ramp	II	45	42.2	8.3	50.5	0.46	33.0	B
I-95 SB Off Ramp	II	45	28.7	9.9	38.6	0.29	27.0	C
Total	II		110.4	48.5	158.9	1.19	26.9	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Breakaway Tr	I	53	301.2	3.6	304.8	4.46	52.7	A
Tymber Creek Rd	I	50	71.5	24.7	96.2	0.99	37.2	B
Booth Rd	I	50	38.1	10.5	48.6	0.53	39.2	B
I-95 SB On Ramp	I	45	27.1	10.3	37.4	0.26	25.1	D
I-95 NB Off Ramp	I	45	7.9	14.5	22.4	0.08	12.2	F
Williamson Blvd.	I	45	15.3	35.0	50.3	0.15	10.5	F
Total	I		461.1	98.6	559.7	6.47	41.6	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	34.8	73.7	0.43	20.9	E
I-95 NB On Ramp	I	45	15.3	16.5	31.8	0.15	16.7	E
I-95 SB Off Ramp	I	45	7.9	14.2	22.1	0.08	12.4	F
Booth Rd	I	47	27.1	2.4	29.5	0.26	31.8	C
Tymber Creek Rd	I	50	38.1	21.1	59.2	0.53	32.1	C
Breakaway Tr	I	50	71.5	6.0	77.5	0.99	46.2	A
Total	I		198.8	95.0	293.8	2.43	29.8	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	43.0	55.7	0.11	7.1	F
Hand Ave Ext	I	48	154.2	16.8	171.0	2.07	43.6	A
SR 40	I	40	56.3	45.8	102.1	0.62	22.0	D
Total	I		223.2	105.6	328.8	2.81	30.7	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	75.6	98.6	0.20	7.3	F
Hand Ave Ext	I	40	56.3	4.3	60.6	0.62	37.1	B
LPGA Blvd	I	50	149.1	40.0	189.1	2.07	39.4	B
Total	I		228.4	119.9	348.3	2.89	29.9	C

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tomoka Farms Rd N	II	45	73.0	17.9	90.9	0.91	36.1	A
I-95 SB Off Ramp	II	45	21.8	6.9	28.7	0.20	25.1	C
I-95 NB Off Ramp	II	45	28.7	5.0	33.7	0.29	30.9	B
Williamson Blvd.	II	45	42.2	36.5	78.7	0.46	21.2	D
Total	II		165.7	66.3	232.0	1.87	28.9	B

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	40.4	79.9	0.43	19.5	D
I-95 NB Off Ramp	II	45	42.2	5.8	48.0	0.46	34.8	B
I-95 SB Off Ramp	II	45	28.7	6.5	35.2	0.29	29.6	B
Tomoka Farms Rd N	II	45	21.8	7.6	29.4	0.20	24.5	C
Total	II		132.2	60.3	192.5	1.39	25.9	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hunters Ridge Blvd	I	54	240.7	21.8	262.5	3.62	49.7	A
Breakaway Tr	I	50	60.5	3.4	63.9	0.84	47.3	A
Tymber Creek Rd	I	50	71.5	43.1	114.6	0.99	31.2	C
Booth Rd	I	50	38.1	9.6	47.7	0.53	39.9	B
I-95 SB On Ramp	I	45	27.1	17.2	44.3	0.26	21.2	D
I-95 NB Off Ramp	I	45	7.9	11.9	19.8	0.08	13.8	F
Williamson Blvd.	I	45	15.3	47.6	62.9	0.15	8.4	F
Total	I		461.1	154.6	615.7	6.47	37.8	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	54.3	93.2	0.43	16.5	E
I-95 NB On Ramp	I	45	15.3	15.0	30.3	0.15	17.5	E
I-95 SB Off Ramp	I	45	7.9	7.5	15.4	0.08	17.8	E
Booth Rd	I	47	27.1	11.4	38.5	0.26	24.4	D
Tymber Creek Rd	I	50	38.1	23.9	62.0	0.53	30.7	C
Breakaway Tr	I	50	71.5	6.9	78.4	0.99	45.6	A
Hunters Ridge Blvd	I	60	50.4	20.8	71.2	0.84	42.5	A
Total	I		249.2	139.8	389.0	3.27	30.3	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	54.4	67.1	0.11	5.9	F
Hand Ave Ext	I	48	154.2	25.0	179.2	2.07	41.6	B
SR 40	I	40	56.3	33.5	89.8	0.62	25.1	D
Total	I		223.2	112.9	336.1	2.81	30.0	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	153.1	176.1	0.20	4.1	F
Hand Ave Ext	I	40	56.3	5.3	61.6	0.62	36.5	B
LPGA Blvd	I	50	149.1	49.6	198.7	2.07	37.5	B
Total	I		228.4	208.0	436.4	2.89	23.9	D

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tomoka Farms Rd N	II	45	73.0	31.2	104.2	0.91	31.5	B
I-95 SB Off Ramp	II	45	21.8	9.9	31.7	0.20	22.7	C
I-95 NB Off Ramp	II	45	28.7	5.6	34.3	0.29	30.4	B
Williamson Blvd.	II	45	42.2	52.5	94.7	0.46	17.6	D
Total	II		165.7	99.2	264.9	1.87	25.4	C

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	93.3	132.8	0.43	11.8	F
I-95 NB Off Ramp	II	45	42.2	8.6	50.8	0.46	32.8	B
I-95 SB Off Ramp	II	45	28.7	10.2	38.9	0.29	26.8	C
Tomoka Farms Rd N	II	45	21.8	22.4	44.2	0.20	16.3	E
Total	II		132.2	134.5	266.7	1.39	18.7	D

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hunters Ridge Blvd	I	54	240.7	30.8	271.5	3.62	48.1	A
Breakaway Tr	I	50	60.5	4.4	64.9	0.84	46.6	A
Tymber Creek Rd	I	50	71.5	32.1	103.6	0.99	34.5	B
Booth Rd	I	50	38.1	11.4	49.5	0.53	38.4	B
I-95 SB On Ramp	I	45	27.1	18.7	45.8	0.26	20.5	E
I-95 NB Off Ramp	I	45	7.9	13.9	21.8	0.08	12.6	F
Williamson Blvd.	I	45	15.3	62.1	77.4	0.15	6.9	F
Total	I		461.1	173.4	634.5	6.47	36.7	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	90.1	129.0	0.43	11.9	F
I-95 NB On Ramp	I	45	15.3	18.6	33.9	0.15	15.6	F
I-95 SB Off Ramp	I	45	7.9	17.6	25.5	0.08	10.7	F
Booth Rd	I	47	27.1	14.0	41.1	0.26	22.8	D
Tymber Creek Rd	I	50	38.1	54.5	92.6	0.53	20.6	E
Breakaway Tr	I	50	71.5	13.6	85.1	0.99	42.0	A
Hunters Ridge Blvd	I	60	50.4	33.2	83.6	0.84	36.2	B
Total	I		249.2	241.6	490.8	3.27	24.0	D

Arterial Level of Service: NW Williamson Blvd.

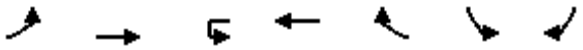
Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	112.9	125.6	0.11	3.2	F
Hand Ave Ext	I	48	154.2	117.5	271.7	2.07	27.4	C
SR 40	I	40	56.3	33.3	89.6	0.62	25.1	D
Total	I		223.2	263.7	486.9	2.81	20.7	E

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	152.7	175.7	0.20	4.1	F
Hand Ave Ext	I	40	56.3	8.0	64.3	0.62	35.0	B
LPGA Blvd	I	50	149.1	61.1	210.2	2.07	35.5	B
Total	I		228.4	221.8	450.2	2.89	23.1	D

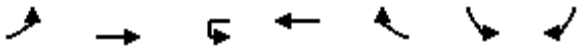
Appendix S

Synchro Output Sheets (Intersection & Roadway Analysis) - Build Alternative 5



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	17	625	0	383	10	45	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3424	0	1777	0
Flt Permitted	0.950					0.957	
Satd. Flow (perm)	1719	3438	1810	3424	0	1777	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	18	658	0	414	0	52	0
Sign Control		Free		Free		Stop	

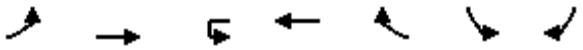
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	17	625	0	383	10	45	5
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	18	658	0	403	11	47	5
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	414		0			773	207
vC1, stage 1 conf vol						408	
vC2, stage 2 conf vol						365	
vCu, unblocked vol	414		0			773	207
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	98		0			91	99
cM capacity (veh/h)	1121		0			533	802

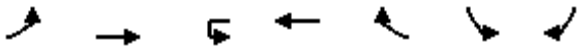
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	18	329	329	269	145	0	53
Volume Left	18	0	0	0	0	0	47
Volume Right	0	0	0	0	11	0	5
cSH	1121	1700	1700	1700	1700	1700	552
Volume to Capacity	0.02	0.19	0.19	0.16	0.09	0.00	0.10
Queue Length 95th (ft)	1	0	0	0	0	0	6
Control Delay (s)	8.3	0.0	0.0	0.0	0.0	0.0	12.2
Lane LOS	A						B
Approach Delay (s)	0.2			0.0			12.2
Approach LOS							B

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	27.3%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	33	653	0	400	14	22	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3421	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3421	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	35	687	0	436	0	23	35
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.7%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	33	653	0	400	14	22	33
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	35	687	0	421	15	23	35
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	436		0			842	218
vC1, stage 1 conf vol						428	
vC2, stage 2 conf vol						413	
vCu, unblocked vol	436		0			842	218
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	97		0			95	96
cM capacity (veh/h)	1099		0			502	789

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	35	344	344	281	155	0	58
Volume Left	35	0	0	0	0	0	23
Volume Right	0	0	0	0	15	0	35
cSH	1099	1700	1700	1700	1700	1700	1254
Volume to Capacity	0.03	0.20	0.20	0.17	0.09	0.00	0.05
Queue Length 95th (ft)	2	0	0	0	0	0	3
Control Delay (s)	8.4	0.0	0.0	0.0	0.0	0.0	10.9
Lane LOS	A						B
Approach Delay (s)	0.4			0.0			10.9
Approach LOS							B

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	34.7%	ICU Level of Service	A
Analysis Period (min)	15		

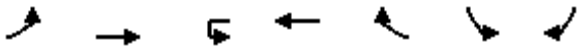
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	56	658	0	404	65	126	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1757	0
Flt Permitted	0.950					0.963	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1757	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	59	693	0	425	68	171	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.7%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	56	658	0	404	65	126	36
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	59	693	0	425	68	133	38
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	425		0			889	213
vC1, stage 1 conf vol						425	
vC2, stage 2 conf vol						464	
vCu, unblocked vol	425		0			889	213
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	95		0			72	95
cM capacity (veh/h)	1109		0			476	796

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	59	346	346	213	213	68	0	171
Volume Left	59	0	0	0	0	0	0	133
Volume Right	0	0	0	0	0	68	0	38
cSH	1109	1700	1700	1700	1700	1700	1700	522
Volume to Capacity	0.05	0.20	0.20	0.13	0.13	0.04	0.00	0.33
Queue Length 95th (ft)	3	0	0	0	0	0	0	28
Control Delay (s)	8.4	0.0	0.0	0.0	0.0	0.0	0.0	15.2
Lane LOS	A							C
Approach Delay (s)	0.7			0.0				15.2
Approach LOS								C

Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	40.7%	ICU Level of Service		A
Analysis Period (min)	15			



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	33	859	3	524	99	175	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	4940	1719	4940	1538	1787	1599
Flt Permitted	0.950		0.950			0.950	
Satd. Flow (perm)	1719	4940	1719	4940	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					104		38
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	35	904	3	552	104	184	38
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8	
Permitted Phases					2		8
Total Split (s)	15.0	45.0	12.0	42.0	42.0	33.0	33.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	7.8	25.0	6.9	22.5	22.5	10.6	10.6
Actuated g/C Ratio	0.17	0.55	0.15	0.49	0.49	0.23	0.23
v/c Ratio	0.12	0.33	0.01	0.23	0.13	0.44	0.09
Control Delay	19.6	7.3	21.0	8.9	3.7	19.3	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.6	7.3	21.0	8.9	3.7	19.3	7.3
LOS	B	A	C	A	A	B	A
Approach Delay		7.7		8.1		17.3	
Approach LOS		A		A		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 45.7			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.44			
Intersection Signal Delay: 9.0		Intersection LOS: A	
Intersection Capacity Utilization 40.5%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	6	78	910	28	48	42	494	431	25	30	40	800
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		2		1		1		2	1		1	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	3341	4940	1538	0	1764	4940	2707	1787	1881	1599	4802
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	3341	4940	1538	0	1764	4940	2707	1787	1881	1599	4802
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				29				454			42	
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	88	958	29	0	95	520	454	26	32	42	842
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Prot	Split	NA	Perm	Split
Protected Phases	1	1	6		5	5	2	2	8	8		4
Permitted Phases				6							8	
Total Split (s)	10.0	10.0	29.0	29.0	13.0	13.0	32.0	32.0	14.0	14.0	14.0	34.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		6.7	24.1	24.1		9.6	26.2	26.2	11.1	11.1	11.1	26.1
Actuated g/C Ratio		0.09	0.31	0.31		0.12	0.33	0.33	0.14	0.14	0.14	0.33
v/c Ratio		0.31	0.63	0.06		0.44	0.31	0.38	0.10	0.12	0.16	0.52
Control Delay		42.9	28.2	9.5		45.2	22.4	3.4	37.0	37.2	13.7	24.3
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		42.9	28.2	9.5		45.2	22.4	3.4	37.0	37.2	13.7	24.3
LOS		D	C	A		D	C	A	D	D	B	C
Approach Delay			28.9				16.4			27.3		
Approach LOS			C				B			C		

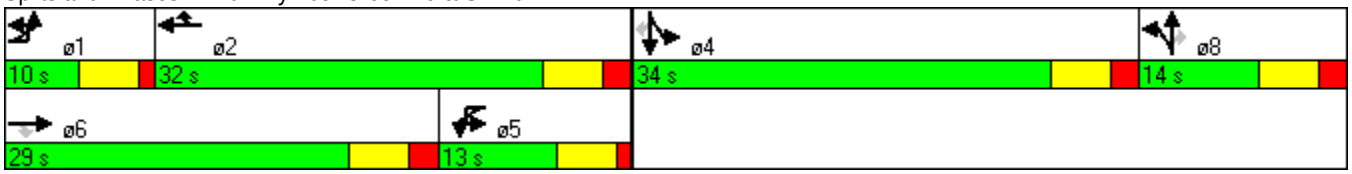
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 78.3			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 23.0		Intersection LOS: C	
Intersection Capacity Utilization 57.8%		ICU Level of Service B	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	50	40
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1792	1524
Flt Permitted		
Satd. Flow (perm)	1792	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		42
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	53	42
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	34.0	34.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	26.1	26.1
Actuated g/C Ratio	0.33	0.33
v/c Ratio	0.09	0.08
Control Delay	21.5	7.3
Queue Delay	0.0	0.0
Total Delay	21.5	7.3
LOS	C	A
Approach Delay	23.4	
Approach LOS	C	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	45	1601	11	8	64	844	12	112	0	29	150	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		250		300		325	0		250	0	
Storage Lanes	1		1		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	4940	1538	0	1728	4940	1538	1787	1599	0	1787	1599
Flt Permitted	0.950				0.950			0.740			0.737	
Satd. Flow (perm)	1719	4940	1538	0	1728	4940	1538	1392	1599	0	1386	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			12				13		146			267
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	1685	12	0	75	888	13	118	31	0	158	26
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases			6				2	4			8	
Total Split (s)	17.0	81.0	81.0	21.0	21.0	85.0	85.0	38.0	38.0	0.0	38.0	38.0
Total Lost Time (s)	4.7	5.0	5.0	5.7	4.7	5.0	5.0	4.0	4.0	3.0	5.0	4.0
Act Effct Green (s)	10.2	90.8	90.8		12.4	95.3	95.3	23.1	23.1		22.1	23.1
Actuated g/C Ratio	0.07	0.65	0.65		0.09	0.68	0.68	0.16	0.16		0.16	0.16
v/c Ratio	0.38	0.53	0.01		0.49	0.26	0.01	0.51	0.08		0.72	0.05
Control Delay	69.5	15.0	5.8		72.2	8.1	4.8	60.1	0.4		73.7	0.2
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	69.5	15.0	5.8		72.2	8.1	4.8	60.1	0.4		73.7	0.2
LOS	E	B	A		E	A	A	E	A		E	A
Approach Delay		16.4				13.0			47.7			63.3
Approach LOS		B				B			D			E

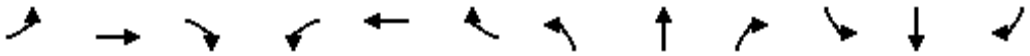
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 82 (59%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 19.7		Intersection LOS: B	

Lane Group	SBR
Lane Configurations	
Volume (vph)	25
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 61.5% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

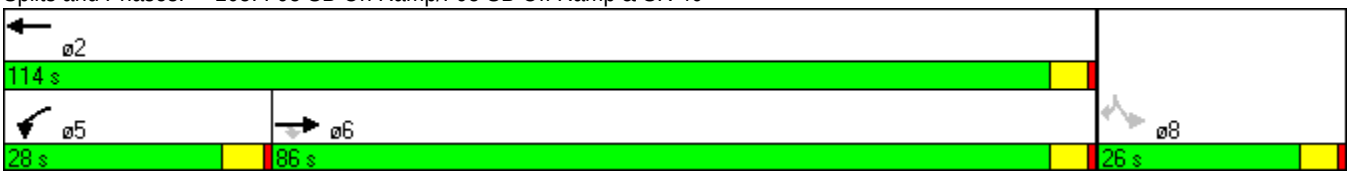


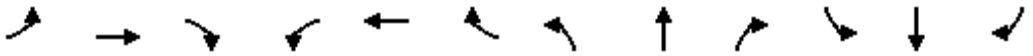
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1193	698	311	1081	0	0	0	0	297	0	129
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			568									136
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1256	735	327	1138	0	0	0	0	313	0	136
Turn Type		NA	Perm	Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases			6							8		8
Total Split (s)	0.0	86.0	86.0	28.0	114.0	0.0	0.0	0.0	0.0	26.0	0.0	26.0
Total Lost Time (s)	4.0	4.0	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		87.6	87.6	20.4	112.4					19.6		19.6
Actuated g/C Ratio		0.63	0.63	0.15	0.80					0.14		0.14
v/c Ratio		0.32	0.63	0.67	0.29					0.67		0.41
Control Delay		6.6	4.9	59.0	4.2					64.3		11.9
Queue Delay		0.0	0.0	0.0	0.1					0.0		0.0
Total Delay		6.6	4.9	59.0	4.3					64.3		11.9
LOS		A	A	E	A					E		B
Approach Delay		5.9			16.5							
Approach LOS		A			B							

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 102 (73%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.67	
Intersection Signal Delay: 14.8	Intersection LOS: B

Intersection Capacity Utilization 70.8% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



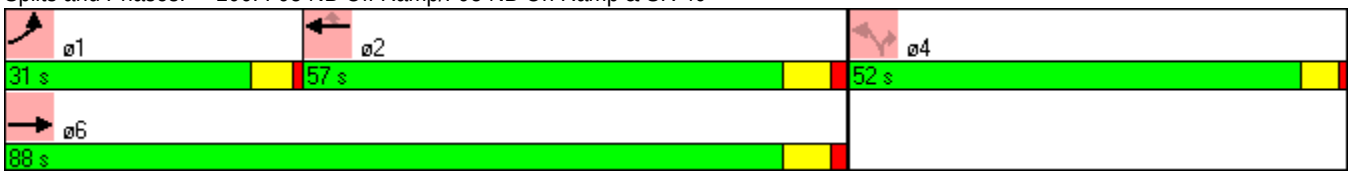


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	1390	0	0	1016	205	376	0	426	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						216			69			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	1463	0	0	1069	216	396	0	448	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	31.0	88.0	0.0	0.0	57.0	57.0	52.0	0.0	52.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	15.8	101.7			81.5	81.5	29.3		29.3			
Actuated g/C Ratio	0.11	0.73			0.58	0.58	0.21		0.21			
v/c Ratio	0.54	0.41			0.25	0.22	0.57		0.72			
Control Delay	70.2	5.8			4.7	1.3	52.1		49.6			
Queue Delay	0.0	0.1			0.0	0.0	0.0		0.0			
Total Delay	70.2	5.8			4.7	1.3	52.1		49.6			
LOS	E	A			A	A	D		D			
Approach Delay		10.1			4.1							
Approach LOS		B			A							

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 8 (6%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 17.3	Intersection LOS: B

Intersection Capacity Utilization 70.8% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40

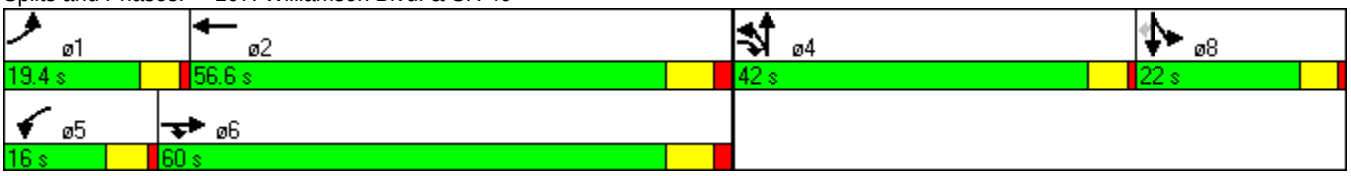


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	86	1196	716	215	748	35	396	83	281	80	194	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4905	0	4894	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4905	0	4894	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			165		6				296			56
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		5%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	1259	754	226	824	0	417	87	296	84	204	81
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases									Free			8
Total Split (s)	19.4	60.0	102.0	16.0	56.6	0.0	42.0	42.0	0.0	22.0	22.0	22.0
Total Lost Time (s)	4.3	4.0	5.0	4.3	4.0	1.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	13.0	63.6	90.5	14.1	64.8		23.8	23.8	140.0	22.1	22.1	22.1
Actuated g/C Ratio	0.09	0.45	0.65	0.10	0.46		0.17	0.17	1.00	0.16	0.16	0.16
v/c Ratio	0.57	0.81	0.42	0.67	0.36		0.50	0.28	0.19	0.16	0.71	0.28
Control Delay	82.7	33.9	8.5	70.8	26.3		54.1	51.4	0.3	50.6	69.5	21.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.7	33.9	8.5	70.8	26.3		54.1	51.4	0.3	50.6	69.5	21.9
LOS	F	C	A	E	C		D	D	A	D	E	C
Approach Delay		26.9			35.9			33.9			54.7	
Approach LOS		C			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 96 (69%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 32.8		Intersection LOS: C	

Intersection Capacity Utilization 70.5% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	394	745	4	485	120	180	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		250		250	150	0
Storage Lanes	2		0		1	2	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	3367	3471	0	3472	1553	3433	1583
Flt Permitted	0.950			0.948		0.950	
Satd. Flow (perm)	3367	3471	0	3292	1553	3433	1583
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					126		288
Link Speed (mph)		40		40		35	
Link Distance (ft)		1131		1488		528	
Travel Time (s)		19.3		25.4		10.3	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	0%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	415	784	0	515	126	189	288
Turn Type	Prot	NA	Perm	NA	Perm	NA	custom
Protected Phases	1	6		2		8	8
Permitted Phases			2		2		8
Total Split (s)	27.0	61.0	34.0	34.0	34.0	29.0	29.0
Total Lost Time (s)	4.0	4.0	5.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	13.2	33.2		15.9	15.9	9.9	9.9
Actuated g/C Ratio	0.26	0.65		0.31	0.31	0.19	0.19
v/c Ratio	0.48	0.35		0.51	0.22	0.29	0.54
Control Delay	19.3	4.7		17.0	4.6	20.7	7.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	19.3	4.7		17.0	4.6	20.7	7.6
LOS	B	A		B	A	C	A
Approach Delay		9.7		14.6		12.8	
Approach LOS		A		B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 51.4			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 11.7		Intersection LOS: B	
Intersection Capacity Utilization 49.3%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave Ext

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	12	213	1175	465	127	720	164	234	292	94	216	437
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		1	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3371	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3371	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				373			173			99		
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			6363
Travel Time (s)			32.8			34.7			9.9			86.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	237	1237	489	134	758	173	246	307	99	227	460
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2			4		
Total Split (s)	17.0	17.0	56.0	56.0	12.0	51.0	51.0	17.0	26.0	26.0	16.0	25.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		12.2	47.8	47.8	8.0	43.7	43.7	12.3	20.7	20.7	11.5	20.0
Actuated g/C Ratio		0.12	0.46	0.46	0.08	0.42	0.42	0.12	0.20	0.20	0.11	0.19
v/c Ratio		0.60	0.78	0.53	0.52	0.52	0.23	0.62	0.44	0.26	0.61	0.69
Control Delay		51.9	27.8	7.0	55.8	24.3	3.8	52.4	39.8	9.4	53.2	46.2
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		51.9	27.8	7.0	55.8	24.3	3.8	52.4	39.8	9.4	53.2	46.2
LOS		D	C	A	E	C	A	D	D	A	D	D
Approach Delay			25.6			24.9			40.0			39.8
Approach LOS			C			C			D			D

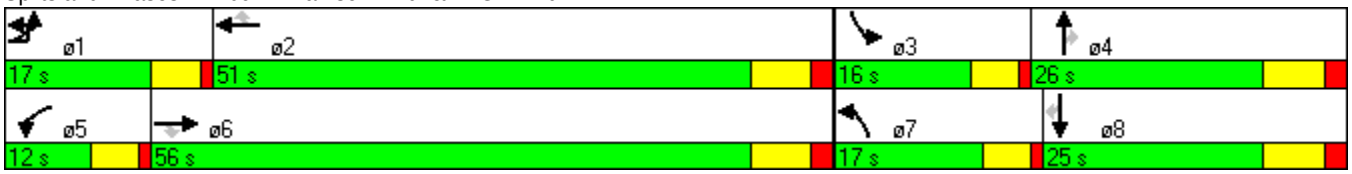
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 104.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 30.3		Intersection LOS: C	
Intersection Capacity Utilization 68.7%		ICU Level of Service C	

Lane Group	SBR
Lane Configurations	
Volume (vph)	238
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	1
Taper Length (ft)	
Satd. Flow (prot)	1553
Flt Permitted	
Satd. Flow (perm)	1553
Right Turn on Red	Yes
Satd. Flow (RTOR)	193
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	251
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Total Split (s)	25.0
Total Lost Time (s)	4.0
Act Effct Green (s)	20.0
Actuated g/C Ratio	0.19
v/c Ratio	0.55
Control Delay	15.9
Queue Delay	0.0
Total Delay	15.9
LOS	B
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

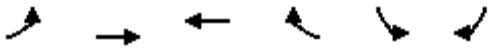


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1415	0	0	762	96	558
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						216
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1489	0	0	802	101	587
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	100.0	0.0	0.0	100.0	20.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	41.0			41.0	8.3	57.2
Actuated g/C Ratio	0.72			0.72	0.15	1.00
v/c Ratio	0.60			0.32	0.21	0.38
Control Delay	7.1			4.8	24.8	0.7
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	7.1			4.8	24.8	0.7
LOS	A			A	C	A
Approach Delay	7.1			4.8	4.2	
Approach LOS	A			A	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 57.2			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.60			
Intersection Signal Delay: 5.8		Intersection LOS: A	
Intersection Capacity Utilization 56.6%		ICU Level of Service B	

Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	726	530	0	895	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						257
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	764	558	0	942	257
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	71.0	71.0	0.0	49.0	49.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		24.5	24.5		24.6	24.6
Actuated g/C Ratio		0.39	0.39		0.39	0.39
v/c Ratio		0.57	0.42		0.72	0.34
Control Delay		17.9	16.0		20.7	3.5
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		17.9	16.0		20.7	3.5
LOS		B	B		C	A
Approach Delay		17.9	16.0		17.0	
Approach LOS		B	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 63.6			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 17.1		Intersection LOS: B	
Intersection Capacity Utilization 80.9%		ICU Level of Service D	

Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

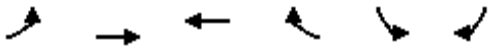
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	628	35	186	575	13	52	1	181	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	1553	1736	1821	0	1787	1881	1599	0	1787	0
Flt Permitted	0.950			0.950			0.950				0.950	
Satd. Flow (perm)	1736	1827	1553	1736	1821	0	1787	1881	1599	0	1787	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	661	37	196	619	0	55	1	191	0	1	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 57.6%		ICU Level of Service B	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	628	35	186	575	13	52	1	181	1	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	1	661	37	196	605	14	55	1	191	1	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1057							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	619			698			1660	1674	661	1858	1704	612
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	453			698			1690	1706	661	1925	1742	445
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			78			0	98	59	95	100	100
cM capacity (veh/h)	923			889			52	60	464	21	57	518

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1
Volume Total	1	661	37	196	619	55	1	191	1
Volume Left	1	0	0	196	0	55	0	0	1
Volume Right	0	0	37	0	14	0	0	191	0
cSH	923	1700	1700	889	1700	52	60	464	21
Volume to Capacity	0.00	0.39	0.02	0.22	0.36	1.05	0.02	0.41	0.05
Queue Length 95th (ft)	0	0	0	17	0	94	1	39	3
Control Delay (s)	8.9	0.0	0.0	10.2	0.0	268.6	66.0	18.1	188.9
Lane LOS	A			B		F	F	C	F
Approach Delay (s)	0.0			2.4		73.9			188.9
Approach LOS						F			F

Intersection Summary				
Average Delay	11.6			
Intersection Capacity Utilization	57.6%	ICU Level of Service		B
Analysis Period (min)	15			

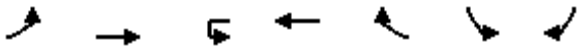


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	93	540	450	135	177	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	250			250	250	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	1736	1827	1827	1553	1787	1599
Flt Permitted	0.282				0.950	
Satd. Flow (perm)	515	1827	1827	1553	1787	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				142		107
Link Speed (mph)		45	45		35	
Link Distance (ft)		1684	3132		11505	
Travel Time (s)		25.5	47.5		224.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	98	568	474	142	186	107
Turn Type	pm+pt	NA	NA	Perm	NA	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8
Total Split (s)	22.0	74.0	52.0	52.0	46.0	46.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	32.2	32.2	23.1	23.1	13.9	13.9
Actuated g/C Ratio	0.59	0.59	0.42	0.42	0.25	0.25
v/c Ratio	0.20	0.53	0.61	0.19	0.41	0.22
Control Delay	6.0	8.8	18.0	3.3	22.9	6.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.0	8.8	18.0	3.3	22.9	6.3
LOS	A	A	B	A	C	A
Approach Delay		8.4	14.6		16.8	
Approach LOS		A	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 54.8			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 12.4		Intersection LOS: B	
Intersection Capacity Utilization 48.6%		ICU Level of Service A	

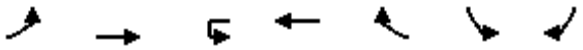
Analysis Period (min) 15

Splits and Phases: 113: LPGA Blvd & Tymber Creek Ext.



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	17	1244	0	761	12	50	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3431	0	1773	0
Flt Permitted	0.950					0.958	
Satd. Flow (perm)	1719	3438	1810	3431	0	1773	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	18	1309	0	814	0	60	0
Sign Control		Free		Free		Stop	

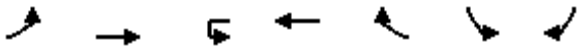
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.4%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	17	1244	0	761	12	50	7
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	18	1309	0	801	13	53	7
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	814		0			1498	407
vC1, stage 1 conf vol						807	
vC2, stage 2 conf vol						691	
vCu, unblocked vol	814		0			1498	407
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	98		0			83	99
cM capacity (veh/h)	790		0			312	596

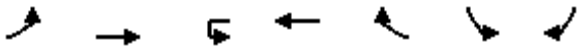
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	18	655	655	534	280	0	60
Volume Left	18	0	0	0	0	0	53
Volume Right	0	0	0	0	13	0	7
cSH	790	1700	1700	1700	1700	1700	332
Volume to Capacity	0.02	0.39	0.39	0.31	0.16	0.00	0.18
Queue Length 95th (ft)	1	0	0	0	0	0	13
Control Delay (s)	9.7	0.0	0.0	0.0	0.0	0.0	18.2
Lane LOS	A						C
Approach Delay (s)	0.1			0.0			18.2
Approach LOS							C

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	44.4%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	140	1177	0	722	58	75	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3400	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3400	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	147	1239	0	821	0	79	168
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	140	1177	0	722	58	75	160
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	147	1239	0	760	61	79	168
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	821		0			1705	411
vC1, stage 1 conf vol						791	
vC2, stage 2 conf vol						914	
vCu, unblocked vol	821		0			1705	411
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	81		0			67	72
cM capacity (veh/h)	785		0			237	593

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	147	619	619	507	314	0	247
Volume Left	147	0	0	0	0	0	79
Volume Right	0	0	0	0	61	0	168
cSH	785	1700	1700	1700	1700	1700	744
Volume to Capacity	0.19	0.36	0.36	0.30	0.18	0.00	0.33
Queue Length 95th (ft)	14	0	0	0	0	0	29
Control Delay (s)	10.6	0.0	0.0	0.0	0.0	0.0	18.0
Lane LOS	B						C
Approach Delay (s)	1.1			0.0			18.0
Approach LOS							C

Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	50.0%	ICU Level of Service		A
Analysis Period (min)	15			

Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	46	1243	0	756	75	133	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1752	0
Flt Permitted	0.950					0.964	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1752	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	48	1308	0	796	79	188	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	46	1243	0	756	75	133	46
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	48	1308	0	796	79	140	48
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	796		0			1547	398
vC1, stage 1 conf vol						796	
vC2, stage 2 conf vol						751	
vCu, unblocked vol	796		0			1547	398
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	94		0			53	92
cM capacity (veh/h)	803		0			296	604

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	48	654	654	398	398	79	0	188
Volume Left	48	0	0	0	0	0	0	140
Volume Right	0	0	0	0	0	79	0	48
cSH	803	1700	1700	1700	1700	1700	1700	341
Volume to Capacity	0.06	0.38	0.38	0.23	0.23	0.05	0.00	0.55
Queue Length 95th (ft)	4	0	0	0	0	0	0	64
Control Delay (s)	9.8	0.0	0.0	0.0	0.0	0.0	0.0	27.8
Lane LOS	A							D
Approach Delay (s)	0.3			0.0				27.8
Approach LOS								D

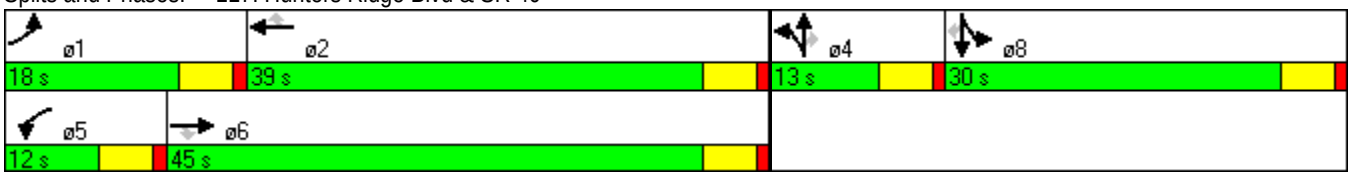
Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

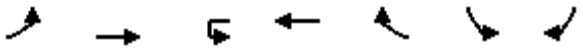
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	112	1149	100	156	665	270	62	62	116	441	100	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		300	300		300	0		300	300		0
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			105			284			122			118
Link Speed (mph)		60			60			35			35	
Link Distance (ft)		1961			4435			1868			1392	
Travel Time (s)		22.3			50.4			36.4			27.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	1209	105	164	700	284	65	65	122	464	105	118
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Total Split (s)	18.0	45.0	45.0	12.0	39.0	39.0	13.0	13.0	13.0	30.0	30.0	30.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	11.4	29.2	29.2	8.1	28.9	28.9	8.4	8.4	8.4	18.2	18.2	18.2
Actuated g/C Ratio	0.14	0.36	0.36	0.10	0.36	0.36	0.10	0.10	0.10	0.23	0.23	0.23
v/c Ratio	0.48	0.67	0.17	0.49	0.39	0.39	0.35	0.33	0.44	0.59	0.25	0.26
Control Delay	41.9	23.8	4.7	43.0	22.0	4.6	43.4	42.7	13.7	32.0	28.8	7.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.9	23.8	4.7	43.0	22.0	4.6	43.4	42.7	13.7	32.0	28.8	7.4
LOS	D	C	A	D	C	A	D	D	B	C	C	A
Approach Delay		23.9			20.7			28.8			27.2	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 80.4			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 23.9		Intersection LOS: C	
Intersection Capacity Utilization 55.9%		ICU Level of Service B	

Analysis Period (min) 15

Splits and Phases: 117: Hunters Ridge Blvd & SR 40





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	35	1750	5	1069	109	189	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	4940	1719	4940	1538	1787	1599
Flt Permitted	0.950		0.950			0.950	
Satd. Flow (perm)	1719	4940	1719	4940	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					115		42
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	37	1842	5	1125	115	199	42
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8	
Permitted Phases					2		8
Total Split (s)	15.0	45.0	12.0	42.0	42.0	33.0	33.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	8.1	36.1	7.0	33.4	33.4	12.5	12.5
Actuated g/C Ratio	0.14	0.62	0.12	0.57	0.57	0.21	0.21
v/c Ratio	0.16	0.61	0.02	0.40	0.12	0.52	0.11
Control Delay	28.2	9.1	29.4	9.3	3.0	27.4	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.2	9.1	29.4	9.3	3.0	27.4	8.9
LOS	C	A	C	A	A	C	A
Approach Delay		9.5		8.8		24.2	
Approach LOS		A		A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 58.6			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 10.3		Intersection LOS: B	
Intersection Capacity Utilization 51.0%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	15	186	1658	66	45	105	900	510	38	35	98	810
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		2		1		1		2	1		1	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	3342	4940	1538	0	1744	4940	2707	1787	1881	1599	4802
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	3342	4940	1538	0	1744	4940	2707	1787	1881	1599	4802
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				69				537			103	
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	212	1745	69	0	158	947	537	40	37	103	853
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Prot	Split	NA	Perm	Split
Protected Phases	1	1	6		5	5	2	2	8	8		4
Permitted Phases				6							8	
Total Split (s)	17.0	17.0	55.0	55.0	21.0	21.0	59.0	59.0	14.0	14.0	14.0	30.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		12.6	50.6	50.6		15.6	53.6	53.6	10.0	10.0	10.0	26.0
Actuated g/C Ratio		0.11	0.43	0.43		0.13	0.45	0.45	0.08	0.08	0.08	0.22
v/c Ratio		0.60	0.83	0.10		0.68	0.42	0.35	0.26	0.23	0.45	0.81
Control Delay		58.1	34.3	5.2		64.9	22.6	2.3	56.3	55.3	16.4	51.0
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		58.1	34.3	5.2		64.9	22.6	2.3	56.3	55.3	16.4	51.0
LOS		E	C	A		E	C	A	E	E	B	D
Approach Delay			35.8				20.0			33.3		
Approach LOS			D				B			C		

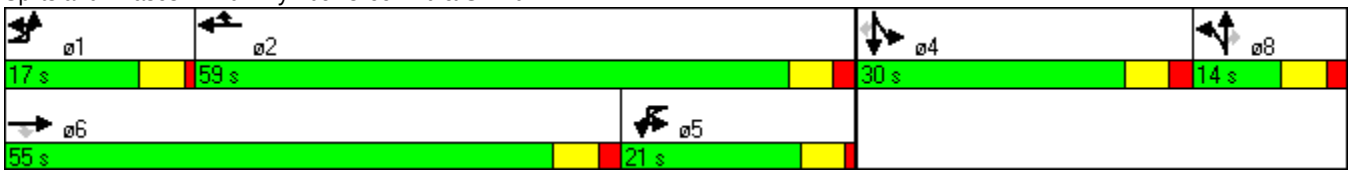
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 118.3			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 32.0		Intersection LOS: C	
Intersection Capacity Utilization 75.8%		ICU Level of Service D	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	58	193
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1792	1524
Flt Permitted		
Satd. Flow (perm)	1792	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		203
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	61	203
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	30.0	30.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	26.0	26.0
Actuated g/C Ratio	0.22	0.22
v/c Ratio	0.15	0.41
Control Delay	39.3	8.0
Queue Delay	0.0	0.0
Total Delay	39.3	8.0
LOS	D	A
Approach Delay	42.5	
Approach LOS	D	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	46	2476	22	8	67	1363	14	129	0	36	150	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		250		300		325	0		250	0	
Storage Lanes	1		1		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	4940	1538	0	1727	4940	1538	1787	1599	0	1787	1599
Flt Permitted	0.950				0.950			0.740			0.732	
Satd. Flow (perm)	1719	4940	1538	0	1727	4940	1538	1392	1599	0	1377	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			23				15		66			143
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	2606	23	0	79	1435	15	136	38	0	158	26
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases			6				2	4			8	
Total Split (s)	14.7	115.0	115.0	13.0	13.0	113.3	113.3	22.0	22.0	0.0	22.0	22.0
Total Lost Time (s)	4.7	5.0	5.0	5.7	4.7	5.0	5.0	4.0	4.0	3.0	5.0	4.0
Act Effct Green (s)	9.2	108.3	108.3		8.6	110.0	110.0	19.5	19.5		18.5	19.5
Actuated g/C Ratio	0.06	0.72	0.72		0.06	0.73	0.73	0.13	0.13		0.12	0.13
v/c Ratio	0.46	0.73	0.02		0.80	0.40	0.01	0.75	0.14		0.93	0.08
Control Delay	81.7	13.7	1.9		121.5	8.2	2.4	88.5	4.5		117.5	0.4
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	81.7	13.7	1.9		121.5	8.2	2.4	88.5	4.5		117.5	0.4
LOS	F	B	A		F	A	A	F	A		F	A
Approach Delay		14.8				14.0			70.2			101.0
Approach LOS		B				B			E			F

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 117 (78%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 20.1		Intersection LOS: C	

Lane Group	SBR
Lane Configurations	
Volume (vph)	25
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 78.4% ICU Level of Service D
Analysis Period (min) 15

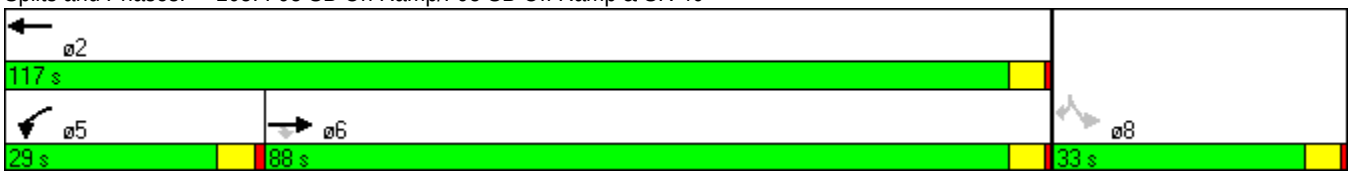
Splits and Phases: 103: Booth Rd & SR 40

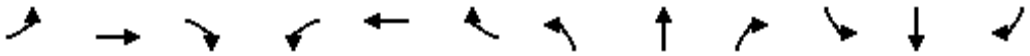
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2004	759	345	1549	0	0	0	0	366	0	168
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			617									60
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2109	799	363	1631	0	0	0	0	385	0	177
Turn Type		NA	Perm	Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases			6							8		8
Total Split (s)	0.0	88.0	88.0	29.0	117.0	0.0	0.0	0.0	0.0	33.0	0.0	33.0
Total Lost Time (s)	4.0	4.0	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		90.7	90.7	22.6	117.6					24.4		24.4
Actuated g/C Ratio		0.60	0.60	0.15	0.78					0.16		0.16
v/c Ratio		0.56	0.68	0.72	0.42					0.71		0.59
Control Delay		12.7	3.5	72.8	8.5					66.7		45.7
Queue Delay		0.0	0.0	0.0	0.1					0.0		0.0
Total Delay		12.7	3.5	72.8	8.5					66.7		45.7
LOS		B	A	E	A					E		D
Approach Delay		10.2			20.2							
Approach LOS		B			C							

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 132 (88%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 19.0	Intersection LOS: B

Intersection Capacity Utilization 77.5% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



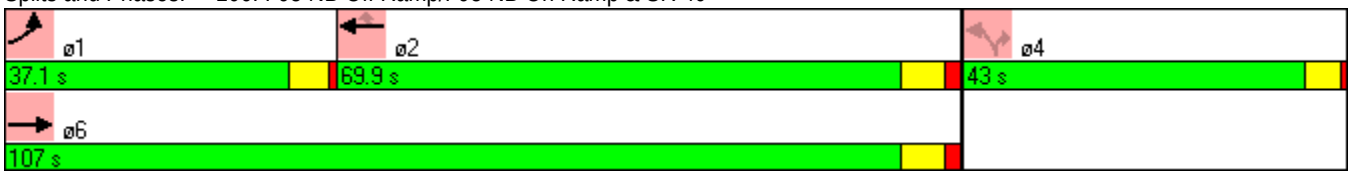


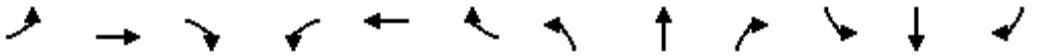
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	120	2250	0	0	1487	253	407	0	516	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						266			16			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	126	2368	0	0	1565	266	428	0	543	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	37.1	107.0	0.0	0.0	69.9	69.9	43.0	0.0	43.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	18.2	104.9			82.4	82.4	36.1		36.1			
Actuated g/C Ratio	0.12	0.70			0.55	0.55	0.24		0.24			
v/c Ratio	0.60	0.69			0.39	0.28	0.53		0.82			
Control Delay	93.0	8.4			14.0	3.2	51.9		62.9			
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0			
Total Delay	93.0	8.4			14.0	3.2	51.9		62.9			
LOS	F	A			B	A	D		E			
Approach Delay		12.7			12.4							
Approach LOS		B			B							

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 8 (5%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 20.9	Intersection LOS: C

Intersection Capacity Utilization 77.5% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



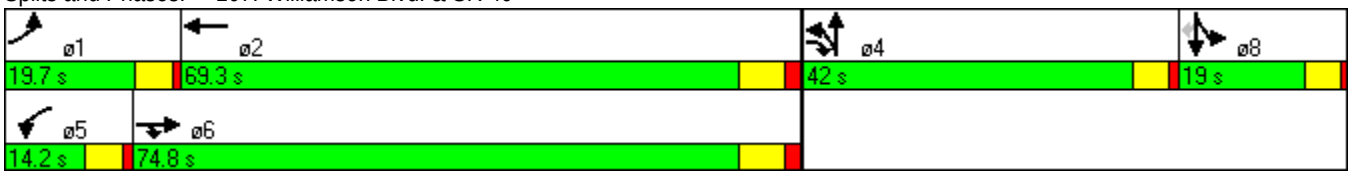


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	1494	1258	220	870	38	793	83	294	80	194	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4910	0	4894	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4910	0	4894	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			84		5				309			50
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		5%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	93	1573	1324	232	956	0	835	87	309	84	204	81
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases									Free			8
Total Split (s)	19.7	74.8	116.8	14.2	69.3	0.0	42.0	42.0	0.0	19.0	19.0	19.0
Total Lost Time (s)	4.3	4.0	4.0	4.3	4.0	1.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	13.3	70.8	112.7	9.9	67.4		37.9	37.9	150.0	15.1	15.1	15.1
Actuated g/C Ratio	0.09	0.47	0.75	0.07	0.45		0.25	0.25	1.00	0.10	0.10	0.10
v/c Ratio	0.61	0.97	0.64	1.05	0.43		0.68	0.19	0.20	0.25	1.11	0.40
Control Delay	83.0	45.4	5.7	140.5	29.1		53.7	45.3	0.3	64.3	156.9	34.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	83.0	45.4	5.7	140.5	29.1		53.7	45.3	0.3	64.3	156.9	34.3
LOS	F	D	A	F	C		D	D	A	E	F	C
Approach Delay		29.0			50.9			39.7			108.9	
Approach LOS		C			D			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 118 (79%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 40.9		Intersection LOS: D	

Intersection Capacity Utilization 86.5% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	605	1021	680	184	245	467
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			250	150	0
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	3367	3471	3471	1553	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3367	3471	3471	1553	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				194		492
Link Speed (mph)		40	40		35	
Link Distance (ft)		1131	1488		528	
Travel Time (s)		19.3	25.4		10.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	637	1075	716	194	258	492
Turn Type	Prot	NA	NA	Perm	NA	custom
Protected Phases	1	6	2		8	8
Permitted Phases				2		8
Total Split (s)	30.0	64.0	34.0	34.0	26.0	26.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	19.2	45.8	22.4	22.4	13.2	13.2
Actuated g/C Ratio	0.28	0.68	0.33	0.33	0.20	0.20
v/c Ratio	0.66	0.46	0.62	0.30	0.38	0.70
Control Delay	26.4	6.0	22.7	4.8	27.0	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.4	6.0	22.7	4.8	27.0	8.9
LOS	C	A	C	A	C	A
Approach Delay		13.6	18.9		15.1	
Approach LOS		B	B		B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 67.4			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 15.3		Intersection LOS: B	
Intersection Capacity Utilization 64.0%		ICU Level of Service C	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave Ext

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	13	252	1307	470	180	972	350	248	443	158	416	664
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		1	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3370	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3370	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				267			368			140		
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			6363
Travel Time (s)			32.8			34.7			9.9			86.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	279	1376	495	189	1023	368	261	466	166	438	699
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2			4		
Total Split (s)	21.0	21.0	74.0	74.0	15.0	68.0	68.0	17.0	29.0	29.0	32.0	44.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		16.0	66.1	66.1	11.0	61.0	61.0	13.1	25.6	25.6	24.3	36.7
Actuated g/C Ratio		0.11	0.46	0.46	0.08	0.43	0.43	0.09	0.18	0.18	0.17	0.26
v/c Ratio		0.74	0.86	0.57	0.73	0.69	0.42	0.85	0.75	0.42	0.77	0.78
Control Delay		75.0	41.1	15.0	82.7	36.7	4.0	88.8	65.3	16.2	66.8	56.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		75.0	41.1	15.0	82.7	36.7	4.0	88.8	65.3	16.2	66.8	56.9
LOS		E	D	B	F	D	A	F	E	B	E	E
Approach Delay			39.5			34.6			63.1			53.7
Approach LOS			D			C			E			D

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 143			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 45.1		Intersection LOS: D	
Intersection Capacity Utilization 80.0%		ICU Level of Service D	

Lane Group	SBR
Lane Configurations	
Volume (vph)	292
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	1
Taper Length (ft)	
Satd. Flow (prot)	1553
Flt Permitted	
Satd. Flow (perm)	1553
Right Turn on Red	Yes
Satd. Flow (RTOR)	156
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	307
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Total Split (s)	44.0
Total Lost Time (s)	4.0
Act Effct Green (s)	36.7
Actuated g/C Ratio	0.26
v/c Ratio	0.60
Control Delay	27.7
Queue Delay	0.0
Total Delay	27.7
LOS	C
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

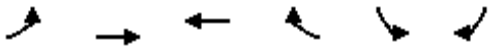
Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1611	0	0	968	126	587
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						193
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1696	0	0	1019	133	618
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	100.0	0.0	0.0	100.0	20.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	96.8			96.8	10.2	120.0
Actuated g/C Ratio	0.81			0.81	0.08	1.00
v/c Ratio	0.61			0.36	0.46	0.40
Control Delay	5.4			3.7	57.3	0.8
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	5.4			3.7	57.3	0.8
LOS	A			A	E	A
Approach Delay	5.4			3.7	10.8	
Approach LOS	A			A	B	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 92 (77%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 6.0	Intersection LOS: A

Intersection Capacity Utilization 62.0% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd

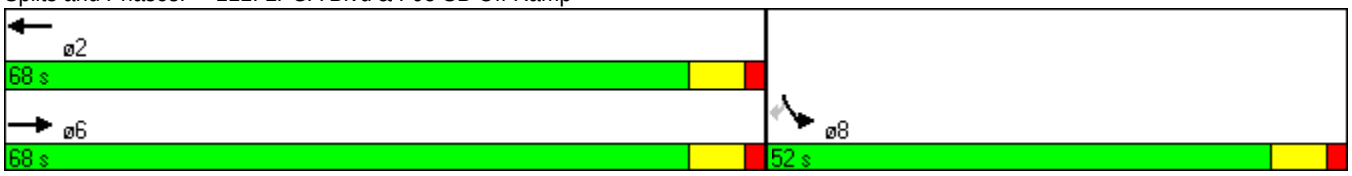


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	1005	640	0	900	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						192
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1058	674	0	947	313
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	68.0	68.0	0.0	52.0	52.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		65.4	65.4		40.6	40.6
Actuated g/C Ratio		0.54	0.54		0.34	0.34
v/c Ratio		0.56	0.36		0.83	0.48
Control Delay		12.5	19.0		43.3	13.3
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		12.5	19.0		43.3	13.3
LOS		B	B		D	B
Approach Delay		12.5	19.0		35.8	
Approach LOS		B	B		D	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.83	
Intersection Signal Delay: 23.8	Intersection LOS: C

Intersection Capacity Utilization 96.6% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

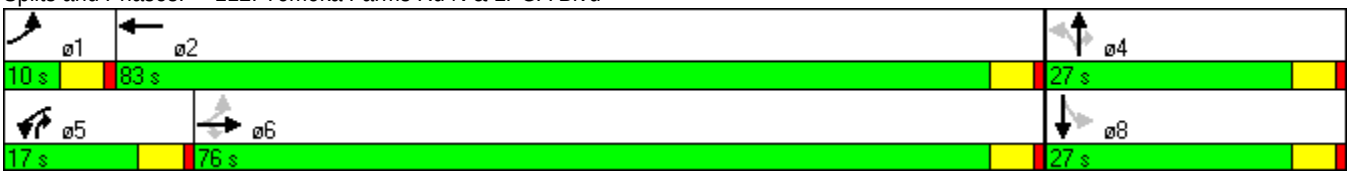


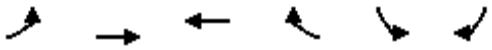
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	867	139	270	653	14	169	1	266	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	1553	3367	1821	0	1787	1881	1599	0	1787	0
Flt Permitted	0.367			0.950			0.757				0.757	
Satd. Flow (perm)	670	1827	1553	3367	1821	0	1424	1881	1599	0	1424	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			146		2				147			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	913	146	284	702	0	178	1	280	0	1	0
Turn Type	pm+pt	NA	Perm	Prot	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6		6				4		4	8		
Total Split (s)	10.0	76.0	76.0	17.0	83.0	0.0	27.0	27.0	17.0	27.0	27.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	4.0	3.0
Act Effct Green (s)	80.9	74.6	74.6	13.7	90.3		19.7	19.7	37.4		19.7	
Actuated g/C Ratio	0.67	0.62	0.62	0.11	0.75		0.16	0.16	0.31		0.16	
v/c Ratio	0.00	0.80	0.14	0.74	0.51		0.76	0.00	0.47		0.00	
Control Delay	4.0	25.0	1.9	68.1	9.1		68.2	39.0	17.3		39.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	4.0	25.0	1.9	68.1	9.1		68.2	39.0	17.3		39.0	
LOS	A	C	A	E	A		E	D	B		D	
Approach Delay		21.8			26.1			37.1			39.0	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 86 (72%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 26.3		Intersection LOS: C	

Intersection Capacity Utilization 78.8% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 112: Tomoka Farms Rd N & LPGA Blvd



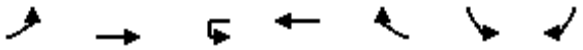


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	196	672	561	283	369	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	250			250	250	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	1736	1827	1827	1553	1787	1599
Flt Permitted	0.169				0.950	
Satd. Flow (perm)	309	1827	1827	1553	1787	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				298		225
Link Speed (mph)		45	45		35	
Link Distance (ft)		1684	3132		11505	
Travel Time (s)		25.5	47.5		224.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	206	707	591	298	388	225
Turn Type	pm+pt	NA	NA	Perm	NA	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8
Total Split (s)	22.0	74.0	52.0	52.0	46.0	46.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	52.7	52.7	36.3	36.3	27.1	27.1
Actuated g/C Ratio	0.60	0.60	0.41	0.41	0.31	0.31
v/c Ratio	0.54	0.65	0.79	0.37	0.71	0.35
Control Delay	14.7	16.1	32.9	3.9	36.6	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.7	16.1	32.9	3.9	36.6	5.3
LOS	B	B	C	A	D	A
Approach Delay		15.8	23.2		25.1	
Approach LOS		B	C		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 88.3			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 20.9		Intersection LOS: C	
Intersection Capacity Utilization 70.8%		ICU Level of Service C	

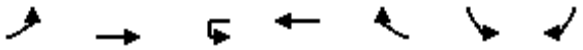
Analysis Period (min) 15

Splits and Phases: 113: LPGA Blvd & Tymber Creek Ext.



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	22	1869	0	1146	14	55	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3431	0	1766	0
Flt Permitted	0.950					0.960	
Satd. Flow (perm)	1719	3438	1810	3431	0	1766	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	23	1967	0	1221	0	69	0
Sign Control		Free		Free		Stop	

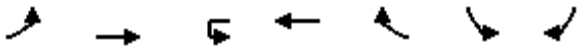
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.0%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	22	1869	0	1146	14	55	10
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	23	1967	0	1206	15	58	11
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1221		0			2244	611
vC1, stage 1 conf vol						1214	
vC2, stage 2 conf vol						1030	
vCu, unblocked vol	1221		0			2244	611
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	96		0			69	98
cM capacity (veh/h)	550		0			185	440

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	23	984	984	804	417	0	68
Volume Left	23	0	0	0	0	0	58
Volume Right	0	0	0	0	15	0	11
cSH	550	1700	1700	1700	1700	1700	203
Volume to Capacity	0.04	0.58	0.58	0.47	0.25	0.00	0.34
Queue Length 95th (ft)	3	0	0	0	0	0	28
Control Delay (s)	11.8	0.0	0.0	0.0	0.0	0.0	31.5
Lane LOS	B						D
Approach Delay (s)	0.1			0.0			31.5
Approach LOS							D

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	246	1702	0	1043	99	132	276
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3393	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3393	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	259	1792	0	1202	0	139	291
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 67.7%		ICU Level of Service C	
Analysis Period (min) 15			

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	246	1702	0	1043	99	132	276
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	259	1792	0	1098	104	139	291
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1202		0			2564	601
vC1, stage 1 conf vol						1150	
vC2, stage 2 conf vol						1414	
vCu, unblocked vol	1202		0			2564	601
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	54		0			0	35
cM capacity (veh/h)	560		0			93	446

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	259	896	896	732	470	0	429
Volume Left	259	0	0	0	0	0	139
Volume Right	0	0	0	0	104	0	291
cSH	560	1700	1700	1700	1700	1700	288
Volume to Capacity	0.46	0.53	0.53	0.43	0.28	0.00	1.49
Queue Length 95th (ft)	49	0	0	0	0	0	487
Control Delay (s)	16.8	0.0	0.0	0.0	0.0	0.0	131.6
Lane LOS	C						F
Approach Delay (s)	2.1			0.0			131.6
Approach LOS							F

Intersection Summary			
Average Delay	16.5		
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	56	1808	0	1112	89	139	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1746	0
Flt Permitted	0.950					0.966	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1746	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	59	1903	0	1171	94	205	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 67.8%		ICU Level of Service C	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	56	1808	0	1112	89	139	56
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	59	1903	0	1171	94	146	59
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1171		0			2240	585
vC1, stage 1 conf vol						1171	
vC2, stage 2 conf vol						1069	
vCu, unblocked vol	1171		0			2240	585
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	90		0			19	87
cM capacity (veh/h)	576		0			181	457

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	59	952	952	585	585	94	0	205
Volume Left	59	0	0	0	0	0	0	146
Volume Right	0	0	0	0	0	94	0	59
cSH	576	1700	1700	1700	1700	1700	1700	218
Volume to Capacity	0.10	0.56	0.56	0.34	0.34	0.06	0.00	0.94
Queue Length 95th (ft)	7	0	0	0	0	0	0	160
Control Delay (s)	12.0	0.0	0.0	0.0	0.0	0.0	0.0	92.4
Lane LOS	B							F
Approach Delay (s)	0.4			0.0				92.4
Approach LOS								F

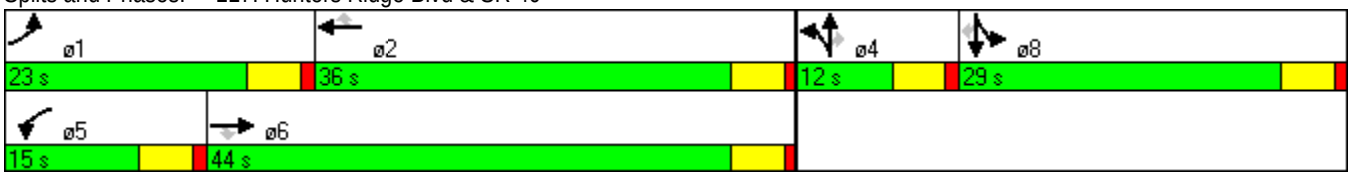
Intersection Summary			
Average Delay	5.7		
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		

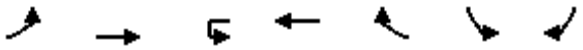
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	179	1613	162	292	888	458	99	116	192	748	190	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		300	300		300	0		300	300		0
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			171			482			167			188
Link Speed (mph)		60			60			35			35	
Link Distance (ft)		1961			4435			1868			1392	
Travel Time (s)		22.3			50.4			36.4			27.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	188	1698	171	307	935	482	104	122	202	787	200	188
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Total Split (s)	23.0	44.0	44.0	15.0	36.0	36.0	12.0	12.0	12.0	29.0	29.0	29.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	16.1	39.5	39.5	11.0	34.3	34.3	8.0	8.0	8.0	25.0	25.0	25.0
Actuated g/C Ratio	0.16	0.40	0.40	0.11	0.34	0.34	0.08	0.08	0.08	0.25	0.25	0.25
v/c Ratio	0.67	0.87	0.24	0.83	0.55	0.57	0.72	0.81	0.71	0.90	0.42	0.35
Control Delay	51.3	33.4	4.0	63.6	28.3	5.4	73.2	82.5	26.4	51.4	34.7	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.3	33.4	4.0	63.6	28.3	5.4	73.2	82.5	26.4	51.4	34.7	6.5
LOS	D	C	A	E	C	A	E	F	C	D	C	A
Approach Delay		32.6			28.2			53.8			41.3	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 99.5			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 34.8		Intersection LOS: C	
Intersection Capacity Utilization 80.3%		ICU Level of Service D	

Analysis Period (min) 15

Splits and Phases: 117: Hunters Ridge Blvd & SR 40





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	37	2636	9	1612	120	197	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	4940	1719	4940	1538	1787	1599
Flt Permitted	0.950		0.950			0.950	
Satd. Flow (perm)	1719	4940	1719	4940	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					126		46
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	39	2775	9	1697	126	207	46
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8	
Permitted Phases					2		8
Total Split (s)	15.0	45.0	12.0	42.0	42.0	33.0	33.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	8.2	46.4	7.0	41.2	41.2	13.3	13.3
Actuated g/C Ratio	0.12	0.66	0.10	0.59	0.59	0.19	0.19
v/c Ratio	0.19	0.85	0.05	0.58	0.13	0.61	0.13
Control Delay	32.4	14.8	32.6	12.2	2.8	34.4	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.4	14.8	32.6	12.2	2.8	34.4	9.1
LOS	C	B	C	B	A	C	A
Approach Delay		15.1		11.6		29.8	
Approach LOS		B		B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 69.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 14.5		Intersection LOS: B	
Intersection Capacity Utilization 68.5%		ICU Level of Service C	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	24	294	2412	104	55	125	1329	592	50	40	187	820
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		2		1		1		2	1		1	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	3347	4940	1538	0	1744	4940	2707	1787	1881	1599	4802
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	3347	4940	1538	0	1744	4940	2707	1787	1881	1599	4802
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				109				623			74	
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	334	2539	109	0	190	1399	623	53	42	197	863
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Prot	Split	NA	Perm	Split
Protected Phases	1	1	6		5	5	2	2	8	8		4
Permitted Phases				6							8	
Total Split (s)	22.0	22.0	64.0	64.0	17.0	17.0	59.0	59.0	14.0	14.0	14.0	25.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		17.2	60.0	60.0		13.0	55.8	55.8	10.0	10.0	10.0	21.0
Actuated g/C Ratio		0.14	0.50	0.50		0.11	0.46	0.46	0.08	0.08	0.08	0.18
v/c Ratio		0.70	1.03	0.13		1.01	0.61	0.39	0.36	0.27	0.98	1.03
Control Delay		57.3	55.8	3.3		120.5	25.5	2.2	59.2	56.3	93.3	86.8
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		57.3	55.8	3.3		120.5	25.5	2.2	59.2	56.3	93.3	86.8
LOS		E	E	A		F	C	A	E	E	F	F
Approach Delay			54.1				27.1			81.8		
Approach LOS			D				C			F		

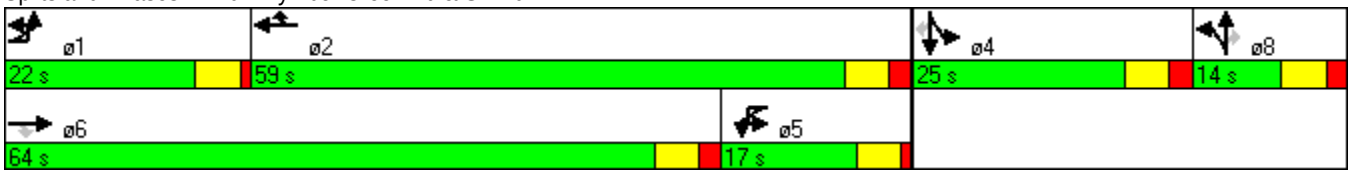
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay: 49.1		Intersection LOS: D	
Intersection Capacity Utilization 97.1%		ICU Level of Service F	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	213	305
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1792	1524
Flt Permitted		
Satd. Flow (perm)	1792	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		273
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	224	321
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	25.0	25.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	21.0	21.0
Actuated g/C Ratio	0.18	0.18
v/c Ratio	0.71	0.65
Control Delay	60.4	15.8
Queue Delay	0.0	0.0
Total Delay	60.4	15.8
LOS	E	B
Approach Delay	66.4	
Approach LOS	E	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	47	3352	28	9	69	1884	16	143	0	45	150	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		250		300		325	0		250	0	
Storage Lanes	1		1		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	4940	1538	0	1728	4940	1538	1787	1599	0	1787	1599
Flt Permitted	0.950				0.950			0.740			0.726	
Satd. Flow (perm)	1719	4940	1538	0	1728	4940	1538	1392	1599	0	1366	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			27				17		58			95
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	3528	29	0	82	1983	17	151	47	0	158	26
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases			6				2	4			8	
Total Split (s)	14.7	115.0	115.0	13.0	13.0	113.3	113.3	22.0	22.0	0.0	22.0	22.0
Total Lost Time (s)	4.7	5.0	5.0	5.7	4.7	5.0	5.0	4.0	4.0	3.0	5.0	4.0
Act Effct Green (s)	9.2	110.0	110.0		8.3	111.4	111.4	18.0	18.0		17.0	18.0
Actuated g/C Ratio	0.06	0.73	0.73		0.06	0.74	0.74	0.12	0.12		0.11	0.12
v/c Ratio	0.46	0.97	0.03		0.85	0.54	0.01	0.90	0.19		1.02	0.09
Control Delay	82.1	28.9	2.0		114.9	8.0	3.9	112.4	11.6		141.1	0.7
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	82.1	28.9	2.0		114.9	8.0	3.9	112.4	11.6		141.1	0.7
LOS	F	C	A		F	A	A	F	B		F	A
Approach Delay		29.4				12.2			88.5			121.3
Approach LOS		C				B			F			F

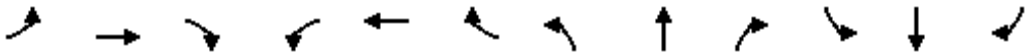
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 104 (69%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 28.2		Intersection LOS: C	

Lane Group	SBR
Lane Configurations	
Volume (vph)	25
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 87.3% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

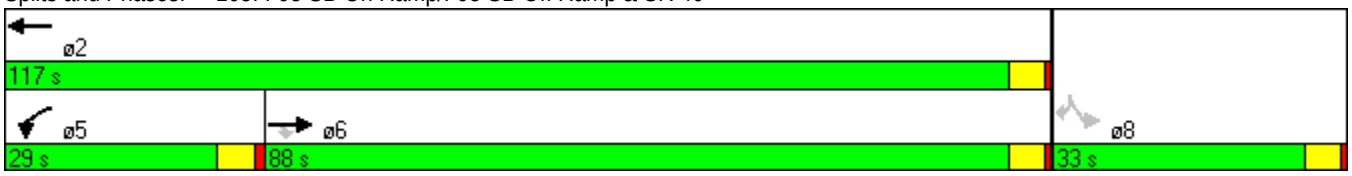


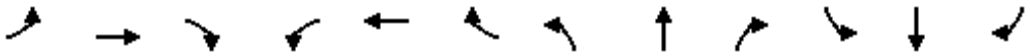
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	2807	820	383	2025	0	0	0	0	431	0	203
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			603									23
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	2955	863	403	2132	0	0	0	0	454	0	214
Turn Type		NA	Perm	Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases			6							8		8
Total Split (s)	0.0	88.0	88.0	29.0	117.0	0.0	0.0	0.0	0.0	33.0	0.0	33.0
Total Lost Time (s)	4.0	4.0	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		87.6	87.6	23.4	115.3					26.7		26.7
Actuated g/C Ratio		0.58	0.58	0.16	0.77					0.18		0.18
v/c Ratio		0.81	0.75	0.78	0.56					0.76		0.73
Control Delay		16.6	3.7	70.4	11.4					67.6		66.7
Queue Delay		0.0	0.0	0.0	0.2					0.0		0.0
Total Delay		16.6	3.7	70.4	11.6					67.6		66.7
LOS		B	A	E	B					E		E
Approach Delay		13.7			20.9							
Approach LOS		B			C							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 132 (88%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 21.4		Intersection LOS: C	

Intersection Capacity Utilization 86.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



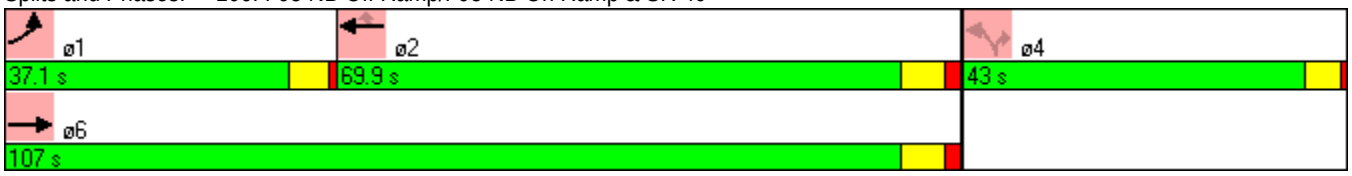


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	229	3009	0	0	1963	298	445	0	604	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						314			3			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	241	3167	0	0	2066	314	468	0	636	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	37.1	107.0	0.0	0.0	69.9	69.9	43.0	0.0	43.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	27.4	102.5			70.9	70.9	38.5		38.5			
Actuated g/C Ratio	0.18	0.68			0.47	0.47	0.26		0.26			
v/c Ratio	0.77	0.94			0.60	0.35	0.55		0.91			
Control Delay	85.2	14.1			27.6	5.6	50.9		72.3			
Queue Delay	0.0	6.3			0.0	0.0	0.0		0.0			
Total Delay	85.2	20.4			27.6	5.6	50.9		72.3			
LOS	F	C			C	A	D		E			
Approach Delay		25.0			24.7							
Approach LOS		C			C							

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 8 (5%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 31.0	Intersection LOS: C

Intersection Capacity Utilization 86.8% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40

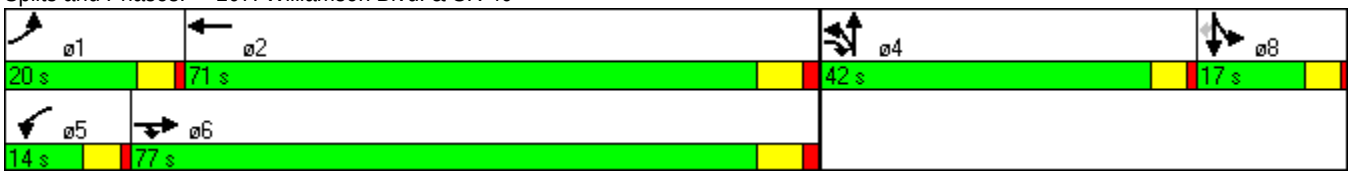


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	90	1757	1835	225	991	40	1193	83	300	80	194	77
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4910	0	4894	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4910	0	4894	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			60		5				303			50
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	1775	1854	227	1041	0	1205	84	303	81	196	78
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases									Free			8
Total Split (s)	20.0	77.0	119.0	14.0	71.0	0.0	42.0	42.0	0.0	17.0	17.0	17.0
Total Lost Time (s)	4.3	4.0	4.0	4.3	4.0	1.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	13.4	73.0	115.0	9.7	69.3		38.0	38.0	150.0	13.0	13.0	13.0
Actuated g/C Ratio	0.09	0.49	0.77	0.06	0.46		0.25	0.25	1.00	0.09	0.09	0.09
v/c Ratio	0.59	1.06	0.89	1.05	0.46		0.97	0.18	0.20	0.28	1.24	0.43
Control Delay	72.6	68.5	7.6	140.3	28.5		74.7	45.2	0.3	66.8	203.8	35.4
Queue Delay	0.0	3.1	0.5	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.6	71.6	8.1	140.3	28.5		74.7	45.2	0.3	66.8	203.8	35.4
LOS	E	E	A	F	C		E	D	A	E	F	D
Approach Delay		40.0			48.5			59.0			135.6	
Approach LOS		D			D			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 118 (79%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.24			
Intersection Signal Delay: 50.8		Intersection LOS: D	

Intersection Capacity Utilization 101.5% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	810	1296	6	857	256	310	655
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		250		250	150	0
Storage Lanes	2		0		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	3367	3471	0	3472	1553	3433	1583
Flt Permitted	0.950			0.944		0.950	
Satd. Flow (perm)	3367	3471	0	3278	1553	3433	1583
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					269		520
Link Speed (mph)		40		40		35	
Link Distance (ft)		1131		1488		528	
Travel Time (s)		19.3		25.4		10.3	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	0%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	853	1364	0	908	269	326	689
Turn Type	Prot	NA	Perm	NA	Perm	NA	custom
Protected Phases	1	6		2		8	8
Permitted Phases			2		2		8
Total Split (s)	30.0	64.0	34.0	34.0	34.0	26.0	26.0
Total Lost Time (s)	4.0	4.0	5.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	24.6	57.0		28.3	28.3	18.2	18.2
Actuated g/C Ratio	0.29	0.68		0.34	0.34	0.22	0.22
v/c Ratio	0.86	0.57		0.82	0.38	0.43	0.92
Control Delay	39.0	8.5		33.3	4.7	30.4	27.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	39.0	8.5		33.3	4.7	30.4	27.2
LOS	D	A		C	A	C	C
Approach Delay		20.3		26.8		28.2	
Approach LOS		C		C		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 83.4			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 23.8		Intersection LOS: C	
Intersection Capacity Utilization 78.5%		ICU Level of Service D	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave Ext

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	16	293	1611	475	254	1215	525	270	583	223	632	875
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		1	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3370	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3370	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				249			445			123		
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			6363
Travel Time (s)			32.8			34.7			9.9			86.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	325	1696	500	267	1279	553	284	614	235	665	921
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2			4		
Total Split (s)	21.0	21.0	74.0	74.0	15.0	68.0	68.0	17.0	29.0	29.0	32.0	44.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		16.9	70.0	70.0	11.0	64.1	64.1	13.0	25.0	25.0	28.0	40.0
Actuated g/C Ratio		0.11	0.47	0.47	0.07	0.43	0.43	0.09	0.17	0.17	0.19	0.27
v/c Ratio		0.86	1.05	0.58	1.08	0.86	0.60	0.97	1.06	0.65	1.06	0.99
Control Delay		86.5	74.6	16.7	143.1	46.2	9.2	113.3	112.7	36.6	109.1	82.6
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		86.5	74.6	16.7	143.1	46.2	9.2	113.3	112.7	36.6	109.1	82.6
LOS		F	E	B	F	D	A	F	F	D	F	F
Approach Delay			64.7			48.8			97.1			83.6
Approach LOS			E			D			F			F

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 69.9		Intersection LOS: E	
Intersection Capacity Utilization 99.3%		ICU Level of Service F	

Lane Group	SBR
Lane Configurations	
Volume (vph)	340
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	1
Taper Length (ft)	
Satd. Flow (prot)	1553
Flt Permitted	
Satd. Flow (perm)	1553
Right Turn on Red	Yes
Satd. Flow (RTOR)	133
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	358
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Total Split (s)	44.0
Total Lost Time (s)	4.0
Act Effct Green (s)	40.0
Actuated g/C Ratio	0.27
v/c Ratio	0.70
Control Delay	38.7
Queue Delay	0.0
Total Delay	38.7
LOS	D
Approach Delay	
Approach LOS	

Intersection Summary

Analysis Period (min) 15

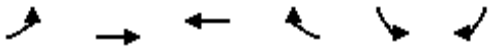
Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1818	0	0	1204	197	674
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						177
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1914	0	0	1267	207	709
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	100.0	0.0	0.0	100.0	20.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	94.4			94.4	12.6	120.0
Actuated g/C Ratio	0.79			0.79	0.10	1.00
v/c Ratio	0.70			0.46	0.58	0.46
Control Delay	5.2			5.2	57.7	1.0
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	5.2			5.2	57.7	1.0
LOS	A			A	E	A
Approach Delay	5.2			5.2	13.8	
Approach LOS	A			A	B	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.70	
Intersection Signal Delay: 7.1	Intersection LOS: A

Intersection Capacity Utilization 67.8% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd

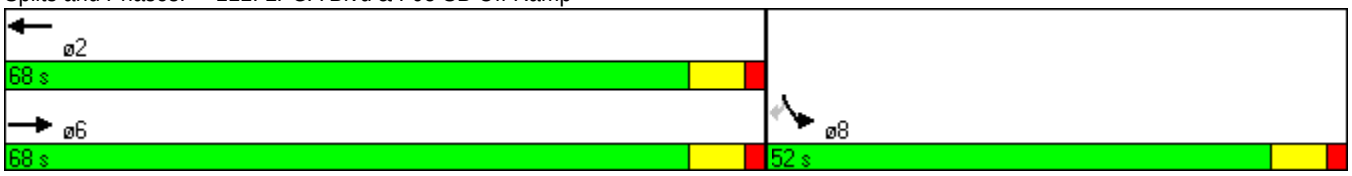


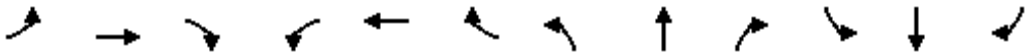
Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	1281	870	0	915	347
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						100
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1348	916	0	963	365
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	68.0	68.0	0.0	52.0	52.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		65.4	65.4		40.6	40.6
Actuated g/C Ratio		0.54	0.54		0.34	0.34
v/c Ratio		0.71	0.48		0.85	0.62
Control Delay		16.4	17.1		44.3	27.9
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		16.4	17.1		44.3	27.9
LOS		B	B		D	C
Approach Delay		16.4	17.1		39.8	
Approach LOS		B	B		D	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 25.2	Intersection LOS: C

Intersection Capacity Utilization 109.4% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp



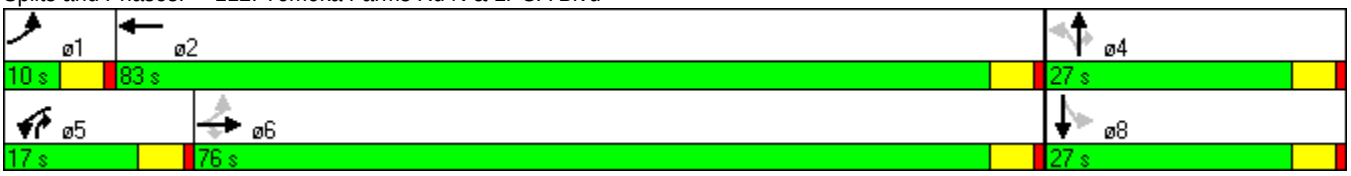


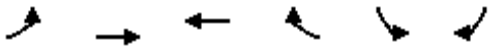
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	1090	263	369	833	15	278	1	363	1	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	1553	3367	1821	0	1787	1881	1599	0	1787	0
Flt Permitted	0.234			0.950			0.757				0.757	
Satd. Flow (perm)	427	1827	1553	3367	1821	0	1424	1881	1599	0	1424	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			277		2				86			
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	1147	277	388	893	0	293	1	382	0	1	0
Turn Type	pm+pt	NA	Perm	Prot	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6		6				4		4	8		
Total Split (s)	10.0	76.0	76.0	17.0	83.0	0.0	27.0	27.0	17.0	27.0	27.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	4.0	3.0
Act Effct Green (s)	78.0	72.0	72.0	13.0	87.0		23.0	23.0	40.0		23.0	
Actuated g/C Ratio	0.65	0.60	0.60	0.11	0.72		0.19	0.19	0.33		0.19	
v/c Ratio	0.00	1.05	0.27	1.06	0.68		1.07	0.00	0.65		0.00	
Control Delay	5.0	65.0	1.9	113.7	15.7		121.5	39.0	31.9		39.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	5.0	65.0	1.9	113.7	15.7		121.5	39.0	31.9		39.0	
LOS	A	E	A	F	B		F	D	C		D	
Approach Delay		52.7			45.4			70.7			39.0	
Approach LOS		D			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 86 (72%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 53.5		Intersection LOS: D	

Intersection Capacity Utilization 96.5% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 112: Tomoka Farms Rd N & LPGA Blvd



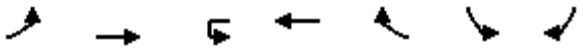


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	309	819	684	446	584	337
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	250			250	250	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	1736	1827	1827	1553	1787	1599
Flt Permitted	0.077				0.950	
Satd. Flow (perm)	141	1827	1827	1553	1787	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				440		293
Link Speed (mph)		45	45		35	
Link Distance (ft)		1684	3132		11505	
Travel Time (s)		25.5	47.5		224.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	325	862	720	469	615	355
Turn Type	pm+pt	NA	NA	Perm	NA	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8
Total Split (s)	22.0	74.0	52.0	52.0	46.0	46.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	70.0	70.0	48.0	48.0	42.0	42.0
Actuated g/C Ratio	0.58	0.58	0.40	0.40	0.35	0.35
v/c Ratio	1.01	0.81	0.98	0.53	0.98	0.47
Control Delay	87.7	27.3	66.1	5.4	71.5	8.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.7	27.3	66.1	5.4	71.5	8.3
LOS	F	C	E	A	E	A
Approach Delay		43.8	42.2		48.4	
Approach LOS		D	D		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay: 44.5		Intersection LOS: D	
Intersection Capacity Utilization 95.5%		ICU Level of Service F	

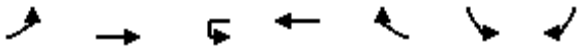
Analysis Period (min) 15

Splits and Phases: 113: LPGA Blvd & Tymber Creek Ext.



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	10	383	0	607	35	25	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3411	0	1766	0
Flt Permitted	0.950					0.960	
Satd. Flow (perm)	1719	3438	1810	3411	0	1766	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	11	403	0	676	0	31	0
Sign Control		Free		Free		Stop	

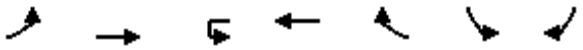
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 27.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	10	383	0	607	35	25	5
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	403	0	639	37	26	5
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	676		0			880	338
vC1, stage 1 conf vol						657	
vC2, stage 2 conf vol						223	
vCu, unblocked vol	676		0			880	338
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	99		0			94	99
cM capacity (veh/h)	892		0			450	661

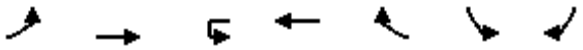
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	11	202	202	426	250	0	32
Volume Left	11	0	0	0	0	0	26
Volume Right	0	0	0	0	37	0	5
cSH	892	1700	1700	1700	1700	1700	475
Volume to Capacity	0.01	0.12	0.12	0.25	0.15	0.00	0.07
Queue Length 95th (ft)	1	0	0	0	0	0	4
Control Delay (s)	9.1	0.0	0.0	0.0	0.0	0.0	13.1
Lane LOS	A						B
Approach Delay (s)	0.2			0.0			13.1
Approach LOS							B

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	27.9%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	41	506	0	826	45	27	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3411	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3411	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	43	533	0	916	0	28	43
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.9%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	41	506	0	826	45	27	41
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	43	533	0	869	47	28	43
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	917		0			1246	458
vC1, stage 1 conf vol						893	
vC2, stage 2 conf vol						353	
vCu, unblocked vol	917		0			1246	458
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	94		0			91	92
cM capacity (veh/h)	721		0			332	552

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	43	266	266	580	337	0	72
Volume Left	43	0	0	0	0	0	28
Volume Right	0	0	0	0	47	0	43
cSH	721	1700	1700	1700	1700	1700	835
Volume to Capacity	0.06	0.16	0.16	0.34	0.20	0.00	0.09
Queue Length 95th (ft)	4	0	0	0	0	0	6
Control Delay (s)	10.3	0.0	0.0	0.0	0.0	0.0	14.0
Lane LOS	B						B
Approach Delay (s)	0.8			0.0			14.0
Approach LOS							B

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		

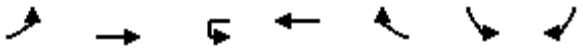
Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	34	404	0	658	106	65	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1735	0
Flt Permitted	0.950					0.968	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1735	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	36	425	0	693	112	104	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	34	404	0	658	106	65	34
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	36	425	0	693	112	68	36
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	693		0			977	346
vC1, stage 1 conf vol						693	
vC2, stage 2 conf vol						284	
vCu, unblocked vol	693		0			977	346
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	96		0			84	95
cM capacity (veh/h)	879		0			422	653

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	36	213	213	346	346	112	0	104
Volume Left	36	0	0	0	0	0	0	68
Volume Right	0	0	0	0	0	112	0	36
cSH	879	1700	1700	1700	1700	1700	1700	480
Volume to Capacity	0.04	0.13	0.13	0.20	0.20	0.07	0.00	0.22
Queue Length 95th (ft)	3	0	0	0	0	0	0	16
Control Delay (s)	9.3	0.0	0.0	0.0	0.0	0.0	0.0	14.6
Lane LOS	A							B
Approach Delay (s)	0.7			0.0				14.6
Approach LOS								B

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	37.2%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	17	531	0	859	162	89	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	4940	1810	4940	1538	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	4940	1810	4940	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					171		16
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	18	559	0	904	171	94	16
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8	
Permitted Phases					2		8
Total Split (s)	21.0	85.0	16.0	80.0	80.0	39.0	39.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	8.1	119.2		113.8	113.8	12.8	12.8
Actuated g/C Ratio	0.06	0.85		0.81	0.81	0.09	0.09
v/c Ratio	0.18	0.13		0.23	0.13	0.58	0.10
Control Delay	66.4	2.0		1.5	0.3	74.2	23.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	66.4	2.0		1.5	0.3	74.2	23.8
LOS	E	A		A	A	E	C
Approach Delay		4.0		1.3		66.9	
Approach LOS		A		A		E	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 46 (33%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 6.3	Intersection LOS: A

Intersection Capacity Utilization 29.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	4	47	554	21	43	72	867	675	36	34	20	530
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		2		1		1		2	1		1	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	3342	4940	1538	0	1750	4940	2707	1787	1881	1599	4802
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	3342	4940	1538	0	1750	4940	2707	1787	1881	1599	4802
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				22				711			21	
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	53	583	22	0	121	913	711	38	36	21	558
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Prot	Split	NA	Perm	Split
Protected Phases	1	1	6		5	5	2	2	8	8		4
Permitted Phases				6							8	
Total Split (s)	14.0	14.0	49.0	49.0	32.0	32.0	67.0	67.0	18.0	18.0	18.0	41.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		9.6	60.3	60.3		28.1	81.2	81.2	11.7	11.7	11.7	26.7
Actuated g/C Ratio		0.07	0.43	0.43		0.20	0.58	0.58	0.08	0.08	0.08	0.19
v/c Ratio		0.23	0.27	0.03		0.34	0.32	0.38	0.26	0.23	0.14	0.61
Control Delay		59.7	26.2	9.6		37.8	11.9	1.4	62.8	61.9	25.4	54.4
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		59.7	26.2	9.6		37.8	11.9	1.4	62.8	61.9	25.4	54.4
LOS		E	C	A		D	B	A	E	E	C	D
Approach Delay			28.4				9.4			54.2		
Approach LOS			C				A			D		

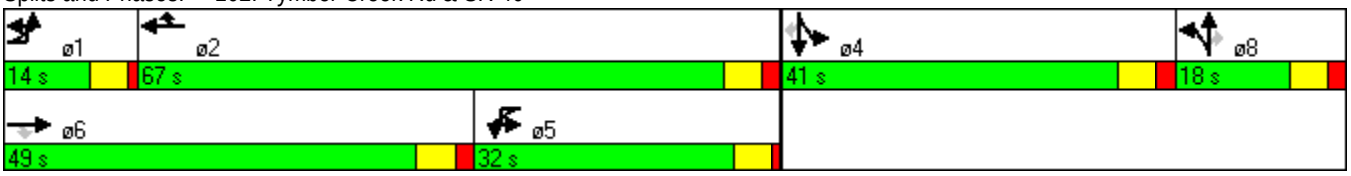
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 56 (40%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 23.1		Intersection LOS: C	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	20	45
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1792	1524
Flt Permitted		
Satd. Flow (perm)	1792	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		47
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	21	47
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	41.0	41.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	26.7	26.7
Actuated g/C Ratio	0.19	0.19
v/c Ratio	0.06	0.14
Control Delay	44.6	12.4
Queue Delay	0.0	0.0
Total Delay	44.6	12.4
LOS	D	B
Approach Delay	51.0	
Approach LOS	D	

Intersection Summary

Intersection Capacity Utilization 47.7%
ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	10	1045	4	13	26	1495	6	148	3	30	57	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		250		300		325	0		250	0	
Storage Lanes	1		1		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	4940	1538	0	1747	4940	1538	1787	1623	0	1787	1599
Flt Permitted	0.950				0.950			0.746			0.734	
Satd. Flow (perm)	1719	4940	1538	0	1747	4940	1538	1403	1623	0	1381	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			4				6		32			124
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	1100	4	0	41	1574	6	156	35	0	60	17
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases			6				2	4			8	
Total Split (s)	13.0	80.0	80.0	19.0	19.0	86.0	86.0	41.0	41.0	0.0	41.0	41.0
Total Lost Time (s)	4.7	5.0	5.0	5.7	4.7	5.0	5.0	4.0	4.0	3.0	5.0	4.0
Act Effct Green (s)	7.5	96.1	96.1		9.7	102.9	102.9	22.8	22.8		21.8	22.8
Actuated g/C Ratio	0.05	0.69	0.69		0.07	0.74	0.74	0.16	0.16		0.16	0.16
v/c Ratio	0.12	0.32	0.00		0.34	0.43	0.01	0.68	0.12		0.28	0.05
Control Delay	84.8	3.2	0.2		75.5	5.6	4.0	69.6	16.8		53.4	0.2
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	84.8	3.2	0.2		75.5	5.6	4.0	69.6	16.8		53.4	0.2
LOS	F	A	A		E	A	A	E	B		D	A
Approach Delay		4.0				7.4			59.9			41.7
Approach LOS		A				A			E			D

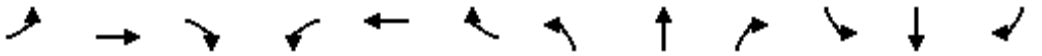
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 46 (33%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 10.4		Intersection LOS: B	

Lane Group	SBR
Lane Configurations	
Volume (vph)	16
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 54.8% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

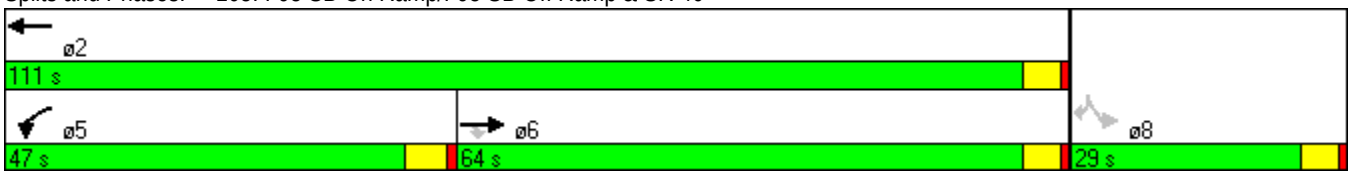


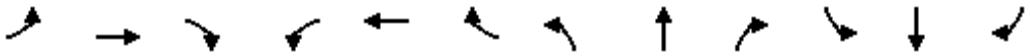
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	879	410	502	1724	0	0	0	0	237	0	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			432									45
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	925	432	528	1815	0	0	0	0	249	0	121
Turn Type		NA	Perm	Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases			6							8		8
Total Split (s)	0.0	64.0	64.0	47.0	111.0	0.0	0.0	0.0	0.0	29.0	0.0	29.0
Total Lost Time (s)	4.0	4.0	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		80.3	80.3	29.7	114.3					17.7		17.7
Actuated g/C Ratio		0.57	0.57	0.21	0.82					0.13		0.13
v/c Ratio		0.26	0.41	0.74	0.45					0.59		0.52
Control Delay		8.0	2.5	48.2	1.7					63.4		43.1
Queue Delay		0.0	0.0	0.0	0.1					0.0		0.0
Total Delay		8.0	2.5	48.2	1.8					63.4		43.1
LOS		A	A	D	A					E		D
Approach Delay		6.2			12.3							
Approach LOS		A			B							

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 74 (53%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.74	
Intersection Signal Delay: 14.3	Intersection LOS: B

Intersection Capacity Utilization 56.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



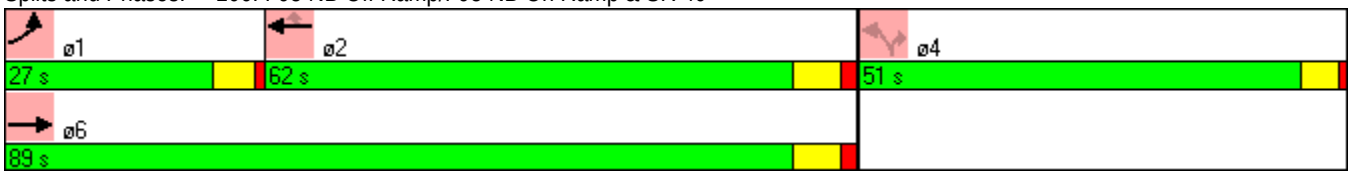


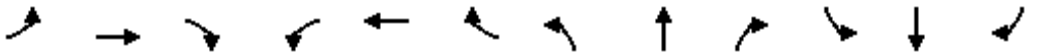
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	100	1016	0	0	1651	346	575	0	406	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						364			181			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	105	1069	0	0	1738	364	605	0	427	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	27.0	89.0	0.0	0.0	62.0	62.0	51.0	0.0	51.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	15.8	95.9			75.8	75.8	35.1		35.1			
Actuated g/C Ratio	0.11	0.68			0.54	0.54	0.25		0.25			
v/c Ratio	0.54	0.32			0.44	0.36	0.72		0.52			
Control Delay	56.4	10.2			10.8	4.5	52.9		26.9			
Queue Delay	0.0	0.3			0.0	0.0	0.0		0.0			
Total Delay	56.4	10.5			10.8	4.5	52.9		26.9			
LOS	E	B			B	A	D		C			
Approach Delay		14.6			9.7							
Approach LOS		B			A							

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 8 (6%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 18.8	Intersection LOS: B

Intersection Capacity Utilization 56.7% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



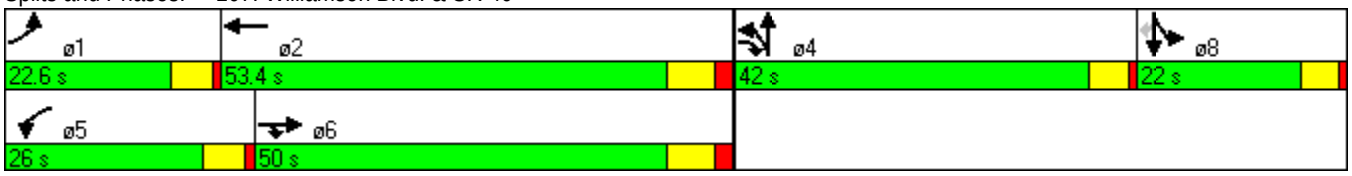


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	115	822	438	329	1152	106	691	150	299	166	123	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4876	0	4894	1827	1553	3335	1810	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4876	0	4894	1827	1553	3335	1810	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			308		12				315			162
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		5%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	121	865	461	346	1325	0	727	158	315	175	129	162
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases									Free			8
Total Split (s)	22.6	50.0	92.0	26.0	53.4	0.0	42.0	42.0	0.0	22.0	22.0	22.0
Total Lost Time (s)	4.3	4.0	5.0	4.3	4.0	1.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	15.4	56.1	91.3	19.7	60.4		32.3	32.3	140.0	15.6	15.6	15.6
Actuated g/C Ratio	0.11	0.40	0.65	0.14	0.43		0.23	0.23	1.00	0.11	0.11	0.11
v/c Ratio	0.64	0.63	0.25	0.74	0.63		0.64	0.38	0.20	0.47	0.64	0.51
Control Delay	72.1	28.6	7.0	67.4	34.3		45.6	41.2	0.3	62.0	73.5	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.1	28.6	7.0	67.4	34.3		45.6	41.2	0.3	62.0	73.5	13.9
LOS	E	C	A	E	C		D	D	A	E	E	B
Approach Delay		25.4			41.1			33.1			48.4	
Approach LOS		C			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 108 (77%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 35.1		Intersection LOS: D	

Intersection Capacity Utilization 65.5% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	266	497	745	167	177	405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			250	150	0
Storage Lanes	2			1	2	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	3367	3471	3471	1553	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3367	3471	3471	1553	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				176		380
Link Speed (mph)		40	40		35	
Link Distance (ft)		1131	1488		528	
Travel Time (s)		19.3	25.4		10.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	280	523	784	176	186	426
Turn Type	Prot	NA	NA	Perm	NA	custom
Protected Phases	1	6	2		8	8
Permitted Phases				2		8
Total Split (s)	28.0	87.0	59.0	59.0	53.0	53.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	17.9	115.3	93.4	93.4	16.7	16.7
Actuated g/C Ratio	0.13	0.82	0.67	0.67	0.12	0.12
v/c Ratio	0.65	0.18	0.34	0.16	0.45	0.81
Control Delay	53.8	3.3	11.8	2.1	59.6	21.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.8	3.3	11.8	2.1	59.6	21.4
LOS	D	A	B	A	E	C
Approach Delay		20.9	10.0		33.0	
Approach LOS		C	A		C	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 100 (71%), Referenced to phase 2:NWTU and 6:SET, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.81	
Intersection Signal Delay: 19.6	Intersection LOS: B

Intersection Capacity Utilization 52.3% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave Ext

Lane Group	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	24	173	758	238	132	935	144	313	454	162	115	302
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%			0%			0%			0%
Storage Length (ft)		325		425	325		350	135		250	250	
Storage Lanes		2		1	2		1	2		1	2	
Taper Length (ft)		150			150			25			25	
Satd. Flow (prot)	0	3375	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Flt Permitted		0.950			0.950			0.950			0.950	
Satd. Flow (perm)	0	3375	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471
Right Turn on Red				Yes			Yes			Yes		
Satd. Flow (RTOR)				251			152			171		
Link Speed (mph)			45			45			40			50
Link Distance (ft)			2165			2290			581			6363
Travel Time (s)			32.8			34.7			9.9			86.8
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%			0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	207	798	251	139	984	152	329	478	171	121	318
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2			4		
Total Split (s)	16.0	16.0	54.0	54.0	13.0	51.0	51.0	22.0	31.0	31.0	12.0	21.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		11.5	52.3	52.3	9.0	49.8	49.8	16.2	24.8	24.8	7.9	16.6
Actuated g/C Ratio		0.10	0.48	0.48	0.08	0.45	0.45	0.15	0.23	0.23	0.07	0.15
v/c Ratio		0.59	0.48	0.29	0.51	0.63	0.19	0.66	0.61	0.35	0.50	0.61
Control Delay		54.2	21.4	3.1	55.2	25.9	3.7	51.1	41.6	7.3	56.6	49.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		54.2	21.4	3.1	55.2	25.9	3.7	51.1	41.6	7.3	56.6	49.0
LOS		D	C	A	E	C	A	D	D	A	E	D
Approach Delay			23.2			26.4			38.8			40.8
Approach LOS			C			C			D			D

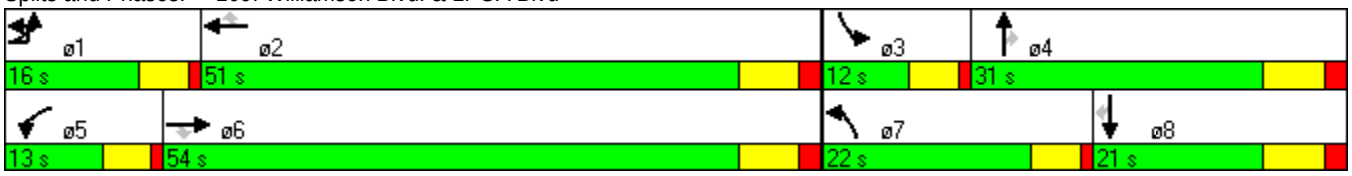
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 30.5		Intersection LOS: C	

Lane Group	SBR
Lane Configurations	
Volume (vph)	173
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	250
Storage Lanes	1
Taper Length (ft)	
Satd. Flow (prot)	1553
Flt Permitted	
Satd. Flow (perm)	1553
Right Turn on Red	Yes
Satd. Flow (RTOR)	150
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	4%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	182
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Total Split (s)	21.0
Total Lost Time (s)	4.0
Act Effct Green (s)	16.6
Actuated g/C Ratio	0.15
v/c Ratio	0.50
Control Delay	15.9
Queue Delay	0.0
Total Delay	15.9
LOS	B
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 64.4% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

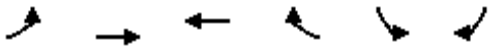


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	709	0	0	870	138	407
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						428
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	746	0	0	916	145	428
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	108.0	0.0	0.0	108.0	32.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	115.6			115.6	11.4	140.0
Actuated g/C Ratio	0.83			0.83	0.08	1.00
v/c Ratio	0.26			0.32	0.53	0.28
Control Delay	1.8			3.3	68.4	0.4
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	1.8			3.3	68.4	0.4
LOS	A			A	E	A
Approach Delay	1.8			3.3	17.6	
Approach LOS	A			A	B	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 54 (39%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 6.5	Intersection LOS: A

Intersection Capacity Utilization 41.5% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd

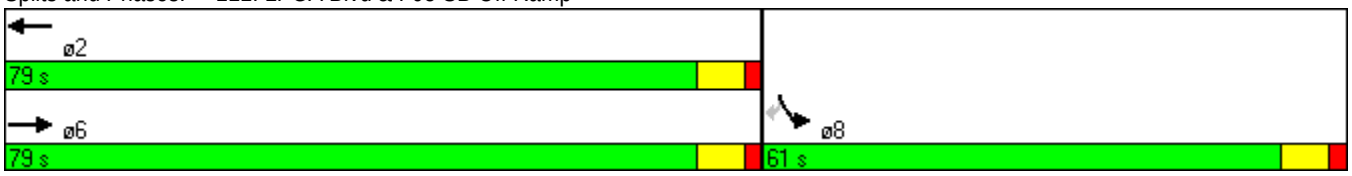


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	629	578	0	275	222
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						233
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	662	608	0	289	234
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	79.0	79.0	0.0	61.0	61.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		108.3	108.3		17.7	17.7
Actuated g/C Ratio		0.77	0.77		0.13	0.13
v/c Ratio		0.25	0.23		0.68	0.58
Control Delay		4.2	4.2		66.3	12.6
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		4.2	4.2		66.3	12.6
LOS		A	A		E	B
Approach Delay		4.2	4.2		42.3	
Approach LOS		A	A		D	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 68 (49%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 15.3	Intersection LOS: B

Intersection Capacity Utilization 41.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp



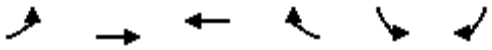
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	456	95	189	589	22	112	2	175	40	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	1		1	1		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	1553	1736	1818	0	1787	1881	1599	0	1777	0
Flt Permitted	0.950			0.950			0.950				0.958	
Satd. Flow (perm)	1736	1827	1553	1736	1818	0	1787	1881	1599	0	1777	0
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	480	100	199	643	0	118	2	184	0	48	0
Sign Control		Free			Free			Stop			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 54.9%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	1	456	95	189	589	22	112	2	175	40	1	5
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
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
Hourly flow rate (vph)	1	480	100	199	620	23	118	2	184	42	1	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1057							
pX, platoon unblocked	0.93						0.93	0.93		0.93	0.93	0.93
vC, conflicting volume	643			580			1506	1523	480	1697	1612	632
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	582			580			1506	1525	480	1711	1619	570
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			80			0	98	69	0	99	99
cM capacity (veh/h)	917			984			77	88	588	38	77	488

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1
Volume Total	1	480	100	199	643	118	2	184	48
Volume Left	1	0	0	199	0	118	0	0	42
Volume Right	0	0	100	0	23	0	0	184	5
cSH	917	1700	1700	984	1700	77	88	588	43
Volume to Capacity	0.00	0.28	0.06	0.20	0.38	1.53	0.02	0.31	1.13
Queue Length 95th (ft)	0	0	0	15	0	193	1	27	92
Control Delay (s)	8.9	0.0	0.0	9.6	0.0	385.9	46.8	13.9	325.2
Lane LOS	A			A		F	E	B	F
Approach Delay (s)	0.0			2.3		158.3			325.2
Approach LOS						F			F

Intersection Summary				
Average Delay	37.1			
Intersection Capacity Utilization	54.9%	ICU Level of Service		A
Analysis Period (min)	15			

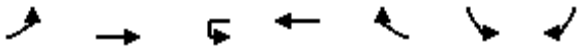


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	78	450	540	162	120	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	250			250	250	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	1736	1827	1827	1553	1787	1599
Flt Permitted	0.382				0.950	
Satd. Flow (perm)	698	1827	1827	1553	1787	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				171		73
Link Speed (mph)		45	45		35	
Link Distance (ft)		1684	3132		11505	
Travel Time (s)		25.5	47.5		224.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	82	474	568	171	126	73
Turn Type	pm+pt	NA	NA	Perm	NA	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8
Total Split (s)	14.0	109.0	95.0	95.0	31.0	31.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	115.8	115.8	104.1	104.1	16.2	16.2
Actuated g/C Ratio	0.83	0.83	0.74	0.74	0.12	0.12
v/c Ratio	0.13	0.31	0.42	0.14	0.61	0.29
Control Delay	3.1	3.7	7.3	0.7	57.3	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	3.1	3.7	7.3	0.7	57.3	9.2
LOS	A	A	A	A	E	A
Approach Delay		3.6	5.8		39.7	
Approach LOS		A	A		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 138 (99%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 9.5		Intersection LOS: A	

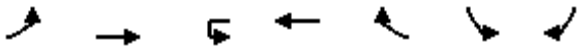
Intersection Capacity Utilization 49.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 113: LPGA Blvd & Tymber Creek Ext.



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	12	761	0	1221	40	28	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3421	0	1761	0
Flt Permitted	0.950					0.961	
Satd. Flow (perm)	1719	3438	1810	3421	0	1761	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	13	801	0	1327	0	36	0
Sign Control		Free		Free		Stop	

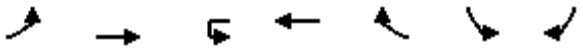
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.0%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	12	761	0	1221	40	28	7
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	13	801	0	1285	42	29	7
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1327		0			1732	664
vC1, stage 1 conf vol						1306	
vC2, stage 2 conf vol						426	
vCu, unblocked vol	1327		0			1732	664
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	97		0			86	98
cM capacity (veh/h)	500		0			207	406

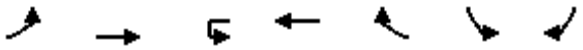
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	13	401	401	857	471	0	37
Volume Left	13	0	0	0	0	0	29
Volume Right	0	0	0	0	42	0	7
cSH	500	1700	1700	1700	1700	1700	230
Volume to Capacity	0.03	0.24	0.24	0.50	0.28	0.00	0.16
Queue Length 95th (ft)	2	0	0	0	0	0	11
Control Delay (s)	12.4	0.0	0.0	0.0	0.0	0.0	23.7
Lane LOS	B						C
Approach Delay (s)	0.2			0.0			23.7
Approach LOS							C

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	45.0%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	96	773	0	1261	106	65	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3397	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3397	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	101	814	0	1439	0	68	101
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 57.2%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	96	773	0	1261	106	65	96
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	101	814	0	1327	112	68	101
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1439		0			1992	719
vC1, stage 1 conf vol						1383	
vC2, stage 2 conf vol						609	
vCu, unblocked vol	1439		0			1992	719
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	78		0			61	73
cM capacity (veh/h)	453		0			176	373

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	101	407	407	885	554	0	169
Volume Left	101	0	0	0	0	0	68
Volume Right	0	0	0	0	112	0	101
cSH	453	1700	1700	1700	1700	1700	436
Volume to Capacity	0.22	0.24	0.24	0.52	0.33	0.00	0.39
Queue Length 95th (ft)	17	0	0	0	0	0	36
Control Delay (s)	15.2	0.0	0.0	0.0	0.0	0.0	26.1
Lane LOS	C						D
Approach Delay (s)	1.7			0.0			26.1
Approach LOS							D

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	34	756	0	1233	123	75	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1743	0
Flt Permitted	0.950					0.967	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1743	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	36	796	0	1298	129	115	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.0%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	34	756	0	1233	123	75	34
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	36	796	0	1298	129	79	36
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1298		0			1767	649
vC1, stage 1 conf vol						1298	
vC2, stage 2 conf vol						469	
vCu, unblocked vol	1298		0			1767	649
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	93		0			62	91
cM capacity (veh/h)	514		0			206	415

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	36	398	398	649	649	129	0	115
Volume Left	36	0	0	0	0	0	0	79
Volume Right	0	0	0	0	0	129	0	36
cSH	514	1700	1700	1700	1700	1700	1700	245
Volume to Capacity	0.07	0.23	0.23	0.38	0.38	0.08	0.00	0.47
Queue Length 95th (ft)	4	0	0	0	0	0	0	46
Control Delay (s)	12.5	0.0	0.0	0.0	0.0	0.0	0.0	32.1
Lane LOS	B							D
Approach Delay (s)	0.5			0.0				32.1
Approach LOS								D

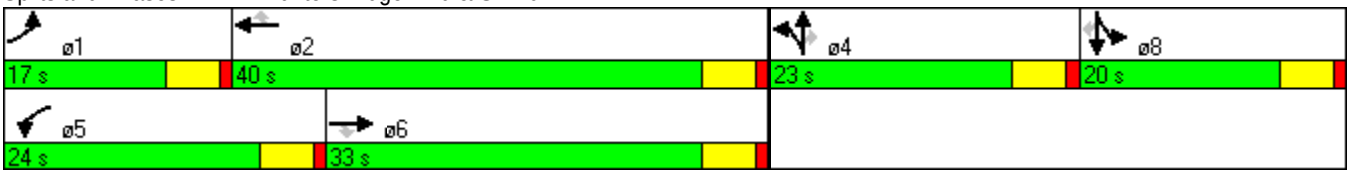
Intersection Summary			
Average Delay	1.7		
Intersection Capacity Utilization	47.0%	ICU Level of Service	A
Analysis Period (min)	15		

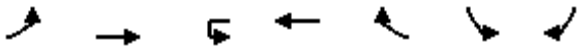
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	657	72	251	1071	458	117	22	251	280	14	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		300	300		300	0		300	300		0
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			76			482			264			112
Link Speed (mph)		60			60			35			35	
Link Distance (ft)		1961			4435			1868			1392	
Travel Time (s)		22.3			50.4			36.4			27.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	692	76	264	1127	482	123	23	264	295	15	112
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Total Split (s)	17.0	33.0	33.0	24.0	40.0	40.0	23.0	23.0	23.0	20.0	20.0	20.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	11.1	26.7	26.7	13.3	32.0	32.0	12.7	12.7	12.7	13.8	13.8	13.8
Actuated g/C Ratio	0.13	0.32	0.32	0.16	0.39	0.39	0.15	0.15	0.15	0.17	0.17	0.17
v/c Ratio	0.49	0.44	0.14	0.50	0.59	0.54	0.45	0.08	0.56	0.51	0.05	0.31
Control Delay	44.9	23.8	6.6	37.3	23.4	4.7	40.2	34.0	9.9	37.4	34.6	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.9	23.8	6.6	37.3	23.4	4.7	40.2	34.0	9.9	37.4	34.6	10.2
LOS	D	C	A	D	C	A	D	C	A	D	C	B
Approach Delay		25.0			20.6			20.3			30.1	
Approach LOS		C			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 82.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 22.8		Intersection LOS: C	
Intersection Capacity Utilization 51.2%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 117: Hunters Ridge Blvd & SR 40





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	20	1075	5	1747	179	95	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	4940	1719	4940	1538	1787	1599
Flt Permitted	0.950		0.950			0.950	
Satd. Flow (perm)	1719	4940	1719	4940	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					188		19
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	21	1132	5	1839	188	100	19
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8	
Permitted Phases					2		8
Total Split (s)	13.0	76.0	12.0	75.0	75.0	22.0	22.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	8.0	52.5	7.4	50.4	50.4	10.6	10.6
Actuated g/C Ratio	0.12	0.77	0.11	0.73	0.73	0.15	0.15
v/c Ratio	0.10	0.30	0.03	0.51	0.16	0.36	0.07
Control Delay	37.9	4.2	39.2	7.0	1.4	35.9	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.9	4.2	39.2	7.0	1.4	35.9	16.9
LOS	D	A	D	A	A	D	B
Approach Delay		4.8		6.5		32.9	
Approach LOS		A		A		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 68.6			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 6.9		Intersection LOS: A	
Intersection Capacity Utilization 47.1%		ICU Level of Service A	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	10	110	988	75	44	74	1613	814	118	59	80	554
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		2		1		1		2	1		1	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	3343	4940	1538	0	1750	4940	2707	1787	1881	1599	4802
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	3343	4940	1538	0	1750	4940	2707	1787	1881	1599	4802
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				79				857			84	
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	127	1040	79	0	124	1698	857	124	62	84	583
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Prot	Split	NA	Perm	Split
Protected Phases	1	1	6		5	5	2	2	8	8		4
Permitted Phases				6							8	
Total Split (s)	12.0	12.0	59.0	59.0	20.0	20.0	67.0	67.0	19.0	19.0	19.0	22.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		8.0	38.9	38.9		32.1	63.0	63.0	14.1	14.1	14.1	18.0
Actuated g/C Ratio		0.07	0.33	0.33		0.27	0.53	0.53	0.12	0.12	0.12	0.15
v/c Ratio		0.56	0.64	0.14		0.26	0.65	0.47	0.58	0.28	0.32	0.80
Control Delay		64.4	35.8	5.8		38.7	21.7	1.9	61.5	51.2	13.4	58.5
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		64.4	35.8	5.8		38.7	21.7	1.9	61.5	51.2	13.4	58.5
LOS		E	D	A		D	C	A	E	D	B	E
Approach Delay			36.8				16.2			44.2		
Approach LOS			D				B			D		

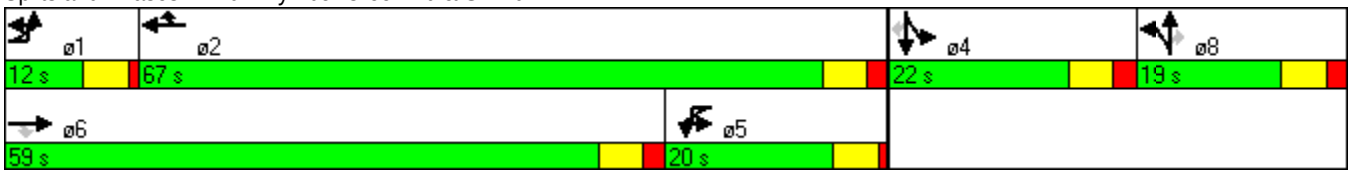
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 119.1			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 28.0		Intersection LOS: C	
Intersection Capacity Utilization 63.3%		ICU Level of Service B	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	40	128
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1792	1524
Flt Permitted		
Satd. Flow (perm)	1792	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		135
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	42	135
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	22.0	22.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	18.0	18.0
Actuated g/C Ratio	0.15	0.15
v/c Ratio	0.15	0.39
Control Delay	46.1	11.1
Queue Delay	0.0	0.0
Total Delay	46.1	11.1
LOS	D	B
Approach Delay	49.4	
Approach LOS	D	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	12	1537	10	16	34	2345	8	157	4	39	57	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		250		300		325	0		250	0	
Storage Lanes	1		1		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	4940	1538	0	1746	4940	1538	1787	1623	0	1787	1599
Flt Permitted	0.950				0.950			0.746			0.728	
Satd. Flow (perm)	1719	4940	1538	0	1746	4940	1538	1403	1623	0	1370	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			11				8		41			71
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	1618	11	0	53	2468	8	165	45	0	60	17
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases			6				2	4			8	
Total Split (s)	11.0	93.0	93.0	15.0	15.0	97.0	97.0	32.0	32.0	0.0	32.0	32.0
Total Lost Time (s)	4.7	5.0	5.0	5.7	4.7	5.0	5.0	4.0	4.0	3.0	5.0	4.0
Act Effct Green (s)	6.9	82.9	82.9		22.9	103.6	103.6	22.8	22.8		21.8	22.8
Actuated g/C Ratio	0.05	0.59	0.59		0.16	0.74	0.74	0.16	0.16		0.16	0.16
v/c Ratio	0.15	0.55	0.01		0.19	0.68	0.01	0.72	0.15		0.28	0.05
Control Delay	68.1	20.4	6.4		35.9	5.6	1.8	73.0	16.3		54.0	0.3
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	68.1	20.4	6.4		35.9	5.6	1.8	73.0	16.3		54.0	0.3
LOS	E	C	A		D	A	A	E	B		D	A
Approach Delay		20.7				6.2			60.8			42.1
Approach LOS		C				A			E			D

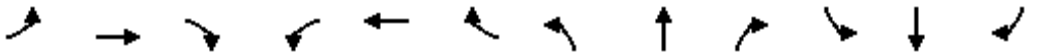
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 132 (94%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.72			
Intersection Signal Delay: 14.7		Intersection LOS: B	

Lane Group	SBR
Lane Configurations	
Volume (vph)	16
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 68.2% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

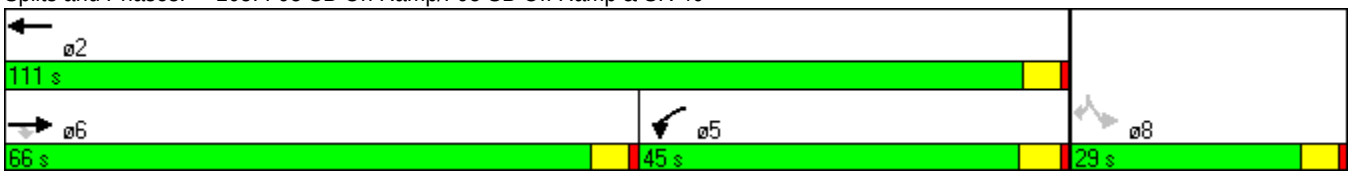


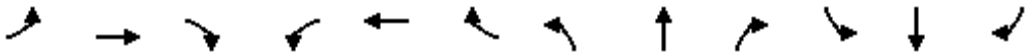
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1251	441	558	2541	0	0	0	0	304	0	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			457									9
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1317	464	587	2675	0	0	0	0	320	0	137
Turn Type		NA	Perm	Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases			6							8		8
Total Split (s)	0.0	66.0	66.0	45.0	111.0	0.0	0.0	0.0	0.0	29.0	0.0	29.0
Total Lost Time (s)	4.0	4.0	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		60.3	60.3	46.9	111.5					20.5		20.5
Actuated g/C Ratio		0.43	0.43	0.34	0.80					0.15		0.15
v/c Ratio		0.49	0.50	0.53	0.68					0.66		0.59
Control Delay		20.3	2.4	31.3	5.8					62.7		62.1
Queue Delay		0.0	0.0	0.0	0.2					0.0		0.0
Total Delay		20.3	2.4	31.3	6.0					62.7		62.1
LOS		C	A	C	A					E		E
Approach Delay		15.6			10.5							
Approach LOS		B			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 118 (84%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 16.5		Intersection LOS: B	

Intersection Capacity Utilization 65.6% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



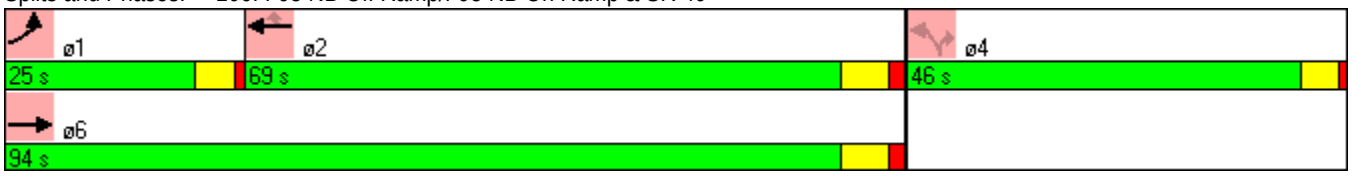


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	129	1426	0	0	2422	419	677	0	457	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						441			80			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	136	1501	0	0	2549	441	713	0	481	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	25.0	94.0	0.0	0.0	69.0	69.0	46.0	0.0	46.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	17.5	92.7			70.8	70.8	38.3		38.3			
Actuated g/C Ratio	0.12	0.66			0.51	0.51	0.27		0.27			
v/c Ratio	0.63	0.46			0.69	0.44	0.78		0.60			
Control Delay	73.1	4.6			13.2	2.9	53.3		39.4			
Queue Delay	0.0	0.2			0.0	0.0	0.0		0.0			
Total Delay	73.1	4.7			13.2	2.9	53.3		39.4			
LOS	E	A			B	A	D		D			
Approach Delay		10.4			11.7							
Approach LOS		B			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 136 (97%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 18.7		Intersection LOS: B	

Intersection Capacity Utilization 65.6% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40

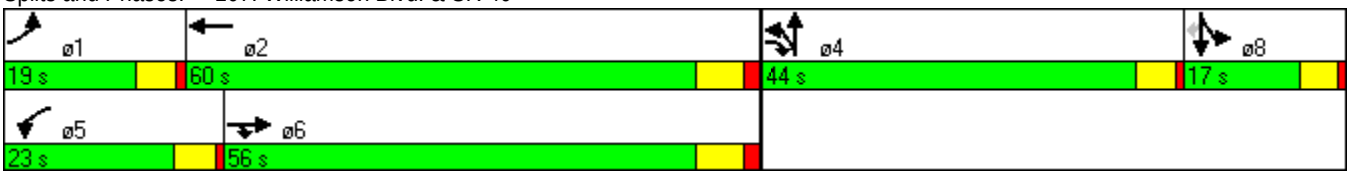


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	116	982	763	334	1483	107	1204	151	304	166	123	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4891	0	4894	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4891	0	4894	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			176		10				320			150
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		5%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	122	1034	803	352	1674	0	1267	159	320	175	129	162
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases									Free			8
Total Split (s)	19.0	56.0	100.0	23.0	60.0	0.0	44.0	44.0	0.0	17.0	17.0	17.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	1.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	14.1	51.8	96.9	18.5	56.3		41.0	41.0	140.0	12.6	12.6	12.6
Actuated g/C Ratio	0.10	0.37	0.69	0.13	0.40		0.29	0.29	1.00	0.09	0.09	0.09
v/c Ratio	0.71	0.81	0.42	0.80	0.85		0.88	0.30	0.21	0.58	0.78	0.59
Control Delay	84.9	39.2	2.9	73.1	43.0		55.8	40.7	0.3	69.0	92.1	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	84.9	39.2	2.9	73.1	43.0		55.8	40.7	0.3	69.0	92.1	20.3
LOS	F	D	A	E	D		E	D	A	E	F	C
Approach Delay		27.2			48.2			44.2			58.5	
Approach LOS		C			D			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 96 (69%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 41.2		Intersection LOS: D	

Intersection Capacity Utilization 80.4% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40



Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	403	680	1021	275	236	519
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			250	150	0
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	3367	3471	3471	1553	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3367	3471	3471	1553	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				289		343
Link Speed (mph)		40	40		35	
Link Distance (ft)		1131	1488		528	
Travel Time (s)		19.3	25.4		10.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	424	716	1075	289	248	546
Turn Type	Prot	NA	NA	Perm	NA	custom
Protected Phases	1	6	2		8	8
Permitted Phases				2		8
Total Split (s)	20.0	61.0	41.0	41.0	29.0	29.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	14.7	51.0	32.1	32.1	18.3	18.3
Actuated g/C Ratio	0.19	0.66	0.41	0.41	0.24	0.24
v/c Ratio	0.67	0.31	0.75	0.36	0.31	0.86
Control Delay	37.3	6.8	24.2	3.6	26.1	25.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.3	6.8	24.2	3.6	26.1	25.9
LOS	D	A	C	A	C	C
Approach Delay		18.2	19.8		26.0	
Approach LOS		B	B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 77.7			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 20.7		Intersection LOS: C	
Intersection Capacity Utilization 67.0%		ICU Level of Service C	

Analysis Period (min) 15

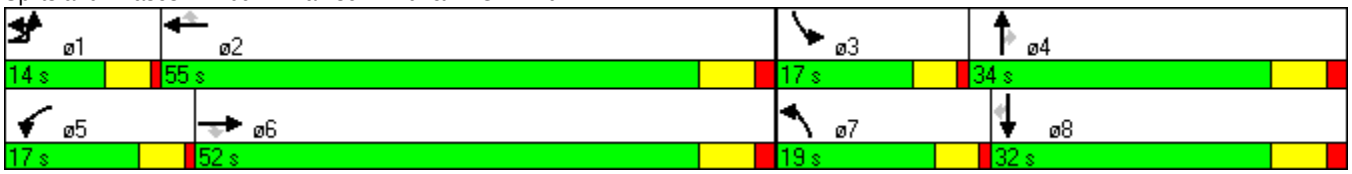
Splits and Phases: 108: Williamson Blvd. & Hand Ave Ext

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	246	1028	238	245	1231	324	313	691	270	238	461	216
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		425	325		350	135		250	250		250
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	150			150			25			25		
Satd. Flow (prot)	3367	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3367	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			251			299			177			166
Link Speed (mph)		45			45			40			50	
Link Distance (ft)		2165			2290			581			6363	
Travel Time (s)		32.8			34.7			9.9			86.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	259	1082	251	258	1296	341	329	727	284	251	485	227
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Total Split (s)	14.0	52.0	52.0	17.0	55.0	55.0	19.0	34.0	34.0	17.0	32.0	32.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	10.0	47.1	47.1	12.6	49.7	49.7	14.6	29.2	29.2	12.6	27.2	27.2
Actuated g/C Ratio	0.09	0.40	0.40	0.11	0.42	0.42	0.12	0.25	0.25	0.11	0.23	0.23
v/c Ratio	0.90	0.78	0.32	0.71	0.88	0.41	0.79	0.84	0.55	0.70	0.60	0.47
Control Delay	87.1	35.7	4.0	63.0	39.9	5.5	64.4	52.3	18.9	62.1	44.3	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	87.1	35.7	4.0	63.0	39.9	5.5	64.4	52.3	18.9	62.1	44.3	15.2
LOS	F	D	A	E	D	A	E	D	B	E	D	B
Approach Delay		39.0			36.9			48.2			42.1	
Approach LOS		D			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 117.5			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 41.0		Intersection LOS: D	
Intersection Capacity Utilization 80.3%		ICU Level of Service D	

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

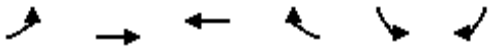


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	961	0	0	1181	214	494
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						346
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1012	0	0	1243	225	520
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	94.0	0.0	0.0	94.0	26.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	93.7			93.7	13.3	120.0
Actuated g/C Ratio	0.78			0.78	0.11	1.00
v/c Ratio	0.37			0.46	0.60	0.33
Control Delay	5.0			5.3	57.5	0.6
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	5.0			5.3	57.5	0.6
LOS	A			A	E	A
Approach Delay	5.0			5.3	17.8	
Approach LOS	A			A	B	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.60	
Intersection Signal Delay: 8.3	Intersection LOS: A

Intersection Capacity Utilization 50.1% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	856	871	0	367	253
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						129
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	901	917	0	386	266
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	75.0	75.0	0.0	45.0	45.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		86.0	86.0		20.0	20.0
Actuated g/C Ratio		0.72	0.72		0.17	0.17
v/c Ratio		0.36	0.37		0.69	0.72
Control Delay		6.1	5.9		53.0	35.2
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		6.1	5.9		53.0	35.2
LOS		A	A		D	D
Approach Delay		6.1	5.9		45.7	
Approach LOS		A	A		D	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.72	
Intersection Signal Delay: 16.5	Intersection LOS: B

Intersection Capacity Utilization 51.4% ICU Level of Service A
Analysis Period (min) 15

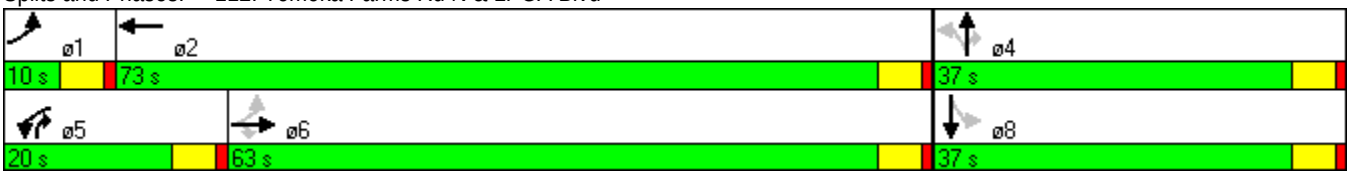
Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

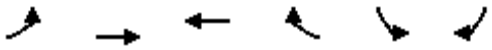
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	621	217	302	800	22	251	2	284	40	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	1553	3367	1820	0	1787	1881	1599	0	1777	0
Flt Permitted	0.232			0.950			0.747				0.798	
Satd. Flow (perm)	424	1827	1553	3367	1820	0	1405	1881	1599	0	1480	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			228		2				191		5	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	654	228	318	865	0	264	2	299	0	48	0
Turn Type	pm+pt	NA	Perm	Prot	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6		6				4		4	8		
Total Split (s)	10.0	63.0	63.0	20.0	73.0	0.0	37.0	37.0	20.0	37.0	37.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	4.0	3.0
Act Effct Green (s)	71.0	64.6	64.6	15.8	82.3		27.7	27.7	47.4		27.7	
Actuated g/C Ratio	0.59	0.54	0.54	0.13	0.69		0.23	0.23	0.40		0.23	
v/c Ratio	0.00	0.67	0.24	0.72	0.69		0.81	0.00	0.40		0.14	
Control Delay	8.0	25.6	2.8	65.9	12.4		63.0	32.0	9.8		32.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	8.0	25.6	2.8	65.9	12.4		63.0	32.0	9.8		32.4	
LOS	A	C	A	E	B		E	C	A		C	
Approach Delay		19.7			26.8			34.7			32.4	
Approach LOS		B			C			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 86 (72%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 26.2		Intersection LOS: C	

Intersection Capacity Utilization 72.5% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 112: Tomoka Farms Rd N & LPGA Blvd



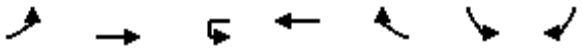


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	164	561	672	338	252	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	250			250	250	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	1736	1827	1827	1553	1787	1599
Flt Permitted	0.160				0.950	
Satd. Flow (perm)	292	1827	1827	1553	1787	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				356		154
Link Speed (mph)		45	45		35	
Link Distance (ft)		1684	3132		11505	
Travel Time (s)		25.5	47.5		224.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	173	591	707	356	265	154
Turn Type	pm+pt	NA	NA	Perm	NA	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8
Total Split (s)	17.0	85.0	68.0	68.0	35.0	35.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	56.1	56.1	41.5	41.5	19.9	19.9
Actuated g/C Ratio	0.66	0.66	0.49	0.49	0.23	0.23
v/c Ratio	0.47	0.49	0.79	0.38	0.63	0.31
Control Delay	10.1	9.1	25.8	2.7	39.2	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.1	9.1	25.8	2.7	39.2	7.5
LOS	B	A	C	A	D	A
Approach Delay		9.3	18.1		27.5	
Approach LOS		A	B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 84.7			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 68.4%		ICU Level of Service C	

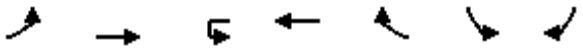
Analysis Period (min) 15

Splits and Phases: 113: LPGA Blvd & Tymber Creek Ext.



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	14	1146	0	1846	45	30	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	250		250		0	0	0
Storage Lanes	1		1		0	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3424	0	1750	0
Flt Permitted	0.950					0.964	
Satd. Flow (perm)	1719	3438	1810	3424	0	1750	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		830		2644		3826	
Travel Time (s)		9.4		30.0		74.5	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	15	1206	0	1990	0	43	0
Sign Control		Free		Free		Stop	

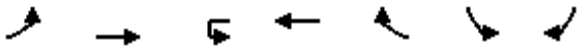
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 62.5%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	14	1146	0	1846	45	30	10
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	15	1206	0	1943	47	32	11
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1991		0			2599	995
vC1, stage 1 conf vol						1967	
vC2, stage 2 conf vol						633	
vCu, unblocked vol	1991		0			2599	995
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	95		0			66	96
cM capacity (veh/h)	274		0			92	245

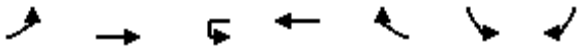
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	15	603	603	1295	695	0	42
Volume Left	15	0	0	0	0	0	32
Volume Right	0	0	0	0	47	0	11
cSH	274	1700	1700	1700	1700	1700	109
Volume to Capacity	0.05	0.35	0.35	0.76	0.41	0.00	0.39
Queue Length 95th (ft)	3	0	0	0	0	0	32
Control Delay (s)	18.9	0.0	0.0	0.0	0.0	0.0	57.6
Lane LOS	C						F
Approach Delay (s)	0.2			0.0			57.6
Approach LOS							F

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		



Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	150	1043	0	1702	162	99	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		0	0	300
Storage Lanes	1		1		0	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3393	0	1787	1599
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	1719	3438	1810	3393	0	1787	1599
Link Speed (mph)		60		60		35	
Link Distance (ft)		836		1751		1900	
Travel Time (s)		9.5		19.9		37.0	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	158	1098	0	1963	0	104	158
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 76.0%		ICU Level of Service D	
Analysis Period (min) 15			



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (veh/h)	150	1043	0	1702	162	99	150
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	158	1098	0	1792	171	104	158
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							15
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1962		0			2742	981
vC1, stage 1 conf vol						1877	
vC2, stage 2 conf vol						865	
vCu, unblocked vol	1962		0			2742	981
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	44		0			0	37
cM capacity (veh/h)	281		0			86	250

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	158	549	549	1194	768	0	262
Volume Left	158	0	0	0	0	0	104
Volume Right	0	0	0	0	171	0	158
cSH	281	1700	1700	1700	1700	1700	215
Volume to Capacity	0.56	0.32	0.32	0.70	0.45	0.00	1.22
Queue Length 95th (ft)	64	0	0	0	0	0	266
Control Delay (s)	33.0	0.0	0.0	0.0	0.0	0.0	126.5
Lane LOS	D						F
Approach Delay (s)	4.1			0.0			126.5
Approach LOS							F

Intersection Summary			
Average Delay	11.0		
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (vph)	31	1112	0	1814	145	89	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	0	0
Storage Lanes	1		1		1	1	0
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	3438	1810	3438	1538	1750	0
Flt Permitted	0.950					0.964	
Satd. Flow (perm)	1719	3438	1810	3438	1538	1750	0
Link Speed (mph)		60		60		35	
Link Distance (ft)		2655		1961		1457	
Travel Time (s)		30.2		22.3		28.4	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	33	1171	0	1909	153	127	0
Sign Control		Free		Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 63.6%		ICU Level of Service B	
Analysis Period (min) 15			

Movement	SEL	SET	NWU	NWT	NWR	SWL	SWR
Lane Configurations							
Volume (veh/h)	31	1112	0	1814	145	89	31
Sign Control		Free		Free		Stop	
Grade		0%		0%		0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	33	1171	0	1909	153	94	33
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type		Raised		Raised			
Median storage veh)		2		2			
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	1909		0			2560	955
vC1, stage 1 conf vol						1909	
vC2, stage 2 conf vol						651	
vCu, unblocked vol	1909		0			2560	955
tC, single (s)	4.2		0.0			6.8	6.9
tC, 2 stage (s)						5.8	
tF (s)	2.2		0.0			3.5	3.3
p0 queue free %	89		0			4	87
cM capacity (veh/h)	295		0			98	261

Direction, Lane #	SE 1	SE 2	SE 3	NW 1	NW 2	NW 3	NW 4	SW 1
Volume Total	33	585	585	955	955	153	0	126
Volume Left	33	0	0	0	0	0	0	94
Volume Right	0	0	0	0	0	153	0	33
cSH	295	1700	1700	1700	1700	1700	1700	117
Volume to Capacity	0.11	0.34	0.34	0.56	0.56	0.09	0.00	1.08
Queue Length 95th (ft)	7	0	0	0	0	0	0	150
Control Delay (s)	18.7	0.0	0.0	0.0	0.0	0.0	0.0	177.8
Lane LOS	C							F
Approach Delay (s)	0.5			0.0				177.8
Approach LOS								F

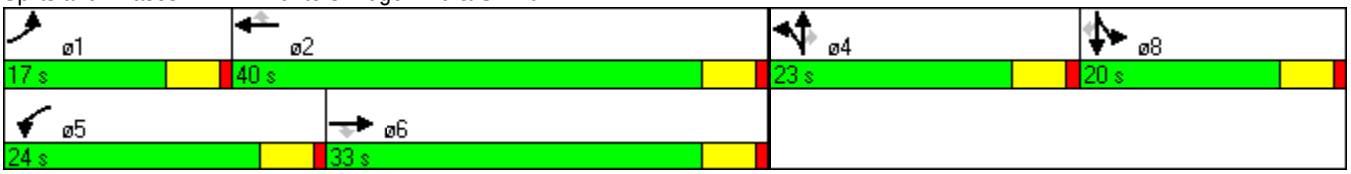
Intersection Summary			
Average Delay	6.8		
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		

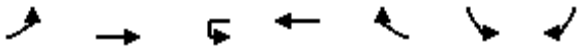
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	178	899	120	424	1468	781	195	45	424	479	27	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		300	300		300	0		300	300		0
Storage Lanes	1		1	2		1	1		1	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	4940	1538	3335	4940	1538	1787	1881	1599	3467	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			126			726			278			187
Link Speed (mph)		60			60			35			35	
Link Distance (ft)		1961			4435			1868			1392	
Travel Time (s)		22.3			50.4			36.4			27.1	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	187	946	126	446	1545	822	205	47	446	504	28	187
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	1	6		5	2		4	4		8	8	
Permitted Phases			6			2			4			8
Total Split (s)	17.0	33.0	33.0	24.0	40.0	40.0	23.0	23.0	23.0	20.0	20.0	20.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	12.8	30.8	30.8	18.1	36.0	36.0	16.8	16.8	16.8	16.0	16.0	16.0
Actuated g/C Ratio	0.13	0.32	0.32	0.19	0.37	0.37	0.17	0.17	0.17	0.16	0.16	0.16
v/c Ratio	0.83	0.61	0.22	0.72	0.85	0.80	0.67	0.15	0.88	0.89	0.09	0.45
Control Delay	71.8	31.1	6.0	44.9	34.2	11.0	49.1	35.2	35.1	59.5	36.7	9.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.8	31.1	6.0	44.9	34.2	11.0	49.1	35.2	35.1	59.5	36.7	9.4
LOS	E	C	A	D	C	B	D	D	D	E	D	A
Approach Delay		34.7			29.1			39.2			45.6	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 97.7			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 33.8		Intersection LOS: C	
Intersection Capacity Utilization 72.4%		ICU Level of Service C	

Analysis Period (min) 15

Splits and Phases: 117: Hunters Ridge Blvd & SR 40





Lane Group	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Volume (vph)	23	1615	6	2639	195	98	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12
Grade (%)		0%		0%		0%	
Storage Length (ft)	300		300		300	150	0
Storage Lanes	1		1		1	1	1
Taper Length (ft)	25		25			25	
Satd. Flow (prot)	1719	4940	1719	4940	1538	1787	1599
Flt Permitted	0.950		0.950			0.950	
Satd. Flow (perm)	1719	4940	1719	4940	1538	1787	1599
Right Turn on Red					Yes		Yes
Satd. Flow (RTOR)					205		22
Link Speed (mph)		50		50		30	
Link Distance (ft)		4435		4152		622	
Travel Time (s)		60.5		56.6		14.1	
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0
Parking (#/hr)							
Mid-Block Traffic (%)		0%		0%		0%	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	24	1700	6	2778	205	103	22
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm
Protected Phases	1	6	5	2		8	
Permitted Phases					2		8
Total Split (s)	15.0	45.0	12.0	42.0	42.0	33.0	33.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	7.5	44.7	6.9	44.4	44.4	9.6	9.6
Actuated g/C Ratio	0.12	0.74	0.11	0.73	0.73	0.16	0.16
v/c Ratio	0.11	0.47	0.03	0.77	0.17	0.37	0.08
Control Delay	26.3	5.8	26.7	11.1	1.6	27.5	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.3	5.8	26.7	11.1	1.6	27.5	11.7
LOS	C	A	C	B	A	C	B
Approach Delay		6.1		10.5		24.8	
Approach LOS		A		B		C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 60.8			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 9.3		Intersection LOS: A	
Intersection Capacity Utilization 64.3%		ICU Level of Service C	

Analysis Period (min) 15

Splits and Phases: 101: SR 40 & Breakaway Tr

Lane Group	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Volume (vph)	15	173	1416	133	45	76	2310	995	209	86	112	652
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)			0%				0%			0%		
Storage Length (ft)		350		300		435		385	250		250	250
Storage Lanes		2		1		1		2	1		1	1
Taper Length (ft)		25				25			25			25
Satd. Flow (prot)	0	3343	4940	1538	0	1750	4940	2707	1787	1881	1599	4802
Flt Permitted		0.950				0.950			0.950			0.950
Satd. Flow (perm)	0	3343	4940	1538	0	1750	4940	2707	1787	1881	1599	4802
Right Turn on Red				Yes				Yes			Yes	
Satd. Flow (RTOR)				140				1047			118	
Link Speed (mph)			50				50			30		
Link Distance (ft)			1096				2791			1539		
Travel Time (s)			14.9				38.1			35.0		
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	6%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)			0%				0%			0%		
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	198	1491	140	0	127	2432	1047	220	91	118	686
Turn Type	Prot	Prot	NA	Perm	Prot	Prot	NA	Prot	Split	NA	Perm	Split
Protected Phases	1	1	6		5	5	2	2	8	8		4
Permitted Phases				6							8	
Total Split (s)	12.0	12.0	59.0	59.0	20.0	20.0	67.0	67.0	19.0	19.0	19.0	22.0
Total Lost Time (s)	5.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		8.0	51.9	51.9		19.1	63.0	63.0	15.0	15.0	15.0	18.0
Actuated g/C Ratio		0.07	0.43	0.43		0.16	0.52	0.52	0.12	0.12	0.12	0.15
v/c Ratio		0.89	0.70	0.19		0.46	0.94	0.55	0.99	0.39	0.39	0.95
Control Delay		92.8	29.4	3.7		53.2	35.2	2.1	109.7	53.7	12.4	74.6
Queue Delay		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		92.8	29.4	3.7		53.2	35.2	2.1	109.7	53.7	12.4	74.6
LOS		F	C	A		D	D	A	F	D	B	E
Approach Delay			34.3				26.2			71.1		
Approach LOS			C				C			E		

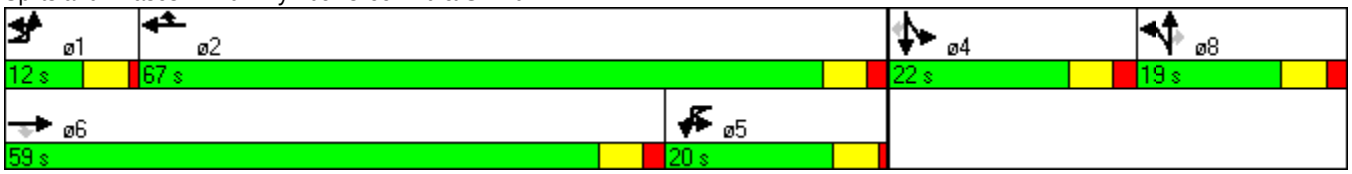
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 36.6		Intersection LOS: D	
Intersection Capacity Utilization 87.3%		ICU Level of Service E	

Lane Group	SBT	SBR
Lane Configurations		
Volume (vph)	58	200
Ideal Flow (vphpl)	1900	1900
Lane Width (ft)	12	12
Grade (%)	0%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Satd. Flow (prot)	1792	1524
Flt Permitted		
Satd. Flow (perm)	1792	1524
Right Turn on Red		Yes
Satd. Flow (RTOR)		95
Link Speed (mph)	30	
Link Distance (ft)	623	
Travel Time (s)	14.2	
Confl. Peds. (#/hr)		
Confl. Bikes (#/hr)		
Peak Hour Factor	0.95	0.95
Growth Factor	100%	100%
Heavy Vehicles (%)	6%	6%
Bus Blockages (#/hr)	0	0
Parking (#/hr)		
Mid-Block Traffic (%)	0%	
Shared Lane Traffic (%)		
Lane Group Flow (vph)	61	211
Turn Type	NA	Perm
Protected Phases	4	
Permitted Phases		4
Total Split (s)	22.0	22.0
Total Lost Time (s)	4.0	4.0
Act Effct Green (s)	18.0	18.0
Actuated g/C Ratio	0.15	0.15
v/c Ratio	0.23	0.68
Control Delay	47.4	38.4
Queue Delay	0.0	0.0
Total Delay	47.4	38.4
LOS	D	D
Approach Delay	64.9	
Approach LOS	E	

Intersection Summary

Analysis Period (min) 15

Splits and Phases: 102: Tymber Creek Rd & SR 40



Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	14	2068	14	18	38	3199	11	166	5	47	57	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%				0%			0%			0%
Storage Length (ft)	300		250		300		325	0		250	0	
Storage Lanes	1		1		1		1	1		0	1	
Taper Length (ft)	25				25			25			25	
Satd. Flow (prot)	1719	4940	1538	0	1746	4940	1538	1787	1625	0	1787	1599
Flt Permitted	0.950				0.950			0.746			0.722	
Satd. Flow (perm)	1719	4940	1538	0	1746	4940	1538	1403	1625	0	1358	1599
Right Turn on Red			Yes				Yes			Yes		
Satd. Flow (RTOR)			15				12		49			54
Link Speed (mph)		50				50			30			30
Link Distance (ft)		2791				656			1194			833
Travel Time (s)		38.1				8.9			27.1			18.9
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	0%	5%	5%	5%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%				0%			0%			0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	15	2177	15	0	59	3367	12	175	54	0	60	17
Turn Type	Prot	NA	Perm	Prot	Prot	NA	Perm	Perm	NA		Perm	NA
Protected Phases	1	6		5	5	2			4			8
Permitted Phases			6				2	4			8	
Total Split (s)	10.7	108.6	108.6	15.4	15.4	113.3	113.3	26.0	26.0	0.0	26.0	26.0
Total Lost Time (s)	4.7	5.0	5.0	5.7	4.7	5.0	5.0	4.0	4.0	3.0	5.0	4.0
Act Effct Green (s)	6.1	105.0	105.0		12.3	115.3	115.3	21.4	21.4		20.4	21.4
Actuated g/C Ratio	0.04	0.70	0.70		0.08	0.77	0.77	0.14	0.14		0.14	0.14
v/c Ratio	0.21	0.63	0.01		0.41	0.89	0.01	0.88	0.20		0.32	0.06
Control Delay	77.1	13.8	3.0		63.5	9.6	0.9	100.0	18.2		63.6	0.4
Queue Delay	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0
Total Delay	77.1	13.8	3.0		63.5	9.6	0.9	100.0	18.2		63.6	0.4
LOS	E	B	A		E	A	A	F	B		E	A
Approach Delay		14.2				10.5			80.7			49.7
Approach LOS		B				B			F			D

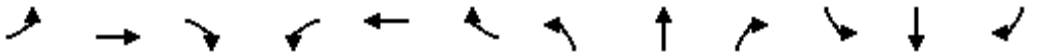
Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 28 (19%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 15.1	Intersection LOS: B

Lane Group	SBR
Lane Configurations	
Volume (vph)	16
Ideal Flow (vphpl)	1900
Lane Width (ft)	12
Grade (%)	
Storage Length (ft)	0
Storage Lanes	0
Taper Length (ft)	
Satd. Flow (prot)	0
Flt Permitted	
Satd. Flow (perm)	0
Right Turn on Red	Yes
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Peak Hour Factor	0.95
Growth Factor	100%
Heavy Vehicles (%)	1%
Bus Blockages (#/hr)	0
Parking (#/hr)	
Mid-Block Traffic (%)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	0
Turn Type	
Protected Phases	
Permitted Phases	
Total Split (s)	0.0
Total Lost Time (s)	3.0
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection Capacity Utilization 85.2% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 103: Booth Rd & SR 40

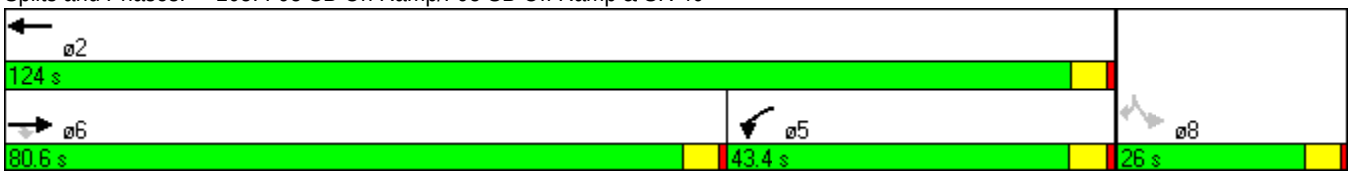


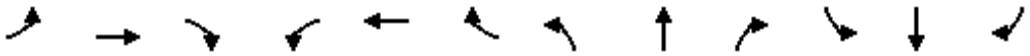
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1717	510	614	3356	0	0	0	0	356	0	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	300		0	0		0	0		0	275		275
Storage Lanes	1		1	2		0	0		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	6225	1538	3335	4940	0	0	0	0	3335	0	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			413									2
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		721			402			1640			813	
Travel Time (s)		10.9			6.1			31.9			15.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%	0%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1807	537	646	3533	0	0	0	0	375	0	171
Turn Type		NA	Perm	Prot	NA					custom		custom
Protected Phases		6		5	2							
Permitted Phases			6							8		8
Total Split (s)	0.0	80.6	80.6	43.4	124.0	0.0	0.0	0.0	0.0	26.0	0.0	26.0
Total Lost Time (s)	4.0	4.0	4.0	4.3	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)		74.9	74.9	41.5	120.7					21.3		21.3
Actuated g/C Ratio		0.50	0.50	0.28	0.80					0.14		0.14
v/c Ratio		0.58	0.55	0.70	0.89					0.79		0.78
Control Delay		32.1	12.9	41.7	11.8					75.1		84.8
Queue Delay		0.0	0.0	0.8	3.2					0.0		0.0
Total Delay		32.1	12.9	42.5	15.0					75.1		84.8
LOS		C	B	D	B					E		F
Approach Delay		27.7			19.3							
Approach LOS		C			B							

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 138 (92%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 26.6		Intersection LOS: C	

Intersection Capacity Utilization 81.7% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 105: I-95 SB On Ramp/I-95 SB Off Ramp & SR 40



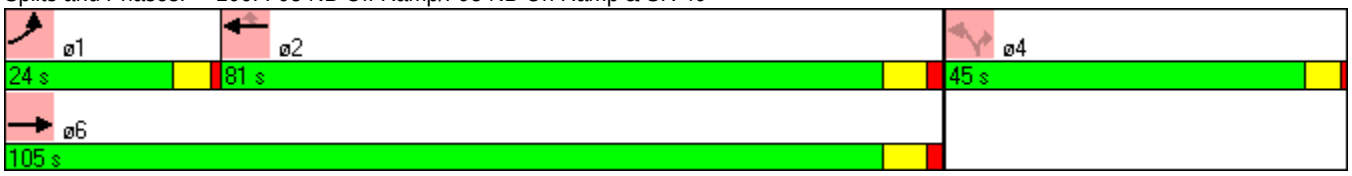


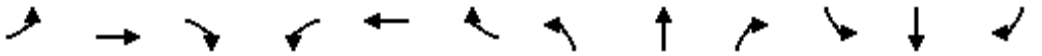
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	160	1913	0	0	3192	491	778	0	505	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	300		400	0		575	0		0
Storage Lanes	1		0	2		1	2		2	0		0
Taper Length (ft)	25			100			25			25		
Satd. Flow (prot)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	1719	4940	0	0	7329	1538	3335	0	2707	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						517			31			
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		402			778			1567			730	
Travel Time (s)		6.1			11.8			30.5			14.2	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	0%	0%	5%	5%	5%	0%	5%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	168	2014	0	0	3360	517	819	0	532	0	0	0
Turn Type	Prot	NA			NA	Perm	custom		custom			
Protected Phases	1	6			2							
Permitted Phases						2	4		4			
Total Split (s)	24.0	105.0	0.0	0.0	81.0	81.0	45.0	0.0	45.0	0.0	0.0	0.0
Total Lost Time (s)	4.3	5.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	18.8	100.4			77.3	77.3	40.6		40.6			
Actuated g/C Ratio	0.13	0.67			0.52	0.52	0.27		0.27			
v/c Ratio	0.78	0.61			0.89	0.50	0.91		0.70			
Control Delay	92.8	4.4			22.9	1.8	67.3		52.1			
Queue Delay	0.0	0.2			0.0	0.0	1.1		0.0			
Total Delay	92.8	4.6			22.9	1.8	68.4		52.1			
LOS	F	A			C	A	E		D			
Approach Delay		11.4			20.1							
Approach LOS		B			C							

Intersection Summary	
Area Type:	Other
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 8 (5%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.91	
Intersection Signal Delay: 25.2	Intersection LOS: C

Intersection Capacity Utilization 81.7% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 106: I-95 NB Off Ramp/I-95 NB On Ramp & SR 40



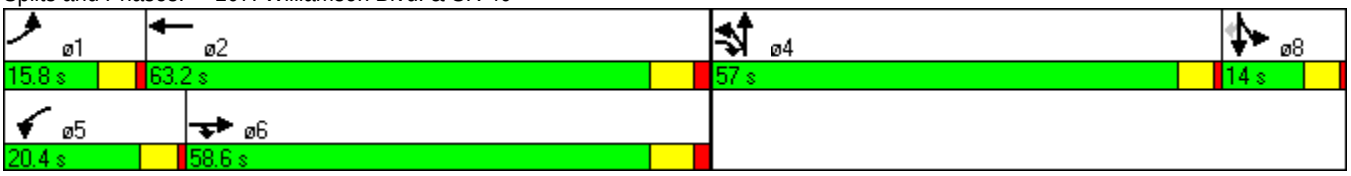


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	117	1092	1098	339	1796	108	1733	152	309	166	123	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		0	325		375	300		0	75		75
Storage Lanes	1		2	2		0	1		1	2		1
Taper Length (ft)	50			50			25			25		
Satd. Flow (prot)	1719	3438	2707	3335	4896	0	4894	1827	1553	3367	1827	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1719	3438	2707	3335	4896	0	4894	1827	1553	3367	1827	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			90		7				312			102
Link Speed (mph)		45			45			40			40	
Link Distance (ft)		778			555			558			1054	
Travel Time (s)		11.8			8.4			9.5			18.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	1103	1109	342	1923	0	1751	154	312	168	124	156
Turn Type	Prot	NA	pt+ov	Prot	NA		Split	NA	Free	Split	NA	Perm
Protected Phases	1	6	6 4	5	2		4	4		8	8	
Permitted Phases									Free			8
Total Split (s)	15.8	58.6	115.6	20.4	63.2	0.0	57.0	57.0	0.0	14.0	14.0	14.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	1.0	4.0	4.0	3.0	4.0	4.0	4.0
Act Effct Green (s)	11.8	54.6	111.6	16.4	59.2		53.0	53.0	150.0	10.0	10.0	10.0
Actuated g/C Ratio	0.08	0.36	0.74	0.11	0.39		0.35	0.35	1.00	0.07	0.07	0.07
v/c Ratio	0.87	0.88	0.54	0.94	0.99		1.01	0.24	0.20	0.75	1.02	0.78
Control Delay	114.1	43.3	3.4	99.1	63.5		72.5	35.5	0.3	89.1	152.7	51.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	114.1	43.3	3.4	99.1	63.5		72.5	35.5	0.3	89.1	152.7	51.5
LOS	F	D	A	F	E		E	D	A	F	F	D
Approach Delay		27.9			68.9			59.7			93.6	
Approach LOS		C			E			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 124 (83%), Referenced to phase 2:WBT and 6:EBT, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 54.5		Intersection LOS: D	

Intersection Capacity Utilization 96.5% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 107: Williamson Blvd. & SR 40

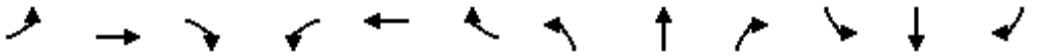


Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	540	864	1296	383	329	695
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	300			250	150	0
Storage Lanes	2			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	3367	3471	3471	1553	3433	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3367	3471	3471	1553	3433	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				403		329
Link Speed (mph)		40	40		35	
Link Distance (ft)		1131	1488		528	
Travel Time (s)		19.3	25.4		10.3	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	568	909	1364	403	346	732
Turn Type	Prot	NA	NA	Perm	NA	custom
Protected Phases	1	6	2		8	8
Permitted Phases				2		8
Total Split (s)	20.0	61.0	41.0	41.0	29.0	29.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	16.0	57.0	37.0	37.0	25.0	25.0
Actuated g/C Ratio	0.18	0.63	0.41	0.41	0.28	0.28
v/c Ratio	0.95	0.41	0.96	0.46	0.36	1.08
Control Delay	64.0	8.9	42.2	3.8	27.4	78.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.0	8.9	42.2	3.8	27.4	78.1
LOS	E	A	D	A	C	E
Approach Delay		30.1	33.4		61.9	
Approach LOS		C	C		E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 39.4		Intersection LOS: D	
Intersection Capacity Utilization 85.5%		ICU Level of Service E	

Analysis Period (min) 15

Splits and Phases: 108: Williamson Blvd. & Hand Ave Ext

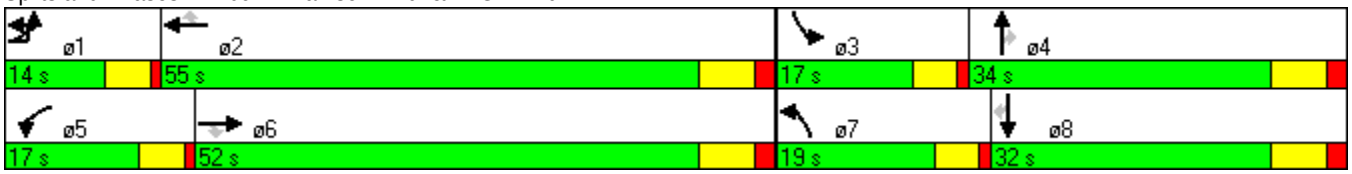


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	287	1286	250	338	1540	505	329	907	373	371	605	252
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	325		425	325		350	135		250	250		250
Storage Lanes	2		1	2		1	2		1	2		1
Taper Length (ft)	150			150			25			25		
Satd. Flow (prot)	3367	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471	1553
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3367	3471	1553	3367	3471	1553	3367	3471	1553	3367	3471	1553
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			263			289			157			157
Link Speed (mph)		45			45			40			50	
Link Distance (ft)		2165			2290			581			6363	
Travel Time (s)		32.8			34.7			9.9			86.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	302	1354	263	356	1621	532	346	955	393	391	637	265
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Total Split (s)	14.0	52.0	52.0	17.0	55.0	55.0	19.0	34.0	34.0	17.0	32.0	32.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	10.0	48.0	48.0	13.0	51.0	51.0	14.9	30.0	30.0	13.0	28.1	28.1
Actuated g/C Ratio	0.08	0.40	0.40	0.11	0.42	0.42	0.12	0.25	0.25	0.11	0.23	0.23
v/c Ratio	1.07	0.98	0.34	0.98	1.10	0.64	0.83	1.10	0.78	1.07	0.78	0.55
Control Delay	126.6	54.8	4.0	94.9	88.9	15.8	68.7	104.0	36.5	117.8	51.0	20.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	126.6	54.8	4.0	94.9	88.9	15.8	68.7	104.0	36.5	117.8	51.0	20.9
LOS	F	D	A	F	F	B	E	F	D	F	D	C
Approach Delay		59.1			74.3			81.1			65.0	
Approach LOS		E			E			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 70.3		Intersection LOS: E	
Intersection Capacity Utilization 99.7%		ICU Level of Service F	

Analysis Period (min) 15

Splits and Phases: 109: Williamson Blvd. & LPGA Blvd

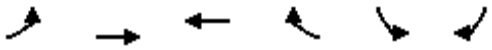


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1213	0	0	1521	272	599
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)		0	0		0	200
Storage Lanes		0	0		2	1
Taper Length (ft)			25		25	
Satd. Flow (prot)	3471	0	0	3471	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	3471	0	0	3471	3367	1553
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						290
Link Speed (mph)	45			45	35	
Link Distance (ft)	358			282	464	
Travel Time (s)	5.4			4.3	9.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	0%	0%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1277	0	0	1601	286	631
Turn Type	NA			NA	NA	Free
Protected Phases	6			2	4	
Permitted Phases						Free
Total Split (s)	94.0	0.0	0.0	94.0	26.0	0.0
Total Lost Time (s)	7.0	4.0	4.0	7.0	6.0	4.0
Act Effct Green (s)	91.6			91.6	15.4	120.0
Actuated g/C Ratio	0.76			0.76	0.13	1.00
v/c Ratio	0.48			0.60	0.66	0.41
Control Delay	5.9			7.8	57.2	0.8
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	5.9			7.8	57.2	0.8
LOS	A			A	E	A
Approach Delay	5.9			7.8	18.4	
Approach LOS	A			A	B	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 9.7	Intersection LOS: A

Intersection Capacity Utilization 60.6% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 110: I-95 NB Off Ramp & LPGA Blvd



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	0	1093	1175	0	460	281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	0			0	250	250
Storage Lanes	0			0	2	1
Taper Length (ft)	25				100	
Satd. Flow (prot)	0	3471	3471	0	3367	1553
Flt Permitted					0.950	
Satd. Flow (perm)	0	3471	3471	0	3367	1553
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)						59
Link Speed (mph)		45	45		35	
Link Distance (ft)		225	249		1549	
Travel Time (s)		3.4	3.8		30.2	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	4%	4%	0%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	1151	1237	0	484	296
Turn Type		NA	NA		NA	Perm
Protected Phases		6	2		8	
Permitted Phases						8
Total Split (s)	0.0	75.0	75.0	0.0	45.0	45.0
Total Lost Time (s)	4.0	7.0	7.0	4.0	7.0	7.0
Act Effct Green (s)		80.5	80.5		25.5	25.5
Actuated g/C Ratio		0.67	0.67		0.21	0.21
v/c Ratio		0.49	0.53		0.68	0.79
Control Delay		8.3	8.8		47.6	49.7
Queue Delay		0.0	0.0		0.0	0.0
Total Delay		8.3	8.8		47.6	49.7
LOS		A	A		D	D
Approach Delay		8.3	8.8		48.4	
Approach LOS		A	A		D	

Intersection Summary	
Area Type:	Other
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 18.4	Intersection LOS: B

Intersection Capacity Utilization 100.9% ICU Level of Service G
Analysis Period (min) 15

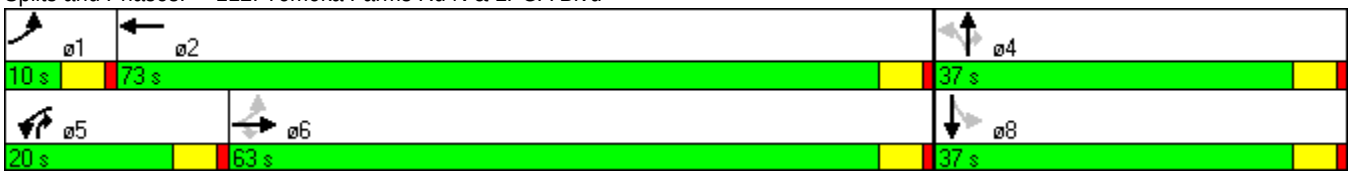
Splits and Phases: 111: LPGA Blvd & I-95 SB Off Ramp

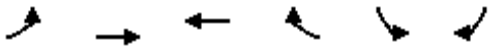
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	787	347	419	1015	22	409	2	384	40	1	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	250		325	300		0	250		0	0		0
Storage Lanes	1		1	2		0	1		1	0		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1736	1827	1553	3367	1821	0	1787	1881	1599	0	1777	0
Flt Permitted	0.068			0.950			0.745				0.805	
Satd. Flow (perm)	124	1827	1553	3367	1821	0	1401	1881	1599	0	1493	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			365		2				118		5	
Link Speed (mph)		45			45			45			45	
Link Distance (ft)		3132			429			405			251	
Travel Time (s)		47.5			6.5			6.1			3.8	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	1	828	365	441	1091	0	431	2	404	0	48	0
Turn Type	pm+pt	NA	Perm	Prot	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6		6				4		4	8		
Total Split (s)	10.0	63.0	63.0	20.0	73.0	0.0	37.0	37.0	20.0	37.0	37.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	4.0	3.0
Act Effct Green (s)	65.0	59.0	59.0	16.0	77.0		33.0	33.0	53.0		33.0	
Actuated g/C Ratio	0.54	0.49	0.49	0.13	0.64		0.28	0.28	0.44		0.28	
v/c Ratio	0.01	0.92	0.38	0.98	0.93		1.12	0.00	0.52		0.12	
Control Delay	8.0	45.5	3.0	92.0	30.5		123.0	31.5	19.5		30.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	
Total Delay	8.0	45.5	3.0	92.0	30.5		123.0	31.5	19.5		30.8	
LOS	A	D	A	F	C		F	C	B		C	
Approach Delay		32.4			48.2			72.8			30.8	
Approach LOS		C			D			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 86 (72%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 48.5		Intersection LOS: D	

Intersection Capacity Utilization 93.1% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 112: Tomoka Farms Rd N & LPGA Blvd





Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	258	684	819	535	397	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)		0%	0%		0%	
Storage Length (ft)	250			250	250	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25				25	
Satd. Flow (prot)	1736	1827	1827	1553	1787	1599
Flt Permitted	0.068				0.950	
Satd. Flow (perm)	124	1827	1827	1553	1787	1599
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				563		242
Link Speed (mph)		45	45		35	
Link Distance (ft)		1684	3132		11505	
Travel Time (s)		25.5	47.5		224.1	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)		0%	0%		0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	272	720	862	563	418	242
Turn Type	pm+pt	NA	NA	Perm	NA	Perm
Protected Phases	1	6	2		8	
Permitted Phases	6			2		8
Total Split (s)	17.0	85.0	68.0	68.0	35.0	35.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Act Effct Green (s)	75.5	75.5	58.3	58.3	29.3	29.3
Actuated g/C Ratio	0.67	0.67	0.52	0.52	0.26	0.26
v/c Ratio	1.00	0.59	0.91	0.52	0.90	0.41
Control Delay	88.7	12.8	40.5	3.1	65.2	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	88.7	12.8	40.5	3.1	65.2	6.6
LOS	F	B	D	A	E	A
Approach Delay		33.6	25.7		43.7	
Approach LOS		C	C		D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 112.9			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.00			
Intersection Signal Delay: 32.1		Intersection LOS: C	
Intersection Capacity Utilization 89.4%		ICU Level of Service E	

Analysis Period (min) 15

Splits and Phases: 113: LPGA Blvd & Tymber Creek Ext.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: AM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Breakway Trail
Analysis Year: 2015 Alt 5
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	892	vph	558	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	235		147	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	483	pcphpl	302	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	483	pcphpl	302	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	8.1	pc/mi/ln	5.0	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: AM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Hunters Ridge Blvd
Analysis Year: 2025 Alt 5
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1376	vph	879	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	362		231	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	745	pcphpl	476	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	745	pcphpl	476	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	B		A	
Density, D	12.4	pc/mi/ln	7.9	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: AM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Hunters Ridge Blvd
Analysis Year: 2035 Alt 5
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1954	vph	1266	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	514		333	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	1058	pcphpl	685	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	1058	pcphpl	685	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	B		B	
Density, D	17.6	pc/mi/ln	11.4	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: PM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Breakway Trail
Analysis Year: 2015 Alt 5
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	548	vph	871	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	144		229	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	296	pcphpl	471	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	296	pcphpl	471	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		A	
Density, D	4.9	pc/mi/ln	7.8	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst: SK
Agency/Co: GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date: 11/15/2011
Analysis Period: PM Design Hour
Highway: SR 40
From/To: Cone Rd
Jurisdiction: Hunters Ridge Blvd
Analysis Year: 2025 Alt 5
Project ID: SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	838	vph	1367	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	221		360	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	453	pcphpl	740	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	453	pcphpl	740	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		B	
Density, D	7.6	pc/mi/ln	12.3	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Phone: Fax:
E-mail:

OPERATIONAL ANALYSIS

Analyst:	SK
Agency/Co:	GMB Engineers & Planners, Inc.SR 40 Design Traffic
Date:	11/15/2011
Analysis Period:	PM Design Hour
Highway:	SR 40
From/To:	Cone Rd
Jurisdiction:	Hunters Ridge Blvd
Analysis Year:	2035 Alt 5
Project ID:	SR 40 Design Traffic

FREE-FLOW SPEED

Direction	1		2	
Lane width	12.0	ft	12.0	ft
Lateral clearance:				
Right edge	6.0	ft	6.0	ft
Left edge	6.0	ft	6.0	ft
Total lateral clearance	12.0	ft	12.0	ft
Access points per mile	0		0	
Median type	Divided			
Free-flow speed:	Base		Measured	
FFS or BFFS	60.0	mph	60.0	mph
Lane width adjustment, FLW	0.0	mph	0.0	mph
Lateral clearance adjustment, FLC	0.0	mph	0.0	mph
Median type adjustment, FM	0.0	mph	0.0	mph
Access points adjustment, FA	0.0	mph	0.0	mph
Free-flow speed	60.0	mph	60.0	mph

VOLUME

Direction	1		2	
Volume, V	1201	vph	1959	vph
Peak-hour factor, PHF	0.95		0.95	
Peak 15-minute volume, v15	316		516	
Trucks and buses	5	%	5	%
Recreational vehicles	2	%	2	%
Terrain type	Level		Level	
Grade	0.00	%	0.00	%
Segment length	0.00	mi	0.00	mi
Number of lanes	2		2	
Driver population adjustment, fP	1.00		1.00	
Trucks and buses PCE, ET	1.5		1.5	
Recreational vehicles PCE, ER	1.2		1.2	
Heavy vehicle adjustment, fHV	0.972		0.972	
Flow rate, vp	650	pcphpl	1060	pcphpl

RESULTS

Direction	1		2	
Flow rate, vp	650	pcphpl	1060	pcphpl
Free-flow speed, FFS	60.0	mph	60.0	mph
Avg. passenger-car travel speed, S	60.0	mph	60.0	mph
Level of service, LOS	A		B	
Density, D	10.8	pc/mi/ln	17.7	pc/mi/ln

Overall results are not computed when free-flow speed is less than 45 mph.

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-95 SB Off Ramp	II	45	63.5	17.9	81.4	0.79	35.1	A
I-95 NB Off Ramp	II	45	28.7	7.1	35.8	0.29	29.1	B
Williamson Blvd.	II	45	42.2	27.8	70.0	0.46	23.8	C
Total	II		134.4	52.8	187.2	1.55	29.7	B

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	24.3	63.8	0.43	24.5	C
I-95 NB Off Ramp	II	45	42.2	4.8	47.0	0.46	35.5	A
I-95 SB Off Ramp	II	45	28.7	16.0	44.7	0.29	23.3	C
Tymber Creek Ext.	II	45	63.5	18.0	81.5	0.79	35.0	A
Total	II		173.9	63.1	237.0	1.98	30.1	B

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Breakaway Tr	I	53	301.2	7.3	308.5	4.46	52.1	A
Tymber Creek Rd	I	50	71.5	28.2	99.7	0.99	35.9	B
Booth Rd	I	50	38.1	15.0	53.1	0.53	35.8	B
I-95 SB On Ramp	I	45	27.1	6.6	33.7	0.26	27.9	C
I-95 NB Off Ramp	I	45	7.9	5.8	13.7	0.08	20.0	E
Williamson Blvd.	I	45	15.3	33.9	49.2	0.15	10.8	F
Total	I		461.1	96.8	557.9	6.47	41.8	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	26.3	65.2	0.43	23.6	D
I-95 NB On Ramp	I	45	15.3	4.7	20.0	0.15	26.5	D
I-95 SB Off Ramp	I	45	7.9	4.2	12.1	0.08	22.7	D
Booth Rd	I	47	27.1	8.1	35.2	0.26	26.7	D
Tymber Creek Rd	I	50	38.1	22.4	60.5	0.53	31.5	C
Breakaway Tr	I	50	71.5	8.9	80.4	0.99	44.5	A
Total	I		198.8	74.6	273.4	2.43	32.1	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	39.8	52.5	0.11	7.5	F
Hand Ave Ext	I	48	154.2	17.0	171.2	2.07	43.5	A
SR 40	I	40	56.3	51.4	107.7	0.62	20.9	E
Total	I		223.2	108.2	331.4	2.81	30.5	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	69.5	92.5	0.20	7.8	F
Hand Ave Ext	I	40	56.3	4.7	61.0	0.62	36.9	B
LPGA Blvd	I	50	149.1	46.2	195.3	2.07	38.2	B
Total	I		228.4	120.4	348.8	2.89	29.9	C

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tomoka Farms Rd N	II	45	47.5	25.0	72.5	0.59	29.5	B
I-95 SB Off Ramp	II	45	21.8	12.5	34.3	0.20	21.0	D
I-95 NB Off Ramp	II	45	28.7	5.4	34.1	0.29	30.6	B
Williamson Blvd.	II	45	42.2	41.1	83.3	0.46	20.0	D
Total	II		140.2	84.0	224.2	1.55	24.8	C

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	36.7	76.2	0.43	20.5	D
I-95 NB Off Ramp	II	45	42.2	3.7	45.9	0.46	36.3	A
I-95 SB Off Ramp	II	45	28.7	19.0	47.7	0.29	21.9	D
Tomoka Farms Rd N	II	45	21.8	9.1	30.9	0.20	23.3	C
Tymber Creek Ext.	II	45	47.5	32.9	80.4	0.59	26.6	C
Total	II		179.7	101.4	281.1	1.98	25.4	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hunters Ridge Blvd	I	54	240.7	23.8	264.5	3.62	49.3	A
Breakaway Tr	I	50	60.5	9.1	69.6	0.84	43.4	A
Tymber Creek Rd	I	50	71.5	34.3	105.8	0.99	33.8	C
Booth Rd	I	50	38.1	13.7	51.8	0.53	36.7	B
I-95 SB On Ramp	I	45	27.1	12.7	39.8	0.26	23.6	D
I-95 NB Off Ramp	I	45	7.9	8.4	16.3	0.08	16.8	E
Williamson Blvd.	I	45	15.3	45.4	60.7	0.15	8.7	F
Total	I		461.1	147.4	608.5	6.47	38.3	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	29.1	68.0	0.43	22.6	D
I-95 NB On Ramp	I	45	15.3	14.0	29.3	0.15	18.1	E
I-95 SB Off Ramp	I	45	7.9	8.5	16.4	0.08	16.7	E
Booth Rd	I	47	27.1	8.2	35.3	0.26	26.6	D
Tymber Creek Rd	I	50	38.1	22.6	60.7	0.53	31.4	C
Breakaway Tr	I	50	71.5	9.3	80.8	0.99	44.3	A
Hunters Ridge Blvd	I	60	50.4	22.0	72.4	0.84	41.8	B
Total	I		249.2	113.7	362.9	3.27	32.5	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	65.3	78.0	0.11	5.1	F
Hand Ave Ext	I	48	154.2	22.7	176.9	2.07	42.1	A
SR 40	I	40	56.3	45.3	101.6	0.62	22.1	D
Total	I		223.2	133.3	356.5	2.81	28.3	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	156.9	179.9	0.20	4.0	F
Hand Ave Ext	I	40	56.3	6.0	62.3	0.62	36.1	B
LPGA Blvd	I	50	149.1	56.9	206.0	2.07	36.2	B
Total	I		228.4	219.8	448.2	2.89	23.3	D

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tomoka Farms Rd N	II	45	47.5	65.0	112.5	0.59	19.0	D
I-95 SB Off Ramp	II	45	21.8	16.4	38.2	0.20	18.9	D
I-95 NB Off Ramp	II	45	28.7	5.2	33.9	0.29	30.8	B
Williamson Blvd.	II	45	42.2	74.6	116.8	0.46	14.3	E
Total	II		140.2	161.2	301.4	1.55	18.5	D

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	46.2	85.7	0.43	18.2	D
I-95 NB Off Ramp	II	45	42.2	5.2	47.4	0.46	35.2	A
I-95 SB Off Ramp	II	45	28.7	17.1	45.8	0.29	22.8	C
Tomoka Farms Rd N	II	45	21.8	15.7	37.5	0.20	19.2	D
Tymber Creek Ext.	II	45	47.5	66.1	113.6	0.59	18.8	D
Total	II		179.7	150.3	330.0	1.98	21.6	D

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hunters Ridge Blvd	I	54	240.7	33.4	274.1	3.62	47.6	A
Breakaway Tr	I	50	60.5	14.8	75.3	0.84	40.2	B
Tymber Creek Rd	I	50	71.5	55.8	127.3	0.99	28.1	C
Booth Rd	I	50	38.1	28.9	67.0	0.53	28.4	C
I-95 SB On Ramp	I	45	27.1	16.6	43.7	0.26	21.5	D
I-95 NB Off Ramp	I	45	7.9	14.1	22.0	0.08	12.5	F
Williamson Blvd.	I	45	15.3	68.5	83.8	0.15	6.3	F
Total	I		461.1	232.1	693.2	6.47	33.6	C

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	28.5	67.4	0.43	22.8	D
I-95 NB On Ramp	I	45	15.3	27.6	42.9	0.15	12.4	F
I-95 SB Off Ramp	I	45	7.9	11.4	19.3	0.08	14.2	F
Booth Rd	I	47	27.1	8.0	35.1	0.26	26.7	D
Tymber Creek Rd	I	50	38.1	25.5	63.6	0.53	29.9	C
Breakaway Tr	I	50	71.5	12.2	83.7	0.99	42.8	A
Hunters Ridge Blvd	I	60	50.4	28.3	78.7	0.84	38.4	B
Total	I		249.2	141.5	390.7	3.27	30.2	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	112.7	125.4	0.11	3.2	F
Hand Ave Ext	I	48	154.2	33.3	187.5	2.07	39.7	B
SR 40	I	40	56.3	45.2	101.5	0.62	22.2	D
Total	I		223.2	191.2	414.4	2.81	24.4	D

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	203.8	226.8	0.20	3.2	F
Hand Ave Ext	I	40	56.3	8.5	64.8	0.62	34.7	B
LPGA Blvd	I	50	149.1	82.6	231.7	2.07	32.2	C
Total	I		228.4	294.9	523.3	2.89	19.9	E

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
I-95 SB Off Ramp	II	45	63.5	4.2	67.7	0.79	42.2	A
I-95 NB Off Ramp	II	45	28.7	1.8	30.5	0.29	34.2	B
Williamson Blvd.	II	45	42.2	21.4	63.6	0.46	26.2	C
Total	II		134.4	27.4	161.8	1.55	34.4	B

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	25.9	65.4	0.43	23.9	C
I-95 NB Off Ramp	II	45	42.2	3.3	45.5	0.46	36.7	A
I-95 SB Off Ramp	II	45	28.7	4.2	32.9	0.29	31.7	B
Tymber Creek Ext.	II	45	63.5	7.3	70.8	0.79	40.3	A
Total	II		173.9	40.7	214.6	1.98	33.2	B

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Breakaway Tr	I	53	301.2	2.0	303.2	4.46	53.0	A
Tymber Creek Rd	I	50	71.5	26.2	97.7	0.99	36.6	B
Booth Rd	I	50	38.1	3.2	41.3	0.53	46.1	A
I-95 SB On Ramp	I	45	27.1	8.0	35.1	0.26	26.7	D
I-95 NB Off Ramp	I	45	7.9	10.2	18.1	0.08	15.1	F
Williamson Blvd.	I	45	15.3	28.6	43.9	0.15	12.1	F
Total	I		461.1	78.2	539.3	6.47	43.2	A

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	34.3	73.2	0.43	21.0	D
I-95 NB On Ramp	I	45	15.3	10.8	26.1	0.15	20.3	E
I-95 SB Off Ramp	I	45	7.9	1.7	9.6	0.08	28.6	C
Booth Rd	I	47	27.1	5.6	32.7	0.26	28.7	C
Tymber Creek Rd	I	50	38.1	11.9	50.0	0.53	38.1	B
Breakaway Tr	I	50	71.5	1.5	73.0	0.99	49.0	A
Total	I		198.8	65.8	264.6	2.43	33.1	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	41.6	54.3	0.11	7.3	F
Hand Ave Ext	I	48	154.2	11.8	166.0	2.07	44.9	A
SR 40	I	40	56.3	41.2	97.5	0.62	23.1	D
Total	I		223.2	94.6	317.8	2.81	31.8	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	73.5	96.5	0.20	7.4	F
Hand Ave Ext	I	40	56.3	3.3	59.6	0.62	37.8	B
LPGA Blvd	I	50	149.1	49.0	198.1	2.07	37.6	B
Total	I		228.4	125.8	354.2	2.89	29.4	C

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tomoka Farms Rd N	II	45	47.5	25.6	73.1	0.59	29.2	B
I-95 SB Off Ramp	II	45	21.8	6.1	27.9	0.20	25.8	C
I-95 NB Off Ramp	II	45	28.7	5.0	33.7	0.29	30.9	B
Williamson Blvd.	II	45	42.2	35.7	77.9	0.46	21.4	D
Total	II		140.2	72.4	212.6	1.55	26.2	C

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	39.9	79.4	0.43	19.7	D
I-95 NB Off Ramp	II	45	42.2	5.3	47.5	0.46	35.1	A
I-95 SB Off Ramp	II	45	28.7	5.9	34.6	0.29	30.1	B
Tomoka Farms Rd N	II	45	21.8	12.4	34.2	0.20	21.1	D
Tymber Creek Ext.	II	45	47.5	25.8	73.3	0.59	29.1	B
Total	II		179.7	89.3	269.0	1.98	26.5	C

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hunters Ridge Blvd	I	54	240.7	23.8	264.5	3.62	49.3	A
Breakaway Tr	I	50	60.5	4.2	64.7	0.84	46.7	A
Tymber Creek Rd	I	50	71.5	35.8	107.3	0.99	33.3	C
Booth Rd	I	50	38.1	20.4	58.5	0.53	32.5	C
I-95 SB On Ramp	I	45	27.1	20.3	47.4	0.26	19.8	E
I-95 NB Off Ramp	I	45	7.9	4.6	12.5	0.08	21.9	D
Williamson Blvd.	I	45	15.3	39.2	54.5	0.15	9.7	F
Total	I		461.1	148.3	609.4	6.47	38.2	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	43.0	81.9	0.43	18.8	E
I-95 NB On Ramp	I	45	15.3	13.2	28.5	0.15	18.6	E
I-95 SB Off Ramp	I	45	7.9	5.8	13.7	0.08	20.0	E
Booth Rd	I	47	27.1	5.6	32.7	0.26	28.7	C
Tymber Creek Rd	I	50	38.1	21.7	59.8	0.53	31.8	C
Breakaway Tr	I	50	71.5	7.0	78.5	0.99	45.6	A
Hunters Ridge Blvd	I	60	50.4	23.4	73.8	0.84	41.0	B
Total	I		249.2	119.7	368.9	3.27	32.0	C

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	52.3	65.0	0.11	6.1	F
Hand Ave Ext	I	48	154.2	24.2	178.4	2.07	41.8	B
SR 40	I	40	56.3	40.7	97.0	0.62	23.2	D
Total	I		223.2	117.2	340.4	2.81	29.7	C

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	92.1	115.1	0.20	6.2	F
Hand Ave Ext	I	40	56.3	6.8	63.1	0.62	35.7	B
LPGA Blvd	I	50	149.1	44.3	193.4	2.07	38.5	B
Total	I		228.4	143.2	371.6	2.89	28.0	C

Arterial Level of Service: EB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Tomoka Farms Rd N	II	45	47.5	45.5	93.0	0.59	23.0	C
I-95 SB Off Ramp	II	45	21.8	8.3	30.1	0.20	23.9	C
I-95 NB Off Ramp	II	45	28.7	5.9	34.6	0.29	30.1	B
Williamson Blvd.	II	45	42.2	54.8	97.0	0.46	17.2	D
Total	II		140.2	114.5	254.7	1.55	21.9	D

Arterial Level of Service: WB LPGA Blvd

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	II	45	39.5	88.9	128.4	0.43	12.2	F
I-95 NB Off Ramp	II	45	42.2	7.8	50.0	0.46	33.4	B
I-95 SB Off Ramp	II	45	28.7	8.8	37.5	0.29	27.8	C
Tomoka Farms Rd N	II	45	21.8	30.5	52.3	0.20	13.8	E
Tymber Creek Ext.	II	45	47.5	40.5	88.0	0.59	24.3	C
Total	II		179.7	176.5	356.2	1.98	20.0	D

Arterial Level of Service: EB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Hunters Ridge Blvd	I	54	240.7	31.1	271.8	3.62	48.0	A
Breakaway Tr	I	50	60.5	5.8	66.3	0.84	45.6	A
Tymber Creek Rd	I	50	71.5	29.4	100.9	0.99	35.5	B
Booth Rd	I	50	38.1	13.8	51.9	0.53	36.7	B
I-95 SB On Ramp	I	45	27.1	32.1	59.2	0.26	15.9	F
I-95 NB Off Ramp	I	45	7.9	4.4	12.3	0.08	22.3	D
Williamson Blvd.	I	45	15.3	43.3	58.6	0.15	9.1	F
Total	I		461.1	159.9	621.0	6.47	37.5	B

Arterial Level of Service: WB SR 40

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Williamson Blvd.	I	45	38.9	63.5	102.4	0.43	15.0	F
I-95 NB On Ramp	I	45	15.3	22.9	38.2	0.15	13.9	F
I-95 SB Off Ramp	I	45	7.9	11.8	19.7	0.08	13.9	F
Booth Rd	I	47	27.1	9.6	36.7	0.26	25.6	D
Tymber Creek Rd	I	50	38.1	35.2	73.3	0.53	26.0	D
Breakaway Tr	I	50	71.5	11.1	82.6	0.99	43.3	A
Hunters Ridge Blvd	I	60	50.4	34.2	84.6	0.84	35.7	B
Total	I		249.2	188.3	437.5	3.27	26.9	D

Arterial Level of Service: NW Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
LPGA Blvd	I	40	12.7	104.0	116.7	0.11	3.4	F
Hand Ave Ext	I	48	154.2	42.2	196.4	2.07	37.9	B
SR 40	I	40	56.3	35.5	91.8	0.62	24.5	D
Total	I		223.2	181.7	404.9	2.81	24.9	D

Arterial Level of Service: SB Williamson Blvd.

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SR 40	I	40	23.0	152.7	175.7	0.20	4.1	F
Hand Ave Ext	I	40	56.3	8.9	65.2	0.62	34.5	B
LPGA Blvd	I	50	149.1	51.0	200.1	2.07	37.2	B
Total	I		228.4	212.6	441.0	2.89	23.6	D

Appendix T

ARTPLAN Multi-Modal LOS Outputs for Year 2035

ARTPLAN 2009 Conceptual Planning Analysis

Project Information

Analyst	PR	**Arterial Name**	SR 40	**Study Period**	Dir Hr Demand Vol
Date Prepared	6/18/2011 11:16:35 AM	**From**	Hunters Ridge Blvd	**Modal Analysis**	Multimodal
Agency	GMB	**To**	Williamson Blvd	**Program**	ARTPLAN 2009
Area Type	Other Urbanized	**Peak Direction**	Eastbound	**Version Date**	12/12/10
Arterial Class	2				

File Name	C:\Users\rpemmanaboina\AppData\Local\Temp\preview.xml
User Notes	SR 40_2035_AM_Alt5

Arterial Data

K	0.097	**PHF**	0.925	**Control Type**	Semiactuated
D	0.55	**% Heavy Vehicles**	5	**Base Sat. Flow Rate**	1950

Automobile Intersection and Segment Data

Segment #	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	FFS	Median Type
1 (to Breakaway Tr)	90	0.46	3	3	2	0	Yes	1	235	0.12	No	4435	23800	2673	3	60	Restrictive
2 (to Tymber Creek Rd)	120	0.5	3	3	11	4	Yes	2	470	0.15	Yes	5428	23800	2740	3	55	Restrictive
3 (to Booth Rd)	150	0.73	4	3	2	1	Yes	1	235	0.06	Yes	2791	34000	3427	3	50	Restrictive
4 (to SB Ramps)	150	0.58	4	4	0	23	No				Yes	1377	34000	3627	4	50	Restrictive
5 (to NB Ramps)	150	0.68	4	3	7	0	Yes	1	700	0.18	No	500	34000	3238	3	50	Restrictive
6 (to Williamson Blvd)	150	0.49	4	3	2	45	Yes	1	235	0.09	Yes	800	34000	3682	2	50	Restrictive

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to Breakaway Tr)	2832	5748	1.071	57.19	E	0.14	26.52	C
2 (to Tymber Creek Rd)	2518	5518	0.913	28.19	C	0.27	35.32	A
3 (to Booth Rd)	3594	5494	0.896	2.90	A	0.34	39.28	A
4 (to SB Ramps)	3019	5833	0.892	18.42	B	0.00	22.32	C
5 (to NB Ramps)	3256	5494	0.871	7.39	A	0.37	19.46	D
6 (to Williamson Blvd)	2110	2604	1.654	325.32	F	0.49	1.60	F

Arterial Length	**2.9036**	**Weighted g/C**	**##**	**FFS Delay**	**474.86**	**Threshold Delay**	**52.23**	**Auto Speed**	**###**	**Auto LOS**	**###**

Multimodal Segment Data

Segment #	Pave Shldr /Bike Lane	Outside Lane Width	Pave Cond	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Obstacle To Bus Stop	Bus Freq	Bus Span Service
1 (to Breakaway Tr)	Yes	Typical	Typical	Yes	Typical	No	No	0	0
2 (to Tymber Creek Rd)	Yes	Typical	Typical	Yes	Typical	No	No	0	0
3 (to Booth Rd)	Yes	Typical	Typical	Yes	Typical	No	No	0	0
4 (to SB Ramps)	Yes	Typical	Typical	Yes	Typical	No	No	0	0
5 (to NB Ramps)	Yes	Typical	Typical	Yes	Adjacent	No	No	0	0
6 (to Williamson Blvd)	Yes	Typical	Typical	Yes	Adjacent	No	No	0	0

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to Breakaway Tr)	100			Yes			Typical			No		
2 (to Tymber Creek Rd)	100			Yes			Typical			No		
3 (to Booth Rd)	100			Yes			Typical			No		
4 (to SB Ramps)	100			Yes			Typical			No		
5 (to NB Ramps)	100			Yes			Adjacent			No		
6 (to Williamson Blvd)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle LOS		Pedestrian LOS					Bus LOS	
Segment #	**Score**	**Segment**	**1**	**2**	**3**	**Score**	**Segment**	**Adj. Buses**	**Segment**
1 (to Breakaway Tr)	3.87	D				4.64	E	0.00	F
2 (to Tymber Creek Rd)	3.80	D				4.50	E	0.00	F
3 (to Booth Rd)	3.78	D				4.83	E	0.00	F
4 (to SB Ramps)	3.61	D				4.18	D	0.00	F
5 (to NB Ramps)	3.51	D				4.60	E	0.00	F
6 (to Williamson Blvd)	3.88	D				6.55	F	0.00	F

Bicycle LOS	Pedestrian LOS	Bus LOS

ARTPLAN 2009 Conceptual Planning Analysis

Project Information

Analyst	PR	**Arterial Name**	SR 40	**Study Period**	Dir Hr Demand Vol
Date Prepared	6/18/2011 11:16:35 AM	**From**	Williamson Blvd	**Modal Analysis**	Multimodal
Agency	GMB	**To**	Hunters Ridge Blvd	**Program**	ARTPLAN 2009
Area Type	Other Urbanized	**Peak Direction**	Westbound	**Version Date**	12/12/10
Arterial Class	2				

File Name	C:\Users\rpemmanaboina\AppData\Local\Temp\preview.xml
User Notes	SR 40_2035_PM_Alt5

Arterial Data

K	0.097	**PHF**	0.925	**Control Type**	Semiactuated
D	0.55	**% Heavy Vehicles**	5	**Base Sat. Flow Rate**	1950

Automobile Intersection and Segment Data

Segment #	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	FFS	Median Type
1 (to I95 NBRamps)	150	0.52	4	3	0	13	No				Yes	800	34000	3683	3	50	Restrictive
2 (to I95 SBRamps)	150	0.8	4	3	16	0	Yes	2	470	0.25	No	500	34000	3970	3	50	Restrictive
3 (to Booth Rd)	150	0.77	4	3	2	1	Yes	1	235	0.08	Yes	1377	34000	3266	3	50	Restrictive
4 (to Tymber Creek Rd)	120	0.52	3	3	4	29	Yes	1	235	0.16	Yes	2791	34000	3426	3	55	Restrictive
5 (to Breakaway Tr)	90	0.73	3	3	1	7	Yes	1	235	0.15	Yes	5248	34000	2840	3	55	Restrictive
6 (to Hunters Ridge Blvd)	100	0.37	3	3	16	29	Yes	2	470	0.20	Yes	4435	34000	2673	3	60	Restrictive

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to I95 NBRamps)	3464	5029	1.325	172.76	F	0.00	2.91	F
2 (to I95 SBRamps)	3605	5494	0.820	0.17	A	0.72	33.11	B
3 (to Booth Rd)	3425	5494	0.810	0.83	A	0.31	38.22	A
4 (to Tymber Creek Rd)	2482	3840	1.243	140.20	F	0.55	10.52	F
5 (to Breakaway Tr)	2825	5339	0.725	7.08	A	0.07	43.99	A
6 (to Hunters Ridge Blvd)	1589	3811	1.127	95.04	F	0.43	19.91	D

Arterial Length	**2.8695**	**Weighted g/C**	**##**	**FFS Delay**	**450.09**	**Threshold Delay**	**28.99**	**Auto Speed**	**###**	**Auto LOS**	**###**

Multimodal Segment Data

Segment #	Pave Shldr /Bike Lane	Outside Lane Width	Pave Cond	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Obstacle To Bus Stop	Bus Freq	Bus Span Service
1 (to I95 NBRamps)	Yes	Typical	Typical	Yes	Adjacent	No	No	0	0
2 (to I95 SBRamps)	Yes	Typical	Typical	Yes	Adjacent	No	No	0	0
3 (to Booth Rd)	Yes	Typical	Typical	Yes	Typical	No	No	0	0
4 (to Tymber Creek Rd)	Yes	Typical	Typical	Yes	Typical	No	No	0	0
5 (to Breakaway Tr)	Yes	Typical	Typical	Yes	Typical	No	No	0	0
6 (to Hunters Ridge Blvd)	Yes	Typical	Typical	Yes	Typical	No	No	0	0

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to I95 NBRamps)	100			Yes			Adjacent			No		
2 (to I95 SBRamps)	100			Yes			Adjacent			No		
3 (to Booth Rd)	100			Yes			Typical			No		
4 (to Tymber Creek Rd)	100			Yes			Typical			No		
5 (to Breakaway Tr)	100			Yes			Typical			No		
6 (to Hunters Ridge Blvd)	100			Yes			Typical			No		

Multimodal LOS

	Bicycle LOS		Pedestrian LOS					Bus LOS	
Segment #	**Score**	**Segment**	**1**	**2**	**3**	**Score**	**Segment**	**Adj. Buses**	**Segment**
1 (to I95 NBRamps)	3.67	D				5.04	E	0.00	F
2 (to I95 SBRamps)	3.61	D				5.20	E	0.00	F
3 (to Booth Rd)	3.70	D				4.62	E	0.00	F
4 (to Tymber Creek Rd)	3.89	D				5.01	E	0.00	F
5 (to Breakaway Tr)	3.82	D				4.58	E	0.00	F
6 (to Hunters Ridge Blvd)	3.87	D				4.64	E	0.00	F

Bicycle LOS	Pedestrian LOS	Bus LOS

ARTPLAN 2009 Conceptual Planning Analysis

Project Information

Analyst	PR	**Arterial Name**	Williamson Blvd	**Study Period**	Dir Hr Demand Vol
Date Prepared	2/22/2011 11:16:35 AM	**From**	SR 40	**Modal Analysis**	Multimodal
Agency	GMB	**To**	LPGA Blvd	**Program**	ARTPLAN 2009
Area Type	Other Urbanized	**Peak Direction**	Southbound	**Version Date**	12/12/10
Arterial Class	2				

File Name	C:\Users\rpemmanaboina\AppData\Local\Temp\preview.xml
User Notes	WB_2035_AM_Alt5

Arterial Data

K	0.097	**PHF**	0.925	**Control Type**	Actuated
D	0.55	**% Heavy Vehicles**	3	**Base Sat. Flow Rate**	1950

Automobile Intersection and Segment Data

Segment #	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	FFS	Median Type
1 (to Hand Ave)	90	0.67	3	2	38	0	Yes	2	470	0.25	No	3300	31400	2029	2	45	Restrictive
2 (to LPGA Blvd)	150	0.27	3	2	34	18	Yes	2	470	0.19	Yes	10865	36400	2081	2	55	Restrictive

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to Hand Ave)	1360	3436	0.591	8.43	A	0.80	34.11	B
2 (to LPGA Blvd)	1080	3219	1.243	174.33	F	#	22.75	C

Arterial Length	**2.6828**	**Weighted g/C**	**0.47**	**FFS Delay**	**206.84**	**Threshold Delay**	**0.00**	**Auto Speed**	**###**	**Auto LOS**	**###**

Multimodal Segment Data

Segment #	Pave Shldr /Bike Lane	Outside Lane Width	Pave Cond	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Obstacle To Bus Stop	Bus Freq	Bus Span Service
1 (to Hand Ave)	Yes	Typical	Typical	Yes	Adjacent	No	No	6	12
2 (to LPGA Blvd)	Yes	Typical	Typical	Yes	Typical	No	No	4	12

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to Hand Ave)	100			Yes			Adjacent			No		
2 (to LPGA Blvd)	100			Yes			Typical			No		

Multimodal LOS

	Bicycle LOS		Pedestrian LOS					Bus LOS	
Segment #	**Score**	**Segment**	**1**	**2**	**3**	**Score**	**Segment**	**Adj. Buses**	**Segment**
1 (to Hand Ave)	3.17	C				4.59	E	4.59	B
2 (to LPGA Blvd)	3.34	C				4.84	E	3.06	C

Bicycle LOS	Pedestrian LOS	Bus LOS

ARTPLAN 2009 Conceptual Planning Analysis

Project Information

Analyst	PR	**Arterial Name**	Williamson Blvd	**Study Period**	Dir Hr Demand Vol
Date Prepared	2/22/2011 11:16:35 AM	**From**	LPGA Blvd	**Modal Analysis**	Multimodal
Agency	GMB	**To**	SR 40	**Program**	ARTPLAN 2009
Area Type	Other Urbanized	**Peak Direction**	Northbound	**Version Date**	12/12/10
Arterial Class	2				

File Name	C:\Users\rpemmanaboina\AppData\Local\Temp\preview.xml
User Notes	WB_2035_PM_Alt5

Arterial Data

K	0.097	**PHF**	0.95	**Control Type**	Semiactuated
D	0.55	**% Heavy Vehicles**	3	**Base Sat. Flow Rate**	1950

Automobile Intersection and Segment Data

Segment #	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	FFS	Median Type
1 (to Hand Ave)	90	0.41	3	2	0	23	No				Yes	10932	31400	1790	2	55	Restrictive
2 (to SR 40)	150	0.35	3	2.5	7	14	Yes	1	235	0.25	Yes	3300	33000	2030	2	45	Restrictive

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to Hand Ave)	1451	2919	1.212	122.77	F	0.00	27.24	C
2 (to SR 40)	1688	4046	1.192	135.91	F	0.55	11.63	F

Arterial Length	**2.6955**	**Weighted g/C**	**0.38**	**FFS Delay**	**281.57**	**Threshold Delay**	**0.00**	**Auto Speed**	**###**	**Auto LOS**	**###**

Multimodal Segment Data

Segment #	Pave Shldr /Bike Lane	Outside Lane Width	Pave Cond	Side walk	Sidewalk Roadway Separation	Sidewalk Roadway Protective Barrier	Obstacle To Bus Stop	Bus Freq	Bus Span Service
1 (to Hand Ave)	Yes	Typical	Typical	Yes	Typical	No	No	4	12
2 (to SR 40)	Yes	Typical	Typical	Yes	Adjacent	No	No	6	12

Pedestrian SubSegment Data

	% of Segment			Sidewalk			Separation			Barrier		
Segment #	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**	**1**	**2**	**3**
1 (to Hand Ave)	100			Yes			Typical			No		
2 (to SR 40)	100			Yes			Adjacent			No		

Multimodal LOS

	Bicycle LOS		Pedestrian LOS					Bus LOS	
Segment #	**Score**	**Segment**	**1**	**2**	**3**	**Score**	**Segment**	**Adj. Buses**	**Segment**
1 (to Hand Ave)	3.26	C				4.44	D	3.60	C
2 (to SR 40)	3.16	C				4.53	E	4.59	B

Bicycle LOS	Pedestrian LOS	Bus LOS

Appendix U

Queue Length Calculation Sheets for Year 2035 AM & PM Design Hours - Alternatives 1 & 5

SR 40 Design Traffic Technical Memorandum

Recommended Queue Length of Turn Lanes for Signalized Interscetions- Design Year 2035 (Alt 1)

Turning Movement	Turning Volume (Veh/Hr)	G/C Ratio	Total Cycle Length (Sec)	Number of Turn Lanes	Per Lane Volume (VPHPL)	Percent Trucks	Adjust. Factor	Calc'd Queue Length (ft)	Existing Queue Length (ft)	Rec'd Queue Length (ft)
AM Design Hour										
INTERSECTION:		**SR 40 & Hunters Ridge Boulevard/Stage Coach Road**								
EB Left	106	0.12	100	1	106	5.3%	1.25	85	225	**100**
EB Thru	1,747	0.41	100	3	582	5.3%	1.25	314		**325**
EB Right	73	0.41	100	1	73	5.3%	1.25	39	225	**100**
WB Left	273	0.09	100	2	137	5.3%	1.25	114	225	125
WB Thru	1,025	0.38	100	3	342	5.3%	1.25	194		200
WB Right	480	0.38	100	1	480	5.3%	1.25	272	225	300
NB Left	44	0.06	100	1	44	5.3%	1.25	38	225	**100**
NB Right	168	0.06	100	1	168	5.3%	1.25	144	225	150
SB Left	882	0.28	100	2	441	1.0%	1.25	278		**300**
SB Right	106	0.28	100	1	106	1.0%	1.25	67	250	**100**
INTERSECTION:		**SR 40 & Breakaway Trail**								
EB Left	36	0.12	70	1	36	5.3%	1.25	20	225	**100**
EB Thru	2,873	0.65	70	3	958	5.3%	1.25	214		**225**
WB Left	10	0.10	70	1	10	5.3%	1.25	6	225	**100**
WB Thru	1,768	0.58	70	3	589	5.3%	1.25	158		175
WB Right	140	0.58	70	1	140	5.3%	1.25	38		**100**
SB Left	214	0.20	70	1	214	1.0%	1.25	105		**125**
SB Right	40	0.20	70	1	40	1.0%	1.25	20	250	**100**
INTERSECTION:		**SR 40 & Tymber Creek Road**								
EB Left	346	0.15	150	2	173	5.3%	1.25	202	250	**225**
EB Thru	2,762	0.58	150	3	921	5.3%	1.25	530		**550**
EB Right	22	0.58	150	1	22	5.3%	1.25	13	250	**100**
WB Left	90	0.05	150	1	90	5.3%	1.25	117	250	125
WB Thru	1,610	0.48	150	3	537	5.3%	1.25	383		400
WB Right	564	0.48	150	2	282	5.3%	1.25	201	250	225
NB Left	28	0.07	150	2	14	1.0%	1.25	17	250	**100**
NB Right	55	0.07	150	1	55	1.0%	1.25	67	250	**100**
SB Left*	796	0.21	150	2	398	6.4%	1.25	435	250	**450**
SB Right	301	0.21	150	1	301	6.4%	1.25	329	250	**350**
INTERSECTION:		**SR 40 & Booth Road**								
EB Left	47	0.06	150	1	47	5.3%	1.25	61	250	**100**
EB Thru	3,625	0.74	150	3	1,208	5.3%	1.25	431		**450**
EB Right	28	0.74	150	1	28	5.3%	1.25	10	275	**100**
WB Left	83	0.06	150	1	83	5.3%	1.25	107	275	**125**
WB Thru	2,043	0.75	150	3	681	5.3%	1.25	233		250
WB Right	10	0.75	150	1	10	5.3%	1.25	3	250	**100**
NB Left	153	0.11	150	1	153	1.0%	1.25	179	400	**200**
INTERSECTION:		**SR 40 & I-95 SB Off Ramp**								
EB Thru	3,046	0.59	150	4	762	5.3%	1.25	428		**475**
EB Right	804	0.59	150	1	804	5.3%	1.25	452	250	**475**
WB Left	393	0.15	150	2	197	5.3%	1.25	229	250	250
WB Thru	2,191	0.77	150	3	730	5.3%	1.25	230		250
SB Left	465	0.17	150	2	233	5.3%	1.25	265	250	**275**
SB Right	208	0.17	150	1	208	5.3%	1.25	237	150	**250**
INTERSECTION:		**SR 40 & I-95 NB Off Ramp**								
EB Left	234	0.18	150	1	234	5.3%	1.25	263	250	**275**
EB Thru	3,277	0.71	150	3	1,092	5.3%	1.25	434		**450**
WB Thru	2,117	0.50	150	5	423	5.3%	1.25	290		300
WB Right	321	0.50	150	1	321	5.3%	1.25	220	250	225
NB Left	467	0.23	150	2	234	5.3%	1.25	247	250	250
NB Right	582	0.23	150	2	291	5.3%	1.25	307	150	**325**

SR 40 Design Traffic Technical Memorandum

Recommended Queue Length of Turn Lanes for Signalized Interscetions- Design Year 2035 (Alt 1)

Turning Movement	Turning Volume (Veh/Hr)	G/C Ratio	Total Cycle Length (Sec)	Number of Turn Lanes	Per Lane Volume (VPHPL)	Percent Trucks	Adjust. Factor	Calc'd Queue Length (ft)	Existing Queue Length (ft)	Rec'd Queue Length (ft)
AM Design Hour										
INTERSECTION:		**SR 40 & Williamson Boulevard**								
EB Left	90	0.09	150	1	90	5.3%	1.25	112	250	125
EB Thru	1,826	0.49	150	2	913	5.3%	1.25	638		**650**
EB Right	2,068	0.76	150	2	1,034	5.3%	1.25	340	250	**350**
WB Left	237	0.07	150	2	119	5.3%	1.25	151	250	175
WB Thru	1,081	0.47	150	3	360	5.3%	1.25	262		275
NB Left	1,257	0.25	150	3	419	4.0%	1.25	426	250	450
SB Left	97	0.08	150	2	49	4.0%	1.25	60	250	100
SB Right	100	0.08	150	1	100	4.0%	1.25	125	250	125
INTERSECTION:		**Williamson Boulevard & Hand Avenue**								
WB Left	336	0.24	90	2	168	4.0%	1.25	104	250	**125**
WB Right	698	0.24	90	1	698	4.0%	1.25	431	250	450
NB Right	277	0.34	90	1	277	1.0%	1.25	144	250	150
SB Left	800	0.29	90	2	400	2.0%	1.25	226	250	**250**
INTERSECTION:		**Williamson Boulevard & LPGA Boulevard**								
EB Left	348	0.13	150	2	174	4.0%	1.25	205	250	**200**
EB Right	597	0.45	150	1	597	4.0%	1.25	445	250	**450**
WB Left	263	0.08	150	2	132	4.0%	1.25	164	250	**175**
WB Right	514	0.41	150	1	514	4.0%	1.25	411	250	**425**
NB Left	292	0.09	150	2	146	1.0%	1.25	175	250	175
NB Right	216	0.17	150	1	216	1.0%	1.25	236	250	250
SB Left	632	0.19	150	2	316	2.0%	1.25	340	250	**350**
SB Right	383	0.27	150	1	383	2.0%	1.25	371	250	**375**
INTERSECTION:		**LPGA Boulevard & I-95 NB Off Ramp**								
NB Left	197	0.10	120	2	99	4.0%	1.25	96	200	100
INTERSECTION:		**LPGA Boulevard & I-95 SB Off Ramp**								
SB Left	988	0.35	120	2	494	4.0%	1.25	348	200	**350**
SB Right	270	0.35	120	1	270	4.0%	1.25	190	150	200
INTERSECTION:		**LPGA Boulevard & Tomoka Farms Road N**								
EB Left	1	0.77	120	1	1	4.0%	1.25	0	250	**100**
EB Right	122	0.72	120	1	122	4.0%	1.25	37	250	**100**
WB Left	340	0.11	120	2	170	4.0%	1.25	164	250	175
NB Left	88	0.08	120	1	88	1.0%	1.25	85	250	100
NB Right	372	0.22	120	1	372	1.0%	1.25	305	250	**325**

Notes:

1. Queue Lengths are calculated based on the following formul: $L = (A)(DHV)(1-G/C)(T+1)(F) / (3600/C) / (N)$

where:

L = Queue length

DHV = design hour volume, in vph

G/C = ratio of green time to cycle length

T = percent of heavy vehicles

F = adjustment factor (1.25 to 2)

C = cycle length

N = # of lanes

A = Assumed 25 feet for automobile

2. * 90% of the left turning traffic are assumed to use the exclusive left turn lanes.

3. Recommended Queue lengths are shown in yellow shade and bold letters.

4. A minimum Queue length of 100 feet is assumed as the recommended length for calculated lengths of less than 100 feet.

SR 40 Design Traffic Technical Memorandum

Recommended Queue Length of Turn Lanes for Signalized Interscetions- Design Year 2035 (Alt 1)

Turning Movement	Turning Volume (Veh/Hr)	G/C Ratio	Total Cycle Length (Sec)	Number of Turn Lanes	Per Lane Volume (VPHPL)	Percent Trucks	Adjust. Factor	Calc'd Queue Length (ft)	Rec'd Queue Length (ft)
PM Design Hour									
INTERSECTION:		**SR 40 & Hunters Ridge Boulevard/Stage Coach Road**							
EB Left	106	0.09	110	1	106	5.3%	1.25	97	100
EB Thru	1,023	0.36	110	3	341	5.3%	1.25	219	225
EB Right	48	0.36	110	1	48	5.3%	1.25	31	100
WB Left	340	0.15	110	2	170	5.3%	1.25	145	**150**
WB Thru	1,668	0.42	110	3	556	5.3%	1.25	324	**325**
WB Right	887	0.42	110	1	887	5.3%	1.25	517	**525**
NB Left	78	0.14	110	1	78	5.3%	1.25	67	100
NB Right	340	0.14	110	1	340	5.3%	1.25	294	**300**
SB Left	544	0.20	110	2	272	1.0%	1.25	210	225
SB Right	106	0.20	110	1	106	1.0%	1.25	82	100
INTERSECTION:		**SR 40 & Breakaway Trail**							
EB Left	21	0.12	90	1	21	5.3%	1.25	15	100
EB Thru	1,760	0.76	90	3	587	5.3%	1.25	116	125
WB Left	5	0.11	90	1	5	5.3%	1.25	4	100
WB Thru	2,902	0.73	90	3	967	5.3%	1.25	215	**225**
WB Right	229	0.73	90	1	229	5.3%	1.25	51	100
SB Left	103	0.16	90	1	103	1.0%	1.25	68	100
SB Right	21	0.16	90	1	21	1.0%	1.25	14	100
INTERSECTION:		**SR 40 & Tymber Creek Road**							
EB Left	300	0.09	150	2	150	5.3%	1.25	187	200
EB Thru	1,600	0.48	150	3	533	5.3%	1.25	380	400
EB Right	22	0.48	150	1	22	5.3%	1.25	16	100
WB Left	121	0.19	150	1	121	5.3%	1.25	134	**150**
WB Thru	2,762	0.58	150	3	921	5.3%	1.25	530	**550**
WB Right	816	0.58	150	2	408	5.3%	1.25	235	**250**
NB Left	39	0.07	150	2	20	1.0%	1.25	24	100
NB Right	24	0.07	150	1	24	1.0%	1.25	29	100
SB Left*	545	0.18	150	2	272	6.4%	1.25	309	325
SB Right	226	0.18	150	1	226	6.4%	1.25	257	275
INTERSECTION:		**SR 40 & Booth Road**							
EB Left	10	0.04	150	1	10	5.3%	1.25	13	100
EB Thru	2,240	0.74	150	3	747	5.3%	1.25	266	275
EB Right	14	0.74	150	1	14	5.3%	1.25	5	100
WB Left	56	0.07	150	1	56	5.3%	1.25	71	100
WB Thru	3,472	0.79	150	3	1,157	5.3%	1.25	333	**350**
WB Right	11	0.79	150	1	11	5.3%	1.25	3	100
NB Left	166	0.12	150	1	166	1.0%	1.25	192	200
INTERSECTION:		**SR 40 & I-95 SB Off Ramp**							
EB Thru	1,864	0.56	150	4	466	5.3%	1.25	281	300
EB Right	496	0.56	150	1	496	5.3%	1.25	299	300
WB Left	586	0.23	150	2	293	5.3%	1.25	309	**325**
WB Thru	3,630	0.81	150	3	1,210	5.3%	1.25	315	**325**
SB Left	385	0.13	150	2	193	5.3%	1.25	230	250
SB Right	166	0.13	150	1	166	5.3%	1.25	198	200
INTERSECTION:		**SR 40 & I-95 NB Off Ramp**							
EB Left	160	0.12	150	1	160	5.3%	1.25	193	200
EB Thru	2,089	0.68	150	3	696	5.3%	1.25	306	325
WB Thru	3,448	0.54	150	5	690	5.3%	1.25	435	**450**
WB Right	530	0.54	150	1	530	5.3%	1.25	334	**350**
NB Left	768	0.26	150	2	384	5.3%	1.25	390	**400**
NB Right	514	0.26	150	2	257	5.3%	1.25	261	275

SR 40 Design Traffic Technical Memorandum

Recommended Queue Length of Turn Lanes for Signalized Interscetions- Design Year 2035 (Alt 1)

Turning Movement	Turning Volume (Veh/Hr)	G/C Ratio	Total Cycle Length (Sec)	Number of Turn Lanes	Per Lane Volume (VPHPL)	Percent Trucks	Adjust. Factor	Calc'd Queue Length (ft)	Rec'd Queue Length (ft)
PM Design Hour									
INTERSECTION:		**SR 40 & Williamson Boulevard**							
EB Left	117	0.07	150	1	117	5.3%	1.25	149	**150**
EB Thru	1,140	0.35	150	2	570	5.3%	1.25	508	525
EB Right	1,228	0.74	150	2	614	5.3%	1.25	219	225
WB Left	328	0.10	150	2	164	5.3%	1.25	202	**225**
WB Thru	1,885	0.38	150	3	628	5.3%	1.25	534	**550**
NB Left	1,939	0.37	150	3	646	4.0%	1.25	551	**575**
SB Left	166	0.07	150	2	83	4.0%	1.25	105	**125**
SB Right	154	0.07	150	1	154	4.0%	1.25	194	**200**
INTERSECTION:		**Williamson Boulevard & Hand Avenue**							
WB Left	307	0.26	90	2	154	4.0%	1.25	92	100
WB Right	796	0.26	90	1	796	4.0%	1.25	479	**500**
NB Right	416	0.35	90	1	416	1.0%	1.25	213	**225**
SB Left	580	0.25	90	2	290	2.0%	1.25	173	200
INTERSECTION:		**Williamson Boulevard & LPGA Boulevard**							
EB Left	284	0.08	130	2	142	4.0%	1.25	153	175
EB Right	274	0.42	130	1	274	4.0%	1.25	187	200
WB Left	329	0.10	130	2	165	4.0%	1.25	174	175
WB Right	505	0.44	130	1	505	4.0%	1.25	332	350
NB Left	362	0.14	130	2	181	1.0%	1.25	177	**200**
NB Right	362	0.26	130	1	362	1.0%	1.25	305	**325**
SB Left	371	0.10	130	2	186	2.0%	1.25	192	200
SB Right	284	0.23	130	1	284	2.0%	1.25	252	275
INTERSECTION:		**LPGA Boulevard & I-95 NB Off Ramp**							
NB Left	281	0.13	120	2	141	4.0%	1.25	132	**150**
INTERSECTION:		**LPGA Boulevard & I-95 SB Off Ramp**							
SB Left	460	0.23	120	2	230	4.0%	1.25	192	200
SB Right	298	0.23	120	1	298	4.0%	1.25	249	**250**
INTERSECTION:		**LPGA Boulevard & Tomoka Farms Road N**							
EB Left	1	0.66	120	1	1	4.0%	1.25	0	100
EB Right	185	0.61	120	1	185	4.0%	1.25	78	100
WB Left	407	0.14	120	2	204	4.0%	1.25	190	**200**
NB Left	210	0.15	120	1	210	1.0%	1.25	188	**200**
NB Right	354	0.32	120	1	354	1.0%	1.25	253	275

Notes:

1. Queue Lengths are calculated based on the following formul: $L = (A)(DHV)(1-G/C)(T+1)(F) / (3600/C) / (N)$

where:

L = Queue length

DHV = design hour volume, in vph

G/C = ratio of green time to cycle length

T = percent of heavy vehicles

F = adjustment factor (1.25 to 2)

C = cycle length

N = # of lanes

A = Assumed 25 feet for automobile

2. * 90% of the left turning traffic are assumed to use the exclusive left turn lanes.

3. Recommended Queue lengths are shown in yellow shade and bold letters.

4. A minimum Queue length of 100 feet is assumed as the recommended length for calculated lengths of less than 100 feet.

SR 40 Design Traffic Technical Memorandum

Recommended Queue Length of Turn Lanes for Signalized Interscetions- Design Year 2035 (Alt 5)

Turning Movement	Turning Volume (Veh/Hr)	G/C Ratio	Total Cycle Length (Sec)	Number of Turn Lanes	Per Lane Volume (VPHPL)	Percent Trucks	Adjust. Factor	Calc'd Queue Length (ft)	Rec'd Queue Length (ft)
AM Design Hour									
INTERSECTION:		**SR 40 & Hunters Ridge Boulevard/Stage Coach Road**							
EB Left	174	0.16	100	1	174	5.3%	1.25	134	**150**
EB Thru	1,613	0.40	100	3	538	5.3%	1.25	295	**300**
EB Right	162	0.40	100	1	162	5.3%	1.25	89	**100**
WB Left	292	0.11	100	2	146	5.3%	1.25	119	125
WB Thru	888	0.34	100	3	296	5.3%	1.25	179	200
WB Right	458	0.34	100	1	458	5.3%	1.25	276	300
NB Left	99	0.08	100	1	99	5.3%	1.25	83	100
NB Right	192	0.08	100	1	192	5.3%	1.25	161	175
SB Left	748	0.25	100	2	374	1.0%	1.25	246	**250**
SB Right	179	0.25	100	1	179	1.0%	1.25	118	125
INTERSECTION:		**SR 40 & Breakaway Trail**							
EB Left	37	0.12	90	1	37	5.3%	1.25	27	**100**
EB Thru	2,636	0.66	90	3	879	5.3%	1.25	246	**250**
WB Left	9	0.10	90	1	9	5.3%	1.25	7	**100**
WB Thru	1,612	0.59	90	3	537	5.3%	1.25	181	**200**
WB Right	120	0.59	90	1	120	5.3%	1.25	40	**100**
SB Left	197	0.19	90	1	197	1.0%	1.25	126	**150**
SB Right	14	0.19	90	1	14	1.0%	1.25	9	**100**
INTERSECTION:		**SR 40 & Tymber Creek Road**							
EB Left	318	0.14	120	2	159	5.3%	1.25	150	**150**
EB Thru	2,412	0.50	120	3	804	5.3%	1.25	441	**450**
EB Right	104	0.50	120	1	104	5.3%	1.25	57	**100**
WB Left	180	0.11	120	1	180	5.3%	1.25	176	**200**
WB Thru	1,329	0.46	120	3	443	5.3%	1.25	262	275
WB Right	592	0.46	120	2	296	5.3%	1.25	175	175
NB Left	50	0.08	120	2	25	1.0%	1.25	24	**100**
NB Right	187	0.08	120	1	187	1.0%	1.25	181	**200**
SB Left	820	0.18	120	3	273	6.4%	1.25	248	**250**
SB Right	305	0.18	120	1	305	6.4%	1.25	277	**300**
INTERSECTION:		**SR 40 & Booth Road**							
EB Left	47	0.06	150	1	47	5.3%	1.25	61	**100**
EB Thru	3,352	0.73	150	3	1,117	5.3%	1.25	414	**425**
EB Right	28	0.73	150	1	28	5.3%	1.25	10	**100**
WB Left	78	0.06	150	1	78	5.3%	1.25	101	**125**
WB Thru	1,884	0.74	150	3	628	5.3%	1.25	224	**225**
WB Right	16	0.74	150	1	16	5.3%	1.25	6	**100**
NB Left	143	0.12	150	1	143	1.0%	1.25	165	175
INTERSECTION:		**SR 40 & I-95 SB Off Ramp**							
EB Thru	2,807	0.58	150	4	702	5.3%	1.25	404	**425**
EB Right	820	0.58	150	1	820	5.3%	1.25	472	**475**
WB Left	383	0.16	150	2	192	5.3%	1.25	221	225
WB Thru	2,025	0.77	150	3	675	5.3%	1.25	213	225
SB Left	431	0.18	150	2	216	5.3%	1.25	242	**250**
SB Right	203	0.18	150	1	203	5.3%	1.25	228	**250**
INTERSECTION:		**SR 40 & I-95 NB Off Ramp**							
EB Left	229	0.18	150	1	229	5.3%	1.25	257	**275**
EB Thru	3,009	0.68	150	3	1,003	5.3%	1.25	440	**450**
WB Thru	1,963	0.47	150	5	393	5.3%	1.25	285	300
WB Right	298	0.47	150	1	298	5.3%	1.25	217	225
NB Left	445	0.26	150	2	223	5.3%	1.25	226	250
NB Right	604	0.26	150	2	302	5.3%	1.25	306	**325**

SR 40 Design Traffic Technical Memorandum

Recommended Queue Length of Turn Lanes for Signalized Interscetions- Design Year 2035 (Alt 5)

Turning Movement	Turning Volume (Veh/Hr)	G/C Ratio	Total Cycle Length (Sec)	Number of Turn Lanes	Per Lane Volume (VPHPL)	Percent Trucks	Adjust. Factor	Calc'd Queue Length (ft)	Rec'd Queue Length (ft)
AM Design Hour									
INTERSECTION:		**SR 40 & Williamson Boulevard**							
EB Left	90	0.09	150	1	90	5.3%	1.25	112	125
EB Thru	1,757	0.77	150	2	879	5.3%	1.25	277	**300**
EB Right	1,835	0.77	150	2	918	5.3%	1.25	289	**300**
WB Left	225	0.06	150	2	113	5.3%	1.25	145	150
WB Thru	991	0.46	150	3	330	5.3%	1.25	245	250
NB Left	1,193	0.25	150	3	398	4.0%	1.25	404	425
SB Left	80	0.09	150	2	40	4.0%	1.25	49	100
SB Right	77	0.09	150	1	77	4.0%	1.25	95	100
INTERSECTION:		**Williamson Boulevard & Hand Avenue**							
WB Left	310	0.22	90	2	155	4.0%	1.25	98	**100**
WB Right	655	0.22	90	1	655	4.0%	1.25	415	**425**
NB Right	256	0.34	90	1	256	1.0%	1.25	133	150
SB Left	810	0.29	90	2	405	2.0%	1.25	229	**250**
INTERSECTION:		**Williamson Boulevard & LPGA Boulevard**							
EB Left	309	0.11	150	2	155	4.0%	1.25	186	**200**
EB Right	475	0.47	150	1	475	4.0%	1.25	341	**350**
WB Left	254	0.07	150	2	127	4.0%	1.25	160	**175**
WB Right	525	0.43	150	1	525	4.0%	1.25	405	**425**
NB Left	270	0.09	150	2	135	1.0%	1.25	162	**175**
NB Right	223	0.17	150	1	223	1.0%	1.25	243	250
SB Left	632	0.19	150	2	316	2.0%	1.25	340	**350**
SB Right	340	0.27	150	1	340	2.0%	1.25	330	**350**
INTERSECTION:		**LPGA Boulevard & I-95 NB Off Ramp**							
NB Left	197	0.10	120	2	99	4.0%	1.25	96	100
INTERSECTION:		**LPGA Boulevard & I-95 SB Off Ramp**							
SB Left	915	0.34	120	2	458	4.0%	1.25	327	**350**
SB Right	347	0.34	120	1	347	4.0%	1.25	248	**250**
INTERSECTION:		**LPGA Boulevard & Tomoka Farms Road N**							
EB Left	1	0.65	120	1	1	4.0%	1.25	0	**100**
EB Right	263	0.60	120	1	263	4.0%	1.25	114	125
WB Left	369	0.11	120	2	185	4.0%	1.25	178	**200**
NB Left	278	0.19	120	1	278	1.0%	1.25	237	250
NB Right	363	0.13	120	1	363	1.0%	1.25	332	**350**
INTERSECTION:		**LPGA Boulevard & Tymber Creek Road Ext.**							
EB Left	309	0.58	120	1	309	4.0%	1.25	141	**150**
WB Right	446	0.40	120	1	446	4.0%	1.25	290	**300**
SB Left	584	0.35	120	1	584	1.0%	1.25	399	**400**
SB Right	337	0.35	120	1	337	1.0%	1.25	230	**250**

Notes:

1. Queue Lengths are calculated based on the following formula: $L = (A)(DHV)(1-G/C)(T+1)(F) / (3600/C) / (N)$

where:

L = Queue length

DHV = design hour volume, in vph

G/C = ratio of green time to cycle length

T = percent of heavy vehicles

F = adjustment factor (1.25 to 2)

C = cycle length

N = # of lanes

A = Assumed 25 feet for automobile

2. Recommended Queue lengths are shown in yellow shade and bold letters.

3. A minimum Queue length of 100 feet is assumed as the recommended length for calculated lengths of less than 100 feet.

SR 40 Design Traffic Technical Memorandum

Recommended Queue Length of Turn Lanes for Signalized Interscetions- Design Year 2035 (Alt 5)

Turning Movement	Turning Volume (Veh/Hr)	G/C Ratio	Total Cycle Length (Sec)	Number of Turn Lanes	Per Lane Volume (VPHPL)	Percent Trucks	Adjust. Factor	Calc'd Queue Length (ft)	Rec'd Queue Length (ft)
PM Design Hour									
INTERSECTION:		**SR 40 & Hunters Ridge Boulevard/Stage Coach Road**							
EB Left	178	0.13	100	1	178	5.3%	1.25	142	150
EB Thru	899	0.32	100	3	300	5.3%	1.25	186	200
EB Right	120	0.32	100	1	120	5.3%	1.25	75	100
WB Left	424	0.19	100	2	212	5.3%	1.25	157	**175**
WB Thru	1,468	0.37	100	3	489	5.3%	1.25	282	**300**
WB Right	781	0.37	100	1	781	5.3%	1.25	450	**450**
NB Left	195	0.17	100	1	195	5.3%	1.25	148	**150**
NB Right	424	0.17	100	1	424	5.3%	1.25	322	**325**
SB Left	479	0.16	100	2	240	1.0%	1.25	176	200
SB Right	178	0.16	100	1	178	1.0%	1.25	131	**150**
INTERSECTION:		**SR 40 & Breakaway Trail**							
EB Left	23	0.12	90	1	23	5.3%	1.25	17	100
EB Thru	1,615	0.74	90	3	538	5.3%	1.25	115	125
WB Left	6	0.11	90	1	6	5.3%	1.25	4	100
WB Thru	2,639	0.73	90	3	880	5.3%	1.25	195	200
WB Right	195	0.73	90	1	195	5.3%	1.25	43	100
SB Left	98	0.16	90	1	98	1.0%	1.25	65	100
SB Right	21	0.16	90	1	21	1.0%	1.25	14	100
INTERSECTION:		**SR 40 & Tymber Creek Road**							
EB Left	185	0.07	120	2	93	5.3%	1.25	94	100
EB Thru	1,416	0.43	120	3	472	5.3%	1.25	295	300
EB Right	133	0.43	120	1	133	5.3%	1.25	83	100
WB Left	121	0.16	120	1	121	5.3%	1.25	111	125
WB Thru	2,310	0.52	120	3	770	5.3%	1.25	405	**425**
WB Right	995	0.52	120	2	498	5.3%	1.25	262	**275**
NB Left	209	0.12	120	2	105	1.0%	1.25	97	100
NB Right	112	0.12	120	1	112	1.0%	1.25	104	125
SB Left	652	0.15	120	3	217	6.4%	1.25	205	225
SB Right	200	0.15	120	1	200	6.4%	1.25	188	200
INTERSECTION:		**SR 40 & Booth Road**							
EB Left	14	0.04	150	1	14	5.3%	1.25	18	100
EB Thru	2,068	0.70	150	3	689	5.3%	1.25	284	300
EB Right	14	0.70	150	1	14	5.3%	1.25	6	100
WB Left	56	0.08	150	1	56	5.3%	1.25	71	100
WB Thru	3,199	0.77	150	3	1,066	5.3%	1.25	336	**350**
WB Right	11	0.77	150	1	11	5.3%	1.25	3	100
NB Left	166	0.14	150	1	166	1.0%	1.25	188	**200**
INTERSECTION:		**SR 40 & I-95 SB Off Ramp**							
EB Thru	1,717	0.50	150	4	429	5.3%	1.25	294	300
EB Right	510	0.50	150	1	510	5.3%	1.25	350	350
WB Left	614	0.28	150	2	307	5.3%	1.25	303	**325**
WB Thru	3,356	0.80	150	3	1,119	5.3%	1.25	307	**325**
SB Left	356	0.14	150	2	178	5.3%	1.25	210	225
SB Right	162	0.14	150	1	162	5.3%	1.25	191	200
INTERSECTION:		**SR 40 & I-95 NB Off Ramp**							
EB Left	160	0.13	150	1	160	5.3%	1.25	191	200
EB Thru	1,913	0.67	150	3	638	5.3%	1.25	289	300
WB Thru	3,192	0.52	150	5	638	5.3%	1.25	420	**425**
WB Right	491	0.52	150	1	491	5.3%	1.25	323	**325**
NB Left	778	0.27	150	2	389	5.3%	1.25	389	**400**
NB Right	505	0.27	150	2	253	5.3%	1.25	253	275

SR 40 Design Traffic Technical Memorandum

Recommended Queue Length of Turn Lanes for Signalized Interscetions- Design Year 2035 (Alt 5)

Turning Movement	Turning Volume (Veh/Hr)	G/C Ratio	Total Cycle Length (Sec)	Number of Turn Lanes	Per Lane Volume (VPHPL)	Percent Trucks	Adjust. Factor	Calc'd Queue Length (ft)	Rec'd Queue Length (ft)
PM Design Hour									
INTERSECTION:		**SR 40 & Williamson Boulevard**							
EB Left	117	0.08	150	1	117	5.3%	1.25	148	**150**
EB Thru	1,092	0.74	150	2	546	5.3%	1.25	195	200
EB Right	1,098	0.74	150	2	549	5.3%	1.25	196	200
WB Left	339	0.11	150	2	170	5.3%	1.25	207	**225**
WB Thru	1,796	0.39	150	3	599	5.3%	1.25	501	**525**
NB Left	1,733	0.35	150	3	578	4.0%	1.25	508	**525**
SB Left	166	0.07	150	2	83	4.0%	1.25	105	**125**
SB Right	154	0.07	150	1	154	4.0%	1.25	194	**200**
INTERSECTION:		**Williamson Boulevard & Hand Avenue**							
WB Left	329	0.28	90	2	165	4.0%	1.25	96	100
WB Right	695	0.28	90	1	695	4.0%	1.25	407	425
NB Right	383	0.41	90	1	383	1.0%	1.25	178	**200**
SB Left	540	0.18	90	2	270	2.0%	1.25	176	200
INTERSECTION:		**Williamson Boulevard & LPGA Boulevard**							
EB Left	287	0.08	120	2	144	4.0%	1.25	143	150
EB Right	250	0.40	120	1	250	4.0%	1.25	163	175
WB Left	338	0.11	120	2	169	4.0%	1.25	163	175
WB Right	505	0.42	120	1	505	4.0%	1.25	317	325
NB Left	329	0.12	120	2	165	1.0%	1.25	152	175
NB Right	373	0.25	120	1	373	1.0%	1.25	294	**300**
SB Left	371	0.11	120	2	186	2.0%	1.25	175	175
SB Right	252	0.23	120	1	252	2.0%	1.25	206	225
INTERSECTION:		**LPGA Boulevard & I-95 NB Off Ramp**							
NB Left	272	0.13	120	2	136	4.0%	1.25	128	**150**
INTERSECTION:		**LPGA Boulevard & I-95 SB Off Ramp**							
SB Left	460	0.21	120	2	230	4.0%	1.25	197	200
SB Right	281	0.21	120	1	281	4.0%	1.25	240	250
INTERSECTION:		**LPGA Boulevard & Tomoka Farms Road N**							
EB Left	1	0.54	120	1	1	4.0%	1.25	0	100
EB Right	347	0.49	120	1	347	4.0%	1.25	192	**200**
WB Left	419	0.13	120	2	210	4.0%	1.25	197	200
NB Left	409	0.28	120	1	409	1.0%	1.25	310	**325**
NB Right	384	0.44	120	1	384	1.0%	1.25	226	250
INTERSECTION:		**LPGA Boulevard & Tymber Creek Road Ext.**							
EB Left	258	0.67	120	1	258	4.0%	1.25	92	100
WB Right	535	0.52	120	1	535	4.0%	1.25	278	300
SB Left	397	0.26	120	1	397	1.0%	1.25	309	325
SB Right	230	0.26	120	1	230	1.0%	1.25	179	200

Notes:

1. Queue Lengths are calculated based on the following formula: $L = (A)\ (DHV)\ (1-G/C)\ (T+1)\ (F)\ /\ (3600/C)\ /\ (N)$

where:

L = Queue length

DHV = design hour volume, in vph

G/C = ratio of green time to cycle length

T = percent of heavy vehicles

F = adjustment factor (1.25 to 2)

C = cycle length

N = # of lanes

A = Assumed 25 feet for automobile

2. Recommended Queue lengths are shown in yellow shade and bold letters.

3. A minimum Queue length of 100 feet is assumed as the recommended length for calculated lengths of less than 100 feet.

Appendix V

ESAL Sheets

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

SECTION #: 79100000
SEGMENT #: 1
ITEM #: 0
PROJECT DESCRIPTION: SR 40 from Cone Road to Hunters Ridge Blvd - Alt 1

LOCATION #: Volusia

LOCATION DESCRIPTION: 0

GROWTH RATE FORMULA

A: Interpolation
B: Enter Growth Rate
C: Enter All AADTs
D: New Facility

If "A" select an interpolation function
If "B" enter rate as decimals (1%=1.01)
If ""C", or "D" continue to next section

Choose A, B, C, or D here: C

Linear Growth Rate ____ %
Compounded Growth Rate ____ %
Decaying Growth Rate ____ %
(select one)

DESIGN INFORMATION

		AADT
Existing Year	2011	9500
Opening Year	2015	13700
Mid-Design Year	2025	24100
Design Year	2035	34500

Note: AADT values have been rounded to the nearest 100

Daily Direction Split (50% or 100%): 50%
Lanes in One Direction: 2

T24 values

Existing to Opening Year: 10.50%
Opening to Mid-Year: 10.50%
Mid-Year to Design-Year: 10.50%

1995 EQUIVALENCY FACTORS |u(1)|

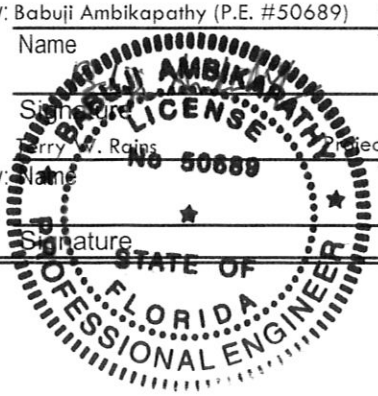
(selected with an X)	FLEXIBLE PAVEMENT SN = 5/THICK		RIGID PAVEMENT SN = 12/THICK	
RURAL FREEWAY:	1.050	___	1.600	___
URBAN FREEWAY:	0.900	___	1.270	___
RURAL HIGHWAY:	0.960	___	1.350	___
URBAN HIGHWAY:	0.890	X	1.220	X
OTHER (Enter Factor and X):		___		___

(1) Equivalency Factors are based on Updated Pavement Damage Factors Memorandum, dated July 2, 1998.

Lane Factors developed by Copes equation

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by:	Babuji Ambikapathy (P.E. #50689)	Sr. Vice President	GMB Engineers & Planners, Inc.	12/29/2011
	Name	Title	Org. Unit or Firm	Date
	Signature			
Reviewed by:	Terry W. Rains	Project Manager-Design Traffic	FDOT, District 5	
	Name	Title	Org. Unit or Firm	Date
	Signature			



18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION Volusia

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2011 to 2035*

SECTION #: 79100000 **Location #:** 1 **FIN #:** 0

FLEXIBLE PAVEMENT URBAN HIGHWAY 0.890

SN=5/THICK SR 40 from Cone Road to Hunters Ridge Blvd - Alt 1 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2011	9500	141	0	0.5	10.50%	0.868	0.890
2012	10500	154	0	0.5	10.50%	0.859	0.890
2013	11600	169	0	0.5	10.50%	0.851	0.890
2014	12600	182	0	0.5	10.50%	0.844	0.890
2015	13700	196	196	0.5	10.50%	0.837	0.890
2016	14700	209	405	0.5	10.50%	0.832	0.890
2017	15700	222	627	0.5	10.50%	0.826	0.890
2018	16800	236	863	0.5	10.50%	0.821	0.890
2019	17800	248	1111	0.5	10.50%	0.816	0.890
2020	18900	262	1373	0.5	10.50%	0.811	0.890
2021	19900	274	1647	0.5	10.50%	0.807	0.890
2022	20900	287	1934	0.5	10.50%	0.803	0.890
2023	22000	300	2234	0.5	10.50%	0.798	0.890
2024	23000	312	2546	0.5	10.50%	0.795	0.890
2025	24100	326	2872	0.5	10.50%	0.791	0.890
2026	25100	338	3210	0.5	10.50%	0.787	0.890
2027	26100	350	3560	0.5	10.50%	0.784	0.890
2028	27200	363	3923	0.5	10.50%	0.781	0.890
2029	28200	375	4298	0.5	10.50%	0.778	0.890
2030	29300	388	4686	0.5	10.50%	0.775	0.890
2031	30300	399	5085	0.5	10.50%	0.772	0.890
2032	31300	411	5496	0.5	10.50%	0.769	0.890
2033	32400	424	5920	0.5	10.50%	0.766	0.890
2034	33400	436	6356	0.5	10.50%	0.764	0.890
2035	34500	448	6804	0.5	10.50%	0.761	0.890

Opening to Mid-Design Year ESAL Accumulation (1000s): 2676

Opening to Design Year ESAL Accumulation (1000s): 6608

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Babuji Ambikapathy | Sr. Vice President | GMB Engineers & Planners, Inc. | 12/29/2011

Name | Title | Org.Unit or Firm | Date

Signature

Reviewed by: Terry [illegible] | Project Manager-Design Traffic | FDOT, District 5

Name | Title | Org.Unit or Firm | Date

Signature

BABUJI AMBIKAPATHY LICENSE No 50589 STATE OF FLORIDA PROFESSIONAL ENGINEER

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION Volusia

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2011 to 2035*

SECTION #: 79100000 **Location #:** 1 **FIN #:** 0

RIGID PAVEMENT URBAN HIGHWAY 1.220

SN=12/THICK SR 40 from Cone Road to Hunters Ridge Blvd - Alt 1 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2011	9500	193	0	0.5	10.50%	0.868	1.220
2012	10500	211	0	0.5	10.50%	0.859	1.220
2013	11600	231	0	0.5	10.50%	0.851	1.220
2014	12600	249	0	0.5	10.50%	0.844	1.220
2015	13700	269	269	0.5	10.50%	0.837	1.220
2016	14700	286	555	0.5	10.50%	0.832	1.220
2017	15700	304	859	0.5	10.50%	0.826	1.220
2018	16800	323	1182	0.5	10.50%	0.821	1.220
2019	17800	340	1522	0.5	10.50%	0.816	1.220
2020	18900	359	1881	0.5	10.50%	0.811	1.220
2021	19900	376	2257	0.5	10.50%	0.807	1.220
2022	20900	393	2650	0.5	10.50%	0.803	1.220
2023	22000	411	3061	0.5	10.50%	0.798	1.220
2024	23000	428	3489	0.5	10.50%	0.795	1.220
2025	24100	446	3935	0.5	10.50%	0.791	1.220
2026	25100	463	4398	0.5	10.50%	0.787	1.220
2027	26100	479	4877	0.5	10.50%	0.784	1.220
2028	27200	497	5374	0.5	10.50%	0.781	1.220
2029	28200	513	5887	0.5	10.50%	0.778	1.220
2030	29300	531	6418	0.5	10.50%	0.775	1.220
2031	30300	547	6965	0.5	10.50%	0.772	1.220
2032	31300	563	7528	0.5	10.50%	0.769	1.220
2033	32400	581	8109	0.5	10.50%	0.766	1.220
2034	33400	597	8706	0.5	10.50%	0.764	1.220
2035	34500	614	9320	0.5	10.50%	0.761	1.220

Opening to Mid-Design Year ESAL Accumulation (1000s): 3666

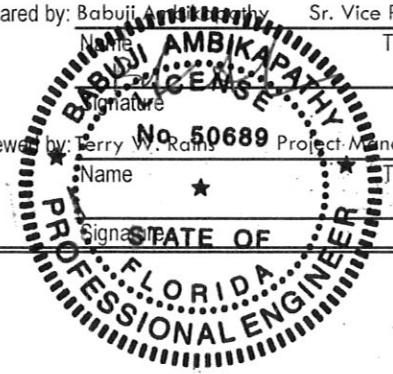
Opening to Design Year ESAL Accumulation (1000s): 9051

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Babuji Ambikapathy Sr. Vice President GMB Engineers & Planners, Inc. 12/29/2011

Name Title Org.Unit or Firm Date

Signature



Reviewed by: Terry W. Rains Project Manager-Design Traffic FDOT, District 5

Name Title Org.Unit or Firm Date

Signature

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

SECTION #: 79100000
SEGMENT #: 2
ITEM #: 0
PROJECT DESCRIPTION: SR 40 from Hunters Ridge Blvd to Tymber Creek Rd - Alt 1

LOCATION #: Volusia

LOCATION DESCRIPTION: 0

GROWTH RATE FORMULA

A: Interpolation
B: Enter Growth Rate
C: Enter All AADTs
D: New Facility

If "A" select an interpolation function
If "B" enter rate as decimals (1%=1.01)
If ""C", or "D" continue to next section

Choose A, B, C, or D here: C

Linear Growth Rate ____ %
Compounded Growth Rate ____ %
Decaying Growth Rate ____ %
(select one)

DESIGN INFORMATION

		AADT
Existing Year	2011	11800
Opening Year	2015	19200
Mid-Design Year	2025	37600
Design Year	2035	56100

Note: AADT values have been rounded to the nearest 100

Daily Direction Split (50% or 100%): 50%
Lanes in One Direction: 3

T24 values
Existing to Opening Year: 10.50%
Opening to Mid-Year: 10.50%
Mid-Year to Design-Year: 10.50%

1995 EQUIVALENCY FACTORS |u(1)|

(selected with an X)	FLEXIBLE PAVEMENT SN = 5/THICK		RIGID PAVEMENT SN = 12/THICK	
RURAL FREEWAY:	1.050	___	1.600	___
URBAN FREEWAY:	0.900	___	1.270	___
RURAL HIGHWAY:	0.960	___	1.350	___
URBAN HIGHWAY:	0.890	X	1.220	X
OTHER (Enter Factor and X):		___		___

(1) Equivalency Factors are based on Updated Pavement Damage Factors Memorandum, dated July 2, 1998.

Lane Factors developed by Copes equation

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Babuji Ambikapathy (P.E. #50689) | Sr. Vice President | GMB Engineers & Planners, Inc. | 12/29/2011
Name | Title | Org. Unit or Firm | Date

Signature

Reviewed by: Jeff W. Rains | Project Manager-Design Traffic | FDOT, District 5
Name | Title | Org. Unit or Firm | Date

Signature

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION Volusia

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2011 to 2035*

SECTION #: 79100000 **Location #:** 2 **FIN #:** 0

FLEXIBLE PAVEMENT URBAN HIGHWAY 0.890

SN=5/THICK SR 40 from Hunters Ridge Blvd to Tymber Creek Rd - Alt 1 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2011	11800	147	0	0.5	10.50%	0.726	0.890
2012	13600	166	0	0.5	10.50%	0.714	0.890
2013	15500	186	0	0.5	10.50%	0.704	0.890
2014	17300	205	0	0.5	10.50%	0.695	0.890
2015	19200	225	225	0.5	10.50%	0.686	0.890
2016	21000	244	469	0.5	10.50%	0.679	0.890
2017	22800	262	731	0.5	10.50%	0.672	0.890
2018	24700	281	1012	0.5	10.50%	0.665	0.890
2019	26500	298	1310	0.5	10.50%	0.659	0.890
2020	28400	317	1627	0.5	10.50%	0.654	0.890
2021	30200	335	1962	0.5	10.50%	0.649	0.890
2022	32000	352	2314	0.5	10.50%	0.644	0.890
2023	33900	370	2684	0.5	10.50%	0.639	0.890
2024	35700	387	3071	0.5	10.50%	0.635	0.890
2025	37600	405	3476	0.5	10.50%	0.630	0.890
2026	39400	422	3898	0.5	10.50%	0.627	0.890
2027	41300	439	4337	0.5	10.50%	0.623	0.890
2028	43100	456	4793	0.5	10.50%	0.619	0.890
2029	45000	473	5266	0.5	10.50%	0.616	0.890
2030	46800	489	5755	0.5	10.50%	0.612	0.890
2031	48700	506	6261	0.5	10.50%	0.609	0.890
2032	50500	522	6783	0.5	10.50%	0.606	0.890
2033	52400	539	7322	0.5	10.50%	0.603	0.890
2034	54200	555	7877	0.5	10.50%	0.600	0.890
2035	56100	572	8449	0.5	10.50%	0.597	0.890

Opening to Mid-Design Year ESAL Accumulation (1000s): 3251

Opening to Design Year ESAL Accumulation (1000s): 8224

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Babuji Ambikapathy Sr. Vice President GMB Engineers & Planners, Inc. 12/29/2011

Name Title Org.Unit or Firm Date

Signature

Reviewed by: Terry W. Rains Project Manager-Design Traffic FDOT, District 5

Name Title Org.Unit or Firm Date

Signature

BABUJI AMBIKAPATHY LICENSE No 50689 STATE OF FLORIDA PROFESSIONAL ENGINEER

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION Volusia

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2011 to 2035*

SECTION #: 79100000 **Location #:** 2 **FIN #:** 0

RIGID PAVEMENT URBAN HIGHWAY 1.220

SN=12/THICK SR 40 from Hunters Ridge Blvd to Tymber Creek Rd - Alt 1 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2011	11800	201	0	0.5	10.50%	0.726	1.220
2012	13600	228	0	0.5	10.50%	0.714	1.220
2013	15500	255	0	0.5	10.50%	0.704	1.220
2014	17300	281	0	0.5	10.50%	0.695	1.220
2015	19200	308	308	0.5	10.50%	0.686	1.220
2016	21000	334	642	0.5	10.50%	0.679	1.220
2017	22800	359	1001	0.5	10.50%	0.672	1.220
2018	24700	385	1386	0.5	10.50%	0.665	1.220
2019	26500	409	1795	0.5	10.50%	0.659	1.220
2020	28400	434	2229	0.5	10.50%	0.654	1.220
2021	30200	458	2687	0.5	10.50%	0.649	1.220
2022	32000	482	3169	0.5	10.50%	0.644	1.220
2023	33900	507	3676	0.5	10.50%	0.639	1.220
2024	35700	530	4206	0.5	10.50%	0.635	1.220
2025	37600	555	4761	0.5	10.50%	0.630	1.220
2026	39400	578	5339	0.5	10.50%	0.627	1.220
2027	41300	602	5941	0.5	10.50%	0.623	1.220
2028	43100	624	6565	0.5	10.50%	0.619	1.220
2029	45000	648	7213	0.5	10.50%	0.616	1.220
2030	46800	670	7883	0.5	10.50%	0.612	1.220
2031	48700	694	8577	0.5	10.50%	0.609	1.220
2032	50500	716	9293	0.5	10.50%	0.606	1.220
2033	52400	739	10032	0.5	10.50%	0.603	1.220
2034	54200	761	10793	0.5	10.50%	0.600	1.220
2035	56100	784	11577	0.5	10.50%	0.597	1.220

Opening to Mid-Design Year ESAL Accumulation (1000s): 4453

Opening to Design Year ESAL Accumulation (1000s): 11269

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Babuji Ambikapathy Sr. Vice President GMB Engineers & Planners, Inc. 12/29/2011

Name Title Org.Unit or Firm Date

Signature

Reviewed by: Terry W. Lamb Project Manager-Design Traffic FDOT, District 5

Name Title Org.Unit or Firm Date

Signature

BABUJI AMBIKAPATHY LICENSE No 50669 STATE OF FLORIDA PROFESSIONAL ENGINEER

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

SECTION #: 79100000
SEGMENT #: 3
ITEM #: 0
PROJECT DESCRIPTION: SR 40 from Tymber Creek Rd. to Williamson Blvd.- Alt 1

LOCATION #: Volusia

LOCATION DESCRIPTION: 0

GROWTH RATE FORMULA

A: Interpolation
B: Enter Growth Rate
C: Enter All AADTs
D: New Facility

If "A" select an interpolation function
If "B" enter rate as decimals (1%=1.01)
If ""C", or "D" continue to next section

Choose A, B, C, or D here: C

Linear Growth Rate ____ %
Compounded Growth Rate ____ %
Decaying Growth Rate ____ %
(select one)

DESIGN INFORMATION

		AADT
Existing Year	2011	29700
Opening Year	2015	36600
Mid-Design Year	2025	54000
Design Year	2035	71300

Note: AADT values have been rounded to the nearest 100

Daily Direction Split (50% or 100%)	50%
Lanes in One Direction	3
T24 values	
Existing to Opening Year	10.50%
Opening to Mid-Year	10.50%
Mid-Year to Design-Year	10.50%

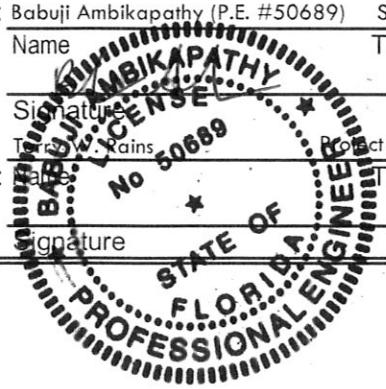
1995 EQUIVALENCY FACTORS |u(1)|

(selected with an X)	FLEXIBLE PAVEMENT SN = 5/THICK		RIGID PAVEMENT SN = 12/THICK	
RURAL FREEWAY:	1.050	___	1.600	___
URBAN FREEWAY:	0.900	___	1.270	___
RURAL HIGHWAY:	0.960	___	1.350	___
URBAN HIGHWAY:	0.890	X	1.220	X
OTHER (Enter Factor and X):		___		___

(1) Equivalency Factors are based on Updated Pavement Damage Factors Memorandum, dated July 2, 1998.
Lane Factors developed by Copes equation

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by:	Babuji Ambikapathy (P.E. #50689)	Sr. Vice President	GMB Engineers & Planners, Inc.	12/29/2011
	Name	Title	Org. Unit or Firm	Date
	Signature			
Reviewed by:	Terry W. Rains	Project Manager-Design Traffic	FDOT, District 5	
	Name	Title	Org. Unit or Firm	Date
	Signature			



18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION Volusia

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2011 to 2035*

SECTION #: 79100000 **Location #:** 3 **FIN #:** 0

FLEXIBLE PAVEMENT URBAN HIGHWAY 0.890

SN=5/THICK SR 40 from Tymber Creek Rd. to Williamson Blvd.- Alt 1 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2011	29700	330	0	0.5	10.50%	0.650	0.890
2012	31400	346	0	0.5	10.50%	0.645	0.890
2013	33100	362	0	0.5	10.50%	0.641	0.890
2014	34800	378	0	0.5	10.50%	0.637	0.890
2015	36600	395	395	0.5	10.50%	0.633	0.890
2016	38300	411	806	0.5	10.50%	0.629	0.890
2017	40000	427	1233	0.5	10.50%	0.625	0.890
2018	41800	444	1677	0.5	10.50%	0.622	0.890
2019	43500	459	2136	0.5	10.50%	0.618	0.890
2020	45300	476	2612	0.5	10.50%	0.615	0.890
2021	47000	491	3103	0.5	10.50%	0.612	0.890
2022	48700	506	3609	0.5	10.50%	0.609	0.890
2023	50500	522	4131	0.5	10.50%	0.606	0.890
2024	52200	538	4669	0.5	10.50%	0.603	0.890
2025	54000	554	5223	0.5	10.50%	0.601	0.890
2026	55700	569	5792	0.5	10.50%	0.598	0.890
2027	57400	583	6375	0.5	10.50%	0.595	0.890
2028	59100	598	6973	0.5	10.50%	0.593	0.890
2029	60900	614	7587	0.5	10.50%	0.591	0.890
2030	62600	629	8216	0.5	10.50%	0.588	0.890
2031	64300	643	8859	0.5	10.50%	0.586	0.890
2032	66100	659	9518	0.5	10.50%	0.584	0.890
2033	67800	673	10191	0.5	10.50%	0.582	0.890
2034	69500	688	10879	0.5	10.50%	0.580	0.890
2035	71300	703	11582	0.5	10.50%	0.578	0.890

Opening to Mid-Design Year ESAL Accumulation (1000s): 4828

Opening to Design Year ESAL Accumulation (1000s): 11187

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Babuji Ambikapathy | Sr. Vice President | GMB Engineers & Planners, Inc. | 12/29/2011

Name | Title | Org.Unit or Firm | Date

Signature

Reviewed by: [illegible] | Project Manager-Design Traffic | FDOT, District 5

Name | Title | Org.Unit or Firm | Date

Signature

BABUJI AMBIKAPATHY LICENSE No 50688 STATE OF FLORIDA PROFESSIONAL ENGINEER

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION Volusia

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2011 to 2035*

SECTION #: 79100000 **Location #:** 3 **FIN #:** 0

RIGID PAVEMENT URBAN HIGHWAY 1.220

SN=12/THICK SR 40 from Tymber Creek Rd. to Williamson Blvd.- Alt 1 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2011	29700	452	0	0.5	10.50%	0.650	1.220
2012	31400	474	0	0.5	10.50%	0.645	1.220
2013	33100	496	0	0.5	10.50%	0.641	1.220
2014	34800	519	0	0.5	10.50%	0.637	1.220
2015	36600	542	542	0.5	10.50%	0.633	1.220
2016	38300	564	1106	0.5	10.50%	0.629	1.220
2017	40000	585	1691	0.5	10.50%	0.625	1.220
2018	41800	608	2299	0.5	10.50%	0.622	1.220
2019	43500	629	2928	0.5	10.50%	0.618	1.220
2020	45300	652	3580	0.5	10.50%	0.615	1.220
2021	47000	673	4253	0.5	10.50%	0.612	1.220
2022	48700	694	4947	0.5	10.50%	0.609	1.220
2023	50500	716	5663	0.5	10.50%	0.606	1.220
2024	52200	737	6400	0.5	10.50%	0.603	1.220
2025	54000	759	7159	0.5	10.50%	0.601	1.220
2026	55700	779	7938	0.5	10.50%	0.598	1.220
2027	57400	800	8738	0.5	10.50%	0.595	1.220
2028	59100	820	9558	0.5	10.50%	0.593	1.220
2029	60900	841	10399	0.5	10.50%	0.591	1.220
2030	62600	861	11260	0.5	10.50%	0.588	1.220
2031	64300	882	12142	0.5	10.50%	0.586	1.220
2032	66100	903	13045	0.5	10.50%	0.584	1.220
2033	67800	923	13968	0.5	10.50%	0.582	1.220
2034	69500	942	14910	0.5	10.50%	0.580	1.220
2035	71300	963	15873	0.5	10.50%	0.578	1.220

Opening to Mid-Design Year ESAL Accumulation (1000s): 6617

Opening to Design Year ESAL Accumulation (1000s): 15331

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by:	Babuji Ambikapathy	Sr. Vice President	GMB Engineers & Planners, Inc.	12/29/2011
	Name	Title	Org.Unit or Firm	Date
	Signature			
Reviewed by:	Terry W. Rains	Project Manager-Design Traffic	FDOT, District 5	
	Name	Title	Org.Unit or Firm	Date
	Signature			

BABUJI AMBIKAPATHY LICENSE No 50689 STATE OF FLORIDA PROFESSIONAL ENGINEER

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

SECTION #: 79100000
SEGMENT #: 1
ITEM #: 0
PROJECT DESCRIPTION: SR 40 from Cone Road to Hunters Ridge Blvd - Alt 5

LOCATION #: Volusia

LOCATION DESCRIPTION: 0

GROWTH RATE FORMULA

A: Interpolation
B: Enter Growth Rate
C: Enter All AADTs
D: New Facility

If "A" select an interpolation function
If "B" enter rate as decimals (1%=1.01)
If ""C", or "D" continue to next section

Choose A, B, C, or D here: C

Linear Growth Rate ____ %
Compounded Growth Rate ____ %
Decaying Growth Rate ____ %
(select one)

DESIGN INFORMATION

		AADT
Existing Year	2011	9500
Opening Year	2015	14300
Mid-Design Year	2025	26200
Design Year	2035	38100

Note: AADT values have been rounded to the nearest 100

Daily Direction Split (50% or 100%)	50%
Lanes in One Direction	2
T24 values	
Existing to Opening Year	10.50%
Opening to Mid-Year	10.50%
Mid-Year to Design-Year	10.50%

1995 EQUIVALENCY FACTORS |u(1)|

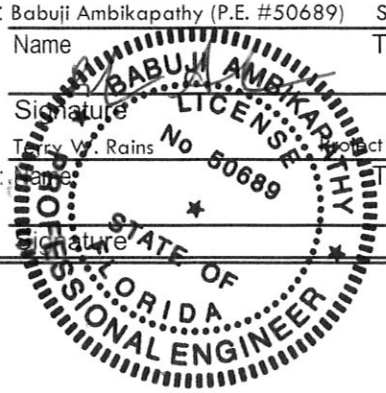
(selected with an X)	FLEXIBLE PAVEMENT SN = 5/THICK		RIGID PAVEMENT SN = 12/THICK	
RURAL FREEWAY:	1.050		1.600	
URBAN FREEWAY:	0.900		1.270	
RURAL HIGHWAY:	0.960		1.350	
URBAN HIGHWAY:	0.890	X	1.220	X
OTHER (Enter Factor and X):				

(1) Equivalency Factors are based on Updated Pavement Damage Factors Memorandum, dated July 2, 1998.

Lane Factors developed by Copes equation

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by:	Babuji Ambikapathy (P.E. #50689)	Sr. Vice President	GMB Engineers & Planners, Inc.	12/29/2011
	Name	Title	Org. Unit or Firm	Date
	Signature			
Reviewed by:	Terry W. Rains	Project Manager-Design Traffic	FDOT, District 5	
	Name	Title	Org. Unit or Firm	Date
	Signature			



18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION Volusia

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2011 to 2035*

SECTION #: 79100000 **Location #:** 1 **FIN #:** 0

FLEXIBLE PAVEMENT URBAN HIGHWAY 0.890

SN=5/THICK SR 40 from Cone Road to Hunters Ridge Blvd - Alt 5 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2011	9500	141	0	0.5	10.50%	0.868	0.890
2012	10700	157	0	0.5	10.50%	0.858	0.890
2013	11900	173	0	0.5	10.50%	0.849	0.890
2014	13100	188	0	0.5	10.50%	0.841	0.890
2015	14300	204	204	0.5	10.50%	0.834	0.890
2016	15400	218	422	0.5	10.50%	0.828	0.890
2017	16600	233	655	0.5	10.50%	0.822	0.890
2018	17800	248	903	0.5	10.50%	0.816	0.890
2019	19000	263	1166	0.5	10.50%	0.810	0.890
2020	20200	278	1444	0.5	10.50%	0.805	0.890
2021	21400	293	1737	0.5	10.50%	0.801	0.890
2022	22600	307	2044	0.5	10.50%	0.796	0.890
2023	23800	322	2366	0.5	10.50%	0.792	0.890
2024	25000	336	2702	0.5	10.50%	0.788	0.890
2025	26200	351	3053	0.5	10.50%	0.784	0.890
2026	27300	364	3417	0.5	10.50%	0.781	0.890
2027	28500	378	3795	0.5	10.50%	0.777	0.890
2028	29700	392	4187	0.5	10.50%	0.774	0.890
2029	30900	406	4593	0.5	10.50%	0.770	0.890
2030	32100	420	5013	0.5	10.50%	0.767	0.890
2031	33300	434	5447	0.5	10.50%	0.764	0.890
2032	34500	448	5895	0.5	10.50%	0.761	0.890
2033	35700	462	6357	0.5	10.50%	0.758	0.890
2034	36900	476	6833	0.5	10.50%	0.756	0.890
2035	38100	490	7323	0.5	10.50%	0.753	0.890

Opening to Mid-Design Year ESAL Accumulation (1000s): 2849

Opening to Design Year ESAL Accumulation (1000s): 7119

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Babuji Ambikapathy Sr. Vice President GMB Engineers & Planners, Inc. 12/29/2011

Name Title Org.Unit or Firm Date

Signature

Reviewed by: Terry W. Rose Project Manager-Design Traffic FDOT, District 5

Name Title Org.Unit or Firm Date

Signature

BABUJI AMBIKAPATHY LICENSE No 50689 STATE OF FLORIDA PROFESSIONAL ENGINEER

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION Volusia

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2011 to 2035*

SECTION #: 79100000 **Location #:** 1 **FIN #:** 0

RIGID PAVEMENT URBAN HIGHWAY 1.220

SN=12/THICK SR 40 from Cone Road to Hunters Ridge Blvd - Alt 5 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2011	9500	193	0	0.5	10.50%	0.868	1.220
2012	10700	215	0	0.5	10.50%	0.858	1.220
2013	11900	237	0	0.5	10.50%	0.849	1.220
2014	13100	258	0	0.5	10.50%	0.841	1.220
2015	14300	279	279	0.5	10.50%	0.834	1.220
2016	15400	299	578	0.5	10.50%	0.828	1.220
2017	16600	319	897	0.5	10.50%	0.822	1.220
2018	17800	340	1237	0.5	10.50%	0.816	1.220
2019	19000	360	1597	0.5	10.50%	0.810	1.220
2020	20200	381	1978	0.5	10.50%	0.805	1.220
2021	21400	401	2379	0.5	10.50%	0.801	1.220
2022	22600	421	2800	0.5	10.50%	0.796	1.220
2023	23800	441	3241	0.5	10.50%	0.792	1.220
2024	25000	461	3702	0.5	10.50%	0.788	1.220
2025	26200	481	4183	0.5	10.50%	0.784	1.220
2026	27300	499	4682	0.5	10.50%	0.781	1.220
2027	28500	518	5200	0.5	10.50%	0.777	1.220
2028	29700	538	5738	0.5	10.50%	0.774	1.220
2029	30900	557	6295	0.5	10.50%	0.770	1.220
2030	32100	576	6871	0.5	10.50%	0.767	1.220
2031	33300	595	7466	0.5	10.50%	0.764	1.220
2032	34500	614	8080	0.5	10.50%	0.761	1.220
2033	35700	633	8713	0.5	10.50%	0.758	1.220
2034	36900	652	9365	0.5	10.50%	0.756	1.220
2035	38100	671	10036	0.5	10.50%	0.753	1.220

Opening to Mid-Design Year ESAL Accumulation (1000s): 3904

Opening to Design Year ESAL Accumulation (1000s): 9757

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Babuji Ambikapathy | Sr. Vice President | GMB Engineers & Planners, Inc. | 12/29/2011

Name | Title | Org.Unit or Firm | Date

Signature

BABUJI AMBIKAPATHY LICENSE No 50689 STATE OF FLORIDA PROFESSIONAL ENGINEER

Reviewed by: Terry W. Rains | Project Manager-Design Traffic | FDOT, District 5

Name | Title | Org.Unit or Firm | Date

Signature

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

SECTION #: 79100000
SEGMENT #: 2
ITEM #: 0
PROJECT DESCRIPTION: SR 40 from Hunters Ridge Blvd to Tymber Creek Rd - Alt 5

LOCATION #: Volusia

LOCATION DESCRIPTION: 0

GROWTH RATE FORMULA

A: Interpolation
B: Enter Growth Rate
C: Enter All AADTs
D: New Facility

If "A" select an interpolation function
If "B" enter rate as decimals (1%=1.01)
If ""C", or "D" continue to next section

Choose A, B, C, or D here: C

Linear Growth Rate ____ %
Compounded Growth Rate ____ %
Decaying Growth Rate ____ %
(select one)

DESIGN INFORMATION

		AADT
Existing Year	2011	11800
Opening Year	2015	18300
Mid-Design Year	2025	34600
Design Year	2035	50800

Note: AADT values have been rounded to the nearest 100

Daily Direction Split (50% or 100%)	50%
Lanes in One Direction	3
T24 values	
Existing to Opening Year	10.50%
Opening to Mid-Year	10.50%
Mid-Year to Design-Year	10.50%

1995 EQUIVALENCY FACTORS |u(1)|

(selected with an X)	FLEXIBLE PAVEMENT SN = 5/THICK		RIGID PAVEMENT SN = 12/THICK	
RURAL FREEWAY:	1.050	___	1.600	___
URBAN FREEWAY:	0.900	___	1.270	___
RURAL HIGHWAY:	0.960	___	1.350	___
URBAN HIGHWAY:	0.890	X	1.220	X
OTHER (Enter Factor and X):		___		___

(1) Equivalency Factors are based on Updated Pavement Damage Factors Memorandum, dated July 2, 1998.
Lane Factors developed by Copes equation

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by:	Babuji Ambikapathy (P.E. #50689)	Sr. Vice President	GMB Engineers & Planners, Inc.	12/29/2011
	Name	Title	Org. Unit or Firm	Date
	Signature			
	Tod W. Bains	Project Manager-Design Traffic	FDOT, District 5	
Reviewed by:	Name	Title	Org. Unit or Firm	Date
	Signature			

BABUJI AMBIKAPATHY LICENSE NO 50689 STATE OF FLORIDA PROFESSIONAL ENGINEER

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION Volusia

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2011 to 2035*

SECTION #: 79100000 **Location #:** 2 **FIN #:** 0

FLEXIBLE PAVEMENT URBAN HIGHWAY 0.890

SN=5/THICK SR 40 from Hunters Ridge Blvd to Tymber Creek Rd - Alt 5 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2011	11800	147	0	0.5	10.50%	0.726	0.890
2012	13400	164	0	0.5	10.50%	0.716	0.890
2013	15000	181	0	0.5	10.50%	0.706	0.890
2014	16600	198	0	0.5	10.50%	0.698	0.890
2015	18300	216	216	0.5	10.50%	0.690	0.890
2016	19900	232	448	0.5	10.50%	0.683	0.890
2017	21500	249	697	0.5	10.50%	0.677	0.890
2018	23100	265	962	0.5	10.50%	0.671	0.890
2019	24800	282	1244	0.5	10.50%	0.665	0.890
2020	26400	297	1541	0.5	10.50%	0.660	0.890
2021	28000	313	1854	0.5	10.50%	0.655	0.890
2022	29700	330	2184	0.5	10.50%	0.650	0.890
2023	31300	345	2529	0.5	10.50%	0.646	0.890
2024	32900	360	2889	0.5	10.50%	0.641	0.890
2025	34600	377	3266	0.5	10.50%	0.637	0.890
2026	36200	392	3658	0.5	10.50%	0.634	0.890
2027	37800	407	4065	0.5	10.50%	0.630	0.890
2028	39400	422	4487	0.5	10.50%	0.627	0.890
2029	41000	436	4923	0.5	10.50%	0.623	0.890
2030	42700	452	5375	0.5	10.50%	0.620	0.890
2031	44300	467	5842	0.5	10.50%	0.617	0.890
2032	45900	481	6323	0.5	10.50%	0.614	0.890
2033	47500	496	6819	0.5	10.50%	0.611	0.890
2034	49100	510	7329	0.5	10.50%	0.608	0.890
2035	50800	525	7854	0.5	10.50%	0.606	0.890

Opening to Mid-Design Year ESAL Accumulation (1000s): 3050

Opening to Design Year ESAL Accumulation (1000s): 7638

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Babuji Ambikapathy Sr. Vice President GMB Engineers & Planners, Inc. 12/29/2011

Name Title Org.Unit or Firm Date

Signature

BABUJI AMBIKAPATHY LICENSE No 50688 STATE OF FLORIDA PROFESSIONAL ENGINEER

Reviewed by: Terry W. Rains Project Manager-Design Traffic FDOT, District 5

Name Title Org.Unit or Firm Date

Signature

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION Volusia

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2011 to 2035*

SECTION #: 79100000 **Location #:** 2 **FIN #:** 0

RIGID PAVEMENT URBAN HIGHWAY 1.220

SN=12/THICK SR 40 from Hunters Ridge Blvd to Tymber Creek Rd - Alt 5 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2011	11800	201	0	0.5	10.50%	0.726	1.220
2012	13400	225	0	0.5	10.50%	0.716	1.220
2013	15000	248	0	0.5	10.50%	0.706	1.220
2014	16600	271	0	0.5	10.50%	0.698	1.220
2015	18300	296	296	0.5	10.50%	0.690	1.220
2016	19900	318	614	0.5	10.50%	0.683	1.220
2017	21500	341	955	0.5	10.50%	0.677	1.220
2018	23100	363	1318	0.5	10.50%	0.671	1.220
2019	24800	386	1704	0.5	10.50%	0.665	1.220
2020	26400	408	2112	0.5	10.50%	0.660	1.220
2021	28000	429	2541	0.5	10.50%	0.655	1.220
2022	29700	452	2993	0.5	10.50%	0.650	1.220
2023	31300	473	3466	0.5	10.50%	0.646	1.220
2024	32900	494	3960	0.5	10.50%	0.641	1.220
2025	34600	516	4476	0.5	10.50%	0.637	1.220
2026	36200	537	5013	0.5	10.50%	0.634	1.220
2027	37800	557	5570	0.5	10.50%	0.630	1.220
2028	39400	578	6148	0.5	10.50%	0.627	1.220
2029	41000	598	6746	0.5	10.50%	0.623	1.220
2030	42700	619	7365	0.5	10.50%	0.620	1.220
2031	44300	639	8004	0.5	10.50%	0.617	1.220
2032	45900	659	8663	0.5	10.50%	0.614	1.220
2033	47500	679	9342	0.5	10.50%	0.611	1.220
2034	49100	699	10041	0.5	10.50%	0.608	1.220
2035	50800	720	10761	0.5	10.50%	0.606	1.220

Opening to Mid-Design Year ESAL Accumulation (1000s): 4180

Opening to Design Year ESAL Accumulation (1000s): 10465

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Babuji Ambikapathy Sr. Vice President GMB Engineers & Planners, Inc. 12/29/2011

Name Title Org.Unit or Firm Date

Signature

BABUJI AMBIKAPATHY LICENSE No 50689 STATE OF FLORIDA PROFESSIONAL ENGINEER

Reviewed by: Terry L. Rains Project Manager-Design Traffic FDOT, District 5

Name Title Org.Unit or Firm Date

Signature

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

SECTION #: 0
SEGMENT #: 3
ITEM #: 0
PROJECT DESCRIPTION: SR 40 from Tymber Creek Rd. to Williamson Blvd.- Alt 5

LOCATION #: Volusia

LOCATION DESCRIPTION: 0

GROWTH RATE FORMULA

A: Interpolation
B: Enter Growth Rate
C: Enter All AADTs
D: New Facility

If "A" select an interpolation function
If "B" enter rate as decimals (1%=1.01)
If ""C", or "D" continue to next section

Choose A, B, C, or D here: C

Linear Growth Rate ____ %
Compounded Growth Rate ____ %
Decaying Growth Rate ____ %
(select one)

DESIGN INFORMATION

		AADT
Existing Year	2011	29700
Opening Year	2015	35800
Mid-Design Year	2025	50900
Design Year	2035	66000

Note: AADT values have been rounded to the nearest 100

Daily Direction Split (50% or 100%): 50%
Lanes in One Direction: 3

T24 values
Existing to Opening Year: 10.50%
Opening to Mid-Year: 10.50%
Mid-Year to Design-Year: 10.50%

1995 EQUIVALENCY FACTORS |u(1)|

(selected with an X)	FLEXIBLE PAVEMENT SN = 5/THICK		RIGID PAVEMENT SN = 12/THICK	
RURAL FREEWAY:	1.050	___	1.600	___
URBAN FREEWAY:	0.900	___	1.270	___
RURAL HIGHWAY:	0.960	___	1.350	___
URBAN HIGHWAY:	0.890	X	1.220	X
OTHER (Enter Factor and X):		___		___

(1) Equivalency Factors are based on Updated Pavement Damage Factors Memorandum, dated July 2, 1998.

Lane Factors developed by Copes equation

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Babuji Ambikapathy (P.E. #50689)	Sr. Vice President	GMB Engineers & Planners, Inc.	12/29/2011
Name	Title	Org. Unit or Firm	Date
Signature			
Terry W. Rains	Project Manager-Design Traffic	FDOT, District 5	
Reviewed by: Name	Title	Org. Unit or Firm	Date
Signature			

BABUJI AMBIKAPATHY LICENSE No 50689 STATE OF FLORIDA PROFESSIONAL ENGINEER

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION Volusia

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2011 to 2035*

SECTION #: 0 **Location #:** 3 **FIN #:** 0

FLEXIBLE PAVEMENT URBAN HIGHWAY 0.890

SN=5/THICK SR 40 from Tymber Creek Rd. to Williamson Blvd.- Alt 5 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2011	29700	330	0	0.5	10.50%	0.650	0.890
2012	31200	344	0	0.5	10.50%	0.646	0.890
2013	32700	358	0	0.5	10.50%	0.642	0.890
2014	34200	373	0	0.5	10.50%	0.638	0.890
2015	35800	388	388	0.5	10.50%	0.634	0.890
2016	37300	402	790	0.5	10.50%	0.631	0.890
2017	38800	416	1206	0.5	10.50%	0.628	0.890
2018	40300	430	1636	0.5	10.50%	0.625	0.890
2019	41800	444	2080	0.5	10.50%	0.622	0.890
2020	43300	457	2537	0.5	10.50%	0.619	0.890
2021	44800	471	3008	0.5	10.50%	0.616	0.890
2022	46300	485	3493	0.5	10.50%	0.613	0.890
2023	47800	498	3991	0.5	10.50%	0.611	0.890
2024	49300	512	4503	0.5	10.50%	0.608	0.890
2025	50900	526	5029	0.5	10.50%	0.605	0.890
2026	52400	539	5568	0.5	10.50%	0.603	0.890
2027	53900	553	6121	0.5	10.50%	0.601	0.890
2028	55400	566	6687	0.5	10.50%	0.598	0.890
2029	56900	579	7266	0.5	10.50%	0.596	0.890
2030	58400	592	7858	0.5	10.50%	0.594	0.890
2031	59900	605	8463	0.5	10.50%	0.592	0.890
2032	61400	618	9081	0.5	10.50%	0.590	0.890
2033	62900	631	9712	0.5	10.50%	0.588	0.890
2034	64400	644	10356	0.5	10.50%	0.586	0.890
2035	66000	658	11014	0.5	10.50%	0.584	0.890

Opening to Mid-Design Year ESAL Accumulation (1000s): 4641

Opening to Design Year ESAL Accumulation (1000s): 10626

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by: Babuji Ambikapathy Sr. Vice President GMB Engineers & Planners, Inc. 12/29/2011

Name Title Org.Unit or Firm Date

Signature

BABUJI AMBIKAPATHY LICENSE No. 50689 STATE OF FLORIDA PROFESSIONAL ENGINEER

Reviewed by: Terry W. Adams Project Manager-Design Traffic FDOT, District 5

Name Title Org.Unit or Firm Date

Signature

18 kip EQUIVALENT SINGLE AXLE LOAD ANALYSIS - LOCATION Volusia

PROJECT TRAFFIC FOR PD&E and DESIGN ANALYSIS INFO / FACTORS

YEARS: *2011 to 2035*

SECTION #: 0 **Location #:** 3 **FIN #:** 0

RIGID PAVEMENT URBAN HIGHWAY 1.220

SN=12/THICK SR 40 from Tymber Creek Rd. to Williamson Blvd.- Alt 5 C

YEAR	AADT	ESAL (1000S)	ACCUM (1000s)	D	T	LF	EF
2011	29700	452	0	0.5	10.50%	0.650	1.220
2012	31200	472	0	0.5	10.50%	0.646	1.220
2013	32700	491	0	0.5	10.50%	0.642	1.220
2014	34200	511	0	0.5	10.50%	0.638	1.220
2015	35800	532	532	0.5	10.50%	0.634	1.220
2016	37300	551	1083	0.5	10.50%	0.631	1.220
2017	38800	570	1653	0.5	10.50%	0.628	1.220
2018	40300	589	2242	0.5	10.50%	0.625	1.220
2019	41800	608	2850	0.5	10.50%	0.622	1.220
2020	43300	627	3477	0.5	10.50%	0.619	1.220
2021	44800	646	4123	0.5	10.50%	0.616	1.220
2022	46300	664	4787	0.5	10.50%	0.613	1.220
2023	47800	683	5470	0.5	10.50%	0.611	1.220
2024	49300	701	6171	0.5	10.50%	0.608	1.220
2025	50900	721	6892	0.5	10.50%	0.605	1.220
2026	52400	739	7631	0.5	10.50%	0.603	1.220
2027	53900	757	8388	0.5	10.50%	0.601	1.220
2028	55400	776	9164	0.5	10.50%	0.598	1.220
2029	56900	794	9958	0.5	10.50%	0.596	1.220
2030	58400	812	10770	0.5	10.50%	0.594	1.220
2031	59900	829	11599	0.5	10.50%	0.592	1.220
2032	61400	847	12446	0.5	10.50%	0.590	1.220
2033	62900	865	13311	0.5	10.50%	0.588	1.220
2034	64400	883	14194	0.5	10.50%	0.586	1.220
2035	66000	901	15095	0.5	10.50%	0.584	1.220

Opening to Mid-Design Year ESAL Accumulation (1000s): 6360

Opening to Design Year ESAL Accumulation (1000s): 14563

I have reviewed the 18 kip Equivalent Single Axle Loads (ESAL's) to be used for pavement design on this project. I hereby attest that these have been developed in accordance with the FDOT Project Traffic Forecasting Procedure using historical traffic data and other available information.

Prepared by:	Babuji Ambikapathy	Sr. Vice President	GMB Engineers & Planners, Inc.	12/29/2011
	Name	Title	Org.Unit or Firm	Date
	Signature			
Reviewed by:	Terry W. Rains	Project Manager-Design Traffic	FDOT, District 5	
	Name	Title	Org.Unit or Firm	Date
	Signature