FINAL

Project Traffic Analysis Report

Tampa Hillsborough Expressway Authority (THEA)

East Selmon Expressway PD&E Study

I-4 Connector to I-75

Hillsborough County, Florida

THEA Project Number: P-01619

Date: 08/29/2023

EXECUTIVE SUMMARY

The Tampa Hillsborough Expressway Authority (THEA) is conducting a Project Development and Environment (PD&E) Study for the East Selmon Expressway corridor from the I-4 Connector to I-75. The purpose of this study to evaluate the needs, costs, and effects of constructing improvements that will increase traffic capacity and safety. The limits of the project include the local lanes and reversible express lanes from the I-4 Connector to I-75, approximately 6.4 miles total. Improvements considered are one additional local lane from the I-4 Connector to I-75, one additional reversible express lane from Palm River Road to I-75, improved access to the reversible express lanes, a braided ramp configuration between US-301 and I-75, and improvements to select ramp terminal intersections.

This Project Traffic Analysis Report (PTAR) summarizes the results of the traffic operations and safety analysis associated with the East Selmon Expressway PD&E. Final recommendations on corridor improvements are provided based upon these findings.

Analysis Findings

The following alternatives were analyzed for each of the project study years:

No-Build: Existing Road Network + Committed Projects[1]

Alt. 1: Standard Widening (one additional local lane in each direction from the I-4 Connector to I-75, one additional reversible express lane from Palm River Road to I-75)

Alt. 2: Standard Widening + Westbound Braided Ramps

Alt. 3: Standard Widening + Westbound Braided Ramps + Eastbound Braided Ramps

The No-Build analysis showed that if no improvements are made to the East Selmon corridor, severe congestion and delay will directly impact the traveling public. In addition, the existing capacity is insufficient for future year traffic demands, leading to bottlenecks that restrict throughput and cause backups that would extend well beyond the project limits.

Each one of the Build alternatives considered yields a measurable operational benefit. For the design year of 2046, the network throughput increases by nearly 7%, and unserved demand reduces by almost 23% in the AM (**Table ES-1**). Throughput increases by over 18% in the PM, and unserved demand reduces by 64%. In both peak periods, the vehicle-hours traveled increases by a negligible amount (1.5% or less). Conversely, the vehicle-miles traveled increases by over 17% in the AM and over 30% in the PM (**ES-2**). These results demonstrate how the proposed Build

[1] Committed projects are planned improvements with funding. These projects have not been constructed but are considered part of the base "No-Build" condition and are also included as part of the Build alternatives.

improvements, under any of the considered alternatives, can accommodate significantly more traffic with minimal increase in traveler delay.

Table ES-1: 2046 No-Build & Build Network Analysis Results, AM Peak Period

Performance Measure	No-Build	Build Alt. 1	Build Alt. 2	Build Alt. 3
Throughput (veh)	115,723	123,280	123,284	123,350
Unserved Demand (veh)	9,820	7,659	7,708	7,578
Vehicle-Hours Traveled	11,395	11,213	11,220	11,234
Vehicle-Miles Traveled	361,953	424,100	424,956	424,937

Table ES-2: 2046 No-Build & Build Network Analysis Results, PM Peak Period

Performance Measure	No-Build	Build Alt. 1	Build Alt. 2	Build Alt. 3
Throughput (veh)	110,864	131,413	131,234	131,277
Unserved Demand (veh)	26,240	9,265	9,390	9,383
Vehicle-Hours Traveled	14,861	14,946	15,050	14,999
Vehicle-Miles Traveled	353,002	460,282	460,136	459,880

Recommendations

The recommendation is to construct Build Alternative 3. These improvements meet the project purpose and need to improve capacity and serve growing regional transportation demand. Alternative 3 was also shown to have no negative impact on corridor safety.

A year of need assessment yielded the recommended phasing of separate constructible projects as summarized in **Table ES-3** and illustrated in **Figure ES-1**.

Table ES-3. East Selmon Project Phasing Summary

Direction	Description	Year of Need
Phase 1		
Eastbound	50th St to 78th St	2027
Eastbound	US-301 Off-Ramp	2027
Phase 2		
Westbound	78th St to I-4	2030
Phase 3		
Eastbound	Falkenburg Braided Ramp	2032
Westbound	I-75 to US-301 Widen & CD Road	2032
Phase 4		
Eastbound	US-301 to I-75	2035
Phase 5		
Eastbound	I-4 Connector to 50th St	2039
Eastbound	78th St to US-301	2039
Westbound	US-301 to 78th St	2039
Phase 6		
REL	REL Widening	2040

Figure ES-1. East Selmon Recommended Project Phasing

While the Build improvements address deficiencies on this section of the corridor, several remaining bottlenecks were identified in the section from Brorein Street to the I-4 Connector:

- Westbound: Brorein Street off-ramp
- Eastbound: Between 22nd Street Ramps
- Eastbound: I-4 Connector off-ramp (two lanes to one lane)

A future Downtown PD&E study is recommended to address these remaining deficiencies. THEA should coordinate closely with the City of Tampa and the Florida Department of Transportation to identify a strategic approach to optimizing throughput in this final remaining segment of the corridor.

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1 INTRODUCTION

This section briefly describes the project, its purpose and need, project commitments, and the preferred alternative.

1.1 Lee Roy Selmon Expressway

The Lee Roy Selmon Expressway (SR 618) is a 14-mile tolled, limited access facility in Hillsborough County. It extends from I-75 in the east, traverses through downtown Tampa, and ends at Gandy Boulevard in the west. Initially opened in 1976, the Selmon Expressway is the primary asset of the Tampa Hillsborough Expressway Authority (THEA). In addition, it features the world's first cashless, all-electronic toll Reversible Express Lanes (REL). **Figure 1-1** shows the Selmon Expressway and the location of the REL.

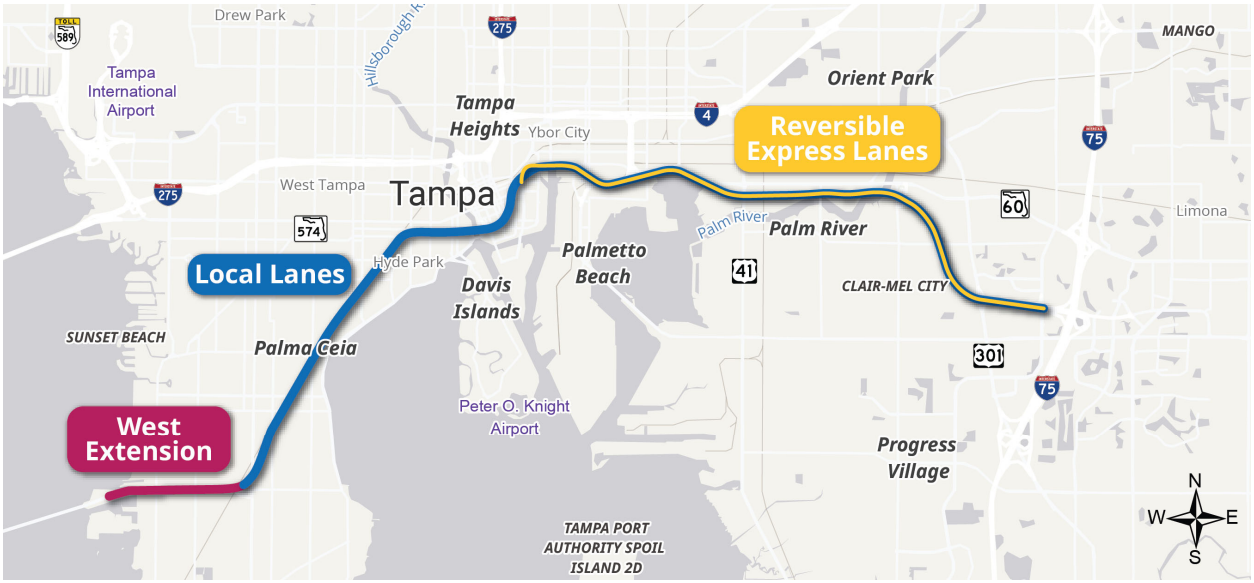


Figure 1-1: Lee Roy Selmon Expressway Corridor

The elevated reversible express lanes carry directional peak traffic between I-75 and downtown Tampa, highlighting the facility's importance as a major commuter route for the region. The Selmon Expressway is also a designated Strategic Intermodal System (SIS) facility and an evacuation route, as well as an alternate to I-4 and I-275.

1.2 Selmon Expressway Projects

THEA has funded a series of Project Development and Environment (PD&E) Studies to evaluate the needs, costs, and effects of constructing improvements that will increase traffic capacity and safety on the Selmon Expressway (**Figure 1-2**). These projects are either downtown improvements or expressway improvements. The Selmon Expressway is the only limited-access facility running directly through downtown Tampa. THEA has worked closely with the City of Tampa leadership to ensure that the ultimate vision of the Selmon Expressway supports the evolving downtown core. Similarly, THEA has funded improvements to the downtown street network to improve mainline operations. The interdependent relationship between these commodities continues to drive THEA's approach to planning for the future of the Selmon Expressway.

Figure 1-2: Selmon Project Location Map

West Extension: This project constructed a 1.9-mile extension of the Selmon Expressway at its western end. The two-way, two-lane elevated express lane facility is over Gandy Boulevard, separating local traffic and through traffic to/from Pinellas County. The bridge opened to traffic in the Spring of 2021.[2]

Twiggs Street Improvement Project: This project constructed an additional westbound travel lane on Twiggs Street between Meridian Avenue and Nebraska Avenue. The primary purpose of this lane was to accept traffic exiting the Selmon Expressway reversible express lanes during the AM peak hour, reducing queues and congestion on both the REL ramp and downtown streets. This project was completed in the Summer of 2022. [3]

Selmon East Ramps: This project will construct two additional slip ramps to improve access to the REL in the westbound direction of travel. The first ramp is at the east end of the corridor and will be a direct connector for traffic from I-75 Northbound to the REL Westbound. The second ramp will be located at the I-4 Connector and will be an egress ramp from the REL Westbound to the local lanes westbound. Construction of these ramps is underway and is scheduled for completion in the Fall of 2023. [4]

South Selmon Capacity Project: This project incorporates safety and capacity improvements to the Selmon Expressway and ramp terminals from the Gandy Bridge to Florida Avenue. One lane of capacity will be added in each direction of the 4.5-mile segment. This project is currently in the procurement phase with construction anticipated to begin in the Spring of 2024. [5]

Whiting Street PD&E: This project will improve the grid network in downtown Tampa by extending the east end of Whiting Street from Brush Street to Meridian Avenue. The Selmon eastbound on-ramp at Jefferson Street will be moved to the north to make way for a new eastbound off-ramp terminal on Whiting Street. This will ultimately allow for improvements to the existing Florida

[2] Tampa Hillsborough Expressway Authority. (2023, April 27). *Selmon West Extension*. Retrieved from Tampa Hillsborough Expressway Authority: https://www.tampa-xway.com/initiatives/completed-projects/selmon-west-extension/

[3] Tampa Hillsborough Expressway Authority. (2023, January 31). *Twiggs Street Improvements*. Retrieved from Tampa Hillsborough Expressway Authority:

https://www.tampa-xway.com/initiatives/completed-projects/twiggs-street-improvement/

[4] Tampa Hillsborough Expressway Authority. (2023, May 16). *REL Slip Ramp Construction*. Retrieved from Tampa Hillsborough Expressway Authority:

https://www.tampa-xway.com/initiatives/completed-projects/rel-slip-ramp-construction/

[5] Tampa Hillsborough Expressway Authority. (2023, February 1). *South Selmon Capacity Project Fact Sheet*. Retrieved from South Selmon Capacity Project: https://southselmoncapacity.com/documents/

Street off-ramp and the closure of the existing ramp to Channelside Drive. This study was completed in late 2022.[6]

Nebraska Avenue PD&E: This study evaluated additional improvements to the downtown street network to reduce congestion caused by large volumes of traffic exiting the REL in the AM peak hour. The preferred alternative was the No-Build alternative based on potential disruption to the surrounding study area.[7]

East Selmon PD&E: This project traffic analysis report focuses on the East Selmon Expressway PD&E. The project's initial scope of work included the downtown Tampa section from Brorein Street to the I-4 Connector. Due to the reimagining of downtown by the City of Tampa and impacts from constraints on the I-4 Connector, the downtown segment of the PD&E from Brorein Street to the I-4 Connector was deferred to a later project. The future *Downtown Selmon PD&E* will allow the improvements identified by the East Selmon PD&E to progress to funding and construction while providing the opportunity for additional coordination with the City, FDOT, and other stakeholders. While ultimate recommendations for the downtown segment are not in this study, the traffic analysis effort includes the downtown segment.

1.3 Project Description

The East Selmon PD&E project will widen and provide additional access to and from the REL between the I-4 Connector and I-75. These future capacity improvements include adding a through lane to the REL from Palm River Road to I-75 and an additional local lane from the I-4 Connector to I-75. In addition, there were assessments of operational improvements to interchanges, ramps, and connections at 50th Street, 78th Street, US-301, Falkenburg Road, and I-75.

1.4 Purpose and Need

The purpose of this project is to accommodate existing and future traffic and enhance safety conditions on the Selmon Expressway from the I-4 Connector to I-75. A secondary purpose is to improve travel time reliability and resiliency of the FDOT Strategic Intermodal System (SIS), of which the Selmon Expressway is a part. The study evaluated alternatives that increase capacity on the mainline toll lanes and the REL, maximize usability of the REL with additional access points, improve operations at interchanges and ramps, and enhance safety throughout the project area.

[6] Tampa Hillsborough Expressway Authority. (2021). Retrieved from Whiting Street PD&E Study: https://whitingstreetpde.com/

[7] Tampa Hillsborough Expressway Authority. (2023). Retrieved from Nebraska Ave PD&E Study: https://selmonstudies.com/nebraska-ave-pde-study/

The following criteria are the basis for the project need:

PRIMARY CRITERIA

Capacity

During the morning peak hour, congestion regularly occurs in the westbound direction from I-75 to 50th Street. Primary issues along the westbound direction include closely spaced on- and off-ramps and travel demands that exceed available capacity resulting in a level-of-service F. Between I-75 and US-301 are multiple on- and off-ramps requiring traffic to merge and weave within a one-mile segment. These include the I-75 Southbound on-ramp, Falkenburg Road on-ramp, US-301 off-ramp, US-301 on-ramp, and a left side on-ramp from the REL. On-going improvements by THEA to construct additional slip ramps (Contract #O-02520) between the local lanes and the REL are expected to improve traffic conditions along the westbound direction by encouraging traffic to shift to the REL. However, even with improved access to the REL, westbound segments between the REL to Falkenburg Road will operate at level-of-service 'F' in 2026.

During the afternoon peak hour, congestion occurs at the eastbound off-ramp to US-301. Both directions of travel along the mainline operate acceptably at a level-of-service D or better. However, two-lane segments in the eastbound lanes, such as 50th Street to 78th Street, will constrain throughput and cause upstream segments to operate at a level-of-service 'F' by 2036.

Transportation Demand

In 2019, 95,000 vehicles per day utilized the Selmon Expressway. By 2046, that number is expected to grow to 167,000, an increase of 75%. Population and economic growth in the region are directly linked to increasing traffic. The University of Florida Bureau of Economic and Business Research (BEBR) projects that the population of Hillsborough County will increase from 1,444,870 residents in 2019 to 1,919,900 residents in 2045, an increase of 33%. Furthermore, the portions of the Tampa Bay region contributing to traffic on the Selmon Expressway (consisting of parts of Hillsborough, Manatee, Polk, Pasco, Hernando, and Citrus counties) are expected to grow by 85% by 2045.

Safety

Over the five years from 2015 to 2019, there were 571 crashes within the project limits. One crash resulted in a fatality, and twelve crashes resulted in severe injuries. Of the 571 crashes, 249 (44%) involved rear-end collisions, indicating congestion as a primary contributing factor. High crash locations include the interchange areas at 50th Street, 78th Street, and US-301. Project safety enhancements will address THEA's Vision Zero safety goals to eliminate all traffic fatalities and serious injuries.

SECONDARY CRITERIA

System Linkages

The Selmon Expressway links other SIS highways such as US-92 (Gandy Boulevard), I-4, and I-75, and serves regional passenger and freight travel to intermodal centers at Channelside, Port Tampa Bay, and Tampa Amtrak.[8] Capacity improvements on the Selmon Expressway would be consistent with SIS Policy Plan objectives and contribute to a more reliable and resilient SIS.

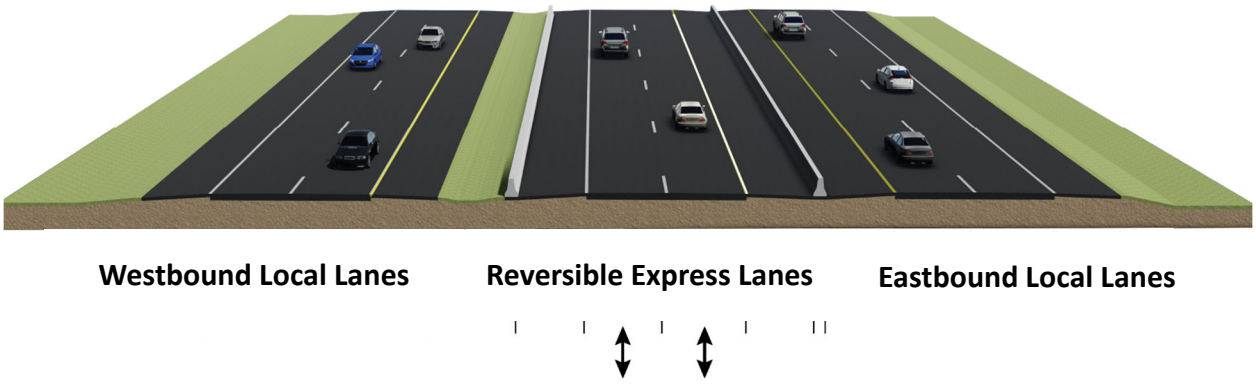
1.5 Description of Alternatives

The alternatives under evaluation are the No-Build Alternative and the Build Alternative.

The No-Build Alternative has the same number of lanes as the existing condition (**Figure 1-3**). Beyond routine maintenance, the only improvement on this corridor section included in the No-Build Alternative is additional westbound REL slip ramps (Contract #O-02520). Referred to as Selmon East Ramps in the THEA FY 2023 work program, these ramps are currently under construction and will be open in 2023. This project includes:

- One slip ramp from I-75 Northbound to the REL Westbound, which is considered a permanent improvement that will remain in the Build Alternative, and
- One slip ramp from the REL Westbound to the local lanes at the I-4 Connector. Any adjustments or changes to this slip ramp will be evaluated in the future Downtown PD&E Study.

Outside of the East Selmon project area, the No-Build Alternative assumes that the South Selmon Capacity Project and Whiting PD&E have been constructed. The No-Build forms the baseline for establishing the environmental impacts of the Build alternative and remains a viable alternative throughout the study.



[8] Florida Department of Transportation. (2023, April 13). *SIS Atlas*. Retrieved from Systems Implementation Office: https://www.fdot.gov/planning/systems/documents/brochures/default.shtm

Figure 1-3: No-Build Alternative Typical Section

The Build Alternative would add one additional local lane in each direction along the Selmon Expressway from the I-4 Connector to 78th Street (**Figure 1-4**). From 78th Street to I-75, the Build Alternative includes one additional lane along the REL and each direction of the local lanes (**Figure 1-5**). The Build alternative will utilize the existing corridor right of way to minimize impacts.

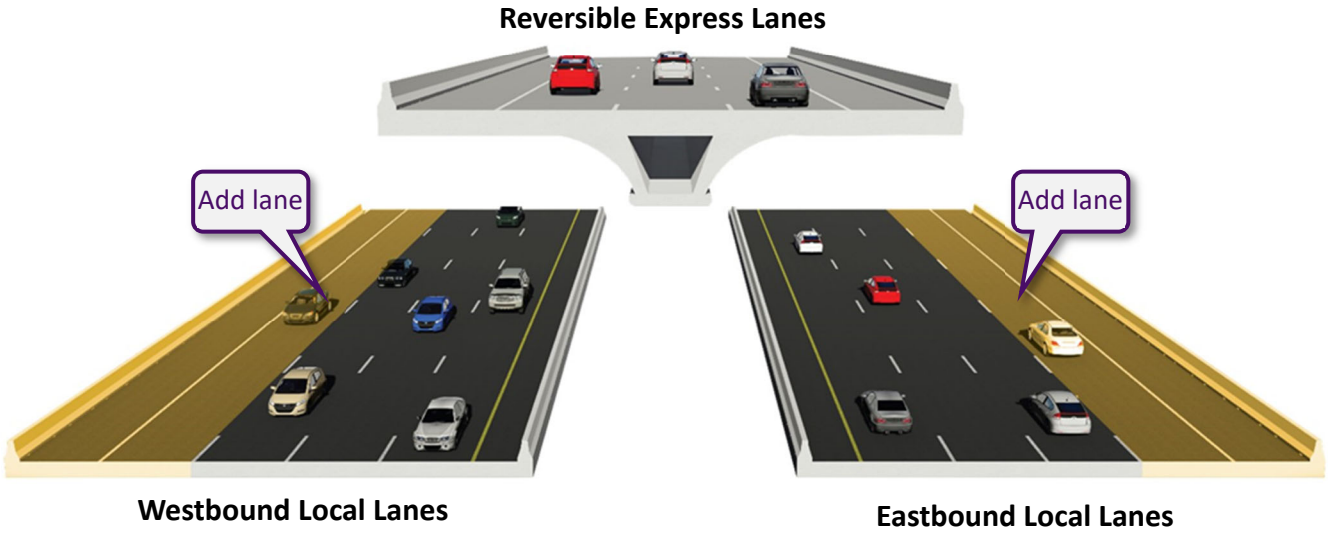


Figure 1-4: Build Alternative Typical Section (Brorein Street. to 78th Street)

Figure 1-5: Build Alternative Typical Section (78th Street to I-75)

In addition to widening, the following improvements were also part of the Build Alternative:

- One slip ramp from the REL Eastbound to the I-75 Southbound ramp
- Relocated REL Westbound to local lane westbound ramp from west of US-301 on-ramp to east of US-301 on-ramp
- Widening the US-301 Eastbound off-ramp to two lanes
- Add lanes on US-301 Northbound and Southbound to accept traffic exiting the Selmon Expressway
- Signalization of 78th Street and the Eastbound Selmon Expressway ramp terminal

- Modifications to the lane usage at 50th Street and the Westbound Selmon Expressway ramp terminal
- Lengthening of acceleration and deceleration lanes in both directions along the corridor
- Assumed improvements in the downtown area as described **Section 6**

These improvements represent the "standard widening" alternative as proposed in the previously completed *Lee Roy Selmon Expressway Planning/Feasibility Study from Brorein Street to I-75*[9]. Additionally, the PD&E project team identified alternatives for enhancements on the east end of the corridor:

- A braided ramp configuration with collector-distributor (CD) road on the westbound local lanes from I-75 to US-301
- A braided ramp configuration on the eastbound local lanes from US-301 to I-75

These enhancements were evaluated separately from the standard widening concept and were shown to yield safety benefits while maintaining operational efficiency. As a result, the braided ramp configurations are incorporated into the final recommendation.

Figure 1-6 shows the recommended improvements for the East Selmon PD&E. The benefits of the proposed improvements are a 7-18% increase in throughput and a 23-64% reduction in unserved demand.

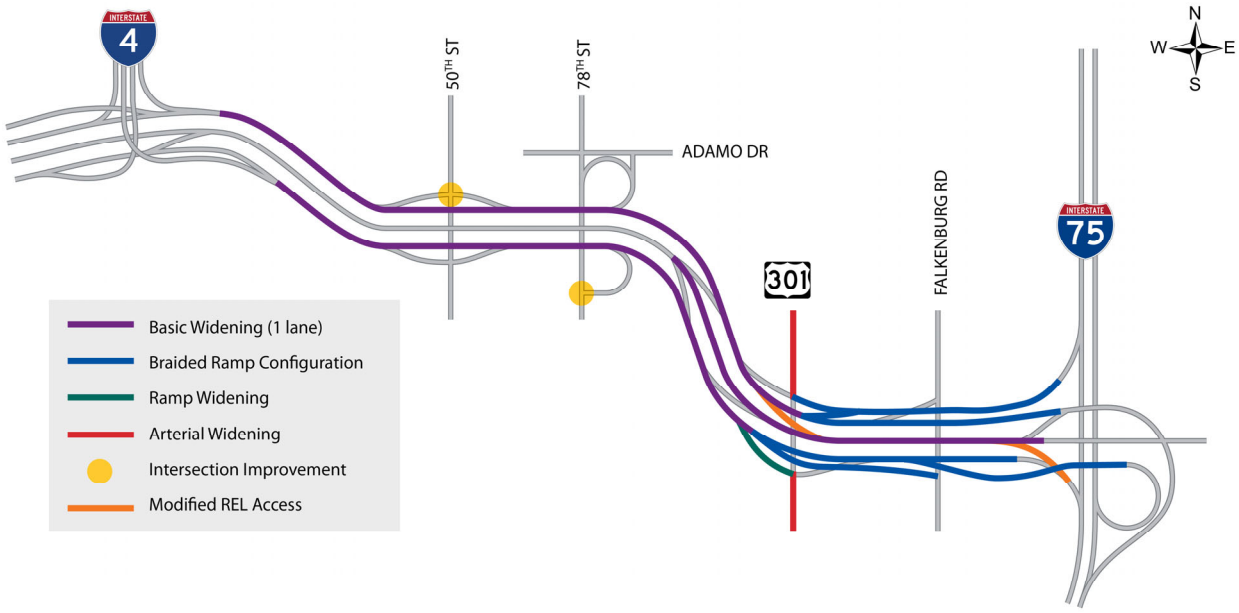


Figure 1-6: East Selmon PD&E Improvements

[9] RS&H. (2019). *Draft Summary Report: Lee Roy Selmon Expressway Planning/Feasibility Study from Brorein Street to I-75.*

1.6 Project Status and Phasing

The proposed project is listed as Selmon East – Eastern Construction Design Build and Western Construction Design Build on the THEA FY 2023 work program.[10] A phased approach to construction will more efficiently utilize financial resources because near-term improvements can be developed compatible with mid-term and long-term projects. Selmon East is also included in the Hillsborough TPO 2045 Long Range Transportation Plan (LRTP) and Fiscal Year 2023/24-2027/28 Transportation Improvement Program (TIP) as a THEA funded project.[11] Below is an illustration from the LRTP that includes the Selmon East project. The project does not need to be included in the State Transportation Improvement Program because federal funds are not being used.

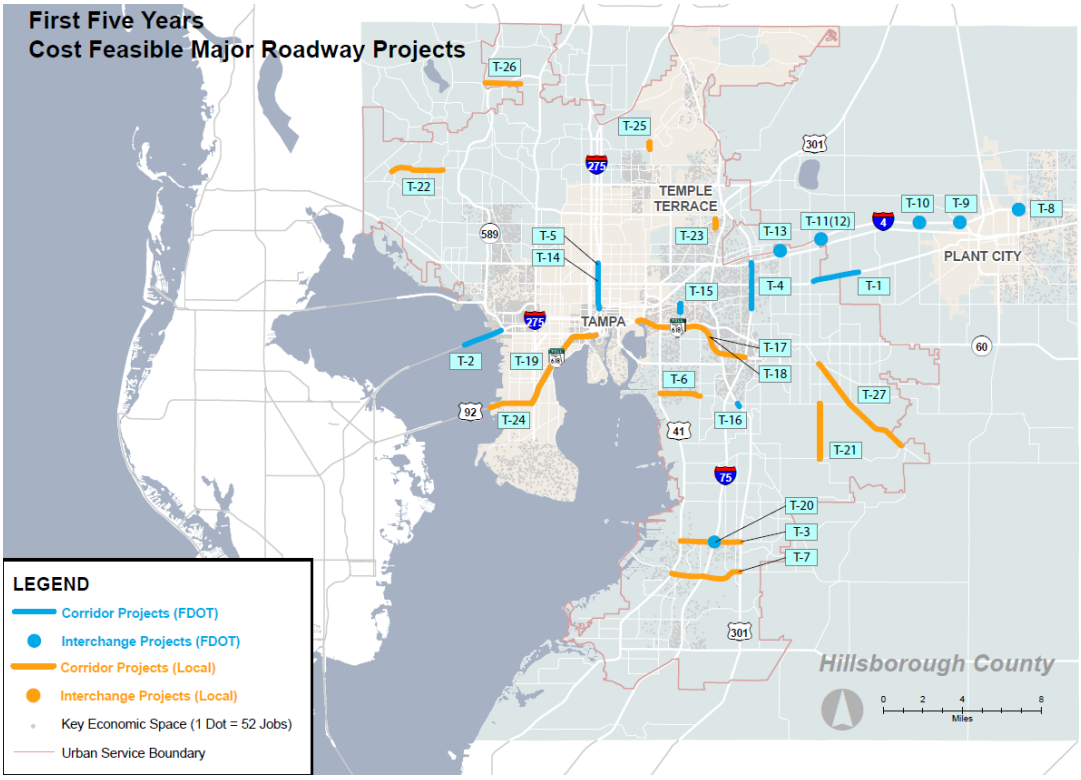


Figure 1-7. Five-Year Cost Feasible Projects, Hillsborough TPO 2045 LRTP

[10] Tampa Hillsborough Expressway Authority. (2022, June). *FY 2023 Work Program*. Retrieved from Tampa Hillsborough Expressway Authority:

https://www.tampa-xway.com/wp-content/uploads/2022/07/FY23_WP_FINAL_WEB.pdf

[11] Hillsborough Transportation Planning Organization. (2023, June 14). *Transportation Improvement Program Fiscal Year 2023/24-2027/28*. Retrieved from Transportation Improvement Program (TIP) & Proposed Amendments: https://planhillsborough.org/wp-content/uploads/2023/04/DRAFT-Transportation-Improvement-Program_Last-updated-31-May-2.pdf

THEA will fund construction for this project entirely with revenue from tolling. To ensure financial stability, the programming of construction is highly dependent on availability of funding streams. Therefore, a phasing of construction analysis was conducted to optimally match year of need to anticipated availability of funds. Individual constructable projects were identified under the umbrella of this PD&E. The improvements in this report serve as a "master plan" with phasing priorities based on construction cost and traffic demands.

2 METHODOLOGY & DATA

2.1 Analysis Extents

The traffic analysis extents cover approximately 10 miles of the Selmon Expressway local lanes from Brorein Street in downtown Tampa to I-75. The extents also include the entire REL facility, which is approximately 8.8 miles from Twiggs Street in downtown Tampa to I-75. The traffic analysis extents are illustrated in **Figure 2-1**.

Throughout this document, the "project area" refers to the limits of the East Selmon PD&E project from I-75 to the I-4 Connector. The "analysis extents" refers to the complete corridor from I-75 to Brorein Street. As stated previously, the original scope of this study was reduced so that additional improvements could be coordinated with the City of Tampa and Florida Department of Transportation (FDOT). However, the traffic analysis extents reflect the original study area with additional local lane segments and intersections in the downtown area.

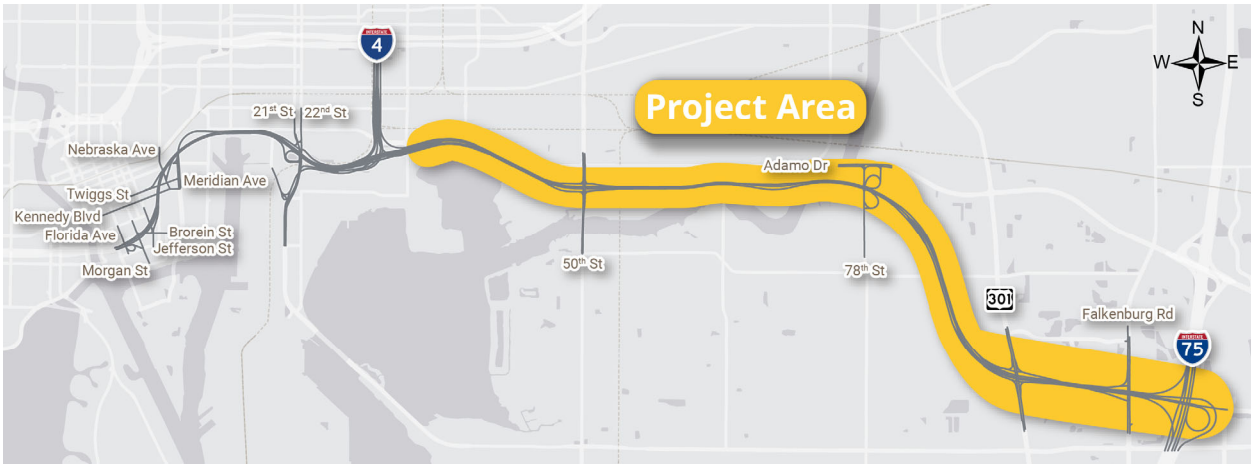


Figure 2-1: Analysis Extents vs. Project Area

The intersections within the analysis extents are listed in **Table 2-1**. They have been distinguished based on their location in the downtown area (outside the scope of this PD&E) or within the East Selmon project limits.

Table 2-1: Intersections within Analysis Extents

Section	Intersection
Downtown	Florida Ave & Brorein St
	Morgan St & Brorein St
	Jefferson St & Brorein St
	Jefferson St & EB Selmon Expressway On-Ramp
	Kennedy Blvd & Jefferson St
	Kennedy Blvd & Nebraska Ave
	Nebraska Ave & EB Selmon Expressway On-Ramp
	Twiggs St & Nebraska Ave
	Twiggs St & Meridian Ave
	22nd St & EB Selmon Expressway Ramps
	22nd St & WB Selmon Expressway Ramps
East Selmon	50th St & EB Selmon Expressway Ramps
	50th St & WB Selmon Expressway Ramps
	78th St & EB Selmon Expressway Off-Ramp
	Adamo Dr & 78th Street
	Adamo Dr & WB Selmon Expressway On-Ramp
	US-301 & EB Selmon Expressway Ramps
	US-301 & WB Selmon Expressway Ramps
	Falkenburg Rd & EB Selmon Expressway Off-Ramp
	Falkenburg Rd & WB Selmon Expressway On-Ramp

2.2 Study Years

The year 2019 was the base year for this project and was used for the microsimulation model calibration task. The future study years for this project are:

- Opening Year = 2026
- Interim Year = 2036
- Design Year = 2046

2.3 Performance Measures

Measures of effectiveness were identified for corridor performance, intersection performance, and network performance. The performance measures for the Selmon Expressway corridor include segment speeds, travel times, and level-of-service. Corridor results shown in this document focus on the critical direction, i.e., westbound in the AM peak and eastbound in the PM peak. Throughout this study, speed-contour plots visualize the propagation of speeds on the corridor over time and across space. There are speed-contour plots for each direction of travel on the local

lanes and separately for the REL. **Table 2-2** shows the speed range color scheme used in the speed-contour plots.

Table 2-2: Speed-Contour Plot Color Scale

Speed Range	Experience Rating	Color Designation
≥60	A	
≥55-60	B	
≥50-55	C	
≥45-50	D	
≥40-45	E	
≥15-40	F	
<15	Jam	

The level-of-service is defined in the Highway Capacity Manual as a letter grade, ranging from A to F, which represents the quality of service from a traveler's perspective. The objective of a level-of-service analysis is to translate complex performance results into a simple stratified system that can be easily understood. Level-of-service for limited access facilities is determined for each segment on the corridor, including basic freeway segments, merge/diverge segments, and weaving segments. The level-of-service is assigned based on the average vehicle density per lane as shown in **Table 2-3**.

Table 2-3: Limited Access Facility Level-of-service Criteria by Segment Type[12]

Level of Service	Volume-to-Capacity Ratio	Density (pc/hr/ln)		
		Basic Freeway	Merge/ Diverge	Weave
A	≤1.0	≤11	≤10	≤10
B		>11-18	>10-20	>10-20
C		>18-26	>20-28	>20-28
D		>26-35	>28-35	>28-35
E		>35-45	>35	>35-43
F	>1.0	>45	-	>43

[12] Transportation Research Board. (2022). *Highway Capacity Manual 7th Edition*. Washington, DC: National Academy of Sciences.

For intersections, the measures of effectiveness are level-of-service and queue lengths. Intersection level-of-service is primarily based on the average delay per vehicle, and the grading stratification varies for signalized and unsignalized intersections. **Table 2-4** identifies the levels-of-service for each type of intersection control.

Table 2-4: Intersection Level-of-service Criteria by Control Type[13]

Level of Service	Volume-to-Capacity Ratio	Delay (sec/veh)	
		Traffic Signal	Stop Control
A	≤1.0	≤10	≤10
B		>10-20	>10-15
C		>20-35	>15-25
D		>35-55	>25-35
E		>55-80	>35-50
F	>1.0	>80	>50

The network performance statistics for this study include the throughput, unserved demand, vehicle miles traveled (VMT), and vehicle hours traveled (VHT). The throughput gives the number of vehicles traversing the entire network and reaching their final destination within the simulation period. The unserved demand measures the adequacy of corridor capacity in relation to traffic demands, with higher volumes of unserved demand suggesting that capacity is insufficient. Vehicle miles traveled refers to the cumulative distance traveled by all vehicles within the network, which is also a measure of total throughput. Finally, vehicle hours traveled refers to the cumulative amount of time traveled by all vehicles within the network, effectively identifying changes in total delay.

2.4 Analysis Tools

Microsimulation modeling is the industry standard approach to evaluating operations of a limited access facility like the Selmon Expressway. VISSIM Version 10.00-16 was the primary tool for alternatives analysis and operational reporting of network and corridor performance measures. This version of the software is consistent with the version used to create the original microsimulation models during the Feasibility Study effort. Highway Capacity Software Version 7.8.5 supplemented microsimulation modeling with secondary corridor performance statistics, providing an initial screening of alternatives and an evaluation of construction phasing (not presented in this document).

[13] Transportation Research Board. (2022). *Highway Capacity Manual 7th Edition*. Washington, DC: National Academy of Sciences.

Synchro Version 11 served as the primary tool for intersection level-of-service reporting, based upon which ramp terminal improvements were identified. Synchro also provided future-year signal timing plans for input into the microsimulation model. **Table 2-5** summarizes the analysis tools used for this study.

Table 2-5: Summary of Analysis Tools

Tool	Network Performance	Corridor Performance	Intersection Performance
VISSIM	Primary	Primary	Secondary
HCS	-	Secondary	-
Synchro	-	-	Primary

2.5 Data Collection

The data collection effort for this project was scheduled to occur in 2020 and would include new traffic count and travel time data. However, the COVID-19 pandemic caused significantly reduced overall traffic volumes and altered travel patterns throughout 2020. Therefore data collection was not considered valid or feasible during 2020. In order to advance the project in a timely manner, a combination of previously collected data, newly available data, and historical data sources was utilized as described in the following sections.

2.5.1 Traffic Counts

A complete set of traffic count data for the analysis extents was compiled in 2016/2017 as part of the Feasibility Study effort. This data came from a variety of sources including Florida Traffic Onlne (FTO), THEA toll gantries, the *Comprehensive Downtown Channelside Traffic Study*[14], and new project traffic counts. The count set from the Feasibility Study was updated with more recently collected data. New counts on the local lanes and REL were available from October 2019 through FTO and THEA toll gantries. Supplemental information for the year 2019 was obtained from the Whiting and Nebraska PD&E Studies. Historical average annual daily traffic (AADT) reports were also downloaded from FTO to identify growth patterns.

2.5.2 Travel Time and Speed

Travel time data on the East Selmon corridor was collected in February 2017 as part of the previously completed Feasibility Study effort. In addition, speed data from October 2019 was provided by HERE through the Regional Integrated Transportation Information System (RITIS) platform for several locations along the Selmon Expressway local lanes.

[14] RS&H. (2018). *Draft Comprehensive Downtown Channelside Traffic Study Technical Memorandum*.

2.5.3 Signal Timing

The City of Tampa and Hillsborough County provided current signal timing information. This data defined the signal phasing and detection parameters used in the microsimulation model.

2.5.4 Origin-Destination Patterns

StreetLight Data provided existing origin-destination (OD) patterns for the analysis extent. StreetLight Data obtains anonymous location data from smartphones and other sources to unobtrusively yield valuable trip pattern data. Travel metrics were obtained for March, April, September, and October 2019.

3 EXISTING CONDITIONS

3.1 Geometry

The roadways in the analysis extents are listed in **Table 3-1**. The Selmon Expressway local lanes and REL are classified as Principal Arterial – Freeway and Expressway and have a speed limit of 55-65 mph. The REL speed limit drops to 40 mph at its western terminus at Twiggs Street. The local roads are classified as Principal Arterial – Other, Minor Arterial, or Major Collector roads. From 50th Street to the west, the study area roads are within the City of Tampa boundary and have a speed limit of 25-40 mph. Conversely, 78th Street, Adamo Drive, US-301 and Falkenburg Road are Hillsborough County roads with speed limits of 45-50 mph. The adopted level-of-service for all roads is 'D'.

Table 3-1: Basic Roadway Characteristics

Roadway	FDOT Functional Classification[15]	Speed Limit (mph)	Jurisdiction	Adopted Level of Service
Selmon Local Lanes	Principal Arterial – Freeway and Expressway Urban	65	THEA	D
Selmon REL	Principal Arterial – Freeway and Expressway Urban	40/65	THEA	D
Florida Ave	Minor Arterial Urban	30	City of Tampa	D
Brorein St	Major Collector Urban	35	City of Tampa	D
Morgan St	Major Collector Urban	25	City of Tampa	D
Jefferson St	Major Collector Urban	30	City of Tampa	D
Kennedy Blvd	Principal Arterial-Other Urban	30	FDOT	D
Nebraska Ave	Minor Arterial Urban	35	FDOT	D
Twiggs St	Major Collector Urban	30	City of Tampa	D
Meridian Ave	Major Collector Urban	40	THEA	D
21st/22nd St	Principal Arterial-Other Urban	35	FDOT	D
50th St	Principal Arterial-Other Urban	40	FDOT	D
78th St	Major Collector Urban	45	Hillsborough County	D
Adamo Dr	Principal Arterial-Other Urban	50	FDOT	D
US-301	Principal Arterial-Other Urban	50	FDOT	D
Falkenburg Rd	Minor Arterial Urban	45	Hillsborough County	D

[15] Florida Department of Transportation. (2010). *Functional Classification and Urban Boundary Maps*. Retrieved from Florida Department of Transportation: https://www.fdot.gov/statistics/hwysys/cubfc.shtm

The cross-section of the East Selmon Expressway study corridor varies. The corridor divides into six distinct segments based on variations in the geometry of the local lanes and REL (**Figure 3-1**). A summary of the characteristics of each cross-section is in **Table 3-2**. Segment 1 starts at I-75 and is 2.1 miles in length. The number of travel lanes fluctuates from four to six in the local lane section due to the closely spaced ramps at I-75, Falkenburg Road, US-301, and the REL. The REL section is at-grade with two travel lanes. There are ramps on this segment from the westbound REL to the local lanes and from the eastbound local lanes to the REL.

Figure 3-1: Selmon Expressway Geometric Segments

Table 3-2: Summary of Cross-Section Characteristics by Segment

Segment No.	Length (mi)	Facility	Speed Limit (mph)	Total Number of Travel Lanes	Travel Lane Width	Median Type	Median Width	Inside Shoulder Width	Outside Shoulder Width
1	2.1	Local Lanes	65	4-6	12-15’	REL	69-164’	6-12’	6-10’
		REL	50-65	2	12’	-	-	15’	10’
2	0.4	Local Lanes	65	4-6	12’	REL	164-172’	5-12’	8-10’
		REL	65	3	12’	-	-	4-15’	10’
3	3.2	Local Lanes	65	4	12-12.5’	Grass	36-48’	5-12’	4-16’
		REL	65	3	12’	-	-	4’	10’
4	1.8	Local Lanes	55-65	4-6	12-12.5’	Grass	36-124’	4-14’	8-23’
		REL	65	3	12’	-	-	4’	4-15’
5	0.5	REL	40-65	3-4	12’	-	-	4’	2-4’
6	1.5	Local Lanes	55	4-6	12’	Other	44’	4-6’	4-10’

Segment 2 is a 0.4-mile transition segment between US-301 and 78th Street. The number of local lanes drops from six to four moving to the west. There are ramps from the westbound local lanes to the REL, and from the eastbound REL to the local lanes, on this segment. To the west of these ramps, the REL facility then transitions from two lanes at-grade to three lanes in a separate, elevated section.

Segment 3 is the longest segment of the study corridor. It covers roughly 3.2 miles from east of 78th Street to 39th Street. The segment contains two local travel lanes in each direction, separated by a grass median. In addition, three reversible express lanes are elevated above the local lanes; this segment has no access between the local lanes and REL.

Segment 4 is the final segment containing both the local lanes and REL. In this 1.8-mile segment, the REL facility is at-grade through the I-4 Connector ramps allowing for an eastbound connection from the local lanes to the REL. The number of local lanes varies from four to six, and the REL has three lanes throughout.

Segment 5 is the final section of the REL from the point at which it crosses over the Selmon local lanes to its western terminus at Twiggs Street. This section is 0.5 miles in length, and the speed limit reduces from 65 to 40 mph approaching the signal at Twiggs Street. The number of lanes increases to four approaching the signalized intersection.

Segment 6 is the final local lane section traversing downtown Tampa. This segment is 1.5 miles long with four to six travel lanes and a speed limit of 55 mph. The western end of this segment coincides with the eastern end of the South Selmon PD&E. Improvements to segments 4-6 will defer to a future PD&E; however, they still fall within the traffic analysis extents and are part of the analysis results.

The existing lane configuration for the entire traffic analysis extents, including all intersections, can be found in **Appendix A**. The existing condition represents the year 2019; ongoing improvements to the downtown core occurring during the development of the East Selmon PD&E are not part of the existing condition. These are the Twiggs Street Improvement Project and the conversion of Brorein Street/Cumberland Avenue from one-way westbound to two-way east of Morgan Street.

3.2 Toll Operations

The Selmon Expressway toll gantry locations are illustrated in **Figure 3-2**. There are three mainline toll gantries, along with toll gantries at 50th Street, 22nd Street, Plant Avenue, and Willow Street. Traffic on the REL is tolled at the same rate as the local lanes.

The REL provides additional capacity to address weekday peak hour congestion. The REL operates westbound only towards downtown from Monday to Friday between 6:00-10:00 AM. The directionality is split from 10:00 AM to 3:00 PM, operating westbound west of 78th Street and eastbound east of 78th Street. The REL operates eastbound, away from downtown, at all other times of the day, and on weekends and holidays. **Figure 3-3** illustrates the REL operations.[16]

Figure 3-2: Selmon Expressway Toll Gantry Locations

[16] Tampa Hillsborough Expressway Authority. (2023, May 05). *REL Background*. Retrieved from Tampa Hillsborough Expressway Authority: https://www.tampa-xway.com/for-travelers/travelers-help-center/rel/

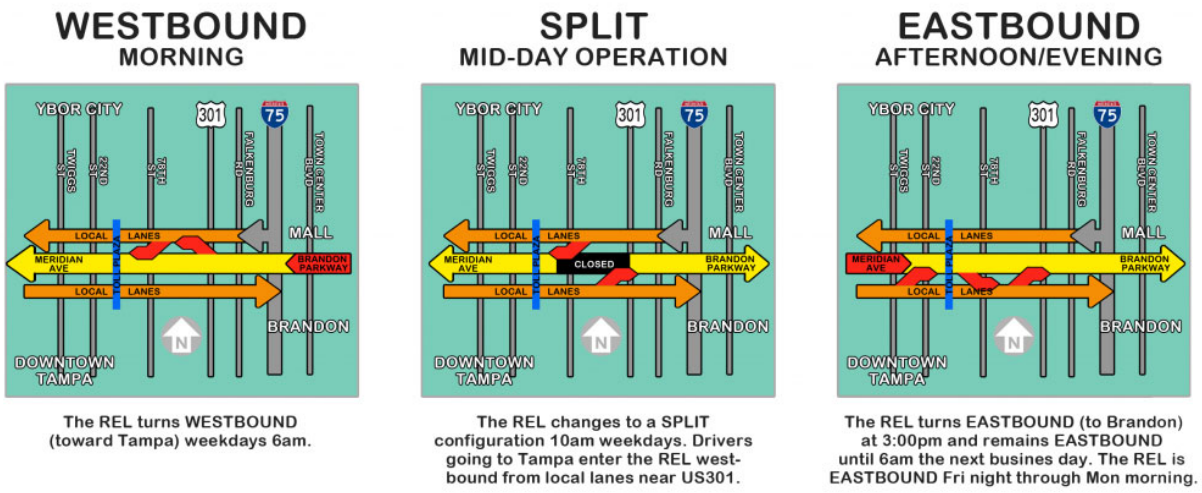


Figure 3-3: Selmon Expressway REL Operations

The existing REL access is limited in the westbound direction. The only entrance ramp from the local lanes into the REL is located west of US-301. This restricts the ability of the REL to reduce peak hour congestion in the critical section of the corridor from I-75 to US-301. Similarly, traffic exiting the REL to the local lanes can only do so west of US-301 or into downtown Tampa. This ramp configuration does not serve westbound through traffic that is destined for locations further west on the Selmon Expressway.

Eastbound REL access is more complimentary to the corridor traffic demands. Eastbound traffic can enter the REL directly from downtown Tampa or via slip ramps at the I-4 Connector and west of US-301. However, eastbound traffic can only exit the REL to the local lanes west of US-301. Therefore traffic destined for I-75 must utilize the local lanes from US-301 eastward.

3.3 Traffic Demands & Factors

The existing traffic volumes for this project were identified from multiple sources including Florida Traffic Online, THEA toll gantry data, and data collected for other studies including the *Comprehensive Downtown Channelside Traffic Study*, the Whiting Ave PD&E, and the Nebraska Ave PD&E. A complete and balanced existing volume set was compiled from these data sources as described in the *East Selmon Expressway PD&E Study Base Year Traffic Volume Development Memorandum*; this memo and the resulting AADTs and peak hour volumes are in contained in **Appendix B**. The AM peak hour was identified as 7:00-8:00 AM and the PM peak hour was identified as 4:30-5:30 PM.

The existing K-Factors, D-Factors, and percentage of traffic using the REL were calculated from the 2019 peak hour volumes in **Appendix B**. The K- and D-Factor values reflect total directional traffic, i.e., local lanes and reversible express lanes combined. The data, summarized in s shown in **Table 3-3**, highlights the extreme peaking characteristics of the Selmon Expressway, especially

between I-75 and downtown Tampa. In the AM, an average of 74% of traffic is traveling in the westbound direction. In the PM, about 70% of traffic is traveling in the eastbound direction. The measured K-Factor is nearly 10% for both time periods. In comparison, the year 2019 factors published by FDOT Traffic Online for this facility (local lanes and REL) are K = 8% and D = 58.9%.

Table 3-3: Summary of Existing K-Factors and D-Factors

East Selmon Expressway Segment	AM Peak (7:00-8:00 AM)			PM Peak (4:30-5:30 PM)		
	K-Factor	D-Factor	Percent on REL	K-Factor	D-Factor	Percent on REL
East of Falkenburg Rd	10.0%	84.8%	45.4%	9.4%	74.3%	49.3%
US-301 to 78th St	9.1%	78.6%	30.7%	9.7%	72.3%	27.2%
50th St to I-4	9.2%	76.8%	40.1%	9.5%	71.1%	40.5%
22nd St to Kennedy Blvd/Nebraska Ave	11.1%	78.3%	37.7%	10.8%	64.6%	18.8%
West of Brorein St	8.6%	53.2%	-	9.9%	63.8%	-
Average	**9.6%**	**74.4%**	**38.5%**	**9.8%**	**69.2%**	**34.0%**

Historic AADT information was obtained from Florida Traffic Online for 2009 through 2020 for two local lane locations and one location in the REL along East Selmon Expressway project corridor (**Figure 3-4**). The amount of traffic using the REL has remained relatively constant over the past 11 years. Traffic in the local lanes has experienced steady growth, especially since 2014. There appears to be an anomaly in the data on the segment west of 50th St in 2016, which shows a significant increase in traffic before returning to typical volume patterns.

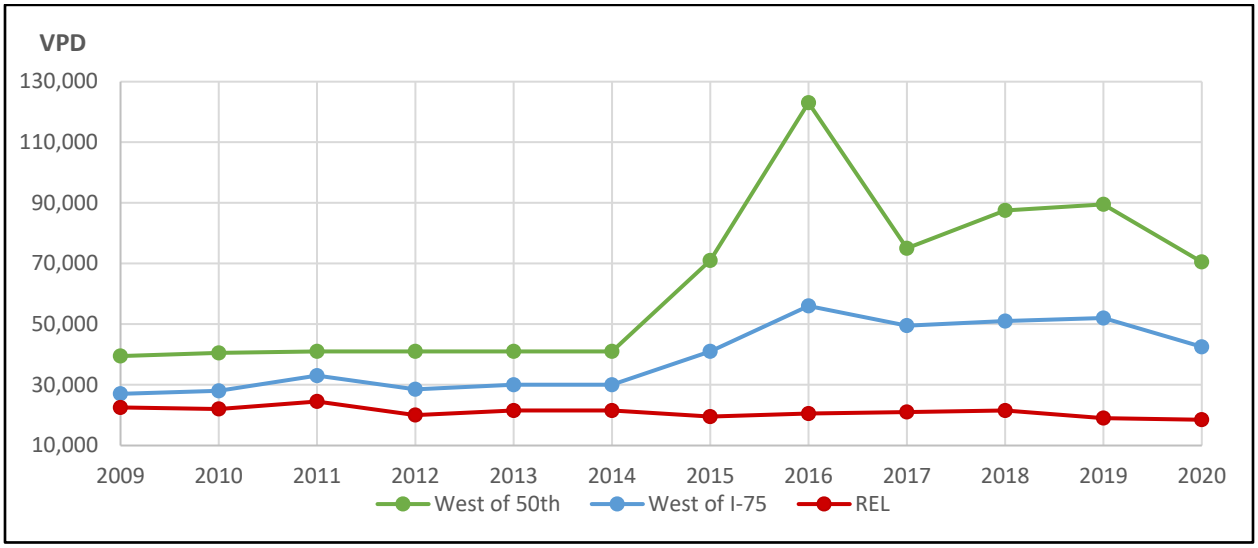


Figure 3-4: East Selmon Expressway Historic AADT Data

3.4 Origin-Destination Patterns

Version 9.2 of the Tampa Bay Regional Planning Model (TBRPM) was used to identify the traffic analysis zones (TAZs) that significantly contribute to traffic on the East Selmon Expressway corridor. The TAZs that yield a minimum of 200 westbound trips per day are illustrated in **Figure 3-5**. This map shows that most of the Selmon Expressway traffic is based in the region that is south of the corridor and east of the Hillsborough Bay.

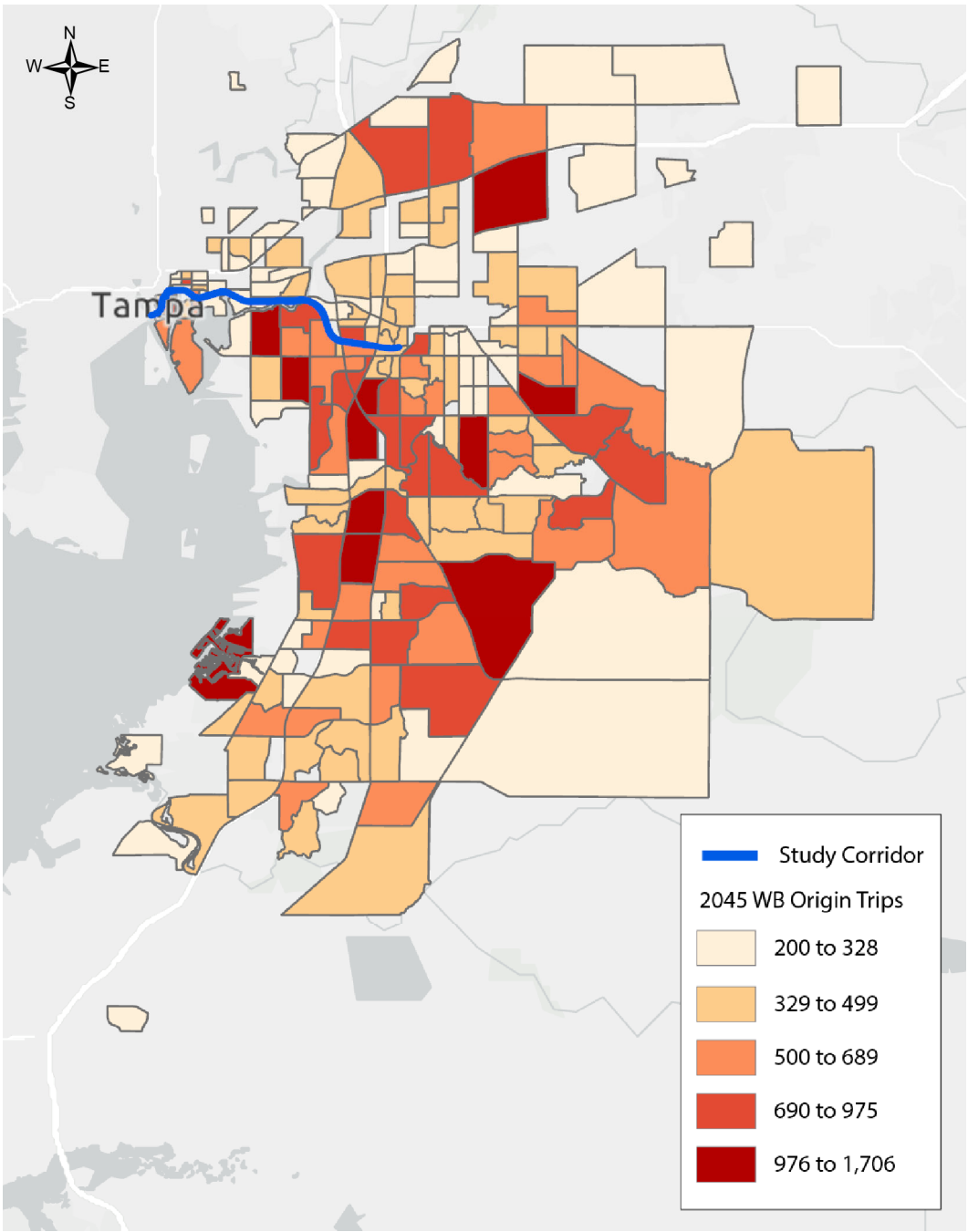


Figure 3-5: Major Contributors to East Selmon Expressway Westbound Traffic (>200 trips per day)

Figure 3-6 (westbound AM) and **Figure 3-7** (eastbound PM) further illustrate the existing origin-destination patterns along the corridor obtained from StreetLight Data. In the AM, 33% of westbound traffic originates from the very eastern end of the corridor (I-75 or the REL). About 33% of westbound traffic continues further to the west on the Selmon Expressway. This traffic cannot fully utilize the REL in the existing condition since no egress is west of US-301. Roughly 50% of westbound traffic is destined for downtown, with 30% using the REL and 20% using the local lanes.

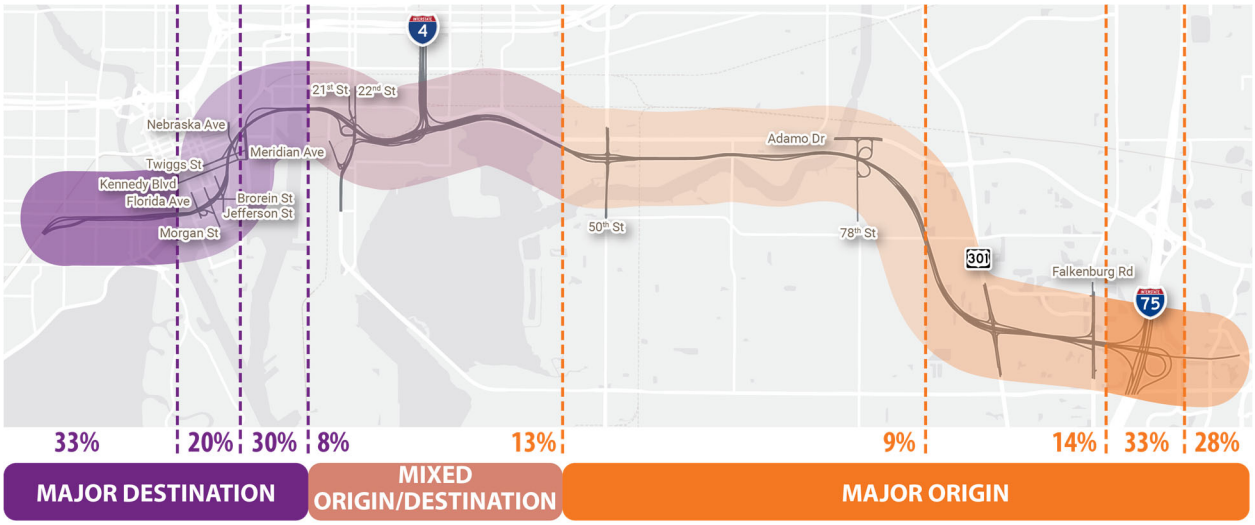


Figure 3-6: Existing Corridor Origin-Destination Patterns, Westbound AM Traffic

In the PM, nearly half of the eastbound traffic originates from the west on the Selmon Expressway. Most traffic exits at the very eastern end of the corridor with a roughly equal split between US-301/Falkenburg Road, I-75, and the REL eastbound to Brandon Parkway.

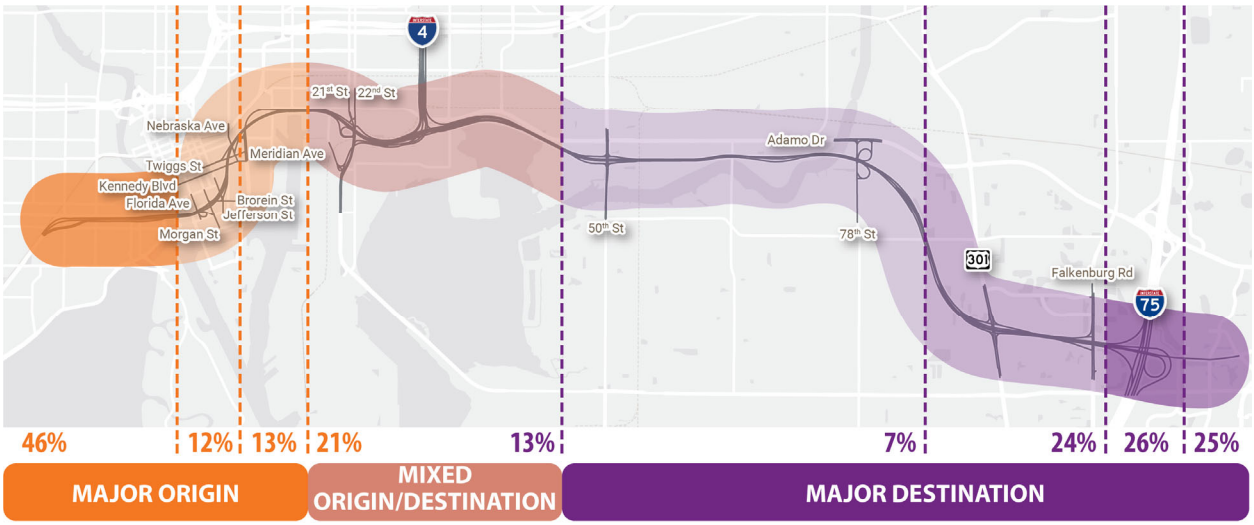


Figure 3-7: Existing Corridor Origin-Destination Patterns, Eastbound PM Traffic

3.5 Traffic Operations

Detailed speed data was available from travel time runs conducted in February 2017 for the Feasibility Study. Travel time runs were collected over three weekdays (Tu-Th) during the AM peak period of 6:30 AM to 9:30 AM and the PM peak period of 3:30 PM and 6:30 PM, resulting in more than 150 directional corridor runs. This data was used to generate speed-contour plots for the existing condition.

Figure 3-8 shows the westbound local lane speed-contour plot for the AM peak period (6:30-9:30 AM); **Appendix A** contains the eastbound local lane plot. In the AM, congestion was present in the westbound direction of travel in the local lanes starting at Falkenburg Road and ending at 50th Street, where speeds ranged from 20 mph up to nearly 70 mph. Additionally, there was significant queuing due to the right-turn movement from the REL terminus to Twiggs Street. The maximum queue in the AM peak was approximately one mile, based on information from the City of Tampa Traffic Management Center. However, these observations were taken before the recent Twiggs Street Improvement Project, which has since reduced queues on the REL. The REL otherwise has freeflow operating conditions in the AM peak period. Congestion or significant speed reductions were not evident in the eastbound direction. Observed speeds through the downtown area were about 55 mph, increasing to approximately 65 mph east of the I-4 Connector.

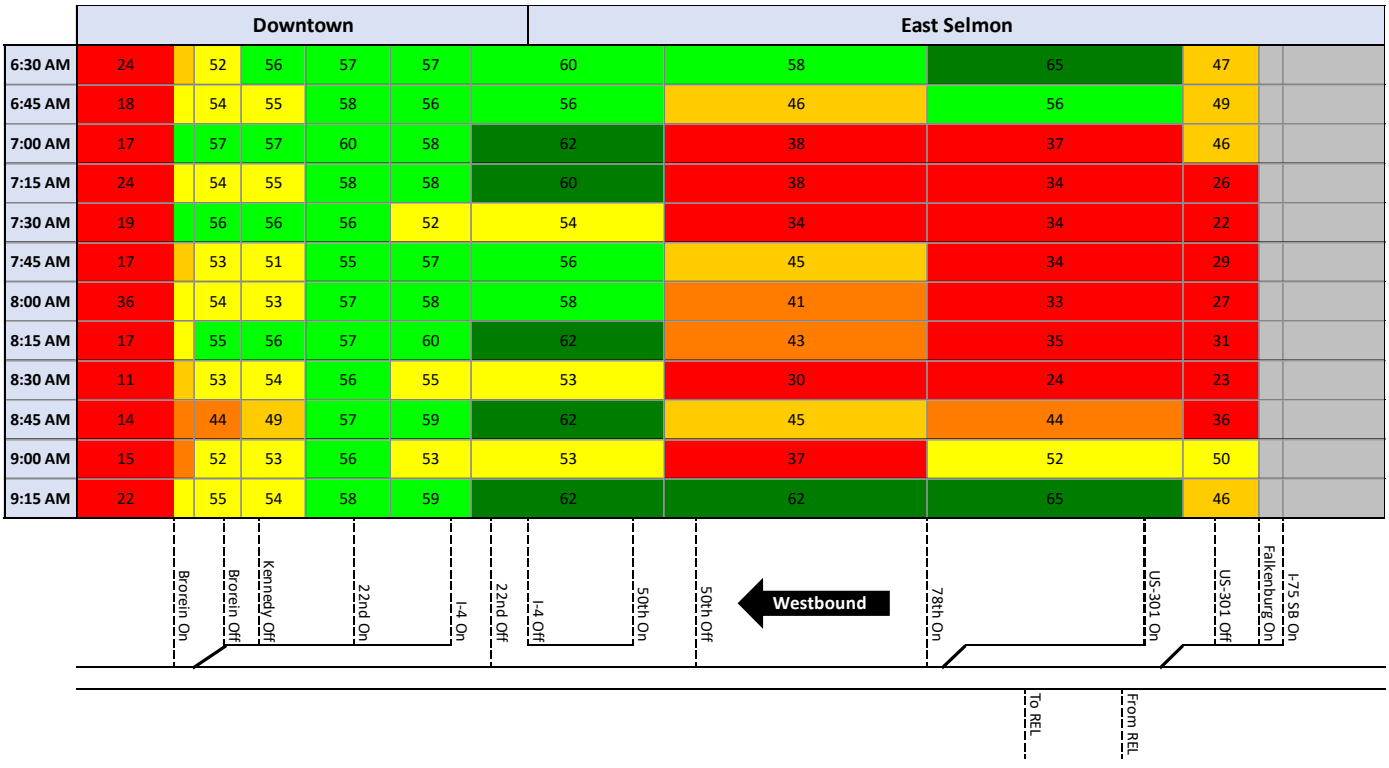


Figure 3-8: Existing Speed-Contour Plot, Westbound Local Lanes, AM Peak Period

Figure 3-9 shows the eastbound local lane speed-contour plot for the PM peak period (3:30-6:30 PM); **Appendix A** contains the westbound local lane plot. In the PM, the eastbound direction experienced congestion near the I-4 Connector ramps, with travel speeds ranging from 30-65 mph. In the westbound direction, freeflow conditions were observed with travel speeds of 65 mph east of the I-4 Connector and 55 mph through downtown.

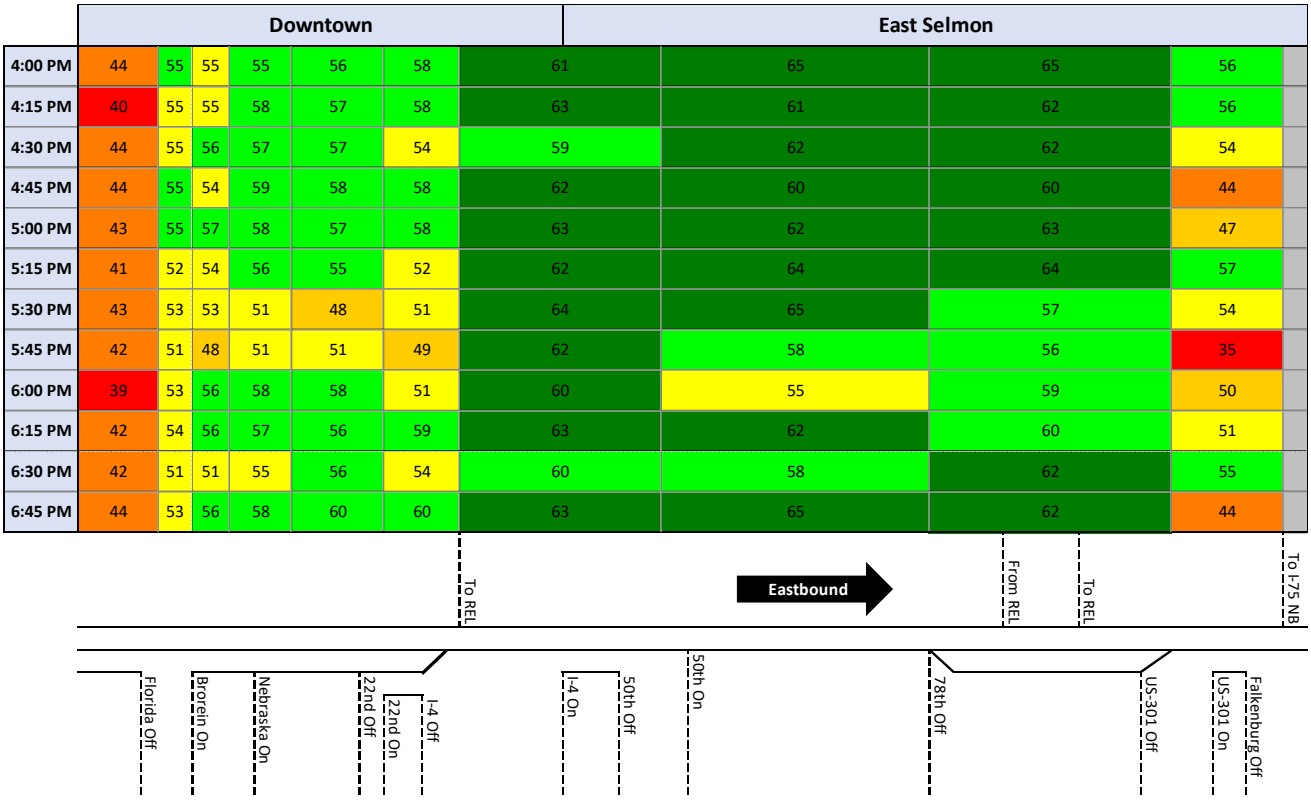


Figure 3-9: Existing Speed-Contour Plot, Eastbound Local Lanes, PM Peak Period

Table 3-4 summarizes the westbound local lane travel times by segment from Florida Ave to US-301 for the AM peak hour, and **Table 3-5** contains the PM peak hour data. These tables show the travel time index, which measures congestion calculated as the ratio of the measured travel time to the freeflow travel time. The freeflow travel time for each segment was estimated based on the posted speed limit. In AM peak hour, the westbound corridor travel time is 1.6 times the freeflow travel time. From Falkenburg Road to 78th Street, the measured travel time is more than double the freeflow travel time in the AM. Even in the PM peak hour, the travel time index is 1.6 from Falkenburg Road to US-301. The Falkenburg Road to 78th Street segment is the critical segment/direction on the East Selmon study corridor.

The eastbound direction travel time index is much lower, even in the PM peak hour. The most significant travel time difference is at the corridor's east end from US-301 to Falkenburg Road.

The overall eastbound corridor measured travel time is 1.1 times the free-flow travel time in the PM.

Table 3-4: Existing Travel Time Data, Westbound Local Lanes

Segment	Distance (ft)	Posted Speed Limit (mph)	Freeflow Travel Time (min)	AM Peak Hour (7:30-8:30 AM)		PM Peak Hour (5:00-6:00 PM)	
				Travel Time (min)	Travel Time Index	Travel Time (min)	Travel Time Index
Falkenburg Rd to US-301	4,265	65	0.7	2.1	2.8	1.2	1.6
US-301 to 78th St	9,676	65	1.7	4.0	2.4	1.7	1.0
78th St to 50th St	10,606	65	1.9	3.4	1.8	1.9	1.0
50th St to I-4 Connector	8,039	65	1.4	1.6	1.2	1.5	1.1
East Selmon Subtotal	**32,587**	**65**	**5.7**	**11.1**	**1.9**	**6.3**	**1.1**
I-4 Connector to 20th St	3,292	55	0.7	0.7	1.0	0.6	0.9
20th St to Channelside Dr	3,730	55	0.8	0.8	1.0	0.7	1.0
Channelside Dr to Kennedy Blvd	2,838	55	0.6	0.6	1.0	0.6	0.9
Kennedy Blvd to Jefferson St	1,496	55	0.3	0.3	1.0	0.3	1.0
Jefferson St to Florida Ave	1,255	55	0.3	0.3	1.0	0.3	1.0
Downtown Subtotal	**12,611**	**55**	**2.6**	**2.6**	**1.0**	**2.5**	**0.9**
Westbound Total	**45,198**	**-**	**8.3**	**13.6**	**1.6**	**8.8**	**1.1**

Table 3-5: Existing Travel Time Data, Eastbound Local Lanes

Segment	Distance (ft)	Posted Speed Limit (mph)	Freeflow Travel Time (min)	AM Peak Hour (7:30-8:30 AM)		PM Peak Hour (5:00-6:00 PM)	
				Travel Time (min)	Travel Time Index	Travel Time (min)	Travel Time Index
Florida Ave to Jefferson St	1,253	55	0.3	0.3	1.0	0.3	1.0
Jefferson St to Kennedy St	1,595	55	0.3	0.3	0.9	0.3	1.0
Kennedy Blvd to Channelside Dr	2,744	55	0.6	0.5	0.9	0.6	1.0
Channelside Dr to 20th St	3,717	55	0.8	0.7	1.0	0.8	1.0
20th St to I-4 Connector	3,314	55	0.7	0.7	0.9	0.7	1.1
Downtown Subtotal	**12,623**	**55**	**2.6**	**2.5**	**1.0**	**2.7**	**1.0**
I-4 Connector to 50th St	7,973	65	1.4	1.4	1.0	1.5	1.0
50th St to 78th St	10,621	65	1.9	1.9	1.0	2.0	1.1
78th St to US-301	9,717	65	1.7	1.7	1.0	1.9	1.1
US-301 to Falkenburg Rd	4,240	65	0.7	1.0	1.4	1.1	1.4
East Selmon Subtotal	**32,552**	**65**	**5.7**	**6.1**	**1.1**	**6.5**	**1.1**
Eastbound Total	**45,175**	**-**	**8.3**	**8.5**	**1.0**	**9.2**	**1.1**

Lastly, the existing intersection levels-of-service are summarized in **Table 3-6** (AM peak hour) and **Table 3-7** (PM peak hour). For unsignalized intersections, the critical approach delay is reported instead of the intersection delay. Results for intersections in downtown Tampa are contained in **Appendix A**. In the AM, the westbound off-ramp to US-301 has a poor level-of-service due to the high right-turn volume and merge condition. In the PM, the interchanges at US-301 and Falkenburg Road also have levels-of-service of 'E' or 'F'.

Table 3-6: Existing Intersection Level-of-service, AM Peak Hour

Intersection	Traffic Control	Delay (sec/veh)	Level-of-service	Highest v/c Ratio	Movements with v/c > 1.0
50th St & EB Selmon Expressway Ramps	Signalized	11.6	B	0.520	-
50th St & WB Selmon Expressway Ramps	Signalized	20.3	C	0.990	-
78th St & EB Selmon Expressway Off-Ramp	Unsignalized	32.7	D	0.359	-
Adamo Dr & 78th Street	Signalized	39.4	D	0.790	-
US-301 & EB Selmon Expressway Ramps	Signalized	34.0	C	0.930	-
US-301 & WB Selmon Expressway Ramps	Signalized	**76.0**	**E**	**1.800**	**WBR**
Falkenburg Rd & EB Selmon Expressway Off-Ramp	Signalized	9.4	A	0.600	-
Falkenburg Rd & WB Selmon Expressway On-Ramp	Signalized	7.9	A	0.650	-

Table 3-7: Existing Intersection Level-of-service, PM Peak Hour

Intersection	Traffic Control	Delay (sec/veh)	Level-of-service	Highest v/c Ratio	Movements with v/c > 1.0
50th St & EB Selmon Expressway Ramps	Signalized	50.8	D	1.580	EBR
50th St & WB Selmon Expressway Ramps	Signalized	12.0	B	0.730	-
78th St & EB Selmon Expressway Off-Ramp	Unsignalized	19.0	C	0.229	-
Adamo Dr & 78th Street	Signalized	35.3	D	0.910	-
US-301 & EB Selmon Expressway Ramps	Signalized	**155.4**	**F**	**2.310**	**EBR**
US-301 & WB Selmon Expressway Ramps	Signalized	**56.8**	**E**	**0.990**	**-**
Falkenburg Rd & EB Selmon Expressway Off-Ramp	Signalized	23.2	C	0.860	-
Falkenburg Rd & WB Selmon Expressway On-Ramp	Signalized	**71.4**	**E**	**1.550**	**NBL**

3.6 Crash History

Data was obtained from FDOT's Crash Analysis Reporting System (CARS). Over the five-year analysis period (2015 to 2019), there were 571 crashes within the project limits, including one fatal crash and twelve crashes resulting in severe injuries. The fatality in 2016 involved a motorcycle that hit the vehicle's rear end ahead of them on the ramp from I-75 Southbound to the Selmon Expressway approaching the bridge over Falkenburg Road. **Figure 3-10** shows the location of the severe crashes and the crash hot spots around interchanges. High crash locations include the interchange areas at 50th Street, 78th Street, and US-301.

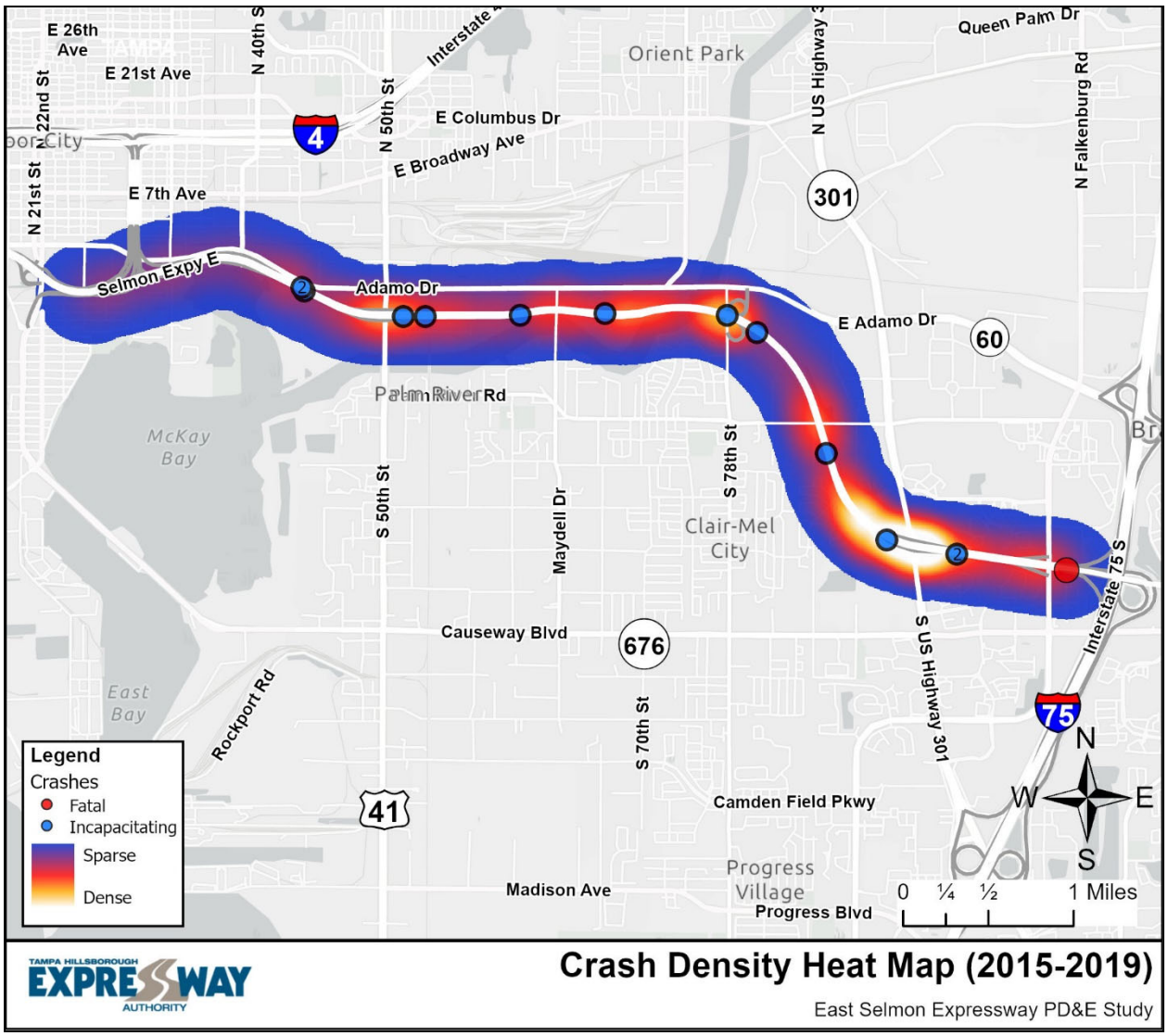


Figure 3-10: Crash Density Heat Map (2015-2019)

Figure 3-11 shows that the highest crash frequency westbound is west of US-301, coinciding with the substandard on-ramp gore spacing (US-301 and REL). **Figure 3-12** shows the highest concentration east of US-301, coinciding with the substandard weaving distance (US-301 onto Falkenburg Road off).

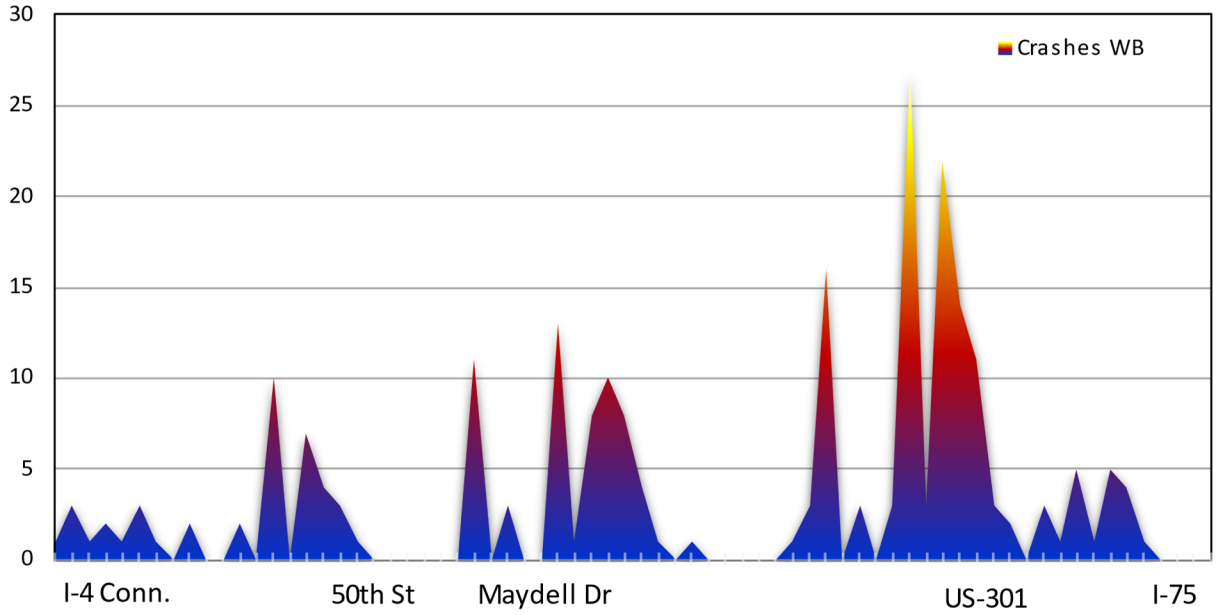


Figure 3-11: Number of Crashes by Location, Westbound Selmon Expressway

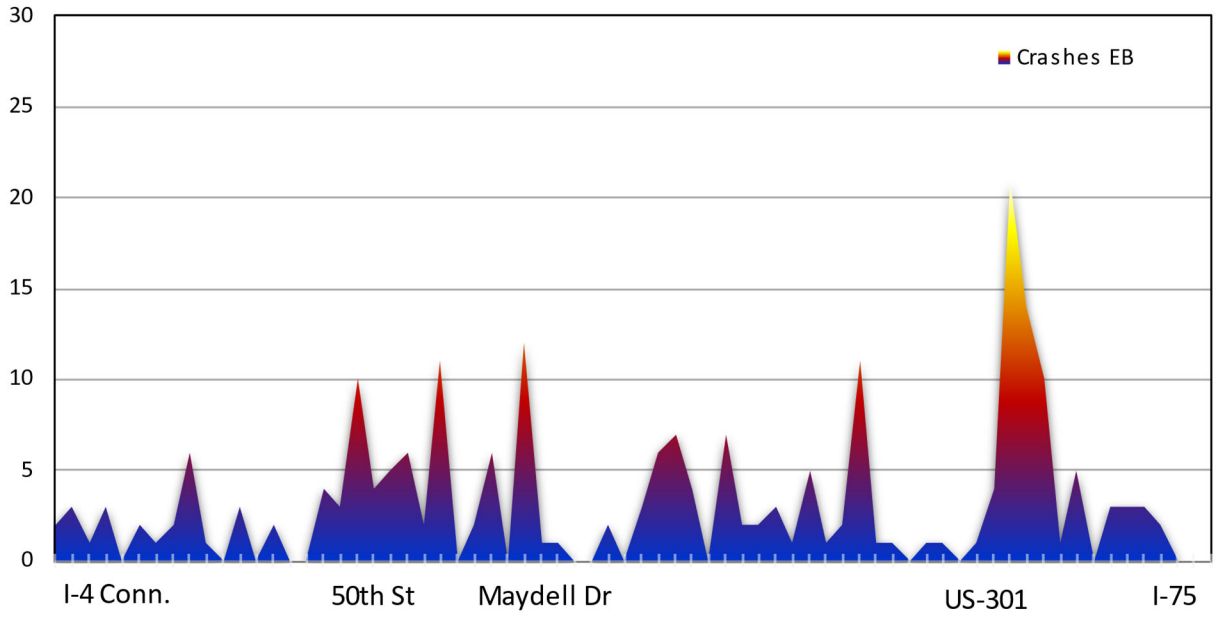


Figure 3-12: Number of Crashes by Location, Eastbound Selmon Expressway

The crash history (**Figure 3-13**) shows that although total crashes have increased, injury crashes have remained steady. An increase in total crashes but not in severity often indicates a roadway experiencing increasing congestion contributing to more property-damage-only rear-end crashes. In addition, the crash rate trend exceeds the traffic growth rate (**Figure 3-14**), indicating that the causes of crashes are more than just additional traffic.

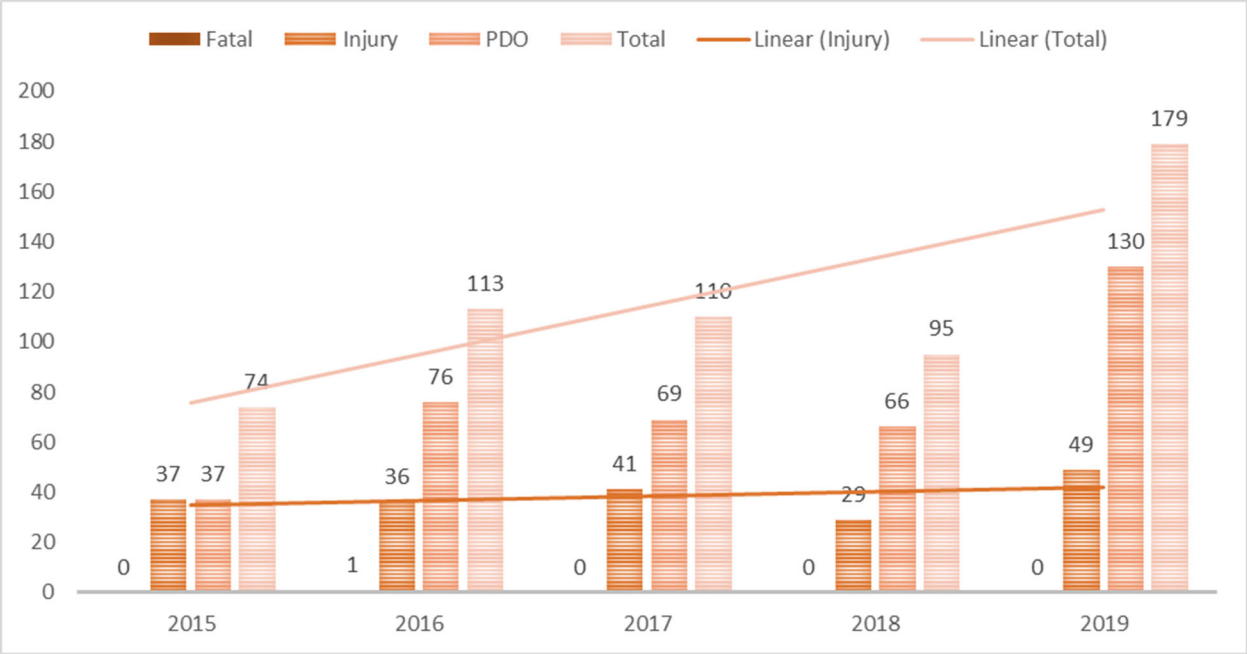


Figure 3-13: Crash History

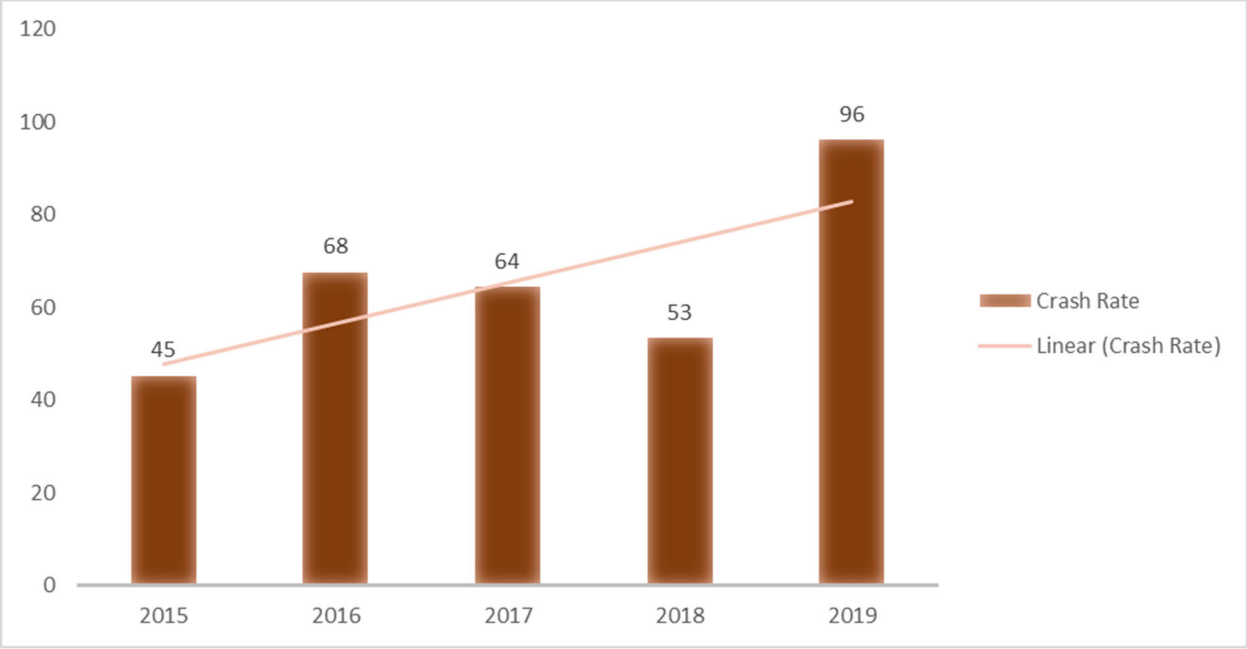


Figure 3-14: Crash Rate per 100 Million Vehicle Miles

Table 3-8 shows that the most common crash type (44%) involved rear-end collisions, indicating congestion as a primary contributing factor. The subsequent highest frequency was vehicles hitting fixed objects (28%) and sideswipe collisions with other vehicles (17%). The distribution of crashes across environmental conditions (**Figure 3-15**) shows a majority on dry pavement and during daylight. Again, this does not appear to show an issue with drainage or lighting.

Table 3-8: Crash Types

Crash Type	Number	Percent
Rear End	249	44%
Hit Fixed Object	158	28%
Sideswipe	96	17%
Single Vehicle	24	4%
Hit Non-Fixed Object	15	3%
Angle	10	2%
Unknown	8	1%
Run Off Road	5	1%
Left Turn	3	1%
Head On	2	<1%
Bike	1	<1%

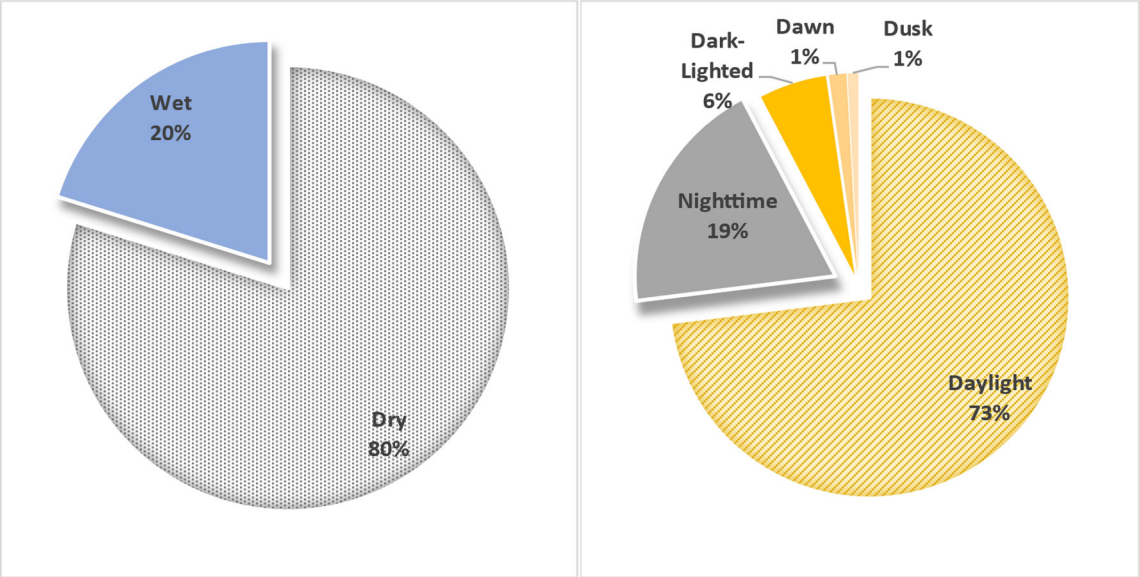


Figure 3-15: Crash Environmental Conditions

4 MICROSIMULATION MODEL CALIBRATION

A microsimulation model was previously developed for the entire traffic analysis extent as part of the Feasibility Study. As part of that study, the initial VISSIM model calibration used traffic data collected in 2016 and 2017. The approach to microsimulation modeling for the updated PD&E effort was to review the model network, update traffic volumes and signal timing inputs, and then enhance and validate the VISSIM model using industry-standard targets. The updated VISSIM model assessed future corridor and ramp-terminal intersection improvements. The microsimulation analysis uses VISSIM version 10.00-16, the version used to create the original model.

The *East Selmon Expressway PD&E Study VISSIM Calibration Report* found in **Appendix C** documented the calibration effort. This section provides a summary of that effort.

4.1 Measures of Effectiveness

The calibration process compares statistical measurements of model outputs to field-measured data to assess the model's ability to mimic existing traffic operations. **Table 4-1** summarizes the data used in calibration and the statistical methods and targets used to compare the model outputs.

Table 4-1: Calibration Data and Statistical Criteria[17]

Measure	Criteria
Traffic Volume	• Sum of link volumes within the calibration area is to be within 5%. • Simulated and measured link volumes for more than 85% of links to be: ○ Within 100 vph for volumes less than 700 vph ○ Within 15% for volumes between 700 vph and 2700 vph ○ Within 400 vph, for volumes greater than 2700 vph. • Simulated and measured link volumes for more than 85% of links to have a GEH* statistic value of five (5) or lower. GEH is the Geoffrey E. Havers empirical formula which helps compare and validate model output volumes to measured volumes. The formula is shown below. $GEH = \sqrt{\frac{2 * (M - C)^2}{M + C}}$ M = Simulation model output volume C = Observed/input volume.
Travel Time	• Simulated travel time within ±15% for routes with observed travel times greater than seven (7) minutes. • Simulated travel time within ±15% (or 1 min if higher) for >85% of segments.[18]
Location of Bottlenecks	Check consistency with field conditions of the following: on- and off-ramp queuing; weaving maneuvers; patterns and extent of queue at intersection and congested links; lane utilization/choice; location of bottlenecks; etc.

[17] Florida Department of Transportation. (2021, May). *Traffic Analysis Handbook*. Retrieved from Systems Implementation Office: https://www.fdot.gov/planning/systems/documents/sm/default.shtm

[18] Federal Highway Administration. (2019, April). *Volume III: Guidelines for Applying Traffic Microsimulation Modeling Software*. Retrieved from Traffic Analysis Tools: https://ops.fhwa.dot.gov/trafficanalysistools/

4.2 Calibration Data

4.2.1 Traffic Volumes

Existing (base year) traffic volume inputs set the target values for vehicle throughput and impact traffic operations along the corridor and intersections. The peak hour volume targets used at the link and intersection turning movement level are found in **Appendix B**.

The AM and PM microsimulation models represent a three-and-a-half-hour timeframe to evaluate the build-up to and dissipation of peak hour congestion. The input simulation traffic volumes are in 15-minute intervals covering the duration of the model using the following breakdown:

- 30-minute Seeding Interval
- Hour 1 = Pre-Peak Hour
- Hour 2 = Peak Hour
- Hour 3 = Post-Peak Hour

The 15-minute volume inputs were developed by applying volume distributions from field-measured count data to the peak hour volumes.

Vehicle routing decisions are the final component of traffic volume inputs, representing origin-destination (OD) patterns in VISSIM. StreetLight Data was used in developing the routing decisions for the AM and PM peak hours, separately for all vehicle types and trucks.

4.2.2 Travel Times

Travel time data on the East Selmon corridor was collected in February 2017 as part of the previously completed Feasibility Study effort. The travel time information used for the microsimulation model calibration effort is in **Table 3-4** and **Table 3-5**.

4.2.3 Locations of Bottlenecks

Detailed speed data was available from travel time runs conducted in February 2017 for the Feasibility Study. This speed information was used to create speed-contour plots highlighting the locations of bottlenecks. The westbound AM plot is in **Figure 3-8** and the eastbound PM plot is in **Figure 3-9**.

4.3 Review of Feasibility VISSIM Model

A review of the Feasibility Study model considered the network layout and traffic control, vehicle inputs and routing decisions, vehicle compositions, desired speed, and driver behaviors. The review process found no errors. However, our review of the AM model indicated that the input volumes were artificially increased over the count volumes for westbound traffic entering the network from I-75 and the REL. We speculated that the feasibility team felt the counted volumes were constrained due to a bottleneck in the westbound local lanes, and they artificially increased

the input volumes to try to represent demand volumes. However, the data needed to verify this assumption was unavailable, and corroboration of the demand volume estimation was impossible. As a result, our team revisited this decision. We focused on modifying driver behaviors to match field-measured congestion without artificially changing input volumes. This approach had a better outcome of representing the causes of congestion.

4.4 Model Recalibration

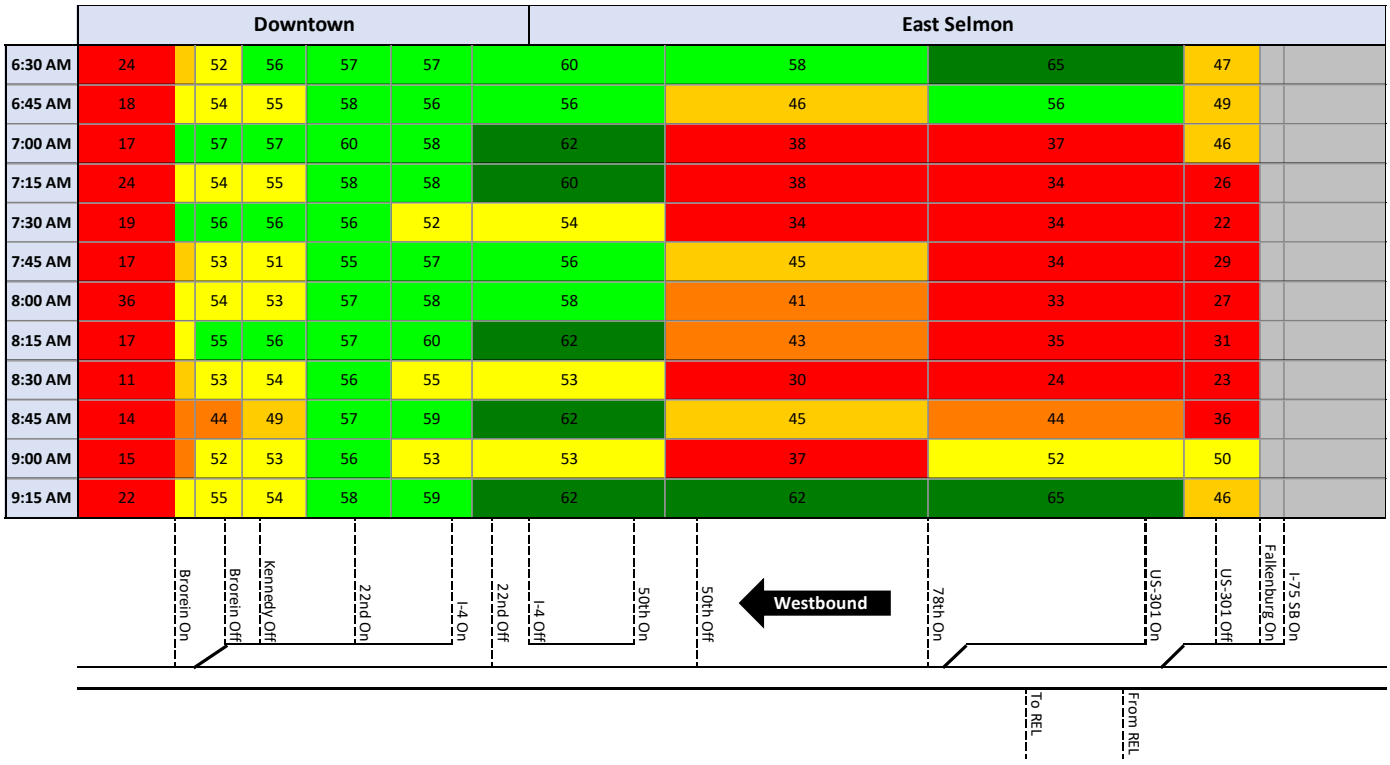
The initial updates to model inputs reflect more recent data, including signal timings, traffic volumes, and origin-destination patterns. In addition, industry standard inputs for vehicle compositions and reduced-speed areas at intersections were applied. Next, we developed new speed curves for mainline traffic from RITIS field data. Lastly, we combined a series of changes to speed decisions, lane change distances, and driving behavior parameters to improve the model representation of field conditions without manual volume adjustments.

Appendix C contains the complete recalibration results. The final model replicates field-measured data within allowable tolerances. As a result, the model targets were successfully met for traffic volumes, travel times, and, most importantly, model representation of bottlenecks and congestion.

Figure 4-1 shows that the westbound speed-contour plot for the AM peak period closely represents the field-measured conditions. Congestion is present continuously from Falkenburg Road to 50th Street. The build-up and dissipation of the congestion are also similar.

Figure 4-2 illustrates the eastbound PM peak period results**.** Calibration adjustments allow faster travel through downtown and the I-4 Connector, displayed in the field-measured data. The model does not represent minor congestion at the western edge due to closely spaced ramps upstream of the model limits, which are not in the model.

From Travel Time Runs:



From VISSIM Model:

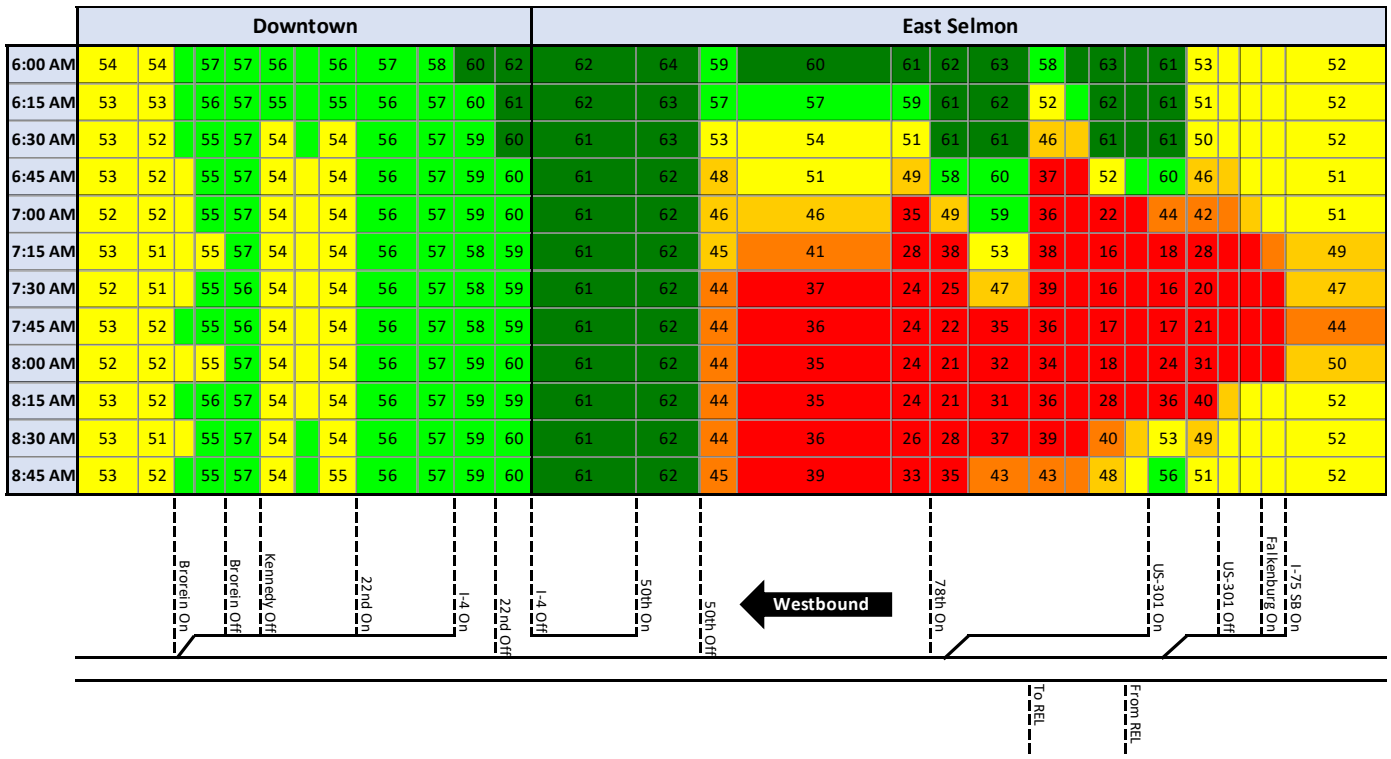
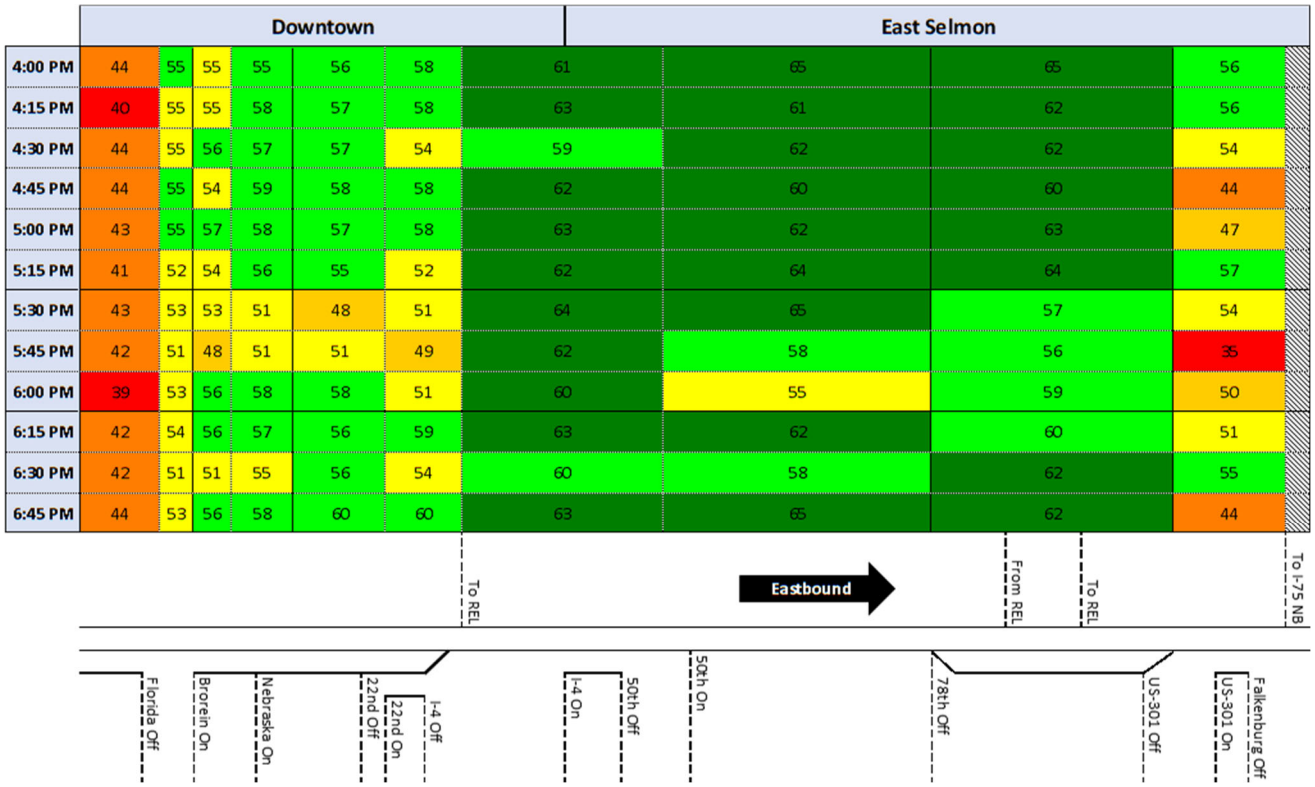


Figure 4-1: Final Speed-Contour Plot Comparison, Westbound Local Lanes, AM Peak Period

From Travel Time Runs:



From VISSIM Model:

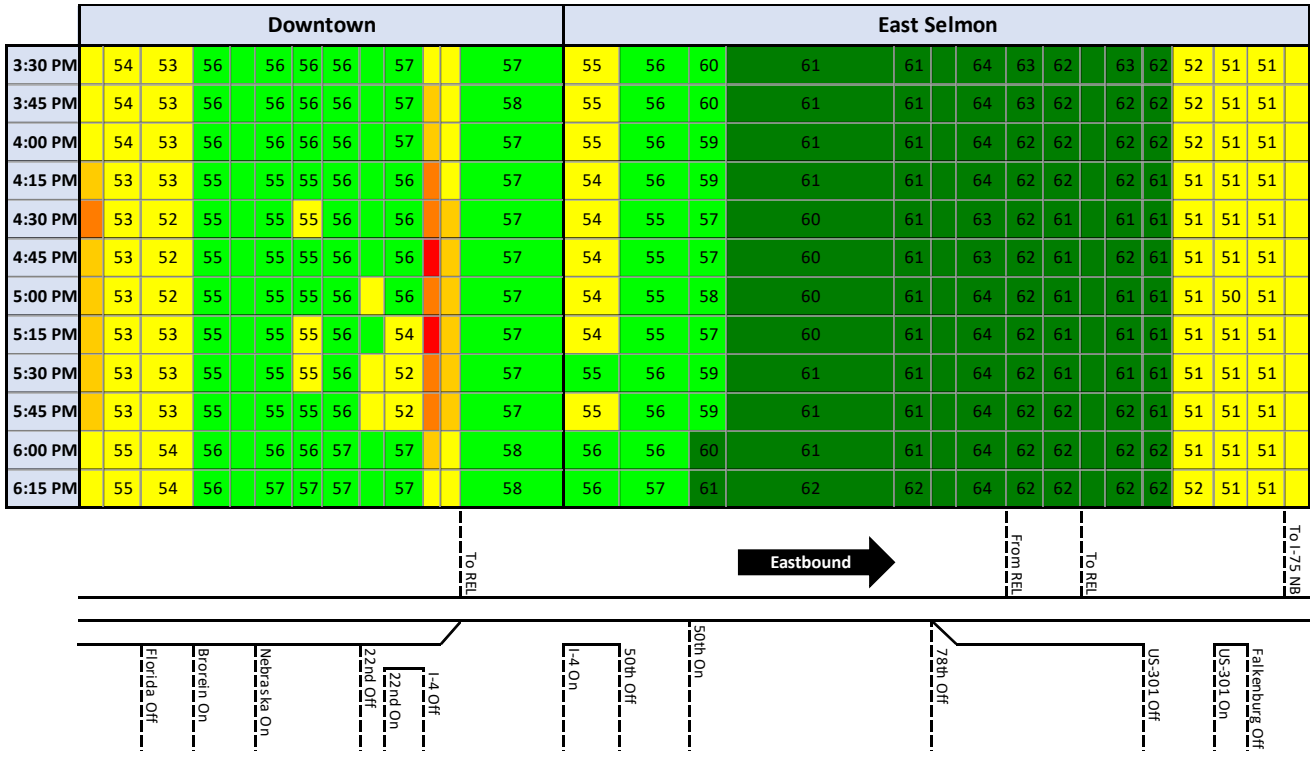


Figure 4-2: Final Speed-Contour Plot Comparison, Eastbound Local Lanes, PM Peak Period

5 TRAVEL DEMAND FORECASTING

Appendix D includes the *East Selmon Expressway PD&E Study Traffic Forecasting Report,* which documents the travel demand forecasting effort. **Figure 5-1** illustrates the demand model subarea boundary.

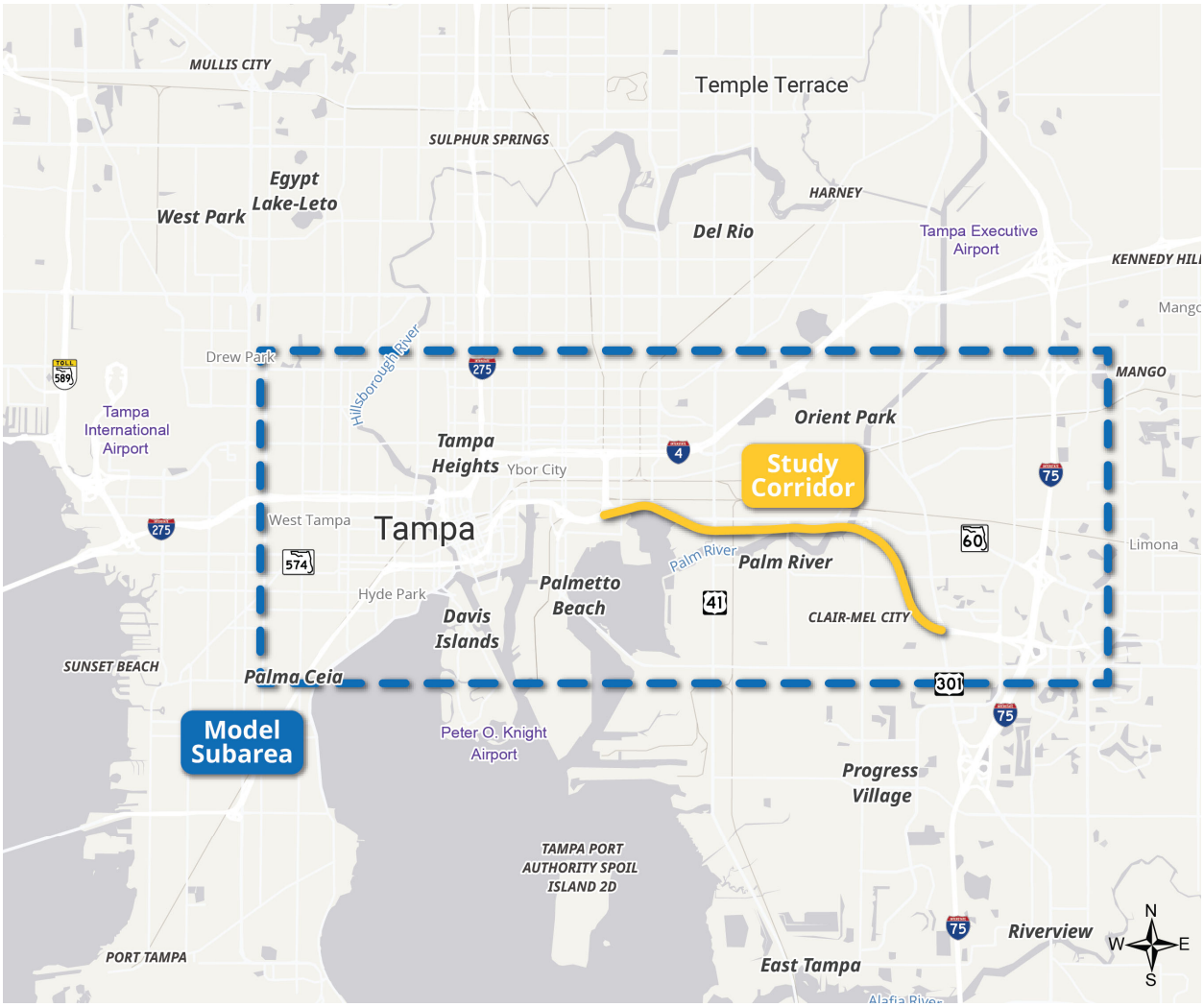


Figure 5-1: Travel Demand Model Subarea Boundary

5.1 Model Review & Validation

This study used the most recent model, Version 9.2 of the Tampa Bay Regional Planning Model (TBRPM). The TBRPM covers District 7 of the FDOT, including Hillsborough, Pinellas, Pasco, Hernando, and Citrus Counties, and Port Manatee. We reviewed the model networks for the model base year (2015), intermediate year (2035), and forecast year (2045) and identified refinements to incorporate into the cost-affordable models.

We ran the base year (2015) model network to determine how well the model performed compared to the 2015 traffic counts within the subarea boundary using the Root Mean Square Error (RMSE). The RMSE for the region and project subarea were within the TBRPM's acceptable range of 32 to 39. Additionally, a screen line analysis shows good model performance regarding traffic flows through the subarea.

5.2 Project Model Runs

The forecast years established for this project are 2026, 2036, and 2046. The year 2026 includes the additional slip ramps to access the REL in the westbound direction of travel. These ramps will be operational in 2023 and consist of the following:

- Ramp 3, direct connector ramp from I-75 Northbound to REL Westbound
- Ramp 2, egress ramp from REL Westbound to the East Selmon Expressway Local Lanes Westbound at the I-4 Connector

The intermediate study year is 2036 and represents Phase 1 and 2 improvements identified in the Feasibility Study for this project. Improvements include widening the local lanes from I-75 to I-4 and other minor ramp improvements.

The design year is 2046 and represents the build-out of Phases 1, 2, and 3 identified in the Feasibility Study. Phase 3 includes widening the local lanes from I-4 to the west end interface with the South Selmon project and off-ramp widening in the downtown area. These improvements are not a part of the East Selmon PD&E but were assumed to be in place by the design year.

5.3 Forecast Development

Forecast AADTs were developed by applying growth obtained from the model to 2019 count data. Straight-line interpolation or extrapolation was applied to quantify AADTs for the project study years 2026, 2036, and 2046.

The *FDOT Project Traffic Forecasting Handbook*[19] outlines the procedure for developing design hour volumes (DHVs) from AADTs, including applying K- and D-Factors to daily traffic forecasts. However, the East Selmon Expressway is a unique facility given the REL system and the heavy commuting characteristics, as evidenced by D-Factors ranging from 53-85%. Therefore, applying standard K- and D-Factors would not produce forecasts representing a realistic magnitude of directional demand. The TBRPM is a time-of-day capacity-constrained model that considers the nuances of capacity constraints in the region, the attractiveness of the added capacity in peak directions with the REL, and the possible impact of tolls. For these reasons, we used peak-period

[19] Florida Department of Transportation. (2019). *Project Traffic Forecasting Handbook*. Retrieved from Systems Implementation Office: https://www.fdot.gov/planning/systems/programs/sm/traffic/default.shtm

traffic assignments and peak-period-to-peak hour conversion factors to develop DHVs. These DHVs were, in turn, compared to existing K- and D-Factors for reasonableness.

5.4 Reasonableness Checks

The modeled growth in AADT derived was compared to historical trends and linear growth rates at several locations. The projected growth of 3.5% per year is consistent with historical trends. In addition, the projected population increase in traffic analysis zones surrounding the East Selmon Expressway subarea is 2.8% annually. Therefore we found the modeled growth reasonable compared to other trend data sources.

The K-Factors and D-Factors from model outputs were reviewed against the existing traffic factors. The 2019 K-Factors range from 9% to 11% and are reasonable, given the lower AADTs and the commuter peaking characteristics. However, the daily volumes will increase significantly due to the projected growth in population and the role of the East Selmon Expressway in the supporting transportation network. As a result, the peak hour volumes will spread, resulting in lower K-Factors. Therefore, a reduction in K-Factor would be expected over time as peak hour spreading occurs. The forecast K-Factors range from 7-10%, reflecting realistic expectations in traffic changing over time.

The D-Factors are significantly high in the peak commuting direction, ranging from 53-85%. Again, these percentages reflect the increased capacity with the REL and are much higher than standard D-Factors for freeways without express lanes. The REL is a permanent facility. With the proposed project improvements, including added capacity and new access to the REL, the directionality will remain high, similar to the existing condition. The forecast D-Factors range from 53-83%, comparable to existing.

5.5 Traffic Forecasts

The traffic forecasts for 2026, 2036, and 2046 are in contained in **Appendix D**.

6 DESCRIPTION OF ALTERNATIVES

The project No-Build alternative represents the existing road network plus committed improvements identified in **Section 1.2**. The committed roadway improvements include:

- Brorein Street/Cumberland Avenue two-way conversion (constructed)
- Twiggs Street Improvement Project (constructed)
- Selmon East Ramps (under construction)
- South Selmon Capacity Project (under construction)
- Whiting Street PD&E

The project Build alternative includes these committed projects plus the recommended project improvements:

- Local Lanes
    - One additional lane in each direction from the I-4 Connector to US-301
    - One additional lane in each direction from US-301 to I-75, or a braided ramp configuration (see **Figure 6-1** and **Figure 6-2**)
    - Lengthening of acceleration and deceleration lanes in both directions along the corridor
- Reversible Express Lanes
    - One additional lane from Palm River Road to I-75
    - Relocated REL Westbound to local lane westbound ramp from west of US-301 on-ramp to east of US-301 on-ramp
    - A new slip ramp from the REL Eastbound directly to the I-75 Southbound ramp
- Ramp Terminals
    - US-301:
        - Widen the eastbound off-ramp to two lanes, and construct an additional lane on US-301 Southbound from the eastbound off-ramp to Causeway Blvd
        - Construct an additional lane on US-301 Northbound from the westbound off-ramp right turn to Delaney Creek Blvd
    - 78th Street: Signalize eastbound off-ramp terminal
    - 50th Street: Convert northbound approach at Selmon Westbound Ramp Terminal from single left with three thru lanes to dual lefts with two thru lanes

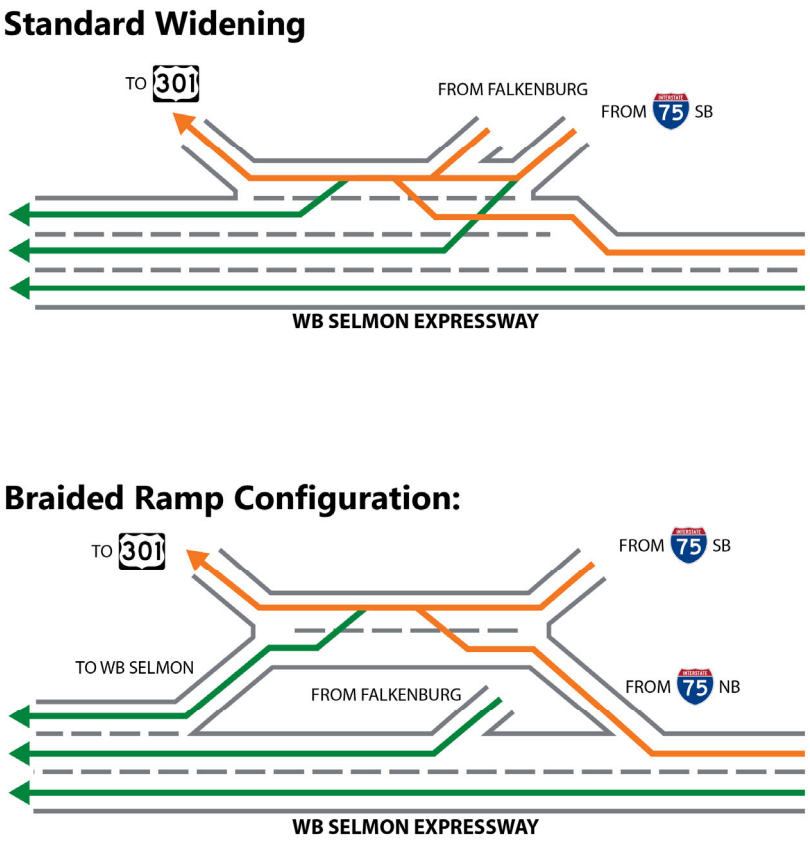


Figure 6-1. Westbound Configuration Alternatives, I-75 to US-301

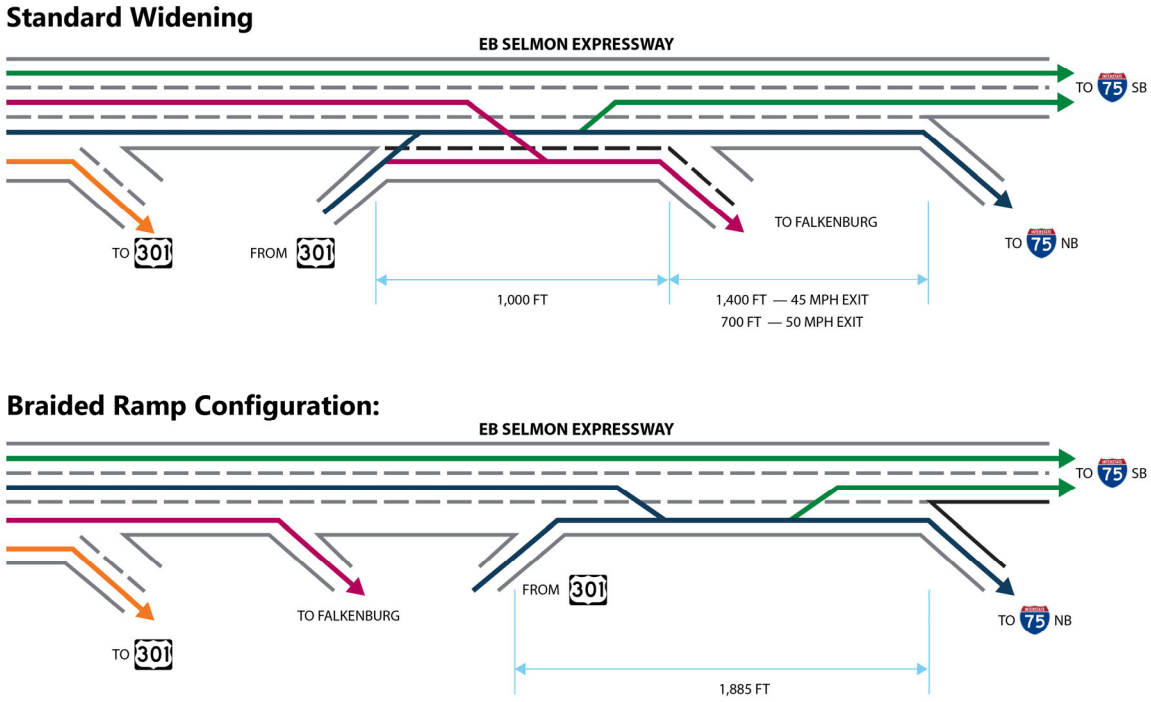


Figure 6-2. Eastbound Configuration Alternatives, US-301 to I-75

The project Build condition also includes the following assumed improvements in the downtown section from Brorein Street to the I-4 Connector. These improvements are outside of the scope of the PD&E should be verified by the future Downtown PD&E study:

- One additional lane in each direction from Brorein Street to the I-4 Connector
- Removal of slip ramp from REL Westbound to local lanes at the I-4 Connector to allow for local lane widening through this segment
- Construction of new slip ramp from REL Westbound to local lanes just east of Kennedy Boulevard
- 22nd Street: Signalization of both ramp terminals
- Kennedy Blvd: Widen westbound off-ramp to two lanes
- Brorein St: Widen westbound off-ramp to two lanes

In addition to these improvements, all No-Build and Build analyses include optimized timing plans at all signalized intersections. Synchro Version 11 was used to optimize signal timings.

7 NO-BUILD OPERATIONAL ANALYSIS

The No-Build alternative was evaluated for the opening year (2026), interim year (2036), and design year (2046). **Appendix E** contains the No-Build Condition analysis results. The results of this analysis show the level of congestion if no further improvements are made and help to inform the year-of-need assessment discussed in **Section 10**.

7.1 Corridor Analysis

The following section summarizes corridor analysis results from VISSIM microsimulation model results for the No-Build condition and includes Existing conditions for comparison.

7.1.1 Level-of-service

Table 7-1 summarizes the westbound corridor levels-of-service for the AM peak hour. The local lanes have two specific bottlenecks in the Existing condition: (1) at the REL ramps just west of US-301 and (2) from 78th Street to 50th Street. As traffic demands continue to increase in the future, the first bottleneck near the US-301 interchange will constrain traffic and push the bottleneck further upstream. Failing levels-of-service will reach the I-75 ramps by 2036, and densities continue to increase to the design year of 2046.

The two-lane section of the REL facility (from east of I-75 to east of 78th Street) operates at a level-of-service 'C'. The three-lane section from east of 78th Street to east of Twiggs Street operates at 'B'/'C' through the design year 2046. The western terminus at Twiggs Street operates at level-of-service 'F' in the Existing condition; it improves to level-of-service 'C' in the future No-Build conditions as a result of the Twiggs Street Improvement Project, which constructed an additional westbound lane on Twiggs Street to accept REL traffic.

Table 7-2 summarizes the eastbound levels-of-service for the PM peak hour. In the local lanes, the existing bottleneck on the west end of the corridor is released with the construction of the South Selmon Capacity Project, which adds one lane of capacity in each direction from the Gandy Bridge to Florida Avenue. However, two new bottlenecks develop further downstream as traffic demands increase. The first bottleneck is at the I-4 Connector eastbound off-ramp, and the second is at the 50th Street interchange. The I-4 Connector off-ramp bottleneck is the most significant in terms of impacts to traffic operations. This off-ramp is two lanes as it exits the Selmon Expressway but drops to one lane just over a half-mile downstream. By 2046, the I-4 ramp backs up onto the Selmon mainline and restricts throughput to the East Selmon portion of the corridor.

The REL facility operates at a relatively consistent level-of-service from the Existing condition to 2046. The two-lane section primarily operates at level-of-service 'C', and the three-lane section operates at level-of-service 'B'.

Table 7-1: Existing & No-Build Segment Level-of-service, Westbound AM Peak Hour

Location on Selmon Expressway Westbound		Segment Type	Density (veh/mi/ln) / Level-of-service			
			2019 Existing	2026 No-Build	2036 No-Build	2046 No-Build
Local Lanes (LL)						
East Selmon	From I-75 NB	Basic	32.4 / D	29.1 / D	77.0 / F	117.5 / F
	Upstream of REL Ramp 3 Off	Diverge	-	31.6 / D	98.5 / F	117.8 / F
	REL Ramp 3 to I-75 SB	Basic	-	32.0 / D	119.4 / F	134.8 / F
	Downstream of I-75 SB On	Merge	35.9 / E	42.1 / E	116.8 / F	117.3 / F
	I-75 to Falkenburg Rd	Basic	-	51.1 / F	114.4 / F	109.4 / F
	Downstream of Falkenburg Rd On	Merge	37.2 / E	44.1 / F	87.6 / F	82.4 / F
	Upstream of US-301 Off	Diverge	50.8 / F	53.7 / F	79.8 / F	77.7 / F
	Between US-301 Ramps (3 lanes)	Basic	42.5 / E	45.5 / F	60.7 / F	62.2 / F
	Between US-301 Ramps (2 lanes)	Basic	78.5 / F	68.3 / F	91.1 / F	93.3 / F
	Downstream of US-301 On	Merge	63.0 / F	55.5 / F	69.1 / F	70.2 / F
	Downstream of REL On	Merge	72.6 / F	65.5 / F	71.7 / F	73.5 / F
	Between REL Ramps	Basic	70.0 / F	64.8 / F	64.8 / F	64.2 / F
	Upstream of REL Off	Diverge	40.2 / E	15.8 / B	14.4 / B	15.9 / B
	REL to 78th St (3 lanes)	Basic	27.5 / D	15.9 / B	14.3 / B	15.9 / B
	REL to 78th St (2 lanes)	Basic	61.3 / F	23.6 / C	21.8 / C	23.9 / C
	Downstream of 78th St On	Merge	58.0 / F	26.8 / C	30.8 / D	27.7 / C
	78th St to 50th St	Basic	49.3 / F	32.2 / D	35.3 / E	33.2 / D
	Upstream of 50th St Off	Diverge	42.8 / E	34.0 / D	35.8 / E	34.5 / D
	Between 50th St Ramps	Basic	27.5 / D	26.2 / D	26.8 / D	25.5 / C
	50th St to I-4	Weave	21.8 / C	22.1 / C	22.6 / C	20.1 / C
Downtown	Upstream of 22nd Off	Diverge	28.9 / D	28.2 / D	27.8 / C	22.9 / C
	22nd St Off to REL Ramp 2 On	Basic	27.7 / D	25.2 / C	24.4 / C	18.9 / C
	Downstream of REL Ramp 2 On	Merge	-	22.8 / C	22.9 / C	17.9 / B
	Downstream of I-4 On	Merge	20.5 / C	26.7 / C	33.4 / D	26.7 / C
	I-4 On to 22nd St On	Basic	23.9 / C	26.8 / D	39.8 / E	27.8 / D
	Downstream of 22nd St On	Merge	25.1 / C	28.7 / D	39.5 / E	32.1 / D
	22nd St to Kennedy Blvd Off	Basic	27.1 / D	30.3 / D	34.1 / D	31.5 / D
	Upstream of Kennedy Blvd Off	Diverge	24.0 / C	26.6 / C	29.9 / D	27.6 / C
	Upstream of Brorein St Off	Diverge	20.9 / C	22.8 / C	26.0 / C	25.0 / C
	Between Brorein St Ramps (3 lanes)	Basic	16.0 / B	16.9 / B	20.3 / C	20.5 / C
	Between Brorein St Ramps (2 lanes)	Basic	24.0 / C	-	-	-
	Downstream of Brorein St On	Merge	21.7 / C	18.2 / B	22.3 / C	16.7 / B
	Selmon Continue West	Basic	27.3 / D	19.7 / C	24.1 / C	18.0 / B
Reversible Express Lanes (REL)						
East Selmon	From Brandon	Basic	22.0 / C	19.9 / C	17.3 / B	20.0 / C
	Downstream of LL On (at I-75)	Merge	-	16.9 / B	17.3 / B	19.2 / B
	LL On to LL Off	Basic	-	20.6 / C	21.1 / C	23.2 / C
	Upstream of LL Off (at US-301)	Diverge	20.8 / C	20.6 / C	21.2 / C	23.2 / C
	LL Off to LL On (2 lanes)	Basic	16.0 / B	18.6 / C	18.8 / C	19.3 / C
	LL Off to LL On (3 lanes)	Basic	10.3 / A	11.9 / B	12.0 / B	12.3 / B
	Downstream of LL On (at US-301)	Merge	13.2 / B	16.8 / B	17.9 / B	17.1 / B
	LL On to LL Off	Basic	-	19.1 / C	20.0 / C	19.2 / C
Down -town	Upstream of LL Off (at I-4)	Diverge	-	18.9 / B	19.9 / B	19.0 / B
	LL Off to Twiggs St	Basic	17.7 / B	18.8 / C	19.5 / C	18.2 / C
	To Twiggs St	Basic	81.6 / F	40.7 / E	43.0 / E	40.2 / E

Table 7-2: Existing & No-Build Segment Level-of-service, Eastbound PM Peak Hour

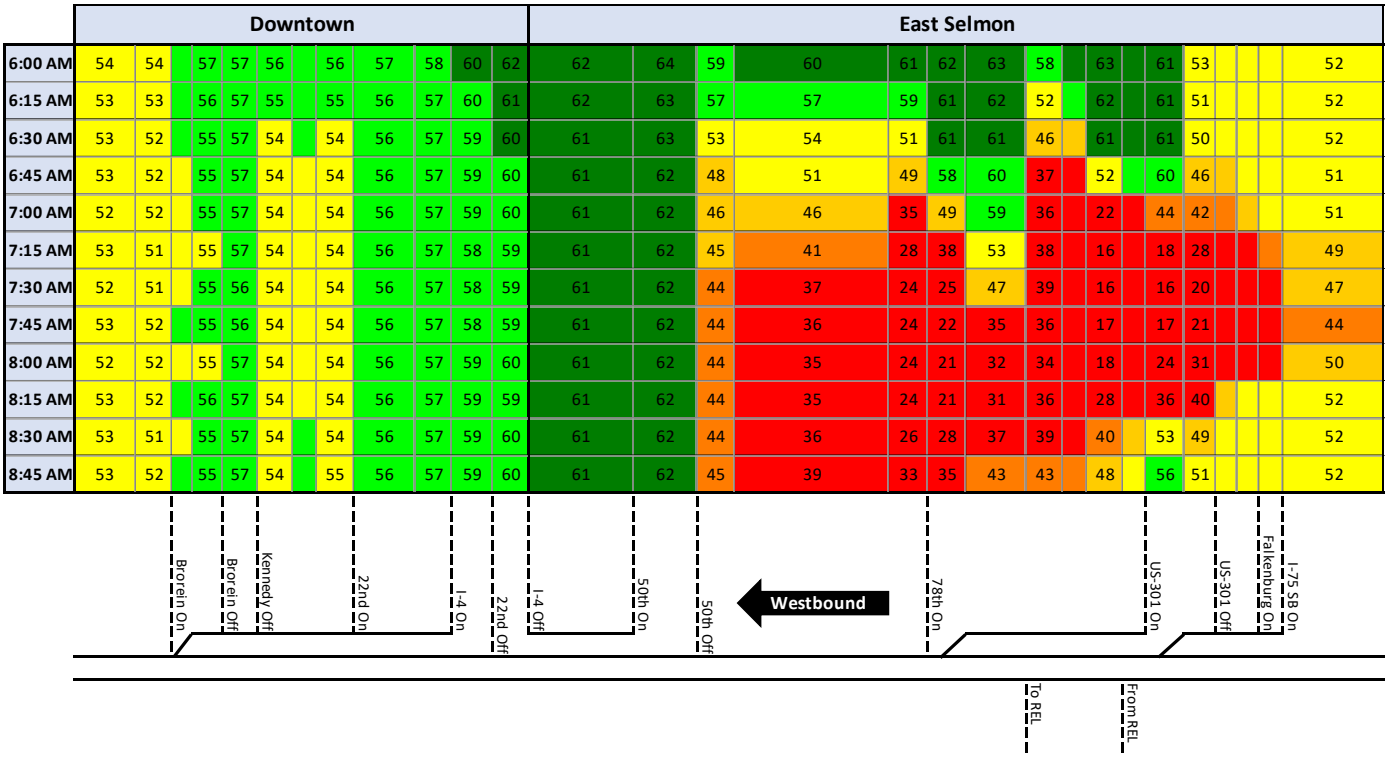
Location on Selmon Expressway Eastbound		Segment Type	Density (veh/mi/ln) / Level-of-service			
			2019 Existing	2026 No-Build	2036 No-Build	2046 No-Build
Local Lanes (LL)						
East Selmon	To I-75 NB	Basic	15.5 / B	21.3 / C	27.4 / D	28.6 / D
	Upstream of I-75 SB Off	Diverge	23.5 / C	27.8 / C	30.3 / D	36.2 / E
	US-301 to Falkenburg Rd	Weave	22.5 / C	25.7 / C	26.6 / C	30.6 / D
	Between US-301 Ramps (2 lanes)	Basic	28.7 / D	32.7 / D	33.7 / D	32.8 / D
	Between US-301 Ramps (3 lanes)	Basic	15.8 / B	18.1 / C	18.7 / C	18.3 / C
	Upstream of US-301 Off	Diverge	22.1 / C	24.6 / C	25.4 / C	22.6 / C
	REL to US-301	Basic	22.0 / C	24.6 / C	25.5 / C	22.5 / C
	Upstream of REL Off	Diverge	25.4 / C	25.7 / C	26.7 / C	24.6 / C
	Downstream of REL On	Merge	22.0 / C	22.2 / C	23.1 / C	21.4 / C
	78th St to REL (3 lanes)	Basic	19.3 / C	20.2 / C	20.4 / C	19.4 / C
	78th St to REL (2 lanes)	Basic	30.3 / D	31.2 / D	31.5 / D	30.0 / D
	Upstream of 78th St Off	Diverge	26.2 / C	27.5 / C	28.1 / D	26.6 / C
	50th St to 78th St	Basic	31.8 / D	33.8 / D	34.8 / D	32.5 / D
	Downstream of 50th St On	Merge	28.2 / D	36.0 / E	44.3 / F	38.4 / E
	Between 50th St Ramps	Basic	31.7 / D	39.6 / E	56.0 / F	51.2 / F
	I-4 to 50th St	Weave	21.7 / C	28.0 / D	54.4 / F	46.9 / F
Downtown	REL Off to I-4 On	Basic	20.7 / C	23.1 / C	53.8 / F	13.9 / B
	Upstream of REL Off (2 lanes)	Diverge	40.9 / E	34.4 / D	39.2 / E	19.3 / B
	Upstream of REL Off (3 lanes)	Basic	34.9 / D	24.4 / C	28.7 / D	13.4 / B
	22nd St On to I-4 Off	Weave	21.9 / C	22.4 / C	75.2 / F	46.9 / F
	Between 22nd St Ramps	Basic	27.5 / D	29.8 / D	62.2 / F	34.8 / D
	Upstream of 22nd St Off	Diverge	25.6 / C	27.2 / C	61.3 / F	105.5 / F
	Nebraska Ave to 22nd St	Basic	29.6 / D	31.7 / D	66.7 / F	114.2 / F
	Downstream of Nebraska Ave On	Merge	25.7 / C	27.9 / C	65.7 / F	128.7 / F
	Brorein St to Nebraska Ave	Basic	26.7 / D	29.0 / D	73.0 / F	129.7 / F
	Downstream of Brorein St On	Merge	26.8 / C	20.8 / C	88.1 / F	155.9 / F
	Whiting St to Brorein St	Basic	35.8 / E	22.7 / C	74.1 / F	146.2 / F
	Upstream of Whiting St Off	Diverge	-	24.9 / C	65.6 / F	145.7 / F
	Upstream of Florida Ave Off	Diverge	25.9 / C	20.1 / C	47.3 / F	118.5 / F
	From Selmon West	Basic	46.2 / F	27.1 / D	62.9 / F	140.8 / F
Reversible Express Lanes (REL)						
East Selmon	To Brandon	Basic	21.5 / C	21.8 / C	22.6 / C	21.1 / C
	Downstream of LL On (at US-301)	Merge	16.8 / B	17.0 / B	17.7 / B	16.5 / B
	LL Off to LL On (2 lanes)	Basic	14.7 / B	18.2 / C	18.5 / C	16.2 / B
	LL Off to LL On (3 lanes)	Basic	9.7 / A	12.0 / B	12.2 / B	10.7 / A
	Upstream of LL Off (at US-301)	Diverge	15.9 / B	17.3 / B	18.6 / B	15.8 / B
	LL On to LL Off	Basic	15.1 / B	17.0 / B	18.0 / B	15.5 / B
Down -town	Downstream of LL On (at I-4)	Merge	13.3 / B	15.0 / B	15.9 / B	13.7 / B
	Twiggs St to LL On	Basic	6.7 / A	11.8 / B	13.4 / B	12.5 / B
	From Twiggs St	Basic	10.7 / B	18.4 / C	20.2 / C	19.2 / C

7.1.2 Speed-Contour Plots

The speed-contour plots for the No-Build condition are shown on the following pages, illustrating the build-up and dissipation of congestion due to the identified bottlenecks. **Figure 7-1** contains the westbound plots during the AM peak period. In the Existing condition, shown for comparison, the congestion extends from the 50th Street off-ramp upstream to Falkenburg Road. Slow travel speeds largely dissipate by the end of the peak period at 9:00 AM. In 2026, the mid-section of the corridor from the REL ramps to 50th Street has increased travel speeds. The speed increase directly results from the Selmon East Ramps project, which allows more traffic to divert to the REL and reduces traffic demand in the local lanes. However, congestion east of the REL ramps worsens and does not clear by the end of the peak period. Between 2036 and 2046, the speeds in this section will slow to nearly a standstill back to I-75.

The eastbound plots for the PM peak period are in **Figure 7-2**. In the existing and 2026 No-Build conditions, travel speeds are near the posted speed limit. However, from 2036 to 2046, 50th Street and the I-4 Connector bottlenecks significantly impact travel speeds. While the 50th Street bottleneck clears by the end of the peak period, congestion from the I-4 Connector continues beyond the modeling period and spills outside the network.

Existing (VISSIM Model):



2026 No-Build:

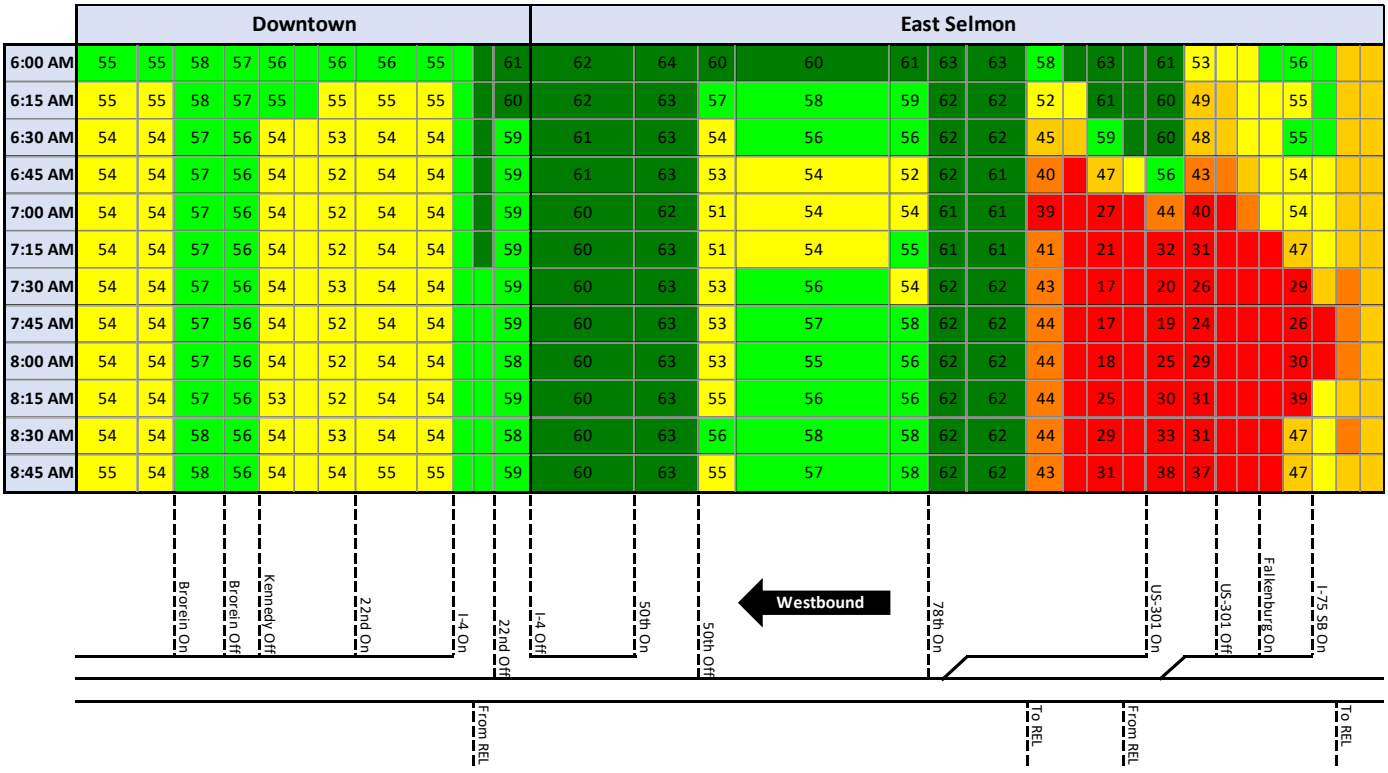
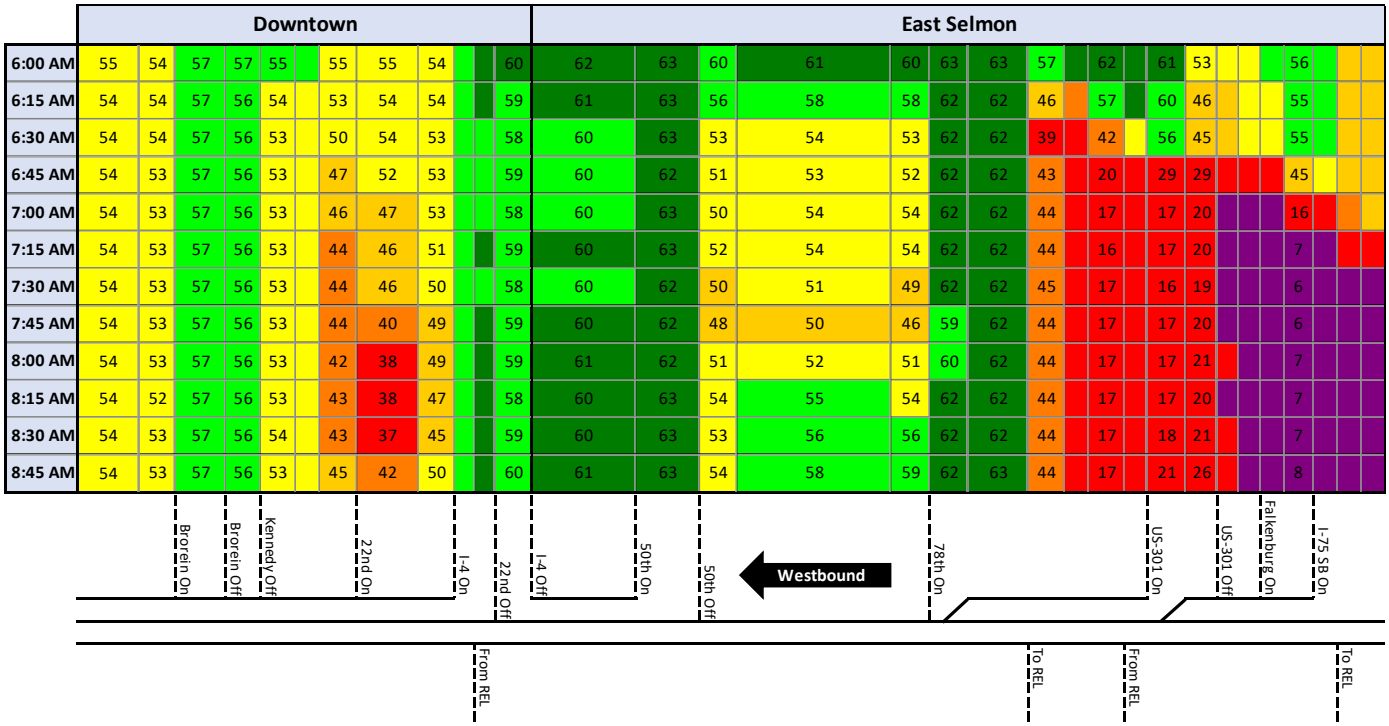


Figure 7-1: Existing & No-Build Speed-Contour Plot Comparison, Westbound Local Lanes, AM Peak Period

2036 No-Build:



2046 No-Build:

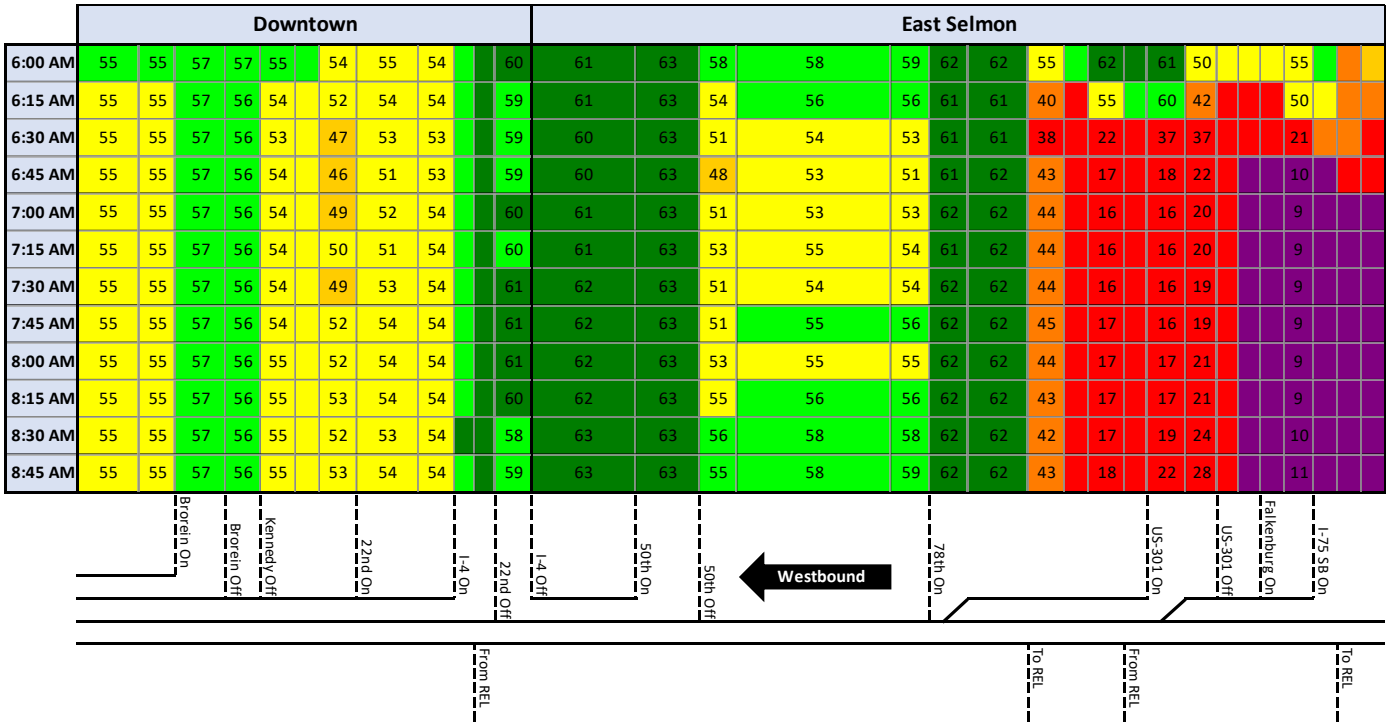
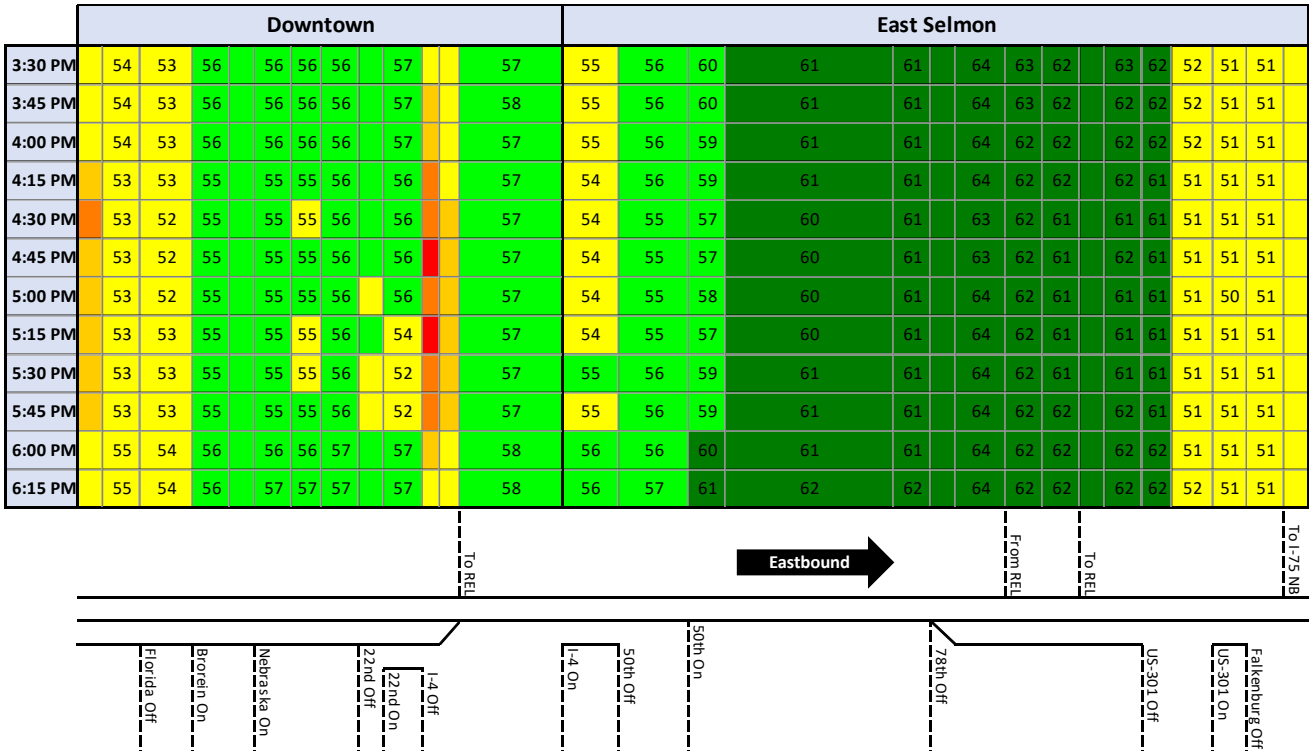


Figure 7-1: Existing & No-Build Speed-Contour Plot Comparison, Westbound Local Lanes, AM Peak Period (Cont'd)

Existing (VISSIM Model):



2026 No-Build:

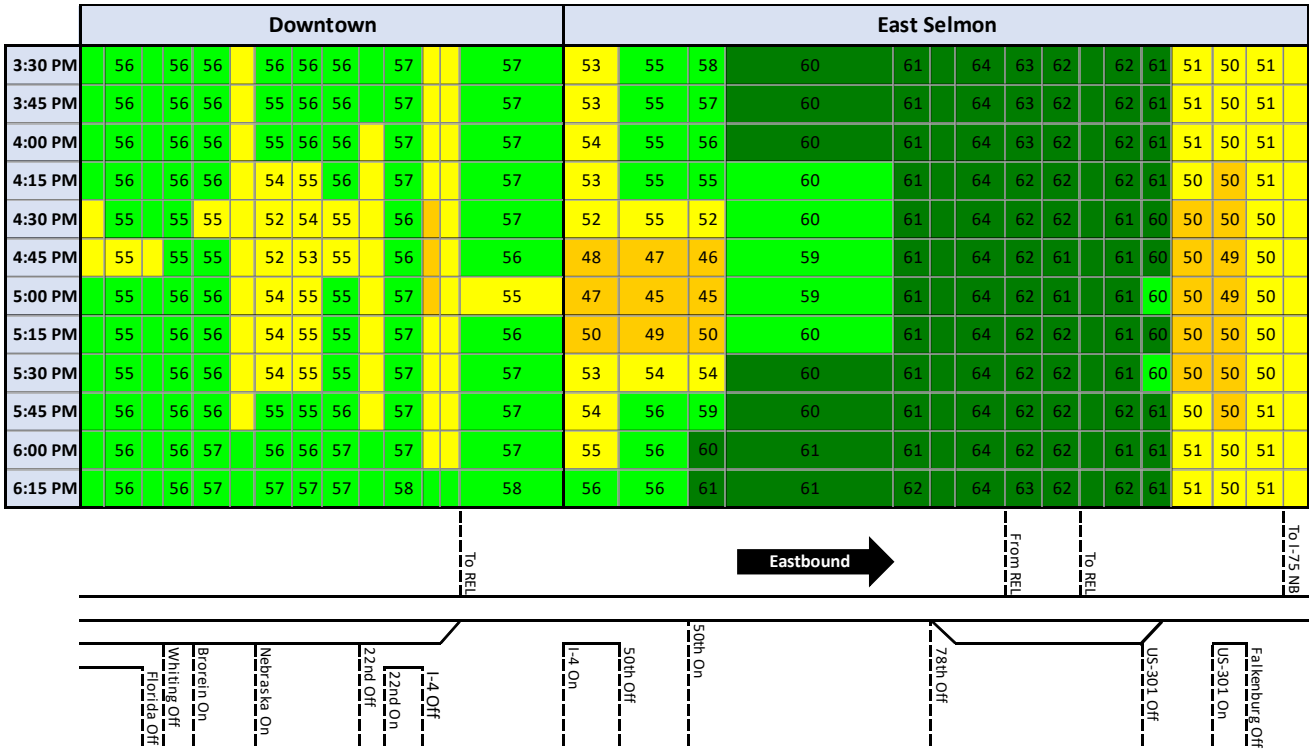
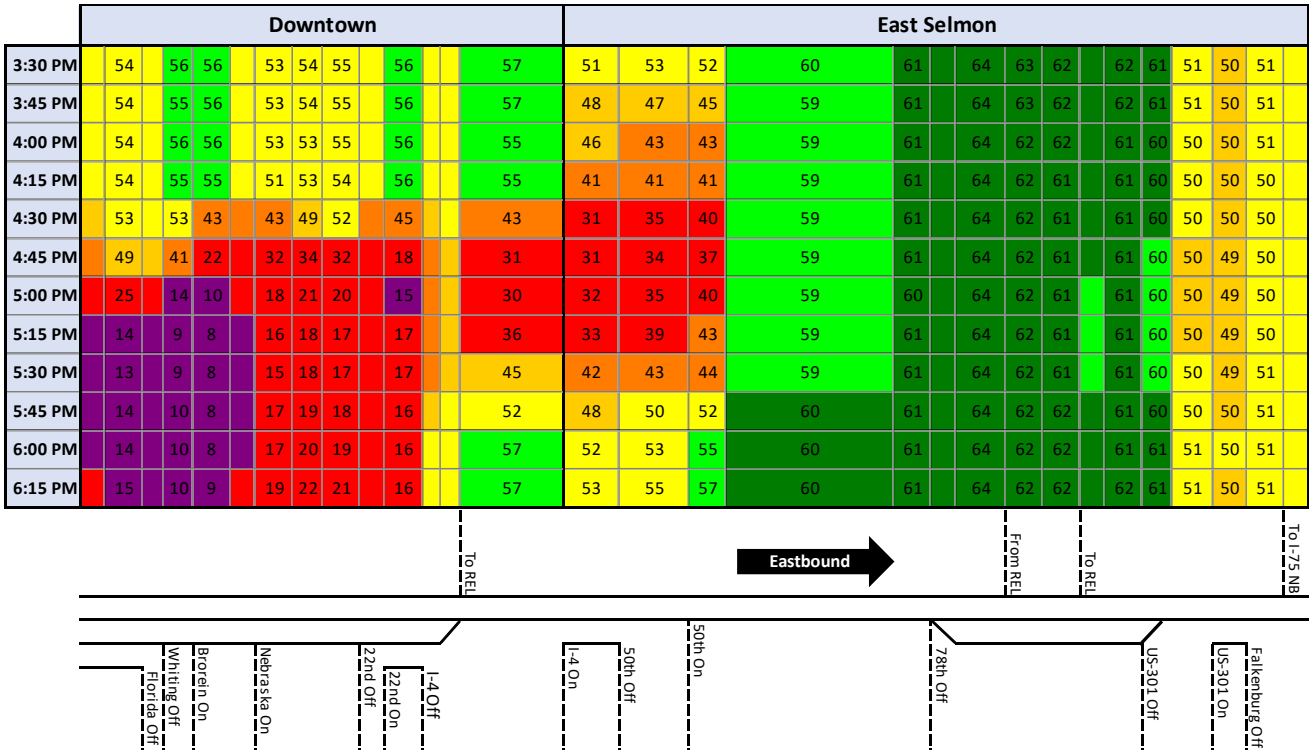


Figure 7-2: Existing & No-Build Speed-Contour Plot Comparison, Eastbound Local Lanes, PM Peak Period

2036 No-Build:



2046 No-Build:

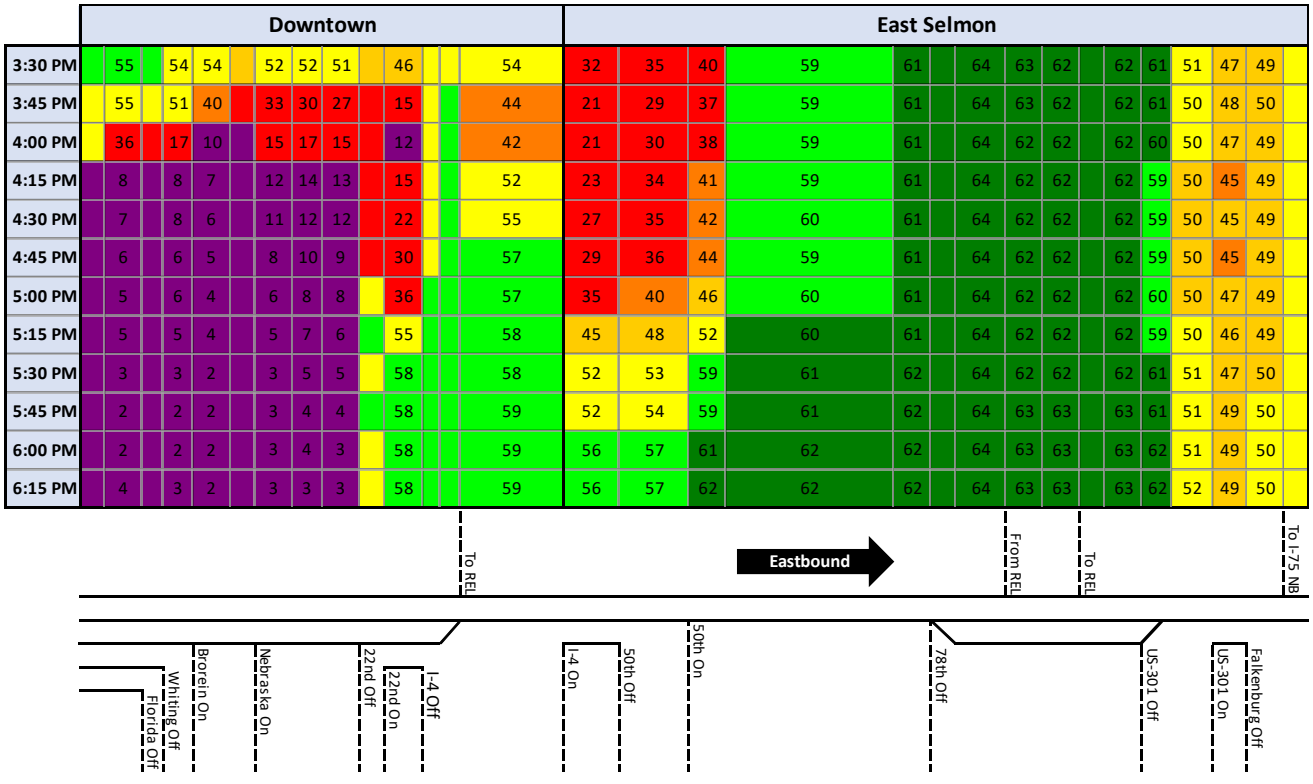


Figure 7-2: Existing & No-Build Speed-Contour Plot Comparison, Eastbound Local Lanes, PM Peak Period (Cont'd)

7.1.3 Travel Times

Table 7-3 summarizes the westbound travel times for the Existing and No-Build conditions**.** Within the East Selmon PD&E project area, the AM peak hour westbound travel times initially decrease in 2026 due to the Selmon East Ramps project. The westbound travel times in 2036/2046 are approximately 12 minutes compared to the current travel time of 11.2 minutes. By 2036, the travel times will exceed the Existing conditions by 11%. The 2046 travel time is lower than 2036 due to the corridor's east-end capacity constraint. Travel times in the PM peak hour are consistent over time in the westbound direction.

Table 7-3: VISSIM Existing & No-Build Travel Times, Westbound Local Lanes

Segment	Travel Time (min)							
	AM Peak Hour				PM Peak Hour			
	2019 Existing	2026 No-Build	2036 No-Build	2046 No-Build	2019 Existing	2026 No-Build	2036 No-Build	2046 No-Build
Falkenburg Rd to US-301	2.0	2.2	4.7	4.2	0.9	0.9	0.9	0.9
US-301 to 78th St	4.4	3.4	3.9	4.1	1.8	1.8	1.8	1.8
78th St to 50th St	3.3	2.1	2.3	2.2	2.0	2.0	2.0	2.0
50th St to I-4 Connector	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
East Selmon Subtotal	**11.2**	**9.2**	**12.4**	**11.9**	**6.1**	**6.1**	**6.1**	**6.2**
I-4 Connector to 20th St	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
20th St to Channelside Dr	0.8	0.8	1.1	0.9	0.8	0.8	0.8	0.8
Channelside Dr to Kennedy Blvd	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Kennedy Blvd to Jefferson St	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Jefferson St to Florida Ave	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Downtown Subtotal	**2.6**	**2.6**	**2.9**	**2.7**	**2.5**	**2.5**	**2.6**	**2.6**
Westbound Total	**13.8**	**11.8**	**15.3**	**14.6**	**8.6**	**8.6**	**8.6**	**8.8**

Table 7-4 summarizes the eastbound travel times for the Existing and No-Build conditions. The travel time is consistent during the AM peak. In the PM, the travel time will increase from 6.4 minutes to 8.7 minutes by 2036 within the East Selmon PD&E project area. In 2046, the travel time decreases within the East Selmon area due to the severe bottleneck downtown, which constrains throughput to the corridor's east end. The total corridor travel time is over 19 minutes due to the identified bottlenecks.

Table 7-4: VISSIM Existing & No-Build Travel Times (minutes), Eastbound Local Lanes

Segment	Travel Time (min)							
	AM Peak Hour				PM Peak Hour			
	2019 Existing	2026 No-Build	2036 No-Build	2046 No-Build	2019 Existing	2026 No-Build	2036 No-Build	2046 No-Build
Florida Ave to Jefferson St	0.3	0.3	0.3	0.3	0.3	0.3	0.7	2.6
Jefferson St to Kennedy St	0.3	0.3	0.3	0.3	0.3	0.3	1.2	2.9
Kennedy Blvd to Channelside Dr	0.5	0.5	0.5	0.6	0.6	0.6	1.6	3.7
Channelside Dr to 20th St	0.7	0.7	0.7	0.7	0.8	0.8	1.7	2.1
20th St to I-4 Connector	0.6	0.7	0.7	0.7	0.9	0.7	1.2	0.9
Downtown Subtotal	**2.5**	**2.5**	**2.5**	**2.5**	**2.8**	**2.7**	**6.3**	**12.1**
I-4 Connector to 50th St	1.6	1.6	1.6	1.6	1.6	1.8	3.5	2.2
50th St to 78th St	1.9	1.9	2.0	2.0	2.0	2.2	2.4	2.3
78th St to US-301	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8
US-301 to Falkenburg Rd	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0
East Selmon Subtotal	**6.1**	**6.2**	**6.2**	**6.2**	**6.4**	**6.7**	**8.7**	**7.3**
Eastbound Total	**8.6**	**8.6**	**8.7**	**8.7**	**9.2**	**9.4**	**15.0**	**19.4**

7.2 Intersection Analysis

The intersection analysis summary focuses on the level-of-service at ramp terminal intersections within the East Selmon project area; complete results, including intersections in downtown Tampa and reported queue lengths, are contained in **Appendix E**.

Table 7-5 summarizes the AM Peak, and **Table 7-6** summarizes the PM Peak delay and level-of-service for each intersection from Synchro. For unsignalized intersections, the critical approach delay is reported instead of the intersection delay. The primary deficiencies within the East Selmon PD&E project area are at the US-301 interchange. The US-301 ramp terminals operate poorly in the PM for all study years. In addition, failing levels-of-service are present at the 50th Street and 78th Street interchanges in the design year.

Table 7-5: Existing & No-Build Intersection Level-of-service, AM Peak Hour

Intersection	Traffic Control	Delay (sec/veh) / Level-of-service			
		2019 Existing	2026 No-Build	2036 No-Build	2046 No-Build
50th St & EB Selmon Expressway Ramps	Signalized	11.6 / B	16.4 / B	20.6 / C	26.2 / C
50th St & WB Selmon Expressway Ramps	Signalized	20.3 / C	19.8 / B	39.0 / D	88.3 / F
78th St & EB Selmon Expressway Off-Ramp	Unsignalized	32.7 / D	29.6 / D	61.6 / F	78.2 / F
US-301 & EB Selmon Expressway Ramps	Signalized	34.0 / C	39.4 / D	39.6 / D	79.8 / E
US-301 & WB Selmon Expressway Ramps	Signalized	76.0 / E	32.1 / C	35.1 / D	75.0 / E
Falkenburg Rd & EB Selmon Expressway Off-Ramp	Signalized	9.4 / A	9.6 / A	10.1 / B	15.2 / B
Falkenburg Rd & WB Selmon Expressway On-Ramp	Signalized	7.9 / A	7.3 / A	9.5 / A	8.7 / A
Whiting St & EB Selmon Expressway Off-Ramp	Signalized	-	12.2 / B	14.0 / B	19.6 / B

Table 7-6: Existing & No-Build Intersection Level-of-service, PM Peak Hour

Intersection	Traffic Control	Delay (sec/veh) / Level-of-service			
		2019 Existing	2026 No-Build	2036 No-Build	2046 No-Build
50th St & EB Selmon Expressway Ramps	Signalized	50.8 / D	28.2 / C	56.4 / E	91.2 / F
50th St & WB Selmon Expressway Ramps	Signalized	12.0 / B	13.3 / B	12.7 / B	18.4 / B
78th St & EB Selmon Expressway Off-Ramp	Unsignalized	19.0 / C	23.4 / C	32.4 / D	81.8 / F
US-301 & EB Selmon Expressway Ramps	Signalized	155.4 / F	107.7 / F	138.0 / F	77.3 / E
US-301 & WB Selmon Expressway Ramps	Signalized	56.8 / E	111.6 / F	143.6 / F	131.5 / F
Falkenburg Rd & EB Selmon Expressway Off-Ramp	Signalized	23.2 / C	20.1 / C	21.5 / C	17.8 / B
Falkenburg Rd & WB Selmon Expressway On-Ramp	Signalized	71.4 / E	16.8 / B	20.9 / C	18.3 / B
Whiting St & EB Selmon Expressway Off-Ramp	Signalized	-	16.2 / B	25.2 / C	30.9 / C

7.3 Network Analysis

Network analysis results from VISSIM are summarized in **Table 7-7** (AM peak period) and **Table 7-8** (PM peak period). While there is congestion in the Existing condition, nearly all demand is met by the end of the simulation. However, unmet demand is prevalent starting in 2026 and increases significantly through 2036 and 2046 without any improvements on the East Selmon corridor.

In the AM, the network throughput increases by 37% from Existing to 2046; there are nearly 10,000 vehicles that are unable to enter the network due to congestion. The vehicle hours traveled increase by 60% while the vehicle miles traveled increases by only 23% in 2046.

Similarly, in the PM, the throughput increases by 24% from Existing to 2046, but the unmet demand is over 26,000 vehicles. As a result, the vehicle-hours traveled more than doubles while the vehicle-miles traveled increases by only 11% in 2046. The disproportionate increase in vehicle-hours traveled indicates severe congestion in future year No-Build scenarios.

Table 7-7: Existing & No-Build Network Analysis Results, AM Peak Period

Performance Measure	2019 Existing	2026 No-Build	2036 No-Build	2046 No-Build
Throughput (veh)	84,521	101,848	109,207	115,723
Unserved Demand (veh)	1	2,268	4,003	9,820
Vehicle-Hours Traveled	7,137	7,685	10,217	11,395
Vehicle-Miles Traveled	293,407	327,730	348,637	361,953

Table 7-8: Existing & No-Build Network Analysis Results, PM Peak Period

Performance Measure	2019 Existing	2026 No-Build	2036 No-Build	2046 No-Build
Throughput (veh)	89,160	109,938	117,718	110,864
Unserved Demand (veh)	5	803	6,401	26,240
Vehicle-Hours Traveled	6,727	8,529	12,071	14,861
Vehicle-Miles Traveled	317,973	351,125	377,712	353,002

7.4 Summary

These results show that if no improvements are made to the East Selmon corridor, severe congestion and delay will directly impact the traveling public. In addition, the existing capacity is insufficient for future year traffic demands, leading to bottlenecks that restrict throughput and cause backups that would extend well beyond the model's limits.

8 BUILD OPERATIONAL ANALYSIS

The previous section verifies that improvements are needed on the East Selmon corridor in order to accommodate future year traffic demands and meet the operational expectations of the traveling public. This section details the evaluation of Build alternatives and the anticipated benefits of improvements. **Appendix F** contains the Build Condition analysis results.

Three (3) Build alternatives were evaluated for the design year (2046). Based on these results, a preferred alternative was selected and carried forward into a 2036 evaluation.

8.1 Years 2046 Evaluation of Build Alternatives

The following are VISSIM models of the Build alternatives:

Alt. 1: Standard Widening (one additional local lane in each direction from the I-4 Connector to I-75, one additional reversible express lane from Palm River Road to I-75)

Alt. 2: Standard Widening + Westbound Braided Ramps

Alt. 3: Standard Widening + Westbound Braided Ramps + Eastbound Braided Ramps

These alternatives were compared based on the corridor and network analysis results; there is no discernible difference in intersection operations between the alternatives.

8.1.1 Corridor Analysis

8.1.1.1 Level-of-service

Table 8-1 summarizes the westbound corridor levels-of-service for the AM peak hour. The proposed Build improvements release the existing bottlenecks at the REL ramps and from 78th Street to 50th Street due to the additional lane of capacity. As a result, the density is reduced by approximately 66% between the REL ramps despite increased traffic demand. A failing level-of-service is still present at the corridor's east end near the new REL slip ramp from I-75; however, the density is reduced by 45% compared to the No-Build condition.

The proposed widening increases traffic throughput to downtown Tampa, forming a new bottleneck stemming from the Brorein Street off-ramp. The upcoming Downtown PD&E Study should include additional improvements at this ramp and the signalized ramp terminal intersection.

The levels-of-service in both the local lanes and the REL are very similar between Build Alternatives 1, 2, and 3. The braided ramp configuration (in Alternatives 2 and 3 for westbound traffic) yields slightly higher densities in the segments from I-75 to US-301. However, the level-of-service is 'D' or better. **Section 9** discusses the anticipated safety benefit of the braided ramp configuration.

Table 8-1: 2046 Segment Level-of-service Comparison, Westbound AM Peak Hour

Location on Selmon Expressway Westbound		Segment Type	Density (veh/mi/ln) / Level-of-service			
			No-Build	Build Alt. 1	Build Alt. 2	Build Alt. 3
Local Lanes (LL)						
East Selmon	From I-75 NB	Basic	117.5 / F	64.3 / F	64.4 / F	64.4 / F
	Upstream of REL Ramp 3 Off	Diverge	117.8 / F	42.7 / E	48.5 / F	48.5 / F
	Upstream of C-D Road Off	Diverge	-	-	24.3 / C	24.3 / C
	REL Ramp 3 to I-75 SB	Basic	134.8 / F	15.7 / B	-	-
	Downstream of I-75 SB On	Merge	117.3 / F	17.5 / B	-	-
	I-75 to Falkenburg Rd	Basic	109.4 / F	17.7 / B	20.3 / C	20.3 / C
	Downstream of Falkenburg Rd On	Merge	82.4 / F	17.2 / B	23.7 / C	23.7 / C
	Upstream of US-301 Off	Diverge	77.7 / F	21.7 / C	-	-
	Between US-301 Ramps (3 lanes)	Basic	62.2 / F	23.6 / C	27.7 / D	27.7 / D
	Downstream of C-D Road On	Merge	-	-	22.0 / C	22.0 / C
	Between US-301 Ramps (2 lanes)	Basic	93.3 / F	-	21.0 / C	21.0 / C
	Downstream of REL On	Merge	-	21.6 / C	21.8 / C	21.8 / C
	Downstream of US-301 On	Merge	70.2 / F	22.0 / C	22.3 / C	22.5 / C
	Downstream of REL On	Merge	73.5 / F	-	-	-
	Between REL Ramps	Basic	64.2 / F	21.4 / C	22.1 / C	22.3 / C
	Upstream of REL Off	Diverge	15.9 / B	16.4 / B	16.6 / B	16.7 / B
	REL to 78th St (3/4 lanes)	Basic	15.9 / B	16.4 / B	16.6 / B	16.7 / B
	REL to 78th St (2/3 lanes)	Basic	23.9 / C	21.9 / C	22.1 / C	22.2 / C
	Downstream of 78th St On	Merge	27.7 / C	26.1 / C	26.7 / C	26.7 / C
	78th St to 50th St	Basic	33.2 / D	29.9 / D	30.4 / D	30.5 / D
	Upstream of 50th St Off	Diverge	34.5 / D	29.1 / D	30.0 / D	29.6 / D
	Between 50th St Ramps	Basic	25.5 / C	24.9 / C	25.1 / C	25.1 / C
	50th St to I-4	Weave	20.1 / C	24.1 / C	24.3 / C	24.3 / C
Downtown	Upstream of 22nd Off	Diverge	22.9 / C	27.1 / C	27.3 / C	27.2 / C
	22nd St Off to REL Ramp 2 On	Basic	18.9 / C	26.0 / D	27.1 / D	26.1 / D
	Downstream of REL Ramp 2 On	Merge	17.9 / B	-	-	-
	Downstream of I-4 On	Merge	26.7 / C	32.1 / D	32.8 / D	34.8 / D
	I-4 On to 22nd St On	Basic	27.8 / D	37.5 / E	39.3 / E	43.3 / E
	Downstream of 22nd St On	Merge	32.1 / D	46.0 / F	47.2 / F	48.6 / F
	22nd St to Kennedy Blvd Off	Basic	31.5 / D	47.4 / F	48.9 / F	48.8 / F
	Upstream of Kennedy Blvd Off	Diverge/Weave	27.6 / C	47.5 / F	47.6 / F	46.7 / F
	Upstream of Brorein St Off	Diverge	25.0 / C	57.5 / F	56.8 / F	56.6 / F
	Between Brorein St Ramps	Basic	20.5 / C	32.4 / D	32.4 / D	32.6 / D
	Downstream of Brorein St On	Merge	16.7 / B	18.7 / B	18.7 / B	18.7 / B
	Selmon Continue West	Basic	18.0 / B	19.7 / C	19.8 / C	19.8 / C
Reversible Express Lanes (REL)						
East Selmon	From Brandon	Basic	20.0 / C	11.8 / B	11.7 / B	11.7 / B
	Downstream of LL On (at I-75)	Merge	19.2 / B	16.1 / B	16.1 / B	16.1 / B
	LL On to LL Off	Basic	23.2 / C	18.8 / C	18.6 / C	18.6 / C
	Upstream of LL Off (at US-301)	Diverge	23.2 / C	17.0 / B	18.7 / B	18.7 / B
	LL Off to LL On	Basic	19.3 / C	15.4 / B	15.4 / B	15.4 / B
	Downstream of LL On (at US-301)	Merge	17.1 / B	19.6 / B	19.7 / B	19.7 / B
	LL On to LL Off	Basic	19.2 / C	21.5 / C	21.7 / C	21.7 / C
Down -town	Upstream of LL Off (at I-4)	Diverge	19.0 / B	-	-	-
	Upstream of LL Off (at Kennedy Blvd)	Diverge	-	23.3 / C	23.5 / C	23.5 / C
	To Twiggs St	Basic	40.2 / E	47.0 / F	47.1 / F	48.0 / F

The eastbound corridor levels-of-service for the PM peak hour are in **Table 8-2**. The proposed widening eliminates the existing bottleneck at 50th Street in the local lanes. However, the upstream bottleneck at the I-4 Connector eastbound off-ramp restricts throughput, as evidenced by the failing level-of-service throughout the downtown segments. Therefore, coordination with FDOT should occur to determine the feasibility of widening the off-ramp, which currently drops to one lane. Additionally, widening the Selmon Expressway local lanes between the 22nd Street ramps should be investigated as part of the future Downtown PD&E Study. The 22nd Street area is the only segment not currently planned to be widened, and it will create another bottleneck for eastbound traffic exiting downtown Tampa.

Comparing alternatives, the eastbound braided ramp configuration (present in Alternative 3 only) does result in slightly lower segment densities from US-301 to I-75. The REL facility operates at a reasonably consistent level-of-service from the existing condition to 2046. The two-lane section primarily operates at level-of-service 'C'. In contrast, the three-lane section operates at level-of-service 'B'.

Table 8-2: 2046 Segment Level-of-service Comparison, Eastbound PM Peak Hour

Location on Selmon Expressway Eastbound		Segment Type	Density (veh/mi/ln) / Level-of-service			
			No-Build	Build Alt. 1	Build Alt. 2	Build Alt. 3
Local Lanes (LL)						
East Selmon	To I-75 NB	Basic	28.6 / D	22.3 / C	22.4 / C	-
	Upstream of I-75 SB Off	Diverge/Basic	36.2 / E	27.0 / C	27.1 / C	22.5 / C
	US-301 to Falkenburg Rd/I-75 NB Off	Weave	30.6 / D	26.4 / C	26.2 / C	23.6 / C
	Between US-301 Ramps (2 lanes)	Basic	32.8 / D	24.4 / C	24.4 / C	17.6 / B
	Upstream of Falkenburg Rd Off	Diverge	-	-	-	22.4 / C
	Between US-301 Ramps (3 lanes)	Basic	18.3 / C	22.4 / C	22.5 / C	-
	Upstream of US-301 Off	Diverge	22.6 / C	22.5 / C	22.5 / C	22.9 / C
	REL to US-301	Basic	22.5 / C	23.2 / C	23.3 / C	22.5 / C
	Upstream of REL Off	Diverge	24.6 / C	23.1 / C	23.2 / C	23.3 / C
	Downstream of REL On	Merge	21.4 / C	27.8 / D	28.0 / D	23.1 / C
	78th St to REL (3 lanes)	Basic	19.4 / C	27.6 / D	27.8 / D	27.9 / D
	78th St to REL (2/3 lanes)	Basic	30.0 / D	25.5 / C	25.6 / C	27.7 / D
	Upstream of 78th St Off	Diverge	26.6 / C	29.4 / D	29.5 / D	25.5 / C
	50th St to 78th St	Basic	32.5 / D	26.3 / C	26.2 / C	29.4 / D
	Downstream of 50th St On	Merge	38.4 / E	29.6 / D	29.7 / D	26.2 / C
	Between 50th St Ramps	Basic	51.2 / F	23.5 / C	23.6 / C	29.6 / D
	I-4 to 50th St	Weave	46.9 / F	17.4 / B	17.5 / B	23.5 / C
Downtown	REL Off to I-4 On	Basic	13.9 / B	23.5 / C	23.5 / C	17.4 / B
	Upstream of REL Off (2/3 lanes)	Diverge	19.3 / B	27.3 / D	27.0 / D	23.5 / C
	Upstream of REL Off (3 lanes)	Basic	13.4 / B	69.3 / F	66.1 / F	26.8 / D
	22nd St On to I-4 Off	Weave	46.9 / F	57.2 / F	55.5 / F	63.1 / F
	Between 22nd St Ramps	Basic	34.8 / D	68.3 / F	67.1 / F	55.8 / F
	Upstream of 22nd St Off	Diverge	105.5 / F	79.5 / F	77.9 / F	67.4 / F
	Nebraska Ave to 22nd St	Basic	114.2 / F	99.1 / F	97.5 / F	78.5 / F
	Downstream of Nebraska Ave On	Merge	128.7 / F	101.6 / F	99.1 / F	97.8 / F
	Brorein St to Nebraska Ave	Basic	129.7 / F	98.9 / F	96.8 / F	99.4 / F
	Downstream of Brorein St On	Merge	155.9 / F	83.6 / F	82.1 / F	97.1 / F
	Whiting St to Brorein St	Basic	146.2 / F	93.4 / F	92.6 / F	82.5 / F
	Upstream of Whiting St Off	Diverge	145.7 / F	75.1 / F	75.0 / F	92.5 / F
	Upstream of Florida Ave Off	Diverge	118.5 / F	87.3 / F	87.4 / F	74.5 / F
	From Selmon West	Basic	140.8 / F	22.3 / C	22.4 / C	86.6 / F
Reversible Express Lanes (REL)						
East Selmon	To Brandon	Basic	21.1 / C	10.6 / A	10.6 / A	10.5 / A
	Upstream of LL Off (at I-75)	Diverge	-	30.4 / D	33.1 / D	28.8 / D
	LL On to LL Off	Basic	-	17.1 / B	17.2 / B	17.0 / B
	Downstream of LL On (at US-301)	Merge	16.5 / B	15.0 / B	15.0 / B	15.0 / B
	LL Off to LL On (2 lanes)	Basic	16.2 / B	-	-	-
	LL Off to LL On (3 lanes)	Basic	10.7 / A	15.3 / B	15.3 / B	15.3 / B
	Upstream of LL Off (at US-301)	Diverge	15.8 / B	19.4 / B	19.4 / B	19.4 / B
	LL On to LL Off	Basic	15.5 / B	19.5 / C	19.4 / C	19.4 / C
Down -town	Downstream of LL On (at I-4)	Merge	13.7 / B	17.4 / B	17.4 / B	17.4 / B
	Twiggs St to LL On	Basic	12.5 / B	14.6 / B	14.6 / B	14.6 / B
	From Twiggs St	Basic	19.2 / C	22.6 / C	22.6 / C	22.5 / C

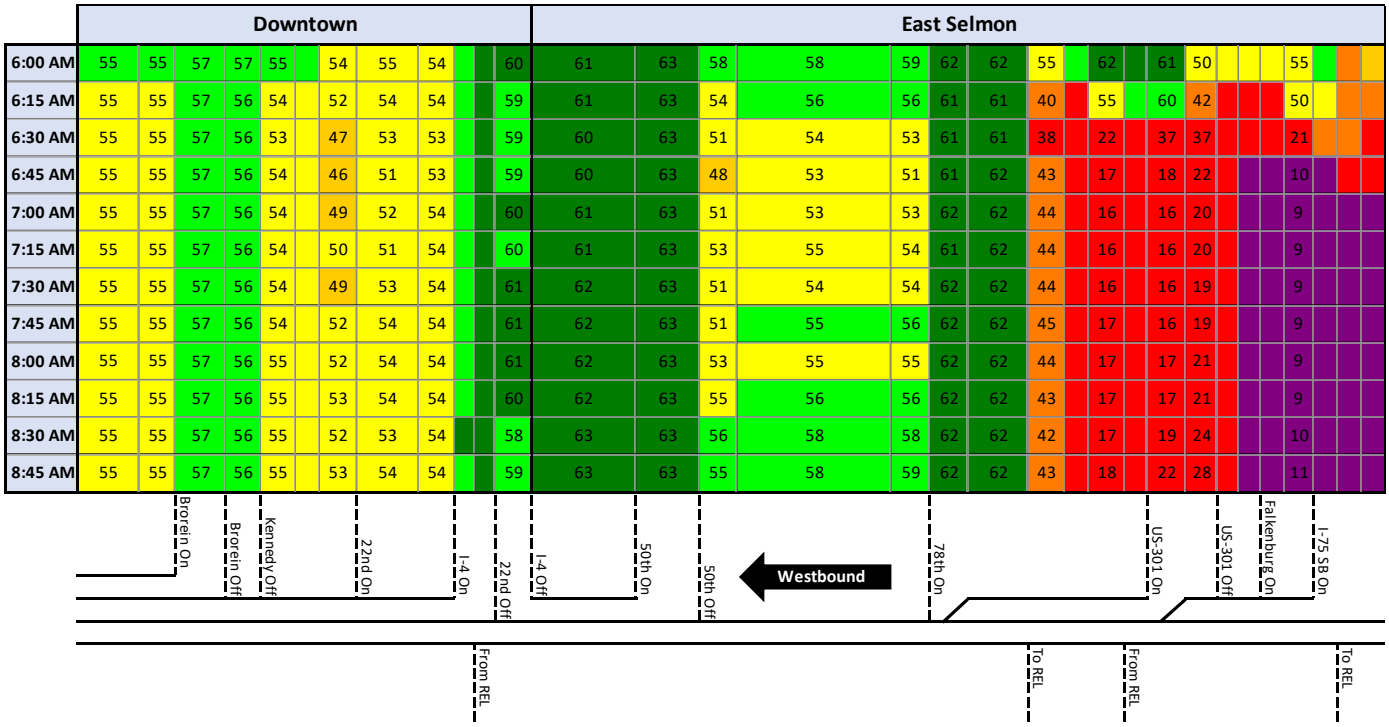
8.1.1.2 Speed-Contour Plots

The speed-contour plots for the Build alternatives are on the following pages. **Figure 8-1** shows the westbound plots during the AM peak period. There is no discernible difference in the travel speeds achieved between the three alternatives. Each one results in travel speeds that are near free-flow conditions from I-75 to 22nd Street. Slower travel speeds are seen at the very east end of the corridor prior to the proposed widening and the relief ramp to the REL. Slow travel speeds are also present in the downtown segment starting at the Brorein Street ramps. At its greatest extent, congestion extends to the I-4 Connector on-ramp and does not clear by the end of the peak period.

The eastbound plots for the PM peak period are in **Figure 8-2**. Each of the Build alternatives displays increased travel speeds from the I-4 Connector up to the US-301 interchange. The congestion seen near the 50th Street interchange in the No-Build condition is mitigated. In addition, the braided ramp configuration, which is present only in Alternative 3 for the eastbound direction, does not significantly impact travel speeds between US-301 and I-75.

While outside the scope of this study, improvements were assumed in the downtown area (see **Section 6**) which produce slightly increased travel speeds. However, the bottleneck at the I-4 Connector off-ramp is still present, constraining traffic entering the East Selmon corridor.

No-Build:



Build Alt. 1:

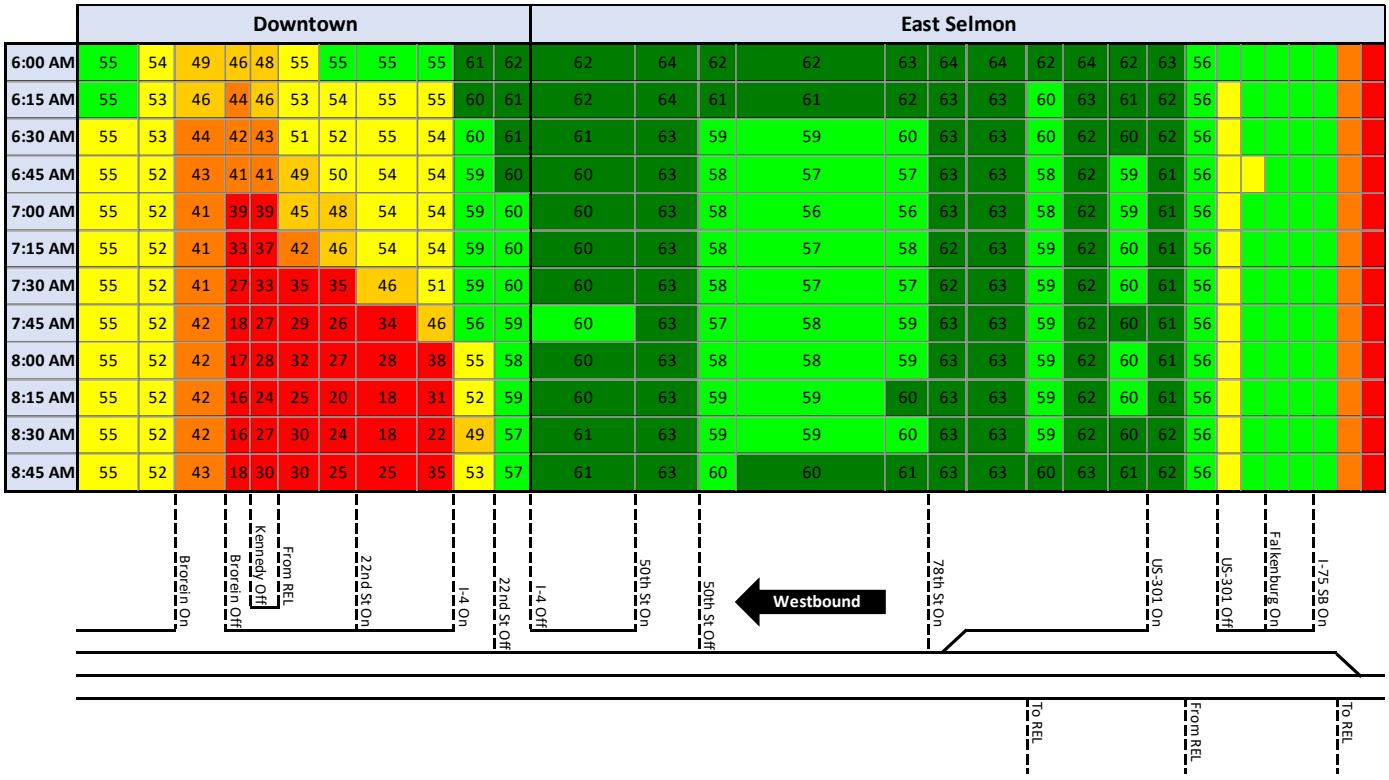
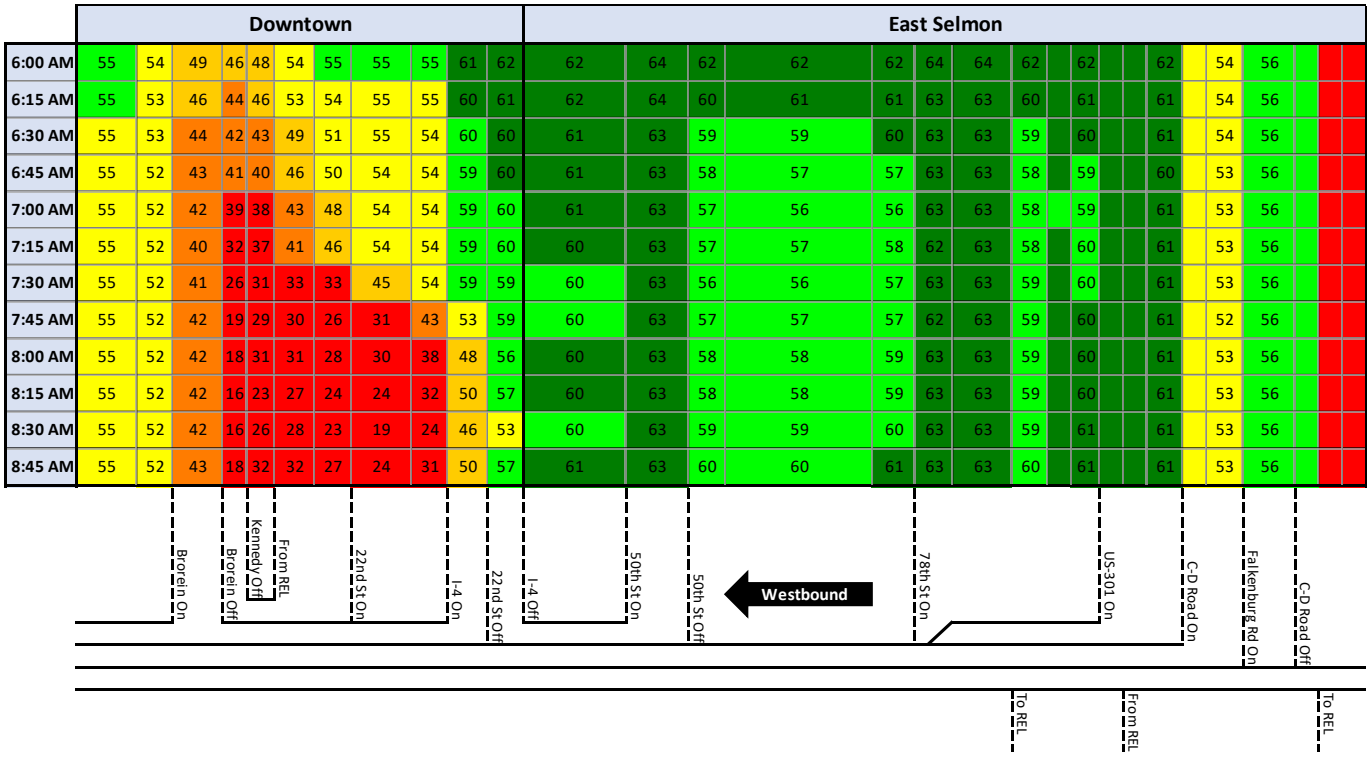


Figure 8-1: 2046 Speed-Contour Plot Comparison, Westbound Local Lanes, AM Peak Period

Build Alt. 2:



Build Alt. 3:

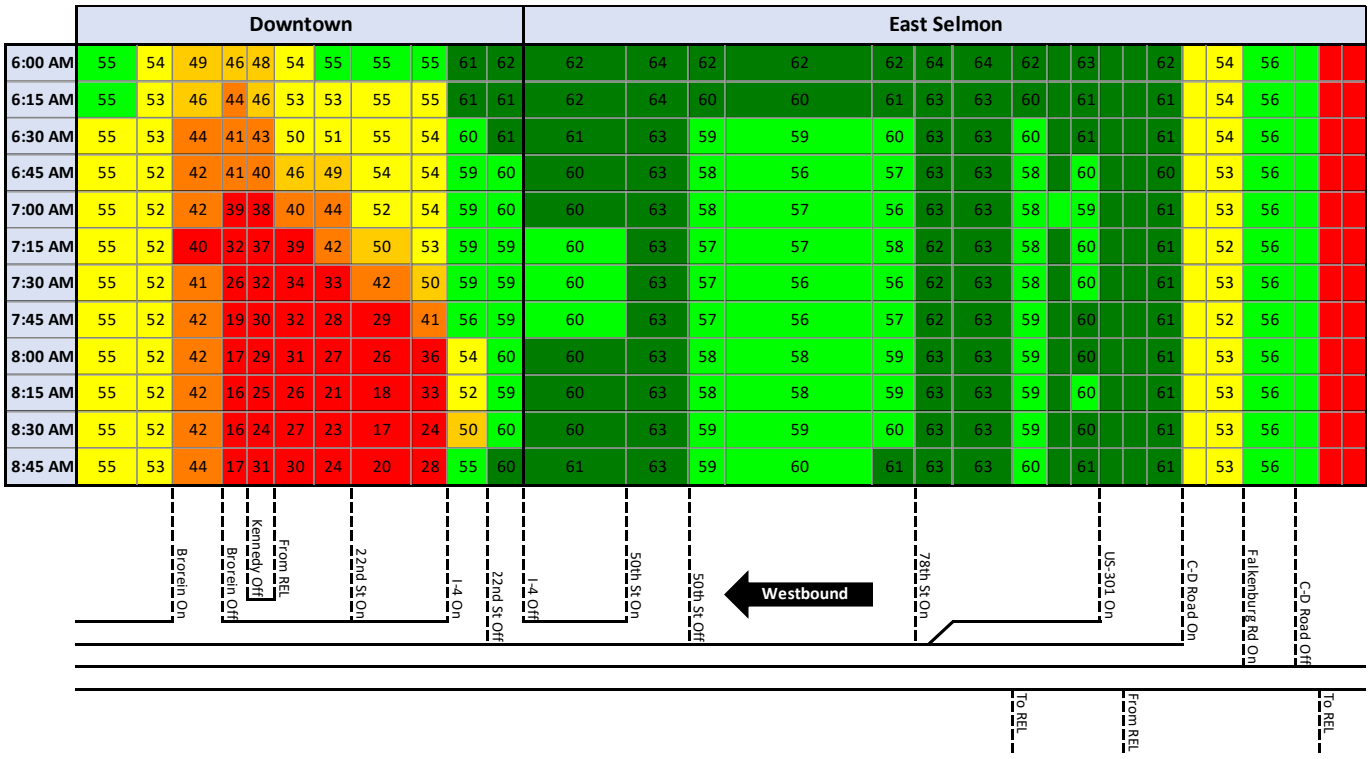
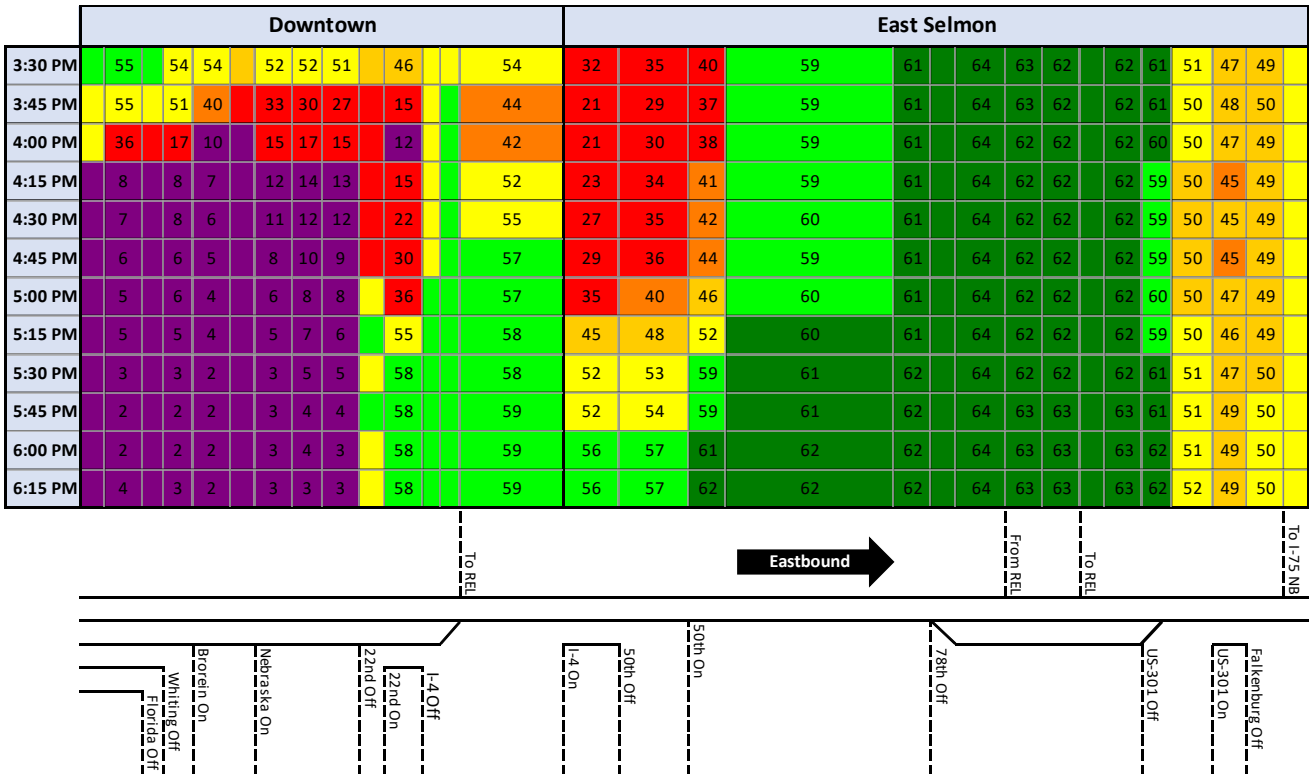


Figure 8-1: 2046 Speed-Contour Plot Comparison, Westbound Local Lanes, AM Peak Period (Cont'd)

No-Build:



Build Alt. 1:

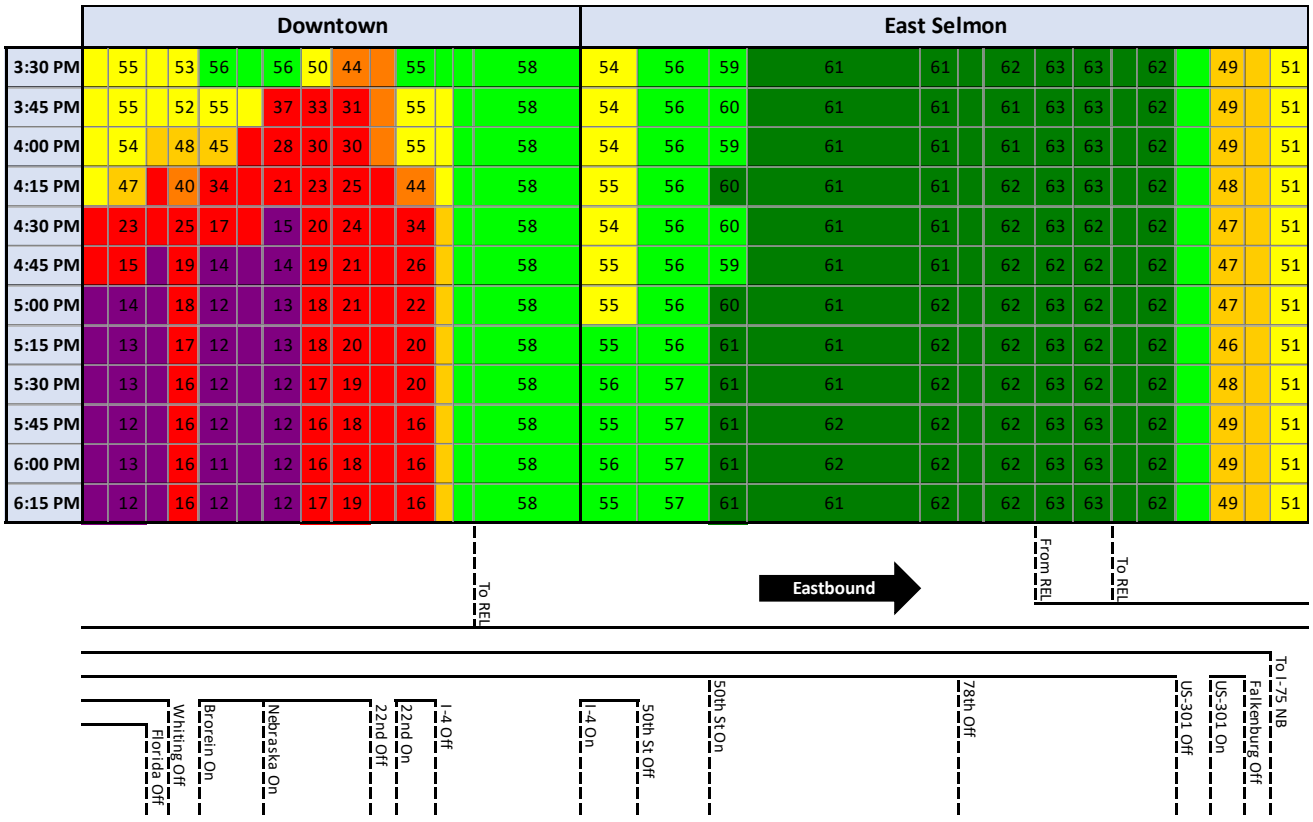
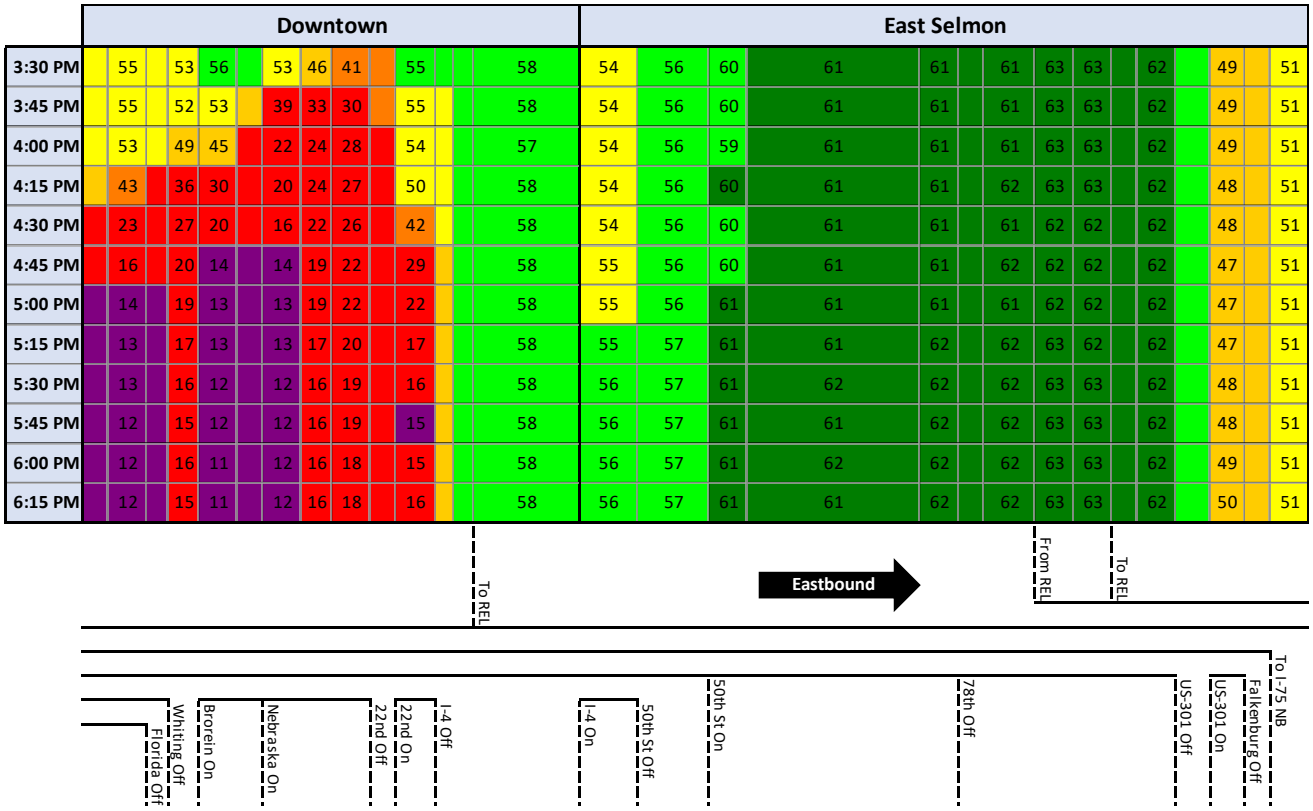


Figure 8-2. 2046 Speed-Contour Plot Comparison, Eastbound Local Lanes, PM Peak Period

Build Alt. 2:



Build Alt. 3:

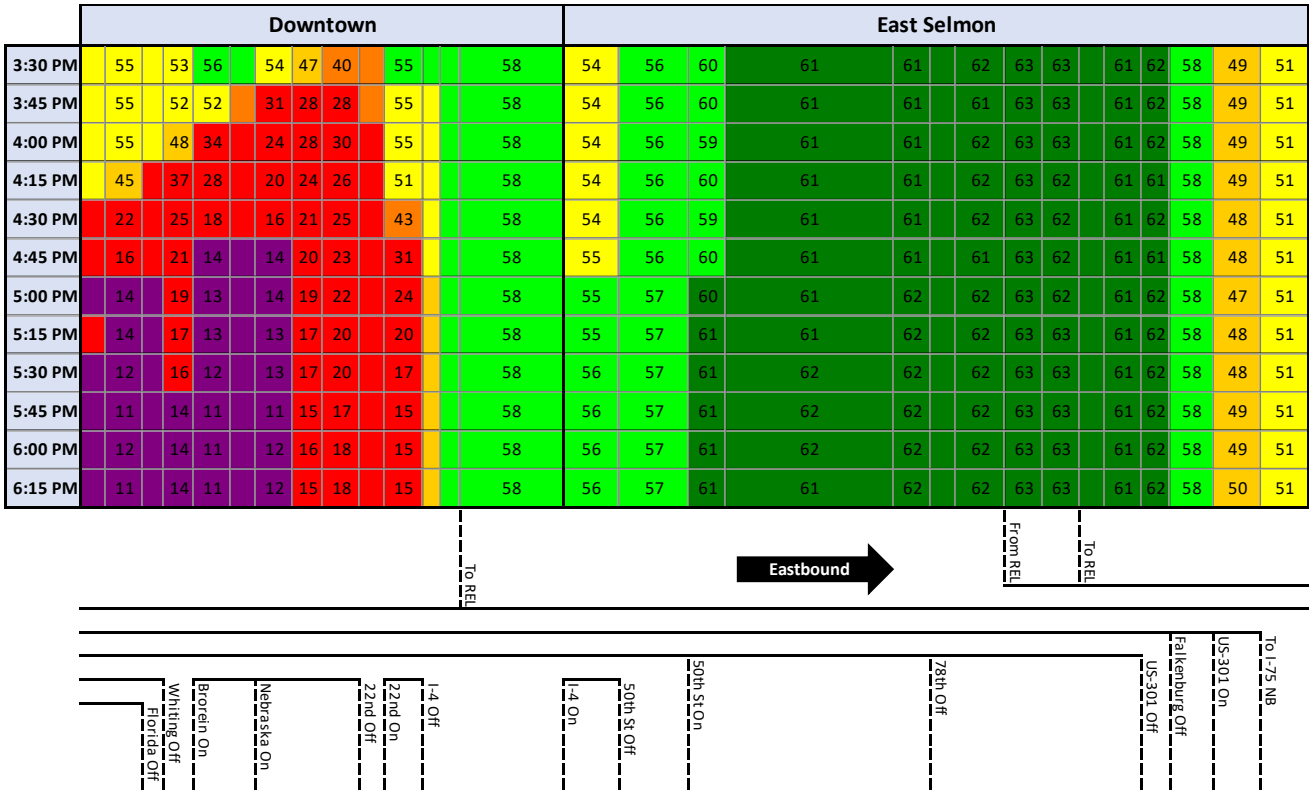


Figure 8-2. 2046 Speed-Contour Plot Comparison, Eastbound Local Lanes, PM Peak Period (Cont'd)

8.1.1.3 Travel Times

The westbound travel times for the Build alternatives are in **Table 8-3.** In the AM, travel times decrease by 48% in the East Selmon project area. As a result, the total corridor travel time is reduced from nearly 15 minutes to under 10 minutes. In the PM, travel times increase slightly due to increased traffic demands.

Table 8-3: 2046 No-Build & Build Travel Times, Westbound Local Lanes

Segment	Travel Time (min)							
	AM Peak Hour				PM Peak Hour			
	No-Build	Build Alt. 1	Build Alt. 2	Build Alt. 3	No-Build	Build Alt. 1	Build Alt. 2	Build Alt. 3
Falkenburg Rd to US-301	4.2	0.9	0.9	0.9	0.9	0.9	0.9	0.9
US-301 to 78th St	4.1	1.8	1.8	1.8	1.8	1.7	1.7	1.7
78th St to 50th St	2.2	2.0	2.0	2.0	2.0	1.9	1.9	1.9
50th St to I-4 Connector	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4
East Selmon Subtotal	**11.9**	**6.2**	**6.2**	**6.2**	**6.2**	**6.0**	**6.0**	**6.0**
I-4 Connector to 20th St	0.7	0.7	0.8	0.8	0.7	0.7	0.7	0.7
20th St to Channelside Dr	0.9	1.1	1.2	1.2	0.8	0.9	1.1	1.2
Channelside Dr to Kennedy Blvd	0.6	0.9	0.9	0.9	0.6	0.8	0.9	0.8
Kennedy Blvd to Jefferson St	0.3	0.5	0.5	0.5	0.3	0.3	0.3	0.3
Jefferson St to Florida Ave	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.3
Downtown Subtotal	**2.7**	**3.5**	**3.6**	**3.7**	**2.6**	**2.9**	**3.2**	**3.3**
Westbound Total	**14.6**	**9.7**	**9.8**	**9.9**	**8.8**	**8.9**	**9.1**	**9.2**

The eastbound travel times are summarized in **Table 8-4**. Travel times remain consistent from No-Build to Build during the AM. In the PM, Build improvements result in a 14% reduction in travel time within the East Selmon project area. The travel time from Florida Avenue to the I-4 Connector reduces from over 12 minutes in the No-Build condition to just over 7 minutes in the Build condition. This reduction in travel time is due to the bottleneck blocking the flow of traffic through the downtown segment.

Table 8-4: 2046 No-Build & Build Travel Times, Eastbound Local Lanes

Segment	Travel Time (min)							
	AM Peak Hour				PM Peak Hour			
	No-Build	Build Alt. 1	Build Alt. 2	Build Alt. 3	No-Build	Build Alt. 1	Build Alt. 2	Build Alt. 3
Florida Ave to Jefferson St	0.3	0.3	0.3	0.3	2.6	0.9	0.9	0.9
Jefferson St to Kennedy St	0.3	0.3	0.3	0.3	2.9	1.1	1.1	1.1
Kennedy Blvd to Channelside Dr	0.6	0.5	0.5	0.5	3.7	2.4	2.3	2.3
Channelside Dr to 20th St	0.7	0.7	0.7	0.7	2.1	1.9	1.8	1.9
20th St to I-4 Connector	0.7	0.7	0.7	0.7	0.9	1.0	0.9	0.9
Downtown Subtotal	**2.5**	**2.5**	**2.5**	**2.5**	**12.1**	**7.3**	**7.1**	**7.1**
I-4 Connector to 50th St	1.6	1.6	1.6	1.6	2.2	1.6	1.6	1.6
50th St to 78th St	2.0	1.9	1.9	1.9	2.3	2.0	2.0	2.0
78th St to US-301	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8
US-301 to Falkenburg Rd	0.9	0.9	0.9	0.9	1.0	1.0	1.0	0.9
East Selmon Subtotal	**6.2**	**6.1**	**6.1**	**6.1**	**7.3**	**6.3**	**6.3**	**6.3**
Eastbound Total	**8.7**	**8.6**	**8.6**	**8.6**	**19.4**	**13.6**	**13.4**	**13.4**

8.1.2 Network Analysis

Table 8-5 (AM peak period) and **Table 8-6** (PM peak period) show the network analysis results. In the AM, the network throughput increases by nearly 7%, and unserved demand reduces by almost 23% due to Build improvements. Throughput increases by over 18% in the PM, and unserved demand reduces by 64%. In both peak periods, the vehicle-hours traveled increases by a negligible amount (1.5% or less). Conversely, the vehicle-miles traveled increases by over 17% in the AM and over 30% in the PM. These results demonstrate how the proposed Build improvements, under any of the considered alternatives, can accommodate significantly more traffic with minimal increase in travel delay.

Table 8-5: 2046 No-Build & Build Network Analysis Results, AM Peak Period

Performance Measure	No-Build	Build Alt. 1	Build Alt. 2	Build Alt. 3
Throughput (veh)	115,723	123,280	123,284	123,350
Unserved Demand (veh)	9,820	7,659	7,708	7,578
Vehicle-Hours Traveled	11,395	11,213	11,220	11,234
Vehicle-Miles Traveled	361,953	424,100	424,956	424,937

Table 8-6: 2046 No-Build & Build Network Analysis Results, PM Peak Period

Performance Measure	No-Build	Build Alt. 1	Build Alt. 2	Build Alt. 3
Throughput (veh)	110,864	131,413	131,234	131,277
Unserved Demand (veh)	26,240	9,265	9,390	9,383
Vehicle-Hours Traveled	14,861	14,946	15,050	14,999
Vehicle-Miles Traveled	353,002	460,282	460,136	459,880

8.1.3 Intersection Analysis

Synchro analysis result summaries for ramp terminals in the East Selmon project area are in **Table 8-7** (AM peak hour) and **Table 8-8** (PM peak hour). **Appendix F** contains the complete intersection analysis results for the Build condition. For unsignalized intersections, the critical approach delay is reported instead of the intersection delay.

Proposed interchange modifications improve all intersections to level-of-service 'D' or better, except for the US-301 eastbound off-ramp in the AM peak. The intersection delay increases by 8% due to increased traffic demands. Further improvements are being incorporated on US-301 by other development projects, which will add capacity and improve levels-of-service.

Table 8-7: 2046 No-Build & Build Intersection Level-of-service, AM Peak Hour

Intersection	Traffic Control	Delay (sec/veh) / Level-of-service	
		No-Build	Build
50th St & EB Selmon Expressway Ramps	Signalized	26.2 / C	24.2 / C
50th St & WB Selmon Expressway Ramps	Signalized	88.3 / F	47.9 / D
78th St & EB Selmon Expressway Off-Ramp	Unsignalized*	78.2 / F	8.6 / A
US-301 & EB Selmon Expressway Ramps	Signalized	79.8 / E	86.1 / F
US-301 & WB Selmon Expressway Ramps	Signalized	75.0 / E	25.9 / C
Falkenburg Rd & EB Selmon Expressway Off-Ramp	Signalized	15.2 / B	13.8 / B
Falkenburg Rd & WB Selmon Expressway On-Ramp	Signalized	8.7 / A	8.5 / A
Whiting St & EB Selmon Expressway Off-Ramp	Signalized	19.6 / B	15.6 / B

*Signalized in Build condition

Table 8-8: 2046 No-Build & Build Intersection Level-of-service, PM Peak Hour

Intersection	Traffic Control	Delay (sec/veh) / Level-of-service	
		No-Build	Build
50th St & EB Selmon Expressway Ramps	Signalized	91.2 / F	39.1 / D
50th St & WB Selmon Expressway Ramps	Signalized	18.4 / B	21.4 / C
78th St & EB Selmon Expressway Off-Ramp	Unsignalized*	81.8 / F	12.8 / B
US-301 & EB Selmon Expressway Ramps	Signalized	77.3 / E	21.5 / C
US-301 & WB Selmon Expressway Ramps	Signalized	131.5 / F	27.1 / C
Falkenburg Rd & EB Selmon Expressway Off-Ramp	Signalized	17.8 / B	26.3 / C
Falkenburg Rd & WB Selmon Expressway On-Ramp	Signalized	18.3 / B	22.0 / C
Whiting St & EB Selmon Expressway Off-Ramp	Signalized	30.9 / C	26.5 / C

*Signalized in Build condition

8.1.4 Selection of Preferred Alternative

The braided ramp configurations do not provide a significant benefit based on the results of the traffic operational analysis. However, Alternative 3 yields a perceived safety benefit due to the reduction in weaving and potential for crashes. As a result, Alternative 3 is the preferred alternative for this study.

8.2 2036 Analysis

2036 analysis was conducted for the preferred Build alternative only, Alternative 3. A comparison of No-Build and Build conditions are in the following sections.

8.2.1 Corridor Analysis

8.2.1.1 Level-of-service

The westbound AM levels-of-service are in **Table 8-9,** and the eastbound PM levels-of-service are in **Table 8-10**. Results for 2036 are similar to 2046. Eliminating westbound bottlenecks at the location of the REL ramps results in a density reduction of 67%. Most East Selmon project area segments operate at level-of-service 'D' or better; 2036 traffic demands are not yet high enough to form the downstream bottleneck at Brorein Street in the 2046 analysis.

The eastbound corridor levels-of-service for the PM peak hour are in **Table 8-10**. The 50th Street bottleneck is eliminated within the East Selmon project area. All East Selmon project area segments operate at a level-of-service 'D' or better. The upstream bottleneck at the I-4 Connector eastbound off-ramp is already severely restricting traffic to the East Selmon corridor in 2036, with failing levels-of-service present downtown.

Table 8-9: 2036 Segment Level-of-service Comparison, Westbound AM Peak Hour

Location on Selmon Expressway Westbound		Segment Type	Density (veh/mi/ln) / Level-of-service	
			No-Build	Build Alt. 3
Local Lanes (LL)				
East Selmon	From I-75 NB	Basic	77.0 / F	49.1 / F
	Upstream of REL Ramp 3 Off	Diverge	98.5 / F	45.4 / F
	Upstream of C-D Road Off	Diverge	-	21.1 / C
	REL Ramp 3 to I-75 SB	Basic	119.4 / F	-
	Downstream of I-75 SB On	Merge	116.8 / F	-
	I-75 to Falkenburg Rd	Basic	114.4 / F	18.5 / C
	Downstream of Falkenburg Rd On	Merge	87.6 / F	23.8 / C
	Upstream of US-301 Off	Diverge	79.8 / F	-
	Between US-301 Ramps (3 lanes)	Basic	60.7 / F	27.6 / D
	Downstream of C-D Road On	Merge	-	21.9 / C
	Between US-301 Ramps (2 lanes)	Basic	91.1 / F	20.9 / C
	Downstream of REL On	Merge	-	20.4 / C
	Downstream of US-301 On	Merge	69.1 / F	21.0 / C
	Downstream of REL On	Merge	71.7 / F	-
	Between REL Ramps	Basic	64.8 / F	21.1 / C
	Upstream of REL Off	Diverge	14.4 / B	14.6 / B
	REL to 78th St (3/4 lanes)	Basic	14.3 / B	14.6 / B
	REL to 78th St (2/3 lanes)	Basic	21.8 / C	19.4 / C
	Downstream of 78th St On	Merge	30.8 / D	23.5 / C
	78th St to 50th St	Basic	35.3 / E	27.3 / D
	Upstream of 50th St Off	Diverge	35.8 / E	27.1 / C
	Between 50th St Ramps	Basic	26.8 / D	24.1 / C
	50th St to I-4	Weave	22.6 / C	22.0 / C
Downtown	Upstream of 22nd Off	Diverge	27.8 / C	21.5 / C
	22nd St Off to REL Ramp 2 On	Basic	24.4 / C	19.2 / C
	Downstream of REL Ramp 2 On	Merge	22.9 / C	-
	Downstream of I-4 On	Merge	33.4 / D	23.8 / C
	I-4 On to 22nd St On	Basic	39.8 / E	23.8 / C
	Downstream of 22nd St On	Merge	39.5 / E	25.0 / C
	22nd St to Kennedy Blvd Off	Basic	34.1 / D	26.9 / D
	Upstream of Kennedy Blvd Off	Diverge/Weave	29.9 / D	25.6 / C
	Upstream of Brorein St Off	Diverge	26.0 / C	27.0 / C
	Between Brorein St Ramps	Basic	20.3 / C	29.9 / D
	Downstream of Brorein St On	Merge	22.3 / C	18.8 / B
	Selmon Continue West	Basic	24.1 / C	20.0 / C
Reversible Express Lanes (REL)				
East Selmon	From Brandon	Basic	17.3 / B	9.3 / A
	Downstream of LL On (at I-75)	Merge	17.3 / B	14.5 / B
	LL On to LL Off	Basic	21.1 / C	16.7 / B
	Upstream of LL Off (at US-301)	Diverge	21.2 / C	16.8 / B
	LL Off to LL On	Basic	18.8 / C	14.9 / B
	Downstream of LL On (at US-301)	Merge	17.9 / B	20.2 / C
	LL On to LL Off	Basic	20.0 / C	22.1 / C
Down -town	Upstream of LL Off (at I-4)	Diverge	19.9 / B	-
	Upstream of LL Off (at Kennedy Blvd)	Diverge	-	24.1 / C
	To Twiggs St	Basic	43.0 / E	53.7 / F

Table 8-10: 2036 Segment Level-of-service Comparison, Eastbound PM Peak Hour

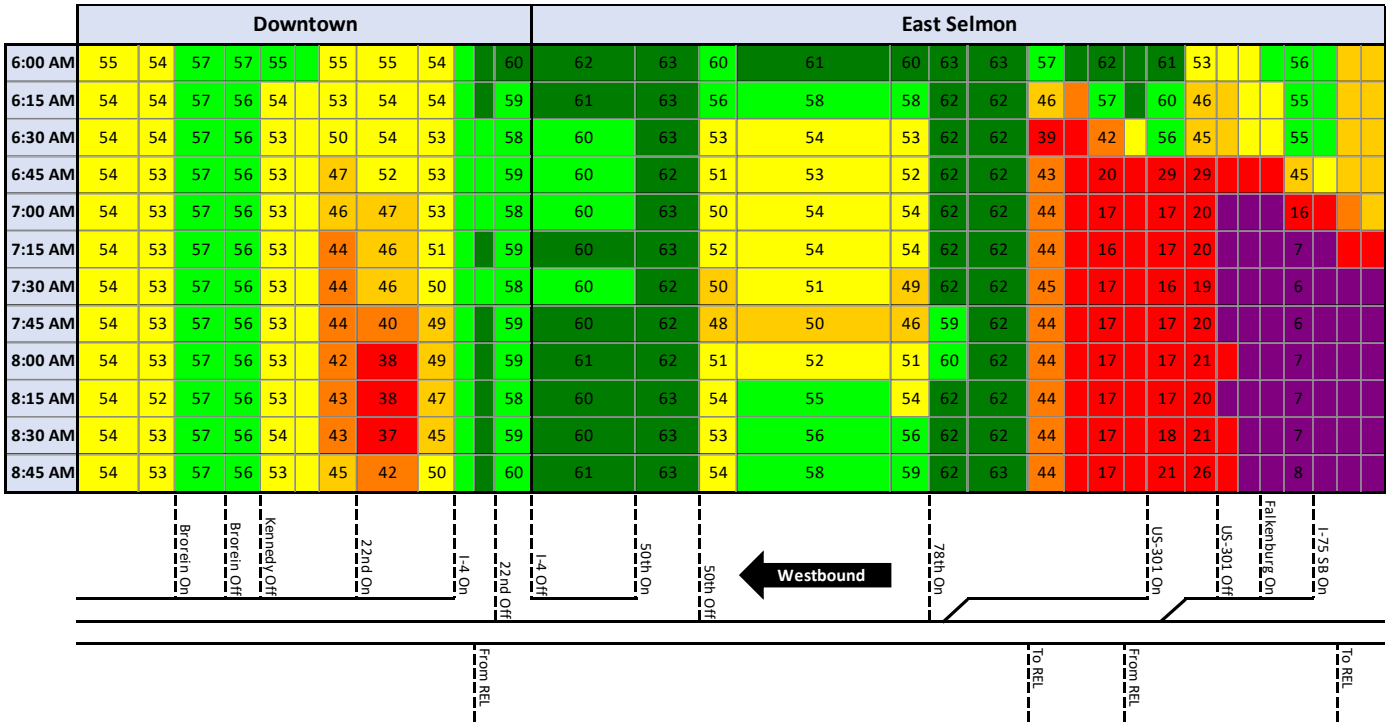
Location on Selmon Expressway Eastbound		Segment Type	Density (veh/mi/ln) / Level-of-service	
			No-Build	Build Alt. 3
Local Lanes (LL)				
East Selmon	To I-75 NB	Basic	27.4 / D	-
	Upstream of I-75 SB Off	Diverge/Basic	30.3 / D	21.1 / C
	US-301 to Falkenburg Rd/I-75 NB Off	Weave	26.6 / C	18.1 / B
	Between US-301 Ramps (2 lanes)	Basic	33.7 / D	15.0 / B
	Upstream of Falkenburg Rd Off	Diverge	-	21.5 / C
	Between US-301 Ramps (3 lanes)	Basic	18.7 / C	-
	Upstream of US-301 Off	Diverge	25.4 / C	21.9 / C
	REL to US-301	Basic	25.5 / C	21.4 / C
	Upstream of REL Off	Diverge	26.7 / C	22.2 / C
	Downstream of REL On	Merge	23.1 / C	22.1 / C
	78th St to REL (3 lanes)	Basic	20.4 / C	26.2 / D
	78th St to REL (2/3 lanes)	Basic	31.5 / D	26.1 / D
	Upstream of 78th St Off	Diverge	28.1 / D	24.6 / C
	50th St to 78th St	Basic	34.8 / D	28.3 / D
	Downstream of 50th St On	Merge	44.3 / F	25.2 / C
	Between 50th St Ramps	Basic	56.0 / F	27.8 / D
	I-4 to 50th St	Weave	54.4 / F	22.6 / C
Downtown	REL Off to I-4 On	Basic	53.8 / F	17.7 / B
	Upstream of REL Off (2/3 lanes)	Diverge	39.2 / E	24.8 / C
	Upstream of REL Off (3 lanes)	Basic	28.7 / D	26.1 / D
	22nd St On to I-4 Off	Weave	75.2 / F	32.3 / D
	Between 22nd St Ramps	Basic	62.2 / F	46.4 / F
	Upstream of 22nd St Off	Diverge	61.3 / F	67.1 / F
	Nebraska Ave to 22nd St	Basic	66.7 / F	77.3 / F
	Downstream of Nebraska Ave On	Merge	65.7 / F	89.3 / F
	Brorein St to Nebraska Ave	Basic	73.0 / F	86.1 / F
	Downstream of Brorein St On	Merge	88.1 / F	81.7 / F
	Whiting St to Brorein St	Basic	74.1 / F	72.3 / F
	Upstream of Whiting St Off	Diverge	65.6 / F	74.2 / F
	Upstream of Florida Ave Off	Diverge	47.3 / F	56.2 / F
	From Selmon West	Basic	62.9 / F	55.4 / F
Reversible Express Lanes (REL)				
East Selmon	To Brandon	Basic	22.6 / C	9.6 / A
	Upstream of LL Off (at I-75)	Diverge	-	19.1 / B
	LL On to LL Off	Basic	-	15.4 / B
	Downstream of LL On (at US-301)	Merge	17.7 / B	13.4 / B
	LL Off to LL On (2 lanes)	Basic	18.5 / C	-
	LL Off to LL On (3 lanes)	Basic	12.2 / B	13.8 / B
	Upstream of LL Off (at US-301)	Diverge	18.6 / B	18.0 / B
	LL On to LL Off	Basic	18.0 / B	17.9 / B
Down -town	Downstream of LL On (at I-4)	Merge	15.9 / B	15.8 / B
	Twiggs St to LL On	Basic	13.4 / B	12.2 / B
	From Twiggs St	Basic	20.2 / C	18.7 / C

8.2.1.2 Speed-Contour Plots

Figure 8-3 illustrates the westbound speed-contour plots during the AM peak period. Slow travel speeds are present in the No-Build condition from the REL ramps through to I-75. In the Build condition, the entire East Selmon project area has operating speeds in excess of 50 mph throughout the morning except for the very east end.

The eastbound speed-contour plots for the PM peak period are in **Figure 8-4**. In the No-Build condition, slow travel speeds are observed from the 50th Street interchange and continuing westward. In the Build condition, travel speeds from the I-4 Connector to 50th Street significantly improve, although the congestion in downtown is still prevalent.

No-Build:



Build Alt. 3:

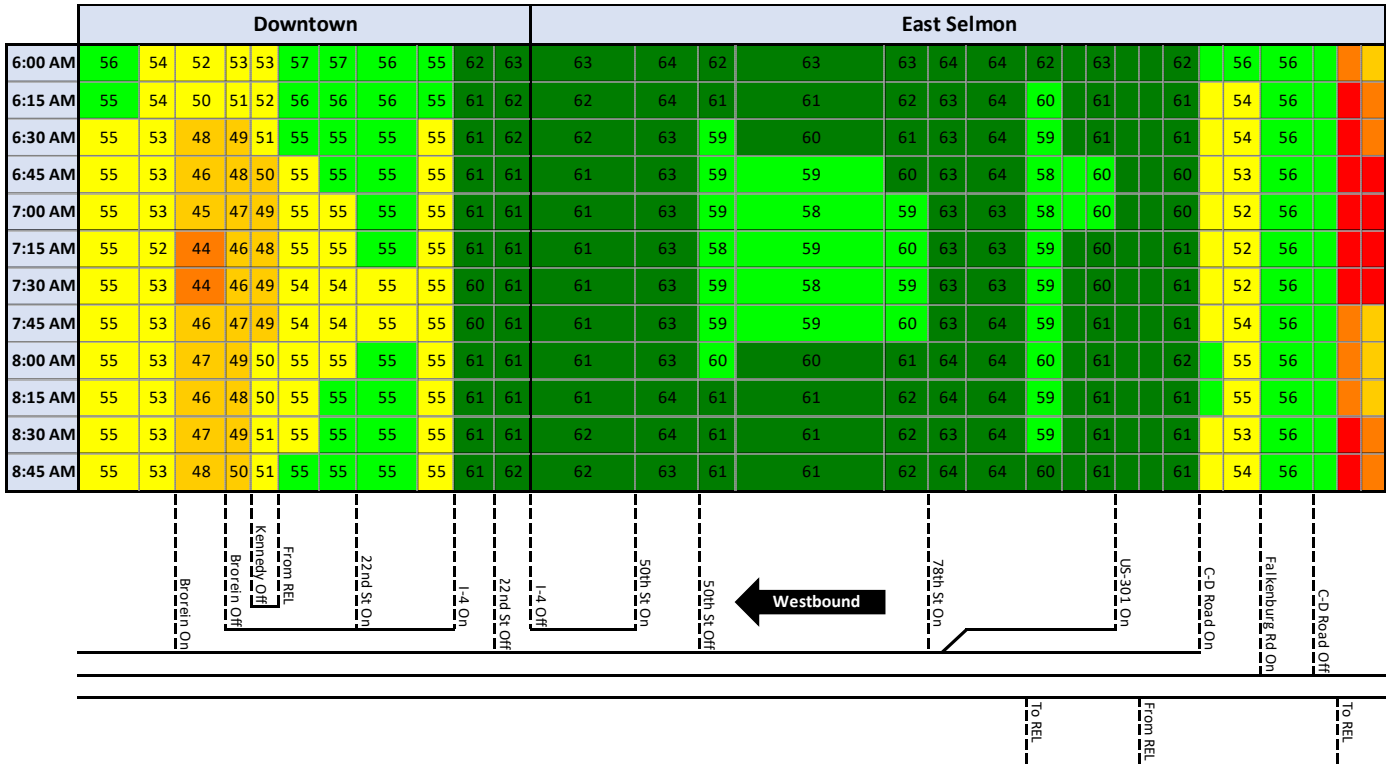
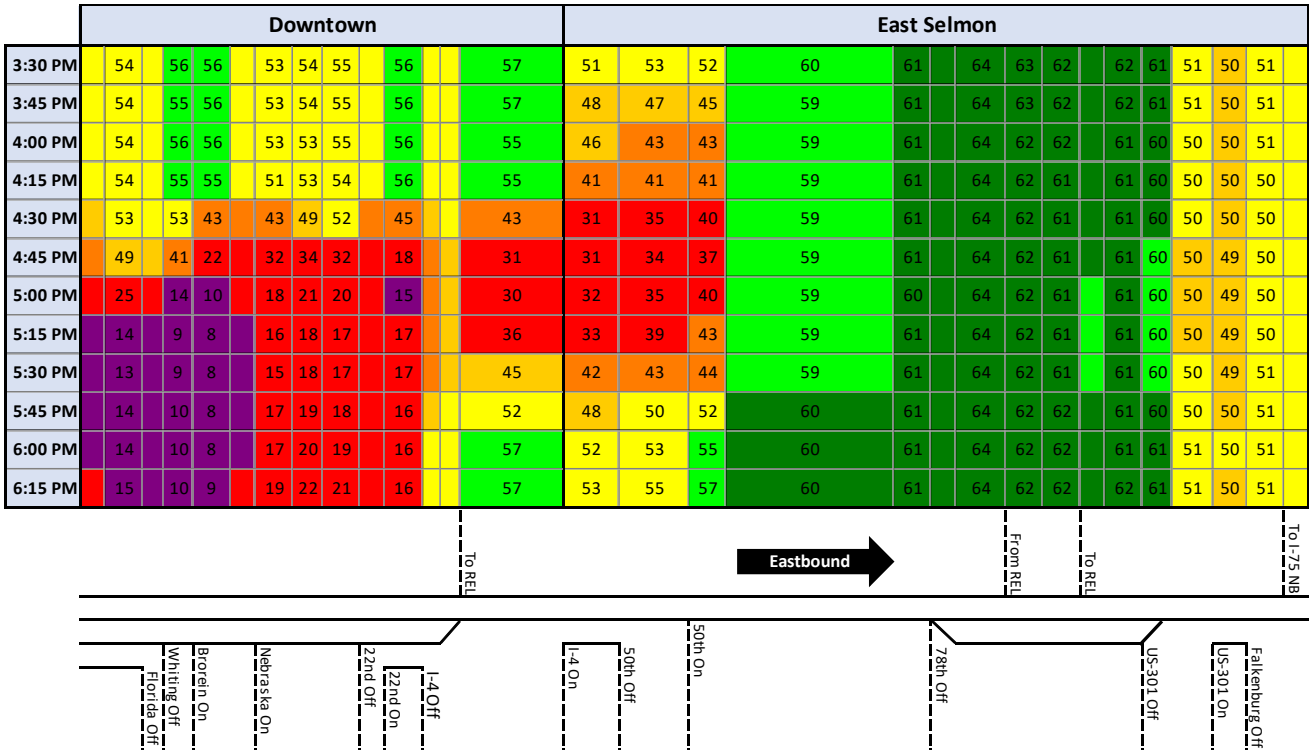


Figure 8-3: 2036 Speed-Contour Plot Comparison, Westbound Local Lanes, AM Peak Period

No-Build:



Build Alt. 3:

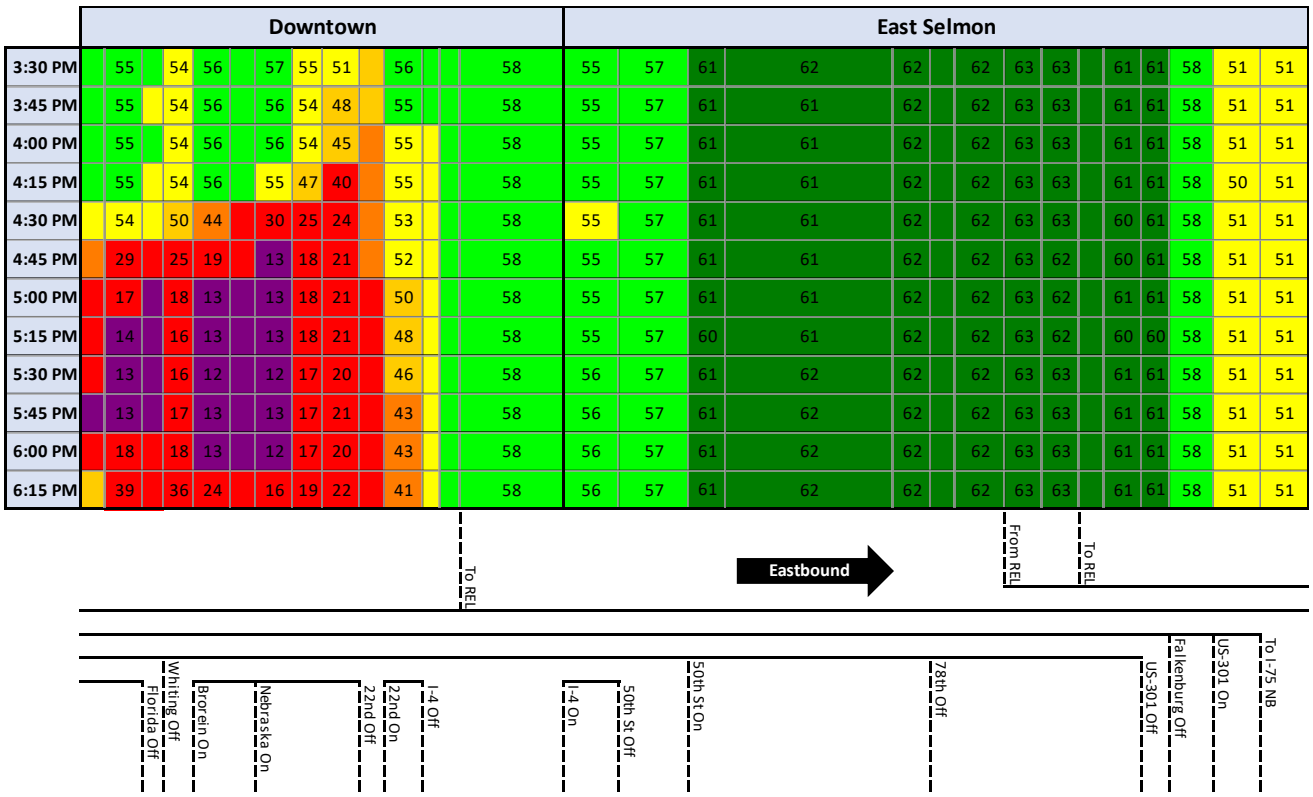


Figure 8-4: 2036 Speed-Contour Plot Comparison, Eastbound Local Lanes, PM Peak Period

8.2.1.3 Travel Times

Table 8-11 shows the westbound travel time comparison between No-Build and Build. In the AM peak, the travel time is reduced by 50% within the East Selmon project area.

Table 8-11: 2036 No-Build & Build Travel Times, Westbound Local Lanes

Segment	Travel Time (min)			
	AM Peak Hour		PM Peak Hour	
	No-Build	Build Alt. 3	No-Build	Build Alt. 3
Falkenburg Rd to US-301	4.7	0.9	0.9	0.8
US-301 to 78th St	3.9	1.8	1.8	1.7
78th St to 50th St	2.3	2.0	2.0	1.9
50th St to I-4 Connector	1.5	1.5	1.5	1.4
East Selmon Subtotal	**12.4**	**6.1**	**6.1**	**5.9**
I-4 Connector to 20th St	0.7	0.7	0.7	0.6
20th St to Channelside Dr	1.1	0.9	0.8	0.8
Channelside Dr to Kennedy Blvd	0.6	0.6	0.6	0.6
Kennedy Blvd to Jefferson St	0.3	0.3	0.3	0.3
Jefferson St to Florida Ave	0.3	0.3	0.3	0.3
Downtown Subtotal	**2.9**	**2.7**	**2.6**	**2.5**
Westbound Total	**15.3**	**8.8**	**8.6**	**8.4**

Table 8-12 shows the eastbound travel times. Again, the East Selmon project area does not recognize a noticeable benefit in travel time due to the upstream bottleneck restricting traffic into the East Selmon corridor.

Table 8-12: 2036 No-Build & Build Travel Times, Eastbound Local Lanes

Segment	Travel Time (min)			
	AM Peak Hour		PM Peak Hour	
	No-Build	Build Alt. 3	No-Build	Build Alt. 3
Florida Ave to Jefferson St	0.3	0.3	0.7	0.7
Jefferson St to Kennedy St	0.3	0.3	1.2	0.9
Kennedy Blvd to Channelside Dr	0.5	0.5	1.6	2.1
Channelside Dr to 20th St	0.7	0.7	1.7	1.7
20th St to I-4 Connector	0.7	0.6	1.2	0.7
Downtown Subtotal	**2.5**	**2.5**	**6.3**	**6.2**
I-4 Connector to 50th St	1.6	1.5	3.5	1.6
50th St to 78th St	2.0	1.9	2.4	2.0
78th St to US-301	1.7	1.7	1.8	1.8
US-301 to Falkenburg Rd	0.9	0.9	1.0	0.9
East Selmon Subtotal	**6.2**	**6.1**	**8.7**	**6.3**
Eastbound Total	**8.7**	**8.5**	**15.0**	**12.5**

8.2.2 Network Analysis

Network analysis results are summarized in **Table 8-13** (AM peak) and **Table 8-14** (PM peak). Even in 2036, the total throughput increases by 3% in the AM and 4% in the PM with proposed Build improvements. The reduction in unserved demand is about 22% in both peaks.

Table 8-13: 2036 No-Build & Build Network Analysis Results, AM Peak Period

Performance Measure	No-Build	Build Alt. 3
Throughput (veh)	109,207	112,475
Unserved Demand (veh)	4,003	3,135
Vehicle-Hours Traveled	10,217	9,661
Vehicle-Miles Traveled	348,637	384,399

Table 8-14: 2036 No-Build & Build Network Analysis Results, PM Peak Period

Performance Measure	No-Build	Build Alt. 3
Throughput (veh)	117,718	122,720
Unserved Demand (veh)	6,401	4,893
Vehicle-Hours Traveled	12,071	12,439
Vehicle-Miles Traveled	377,712	413,239

8.2.3 Intersection Analysis

Synchro analysis result summaries for ramp terminals in the East Selmon project area are in **Table 8-15** (AM peak hour) and **Table 8-16** (PM peak hour). **Appendix F** contains the complete intersection analysis results for the Build condition. For unsignalized intersections, the critical approach delay is reported instead of the intersection delay.

In the No-Build condition, the 78th Street eastbound off-ramp is failing in the AM, and both US-301 ramp terminals are failing in the PM. The Build condition improves all intersection levels-of-service to 'D' or better for both peak hours.

Table 8-15: 2036 No-Build & Build Intersection Level-of-service, AM Peak Hour

Intersection	Traffic Control	Delay (sec/veh) / Level-of-service	
		No-Build	Build
50th St & EB Selmon Expressway Ramps	Signalized	20.6 / C	16.9 / B
50th St & WB Selmon Expressway Ramps	Signalized	39.0 / D	30.9 / C
78th St & EB Selmon Expressway Off-Ramp	Unsignalized*	61.6 / F	6.3 / A
US-301 & EB Selmon Expressway Ramps	Signalized	39.6 / D	30.4 / C
US-301 & WB Selmon Expressway Ramps	Signalized	35.1 / D	27.7 / C
Falkenburg Rd & EB Selmon Expressway Off-Ramp	Signalized	10.1 / B	12.3 / B
Falkenburg Rd & WB Selmon Expressway On-Ramp	Signalized	9.5 / A	11.6 / B
Whiting St & EB Selmon Expressway Off-Ramp	Signalized	14.0 / B	13.6 / B

*Signalized in Build condition

Table 8-16. 2036 No-Build & Build Intersection Level-of-service, PM Peak Hour

Intersection	Traffic Control	Delay (sec/veh) / Level-of-service	
		No-Build	Build
50th St & EB Selmon Expressway Ramps	Signalized	56.4 / E	41.5 / D
50th St & WB Selmon Expressway Ramps	Signalized	12.7 / B	14.7 / B
78th St & EB Selmon Expressway Off-Ramp	Unsignalized*	32.4 / D	15.6 / B
US-301 & EB Selmon Expressway Ramps	Signalized	138.0 / F	22.6 / C
US-301 & WB Selmon Expressway Ramps	Signalized	143.6 / F	41.3 / D
Falkenburg Rd & EB Selmon Expressway Off-Ramp	Signalized	21.5 / C	21.1 / C
Falkenburg Rd & WB Selmon Expressway On-Ramp	Signalized	20.9 / C	17.6 / B
Whiting St & EB Selmon Expressway Off-Ramp	Signalized	25.2 / C	14.7 / B

*Signalized in Build condition

9 PREDICTIVE SAFETY ANALYSIS

The predictive crash analysis utilized the Enhanced Interchange Safety Analysis Tool (ISATe) build 06.10 available from the FHWA.[20] Roadway and traffic data was entered into the ISATe spreadsheet, which utilizes safety performance functions to predict the number of crashes the facility would experience. The local lane predictive crash results by crash severity, shown in **Figure 9-1,** are based on the 20-year design life for the Build and No-Build alternatives. **Figure 9-2** shows the REL predictive crash results**.**

The results show a slight increase in crash frequency with the Build alternative but a decrease in less severe crashes on the local lanes. This slight increase is attributable to the overall increase in traffic from the improved roadway. It does not indicate an increase in crashes per vehicle. The crash rates in **Figure 9-3** and **Figure 9-4** show fewer crashes per vehicle miles traveled with the Build Alternative. The lower predicted crash rate in the REL is likely due to fewer ingress and egress conflicts than in the local lanes.

Safety conditions will remain the same on most ramps and ramp terminals because the Build alternative is not reconstructing them. However, we anticipate the proposed braided ramps between US-301 and I-75 to improve traffic operations, reduce vehicular weaving conflicts, and benefit safety conditions overall.

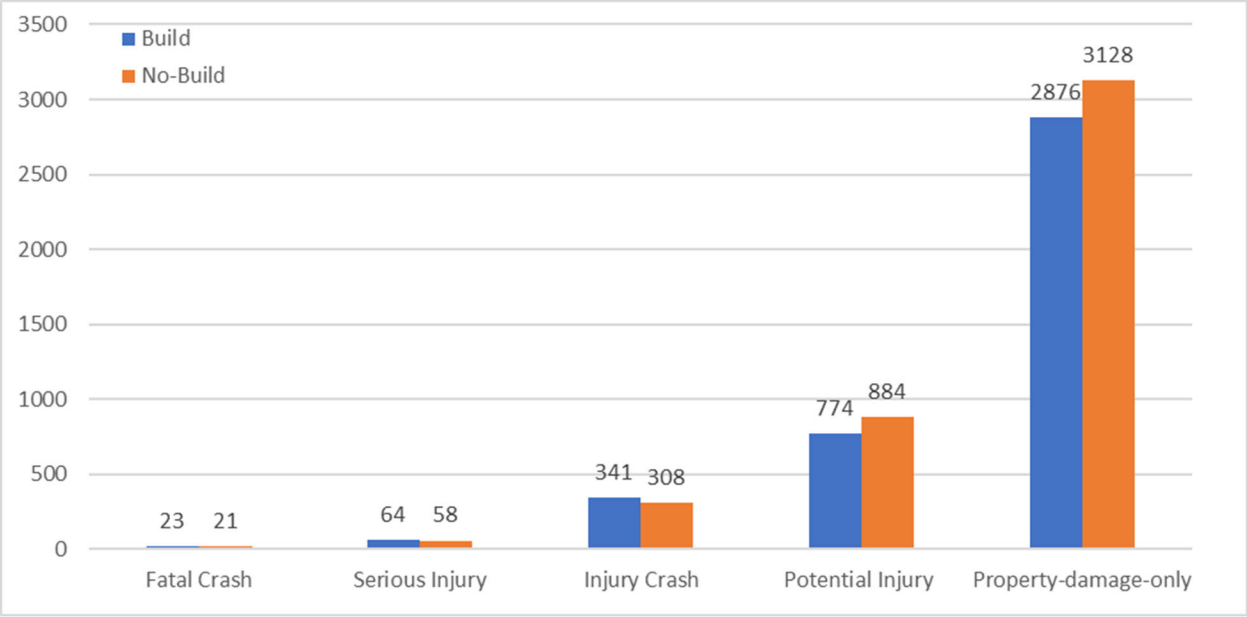


Figure 9-1: Predictive Crash Comparison, Local Lanes

[20] FHWA. RSDP Toolbox Content Page. Accessed on May 9, 2023 at https://safety.fhwa.dot.gov/rsdp/toolbox-content.aspx?toolid=62

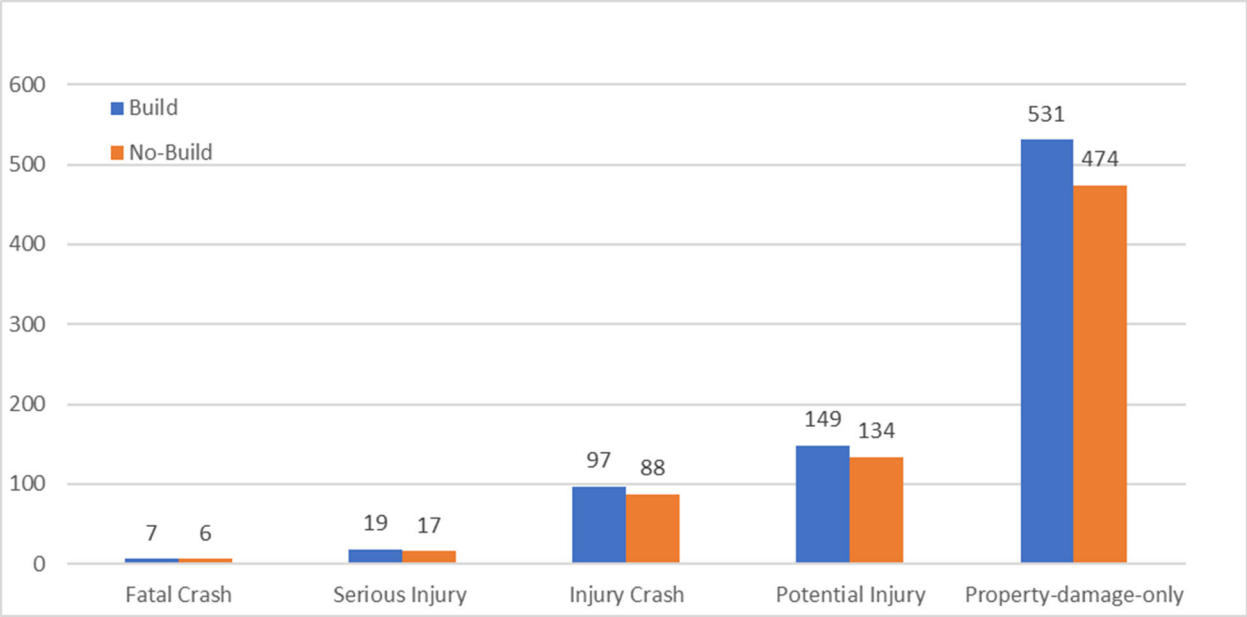


Figure 9-2: Predictive Crash Comparison, REL

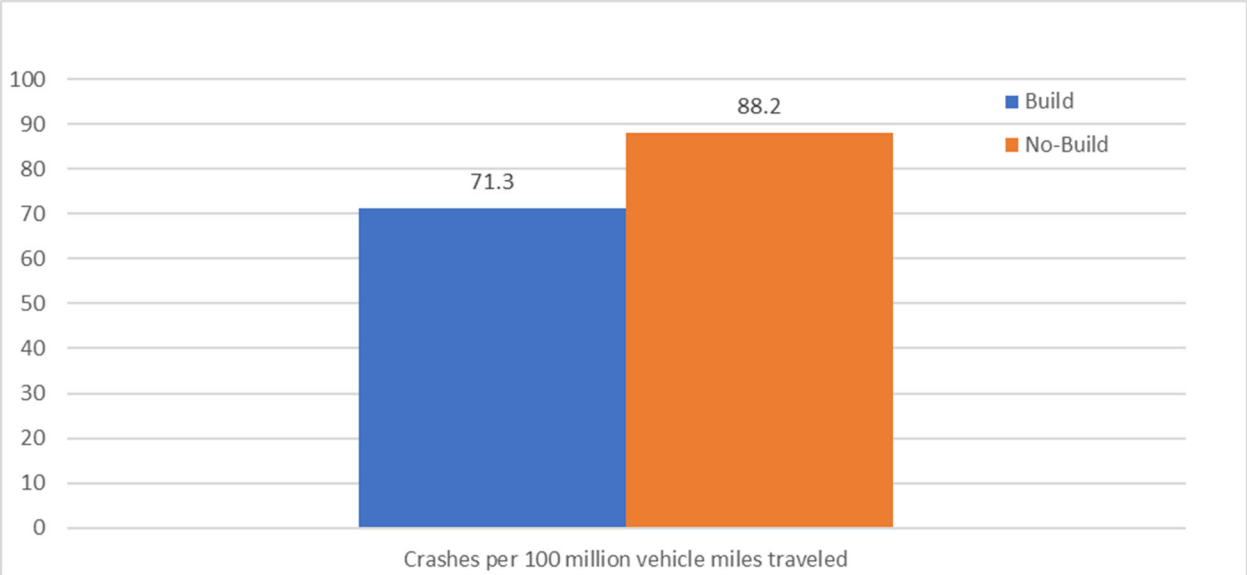


Figure 9-3: Predictive Crash Rate, Local Lanes

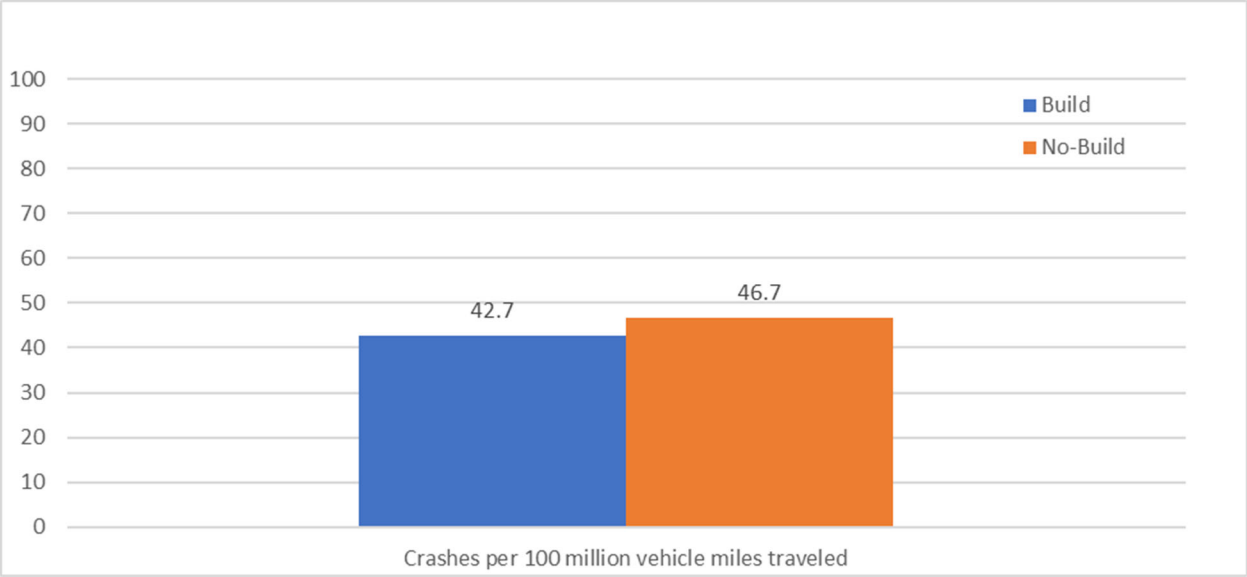


Figure 9-4: Predictive Crash Rate, REL

9.1 System Recommendations from the Arterial Safety Analysis Annual Update

The Arterial Safety Analysis Annual Update is prepared by THEA every year to analyze crash data on the system and make recommendations for improvements. The following recommendations are incorporated from the 2022 report:[21]

1. Consider installing additional in-ground rumble strips along both sides of the roadway throughout the entire corridor to help reduce lane departure crashes.
2. Convert the signalized left turn movements at the 50th Street (US 41) interchange into protected-only left-turn movements. As a result, there were 18 southbound left turn and northbound through crashes.
3. Consider installing dynamic speed feedback signs on the REL to reduce speeds.

Safety enhancements are needed to address THEA's Vision Zero safety goals to eliminate all traffic fatalities and serious injuries.

[21] HNTB. 2022. *Arterial Safety Analysis Annual Update (2022).* Dated April 2022. Pg. 30 and 31.

10 PROJECT PHASING

The project phasing evaluation identified (1) separate constructible projects along the East Selmon Expressway corridor, and (2) the year of need for each of those projects. The separate constructible projects are:

- Eastbound Local Lanes:
    a. I-4 Connector to 50th Street Widening
    b. 50th Street to 78th Street Widening
    c. 78th Street to US-301 Widening
    d. US-301 Off-Ramp Widening
    e. Falkenburg Braided Ramp
    f. US-301 to I-75 Widening
- Westbound Local Lanes
    a. I-75 to US-301 CD Road
    b. US-301 to 78th Street Widneing
    c. 78th to I-4 Connector Widening
- Reversible Express Lanes
    a. I-75 to Palm River Road Widening

The year of need is when the expected traffic demands exceed the No-Build capacity; an assessment of each segment's capacity and traffic demands was made based on this approach. Given the heavy commuting characteristics of the corridor, the year of need uses the peak hour traffic volumes, comparing the No-Build lane capacity to the forecast volumes for 2026, 2036, and 2046. The capacity of the local lanes was assumed to be 2,040 vehicles per hour per lane (vphpl). The reversible express lanes were assumed to have a slightly lower capacity of 1,870 vphpl to maintain ideal operating conditions.

Figure 10-1 compares AM peak hour volumes to capacity in the westbound local lanes. The entire corridor will remain under capacity in the year 2026. However, by 2036, the two-lane section from 78th Street to 50th Street will be over capacity, and the section between the US-301 ramps will be at capacity. In 2046, the weaving section from 50th Street to the I-4 Connector is also over capacity.

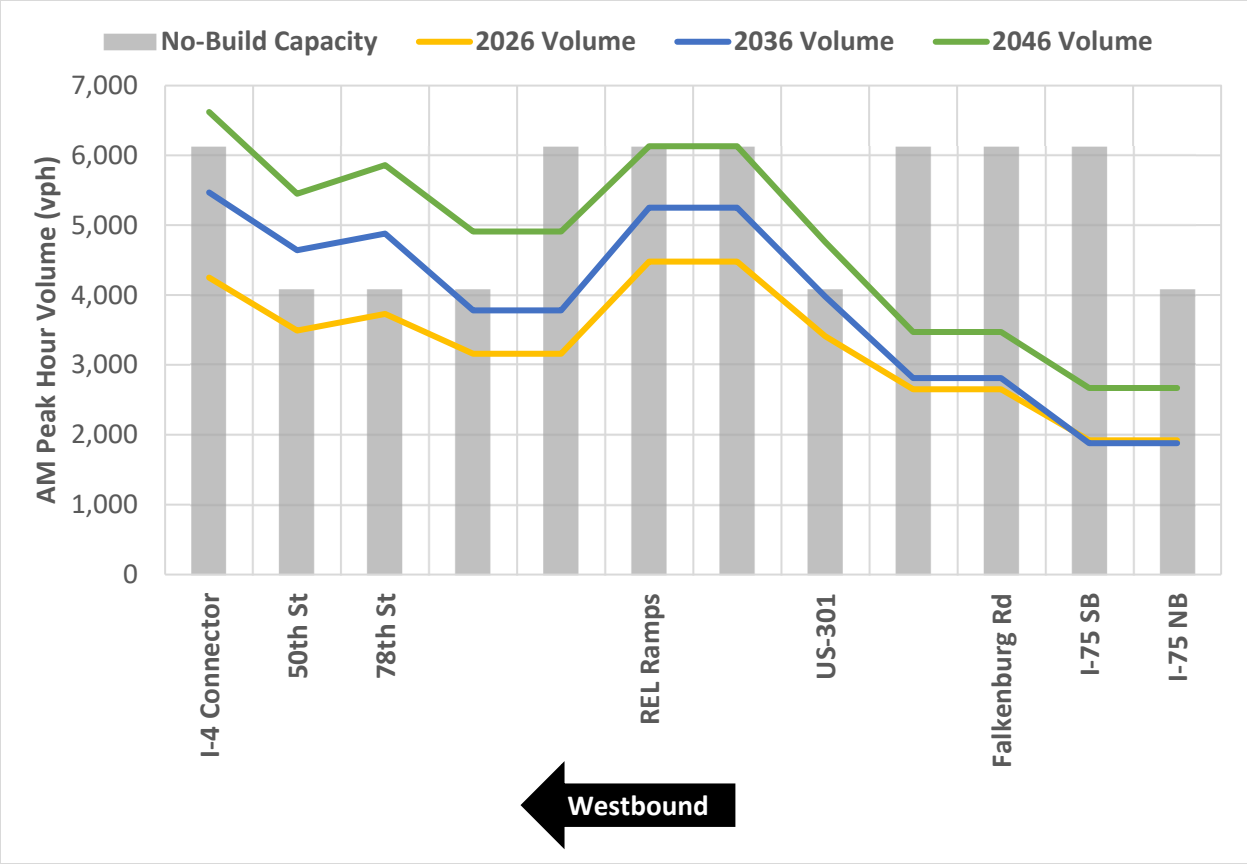


Figure 10-1. Comparison of Capacity and Forecast Volume, Westbound Local Lanes, AM Peak Hour

Figure 10-2 shows the comparison of PM peak hour volumes to capacity in the eastbound local lanes. While no segments are over capacity in 2026, segments between 50th Street and 78th Street are near capacity. In 2036, the sections from 50th Street to 78th Street and between the US-301 ramps are over capacity. In 2046, the weaving section from 50th Street to the I-4 Connector is also over capacity. By 2046, nearly all segments are over capacity except for those east of the US-301 on-ramp.

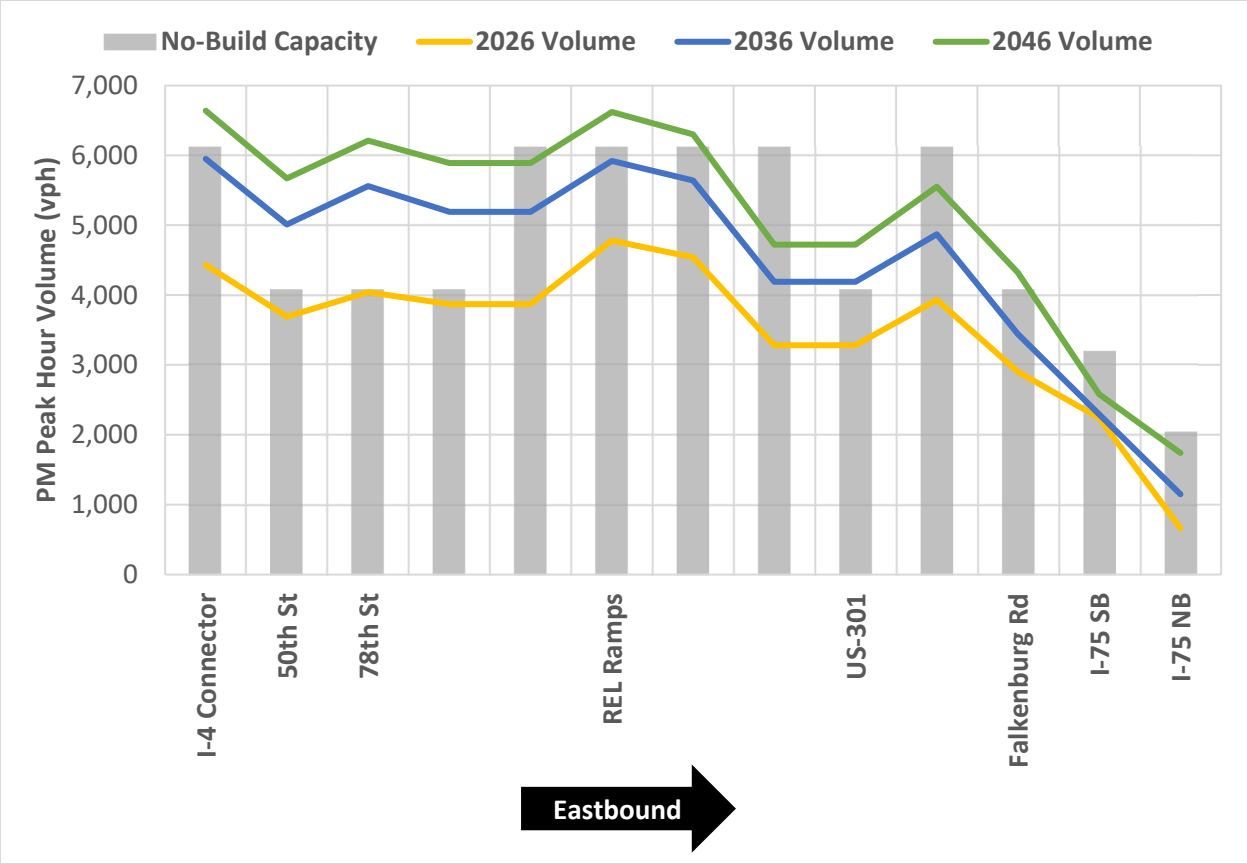


Figure 10-2. Comparison of Capacity and Forecast Volume, Eastbound Local Lanes, PM Peak Hour

To determine the exact year of need, the demand for intermediate years was estimated by assuming a simple straight-line growth from 2026 to 2036 and from 2036 to 2046. In both the eastbound and westbound directions, the existing two-lane sections are the critical segments to consider for future widening. **Figure 10-3** shows that in the westbound direction, the section from 78th Street to 50th Street will be over capacity in 2030, while the segment between the US-301 ramps will be over capacity in 2038. In the eastbound direction (**Figure 10-4**), the section from 50th Street to 78th Street will be over capacity in 2027, and the segment between the US-301 ramps will be over capacity in 2035.

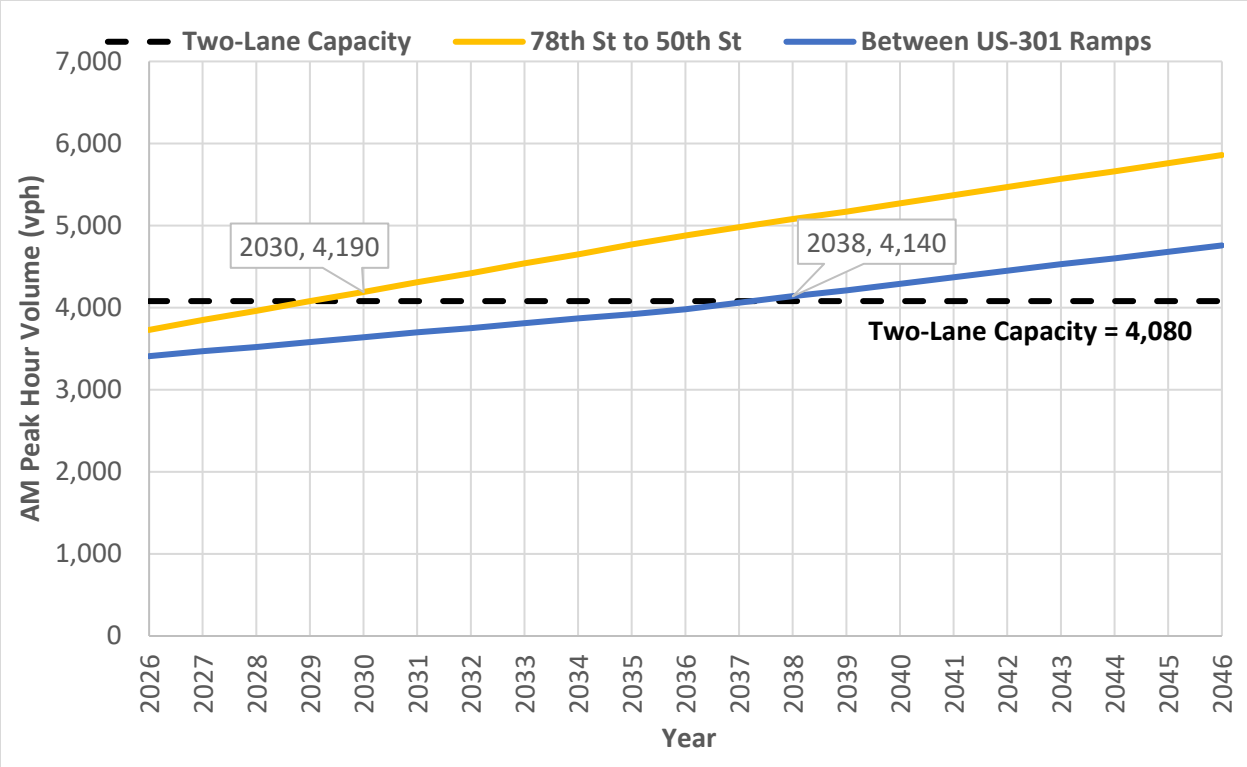


Figure 10-3. Critical Segment Year of Need Assessment, Westbound Local Lanes, AM Peak Hour

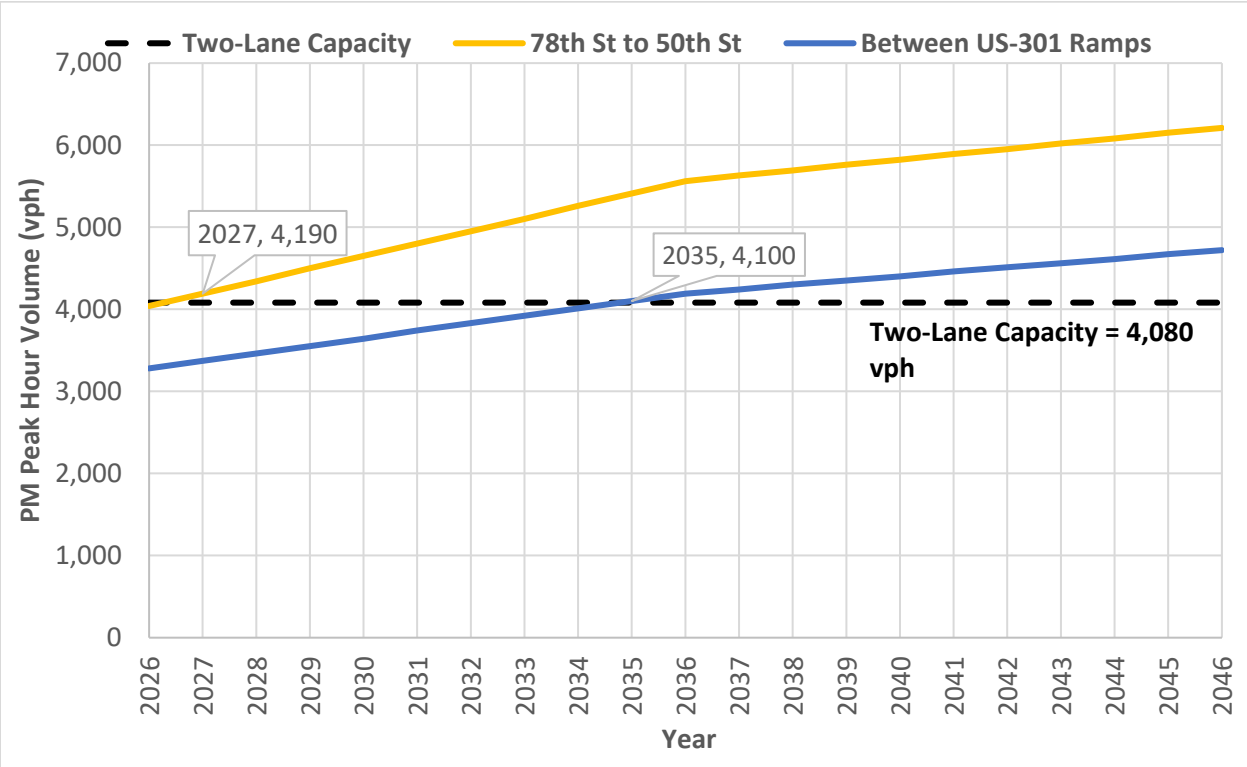


Figure 10-4. Critical Segment Year of Need Assessment, Eastbound Local Lanes, PM Peak Hour

Using this same approach, the year of need for each of the constructible segments was identified as summarized in **Table 10-1**. Based upon this information, projects were grouped into six recommended phases as illustrated in **Figure 10-5**.

Table 10-1. East Selmon Project Phasing Summary

Direction	Description	Year of Need
Phase 1		
Eastbound	50th St to 78th St	2027
Eastbound	US-301 Off-Ramp	2027
Phase 2		
Westbound	78th St to I-4	2030
Phase 3		
Eastbound	Falkenburg Braided Ramp	2032
Westbound	I-75 to US-301 Widen & CD Road	2032
Phase 4		
Eastbound	US-301 to I-75	2035
Phase 5		
Eastbound	I-4 Connector to 50th St	2039
Eastbound	78th St to US-301	2039
Westbound	US-301 to 78th St	2039
Phase 6		
REL	REL Widening	2040

Figure 10-5. East Selmon Recommended Project Phasing

It should be noted that the eastbound flow of traffic will be restricted in the future due to the identified bottlenecks in the downtown area. However, it is anticipated that the eastbound volumes from 50th Street to 78th Street will exceed the capacity of this segment before these bottlenecks form based on the No-Build analysis results in **Section 7**. Therefore the recommended project sequencing was not adjusted to account for upstream constraints.

11 CONCLUSION AND RECOMMENDATIONS

The traffic analysis results in this report show that the existing Selmon Expressway corridor from the I-4 Connector to I-75 is insufficient for future traffic demands. Insufficient roadway capacity and other operational deficiencies result in multiple bottlenecks that adversely impact the traveling public.

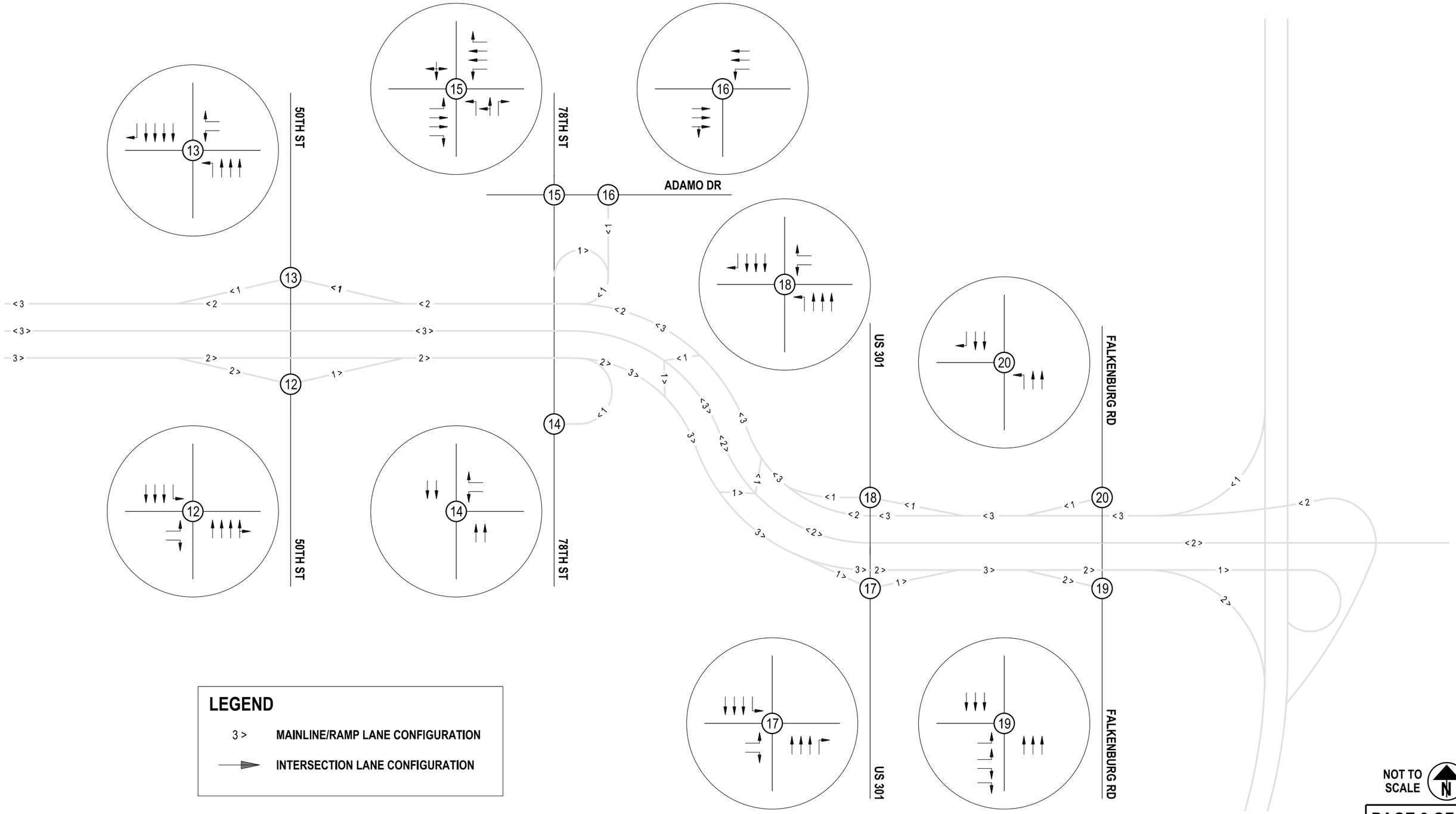
The recommendation to mitigate the capacity and operational issues is to construct **Build Alternative 3**. This alternative includes one additional lane of capacity in the local lanes and reversible express lanes, improved access to the reversible express lanes, a braided ramp configuration between US-301 and I-75, and improvements to select ramp terminal intersections. These improvements yield a significant benefit, resulting in a 7-18% increase in throughput and a 23-64% reduction in unserved demand.

This study assumed several improvements in the downtown area. Even still, there are remaining bottlenecks in the section from Brorein Street to the I-4 Connector:

- Westbound: Brorein Street off-ramp
- Eastbound: Between 22nd Street Ramps
- Eastbound: I-4 Connector off-ramp (two lanes to one lane)

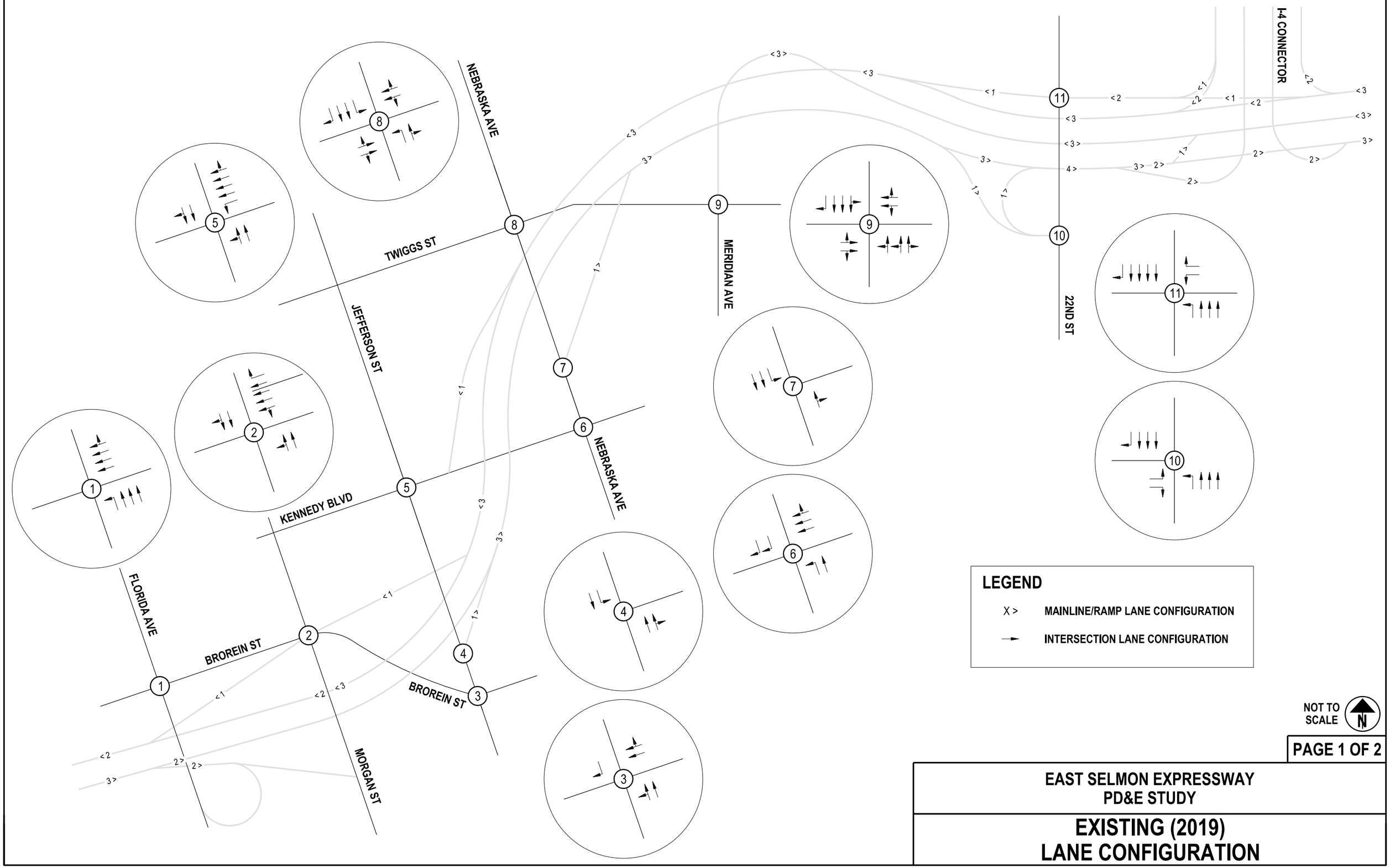
A future Downtown PD&E study will address these deficiencies. THEA should coordinate closely with the City of Tampa and FDOT to identify a strategic approach to optimizing throughput in this final remaining segment of the corridor.

Appendix A: EXISTING CONDITIONS



EAST SELMON EXPRESSWAY
PD&E STUDY

EXISTING (2019)
LANE CONFIGURATION



EAST SELMON EXPRESSWAY
PD&E STUDY

EXISTING (2019) LANE CONFIGURATION

Timingsheet, Controller Operation and Load Switch Page

SECID: 1207 Timing Date: 5/17/2018 Phasing Date: 5/17/2018 Shop Number: 1076 Drop:

Major Street **BROREIN** Orientation: Westbound Controller Type COBALT

Minor Street **FLORIDA** Orientation: Northbound Computer System Cen Last Date Sent 8/26/2014

Controller Timings (seconds)

Controller Phase Number		2		4				
Direction		WB		NB				
Minimum Green		10		10				
Vehicle Extention		3.0		3.0				
Yellow Clr/Alt Clr		3.7		3.7				
Red Clr/Alt Red Clr		2.1		2.4				
Max Green I		50		70				
Max Green II		50		70				
Walk		7		7				
Walk - XGuard								
FDW		17		23				
FDW - XGuard								
Detector Memory		---		---				
Phase Recall		MAX		MAX				
Ped Recall		ON		ON				
Flash Operation		YEL		RED				

Controller Operation

RXR Preempt: No FDOT SOP: 1 MOD

Fire Preempt: No Backup Protection: N

Bridge Preempt: No LPI Location(Y/N): Y

Transit Preempt: False LPI Date: 5/17/2018

Crossing Guard Times AM:

Crossing Guard Times PM:

Free Time Primary:

Free Time Secondary:

Flash Source- (C)omputer or (F)ield:

Flash Times Primary

Flash Times Secondary

CNA Ø's **Ø2, Ø4**

Phase Ring Assignments

Sequence 1	**Ring 1:**	1	2	|	3	4
	Ring 2:	5	6	|	7	8
Sequence 2	**Ring 1:**					
	Ring 2:					
Sequence 3	**Ring 1:**					
	Ring 2:					
Sequence 4	**Ring 1:**					
	Ring 2:					

Cabinet Load Switch Assignments

LS1:	LS2:	Ø2	LS3:		LS4:	Ø4	LS5:		LS6:		LS7:	P2	LS8:		P4
LS9:	LS10:		LS11:		LS12:		LS13:		LS14:		LS15:		LS16:		

Comments

UPDATED TIMINGS

ACTUATED PRETIMED OPERATION

LPI Location - 5sec green delay for Northbound.

Submitted By: [signature] Date: 5-31-18 Review By: [signature] Date: 6/11/18 Approved By BC Date: 06/12/2018

Implemented By: DW Date: 6-14-18 Notes:

Coordination Pattern Page

Print Date: 6/1/2018

Major Street: BROREIN

Minor Street: FLORIDA

Free Time Primary:

Free Time Secondary

Day Plan #1 - Mon-Thr patt 1 -7.
Day Plan #2 - Fri - patt 1 - 7 w/5 @ 14:45
Day Plan #3 - Sat - patt 7, then patt 2 all other times
Day Plan #4 - Sun - patt 7, then patt 2 all other times

Section Id: 1207 **Record Number:** 153 **Coord Date:** 7/12/2017

Min Green:		10		10					
Yellow CLR:		3.7		3.7					
All Red CLR:		2.1		2.4					
Walk:		7		7					
FDW:		17		23					
Direction:		WB		NB					
Ø Number:		2		4					

	Patterns	Cycle	Offset									
1.	0615 - 0900 AM Peak	140	43		60		80					
2.	0900 - 1115 AM Off Peak	120	84		50		70					
3.	1115 - 1330 Noon	120	84		50		70					
4.	1330 - 1515 PM Off Peak	120	84		50		70					
5.	1515 - 1830 PM Peak	140	46		60		80					
6.	1830 - 2000 Evening	120	84		50		70					
7.	2000 - 0615 Late	120	94		50		70					
8.		120	94		50		70					
9.	Convention Ctr - Outbound	120	94		50		70					
10.	Arena - Inbound	120	110		40		80					
11.	Arena - Outbound Fla Ave Closed	120	83		48		72					
12.	Marriott - Outbound PM	100	39		54		46					
13.	Arena - Outbound Fla Ave Opened	120	84		35		85					
14.	Arena - Inbound Flush	120	110		40		80					
15.	Arena Lg / Straz - Outbound	120	93		35		85					
16.	Hurricane	100	39		54		46					

Plan, SOP and Signal Heads Page

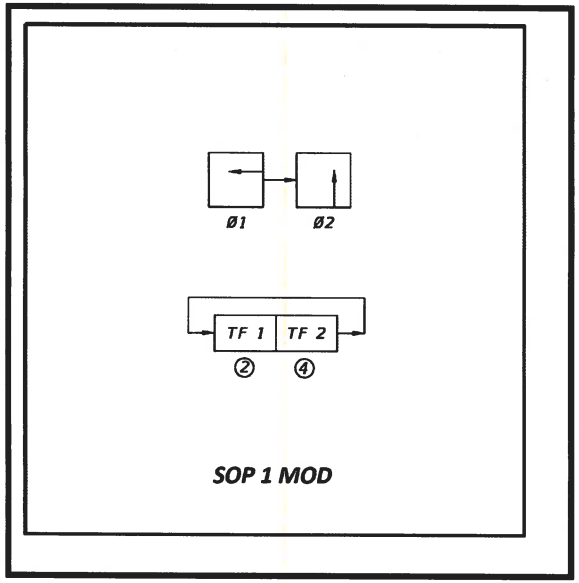
Print Date: 5/25/2018

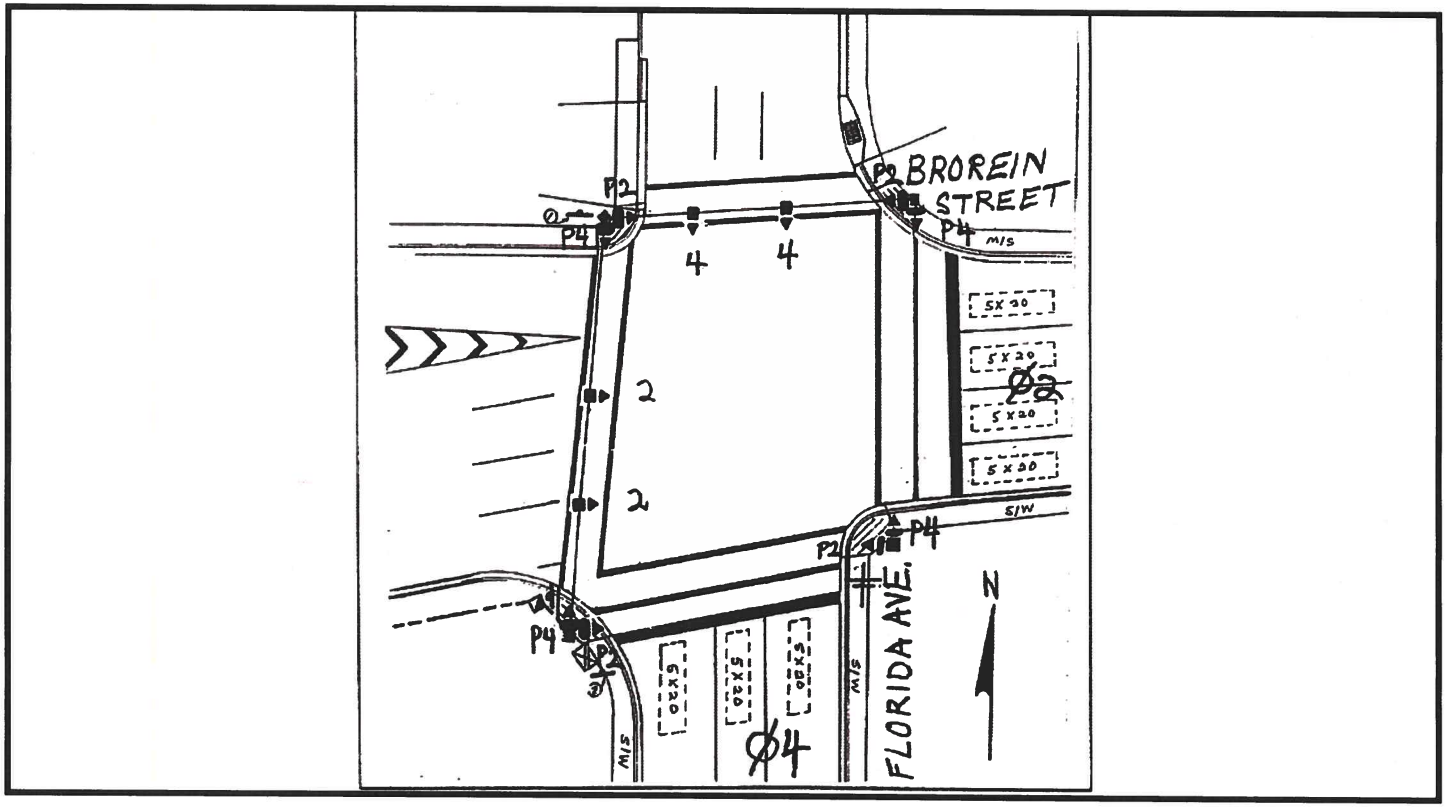
Section Id 1207 **Controller Type** COBALT

Major Street BROREIN

Minor Street FLORIDA

Coord Date 7/12/2017 **FDOT SOP:** 1 MOD





Ped 1 Selector	Sig 1 Selector	Sig 2 Selector	Sig 3 Selector	Sig 4 Selector	Sig 5 Selector	Sig 6 Selector	Sig 7 Selector	Sig 8 Selector
1ped-wlk-fdw-count	3-section-ball-vertica							
PED Signal 1:	Signal Head 1:	Signal Head 2:	Signal Head 3:	Signal Head 4:	Signal Head 5:	Signal Head 6:	Signal Head 7:	Signal Head 8:
P2, P4	2, 4							
								

Ped 2 Selector	Sig 9 Selector	Sig 10 Selector	Sig 11 Selector	Sig 12 Selector	Sig 13 Selector	Sig 14 Selector	Sig 15 Selector	Sig 16 Selector
PED Signal 2:	Signal Head 9:	Signal Head 10:	Signal Head 11:	Signal Head 12:	Signal Head 13:	SIGNAL HEAD 14	SIGNAL HEAD 15	SIGNA L HEAD 16

Timingsheet, Controller Operation and Load Switch Page

988

SECID: 1208 Timing Date: 5/17/2018 Phasing Date: 5/17/2018 Shop Number: 1469 Drop:

Major Street **BROREIN** Orientation: Westbound Controller Type COBALT

Minor Street **MORGAN** Orientation: North-South Computer System Cen Last Date Sent 7/28/2014

Controller Timings (seconds)

Controller Phase Number		2		4				
Direction		WB		N/S				
Minimum Green		10		10				
Vehicle Extention		3.0		3.0				
Yellow Clr/Alt Clr		3.7		3.7				
Red Clr/Alt Red Clr		2		2.3				
Max Green I		55		25				
Max Green II		80		35				
Walk		7		7				
Walk - XGuard								
FDW		12		19				
FDW - XGuard								
Detector Memory		---		---				
Phase Recall		MAX		MAX				
Ped Recall		ON		ON				
Flash Operation		YEL		RED				

Controller Operation

RXR Preempt: No FDOT SOP: 1 MOD

Fire Preempt: No Backup Protection: N

Bridge Preempt: No LPI Location(Y/N): No

Transit Preempt: False LPI Date:

Crossing Guard Times AM:

Crossing Guard Times PM:

Free Time Primary:

Free Time Secondary:

Flash Source- (C)omputer or (F)ield:

Flash Times Primary

Flash Times Secondary

CNA Ø's **Ø2, Ø4**

Cabinet Load Switch Assignments

LS1:		LS2:	Ø2	LS3:		LS4:	Ø4	LS5:	LS6:	LS7:	LS8:
LS9:	P2	LS10:	P4	LS11:		LS12:		LS13:	LS14:	LS15:	LS16:

Phase Ring Assignments

Sequence 1	**Ring 1:**	1	2	3	4	
	Ring 2:	5	6	7	8	
Sequence 2	**Ring 1:**					
	Ring 2:					
Sequence 3	**Ring 1:**					
	Ring 2:					
Sequence 4	**Ring 1:**					
	Ring 2:					

Comments

MAX II: MONDAY THRU THURSDAY (06:15 - 09:00 & 15:15 - 18:30) / FRIDAY (06:15 - 09:00 & 14:45 - 18:30)

MAX I ALL OTHER TIMES

UPDATED TIMINGS

NOTE: APPLY ACTUATED PRE-TIMED OPERATION.

Submitted By: CMB Date: 10/30/18 Review By: [signature] Date: 11-1-18 Approved By BC Date: 11/01/2018

Implemented By: DW Date: 11/7/18 Notes:

Coordination Pattern Page

Ver. E

Print Date: 10/30/2018

Major Street: BROREIN **Section Id:** 1208 **Record Number:** 154 **Coord Date:** 6/4/2018

Minor Street: MORGAN

Coord M-F: Mon - Thur patt 1 - 7, Fri patt 1 - 7 w/5 @ 1445

Coord WkEnd: Sat - Sun patt 7 & patt 2 all other times

Coord Free:

Coord Sp Ops:

Direction:		WB		N/S										
Ø Number:		2		4										

	Patterns	Sequence	Cycle	Offset										
1.	0615 - 0900 AM Peak	1	140	35		94		46						
2:	0900 - 1115 AM Off Peak	1	120	75		80		40						
3.	1115 - 1330 Noon	1	120	75		80		40						
4.	1330 - 1515 PM Off Peak	1	120	75		80		40						
5.	1515 - 1830 PM Peak	1	140	29		94		46						
6.	1830 - 2000 Evening	1	120	75		80		40						
7.	2000 - 0615 Late	1	120	75		80		40						
8.		1	120	75		80		40						
9.	Convention Ctr - Outbound	1	120	75		80		40						
10.	Arena - Inbound	1	120	97		45		75						
11.	Arena - Outbound Fla Ave Closed	1	120	31		40		80						
12.	Marriott - Outbound PM	1	100	95		30		70						
13.	Arena - Outbound Fla Ave Opened	1	120	75		40		80						
14.	P.A.C. - Out	1	120	97		45		75						
15.	Arena Lg / P.A.C. - Outbound	1	120	32		60		60						
16.	Hurricane	1	100	32		66		34						

Plan, SOP and Signal Heads Page

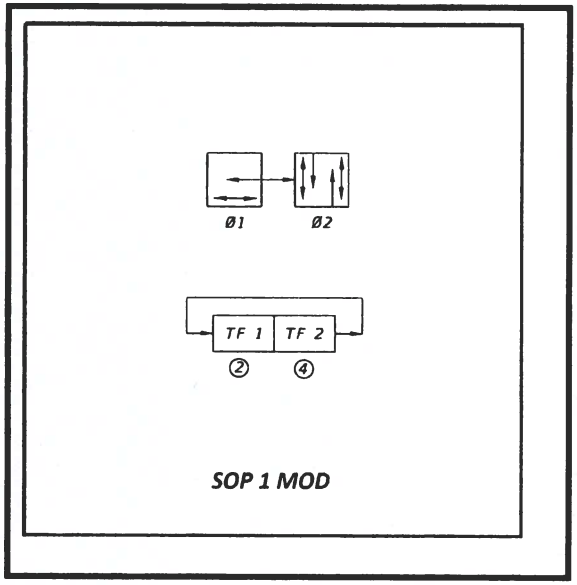
Print Date: 10/30/2018

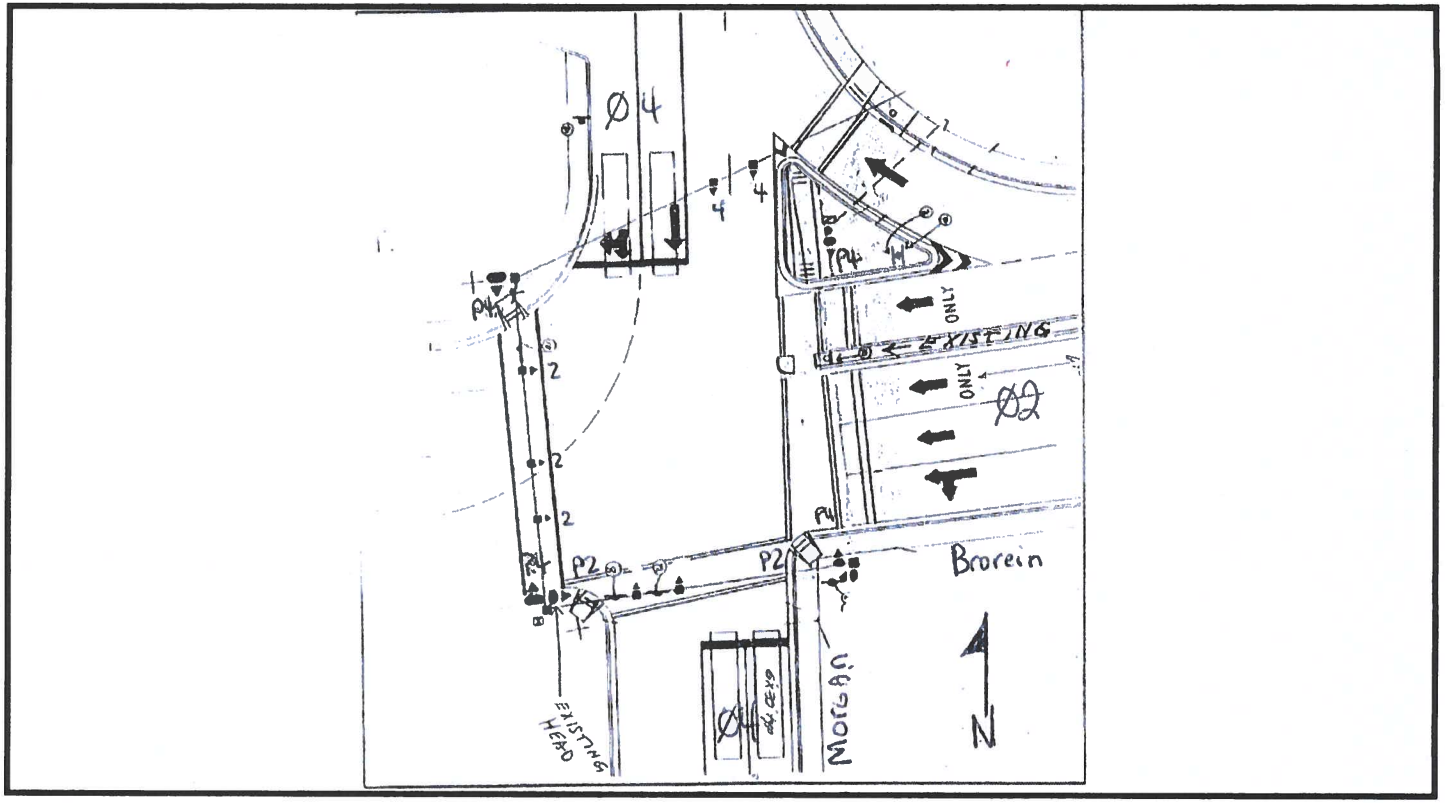
Section Id 1208 **Controller Type** COBALT

Major Street BROREIN

Minor Street MORGAN

Coord Date 6/4/2018 **FDOT SOP:** 1 MOD





Ped 1 Selector	Sig 1 Selector	Sig 2 Selector	Sig 3 Selector	Sig 4 Selector	Sig 5 Selector	Sig 6 Selector	Sig 7 Selector	Sig 8 Selector
1ped-wlk-fdw-count	3-section-ball-vertica							
PED Signal 1:	Signal Head 1:	Signal Head 2:	Signal Head 3:	Signal Head 4:	Signal Head 5:	Signal Head 6:	Signal Head 7:	Signal Head 8:
P2, P4	2, 4							

Ped 2 Selector	Sig 9 Selector	Sig 10 Selector	Sig 11 Selector	Sig 12 Selector	Sig 13 Selector	Sig 14 Selector	Sig 15 Selector	Sig 16 Selector
PED Signal 2:	Signal Head 9:	Signal Head 10:	Signal Head 11:	Signal Head 12:	Signal Head 13:	SIGNAL HEAD 14	SIGNAL HEAD 15	SIGNA L HEAD 16

Timingsheet, Controller Operation and Load Switch Page

SECID: 1209 Timing Date: 5/17/2018 Phasing Date: 5/17/2018 Shop Number: 1002 Drop:

Major Street **BROREIN** Orientation: Westbound Controller Type COBALT

Minor Street **JEFFERSON** Orientation: North-South Computer System Cen Last Date Sent 2/26/2015

Controller Timings (seconds)

Controller Phase Number		2		4				
Direction		WB		NB				
Minimum Green		10		10				
Vehicle Extention		2.0		2.0				
Yellow Clr/Alt Clr		3.7		3.7				
Red Clr/Alt Red Clr		2		2				
Max Green I		80		60				
Max Green II		80		60				
Walk		7		7				
Walk - XGuard								
FDW		11		11				
FDW - XGuard								
Detector Memory		---		---				
Phase Recall		MAX		MAX				
Ped Recall		ON		ON				
Flash Operation		YEL		RED				

Controller Operation

RXR Preempt: No FDOT SOP: 1 MOD

Fire Preempt: No Backup Protection: N

Bridge Preempt: No LPI Location(Y/N): No

Transit Preempt: False LPI Date:

Crossing Guard Times AM:

Crossing Guard Times PM:

Free Time Primary:

Free Time Secondary:

Flash Source- (C)omputer or (F)ield:

Flash Times Primary

Flash Times Secondary

CNA Ø's **Ø2, Ø4**

Cabinet Load Switch Assignments

LS1:		LS2:	Ø2	LS3:	LS4:	Ø4	LS5:	LS6:	LS7:	LS8:
LS9:	P2	LS10:	P4	LS11:	LS12:		LS13:	LS14:	LS15:	LS16:

Phase Ring Assignments

Sequence 1	**Ring 1:**	1 2 | 3 4
	Ring 2:	5 6 | 7 8
Sequence 2	**Ring 1:**	
	Ring 2:	
Sequence 3	**Ring 1:**	
	Ring 2:	
Sequence 4	**Ring 1:**	
	Ring 2:	

Comments

UPDATED TIMINGS

E.O.C. RESISTOR TO BE INSTALLED ON RECEIVE

ACTUATED PRETIMED OPERATION

Submitted By: [signature] Date: 10/30/18 Review By: [signature] Date: 10-31-18 Approved By BC Date: 11/6/2018

Implemented By: DW Date: 11/8/18 Notes:

Coordination Pattern Page

Ver. E

Print Date: 10/31/2018

Major Street: BROREIN **Section Id:** 1209 **Record Number:** 155 **Coord Date:** 6/4/2018

Minor Street: JEFFERSON

Coord M-F: Day Plan 1 Mon - Thurs, Day Plan 2 Friday

Coord WkEnd: Day Plan 3 Saturday, Day Plan 4 Sunday

Coord Free:

Coord Sp Ops:

Direction:		WB		NB				
Ø Number:		2		4				

	Patterns	Sequence	Cycle	Offset								
1.	0615 - 0900 AM Peak	1	140	30		115		25				
2:	0900 - 1130 AM Off Peak	1	120	70		95		25				
3.	1130 - 1330 Noon	1	120	70		95		25				
4.	1330 - 1515 PM Off Peak	1	120	70		95		25				
5.	1515 - 1830 PM Peak	1	140	45		95		45				
6.	1830 - 2000 Evening	1	120	70		95		25				
7.	2000 - 0615 Late	1	120	70		95		25				
8.		1	120	70		95		25				
9.	Convention Ctr - Outbound	1	120	84		60		60				
10.	Arena - Inbound	1	120	84		85		35				
11.	Arena - Outbound Fla Ave Closed	1	120	21		90		30				
12.	Marriott - Outbound PM	1	100	95		65		35				
13.	Arena - Outbound Fla Ave Opened	1	120	71		40		80				
14.	Straz - Outbound	1	120	84		85		35				
15.	Arena Lg / Straz - Outbound	1	120	22		80		40				
16.	Hurricane	1	100	23		60		40				

Plan, SOP and Signal Heads Page

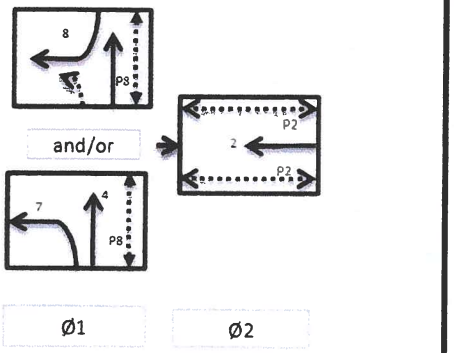
Print Date: 10/30/2018

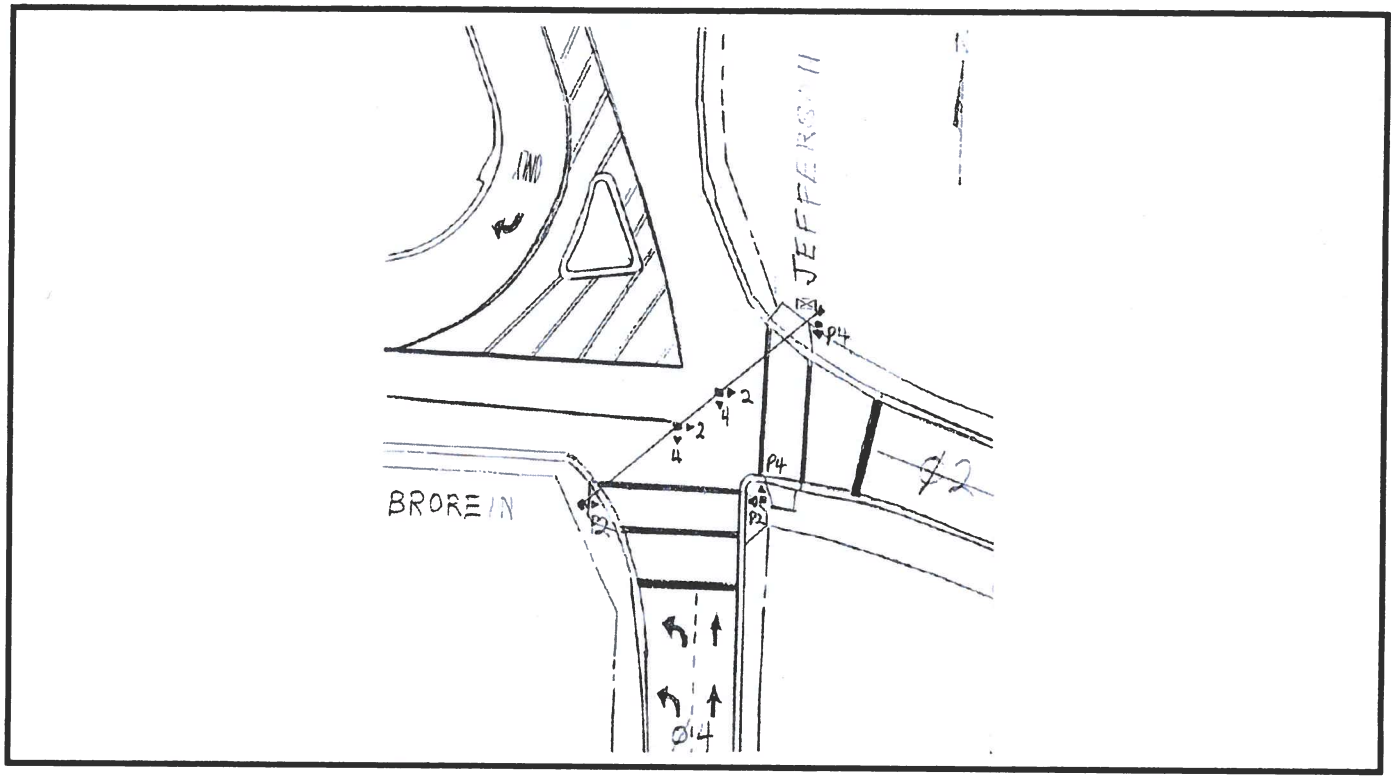
Section Id 1209 **Controller Type** COBALT

Major Street BROREIN

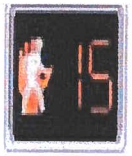
Minor Street JEFFERSON

Coord Date 6/4/2018 **FDOT SOP:** 1 MOD





Ped 1 Selector	Sig 1 Selector	Sig 2 Selector	Sig 3 Selector	Sig 4 Selector	Sig 5 Selector	Sig 6 Selector	Sig 7 Selector	Sig 8 Selector
1ped-wlk-fdw-count	3-section-ball-vertica							
PED Signal 1:	Signal Head 1:	Signal Head 2:	Signal Head 3:	Signal Head 4:	Signal Head 5:	Signal Head 6:	Signal Head 7:	Signal Head 8:
P2,P4	Ø2,Ø4							



Ped 2 Selector	Sig 9 Selector	Sig 10 Selector	Sig 11 Selector	Sig 12 Selector	Sig 13 Selector	Sig 14 Selector	Sig 15 Selector	Sig 16 Selector
PED Signal 2:	Signal Head 9:	Signal Head 10:	Signal Head 11:	Signal Head 12:	Signal Head 13:	SIGNAL HEAD 14	SIGNAL HEAD 15	SIGNA L HEAD 16

Timingsheet, Controller Operation and Load Switch Page

SECID: 75 Timing Date: 10/31/2017 Phasing Date: 10/31/2000 ARCGIS Node ID: Shop Number: 1746 Drop: 8

Major Street **JEFFERSON** Orientation: North-South Controller Type COBALT

Minor Street **KENNEDY** Orientation: Westbound Computer System Cen Date Sen 5/6/2014

Controller Timings (seconds)

Controller Phase Number		2		4				
Direction		N/S		WB				
Minimum Green		10		10				
Vehicle Extention		3.0		3.0				
Yellow Clr/Alt Clr		3.7		3.7				
Red Clr/Alt Red Clr		2.2		2.0				
Max Green I		50		85				
Max Green II		50		85				
Walk		7		7				
Walk - XGuard		---		---				
FDW		13		13				
FDW - XGuard		---		---				
Detector Memory		---		---				
Phase Recall		MAX		MAX				
Ped Recall		ON		ON				
Flash Operation		RED		YEL				

Controller Operation

RXR Preempt: No FDOT SOP: 1 Mod

Fire Preempt: No Backup Protection: N

Bridge Preempt: No FDOT Walk Y

Transit Preempt: False FDOT FDW: Y

Crossing Guard Times AM:

Crossing Guard Times PM:

Free Time Primary:

Free Time Secondary:

Flash Source- (C)omputer or (F)ield:

Flash Times Primary

Flash Times Secondary

CNA Ø's **Ø2, Ø4**

Phase Ring Assignments

Sequence 1	**Ring 1:**	2 | 4
	Ring 2:	
Sequence 2	**Ring 1:**	
	Ring 2:	
Sequence 3	**Ring 1:**	
	Ring 2:	
Sequence 5	**Ring 1:**	
	Ring 2:	

Cabinet Load Switch Assignments

LS1: LS2: Ø2 LS3: LS4: Ø4 LS5: LS6: LS7: P2 LS8: P4

LS9: LS10: LS11: LS12: LS13: LS14: LS15: LS16:

Comments

UPDATED TIMINGS

ACTUATED PRETIMED OPERATION

Submitted By: Date: 12-8-17 Review By: Date: 12-8-17 Approved By Date: 12-8-17

Implemented By: Date: 6-8-18 Notes:

Coordination Pattern Page

Print Date: 12/8/2017

Major Street: JEFFERSON

Minor Street: KENNEDY

Free Time Primary:

Free Time Secondary

Day Plan #1 - Mon-Thr patt 1 -7
Day Plan #2 - Fri - patt 1 - 7 w/5 @ 14:45
Day Plan #3 - Sat - patt 7, then patt 6 all other times
Day Plan #4 - Sun - patt 7, then patt 6 all other times

Section Id: 75 **Record Number:** 560 **Coord Date:** 10/31/2017

Min Green:		10		10				
Yellow CLR:		3.7		3.7				
All Red CLR:		2.2		2.0				
Walk:		7		7				
FDW:		13		13				

Direction:		N/S		WB				
Ø Number:		2		4				

	Patterns	Cycle	Offset									
1.	0615 - 0900 AM Peak	140	9		70		70					
2.	0900 - 1115 AM Off Peak	120	20		60		60					
3.	1115 - 1330 Noon	120	20		60		60					
4.	1330 - 1515 PM Off Peak	120	20		60		60					
5.	1515 - 1830 PM Peak	140	135		70		70					
6.	1830 - 2000 Evening	120	20		60		60					
7.	2000 - 0615 Late	120	20		60		60					
8.		120	20		60		60					
9.	Convention Ctr - Outbound	120	30		40		80					
10.	Arena - Inbound	120	30		40		80					
11.	Arena - Out Fla Ave Closed	120	51		85		35					
12.	Art Festival - Inbound	120	28		36		84					
13.	Arena - Out Fla Ave Opened	120	51		80		40					
14.	Straz - Outbound	120	5		54		66					
15.	Arena Lg/Straz - Outbound	120	30		40		80					
16.	Hurricane	100	1		40		60					

Timingsheet, Controller Operation and Load Switch Page

SECID: 81 Timing Date: 6/20/2018 Phasing Date: 6/20/2018 Shop Number: 1769 Drop:

Major Street **NEBRASKA** Orientation: North-South Controller Type COBALT

Minor Street **KENNEDY** Orientation: Westbound Computer System Cen Last Date Sent

Controller Timings (seconds)

Controller Phase Number		**Ø2**		**Ø4**		**Ø6**		
Direction		**SBRT**		**WB**		**NB**		
Minimum Green		10		10		10		
Vehicle Extention		3.0		3.0		3.0		
Yellow Clr/Alt Clr		3.7		3.7		3.7		
Red Clr/Alt Red Clr		2.2		2.1		2.2		
Max Green I		25		25		25		
Max Green II		25		55		25		
Walk		7		7		7		
Walk - XGuard		---		---		---		
FDW		14		17		12		
FDW - XGuard		---		---		---		
Detector Memory		---		---		---		
Phase Recall		MAX		MAX		MAX		
Ped Recall		---		ON		ON		
Flash Operation		RED		RED		RED		

Controller Operation

RXR Preempt: No FDOT SOP: 13 MOD

Fire Preempt: No Backup Protection: N

Bridge Preempt: No LPI Location(Y/N): No

Transit Preempt: False LPI Date:

Crossing Guard Times AM:

Crossing Guard Times PM:

Free Time Primary:

Free Time Secondary:

Flash Source- (C)omputer or (F)ield:

Flash Times Primary

Flash Times Secondary

CNA Ø's **2+6**

Phase Ring Assignments

Sequence 1
Ring 1: 1 2 | 3 4
Ring 2: 5 6 | 7 8

Sequence 2
Ring 1:
Ring 2:

Sequence 3
Ring 1:
Ring 2:

Sequence 4
Ring 1:
Ring 2:

Cabinet Load Switch Assignments

LS1: OLE	LS2: OLF	LS3:	LS4: Ø4	LS5:	LS6: Ø6	LS7:	LS8:
LS9: P2	LS10: P4	LS11: P6	LS12:	LS13:	LS14:	LS15:	LS16:

Comments

Ø2 is parent phase to OLF. OLF is also ped protected from Ø2.

Ø6 is paerent phase to OLE 3 section flashing yellow arrow.

OLE protect (PED) 2

Submitted By: MJ Date: 7-9-18 Review By: SS Date: 7/9/18 Approved By BC Date: 07/09/2018

Implemented By: [illegible signature] Date: 7-11-18 Notes: INS NB LT W/ FYA [illegible] ARROW

Coordination Pattern Page

Print Date: 7/9/2018

Major Street: NEBRASKA

Minor Street: KENNEDY

Free Time Primary:

Free Time Secondary

Day Plan #1 - Mon-Thr patt 1 -7.
Day Plan #2 - Fri - patt 1 - 7 w/5 @ 14:45
Day Plan #3 - Sat - patt 7, then patt 2 all other times
Day Plan #4 - Sun - patt 7, then patt 2 all other times

Section Id: 81 **Record Number:** 563 **Coord Date:** 10/24/2017

Min Green:		10		10		10		
Yellow CLR:		3.7		3.7		3.7		
All Red CLR:		2.2		2.1		2.2		
Walk:		7		7		7		
FDW:		14		17		12		
Direction:		SBRT		WB		NB		
Ø Number:		Ø2		Ø4		Ø6		

	Patterns	Cycle	Offset									
1.	0615 - 0900 AM Peak	140	15		50		90		50			
2.	0900 - 1115 AM Off Peak	120	86		60		60		60			
3.	1115 - 1330 Noon	120	86		60		60		60			
4.	1330 - 1515 PM Off Peak	120	86		60		60		60			
5.	1515 - 1830 PM Peak	140	60		50		90		50			
6.	1830 - 2000 Evening	120	86		60		60		60			
7.	2000 - 0615 Late	120	86		60		60		60			
8.		120	86		60		60		60			
9.	Convention Ctr - Outbound	120	86		30		90		30			
10.	Arena - Inbound	120	15		32		88		32			
11.	Arena - Out Fla Ave Closed	120	10		60		60		60			
12.	Art Festival Inbound	120	85		40		60		40			
13.	Arena - Out Fla Ave Opened	120	104		29		91		29			
14.	Straz - Outbound	120	80		32		88		32			
15.	Arena Lg/Straz Outbound	120	92		30		90		30			
16.	Hurricane	100	85		40		60		40			

Plan, SOP and Signal Heads Page

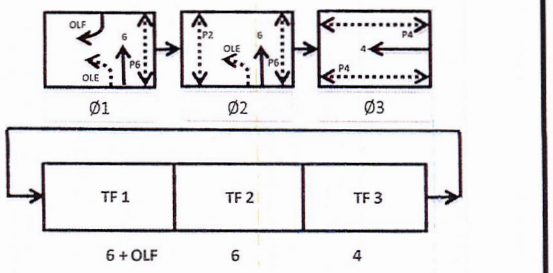
Print Date: 7/9/2018

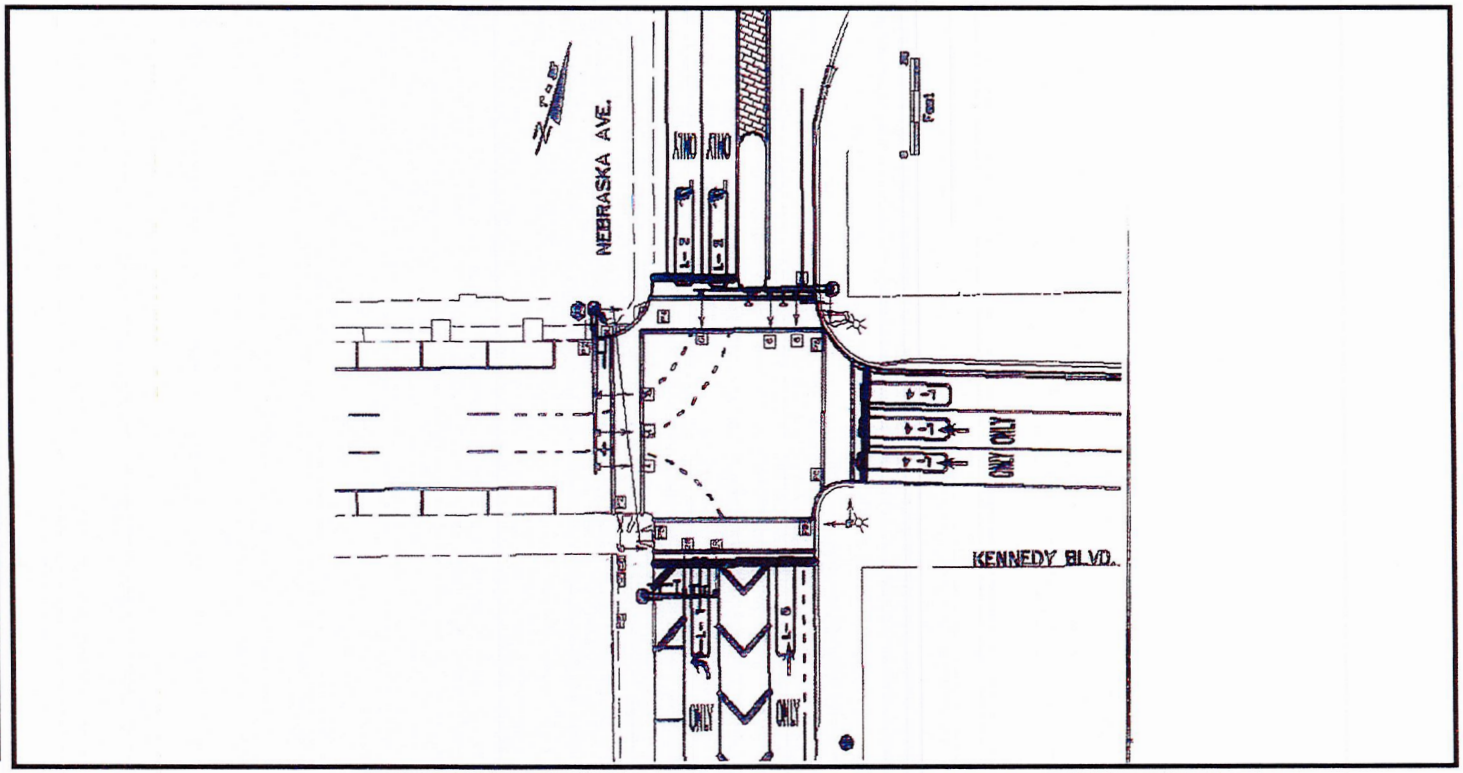
Section Id 81 **Controller Type** COBALT

Major Street NEBRASKA

Minor Street KENNEDY

Coord Date 10/24/2017 **FDOT SOP:** 13 MOD





Ped 1 Selector	Sig 1 Selector	Sig 2 Selector	Sig 3 Selector	Sig 4 Selector	Sig 5 Selector	Sig 6 Selector	Sig 7 Selector	Sig 8 Selector
1ped-wlk-fdw-count	3-section-ball-vertica	3-section-ylfl-yl-rl	3-section-gr-yr-rr-ver					
PED Signal 1:	Signal Head 1:	Signal Head 2:	Signal Head 3:	Signal Head 4:	Signal Head 5:	Signal Head 6:	Signal Head 7:	Signal Head 8:
P2, P4, P6	4, 6	6L	2					
								

Ped 2 Selector	Sig 9 Selector	Sig 10 Selector	Sig 11 Selector	Sig 12 Selector	Sig 13 Selector	Sig 14 Selector	Sig 15 Selector	Sig 16 Selector
PED Signal 2:	Signal Head 9:	Signal Head 10:	Signal Head 11:	Signal Head 12:	Signal Head 13:	SIGNAL HEAD 14	SIGNAL HEAD 15	SIGNA L HEAD 16

City of Tampa Signal Timing Sheet

Section ID: 80 Computer: M CCU: 20 Drop: 9 Shop ID: 1465

Timing Date: 4/21/2014 Phase Date: 4/1/2013 Controller: Econo ASC3S

Intersection: NEBRASKA / TWIGGS

Phase Numbers		2			5	6		8
Direction		SB			SBLT	NB		EB
Minimum Green		10			5	10		10
Walk		7			---	7		7
Flash Don't Walk		15			---	15		16
Vehicle Extension		3.0			2.0	3.0		3.0
Max. Green I		40			15	40		40
Max. Green II		40			15	40		40
Yellow Clearance		3.7			3.7	3.7		3.7
All Red Clearance		2.3			2.0	2.3		2.4
Phase Recall		MAX				MAX		MAX
Detector Memory		---			---	---		---
Ped. Recall		ON				ON		ON
Flash Operation		YEL				YEL		RED

Special Modes and Times of Operation:

Surveillance Times:

Flash Source: Flash Times:

C = Computer Flash T = Time Clock/Controller

Special Functions:

FDOT SOP: 11 MOD

Backup Protection (Y/N): Y

FDOT FDW (Y/N): Y

Please Implement Within : [X] 1 Week [ ] 1 Month

Comments:

ACTUATED PRE-TIMED OPERATION
TSP Location. IP 172.19.45.66

Submitted By: GT Date: 4-22-14

Reviewed By: JS Date: 4-22-14

Approved By: [illegible] Date: 4/22/14

Signal Timing Implemented: [✓] As sent . [ ] With the following revisions

Date: 2/26/15 By: M.L

Signal Timing Not Implemented: [ ] Reasons: _____

Date: _____ By: _____

2/26

CITY OF TAMPA COMPUTER PATTERN SHEET

80

80 - NEBRASKA & TWIGGS

ECONOLITE

Timing Date: 03/31/2017		MIN	10	10	5
		YEL	3.7	3.7	3.7
MSX: M CCU: 14 Drop: 1		RED	2.3	2.4	2
		WLK	7	7	
Structures: 1		FDW	15	16	
Lead / Lag:	Min - 57		29	17	11

Pat			CYC	OS	2/6	8	5
1	Am	0615 - 0900	140	119	33	95	12
2	Am off	0900 - 1115	120	114	40	68	12
3	Noon	1115 - 1330	120	60	40	68	12
4	Pm off	1330 - 1515	120	60	53	55	12
5	Pm	1515 - 1830	140	130	35	65	40
6	Evening	1830 - 2000	120	114	33	75	12
7	Late	2000 - 0615	120	60	33	75	12
8			120	114	33	75	12
9	Convention Ctr - Out		120	60	30	70	20
10	Arena-In		90	32	33	45	12
11	Arena-Out Fla Closed		240	92	193	35	12
12	Art Festival In		120	114	33	75	12
13	Arena-Out Fla Opened		120	92	33	75	12
14	P.A.C. - Out		90	32	33	45	12
15	Arena Lg/ P.A.C. Out		120	60	48	60	12
16	Hurricane		90	32	33	45	12

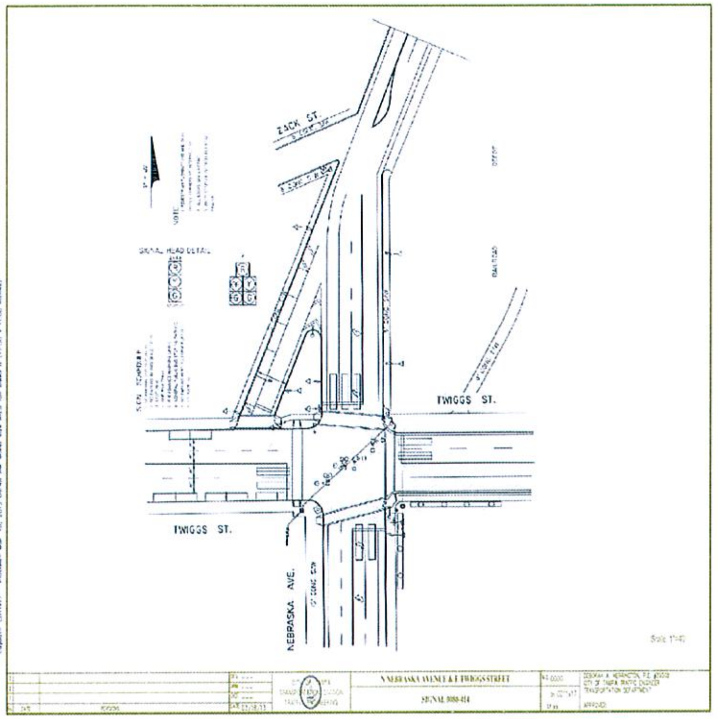
Call on 4 & 8 for Pattern 1

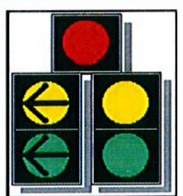
T.B.C. Day Plan 1: M-Th patt 1-7 Day Plan 2: Fri patt 1-7 w/5 @ 14:45
Day Plan 3: S-Su patt 7 and patt 2 all other times

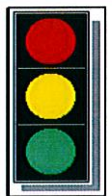
City of Tampa - Phasing Diagram

DWG	8/20/2013
Vers.	2/15/2010
Pg:	1 of 1

Sect. I.D.#	80		
Location:	NEBRASKA / TWIGGS	Prepared by GT	Reviewed by [signature]







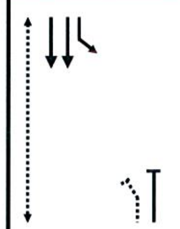
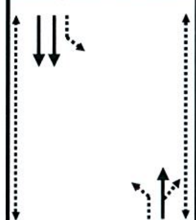
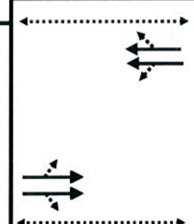
5/2

2, 6, 8

P2, P6, P8

8 phase controller in concurrent, semi-actuated 4 phase operation. CNA phases are Ø2 & Ø6. Backup Protection - 'ON'. Ped heads and buttons on P2, P6, and P8.

FDOT SOP 11 MOD

Phasing Date: 5/15/2007	Overlaps / Signal Head Numbers		2	6	8	5/2		P2	P4	P6	P8
Controller:	Econolite										
Vehicle	Flashing Operation		Y	Y	R		Y		N/A		
Movements	**Phase**	**Interval**	**Display Sequence**								
	Ø2 & Ø5	RW	G	R	R	←G	G	W		DW	DW
		Clear Ped	G	R	R	←G	G	FDW		DW	DW
		Clear to	G	R	R	←Y	G	DW		DW	DW
		Ø2 & Ø6	G	R	R		G	DW		DW	DW
	Ø2 & Ø6	RW	G	G	R		G	W		W	DW
		Clear Ped	G	G	R		G	FDW		FDW	DW
		Clear to	Y	Y	R		Y	DW		DW	DW
		Ø4 & Ø8	R	R	R		R	DW		DW	DW
	Ø8	RW	R	R	G		R	DW		DW	W
		Clear Ped	R	R	G		R	DW		DW	FDW
		Clear to	R	R	Y		R	DW		DW	DW
		All Other	R	R	R		R	DW		DW	DW
		Signal Head #	2	6	8	5/2					
		Econolite Overlaps									
		Load Switch #	LS2	LS6	LS8	LS5	LS2				
		Peek Overlaps									

City of Tampa Signal Timing Sheet

Form Ver : 4/19/2017

Section ID: 1301 Computer: M CCU: 14 Drop: 3 Facilities ID: Shop ID: 2095

Timing Date: 9/29/2015 Phase Date: 8/25/2017 Controller: COBALT

Intersection: TWIGGS / MERIDIAN

Phase Numbers	1	2	4	6	7	8
Direction	EBLT	WB	NB	EB	NBLT	SB
Minimum Green	5	10	10	10	5	10
Walk	---	---	7	7	7	
Walk - XGuard						
FDW	---	---	13	32	13	---
FDW - XGuard						
Vehicle Extension	3.0	3.0	3.0	3.0	2.0	3.0
Max. Green I	10	30	20	30	10	20
Max. Green II	15	30	40	30	15	60
Yellow Clr/Alt Yel Cl	4.0	4.0	4.4	4.0	4.4	4.4
Red Clr/Alt Red Clr	2.0	2.8	2.0	2.8	2.5	2.0
Phase Recall	MAX	MAX	---	MAX	---	---
Detector Memory	---	---	---	---	---	---
Ped. Recall	---	---	---	---	---	---
Flash Operation	---	RED	RED	RED	---	RED

Special Modes and Times of Operation:

Free Operation Time

Free Operation Other Tim

Crossing Guard Times A

Railroad Preempt: Yes Fire Preempt: No Bridge Preempt: No

Crossing Guard Times P

Transit Preemp False

Flash Source: C = Computer T = TOD/Controller

Flash Time Primary:

Special Functions:

Flash Time Secondary:

FDOT SOP: 16 MOD

Backup Protection (Y/N): Y

FDOT FDW (Y/N): Y

Comments:

*UPDATED FDOT CLEARANCES BY FALLER DAVIS

Please Implement Signal Timings Within : [ ] 1 Week [ ] 1 Month

Submitted By: GT Date: 8.24.17

Reviewed By: RM Date: 8.25.17

Approved By: RM Date: 8.25.17

Implemented By: MJF Date: 8/30/2017

Implemented as sent: [X] With the following revisions below: [ ] Returned, not implemented: [ ]

COMPUTER PATTERN SHEET

1301
1301
STRUCTURE 1

CITY OF TAMPA

1301 - TWIGGS & MERIDIAN

ECONOLITE

Timing Date: 8/25/2017 MSX: M CCU: 14 Drop: 5 Structures: 12 Lead / Lag:			MIN YEL RED WLK FDW Min - 69	10 4 2.8 17	10 4.4 2 17	10 4.4 2 7 13 17	5 4 2 12
Pat			CYC	OS	EW	SB	NB	EBLT
1	Am	0515 - 0900						
2	Am off	0900 - 1115						
3	Noon	1115 - 1300						
4	Pm off	1300 - 1515	60	45	28	15	15	12
5	Pm	1515 - 1830	140	125	38	16	40	46
6	Evening	1830 - 2200	60	45	18	15	15	12
7	Late	2200 - 0515	60	45	18	15	15	12
8	Late		120	45	51	17	16	36
9	Convention Ctr - Out		120	55	51	17	16	32
10	Arena-In		70	25	24	16	16	14
11	Arena-Out Fla Closed		70	25	20	16	20	14
12	Marriott (Out Pm)		70	25	20	16	20	14
13	Arena-Out Fla Opened		120	0	37	16	55	12
14	P.A.C. - Out		70	25	20	16	20	14
15	Arena Lg/ P.A.C. Out		70	25	20	16	20	14
16	Hurricane		70	25	20	16	20	14

Call for phase 8 during pattern 1 A.M. Closed
Call for phase 4 16:15 - 18:30 M-F P.M. Open
Call for phase 8 at 05:15 M-F
Omit EBLT (01) Pat 8,9,10,11,12,13,14,15
Call on NB (04) Pat 6,7,8,9,10,11,12,13,14,15

T.B.C. Day Plan 1: M-Th patt 1-7 Day Plan 2: Fri patt 1-7 w/5 @ 14:45
Day Plan 3: S-Su patt 7 and patt 6 all other times

COMPUTER PATTERN SHEET

1301
1301
STRUCTURE 2

CITY OF TAMPA

1301 - TWIGGS & MERIDIAN

ECONOLITE

Timing Date: 8/25/2017 MSX: M CCU: 14 Drop: 5 Structures: 12 Lead / Lag:			MIN YEL RED WLK FDW Min - 52	10 4 2.8 17	5 4.4 2.5 7 13 12	10 4.4 2 17
Pat			CYC	OS	EW	NBLT	SB
1	Am	0515 - 0900	140	122	47	12	81
2	Am off	0900 - 1115	60	0	29	13	18
3	Noon	1115 - 1300	60	0	29	13	18
4	Pm off	1300 - 1515					
5	Pm	1515 - 1830					
6	Evening	1830 - 2200					
7	Late	2200 - 0515					
8	Late						
9	Convention Ctr - Out						
10	Arena-In						
11	Arena-Out Fla Closed						
12	Marriott (Out Pm)						
13	Arena-Out Fla Opened						
14	P.A.C. - Out						
15	Arena Lg/ P.A.C. Out						
16	Hurricane						

Call for phase 8 during pattern 1 A.M. Closed
Call for phase 4 16:15 - 18:30 M-F P.M. Open
Call for phase 8 at 05:15 M-F
Omit EBLT (01) Pat 8,9,10,11,12,13,14,15
Call on NB (04) Pat 6,7,8,9,10,11,12,13,14,15

T.B.C. Day Plan 1: M-Th patt 1-7 Day Plan 2: Fri patt 1-7 w/5 @ 14:45
Day Plan 3: S-Su patt 7 and patt 6 all other times

City of Tampa - Phasing Diagram

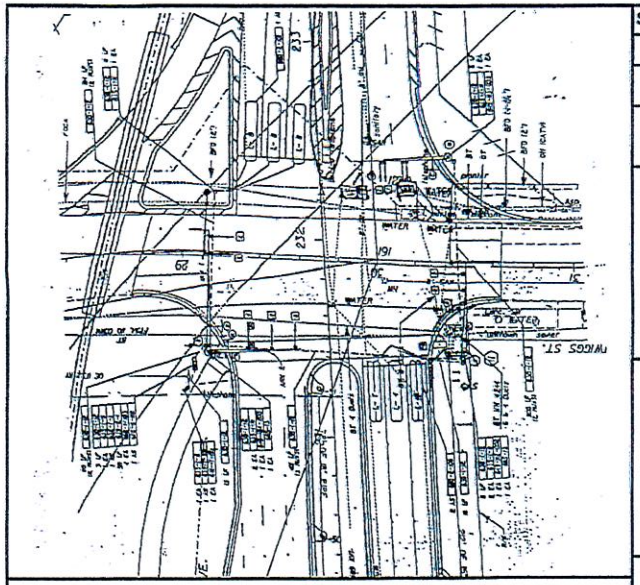
Pg: 1 of 2

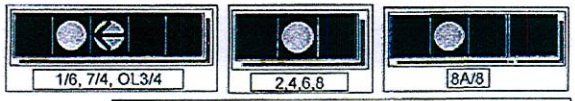
Sect. I.D.# 1301

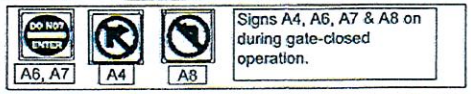
Location: Twiggs / Meridian

Prepared by GT Reviewed by

Date: 6/14/2006



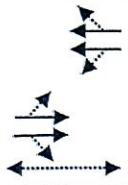
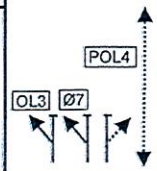
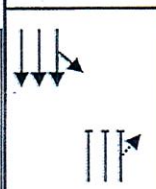


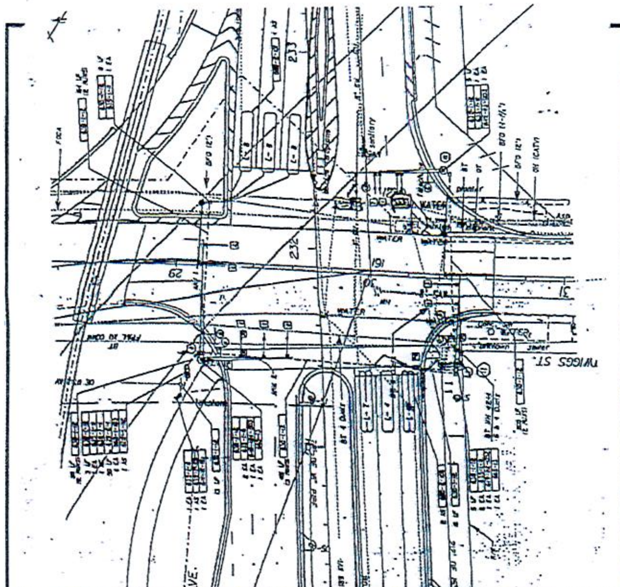


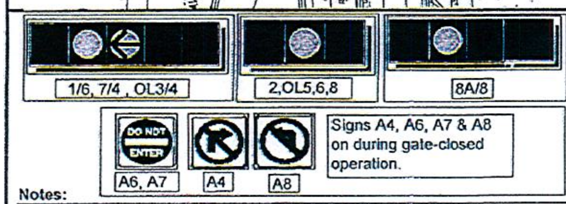
Signs A4, A6, A7 & A8 on during gate-closed operation.

Notes:

8 Phase Controller in 5 phase semi-actuated concurrent/sequential operation. CNA applied to Ø2 & Ø6. Ped heads and buttons on POL4 & P6. Sequence - Ø1 + Ø6, Ø2 + Ø6, Ø7(Ø7 + OL3 + POL4), Ø8(Ø8 + POL4), Ø4(Ø4 + OL3 + POL4),. Ped Overlap POL4 operates with Ø's 7, 4 & 8. Ø1 & Ø4 will be omitted during gate-closed operation and Ø7 will be omitted during gate-open operation. Omits to be applied by THCEA ACN(Automated Control Node). Railroad Preemption Clearance - Ø6. Railroad Preemption Dwell - Ø4(OL3 terminates) or Ø8 by ACN. No Ped operation during Preemption.

Vehicle Movements	Phase	Interval	Signal Head Numbers: 1/6	2	4	6	OL3/4	7/4	8	8A/8	P 2	POL 4	P 6	P 8
		Overlaps					OL3							
		Flashing Operation	R	R	R	R		R	R	R				
		Display Sequence												
	Ø1 & Ø6	RW	←G G	R	R	G		R	R	R	ON	DW	DW	W	DW
		Clear to	←Y G	R	R	G		R	R	R	ON	DW	DW	W	DW
		Ø2 & Ø6	G	R	R	G		R	R	R	ON	DW	DW	W	DW
	Ø2 & Ø6	RW	G	G	R	G		R	R	R	ON	DW	DW	W	DW
		Clear Ped	G	G	R	G		R	R	R	ON	DW	DW	FDW	DW
		Clear to	Y	Y	R	Y		R	R	R	ON	DW	DW	DW	DW
		All Other	R	R	R	R		R	R	R	ON	DW	DW	DW	DW
	Ø7 & OL3 & POL4	RW	R	R	R	R	←G	R ←G	R	R	ON	DW	W	DW	DW
		Clear Ped	R	R	R	R	←G	R ←G	R	R	ON	DW	FDW	DW	DW
		Clear to	R	R	R	R	←G	R ←Y	R	R	ON	DW	W	DW	DW
		Ø4	R	R	R	R	←G	R	R	R	ON	DW	W	DW	DW
		Clear to	R	R	R	R	←Y	R ←Y	R	R	ON	DW	DW	DW	DW
		All Other	R	R	R	R		R	R	R	ON	DW	DW	DW	DW
	Ø8	RW	R	R	R	R		R	R	G ←G G	ON	DW	DW	DW	DW
		Clear to	R	R	R	R		R	R	Y ←Y Y	ON	DW	DW	DW	DW
		All Other	R	R	R	R		R	R	R	ON	DW	DW	DW	DW
							OL3				A4				
							LS3			LS8 LS8	A6		POL4		
											A7		LS14	LS15	
											A8				
											Closed				





Notes:

8 Phase Controller in 5 phase semi-actuated concurrent/sequential operation. CNA applied to Ø2 & Ø6. Ped heads and buttons on POL4 & P6. Sequence - Ø1 + Ø6, Ø2 + Ø6, Ø7(Ø7 + OL3 + POL4), Ø8(Ø8 + POL4), Ø4(Ø4 + OL3 + POL4),. Ped Overlap POL4 operates with Ø's 7, 4 & 8. Ø1 & Ø4 will be omitted during gate-closed operation and Ø7 will be omitted during gate-open operation. Omits to be applied by THCEA ACN(Automated Control Node). Railroad Preemption Clearance - Ø6. Railroad Preemption Dwell - Ø4(OL3 terminates) or Ø8 by ACN. No Ped operation during Preemption.

City of Tampa - Phasing Diagram

Sect. I.D.# 1301 — Pg: 2 of 2

Location: Twiggs / Meridian — Prepared by GT — Reviewed by [signature]

Date: 6/14/2006

Vehicle Movements	Phase	Interval	1/6	2	4	6	OL3	OL3/4	7/4	8	8A	8A/8	Signs	P 2	POL 4	P 6	P 8
	Overlaps / Flashing Operation		R	R	R	R		R	R	R		R					
POL4, OL3	Ø4 & OL3 & POL4	RW	R	R	R	R	←G	G	G	R		R		DW	W	DW	DW
		Clear Ped	R	R		R	←G	G	G	R		R		DW	FDW	DW	DW
		Clear to	R	R	R	R	←Y	Y	Y	R		R		DW	DW	DW	DW
		All Other	R	R	R	R		R	R	R		R		DW	DW	DW	DW
RAILROAD Preempt Clearance	Ø6	RW	G	R	R	G		R	R	R		R	ON	DW	DW	DW	DW
		Clear to	Y	R	R	Y		R	R	R		R	ON	DW	DW	DW	DW
		Dwell	R	R	R	R		R	R	R		R	ON	DW	DW	DW	DW
RAILROAD Closed Dwell	Ø8	RW	R	R	R	R		R	R	G	←G	G	ON	DW	DW	DW	DW
		Clear to	R	R	R	R		R	R	Y	←Y	Y	ON	DW	DW	DW	DW
		Exit Ø2 & Ø6	R	R	R	R		R	R	R		R	ON	DW	DW	DW	DW
RAILROAD Open Dwell	Ø4	RW	R	R	G	R		G	G	R		R		DW	DW	DW	DW
		Clear to	R	R	Y	R		Y	Y	R		R		DW	DW	DW	DW
		Exit Ø2 & Ø6	R	R	R	R		R	R	R		R		DW	DW	DW	DW
							OL3						A4		POL4		
							LS3				LS8	LS8	A6		LS14	LS15	
													A7				
													A8				
													Closed				

Timingsheet, Controller Operation and Load Switch Page

SECID: 412 Timing Date: 4/7/2016 Phasing Date: 4/7/2016 ARCGIS Node ID: Shop Number: 1472 Drop: 2

Major Street **50TH ST** Orientation: North-South Controller Type COBALT

Minor Street **CROSSTOWN (S)** Orientation: Eastbound Computer System Cen Date Sen 5/9/2016

Controller Timings (seconds)

Controller Phase Number		2			5	6		8
Direction		SB			SBLT	NB		EB
Minimum Green		10			5	10		10
Vehicle Extention		3.0			2.0	3.0		5.0
Yellow Clr/Alt Clr		4.4			4.4	4.4		4.4
Red Clr/Alt Red Clr		2.1			2.3	2.1		2.5
Max Green I		65			20	65		40
Max Green II		85			25	85		45
Walk		7			---	---		7
Walk - XGuard		---			---	---		---
FDW		10			---	---		33
FDW - XGuard		---			---	---		---
Detector Memory		---			---	---		---
Phase Recall		MAX			---	MAX		---
Ped Recall		ON			---	ON		---
Flash Operation		YEL			---	YEL		RED

Controller Operation

RXR Preempt: No FDOT SOP: 14 MOD

Fire Preempt: No Backup Protection: Y

Bridge Preempt: No FDOT Walk Y

Transit Preempt: False FDOT FDW: Y

Crossing Guard Times AM:

Crossing Guard Times PM:

Free Time Primary:

Free Time Secondary:

Flash Source- (C)omputer or (F)ield:

Flash Times Primary

Flash Times Secondary

CNA Ø's **Ø2, Ø6**

Phase Ring Assignments

Sequence 1	**Ring 1:**	1 2 | 3 4
	Ring 2:	5 6 | 7 8
Sequence 2	**Ring 1:**	
	Ring 2:	
Sequence 3	**Ring 1:**	
	Ring 2:	
Sequence 4	**Ring 1:**	
	Ring 2:	

Cabinet Load Switch Assignments

LS1: LS2: Ø2 LS3: LS4: LS5: Ø5 LS6: Ø6 LS7: LS8: Ø8

LS9: P2 LS10: LS11: P6 LS12: P8 LS13: LS14: LS15: LS16:

Comments

Timings by E.O.R. FDOT Project #429074-1-52-01.

172.19.4.226
255.255.240.0
172.19.0.1

Submitted By: GT Date: 12-12-17 Review By: MJ Date: 12-12-17 Approved By BD Date: 12-12-17

Implemented By: K. Rad Date: 1-23-17 Notes:

Coordination Pattern Page

Print Date: 12/12/2017

Major Street: 50TH ST

Minor Street: CROSSTOWN (S)

Free Time Primary:

Free Time Secondary

Day Plan #1 - Mon-Thr patt 1 -7.
Day Plan #2 - Fri - patt 1 - 7 w/5 @ 14:45
Day Plan #3 - Sat - patt 7, then patt 6 all other times
Day Plan #4 - Sun - patt 7, then patt 6 all other times

Section Id: 412 **Record Number:** 51 **Coord Date:** 9/9/2016

Min Green:		10			5	10		10
Yellow CLR:		4.4			4.4	4.4		4.4
All Red CLR:		2.1			2.3	2.1		2.5
Walk:		7			---	---		7
FDW:		10			---	---		33
Direction:		SB			SBLT	NB		EB
Ø Number:		2			5	6		8

	Patterns	Cycle	Offset								
1.	0600 - 0915 AM Peak	95	26		75			20	55		20
2.	0915 - 1115 AM Off Peak	90	50		70			20	50		20
3.	1115 - 1330 Noon	90	50		70			20	50		20
4.	1330 - 1445 PM Off Peak	90	50		70			20	50		20
5.	1445 - 1900 PM Peak	95	50		75			20	55		20
6.	1900 - 2200 Evening	80	30		60			20	40		20
7.	2200 - 0600 Late	80	30		60			20	40		20
8.		140	114		98			28	70		42
9.	X-town Detour - Eastbound	160	28		110			30	80		50
10.		120	12		95			20	75		25
11.	Large Band - Eastbound										
12.	Guavaween - Inbound										
13.	Guavaween - Outbound										
14.	Larger Band - Westbound										
15.	Large Band - Westbound										
16.	Hurricance										

Plan, SOP and Signal Heads Page

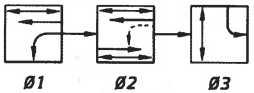
Print Date: 11/30/2017

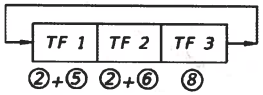
Section Id 412 **Controller Type** COBALT

Major Street 50TH ST

Minor Street CROSSTOWN (S)

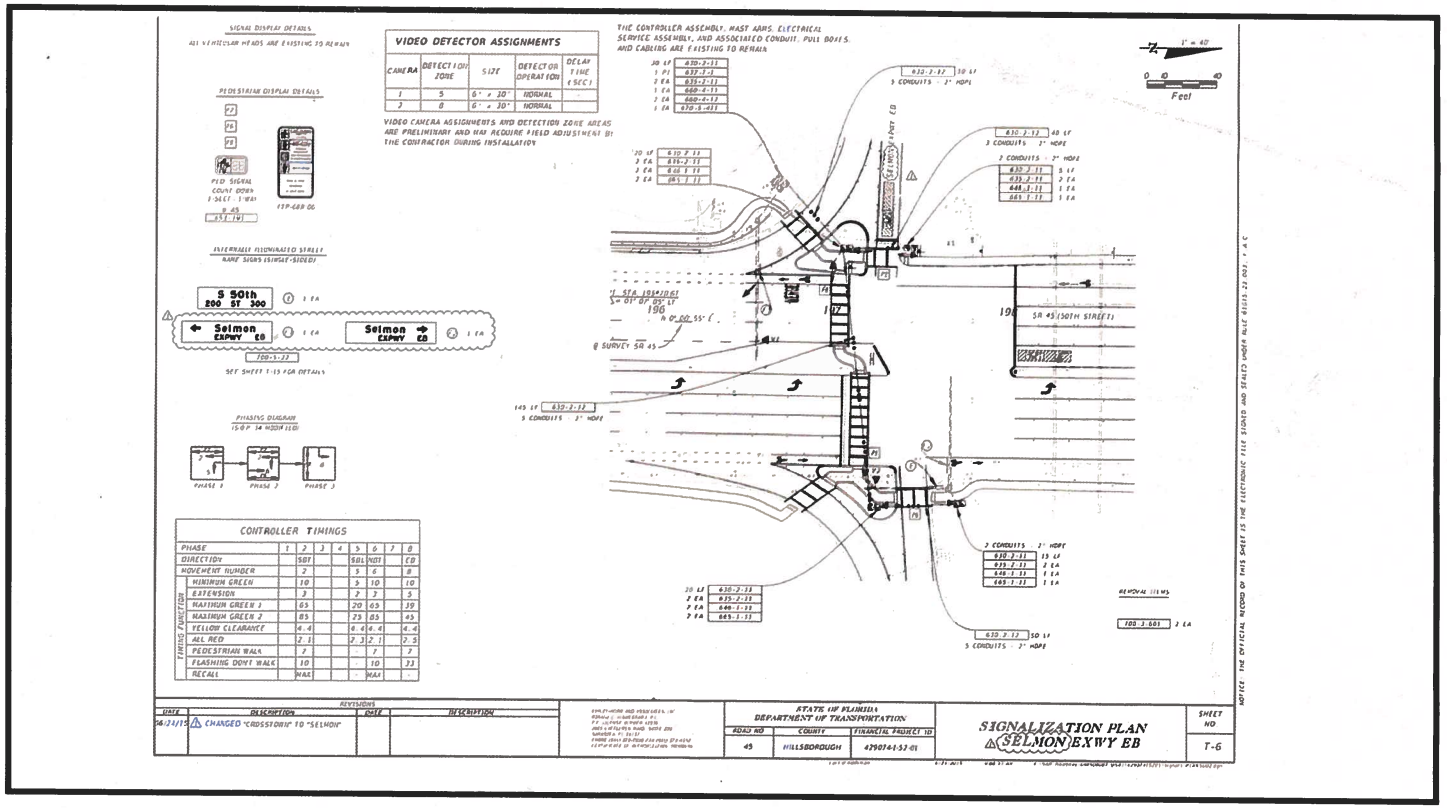
Coord Date 9/9/2016 **FDOT SOP:** 14 MOD



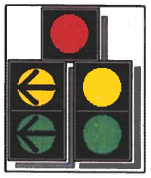


SOP 14 MOD

(DIAMOND INTERCHANGE OPERATION)



Ped 1 Selector	Sig 1 Selector	Sig 2 Selector	Sig 3 Selector	Sig 4 Selector	Sig 5 Selector	Sig 6 Selector	Sig 7 Selector	Sig 8 Selector
1ped-wlk-fdw-count	3-section-ball-vertica	5-section-doghouse-						
PED Signal 1:	Signal Head 1:	Signal Head 2:	Signal Head 3:	Signal Head 4:	Signal Head 5:	Signal Head 6:	Signal Head 7:	Signal Head 8:



Ped 2 Selector	Sig 9 Selector	Sig 10 Selector	Sig 11 Selector	Sig 12 Selector	Sig 13 Selector	Sig 14 Selector	Sig 15 Selector	Sig 16 Selector
PED Signal 2:	Signal Head 9:	Signal Head 10:	Signal Head 11:	Signal Head 12:	Signal Head 13:	SIGNAL HEAD 14	SIGNAL HEAD 15	SIGNA L HEAD 16

Timingsheet, Controller Operation and Load Switch Page

SECID: 411 Timing Date: 4/7/2016 Phasing Date: 4/7/2016 ARCGIS Node ID: Shop Number: 1470 Drop: 1

Major Street **50TH ST** Orientation: North-South Controller Type COBALT

Minor Street **CROSSTOWN (N)** Orientation: Westbound Computer System Cen Date Sen 5/9/2016

Controller Timings (seconds)

Controller Phase Number	1	2		4		6		
Direction	NB LT	SB		WB		NB		
Minimum Green	5	10		10		10		
Vehicle Extention	2.0	3.0		4.0		3.0		
Yellow Clr/Alt Clr	4.4	4.4		4.4		4.4		
Red Clr/Alt Red Clr	2.4	2.0		2.8		2.0		
Max Green I	15	70		40		70		
Max Green II	25	85		45		85		
Walk	---	7		7		7		
Walk - XGuard		---		---		---		
FDW	---	10		32		10		
FDW - XGuard		---		---		---		
Detector Memory	---	---		---		---		
Phase Recall	---	MAX		---		MAX		
Ped Recall	---	ON		---		ON		
Flash Operation	---	YEL		RED		YEL		

Controller Operation

RXR Preempt: No FDOT SOP: 15 MOD

Fire Preempt: No Backup Protection: Y

Bridge Preempt: No FDOT Walk Y

Transit Preempt: False FDOT FDW: Y

Crossing Guard Times AM:

Crossing Guard Times PM:

Free Time Primary:

Free Time Secondary:

Flash Source- (C)omputer or (F)ield:

Flash Times Primary

Flash Times Secondary

CNA Ø's **Ø2, Ø6**

Cabinet Load Switch Assignments

LS1:	Ø1	LS2:	Ø2	LS3:		LS4:	Ø4	LS5:		LS6:	Ø6	LS7:		LS8:	
LS9:	P2	LS10:	P4	LS11:	P6	LS12:		LS13:		LS14:		LS15:		LS16:	

Phase Ring Assignments

Sequence 1	**Ring 1:**	1	2	3	4	
	Ring 2:	5	6	7	8	
Sequence 2	**Ring 1:**					
	Ring 2:					
Sequence 3	**Ring 1:**					
	Ring 2:					
Sequence 4	**Ring 1:**					
	Ring 2:					

Comments

Timings by E.O.R. FDOT Project #429074-1-52-01.

Submitted By: GT Date: 11-30-17 Review By: Date: 12-12-17 Approved By Date: 12-12-17

Implemented By: K Neal Date: 1-23-18 Notes:

Coordination Pattern Page

Print Date: 12/12/2017

Major Street: 50TH ST

Minor Street: CROSSTOWN (N)

Free Time Primary:

Free Time Secondary

Day Plan #1 - Mon-Thr patt 1 -7.
Day Plan #2 - Fri - patt 1 - 7 w/5 @ 14:45
Day Plan #3 - Sat - patt 7, then patt 6 all other times
Day Plan #4 - Sun - patt 7, then patt 6 all other times

Section Id: 411 **Record Number:** 50 **Coord Date:** 9/9/2016

Min Green:	5	10		10		10		
Yellow CLR:	4.4	4.4		4.4		4.4		
All Red CLR:	2.4	2.0		2.8		2.0		
Walk:	---	7		7		7		
FDW:	---	10		32		10		

Direction:	NB LT	SB		WB		NB		
Ø Number:	1	2		4		6		

	Patterns	Cycle	Offset									
1.	0600 - 0915 AM Peak	95	28	20	55		20		75			
2.	0915 - 1115 AM Off Peak	90	53	20	50		20		70			
3.	1115 - 1330 Noon	90	53	20	50		20		70			
4.	1330 - 1445 PM Off Peak	90	53	20	50		20		70			
5.	1445 - 1900 PM Peak	95	55	20	55		20		75			
6.	1900 - 2200 Evening	80	32	20	40		20		60			
7.	2200 - 0600 Late	80	32	20	40		20		60			
8.		140	2	24	73		43		97			
9.	X-town Detour Eastbound	160	43	30	80		50		110			
10.		120	41	15	75		30		90			
11.	Large Band Eastbound											
12.	Guavaween - Inbound											
13.	Guavaween - Outbound											
14.	Larger Band - Westbound											
15.	Large Band - Westbound											
16.	Hurricane											

Plan, SOP and Signal Heads Page

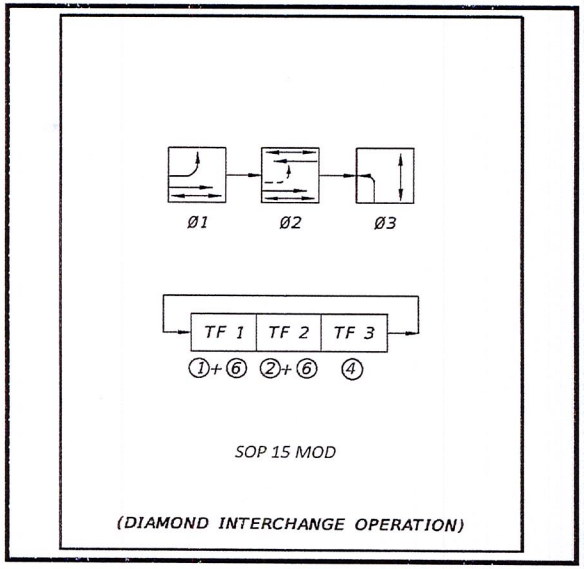
Print Date: 11/30/2017

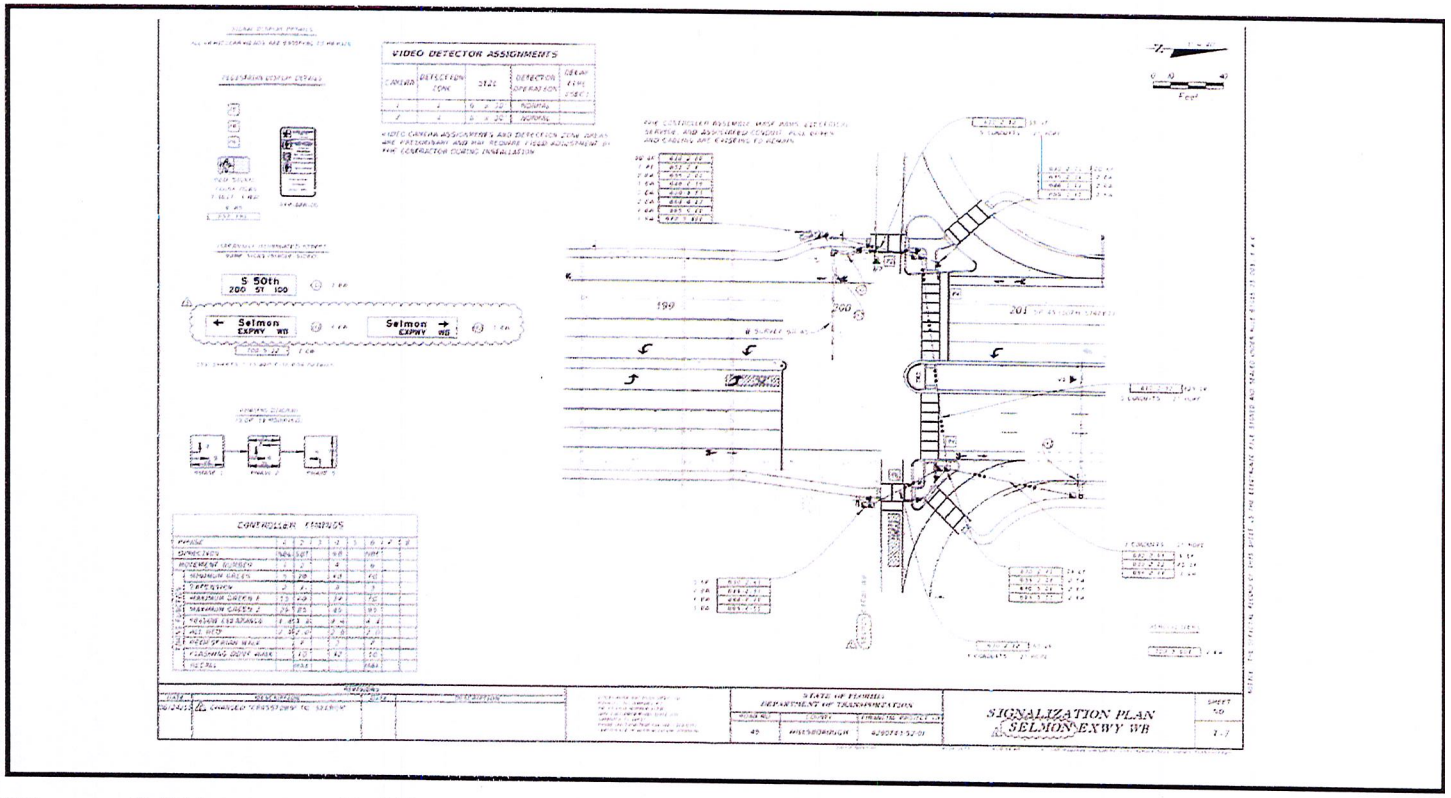
Section Id 411 **Controller Type** COBALT

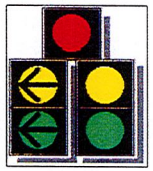
Major Street 50TH ST

Minor Street CROSSTOWN (N)

Coord Date 9/9/2016 **FDOT SOP:** 15 MOD





Ped 1 Selector	Sig 1 Selector	Sig 2 Selector	Sig 3 Selector	Sig 4 Selector	Sig 5 Selector	Sig 6 Selector	Sig 7 Selector	Sig 8 Selector
1ped-wlk-fdw-count	3-section-ball-vertica	5-section-doghouse-						
PED Signal 1:	Signal Head 1:	Signal Head 2:	Signal Head 3:	Signal Head 4:	Signal Head 5:	Signal Head 6:	Signal Head 7:	Signal Head 8:
P2, P4, P6	2, 4, 6	5/2						
								
Ped 2 Selector	Sig 9 Selector	Sig 10 Selector	Sig 11 Selector	Sig 12 Selector	Sig 13 Selector	Sig 14 Selector	Sig 15 Selector	Sig 16 Selector
PED Signal 2:	Signal Head 9:	Signal Head 10:	Signal Head 11:	Signal Head 12:	Signal Head 13:	SIGNAL HEAD 14	SIGNAL HEAD 15	SIGNA L HEAD 16

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Station : 1083 - Adamo Dr (SR 60) & 78th St (F138) (Standard File)

Phase [1.1.1]

	1	2 (WT)	3 (ST)	4 (NT)	5 (WL)	6 (ET)	7	8	9	10	11	12	13	14	15	16
Walk		7		7		7										
Ped Clearance		12		37		11										
Min Green		15	6	6	5	15										
Passage		4	3	4	3	4										
Max1		85	15	25	25	65										
Max2																
Yellow	9	5.2	3.4	4.8	5.2	5.2	9	9	9	9	9	9	9	9	9	9
Red		2	4.6	2.3	2	2										
Red Revert	3	4	3	3	3	4	3	3	3	3	3	3	3	3	3	3
Added Initial																
Max Initial																
Time Before Reduce																
Cars Before Reduce																
Time To Reduce																
Reduce By																
Min Gap																
Dynamic Max Limit																
Dynamic Max Step																
Auto Exit		ON				ON										
Rest In Walk																

Phase Option [1.1.2]

	1	2 (WT)	3 (ST)	4 (NT)	5 (WL)	6 (ET)	7	8	9	10	11	12	13	14	15	16
Enable		ON	ON	ON	ON	ON										
Auto Entry				ON												
Non Act1																
Non Act2																
Lock Call			ON													
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON				ON										
Sim Gap Enable		ON			ON	ON										
Guar Passage																
Cond Service																
Add Init Calc																

Alternate Phase Program 1, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1													
2													
3													
4													
5													
6													
7													
8													

Alternate Phase Program 2, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1													
2													
3													
4													
5													
6													
7													
8													

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

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Station : 1083 - Adamo Dr (SR 60) & 78th St (F138) (Standard File)

Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Backup Time	Red Revert	Console Timeout	Tone Disable	Feature Profile	Phase Mode	Diamond Mode	SDLC Retry Time	TS2 Det Faults	Cycle Fault Action	Max Cycle Time	Max Seek Track Time	Max Seek Dwell Time	Enable Run	Local Flash Start	Start Red Time	Disable Init Ped	Yellow 3 Second Disable	Omit Yellow Enable	Free Ring Sequence
	ON		4	30	OFF		QSEQ	4PH		ON	ALARM				ON	OFF		OFF	OFF	OFF	1

Comm, General Comm Parameters [6.1]

Station ID	Master Station ID	Fallback time	Allow Pencil	Port	System-Up	Sys-Down	PC/Print	Aux 232
1083		900	OFF					

Port Parameters [6.2]

Comm	Mode	Baud	MsgTime	Duplex	Enable	DialTime	Modem	ModemTime	Tel#1	Tel#2
System Up(P-A)										
System Down(P-B)										
PC/Print(P-2)										

Overlap General Parameters [1.5.1]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	OFF	ON	OFF

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2																	NORMAL		3.5	1.5
Overlap 3																	NORMAL		3.5	1.5
Overlap 4																	NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6																	NORMAL		3.5	1.5
Overlap 7																	NORMAL		3.5	1.5
Overlap 8																	NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds									
Overlap 1																									OFF	OFF
Overlap 2																									OFF	OFF
Overlap 3																									OFF	OFF
Overlap 4																									OFF	OFF
Overlap 5																									OFF	OFF
Overlap 6																									OFF	OFF
Overlap 7																									OFF	OFF
Overlap 8																									OFF	OFF

Detector, Vehicle Parameters 1-16 [5.1]

	1 (SBT1)	2	3 (WBT1)	4 (WBT2)	5 (WBL1)	6	7 (NBT1)	8 (NBL2)	9	10 (EBT1)	11 (EBT2)	12 (EBL1)	13	14	15	16
Call Phase	3		2	2	5		4	4		6	6	6				
Switch Phase																
Delay Time	3															

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase																
Switch Phase																
Delay Time																

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Station : 1083 - Adamo Dr (SR 60) & 78th St (F138) (Standard File)

Detector Alternate Program 1, Vehicle Parameters [5.5.1]

	1 (SBT1)	2	3 (WBT1)	4 (WBT2)	5 (WBL1)	6	7 (NBT1)	8 (NBL2)	9	10 (EBT1)	11 (EBT2)	12 (EBL1)	13	14	15	16
Call Phase																
Switch Phase																
Delay Time																

Channels/SDLC, Assign to Phases [1.3.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #		2	3	4	5	6							2	4	6									
Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED								
Flash	RED	YEL	RED	RED	RED	YEL	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Flash 1-2 Hertz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Alt Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT		ON	AUTO	EXT

Channel/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1															
2		1		1							1	1			
3															
4			1												
5				1											
6		1		1											
7															
8															
9															
10															
11															
12															
13		1													
14															
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac		Detector														MMU	Diag
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
Present	ON	ON							ON								ON	
Peer to Peer																		

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2		3	4	7	8	
Ring 2	5	6						
Ring 3								
Ring 4								

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Station : 1083 - Adamo Dr (SR 60) & 78th St (F138) (Standard File)

Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	
8	
9	
10	
11	
12	ON
13	ON
14	ON
15	ON
16	ON
17	
18	
19	
20	
21	
22	ON
23	ON
24	
25	
26	ON
27	
28	
29	ON
30	
31	
32	
33	
34	
35	
36	
37	ON
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	

Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	
8	
9	
10	
11	
12	ON
13	ON
14	ON
15	ON
16	ON
17	
18	
19	
20	
21	
22	ON
23	ON
24	
25	
26	ON
27	
28	
29	ON
30	
31	
32	
33	
34	
35	
36	
37	ON
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
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56	
57	
58	
59	
60	
61	
62	
63	
64	

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash	ON	ON				
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green	5	5				
Min Walk						
Ped Clear						
Track Green						
Min Dwell	5	5	10	10	10	10
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Alarms, Parameters [1.4.1]

Auto Flash Parameter

Yellow	Red	Mode	Source
		VOT_MON	TEST A

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled
ON	ON

Alarms, Phases/Overlaps [1.4.2]

Auto Flash	1	2	3	4	5	6	7	8	9	10	11	12
Phases												
Overlaps												

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Station : 1083 - Adamo Dr (SR 60) & 78th St (F138) (Standard File)

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	RAIL	RAIL	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MIN	MIN	MIN	MIN
Extend Dwell	1	1				
Pattern						
Output Mode						
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Coordination, Modes,+ [2.1]

Modes

Operational	Correct	Maximum	Force-Off
	SHRT/LNG	MAX INH	FIXED

Modes+

Mode	Leave Before	Leave After	Recycle	Stop In Walk	External	Auto Reset	Latch Sec Foff	Coord Easy Float	Yield Value	Coord NTCIP Yield Sign	Closed Loop Active	
FRC	TIMED	TIMED	NO RECYCLE	ON	OFF	ON	OFF	OFF	0	+	ON	OFF

Coordination, Pattern 1-16 [2.1]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	190	140	200	100	100	100	100									
Offset Time	55	49	20	85	69	98	68									
Split Number	1	2	3	4	5	6	7									
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn

Coordination, Pattern 17-32 [2.1]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time											220	220	220	230	230	230
Offset Time											143	83	89	74	15	30
Split Number											27	28	29	30	31	32
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn

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Station : 1083 - Adamo Dr (SR 60) & 78th St (F138) (Standard File)

Coordination, Splits [2.7.1]

Split Table 1	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time		122	18	50	45	77										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph						ON										

Split Table 2	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time		94	18	28	30	64										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph						ON										

Split Table 3	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time		146	19	35	50	96										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph						ON										

Split Table 4	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time		63	18	19	26	37										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph						ON										

Split Table 5	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time		60	18	22	27	33										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph						ON										

Split Table 6	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time		62	18	20	28	34										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph						ON										

Split Table 7	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time		63	18	19	30	33										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph						ON										

Split Table 8	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 9	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 10	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 11	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 12	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

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Station : 1083 - Adamo Dr (SR 60) & 78th St (F138) (Standard File)

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		152	18	50	30	122										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph						ON										

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time		152	18	50	45	107										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT

Coord-Ph						ON										

Split Table 29	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time		152	18	50	40	112										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph						ON										

Split Table 30	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time		171	19	40	48	123										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph						ON										

Split Table 31	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time		171	19	40	63	108										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph						ON										

Split Table 32	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time		171	19	40	58	113										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph						ON										

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TB Coor, Advanced Scheduler [4.3]

	Month											Day of Week							Day of Month									1									2									3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1	1	1	1	1	1	1	1	1	1	1	1	1			1	1	1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4	1												1	1	1	1	1	1	1																															2
5							1						1	1	1	1	1	1					1																											2
6												1	1	1	1	1	1	1																											1					2
7					1									1																															1	1	1	1	1	1	2
8									1					1						1	1	1	1	1	1	1																										2
9											1						1																											1	1	1	1	1	1	1			2
10											1							1																											1	1	1	1	1	1	1			2
11	1	1	1	1	1	1	1	1	1	1	1	1						1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1	1	1		1						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13																																																		1
14																																																		1
15																																																		1
16																																																		1
17																																																		1
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28																																																		1
29																																																		1
30																																																		1
31																																																		1
32																																																		1

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		5	9	15	19											
Minute		45	15		30											
Action	99	1	2	3	4											

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	9	20												
Minute			30	30												
Action	99	5	6	7												

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	10	19	22											
Minute		30	30													
Action	99	5	6	7	99											

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

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Day Plan Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

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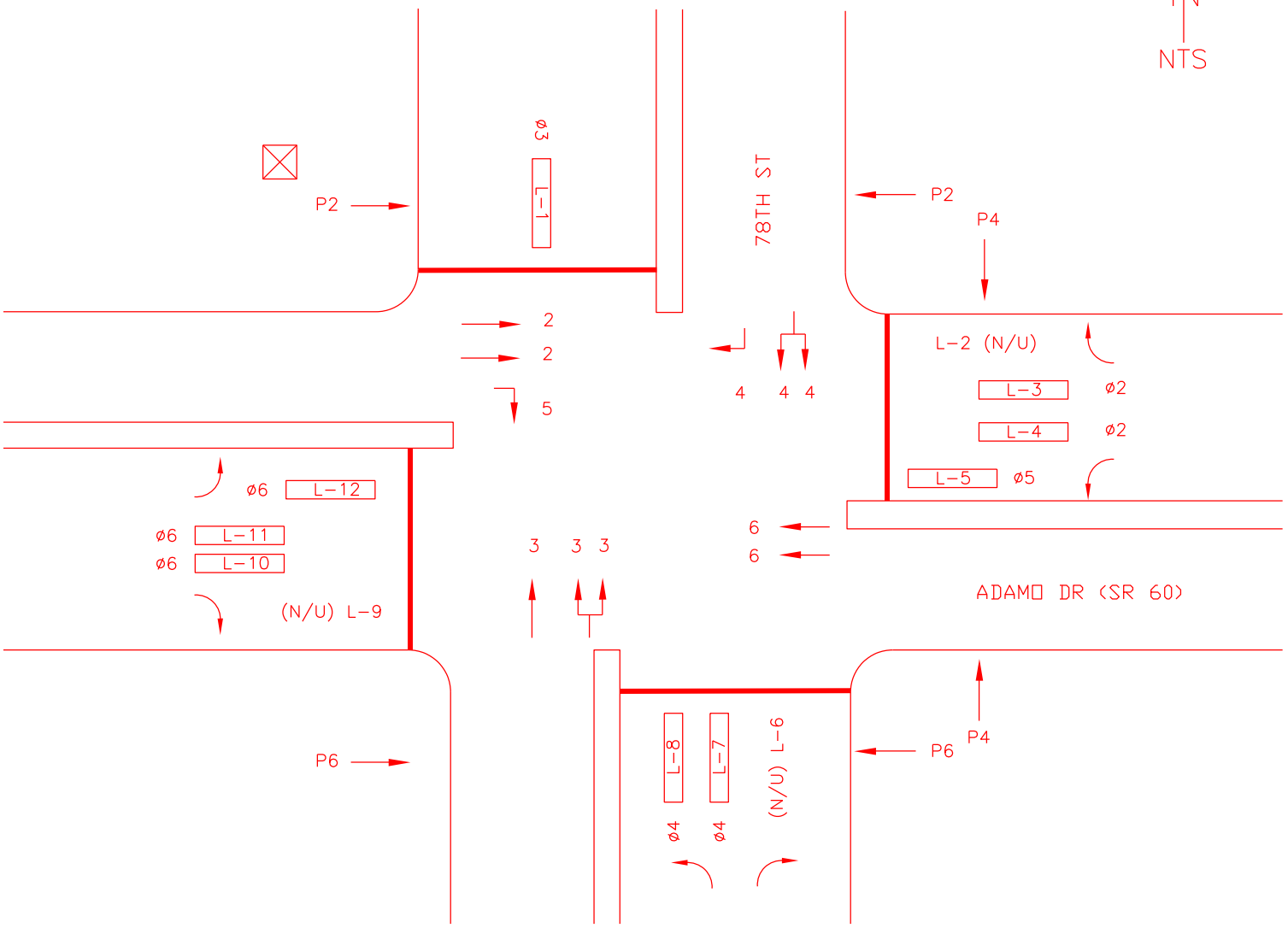
Station : 1083 - Adamo Dr (SR 60) & 78th St (F138) (Standard File)

TB Coor, Action Table [4.5]

Action	Pattern	Aux 1	Aux 2	Aux 3	Special 1	Special 2	Special 3	Special 4	Special 5	Special 6	Special 7	Special 8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25	25											
26	26											
27	27											
28	28											
29	29											
30	30											
31	31											
32	32											
33	33											
34	34											
35	35											
36	36											
37	37											
38	38											
39	39											
40	40											
41	41											
42	42											
43	43											
44	44											
45	45											
46	46											
47	47											
48	48											
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												
61												
62												
63												
64												
99	254											
100	255											

INTERSECTION

INTERSECTION: ADAMO DR (SR 60) @ 78TH ST (F138)
ID# 1083



PHASING DIAGRAM

ø1 N/U	ø2 P2	ø3	ø4 P4
ø5	ø6 P6	ø7 N/U	ø8 N/U

OVERLAPS

A=
B=
C=
D=

NORTH ARROW

INTERSECTION: ADAMO DR (SR 60) @ 78TH ST

NAZTEC, INC.
SUGAR LAND, TEXAS, USA

TITLE: HILLSBOROUGH COUNTY, FL

DRAWN BY	DATE	SHEET	SCALE
AGI	3/30/18	1 OF 1	N/A

CHECK BY	DATE	DWG. NO.
		70006-NITS

REV.	DATE	BY

NAZTEC FDOT CERTIFICATION NUMBERS:

66013431703011-Loop Detector
67816111703011-MMU
67816151703011-Cabinet Power Supply
67816171703011-BIU
67115521703011-TS2 Controller
67614581703011-TS2 Rack Cabinet

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Station : 1047 - Selmon Expy EB Ramp & US 301 (F063) (Standard File)

Phase [1.1.1]

	1 (SL)	2 (NT)	3 (WT)	4 (ET)	5 (NL)	6 (ST)	7	8	9	10	11	12	13	14	15	16
Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clearance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	15	5	5	5	15	0	0	0	0	0	0	0	0	0	0
Gap Ext	4	3	4	4	4	3	0	0	0	0	0	0	0	0	0	0
Max1	10	30	10	20	25	30	0	0	0	0	0	0	0	0	0	0
Max2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellow Clr	5.1	5.1	5.1	5.1	5.1	5.1	9	9	9	9	9	9	9	9	9	9
Red Clr	2	2	2.7	2.4	2	2	0	0	0	0	0	0	0	0	0	0
Red Revert	3	3	3	3	3	3	0	0	3	3	3	3	3	3	3	3
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Step	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto Flash Entry				ON												
Auto Flash Exit		ON				ON										
Non-Actuated 1																
Non-Actuated 2																
Rest In Walk																

Phase Option [1.1.2]

	1 (SL)	2 (NT)	3 (WT)	4 (ET)	5 (NL)	6 (ST)	7	8	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON	ON	ON										
Lock Call																
Min Recall		ON				ON										
Max Recall						ON										
Ped Recall																
Soft Recall																
Dual Entry		ON				ON										
Sim Gap Enable	ON	ON			ON	ON										
Guar Passage																
Cond Service																
Add Init Calc																

Alternate Phase Program 1, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	
6	0	0	0	0	0	0	0	0	0	
7	0	0	0	0	0	0	0	0	0	
8	0	0	0	0	0	0	0	0	0	

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	
6	0	0	0	0	0	0	0	0	0	
7	0	0	0	0	0	0	0	0	0	
8	0	0	0	0	0	0	0	0	0	

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Station : 1047 - Selmon Expy EB Ramp & US 301 (F063) (Standard File)

Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Red Revert	Local Flash Start	Allow < 3 sec Yel	Allow Skip Yel	MCE Timeout	Enable Run	Start Red Time	Phase Mode	Startup Calls	Diamond Mode	Stop Time Over Preempt	Free Ring Sequence	Clearance Decide	Min Ped Clear Time	RingAlgo
	ON	3	OFF	OFF	OFF		ON		QSEQ	OFF	4PH	OFF	3	OFF	OFF	

Comm, General Comm Parameters [6.1]

Station ID	Master Station ID	Fallback time	Allow Pencil	Port	System-Up	Sys-Down	PC/Print	Aux 232
1047								

Port Parameters [6.2]

Comm	Mode	Baud	MsgTime	Duplex	Enable	DialTime	Modem	ModemTime	Tel#1	Tel#2
System Up(P-A)										
System Down(P-B)										
PC/Print(P-2)										

Overlap General Parameters [1.5.1]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	ON	ALWAYS	

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases								Modifer Phases								Type	Green	Yellow	Red
Overlap 1																	NORMAL		3.5	1.5
Overlap 2	1	3							2								FYA-4		5.1	2
Overlap 3																	NORMAL		3.5	1.5
Overlap 4	2	4	6														NORMAL		3.5	1.5
Overlap 5																	NORMAL		3.5	1.5
Overlap 6	4	5							6								FYA-4		5.1	2
Overlap 7																	NORMAL		3.5	1.5
Overlap 8	2	3	6														NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds							
Overlap 1																								
Overlap 2																								
Overlap 3																								
Overlap 4																								
Overlap 5																								
Overlap 6																								
Overlap 7																								
Overlap 8																								

Detector, Vehicle Parameters 1-16 [5.1]

	1 (ET1)	2 (ST3)	3 (ST2)	4 (ST1)	5 (SL1)	6 (NT3)	7 (NT2)	8 (NT1)	9 (ST3)	10 (ST2)	11 (ST1)	12 (WT1)	13 (NT3)	14 (NT2)	15 (NT1)	16 (NL1)
Call Phase	4	6	6	6	1	2	2	2	6	6	6	3	2	2	2	5
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Detector Alternate Program 1, Vehicle Parameters [5.5.1]

	1 (ET1)	2 (ST3)	3 (ST2)	4 (ST1)	5 (SL1)	6 (NT3)	7 (NT2)	8 (NT1)	9 (ST3)	10 (ST2)	11 (ST1)	12 (WT1)	13 (NT3)	14 (NT2)	15 (NT1)	16 (NL1)
Call Phase	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Channels/SDLC, Assign to Phases [1.3.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	2	2	3	4	6	6	4	8					2		6									
Type	OLP	VEH	VEH	OLP	OLP	VEH	VEH	OLP	OLP	OLP	OLP	OLP	PED	PED	PED	PED								
Flash	RED	YEL	RED	YEL	RED	YEL	RED	YEL	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Dimming Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT				

Channel/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1									1		1	1	1	1	
2									1		1	1	1		
3									1						
4									1	1	1	1			
5									1	1					
6									1						
7															
8															
9															
10															
11															
12															
13															
14															
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac		Detector														MMU	Diag
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
Dev Present	ON	ON							ON								ON	
Peer to Peer																		

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2		3	4	7	8	
Ring 2	5	6						
Ring 3								
Ring 4								

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Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	
8	
9	
10	
11	
12	ON
13	ON
14	ON
15	ON
16	ON
17	
18	
19	
20	
21	
22	ON
23	ON
24	
25	
26	ON
27	
28	
29	ON
30	
31	
32	
33	
34	
35	
36	
37	ON
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	ON
50	ON
51	ON
52	ON
53	ON
54	ON
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	

Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	
8	
9	
10	
11	
12	ON
13	ON
14	ON
15	ON
16	ON
17	
18	
19	
20	
21	
22	ON
23	ON
24	
25	
26	ON
27	
28	
29	ON
30	
31	
32	
33	
34	
35	
36	
37	ON
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	ON
50	ON
51	ON
52	ON
53	ON
54	ON
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Auto Flash	ON	ON				
Override Higher Preempt						
Flash in Dwell						
Link to Preempt						
Delay						
Min Duration						
Min Green	5	5	5	5	5	5
Min Walk						
Ped Clear			99	99	99	99
Track Green						
Min Dwell	5	5	10	10	10	10
Max Presence						
Track Veh 1						
Track Veh 2						
Track Veh 3						
Track Veh 4						
Dwell Cyc Veh 1						
Dwell Cyc Veh 2						
Dwell Cyc Veh 3						
Dwell Cyc Veh 4						
Dwell Cyc Veh 5						
Dwell Cyc Veh 6						
Dwell Cyc Veh 7						
Dwell Cyc Veh 8						
Dwell Cyc Veh 9						
Dwell Cyc Veh 10						
Dwell Cyc Veh 11						
Dwell Cyc Veh 12						
Dwell Cyc Ped1						
Dwell Cyc Ped2						
Dwell Cyc Ped3						
Dwell Cyc Ped4						
Dwell Cyc Ped5						
Dwell Cyc Ped6						
Dwell vPed7						
Dwell Cyc Ped8						
Exit 1						
Exit 2						
Exit 3						
Exit 4						

Alarms, Parameters [1.4.1]

Auto Flash Parameter

Yellow	Red	Mode	Source

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled
OFF	ON

Alarms, Phases/Overlaps [1.4.2]

Auto Flash	1	2	3	4	5	6	7	8	9	10	11	12
Phases												
Overlaps												

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Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	RAIL	RAIL	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Return Max/Min	MAX	MAX	MIN	MIN	MIN	MIN
Extend Dwell	1	1				
Pattern						
Output Mode						
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
DwellCyc Over 1						
DwellCyc Over 2						
DwellCyc Over 3						
DwellCyc Over 4						
DwellCyc Over 5						
DwellCyc Over 6						
DwellCyc Over 7						
DwellCyc Over 8						
DwellCyc Over 9						
DwellCyc Over 10						
DwellCyc Over 11						
DwellCyc Over 12						
Ped Clear						
Yellow						
Red						
Return Max						

Coordination, Modes,+ [2.1]

Modes

Operational	Correct	Maximum	Force-Off
	SHRT/LNG	MAX INH	FIXED

Modes+

Mode	Leave Before	Leave After	Recycle	Stop In Walk	External	Auto Reset	Latch Sec Foff	Coord Easy Float	Yield Value	Coord NTCIP Yield Sign	Closed Loop Active	
RESERVED	TIMED	TIMED	NO_RECYCLE	ON	OFF	ON	OFF	OFF	0	+	ON	OFF

Coordination, Pattern 1-16 [2.1]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	190	140	200	110	100											
Offset Time	142	73	63	41	20											
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn

Coordination, Pattern 17-32 [2.1]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time		210	220								220	220	220	230	245	230
Offset Time		142	63								16	140	66	143	132	50
Split Number	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Seq Number	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn

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Coordination, Splits [2.7.1]

Split Table 1	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	21	112	28	29	63	70										
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 2	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	25	68	25	22	25	68										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 3	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	30	120	25	25	50	100										
Mode	MIN	MAX	NON	MAX	MAX	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 4	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	17	57	18	18	25	49										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 5	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	15	52	15	18	25	42										
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 6	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	16	49	19	16	16	49										
Mode	MIN	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 7	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	16	52	16	16	16	52										
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 8	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 9	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 10	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 11	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 12	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

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Split Table 13	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 14	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 15	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 16	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 17	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 18	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	23	126	30	31	103	46										
Mode	NON	MAX	NON	NON	MAX	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 19	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	33	131	28	28	55	109										
Mode	MIN	MAX	NON	MAX	MAX	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 20	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 21	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 22	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 23	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 24	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 25	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 26	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase																

Split Table 27	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	21	142	28	29	78	85										
Mode	MAX	MAX	NON	NON	MAX	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 28	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	51	112	28	29	63	100										
Mode	MAX	MAX	NON	NON	MAX	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT

Coord Phase		ON														

Split Table 29	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	31	132	28	29	73	90										
Mode	MAX	MAX	NON	NON	MAX	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 30	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	30	150	25	25	65	115										
Mode	MAX	MAX	NON	NON	MAX	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	50	145	25	25	50	145										
Mode	MAX	MAX	NON	NON	MAX	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

Split Table 32	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	40	140	25	25	60	120										
Mode	MAX	MAX	NON	NON	MAX	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord Phase		ON														

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TB Coor, Advanced Scheduler [4.3]

	Month												Day of Week							Day of Month									1										2										3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1	1	1	1	1	1	1	1	1	1	1	1	1			1	1	1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4	1												1	1	1	1	1	1	1	1																															2
5							1						1	1	1	1	1	1	1				1																												2
6												1	1	1	1	1	1	1	1																									1							2
7					1									1																														1	1	1	1	1	1	1	2
8									1					1						1	1	1	1	1	1	1																									2
9											1						1																									1	1	1	1	1	1	1				2
10											1							1																									1	1	1	1	1	1	1			2
11	1	1	1	1	1	1	1	1	1	1	1	1						1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1	1	1		1						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13																																																			1
14																																																			1
15																																																			1
16																																																			1
17																																																			1
18																																																			1
19																																																			1
20																																																			1
21																																																			1
22																																																			1
23																																																			1
24																																																			1
25																																																			1
26																																																			1
27																																																			1
28																																																			1
29																																																			1
30																																																			1
31																																																			1
32																																																			1

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		5	6	9	15	19	22									
Minute		30														
Action	99	1	1	2	3	4	99									

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		8	22													
Minute																
Action	99	5	99													

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		9	21													
Minute																
Action	99	5	99													

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

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Station : 1047 - Selmon Expy EB Ramp & US 301 (F063) (Standard File)

Day Plan Table 7	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action	99															

Day Plan Table 8	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action	99															

Day Plan Table 9	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action	99															

Day Plan Table 10	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action	99															

Day Plan Table 11	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action	99															

Day Plan Table 12	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Hour																
Minute																
Action	99															

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Station : 1047 - Selmon Expy EB Ramp & US 301 (F063) (Standard File)

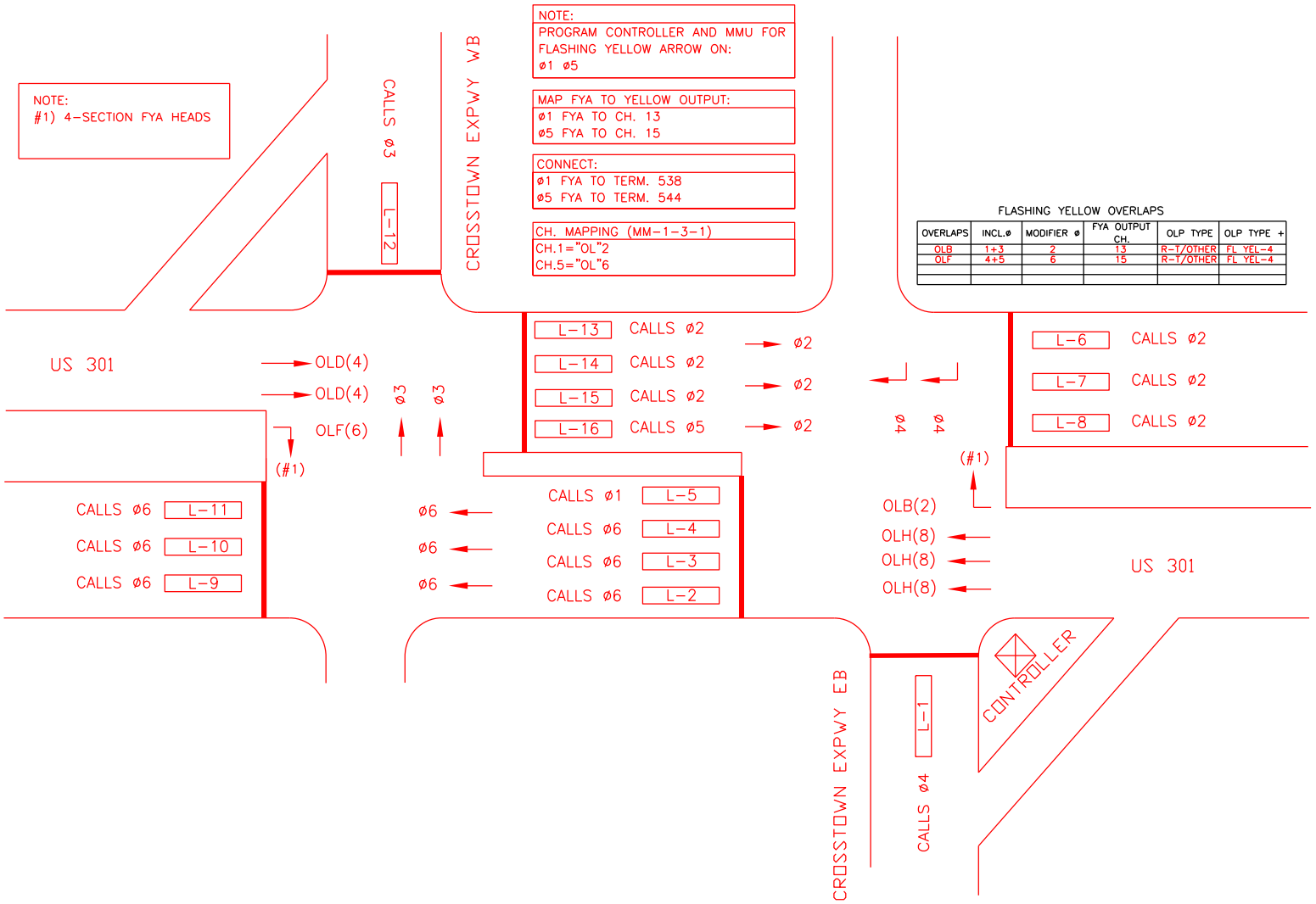
TB Coor, Action Table [4.5]

Action	Pattern	Aux 1	Aux 2	Aux 3	Special 1	Special 2	Special 3	Special 4	Special 5	Special 6	Special 7	Special 8
1	1				0	0						
2	2				0	0						
3	3				0	0						
4	4				0	0						
5	5				0	0						
6	6				0	0						
7	7				0	0						
8	8				0	0						
9	9				0	0						
10	10				0	0						
11	11				0	0						
12	12				0	0						
13	13				0	0						
14	14				0	0						
15	15				0	0						
16	16				0	0						
17	17				0	0						
18	18				0	0						
19	19				0	0						
20	20				0	0						
21	21				0	0						
22	22				0	0						
23	23				0	0						
24	24				0	0						
25	25				0	0						
26	26				0	0						
27	27				0	0						
28	28				0	0						
29	29				0	0						
30	30				0	0						
31	31				0	0						
32	32				0	0						
33	33				0	0						
34	34				0	0						
35	35				0	0						
36	36				0	0						
37	37				0	0						
38	38				0	0						
39	39				0	0						
40	40				0	0						
41	41				0	0						
42	42				0	0						
43	43				0	0						
44	44				0	0						
45	45				0	0						
46	46				0	0						
47	47				0	0						
48	48				0	0						
49					0	0						
50					0	0						
51					0	0						
52					0	0						
53					0	0						
54					0	0						
55					0	0						
56					0	0						
57					0	0						
58					0	0						
59					0	0						
60					0	0						
61					0	0						
62					0	0						
63					0	0						
64					0	0						
99	254				0	0						
100	255				0	0						

INTERSECTION

INTERSECTION: US 301 @ CROSSTOWN EXPWY (F063)
ID# 1047

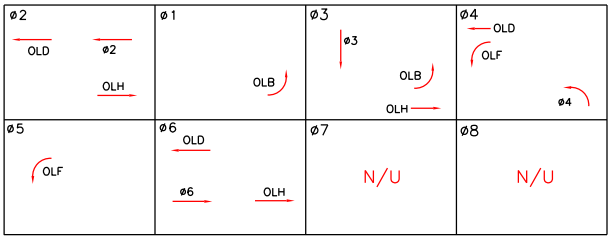
N NTS



OVERLAPS

B=ø1,ø3,MOD2
D=ø2,ø4,ø6
F=ø4,ø5,MOD6
H=ø2,ø3,ø6

PHASING DIAGRAM (SEQUENCE 3 SHOWN)



NORTH ARROW

INTERSECTION: US 301 @ CROSSTOWN EXPWY

NAZTEC, INC.
SUGAR LAND, TEXAS, USA

TITLE: HILLSBOROUGH COUNTY, FL

DRAWN BY	DATE	SHEET	SCALE
AGI	9/7/17	1 OF 1	N/A
CHECK BY	DATE	DWG. NO.	
		70006-NITS	

REV.	DATE	BY

NAZTEC FDOT CERTIFICATION NUMBERS:

66013431703011-Loop Detector
67816111703011-MMU
67816151703011-Cabinet Power Supply
67816171703011-BIU
67115521703011-TS2 Controller
67614581703011-TS2 Rack Cabinet

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Station : 1095 - Selmon Exwy & Falkenburg Rd(F242) (Standard File)

Phase [1.1.1]

	1 (NL)	2 (ST)	3 (EL)	4	5	6 (NT)	7	8 (ER)	9	10	11	12	13	14	15	16
Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clearance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Green	5	15	6	0	0	15	0	6	0	0	0	0	0	0	0	0
Passage	6	4	3.5	0	0	4	0	3.5	0	0	0	0	0	0	0	0
Max1	30	50	30	0	0	50	0	30	0	0	0	0	0	0	0	0
Max2	40	30	20	0	0	30	0	20	0	0	0	0	0	0	0	0
Yellow	4.8	4.8	4.1	9	9	4.8	9	4.1	9	9	9	9	9	9	9	9
Red	2	2	2	0	0	2	0	2	0	0	0	0	0	0	0	0
Red Revert	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Added Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max Initial	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time Before Reduce	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Before Reduce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time To Reduce	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Reduce By	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Limit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dynamic Max Step	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Auto Exit																
Rest In Walk																

Phase Option [1.1.2]

	1 (NL)	2 (ST)	3 (EL)	4	5	6 (NT)	7	8 (ER)	9	10	11	12	13	14	15	16
Enable	ON	ON	ON			ON		ON								
Auto Entry																
Non Act1																
Non Act2																
Lock Call																
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Soft Recall																
Dual Entry		ON	ON			ON		ON								
Sim Gap Enable		ON	ON			ON		ON								
Guar Passage																
Cond Service																
Add Init Calc																

Alternate Phase Program 1, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Calls and Redirection [1.1.6.3]

Entry	Call Phases				From	To	From	To	From	To	From	To	Assigned Ph
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	20	6	40	40	4.8	2	1	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0

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Station : 1095 - Selmon Exwy & Falkenburg Rd(F242) (Standard File)

Unit Parameters [1.2.1]

StartUp Flash	Auto Ped Clear	Backup Time	Red Revert	Console Timeout	Tone Disable	Feature Profile	Phase Mode	Diamond Mode	SDLC Retry Time	TS2 Det Faults	Cycle Fault Action	Max Cycle Time	Max Seek Track Time	Max Seek Dwell Time	Enable Run	Local Flash Start	Start Red Time	Disable Init Ped	Yellow 3 Second Disable	Omit Yellow Enable	Free Ring Sequence
	ON		3	30	OFF		STD8	4PH		ON	ALARM				ON	OFF		OFF	OFF	OFF	1

Comm, General Comm Parameters [6.1]

Station ID	Master Station ID	Fallback time	Allow Pencil	Port	System-Up	Sys-Down	PC/Print	Aux 232
1095			OFF					

Port Parameters [6.2]

Comm	Mode	Baud	MsgTime	Duplex	Enable	DialTime	Modem	ModemTime	Tel#1	Tel#2
System Up(P-A)										
System Down(P-B)										
PC/Print(P-2)										

Overlap General Parameters [1.5.1]

Conflict Lock	Lock Inhibit	Program Card	Use Parent	Canadian Fast Flash
OFF	OFF	OFF	ON	OFF

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases									Modifer Phases								Type	Green	Yellow	Red
Overlap 1																		NORMAL		3.5	1.5
Overlap 2	1	3								2								R-T/OTH		4.8	2
Overlap 3	2	6																NORMAL		3.5	1.5
Overlap 4																		NORMAL		3.5	1.5
Overlap 5																		NORMAL		3.5	1.5
Overlap 6																		NORMAL		3.5	1.5
Overlap 7																		NORMAL		3.5	1.5
Overlap 8																		NORMAL		3.5	1.5

Overlap Conflict Parameters+ [1.5.2.2]

Overlap	Conflicting Phases								Conflicting Overlaps								Conflicting Peds									
Overlap 1																									OFF	OFF
Overlap 2																									OFF	OFF
Overlap 3																									OFF	OFF
Overlap 4																									OFF	OFF
Overlap 5																									OFF	OFF
Overlap 6																									OFF	OFF
Overlap 7																									OFF	OFF
Overlap 8																									OFF	OFF

Detector, Vehicle Parameters 1-16 [5.1]

	1 (EL1)	2 (EL2)	3 (ST1)	4 (ST2)	5 (ST3)	6	7	8 (NL1)	9 (NT1)	10 (NT2)	11 (NT3)	12 (ER1)	13 (ER2)	14	15	16
Call Phase	3	3	2	2	2	2	2	1	1	6	6	0	8	0	0	0
Switch Phase	0	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	5	5	0	0	0

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase	0	2	3	0	0	6	0	8	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0

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Station : 1095 - Selmon Exwy & Falkenburg Rd(F242) (Standard File)

Detector Alternate Program 1, Vehicle Parameters [5.5.1]

	1 (EL1)	2 (EL2)	3 (ST1)	4 (ST2)	5 (ST3)	6	7	8 (NL1)	9 (NT1)	10 (NT2)	11 (NT3)	12 (ER1)	13 (ER2)	14	15	16
Call Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Switch Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Channels/SDLC, Assign to Phases [1.3.1]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
PH/OLP #	2	2	3			6		8	9		3		2											
Type	OLP	VEH	VEH	VEH	VEH	VEH	VEH	VEH	OLP	OLP	OLP	OLP	PED	PED	PED	PED								
Flash	RED	YEL	RED	RED	RED	YEL	RED	RED	RED	RED	RED	RED	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Flash 1-2 Hertz																								
Dimming Green																								
Dimming Yellow																								
Dimming Red																								
Alt Cyc	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

Channel/SDLC, Parameters [1.3.3]

TOD Dim Enable	Extra Maps Enable	D Connector Enable	Single BIU Map	IO Mode	Preempt or Ext Output
OFF	DEFAULT		ON	AUTO	EXT

Channel/SDLC, MMU Map [1.3.5]

MMU-to-Controller Channel Map

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Channel/SDLC, Permissive [1.3.4]

Channel	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2
1						1		1	1		1			1	
2						1		1			1				
3								1	1						
4															
5															
6						1		1							
7															
8								1							
9						1									
10															
11															
12															
13															
14															
15															

Channel/SDLC, Permissive [1.3.7]

SDLC Device	Term/Fac		Detector														MMU	Diag
BIU#	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8		
Present	ON	ON							ON	ON							ON	
Peer to Peer																		

Ring Sequence [1.2.4]

Ring	P1	P2	P3	P4	P5	P6	P7	P8
Ring 1	1	2	3	4				
Ring 2	5	6	7	8				
Ring 3								
Ring 4								

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Station : 1095 - Selmon Exwy & Falkenburg Rd(F242) (Standard File)

Alarms, Enable Events [1.6.1]

Event#	Event Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	
8	
9	
10	
11	
12	ON
13	ON
14	ON
15	ON
16	ON
17	
18	
19	
20	
21	
22	ON
23	ON
24	
25	
26	ON
27	
28	
29	ON
30	
31	
32	
33	
34	
35	
36	
37	ON
38	
39	
40	
41	
42	
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64	

Alarms, Enable Alarms [1.6.4]

Alarm#	Alarm Enable
1	ON
2	ON
3	ON
4	ON
5	ON
6	ON
7	
8	
9	
10	
11	
12	ON
13	ON
14	ON
15	ON
16	ON
17	
18	
19	
20	
21	
22	ON
23	ON
24	
25	
26	ON
27	
28	
29	ON
30	
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36	
37	ON
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Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input	ON	ON	ON	ON	ON	ON
Override Flash	ON	ON				
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green	5	5				
Min Walk						
Ped Clear						
Track Green						
Min Dwell	5	5	10	10	10	10
Max Presence						
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1						
Dwell P2						
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1						
Exit R2						
Exit R3						
Exit R4						

Alarms, Parameters [1.4.1]

Auto Flash Parameter

Yellow	Red	Mode	Source
		VOT_MON	TEST A

Alarms, Parameters [1.6.7]

Preempt Event Enabled	Pattern Event Enabled
ON	ON

Alarms, Phases/Overlaps [1.4.2]

Auto Flash	1	2	3	4	5	6	7	8	9	10	11	12
Phases												
Overlaps												

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Station : 1095 - Selmon Exwy & Falkenburg Rd(F242) (Standard File)

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable						
Type	RAIL	RAIL	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MIN	MIN	MIN	MIN
Extend Dwell	1	1				
Pattern						
Output Mode						
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Coordination, Modes,+ [2.1]

Modes

Operational	Correct	Maximum	Force-Off
	SHRT/LNG	MAX INH	FIXED

Modes+

Mode	Leave Before	Leave After	Recycle	Stop In Walk	External	Auto Reset	Latch Sec Foff	Coord Easy Float	Yield Value	Coord NTCIP Yield Sign	Closed Loop Active	
FRC	TIMED	TIMED	NO_RECYCLE	ON	OFF	ON	OFF	OFF	0	+	ON	OFF

Coordination, Pattern 1-16 [2.1]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	95	90	150	140	90	80	70									
Offset Time	82	85	90	131	77	54	5									
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn

Coordination, Pattern 17-32 [2.1]

Pattern	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cycle Time															200	
Offset Time															120	
Split Number	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Offset	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn	endgrn

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Coordination, Splits [2.7.1]

Split Table 1	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	28	45	22			73		22								
Mode	MIN	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph		ON														

Split Table 2	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	27	43	20			70		20								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph		ON														

Split Table 3	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	13	73	64			86		64								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph		ON														

Split Table 4	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	18	90	32			108		32								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph		ON														

Split Table 5	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	25	47	18			72		18								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph		ON														

Split Table 6	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	25	39	16			64		16								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph		ON														

Split Table 7	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	21	32	17			53		17								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph		ON														

Split Table 8	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 9	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 10	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 11	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 12	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

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Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 17	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 18	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 19	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 20	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 21	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 23	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 25	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 26	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 27	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 28	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT

Coord-Ph																

Split Table 29	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 30	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

Split Table 31	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time	17	98	85			115		85								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph		ON														

Split Table 32	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Time																
Mode	NON	NON	NON	NON	NON	NON	NON	NON	OMT	OMT	OMT	OMT	OMT	OMT	OMT	OMT
Coord-Ph																

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TB Coor, Advanced Scheduler [4.3]

	Month											Day of Week							Day of Month									1									2									3		
Plan	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	Day Plan
1	1	1	1	1	1	1	1	1	1	1	1	1			1	1	1			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
3	1	1	1	1	1	1	1	1	1	1	1	1	1							1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3
4	1												1	1	1	1	1	1	1																															2
5							1						1	1	1	1	1	1					1																											2
6												1	1	1	1	1	1	1																										1						2
7					1									1																														1	1	1	1	1	1	1	2
8									1					1						1	1	1	1	1	1	1																										2
9											1						1																											1	1	1	1	1	1	1			2
10										1								1																											1	1	1	1	1	1	1			2
11	1	1	1	1	1	1	1	1	1	1	1	1						1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
12	1	1	1	1	1	1	1	1	1	1	1	1		1						1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
13																																																		1
14																																																		1
15																																																		1
16																																																		1
17																																																		1
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27																																																		1
28																																																		1
29																																																		1
30																																																		1
31																																																		1
32																																																		1

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	15	19	20										
Minute				30		30										
Action	99	1	2	3	4	99										

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		9	10	19	21											
Minute			30	30												
Action	99	5	6	7	99											

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		9	10	19	21											
Minute			30	30												
Action	99	5	6	7	99											

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

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Day Plan Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

Day Plan Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	99															

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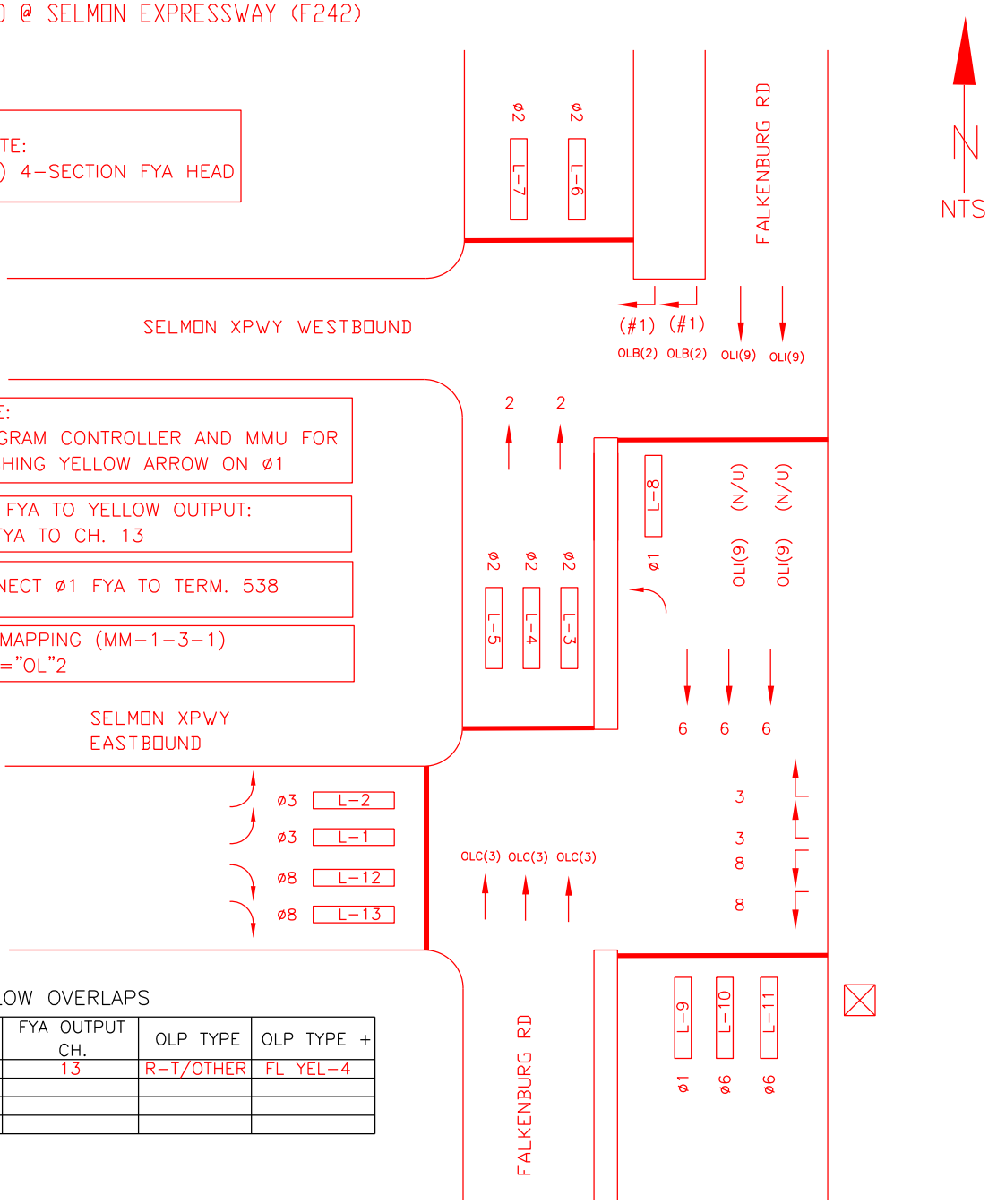
TB Coor, Action Table [4.5]

Action	Pattern	Aux 1	Aux 2	Aux 3	Special 1	Special 2	Special 3	Special 4	Special 5	Special 6	Special 7	Special 8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25	25											
26	26											
27	27											
28	28											
29	29											
30	30											
31	31											
32	32											
33	33											
34	34											
35	35											
36	36											
37	37											
38	38											
39	39											
40	40											
41	41											
42	42											
43	43											
44	44											
45	45											
46	46											
47	47											
48	48											
49												
50												
51												
52												
53												
54												
55												
56												
57												
58												
59												
60												
61												
62												
63												
64												
99	254											
100	255											

INTERSECTION

INTERSECTION: FALKENBURG RD @ SELMON EXPRESSWAY (F242)
ID# 1095

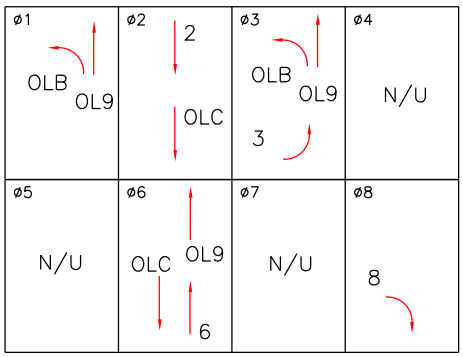


FLASHING YELLOW OVERLAPS

OVERLAPS	INCL.ø	MODIFIER ø	FYA OUTPUT CH.	OLP TYPE	OLP TYPE +
OLB	1,3	2	13	R-T/OTHER	FL YEL-4

PHASING DIAGRAM

PHASING DIAGRAM



NORTH ARROW

OVERLAPS

A=
B=ø1,ø3,MODø2
C=ø2,ø6
I(9)=ø1,ø3,ø6

INTERSECTION: FALKENBURG RD @ SELMON EXPRESSWAY

NAZTEC, INC.
SUGAR LAND, TEXAS, USA

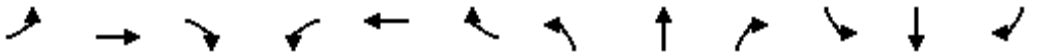
TITLE: HILLSBOROUGH COUNTY, FL

DRAWN BY	DATE	SHEET	SCALE
AGI	1/21/14	1 OF 1	N/A
CHECK BY	DATE	DWG. NO.	
		70006-NITS	

REV.	DATE	BY

NAZTEC FDOT CERTIFICATION NUMBERS:

66013431703011-Loop Detector
67816111703011-MMU
67816151703011-Cabinet Power Supply
67816171703011-BIU
67115521703011-TS2 Controller
67614581703011-TS2 Rack Cabinet

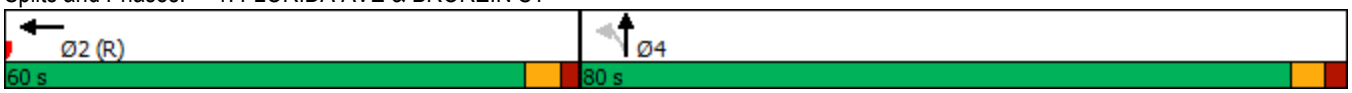


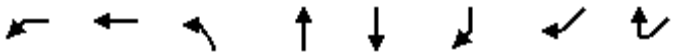
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1632	394	188	1455	0	0	0	0
Future Volume (vph)	0	0	0	0	1632	394	188	1455	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	1.00	1.00	1.00	1.00
Frt					0.971							
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6222	0	1770	5085	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	6222	0	1770	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					18		22					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		273			600			296			353	
Travel Time (s)		6.2			13.6			6.7			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1774	428	204	1582	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2202	0	204	1582	0	0	0	0
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Minimum Split (s)					29.8		36.1	36.1				
Total Split (s)					60.0		80.0	80.0				
Total Split (%)					42.9%		57.1%	57.1%				
Maximum Green (s)					54.2		73.9	73.9				
Yellow Time (s)					3.7		3.7	3.7				
All-Red Time (s)					2.1		2.4	2.4				
Lost Time Adjust (s)					0.0		0.0	0.0				
Total Lost Time (s)					5.8		6.1	6.1				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		23.0	23.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					54.2		73.9	73.9				
Actuated g/C Ratio					0.39		0.53	0.53				
v/c Ratio					0.91		0.22	0.59				
Control Delay					30.8		16.3	23.8				
Queue Delay					0.1		0.0	0.0				
Total Delay					30.9		16.3	23.8				
LOS					C		B	C				
Approach Delay					30.9			22.9				
Approach LOS					C			C				

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	

Offset: 43 (31%), Referenced to phase 2:WBT and 6:, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 27.3 Intersection LOS: C
Intersection Capacity Utilization 68.3% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 1: FLORIDA AVE & BROREIN ST



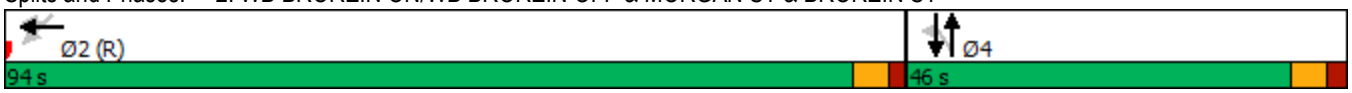


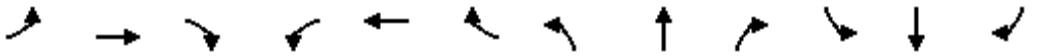
Lane Group	WBL	WBT	NBL	NBT	SBT	SBR	SWR	SWR2
Lane Configurations								
Traffic Volume (vph)	79	1544	38	165	172	185	544	374
Future Volume (vph)	79	1544	38	165	172	185	544	374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.922		0.850	0.850
Flt Protected		0.998		0.991				
Satd. Flow (prot)	0	5075	0	3507	3263	0	1583	1583
Flt Permitted		0.998		0.798				
Satd. Flow (perm)	0	5075	0	2824	3263	0	1583	1583
Right Turn on Red								Yes
Satd. Flow (RTOR)								195
Link Speed (mph)		30		30	30			
Link Distance (ft)		591		494	379			
Travel Time (s)		13.4		11.2	8.6			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	86	1678	41	179	187	201	591	407
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1764	0	220	388	0	591	407
Turn Type	Perm	NA	Perm	NA	NA		Perm	Free
Protected Phases		2		4	4			
Permitted Phases	2		4				2	Free
Minimum Split (s)	24.7	24.7	32.0	32.0	32.0		24.7	
Total Split (s)	94.0	94.0	46.0	46.0	46.0		94.0	
Total Split (%)	67.1%	67.1%	32.9%	32.9%	32.9%		67.1%	
Maximum Green (s)	88.3	88.3	40.0	40.0	40.0		88.3	
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7		3.7	
All-Red Time (s)	2.0	2.0	2.3	2.3	2.3		2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.7		6.0	6.0		5.7	
Lead/Lag								
Lead-Lag Optimize?								
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	12.0	12.0	19.0	19.0	19.0		12.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	
Act Effct Green (s)		88.3		40.0	40.0		88.3	140.0
Actuated g/C Ratio		0.63		0.29	0.29		0.63	1.00
v/c Ratio		0.55		0.27	0.42		0.59	0.26
Control Delay		10.6		39.9	42.2		18.3	0.4
Queue Delay		0.3		0.0	0.0		0.1	0.0
Total Delay		10.9		39.9	42.2		18.4	0.4
LOS		B		D	D		B	A
Approach Delay		10.9		39.9	42.2			
Approach LOS		B		D	D			

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	

Offset: 35 (25%), Referenced to phase 2:WBTL, Start of Green	
Natural Cycle: 65	
Control Type: Pretimed	
Maximum v/c Ratio: 0.59	
Intersection Signal Delay: 16.4	Intersection LOS: B
Intersection Capacity Utilization 103.7%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 2: WB BROREIN ON/WB BROREIN OFF & MORGAN ST & BROREIN ST





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1463	207	13	224	0	0	0	147
Future Volume (vph)	0	0	0	0	1463	207	13	224	0	0	0	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt					0.981							0.865
Flt Protected								0.997				
Satd. Flow (prot)	0	0	0	0	3472	0	0	3529	0	0	0	1611
Flt Permitted								0.997				
Satd. Flow (perm)	0	0	0	0	3472	0	0	3529	0	0	0	1611
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					36			21				72
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		591			202			322			162	
Travel Time (s)		13.4			4.6			7.3			3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1590	225	14	243	0	0	0	160
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1815	0	0	257	0	0	0	160
Turn Type					NA		Perm	NA				Perm
Protected Phases					2			4				
Permitted Phases							4					4
Minimum Split (s)					23.7		23.7	23.7				23.7
Total Split (s)					115.0		25.0	25.0				25.0
Total Split (%)					82.1%		17.9%	17.9%				17.9%
Maximum Green (s)					109.3		19.3	19.3				19.3
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.0		2.0	2.0				2.0
Lost Time Adjust (s)					0.0			0.0				0.0
Total Lost Time (s)					5.7			5.7				5.7
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				7.0
Flash Dont Walk (s)					11.0		11.0	11.0				11.0
Pedestrian Calls (#/hr)					0		0	0				0
Act Effct Green (s)					109.3			19.3				19.3
Actuated g/C Ratio					0.78			0.14				0.14
v/c Ratio					0.67			0.51				0.56
Control Delay					8.3			55.2				39.0
Queue Delay					0.0			0.0				0.0
Total Delay					8.3			55.2				39.0
LOS					A			E				D
Approach Delay					8.3			55.2			39.0	
Approach LOS					A			E			D	

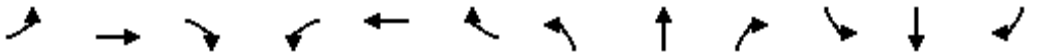
Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	

Offset: 30 (21%), Referenced to phase 2:WBT and 6:, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 0.67
Intersection Signal Delay: 15.9 Intersection LOS: B
Intersection Capacity Utilization 78.7% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 3: JEFFERSON ST & BROREIN ST

Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	266	165	40	147	0	0
Future Volume (vph)	266	165	40	147	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	115		0	0
Storage Lanes		0	0		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.943					
Flt Protected			0.950			
Satd. Flow (prot)	3337	0	1770	1863	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	3337	0	1770	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	162			583	231	
Travel Time (s)	3.7			13.3	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	289	179	43	160	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	468	0	43	160	0	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			

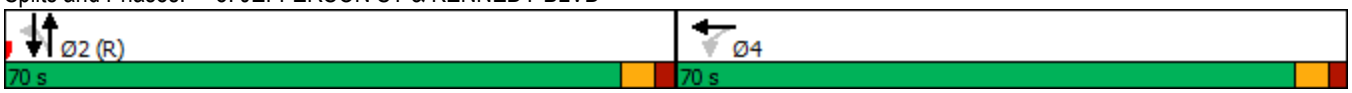


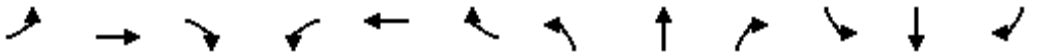
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	196	1843	237	118	305	0	0	82	31
Future Volume (vph)	0	0	0	196	1843	237	118	305	0	0	82	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.983						0.959	
Flt Protected				0.950				0.986				
Satd. Flow (prot)	0	0	0	1770	6299	0	0	3490	0	0	3394	0
Flt Permitted				0.950				0.815				
Satd. Flow (perm)	0	0	0	1770	6299	0	0	2884	0	0	3394	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					31						2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			319			716			284	
Travel Time (s)		13.1			7.3			16.3			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	213	2003	258	128	332	0	0	89	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	213	2261	0	0	460	0	0	123	0
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					4			2			2	
Permitted Phases				4			2					
Minimum Split (s)				25.7	25.7		25.9	25.9			25.9	
Total Split (s)				70.0	70.0		70.0	70.0			70.0	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				64.3	64.3		64.1	64.1			64.1	
Yellow Time (s)				3.7	3.7		3.7	3.7			3.7	
All-Red Time (s)				2.0	2.0		2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0			0.0			0.0	
Total Lost Time (s)				5.7	5.7			5.9			5.9	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				13.0	13.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				64.3	64.3			64.1			64.1	
Actuated g/C Ratio				0.46	0.46			0.46			0.46	
v/c Ratio				0.26	0.78			0.35			0.08	
Control Delay				20.2	25.8			25.4			21.2	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				20.2	25.8			25.4			21.2	
LOS				C	C			C			C	
Approach Delay					25.3			25.4			21.2	
Approach LOS					C			C			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	

Offset: 9 (6%), Referenced to phase 2:NBSB and 6:, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 25.2 Intersection LOS: C
Intersection Capacity Utilization 55.5% ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 5: JEFFERSON ST & KENNEDY BLVD



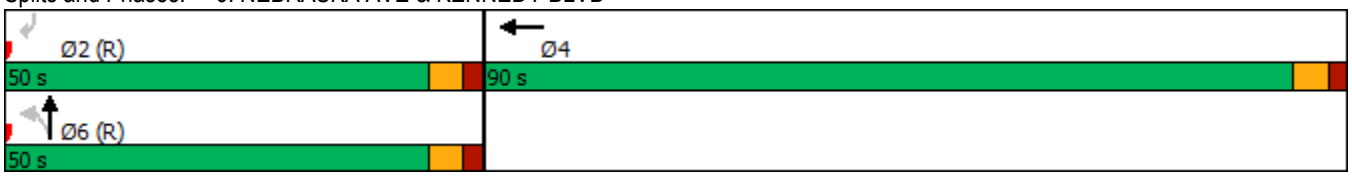


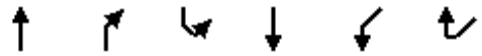
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1543	323	18	121	0	0	0	153
Future Volume (vph)	0	0	0	0	1543	323	18	121	0	0	0	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88
Frt					0.974							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4953	0	1770	1863	0	0	0	2787
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	4953	0	1770	1863	0	0	0	2787
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					58		22					44
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		847			465			292			201	
Travel Time (s)		19.3			10.6			6.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1677	351	20	132	0	0	0	166
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2028	0	20	132	0	0	0	166
Turn Type					NA		Perm	NA				Perm
Protected Phases					4			6				
Permitted Phases							6					2
Minimum Split (s)					29.8		24.9	24.9				26.9
Total Split (s)					90.0		50.0	50.0				50.0
Total Split (%)					64.3%		35.7%	35.7%				35.7%
Maximum Green (s)					84.2		44.1	44.1				44.1
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.1		2.2	2.2				2.2
Lost Time Adjust (s)					0.0		0.0	0.0				0.0
Total Lost Time (s)					5.8		5.9	5.9				5.9
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				7.0
Flash Dont Walk (s)					17.0		12.0	12.0				14.0
Pedestrian Calls (#/hr)					0		0	0				0
Act Effct Green (s)					84.2		44.1	44.1				44.1
Actuated g/C Ratio					0.60		0.32	0.32				0.32
v/c Ratio					0.68		0.03	0.23				0.18
Control Delay					19.5		11.4	36.7				24.7
Queue Delay					0.0		0.0	0.0				0.0
Total Delay					19.5		11.4	36.7				24.7
LOS					B		B	D				C
Approach Delay					19.5			33.3			24.7	
Approach LOS					B			C			C	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	

Offset: 15 (11%), Referenced to phase 2:SBR and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 20.8 Intersection LOS: C
Intersection Capacity Utilization 68.3% ICU Level of Service C
Analysis Period (min) 15

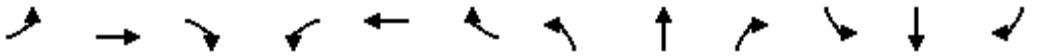
Splits and Phases: 6: NEBRASKA AVE & KENNEDY BLVD





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	334	110	60	153	0	0
Future Volume (vph)	334	110	60	153	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	130		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt	0.966					
Flt Protected			0.950			
Satd. Flow (prot)	1799	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1799	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			390	272	
Travel Time (s)	4.6			8.9	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	363	120	65	166	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	483	0	65	166	0	0
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.3%		ICU Level of Service A	
Analysis Period (min) 15			

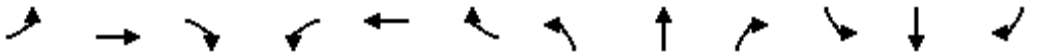


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	86	10	45	910	673	22	225	87	161	158	59
Future Volume (vph)	1	86	10	45	910	673	22	225	87	161	158	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	150		0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.984			0.938			0.958				0.850
Flt Protected					0.999		0.950			0.950		
Satd. Flow (prot)	0	3483	0	0	3316	0	1770	1785	0	1770	3539	1583
Flt Permitted		0.945			0.941		0.643			0.122		
Satd. Flow (perm)	0	3291	0	0	3124	0	1198	1785	0	227	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			249			12				64
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			652			390			257	
Travel Time (s)		17.7			14.8			8.9			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	93	11	49	989	732	24	245	95	175	172	64
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	105	0	0	1770	0	24	340	0	175	172	64
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	Perm
Protected Phases		8			8			6		5	2	
Permitted Phases	8			8			6			2		2
Detector Phase	8	8		8	8		6	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		5.0	10.0	10.0
Minimum Split (s)	29.1	29.1		29.1	29.1		28.0	28.0		10.7	28.0	28.0
Total Split (s)	95.0	95.0		95.0	95.0		33.0	33.0		12.0	45.0	45.0
Total Split (%)	67.9%	67.9%		67.9%	67.9%		23.6%	23.6%		8.6%	32.1%	32.1%
Maximum Green (s)	88.9	88.9		88.9	88.9		27.0	27.0		6.3	39.0	39.0
Yellow Time (s)	3.7	3.7		3.7	3.7		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.4		2.4	2.4		2.3	2.3		2.0	2.3	2.3
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.1			6.1		6.0	6.0		5.7	6.0	6.0
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		2.0	3.0	3.0
Recall Mode	Max	Max		Max	Max		C-Max	C-Max		None	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0			7.0	7.0
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		15.0	15.0			15.0	15.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0			0	0
Act Effct Green (s)		88.9			88.9		27.0	27.0		39.3	39.0	39.0
Actuated g/C Ratio		0.64			0.64		0.19	0.19		0.28	0.28	0.28
v/c Ratio		0.05			0.85		0.10	0.96		1.32	0.17	0.13
Control Delay		8.7			19.5		44.4	86.8		220.8	38.9	9.1
Queue Delay		0.0			37.7		0.0	0.0		0.0	0.0	0.0
Total Delay		8.7			57.1		44.4	86.8		220.8	38.9	9.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		A			E		D	F		F	D	A
Approach Delay		8.7			57.1			84.0			111.7	
Approach LOS		A			E			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 119 (85%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.32			
Intersection Signal Delay: 67.4		Intersection LOS: E	
Intersection Capacity Utilization 92.3%		ICU Level of Service F	
Analysis Period (min) 15			

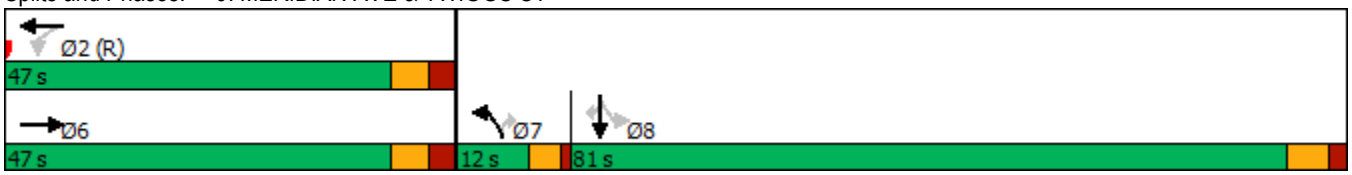
Splits and Phases: 8: NEBRASKA AVE & TWIGGS ST



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	175	159	50	469	0	101	0	41	217	1610	1058
Future Volume (vph)	0	175	159	50	469	0	101	0	41	217	1610	1058
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	0.97	1.00	1.00	0.91	0.91	1.00
Frt		0.929							0.850			0.850
Flt Protected					0.995		0.950				0.994	
Satd. Flow (prot)	0	3288	0	0	3522	0	3433	0	1583	0	5055	1583
Flt Permitted					0.826		0.950				0.994	
Satd. Flow (perm)	0	3288	0	0	2923	0	3433	0	1583	0	5055	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		111							79			98
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			772			501			413	
Travel Time (s)		14.8			17.5			11.4			9.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	190	173	54	510	0	110	0	45	236	1750	1150
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	363	0	0	564	0	110	0	45	0	1986	1150
Turn Type		NA		Perm	NA		Prot		Perm	Perm	NA	Perm
Protected Phases		6			2		7				8	
Permitted Phases				2					7	8		8
Detector Phase		6		2	2		7		7	8	8	8
Switch Phase												
Minimum Initial (s)		10.0		10.0	10.0		5.0		5.0	10.0	10.0	10.0
Minimum Split (s)		45.8		16.8	16.8		9.5		9.5	16.4	16.4	16.4
Total Split (s)		47.0		47.0	47.0		12.0		12.0	81.0	81.0	81.0
Total Split (%)		33.6%		33.6%	33.6%		8.6%		8.6%	57.9%	57.9%	57.9%
Maximum Green (s)		40.2		40.2	40.2		7.5		7.5	74.6	74.6	74.6
Yellow Time (s)		4.0		4.0	4.0		3.5		3.5	4.4	4.4	4.4
All-Red Time (s)		2.8		2.8	2.8		1.0		1.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0		0.0		0.0		0.0	0.0
Total Lost Time (s)		6.8			6.8		4.5		4.5		6.4	6.4
Lead/Lag							Lead		Lead	Lag	Lag	Lag
Lead-Lag Optimize?							Yes		Yes	Yes	Yes	Yes
Vehicle Extension (s)		3.0		3.0	3.0		3.0		3.0	3.0	3.0	3.0
Recall Mode		Max		C-Max	C-Max		None		None	None	None	None
Walk Time (s)		7.0										
Flash Dont Walk (s)		32.0										
Pedestrian Calls (#/hr)		0										
Act Effct Green (s)		40.2			40.2		7.4		7.4		74.7	74.7
Actuated g/C Ratio		0.29			0.29		0.05		0.05		0.53	0.53
v/c Ratio		0.35			0.67		0.61		0.28		0.74	1.29
Control Delay		7.3			48.8		79.4		7.3		27.2	167.9
Queue Delay		0.0			0.0		0.0		0.0		0.0	0.0
Total Delay		7.3			48.8		79.4		7.3		27.2	167.9
LOS		A			D		E		A		C	F
Approach Delay		7.3			48.8			58.4			78.8	
Approach LOS		A			D			E			E	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 122 (87%), Referenced to phase 2:WBTL, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.29	
Intersection Signal Delay: 67.9	Intersection LOS: E
Intersection Capacity Utilization 97.6%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 9: MERIDIAN AVE & TWIGGS ST



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Lane Configurations									
Traffic Volume (vph)	66	122	14	1682	770	0	97	0	0
Future Volume (vph)	66	122	14	1682	770	0	97	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt		0.850					0.850		
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	5085	5085	0	1583	0	0
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	5085	5085	0	1583	0	0
Link Speed (mph)	30			30	30			30	
Link Distance (ft)	404			536	498			405	
Travel Time (s)	9.2			12.2	11.3			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	72	133	15	1828	837	0	105	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	72	133	15	1828	837	0	105	0	0
Sign Control	Stop			Free	Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations								
Traffic Vol, veh/h	66	122	14	1682	770	0	0	0
Future Vol, veh/h	66	122	14	1682	770	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	-	-
Storage Length	0	0	0	-	-	0	-	-
Veh in Median Storage, #	0	-	-	0	0	-	0	-
Grade, %	0	-	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	72	133	15	1828	837	0	0	0

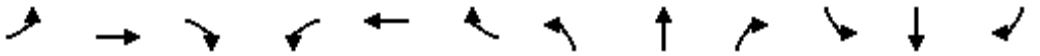
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1598	419	837	0	-	0
Stage 1	837	-	-	-	-	-
Stage 2	761	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	-	-
Pot Cap-1 Maneuver	153	498	-	-	-	0
Stage 1	304	-	-	-	-	0
Stage 2	383	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	153	498	-	-	-	-
Mov Cap-2 Maneuver	153	-	-	-	-	-
Stage 1	304	-	-	-	-	-
Stage 2	383	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	26.4		0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	-	153	498	-
HCM Lane V/C Ratio	-	-	0.469	0.266	-
HCM Control Delay (s)	-	-	47.8	14.8	-
HCM Lane LOS	-	-	E	B	-
HCM 95th %tile Q(veh)	-	-	2.2	1.1	-

Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations											
Traffic Volume (vph)	0	0	336	1412	0	0	841	0	26	0	238
Future Volume (vph)	0	0	336	1412	0	0	841	0	26	0	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00	1.00	1.00	1.00
Frt											0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Flt Permitted			0.950						0.950		
Satd. Flow (perm)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	264			498			271			329	
Travel Time (s)	6.0			11.3			6.2			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	365	1535	0	0	914	0	28	0	259
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	365	1535	0	0	914	0	28	0	259
Sign Control	Free			Free			Free			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.7%		ICU Level of Service A	
Analysis Period (min) 15			

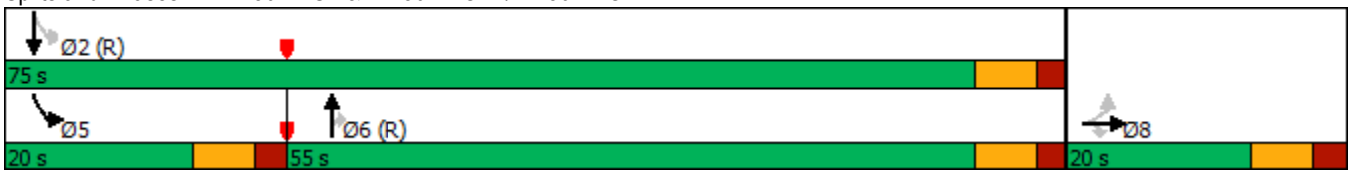


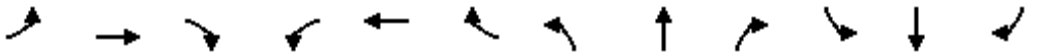
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	0	164	0	0	0	0	1701	34	104	746	0
Future Volume (vph)	94	0	164	0	0	0	0	1701	34	104	746	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		200	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.073		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	136	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			178						122			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		549			603			383			284	
Travel Time (s)		12.5			13.7			8.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	102	0	178	0	0	0	0	1849	37	113	811	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	102	178	0	0	0	0	1849	37	113	811	0
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8						6	2		
Detector Phase	8	8	8					6	6	5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	5.0	10.0	
Minimum Split (s)	46.9	46.9	46.9					16.5	16.5	11.7	23.5	
Total Split (s)	20.0	20.0	20.0					55.0	55.0	20.0	75.0	
Total Split (%)	21.1%	21.1%	21.1%					57.9%	57.9%	21.1%	78.9%	
Maximum Green (s)	13.1	13.1	13.1					48.5	48.5	13.3	68.5	
Yellow Time (s)	4.4	4.4	4.4					4.4	4.4	4.4	4.4	
All-Red Time (s)	2.5	2.5	2.5					2.1	2.1	2.3	2.1	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.9	6.9					6.5	6.5	6.7	6.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0					3.0	3.0	2.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Dont Walk (s)	33.0	33.0	33.0								10.0	
Pedestrian Calls (#/hr)	0	0	0								0	
Act Effct Green (s)		12.0	12.0					56.1	56.1	69.4	69.6	
Actuated g/C Ratio		0.13	0.13					0.59	0.59	0.73	0.73	
v/c Ratio		0.46	0.50					0.49	0.04	0.52	0.22	
Control Delay		45.3	11.3					12.1	0.1	39.3	2.6	
Queue Delay		0.4	0.0					0.0	0.0	0.0	0.1	
Total Delay		45.7	11.3					12.1	0.1	39.3	2.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D	B					B	A	D	A	
Approach Delay		23.8						11.9			7.2	
Approach LOS		C						B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 26 (27%), Referenced to phase 2:SBTL and 6:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 63.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 12: 50TH ST & EB 50TH OFF/EB 50TH ON

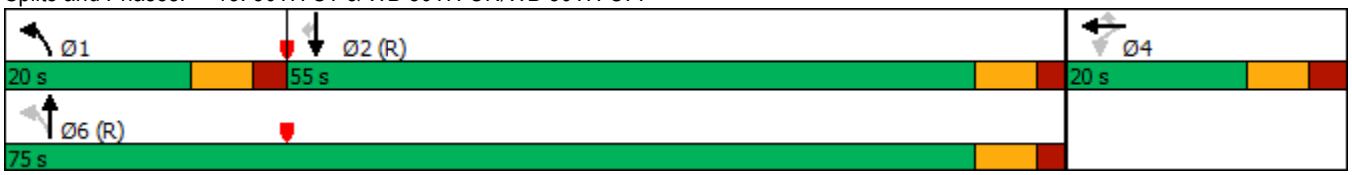


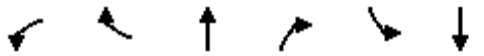


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	25	0	228	478	1317	0	0	825	111
Future Volume (vph)	0	0	0	25	0	228	478	1317	0	0	825	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.246					
Satd. Flow (perm)	0	0	0	0	1770	1583	458	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						117						126
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		457			359			284			339	
Travel Time (s)		10.4			8.2			6.5			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	27	0	248	520	1432	0	0	897	121
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	27	248	520	1432	0	0	897	121
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Detector Phase				4	4	4	1	6			2	2
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	10.0
Minimum Split (s)				46.2	46.2	46.2	11.8	23.4			23.4	23.4
Total Split (s)				20.0	20.0	20.0	20.0	75.0			55.0	55.0
Total Split (%)				21.1%	21.1%	21.1%	21.1%	78.9%			57.9%	57.9%
Maximum Green (s)				12.8	12.8	12.8	13.2	68.6			48.6	48.6
Yellow Time (s)				4.4	4.4	4.4	4.4	4.4			4.4	4.4
All-Red Time (s)				2.8	2.8	2.8	2.4	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.2	7.2	6.8	6.4			6.4	6.4
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	2.0	3.0			3.0	3.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)				32.0	32.0	32.0		10.0			10.0	10.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)					12.2	12.2	68.8	69.2			48.6	48.6
Actuated g/C Ratio					0.13	0.13	0.72	0.73			0.51	0.51
v/c Ratio					0.12	0.82	0.99	0.39			0.27	0.14
Control Delay					37.6	42.9	69.5	2.1			13.5	2.5
Queue Delay					0.0	0.0	5.0	0.0			0.0	0.0
Total Delay					37.6	42.9	74.4	2.1			13.5	2.5
LOS					D	D	E	A			B	A
Approach Delay					42.4			21.4			12.2	
Approach LOS					D			C			B	

Intersection Summary		
Area Type:	Other	
Cycle Length: 95		
Actuated Cycle Length: 95		
Offset: 28 (29%), Referenced to phase 2:SBT and 6:NBTL, Start of Green		
Natural Cycle: 95		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.99		
Intersection Signal Delay: 20.3		Intersection LOS: C
Intersection Capacity Utilization 63.8%		ICU Level of Service B
Analysis Period (min) 15		

Splits and Phases: 13: 50TH ST & WB 50TH ON/WB 50TH OFF





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	66	0	1145	0	0	382
Future Volume (vph)	66	0	1145	0	0	382
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	3539	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	3539	0	0	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	292		343			439
Travel Time (s)	6.6		7.8			10.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	72	0	1245	0	0	415
Shared Lane Traffic (%)						
Lane Group Flow (vph)	72	0	1245	0	0	415
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	66	0	1145	0	0	382
Future Vol, veh/h	66	0	1145	0	0	382
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	72	0	1245	0	0	415

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1453	-	0	-	-	-
Stage 1	1245	-	-	-	-	-
Stage 2	208	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-
Pot Cap-1 Maneuver	121	0	-	0	0	-
Stage 1	235	0	-	0	0	-
Stage 2	807	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	121	-	-	-	-	-
Mov Cap-2 Maneuver	200	-	-	-	-	-
Stage 1	235	-	-	-	-	-
Stage 2	807	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.7	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	200	-
HCM Lane V/C Ratio	-	0.359	-
HCM Control Delay (s)	-	32.7	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	1.5	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	469	234	147	1295	4	734	1	449	1	1	1
Future Volume (vph)	3	469	234	147	1295	4	734	1	449	1	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	0		315	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.955	
Flt Protected	0.950			0.950			0.950	0.952			0.984	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1681	1685	1583	0	1750	0
Flt Permitted	0.141			0.950			0.950	0.952				
Satd. Flow (perm)	263	3539	1583	1770	3539	1583	1681	1685	1583	0	1779	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			254			69			328		1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		887			638			788			238	
Travel Time (s)		20.2			14.5			17.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	510	254	160	1408	4	798	1	488	1	1	1
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	3	510	254	160	1408	4	399	400	488	0	3	0
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Perm	NA	
Protected Phases		6		5	2		4	4			3	
Permitted Phases	6		6			2			4	3		
Detector Phase	6	6	6	5	2	2	4	4	4	3	3	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	25.2	25.2	25.2	12.2	26.2	26.2	51.1	51.1	51.1	14.0	14.0	
Total Split (s)	77.0	77.0	77.0	45.0	122.0	122.0	50.0	50.0	50.0	18.0	18.0	
Total Split (%)	40.5%	40.5%	40.5%	23.7%	64.2%	64.2%	26.3%	26.3%	26.3%	9.5%	9.5%	
Maximum Green (s)	69.8	69.8	69.8	37.8	114.8	114.8	42.9	42.9	42.9	10.0	10.0	
Yellow Time (s)	5.2	5.2	5.2	5.2	5.2	5.2	4.8	4.8	4.8	3.4	3.4	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.3	4.6	4.6	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.1	7.1		8.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0			
Flash Dont Walk (s)	11.0	11.0	11.0		12.0	12.0	37.0	37.0	37.0			
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0			
Act Effct Green (s)	85.1	85.1	85.1	22.5	114.8	114.8	57.3	57.3	57.3		7.2	
Actuated g/C Ratio	0.45	0.45	0.45	0.12	0.60	0.60	0.30	0.30	0.30		0.04	
v/c Ratio	0.03	0.32	0.30	0.77	0.66	0.00	0.79	0.79	0.69		0.04	
Control Delay	33.7	35.3	4.3	103.6	26.6	0.0	71.9	71.9	24.7		76.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	33.7	35.3	4.3	103.6	26.6	0.0	71.9	71.9	24.7		76.7	

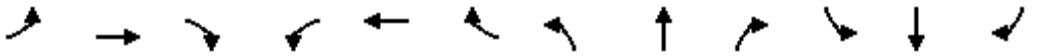
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	D	A	F	C	A	E	E	C		E	
Approach Delay		25.0			34.4			54.0			76.7	
Approach LOS		C			C			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 190			
Actuated Cycle Length: 190			
Offset: 55 (29%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 39.4		Intersection LOS: D	
Intersection Capacity Utilization 93.2%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 15: 78TH ST & ADAMO DR

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	906	13	142	1446	0	0
Future Volume (vph)	906	13	142	1446	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	1.00
Frt		0.850				
Flt Protected				0.996		
Satd. Flow (prot)	5085	1583	0	5065	0	0
Flt Permitted				0.996		
Satd. Flow (perm)	5085	1583	0	5065	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	638			376	435	
Travel Time (s)	14.5			8.5	9.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	985	14	154	1572	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	985	14	0	1726	0	0
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			

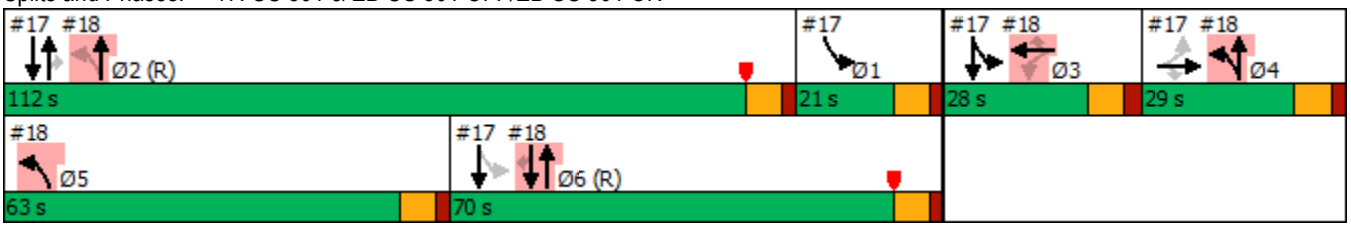


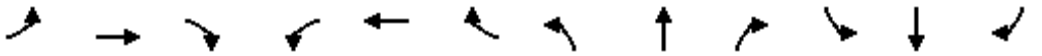
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	137	0	300	0	0	0	0	2303	251	105	983	0
Future Volume (vph)	137	0	300	0	0	0	0	2303	251	105	983	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		500	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	5085	1583	1770	5085	0
Flt Permitted		0.950								0.082		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	5085	1583	153	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			194						264			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		739			677			1414			381	
Travel Time (s)		16.8			15.4			32.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	149	0	326	0	0	0	0	2503	273	114	1068	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	149	326	0	0	0	0	2503	273	114	1068	0
Turn Type	Perm	NA	Perm					NA	Perm	custom	NA	
Protected Phases		4						2		1 3	6 3 2	
Permitted Phases	4		4						2	6		
Detector Phase	4	4	4					2	2	1 3	6 3 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					15.0	15.0			
Minimum Split (s)	12.5	12.5	12.5					22.1	22.1			
Total Split (s)	29.0	29.0	29.0					112.0	112.0			
Total Split (%)	15.3%	15.3%	15.3%					58.9%	58.9%			
Maximum Green (s)	21.5	21.5	21.5					104.9	104.9			
Yellow Time (s)	5.1	5.1	5.1					5.1	5.1			
All-Red Time (s)	2.4	2.4	2.4					2.0	2.0			
Lost Time Adjust (s)		0.0	0.0					0.0	0.0			
Total Lost Time (s)		7.5	7.5					7.1	7.1			
Lead/Lag	Lag	Lag	Lag					Lead	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes					Yes	Yes			
Vehicle Extension (s)	4.0	4.0	4.0					3.0	3.0			
Recall Mode	None	None	None					C-Max	C-Max			
Act Effct Green (s)		21.5	21.5					104.9	104.9	90.9	153.9	
Actuated g/C Ratio		0.11	0.11					0.55	0.55	0.48	0.81	
v/c Ratio		0.74	0.93					0.89	0.28	0.27	0.26	
Control Delay		103.6	65.2					42.7	3.0	16.1	0.3	
Queue Delay		14.1	0.0					0.7	0.0	0.0	0.2	
Total Delay		117.7	65.2					43.4	3.0	16.1	0.5	
LOS		F	E					D	A	B	A	
Approach Delay		81.6						39.4			2.0	
Approach LOS		F						D			A	

Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	15.0
Minimum Split (s)	12.1	12.8	12.1	22.1
Total Split (s)	21.0	28.0	63.0	70.0
Total Split (%)	11%	15%	33%	37%
Maximum Green (s)	13.9	20.2	55.9	62.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.7	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	4.0	3.0
Recall Mode	None	None	Max	C-Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary	
Area Type:	Other
Cycle Length: 190	
Actuated Cycle Length: 190	
Offset: 142 (75%), Referenced to phase 2:NBSB and 6:SBTL, Start of Yellow	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.80	
Intersection Signal Delay: 34.0	Intersection LOS: C
Intersection Capacity Utilization 78.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 17: US 301 & EB US 301 OFF/EB US 301 ON





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	84	0	496	590	1850	0	0	1004	121
Future Volume (vph)	0	0	0	84	0	496	590	1850	0	0	1004	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	5085	1583
Flt Permitted					0.950		0.082					
Satd. Flow (perm)	0	0	0	0	1770	1583	153	5085	0	0	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						148						111
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			711			381			795	
Travel Time (s)		13.2			16.2			8.7			18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	91	0	539	641	2011	0	0	1091	132
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	91	539	641	2011	0	0	1091	132
Turn Type				Perm	NA	Perm	custom	NA			NA	Perm
Protected Phases					3		5 4	2 4 6			6	
Permitted Phases				3		3	2					6
Detector Phase				3	3	3	5 4	2 4 6			6	6
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0					15.0	15.0
Minimum Split (s)				12.8	12.8	12.8					22.1	22.1
Total Split (s)				28.0	28.0	28.0					70.0	70.0
Total Split (%)				14.7%	14.7%	14.7%					36.8%	36.8%
Maximum Green (s)				20.2	20.2	20.2					62.9	62.9
Yellow Time (s)				5.1	5.1	5.1					5.1	5.1
All-Red Time (s)				2.7	2.7	2.7					2.0	2.0
Lost Time Adjust (s)					0.0	0.0					0.0	0.0
Total Lost Time (s)					7.8	7.8					7.1	7.1
Lead/Lag				Lead	Lead	Lead					Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0					3.0	3.0
Recall Mode				None	None	None					C-Max	C-Max
Act Effct Green (s)					20.2	20.2	133.9	154.9			62.9	62.9
Actuated g/C Ratio					0.11	0.11	0.70	0.82			0.33	0.33
v/c Ratio					0.48	1.80	0.77	0.49			0.65	0.22
Control Delay					89.4	399.7	42.7	0.2			56.3	11.1
Queue Delay					0.0	0.0	43.2	0.3			0.0	0.0
Total Delay					89.4	399.7	85.9	0.5			56.3	11.1
LOS					F	F	F	A			E	B
Approach Delay					354.9			21.2			51.4	
Approach LOS					F			C			D	

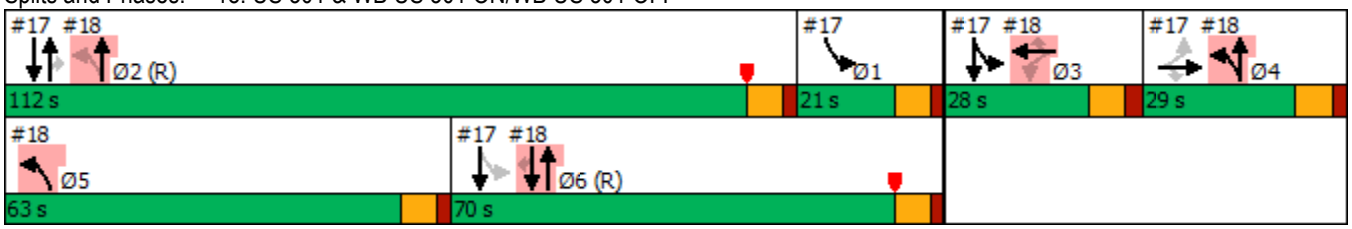
Intersection Summary	
Area Type:	Other

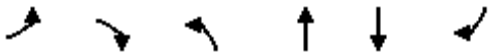
Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	15.0	5.0	5.0
Minimum Split (s)	12.1	22.1	12.5	12.1
Total Split (s)	21.0	112.0	29.0	63.0
Total Split (%)	11%	59%	15%	33%
Maximum Green (s)	13.9	104.9	21.5	55.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.4	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0	4.0	4.0
Recall Mode	None	C-Max	None	Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

Cycle Length: 190
Actuated Cycle Length: 190
Offset: 142 (75%), Referenced to phase 2:NBSB and 6:SBTL, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.80
Intersection Signal Delay: 76.0 Intersection LOS: E
Intersection Capacity Utilization 78.9% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 18: US 301 & WB US 301 ON/WB US 301 OFF



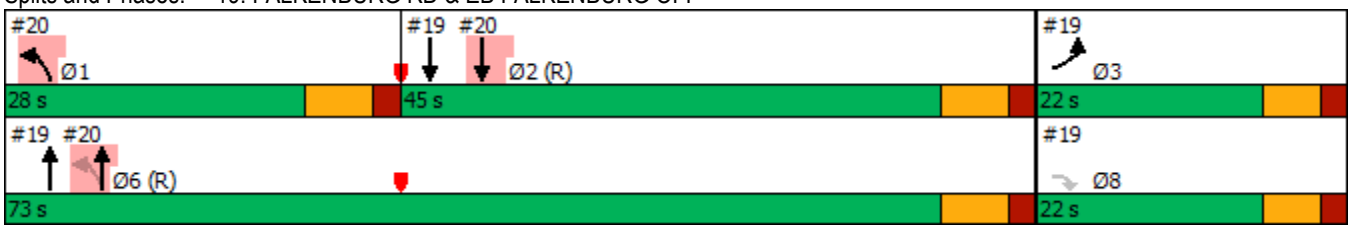


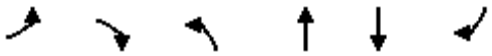
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
Lane Configurations							
Traffic Volume (vph)	238	428	0	1592	486	0	
Future Volume (vph)	238	428	0	1592	486	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.97	0.88	1.00	0.91	0.91	1.00	
Frt		0.850					
Flt Protected	0.950						
Satd. Flow (prot)	3433	2787	0	5085	5085	0	
Flt Permitted	0.950						
Satd. Flow (perm)	3433	2787	0	5085	5085	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		465					
Link Speed (mph)	30			30	30		
Link Distance (ft)	519			688	550		
Travel Time (s)	11.8			15.6	12.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	259	465	0	1730	528	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	259	465	0	1730	528	0	
Turn Type	Prot	Perm		NA	NA		
Protected Phases	3			6	2		1
Permitted Phases		8					
Detector Phase	3	8		6	2		
Switch Phase							
Minimum Initial (s)	6.0	6.0		15.0	15.0		5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		11.8
Total Split (s)	22.0	22.0		73.0	45.0		28.0
Total Split (%)	23.2%	23.2%		76.8%	47.4%		29%
Maximum Green (s)	15.9	15.9		66.2	38.2		21.2
Yellow Time (s)	4.1	4.1		4.8	4.8		4.8
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		
Total Lost Time (s)	6.1	6.1		6.8	6.8		
Lead/Lag					Lag		Lead
Lead-Lag Optimize?					Yes		Yes
Vehicle Extension (s)	3.5	3.5		4.0	4.0		6.0
Recall Mode	None	None		C-Max	C-Max		Min
Act Effct Green (s)	12.8	12.8		69.3	44.3		
Actuated g/C Ratio	0.13	0.13		0.73	0.47		
v/c Ratio	0.56	0.60		0.47	0.22		
Control Delay	42.9	7.0		6.0	6.3		
Queue Delay	0.0	0.0		0.0	0.0		
Total Delay	42.9	7.0		6.0	6.3		
LOS	D	A		A	A		
Approach Delay	19.9			6.0	6.3		
Approach LOS	B			A	A		

Intersection Summary	
Area Type:	Other

Cycle Length: 95	
Actuated Cycle Length: 95	
Offset: 82 (86%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 9.4	Intersection LOS: A
Intersection Capacity Utilization 48.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 19: FALKENBURG RD & EB FALKENBURG OFF



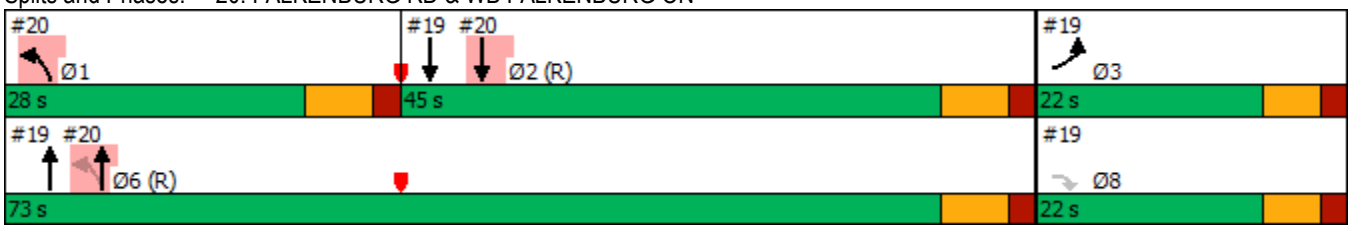


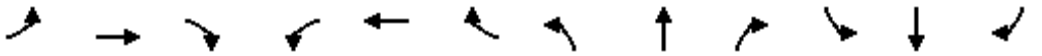
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø3	Ø8
Lane Configurations								
Traffic Volume (vph)	0	0	423	1407	486	178		
Future Volume (vph)	0	0	423	1407	486	178		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00		
Frt						0.850		
Flt Protected			0.950					
Satd. Flow (prot)	0	0	1770	3539	3539	1583		
Flt Permitted			0.373					
Satd. Flow (perm)	0	0	695	3539	3539	1583		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)						193		
Link Speed (mph)	30			30	30			
Link Distance (ft)	492			550	852			
Travel Time (s)	11.2			12.5	19.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	0	460	1529	528	193		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	460	1529	528	193		
Turn Type			pm+pt	NA	NA	Free		
Protected Phases			1	6	2		3	8
Permitted Phases			6			Free		
Detector Phase			1	6	2			
Switch Phase								
Minimum Initial (s)			5.0	15.0	15.0		6.0	6.0
Minimum Split (s)			11.8	22.5	22.5		22.5	22.5
Total Split (s)			28.0	73.0	45.0		22.0	22.0
Total Split (%)			29.5%	76.8%	47.4%		23%	23%
Maximum Green (s)			21.2	66.2	38.2		15.9	15.9
Yellow Time (s)			4.8	4.8	4.8		4.1	4.1
All-Red Time (s)			2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)			0.0	0.0	0.0			
Total Lost Time (s)			6.8	6.8	6.8			
Lead/Lag			Lead		Lag			
Lead-Lag Optimize?			Yes		Yes			
Vehicle Extension (s)			6.0	4.0	4.0		3.5	3.5
Recall Mode			Min	C-Max	C-Max		None	None
Act Effct Green (s)			69.3	69.3	44.3	95.0		
Actuated g/C Ratio			0.73	0.73	0.47	1.00		
v/c Ratio			0.65	0.59	0.32	0.12		
Control Delay			9.2	5.1	17.7	0.2		
Queue Delay			0.0	0.0	0.0	0.0		
Total Delay			9.2	5.1	17.7	0.2		
LOS			A	A	B	A		
Approach Delay				6.1	13.0			
Approach LOS				A	B			

Intersection Summary	
Area Type:	Other

Cycle Length: 95	
Actuated Cycle Length: 95	
Offset: 82 (86%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.65	
Intersection Signal Delay: 7.9	Intersection LOS: A
Intersection Capacity Utilization 48.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 20: FALKENBURG RD & WB FALKENBURG ON



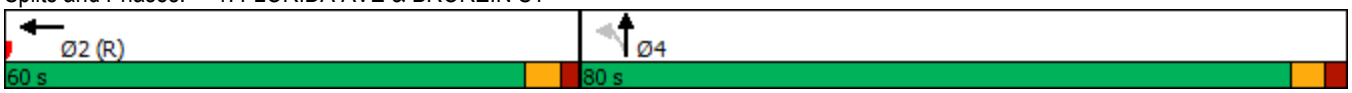


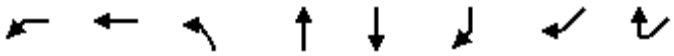
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1130	124	158	1286	0	0	0	0
Future Volume (vph)	0	0	0	0	1130	124	158	1286	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	1.00	1.00	1.00	1.00
Frt					0.985							
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6312	0	1770	5085	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	6312	0	1770	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					22		22					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		273			600			296			353	
Travel Time (s)		6.2			13.6			6.7			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1228	135	172	1398	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1363	0	172	1398	0	0	0	0
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Minimum Split (s)					29.8		36.1	36.1				
Total Split (s)					60.0		80.0	80.0				
Total Split (%)					42.9%		57.1%	57.1%				
Maximum Green (s)					54.2		73.9	73.9				
Yellow Time (s)					3.7		3.7	3.7				
All-Red Time (s)					2.1		2.4	2.4				
Lost Time Adjust (s)					0.0		0.0	0.0				
Total Lost Time (s)					5.8		6.1	6.1				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		23.0	23.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					54.2		73.9	73.9				
Actuated g/C Ratio					0.39		0.53	0.53				
v/c Ratio					0.55		0.18	0.52				
Control Delay					21.2		15.5	22.4				
Queue Delay					0.0		0.0	0.0				
Total Delay					21.2		15.5	22.4				
LOS					C		B	C				
Approach Delay					21.2			21.6				
Approach LOS					C			C				

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	

Offset: 46 (33%), Referenced to phase 2:WBT and 6:, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 0.55
Intersection Signal Delay: 21.4 Intersection LOS: C
Intersection Capacity Utilization 53.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 1: FLORIDA AVE & BROREIN ST



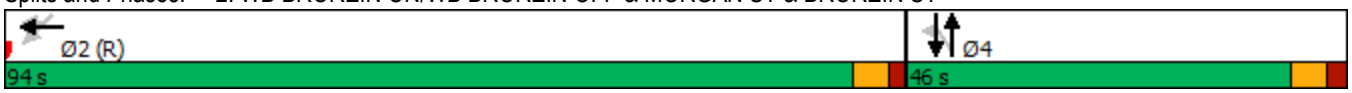


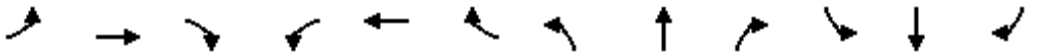
Lane Group	WBL	WBT	NBL	NBT	SBT	SBR	SWR	SWR2
Lane Configurations								
Traffic Volume (vph)	10	935	69	78	36	332	268	50
Future Volume (vph)	10	935	69	78	36	332	268	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	0.95	0.95	0.95	0.95	1.00	1.00
Frt					0.865		0.850	0.850
Flt Protected		0.999		0.977				
Satd. Flow (prot)	0	5080	0	3458	3061	0	1583	1583
Flt Permitted		0.999		0.612				
Satd. Flow (perm)	0	5080	0	2166	3061	0	1583	1583
Right Turn on Red								Yes
Satd. Flow (RTOR)								68
Link Speed (mph)		30		30	30			
Link Distance (ft)		591		494	379			
Travel Time (s)		13.4		11.2	8.6			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1016	75	85	39	361	291	54
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	1027	0	160	400	0	291	54
Turn Type	Perm	NA	Perm	NA	NA		Perm	Free
Protected Phases		2		4	4			
Permitted Phases	2		4				2	Free
Minimum Split (s)	24.7	24.7	32.0	32.0	32.0		24.7	
Total Split (s)	94.0	94.0	46.0	46.0	46.0		94.0	
Total Split (%)	67.1%	67.1%	32.9%	32.9%	32.9%		67.1%	
Maximum Green (s)	88.3	88.3	40.0	40.0	40.0		88.3	
Yellow Time (s)	3.7	3.7	3.7	3.7	3.7		3.7	
All-Red Time (s)	2.0	2.0	2.3	2.3	2.3		2.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.7		6.0	6.0		5.7	
Lead/Lag								
Lead-Lag Optimize?								
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	
Flash Dont Walk (s)	12.0	12.0	19.0	19.0	19.0		12.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	
Act Effct Green (s)		88.3		40.0	40.0		88.3	140.0
Actuated g/C Ratio		0.63		0.29	0.29		0.63	1.00
v/c Ratio		0.32		0.26	0.46		0.29	0.03
Control Delay		9.7		40.0	43.1		12.6	0.0
Queue Delay		0.0		0.0	0.0		0.0	0.0
Total Delay		9.7		40.0	43.1		12.6	0.0
LOS		A		D	D		B	A
Approach Delay		9.7		40.0	43.1			
Approach LOS		A		D	D			

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	

Offset: 29 (21%), Referenced to phase 2:WBTL, Start of Green	
Natural Cycle: 60	
Control Type: Pretimed	
Maximum v/c Ratio: 0.46	
Intersection Signal Delay: 19.3	Intersection LOS: B
Intersection Capacity Utilization 74.5%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: WB BROREIN ON/WB BROREIN OFF & MORGAN ST & BROREIN ST



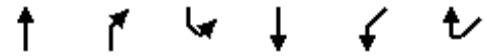


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	700	90	38	540	0	0	0	207
Future Volume (vph)	0	0	0	0	700	90	38	540	0	0	0	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt					0.983							0.865
Flt Protected								0.997				
Satd. Flow (prot)	0	0	0	0	3479	0	0	3529	0	0	0	1611
Flt Permitted								0.997				
Satd. Flow (perm)	0	0	0	0	3479	0	0	3529	0	0	0	1611
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					20			21				230
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		591			202			322			162	
Travel Time (s)		13.4			4.6			7.3			3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	761	98	41	587	0	0	0	225
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	859	0	0	628	0	0	0	225
Turn Type					NA		Perm	NA				Perm
Protected Phases					2			4				
Permitted Phases							4					4
Minimum Split (s)					23.7		23.7	23.7				23.7
Total Split (s)					95.0		45.0	45.0				45.0
Total Split (%)					67.9%		32.1%	32.1%				32.1%
Maximum Green (s)					89.3		39.3	39.3				39.3
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.0		2.0	2.0				2.0
Lost Time Adjust (s)					0.0			0.0				0.0
Total Lost Time (s)					5.7			5.7				5.7
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				7.0
Flash Dont Walk (s)					11.0		11.0	11.0				11.0
Pedestrian Calls (#/hr)					0		0	0				0
Act Effct Green (s)					89.3			39.3				39.3
Actuated g/C Ratio					0.64			0.28				0.28
v/c Ratio					0.39			0.62				0.36
Control Delay					12.5			45.6				6.0
Queue Delay					0.0			0.0				0.0
Total Delay					12.5			45.6				6.0
LOS					B			D				A
Approach Delay					12.5			45.6			6.0	
Approach LOS					B			D			A	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	

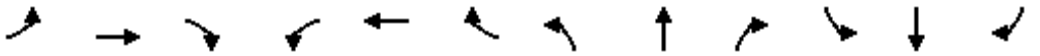
Offset: 45 (32%), Referenced to phase 2:WBT and 6:, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 23.8 Intersection LOS: C
Intersection Capacity Utilization 65.3% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 3: JEFFERSON ST & BROREIN ST



Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	245	385	314	207	0	0
Future Volume (vph)	245	385	314	207	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	115		0	0
Storage Lanes		0	0		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00
Frt	0.908					
Flt Protected			0.950			
Satd. Flow (prot)	3214	0	1770	1863	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	3214	0	1770	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	162			583	231	
Travel Time (s)	3.7			13.3	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	266	418	341	225	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	684	0	341	225	0	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			

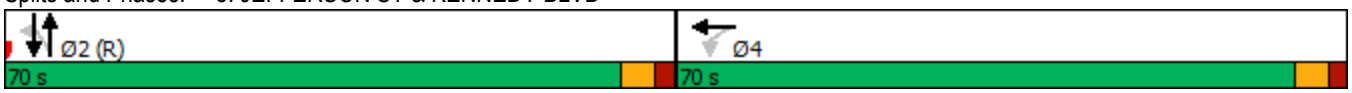


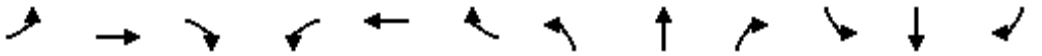
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	112	1360	127	66	424	0	0	54	45
Future Volume (vph)	0	0	0	112	1360	127	66	424	0	0	54	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.987						0.932	
Flt Protected				0.950				0.993				
Satd. Flow (prot)	0	0	0	1770	6325	0	0	3514	0	0	3299	0
Flt Permitted				0.950				0.885				
Satd. Flow (perm)	0	0	0	1770	6325	0	0	3132	0	0	3299	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					20						13	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			319			716			284	
Travel Time (s)		13.1			7.3			16.3			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	122	1478	138	72	461	0	0	59	49
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	122	1616	0	0	533	0	0	108	0
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					4			2			2	
Permitted Phases				4			2					
Minimum Split (s)				25.7	25.7		25.9	25.9			25.9	
Total Split (s)				70.0	70.0		70.0	70.0			70.0	
Total Split (%)				50.0%	50.0%		50.0%	50.0%			50.0%	
Maximum Green (s)				64.3	64.3		64.1	64.1			64.1	
Yellow Time (s)				3.7	3.7		3.7	3.7			3.7	
All-Red Time (s)				2.0	2.0		2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0			0.0			0.0	
Total Lost Time (s)				5.7	5.7			5.9			5.9	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				13.0	13.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				64.3	64.3			64.1			64.1	
Actuated g/C Ratio				0.46	0.46			0.46			0.46	
v/c Ratio				0.15	0.55			0.37			0.07	
Control Delay				30.8	38.1			25.7			18.8	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				30.8	38.1			25.7			18.8	
LOS				C	D			C			B	
Approach Delay					37.6			25.7			18.8	
Approach LOS					D			C			B	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	

Offset: 135 (96%), Referenced to phase 2:NBSB and 6:, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.55
Intersection Signal Delay: 34.1 Intersection LOS: C
Intersection Capacity Utilization 48.4% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 5: JEFFERSON ST & KENNEDY BLVD



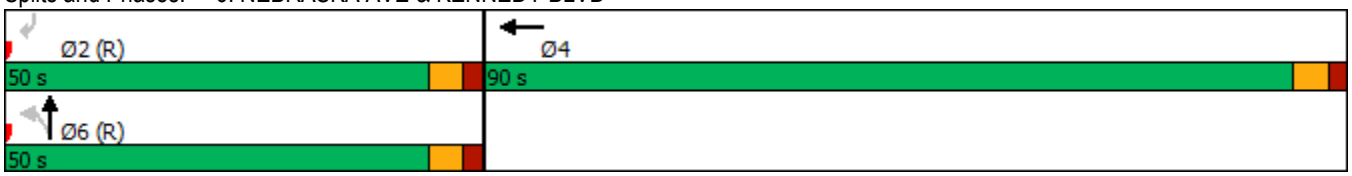


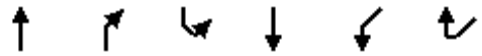
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	643	191	3	336	0	0	0	112
Future Volume (vph)	0	0	0	0	643	191	3	336	0	0	0	112
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88
Frt					0.966							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4912	0	1770	1863	0	0	0	2787
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	4912	0	1770	1863	0	0	0	2787
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					97		22					422
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		847			465			292			201	
Travel Time (s)		19.3			10.6			6.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	699	208	3	365	0	0	0	122
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	907	0	3	365	0	0	0	122
Turn Type					NA		Perm	NA				Perm
Protected Phases					4			6				
Permitted Phases							6					2
Minimum Split (s)					29.8		24.9	24.9				26.9
Total Split (s)					90.0		50.0	50.0				50.0
Total Split (%)					64.3%		35.7%	35.7%				35.7%
Maximum Green (s)					84.2		44.1	44.1				44.1
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.1		2.2	2.2				2.2
Lost Time Adjust (s)					0.0		0.0	0.0				0.0
Total Lost Time (s)					5.8		5.9	5.9				5.9
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				7.0
Flash Dont Walk (s)					17.0		12.0	12.0				14.0
Pedestrian Calls (#/hr)					0		0	0				0
Act Effct Green (s)					84.2		44.1	44.1				44.1
Actuated g/C Ratio					0.60		0.32	0.32				0.32
v/c Ratio					0.30		0.01	0.62				0.10
Control Delay					12.3		0.0	46.4				3.0
Queue Delay					0.0		0.0	0.0				0.0
Total Delay					12.3		0.0	46.4				3.0
LOS					B		A	D				A
Approach Delay					12.3			46.1			3.0	
Approach LOS					B			D			A	

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	

Offset: 60 (43%), Referenced to phase 2:SBR and 6:NBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 20.4 Intersection LOS: C
Intersection Capacity Utilization 48.0% ICU Level of Service A
Analysis Period (min) 15

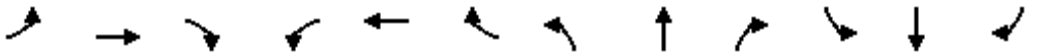
Splits and Phases: 6: NEBRASKA AVE & KENNEDY BLVD





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	355	172	251	112	0	0
Future Volume (vph)	355	172	251	112	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	130		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt	0.956					
Flt Protected			0.950			
Satd. Flow (prot)	1781	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1781	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			390	272	
Travel Time (s)	4.6			8.9	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	386	187	273	122	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	573	0	273	122	0	0
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 49.7%		ICU Level of Service A	
Analysis Period (min) 15			

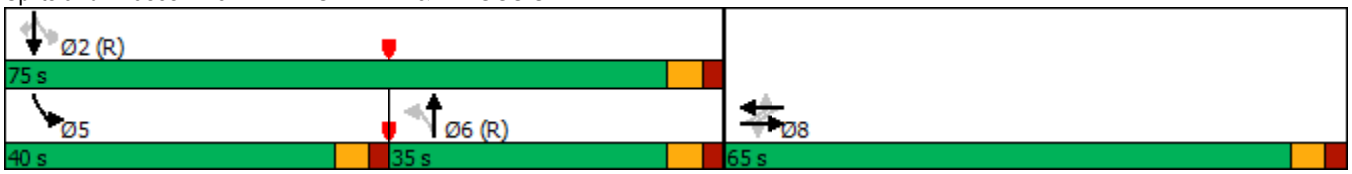


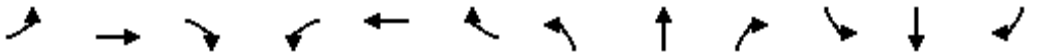
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	751	72	19	173	92	8	259	88	433	272	33
Future Volume (vph)	55	751	72	19	173	92	8	259	88	433	272	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	150		0
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.988			0.951			0.962				0.850
Flt Protected		0.997			0.997		0.950			0.950		
Satd. Flow (prot)	0	3486	0	0	3356	0	1770	1792	0	1770	3539	1583
Flt Permitted		0.896			0.826		0.571			0.113		
Satd. Flow (perm)	0	3133	0	0	2780	0	1064	1792	0	210	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			70			11				36
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			652			390			257	
Travel Time (s)		17.7			14.8			8.9			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	816	78	21	188	100	9	282	96	471	296	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	954	0	0	309	0	9	378	0	471	296	36
Turn Type	Perm	NA		Perm	NA		Perm	NA		pm+pt	NA	Perm
Protected Phases		8			8			6		5	2	
Permitted Phases	8			8			6			2		2
Detector Phase	8	8		8	8		6	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	10.0		5.0	10.0	10.0
Minimum Split (s)	29.1	29.1		29.1	29.1		28.0	28.0		10.7	28.0	28.0
Total Split (s)	65.0	65.0		65.0	65.0		35.0	35.0		40.0	75.0	75.0
Total Split (%)	46.4%	46.4%		46.4%	46.4%		25.0%	25.0%		28.6%	53.6%	53.6%
Maximum Green (s)	58.9	58.9		58.9	58.9		29.0	29.0		34.3	69.0	69.0
Yellow Time (s)	3.7	3.7		3.7	3.7		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.4		2.4	2.4		2.3	2.3		2.0	2.3	2.3
Lost Time Adjust (s)		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.1			6.1		6.0	6.0		5.7	6.0	6.0
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		2.0	3.0	3.0
Recall Mode	Max	Max		Max	Max		C-Max	C-Max		None	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0			7.0	7.0
Flash Dont Walk (s)	16.0	16.0		16.0	16.0		15.0	15.0			15.0	15.0
Pedestrian Calls (#/hr)	0	0		0	0		0	0			0	0
Act Effct Green (s)		58.9			58.9		29.6	29.6		69.3	69.0	69.0
Actuated g/C Ratio		0.42			0.42		0.21	0.21		0.50	0.49	0.49
v/c Ratio		0.72			0.26		0.04	0.98		0.98	0.17	0.05
Control Delay		37.3			16.2		39.9	86.9		77.6	20.0	5.6
Queue Delay		0.0			0.0		0.0	0.0		7.1	0.0	0.0
Total Delay		37.3			16.2		39.9	86.9		84.7	20.0	5.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D			B		D	F		F	B	A
Approach Delay		37.3			16.2			85.8			57.3	
Approach LOS		D			B			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 130 (93%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 48.8		Intersection LOS: D	
Intersection Capacity Utilization 95.9%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 8: NEBRASKA AVE & TWIGGS ST

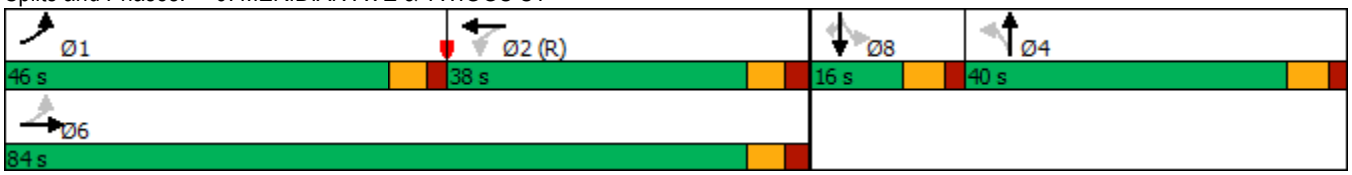




Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	489	641	142	38	250	63	34	606	112	0	0	0
Future Volume (vph)	489	641	142	38	250	63	34	606	112	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	1.00
Frt		0.983			0.973			0.978				
Flt Protected		0.981			0.995			0.998				
Satd. Flow (prot)	0	3413	0	0	3426	0	0	4963	0	0	5085	1863
Flt Permitted		0.592			0.652			0.950				
Satd. Flow (perm)	0	2060	0	0	2245	0	0	4725	0	0	5085	1863
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			17			23				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			772			501			413	
Travel Time (s)		14.8			17.5			11.4			9.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	532	697	154	41	272	68	37	659	122	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1383	0	0	381	0	0	818	0	0	0	0
Turn Type	pm+pt	NA		Perm	NA		Perm	NA				Perm
Protected Phases	1	6			2			4			8	
Permitted Phases	6			2			4			8		8
Detector Phase	1	6		2	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	11.0	45.8		16.8	16.8		26.4	26.4		16.4	16.4	16.4
Total Split (s)	46.0	84.0		38.0	38.0		40.0	40.0		16.0	16.0	16.0
Total Split (%)	32.9%	60.0%		27.1%	27.1%		28.6%	28.6%		11.4%	11.4%	11.4%
Maximum Green (s)	40.0	77.2		31.2	31.2		33.6	33.6		9.6	9.6	9.6
Yellow Time (s)	4.0	4.0		4.0	4.0		4.4	4.4		4.4	4.4	4.4
All-Red Time (s)	2.0	2.8		2.8	2.8		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	0.0
Total Lost Time (s)		6.8			6.8			6.4			6.4	6.4
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	Max		C-Max	C-Max		None	None		None	None	None
Walk Time (s)		7.0					7.0	7.0				
Flash Dont Walk (s)		32.0					13.0	13.0				
Pedestrian Calls (#/hr)		0					0	0				
Act Effct Green (s)		95.1			31.2			31.7				
Actuated g/C Ratio		0.68			0.22			0.23				
v/c Ratio		0.71			0.74			0.75				
Control Delay		14.8			58.3			53.4				
Queue Delay		1.3			0.0			0.0				
Total Delay		16.1			58.3			53.4				
LOS		B			E			D				
Approach Delay		16.1			58.3			53.4				
Approach LOS		B			E			D				

Intersection Summary	
Area Type:	Other
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 125 (89%), Referenced to phase 2:WBTL, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.75	
Intersection Signal Delay: 34.1	Intersection LOS: C
Intersection Capacity Utilization 78.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 9: MERIDIAN AVE & TWIGGS ST



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Lane Configurations									
Traffic Volume (vph)	124	194	42	978	1424	0	220	0	0
Future Volume (vph)	124	194	42	978	1424	0	220	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt		0.850					0.850		
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	5085	5085	0	1583	0	0
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	5085	5085	0	1583	0	0
Link Speed (mph)	30			30	30			30	
Link Distance (ft)	404			536	498			405	
Travel Time (s)	9.2			12.2	11.3			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	135	211	46	1063	1548	0	239	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	135	211	46	1063	1548	0	239	0	0
Sign Control	Stop			Free	Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.7%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	30.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations								
Traffic Vol, veh/h	124	194	42	978	1424	0	0	0
Future Vol, veh/h	124	194	42	978	1424	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	-	-
Storage Length	0	0	0	-	-	0	-	-
Veh in Median Storage, #	0	-	-	0	0	-	0	-
Grade, %	0	-	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	135	211	46	1063	1548	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2065	774	1548	0	-	0
Stage 1	1548	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	~ 86	293	211	-	-	0
Stage 1	~ 110	-	-	-	-	0
Stage 2	514	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 67	293	211	-	-	-
Mov Cap-2 Maneuver	~ 67	-	-	-	-	-
Stage 1	~ 86	-	-	-	-	-
Stage 2	514	-	-	-	-	-

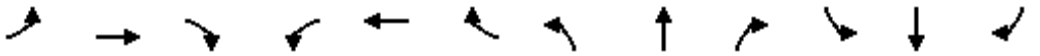
Approach	EB	NB	SB
HCM Control Delay, s	261.7	1.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	211	-	67	293	-
HCM Lane V/C Ratio	0.216	-	2.012	0.72	-
HCM Control Delay (s)	26.7	-	$ 603.3	43.4	-
HCM Lane LOS	D	-	F	E	-
HCM 95th %tile Q(veh)	0.8	-	12.5	5.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations											
Traffic Volume (vph)	0	0	191	911	0	0	1626	0	18	0	185
Future Volume (vph)	0	0	191	911	0	0	1626	0	18	0	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00	1.00	1.00	1.00
Frt											0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Flt Permitted			0.950						0.950		
Satd. Flow (perm)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	264			498			271			329	
Travel Time (s)	6.0			11.3			6.2			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	208	990	0	0	1767	0	20	0	201
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	208	990	0	0	1767	0	20	0	201
Sign Control	Free			Free			Free			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.5%		ICU Level of Service A	
Analysis Period (min) 15			

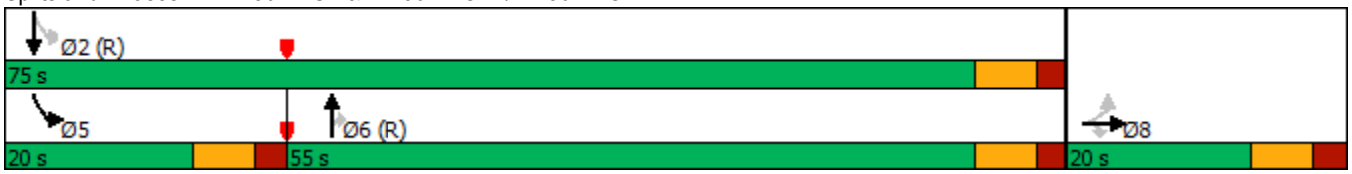


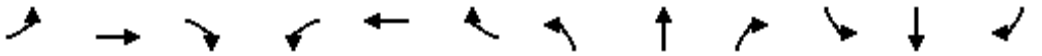
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	0	463	0	0	0	0	1032	48	287	1473	0
Future Volume (vph)	96	0	463	0	0	0	0	1032	48	287	1473	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		200	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.187		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	348	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			117						122			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		549			603			383			284	
Travel Time (s)		12.5			13.7			8.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	104	0	503	0	0	0	0	1122	52	312	1601	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	104	503	0	0	0	0	1122	52	312	1601	0
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8						6	2		
Detector Phase	8	8	8					6	6	5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	5.0	10.0	
Minimum Split (s)	46.9	46.9	46.9					16.5	16.5	11.7	23.5	
Total Split (s)	20.0	20.0	20.0					55.0	55.0	20.0	75.0	
Total Split (%)	21.1%	21.1%	21.1%					57.9%	57.9%	21.1%	78.9%	
Maximum Green (s)	13.1	13.1	13.1					48.5	48.5	13.3	68.5	
Yellow Time (s)	4.4	4.4	4.4					4.4	4.4	4.4	4.4	
All-Red Time (s)	2.5	2.5	2.5					2.1	2.1	2.3	2.1	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.9	6.9					6.5	6.5	6.7	6.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0					3.0	3.0	2.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Dont Walk (s)	33.0	33.0	33.0								10.0	
Pedestrian Calls (#/hr)	0	0	0								0	
Act Effct Green (s)		13.1	13.1					51.3	51.3	68.3	68.5	
Actuated g/C Ratio		0.14	0.14					0.54	0.54	0.72	0.72	
v/c Ratio		0.43	1.58					0.32	0.06	0.77	0.44	
Control Delay		43.6	298.5					12.8	0.1	39.5	3.6	
Queue Delay		0.0	0.0					0.0	0.0	1.4	0.1	
Total Delay		43.6	298.5					12.8	0.1	40.9	3.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS		D	F					B	A	D	A	
Approach Delay		254.8						12.2			9.7	
Approach LOS		F						B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 95			
Actuated Cycle Length: 95			
Offset: 50 (53%), Referenced to phase 2:SBTL and 6:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.58			
Intersection Signal Delay: 50.8		Intersection LOS: D	
Intersection Capacity Utilization 68.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 12: 50TH ST & EB 50TH OFF/EB 50TH ON

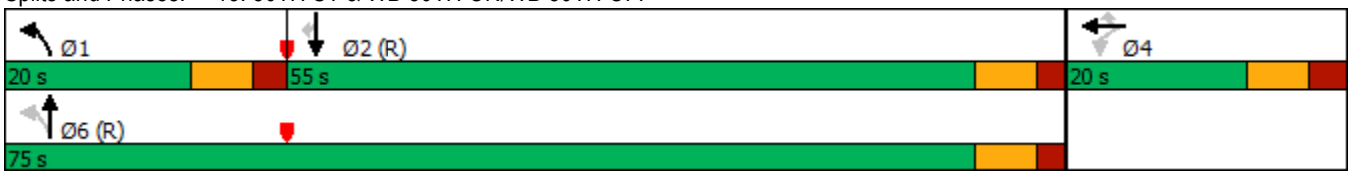


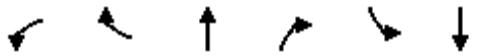


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	28	0	152	171	957	0	0	1732	111
Future Volume (vph)	0	0	0	28	0	152	171	957	0	0	1732	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.067					
Satd. Flow (perm)	0	0	0	0	1770	1583	125	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						164						126
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		457			359			284			339	
Travel Time (s)		10.4			8.2			6.5			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	30	0	165	186	1040	0	0	1883	121
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	30	165	186	1040	0	0	1883	121
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2
Detector Phase				4	4	4	1	6			2	2
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	10.0
Minimum Split (s)				46.2	46.2	46.2	11.8	23.4			23.4	23.4
Total Split (s)				20.0	20.0	20.0	20.0	75.0			55.0	55.0
Total Split (%)				21.1%	21.1%	21.1%	21.1%	78.9%			57.9%	57.9%
Maximum Green (s)				12.8	12.8	12.8	13.2	68.6			48.6	48.6
Yellow Time (s)				4.4	4.4	4.4	4.4	4.4			4.4	4.4
All-Red Time (s)				2.8	2.8	2.8	2.4	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.2	7.2	6.8	6.4			6.4	6.4
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	2.0	3.0			3.0	3.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)				32.0	32.0	32.0		10.0			10.0	10.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)					10.6	10.6	70.4	70.8			54.6	54.6
Actuated g/C Ratio					0.11	0.11	0.74	0.75			0.57	0.57
v/c Ratio					0.15	0.51	0.73	0.27			0.51	0.13
Control Delay					39.7	12.6	55.7	1.9			13.2	2.4
Queue Delay					0.1	0.0	0.2	0.1			0.0	0.0
Total Delay					39.8	12.6	55.9	2.0			13.3	2.4
LOS					D	B	E	A			B	A
Approach Delay					16.8			10.1			12.6	
Approach LOS					B			B			B	

Intersection Summary		
Area Type:	Other	
Cycle Length: 95		
Actuated Cycle Length: 95		
Offset: 55 (58%), Referenced to phase 2:SBT and 6:NBTL, Start of Green		
Natural Cycle: 95		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.73		
Intersection Signal Delay: 12.0		Intersection LOS: B
Intersection Capacity Utilization 68.3%		ICU Level of Service C
Analysis Period (min) 15		

Splits and Phases: 13: 50TH ST & WB 50TH ON/WB 50TH OFF





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	70	0	616	0	0	819
Future Volume (vph)	70	0	616	0	0	819
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	3539	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	3539	0	0	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	292		343			439
Travel Time (s)	6.6		7.8			10.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	0	670	0	0	890
Shared Lane Traffic (%)						
Lane Group Flow (vph)	76	0	670	0	0	890
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.2%		ICU Level of Service A	
Analysis Period (min) 15			

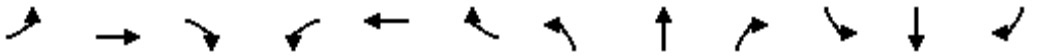
Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	0	616	0	0	819
Future Vol, veh/h	70	0	616	0	0	819
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	76	0	670	0	0	890

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1115	-	0	-	-	-
Stage 1	670	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-
Pot Cap-1 Maneuver	202	0	-	0	0	-
Stage 1	470	0	-	0	0	-
Stage 2	613	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	202	-	-	-	-	-
Mov Cap-2 Maneuver	332	-	-	-	-	-
Stage 1	470	-	-	-	-	-
Stage 2	613	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	332	-
HCM Lane V/C Ratio	-	0.229	-
HCM Control Delay (s)	-	19	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	0.9	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1224	532	286	884	3	288	0	318	5	1	1
Future Volume (vph)	5	1224	532	286	884	3	288	0	318	5	1	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	0		315	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.981	
Flt Protected	0.950			0.950			0.950	0.950			0.966	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1681	1681	1583	0	1765	0
Flt Permitted	0.298			0.950			0.950	0.950			0.836	
Satd. Flow (perm)	555	3539	1583	1770	3539	1583	1681	1681	1583	0	1528	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			578			66			346		1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		887			638			788			238	
Travel Time (s)		20.2			14.5			17.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	1330	578	311	961	3	313	0	346	5	1	1
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	5	1330	578	311	961	3	156	157	346	0	7	0
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Perm	NA	
Protected Phases		6		5	2		4	4			3	
Permitted Phases	6		6			2			4	3		
Detector Phase	6	6	6	5	2	2	4	4	4	3	3	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	25.2	25.2	25.2	12.2	26.2	26.2	51.1	51.1	51.1	14.0	14.0	
Total Split (s)	96.0	96.0	96.0	50.0	146.0	146.0	35.0	35.0	35.0	19.0	19.0	
Total Split (%)	48.0%	48.0%	48.0%	25.0%	73.0%	73.0%	17.5%	17.5%	17.5%	9.5%	9.5%	
Maximum Green (s)	88.8	88.8	88.8	42.8	138.8	138.8	27.9	27.9	27.9	11.0	11.0	
Yellow Time (s)	5.2	5.2	5.2	5.2	5.2	5.2	4.8	4.8	4.8	3.4	3.4	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.3	4.6	4.6	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.1	7.1		8.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0			
Flash Dont Walk (s)	11.0	11.0	11.0		12.0	12.0	37.0	37.0	37.0			
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0			
Act Effct Green (s)	107.2	107.2	107.2	38.8	153.2	153.2	25.2	25.2	25.2		8.0	
Actuated g/C Ratio	0.54	0.54	0.54	0.19	0.77	0.77	0.13	0.13	0.13		0.04	
v/c Ratio	0.02	0.70	0.52	0.91	0.35	0.00	0.74	0.74	0.69		0.11	
Control Delay	30.0	40.0	3.9	108.0	9.1	0.0	104.4	104.9	14.1		86.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	30.0	40.0	3.9	108.0	9.1	0.0	104.4	104.9	14.1		86.2	

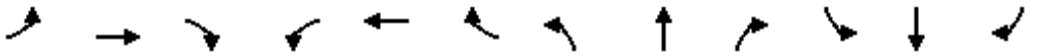
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	C	D	A	F	A	A	F	F	B		F	
Approach Delay		29.0			33.2			57.1			86.2	
Approach LOS		C			C			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 200			
Actuated Cycle Length: 200			
Offset: 20 (10%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 35.3		Intersection LOS: D	
Intersection Capacity Utilization 77.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 15: 78TH ST & ADAMO DR

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1536	11	115	1173	0	0
Future Volume (vph)	1536	11	115	1173	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	1.00
Frt		0.850				
Flt Protected				0.996		
Satd. Flow (prot)	5085	1583	0	5065	0	0
Flt Permitted				0.996		
Satd. Flow (perm)	5085	1583	0	5065	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	638			376	435	
Travel Time (s)	14.5			8.5	9.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1670	12	125	1275	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1670	12	0	1400	0	0
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 61.3%		ICU Level of Service B	
Analysis Period (min) 15			

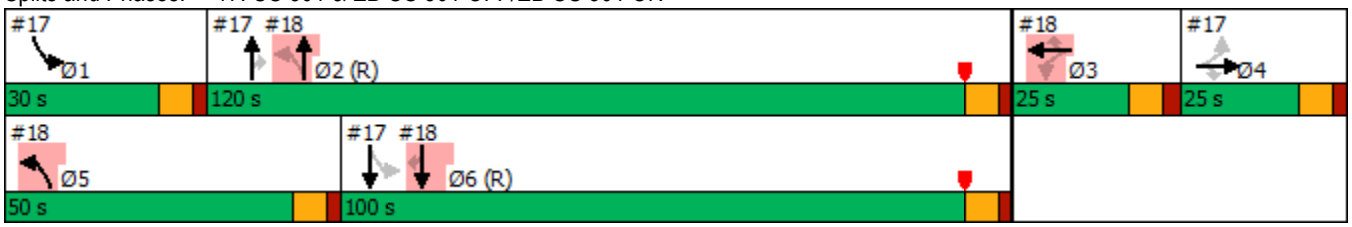


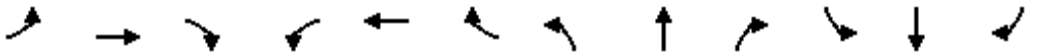
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	0	1080	0	0	0	0	1209	253	270	1970	0
Future Volume (vph)	96	0	1080	0	0	0	0	1209	253	270	1970	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		500	0		0
Storage Lanes	0		1	0		0	0		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	5085	1583	1770	5085	0
Flt Permitted		0.950								0.197		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	5085	1583	367	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			397						275			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		739			677			1414			381	
Travel Time (s)		16.8			15.4			32.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	104	0	1174	0	0	0	0	1314	275	293	2141	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	104	1174	0	0	0	0	1314	275	293	2141	0
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2	6		
Detector Phase	4	4	4					2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					15.0	15.0	5.0	15.0	
Minimum Split (s)	12.5	12.5	12.5					22.1	22.1	12.1	22.1	
Total Split (s)	25.0	25.0	25.0					120.0	120.0	30.0	100.0	
Total Split (%)	12.5%	12.5%	12.5%					60.0%	60.0%	15.0%	50.0%	
Maximum Green (s)	17.5	17.5	17.5					112.9	112.9	22.9	92.9	
Yellow Time (s)	5.1	5.1	5.1					5.1	5.1	5.1	5.1	
All-Red Time (s)	2.4	2.4	2.4					2.0	2.0	2.0	2.0	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		7.5	7.5					7.1	7.1	7.1	7.1	
Lead/Lag	Lag	Lag	Lag					Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes					Yes	Yes	Yes	Yes	
Vehicle Extension (s)	4.0	4.0	4.0					3.0	3.0	4.0	3.0	
Recall Mode	Max	Max	Max					C-Max	C-Max	Min	C-Max	
Act Effct Green (s)		19.0	19.0					116.1	116.1	112.6	92.9	
Actuated g/C Ratio		0.10	0.10					0.58	0.58	0.56	0.46	
v/c Ratio		0.62	2.31					0.45	0.27	0.85	0.91	
Control Delay		104.0	612.2					24.6	2.5	53.0	13.8	
Queue Delay		9.3	0.0					0.0	0.0	0.0	6.9	
Total Delay		113.3	612.2					24.6	2.5	53.0	20.8	
LOS		F	F					C	A	D	C	
Approach Delay		571.6						20.8			24.6	
Approach LOS		F						C			C	

Lane Group	Ø3	Ø5
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Storage Length (ft)		
Storage Lanes		
Taper Length (ft)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	5
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	5.0	5.0
Minimum Split (s)	12.8	12.1
Total Split (s)	25.0	50.0
Total Split (%)	13%	25%
Maximum Green (s)	17.2	42.9
Yellow Time (s)	5.1	5.1
All-Red Time (s)	2.7	2.0
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	4.0	4.0
Recall Mode	None	Max
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		

Intersection Summary		
Area Type:	Other	
Cycle Length: 200		
Actuated Cycle Length: 200		
Offset: 63 (32%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow		
Natural Cycle: 140		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 2.31		
Intersection Signal Delay: 155.4	Intersection LOS: F	
Intersection Capacity Utilization 117.1%	ICU Level of Service H	
Analysis Period (min) 15		

Splits and Phases: 17: US 301 & EB US 301 OFF/EB US 301 ON





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	92	0	201	292	1013	0	0	2148	130
Future Volume (vph)	0	0	0	92	0	201	292	1013	0	0	2148	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.91	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	5085	1583
Flt Permitted					0.950		0.040					
Satd. Flow (perm)	0	0	0	0	1770	1583	75	5085	0	0	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						218						145
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			711			381			795	
Travel Time (s)		13.2			16.2			8.7			18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	100	0	218	317	1101	0	0	2335	141
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	100	218	317	1101	0	0	2335	141
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					3		5	2			6	
Permitted Phases				3		3	2					6
Detector Phase				3	3	3	5	2			6	6
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0	5.0	15.0			15.0	15.0
Minimum Split (s)				12.8	12.8	12.8	12.1	22.1			22.1	22.1
Total Split (s)				25.0	25.0	25.0	50.0	120.0			100.0	100.0
Total Split (%)				12.5%	12.5%	12.5%	25.0%	60.0%			50.0%	50.0%
Maximum Green (s)				17.2	17.2	17.2	42.9	112.9			92.9	92.9
Yellow Time (s)				5.1	5.1	5.1	5.1	5.1			5.1	5.1
All-Red Time (s)				2.7	2.7	2.7	2.0	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.8	7.8	7.1	7.1			7.1	7.1
Lead/Lag				Lead	Lead	Lead	Lead	Lag			Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes	Yes	Yes			Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	4.0	3.0			3.0	3.0
Recall Mode				None	None	None	Max	C-Max			C-Max	C-Max
Act Effct Green (s)					15.7	15.7	142.9	116.1			92.9	92.9
Actuated g/C Ratio					0.08	0.08	0.71	0.58			0.46	0.46
v/c Ratio					0.72	0.67	0.76	0.37			0.99	0.17
Control Delay					117.8	19.7	105.6	6.7			68.3	4.0
Queue Delay					2.5	0.0	56.7	0.1			1.7	0.0
Total Delay					120.2	19.7	162.2	6.8			70.0	4.0
LOS					F	B	F	A			E	A
Approach Delay					51.3			41.5			66.3	
Approach LOS					D			D			E	

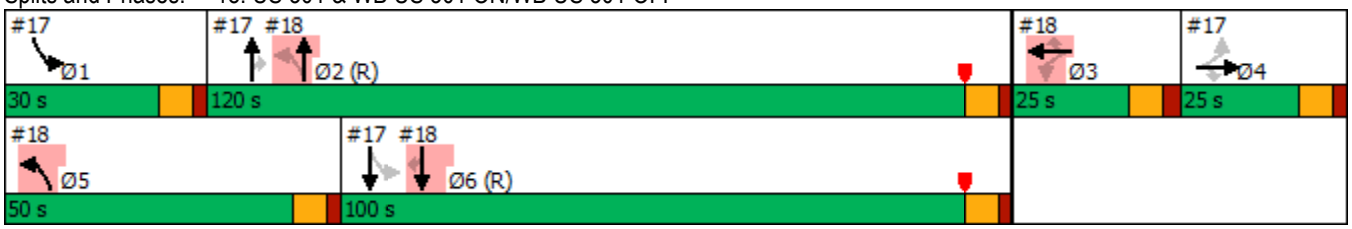
Intersection Summary	
Area Type:	Other

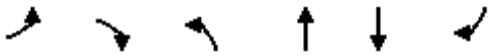
Lane Group	Ø1	Ø4
Lane Configurations		
Traffic Volume (vph)		
Future Volume (vph)		
Ideal Flow (vphpl)		
Lane Util. Factor		
Frt		
Flt Protected		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Adj. Flow (vph)		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	1	4
Permitted Phases		
Detector Phase		
Switch Phase		
Minimum Initial (s)	5.0	5.0
Minimum Split (s)	12.1	12.5
Total Split (s)	30.0	25.0
Total Split (%)	15%	13%
Maximum Green (s)	22.9	17.5
Yellow Time (s)	5.1	5.1
All-Red Time (s)	2.0	2.4
Lost Time Adjust (s)		
Total Lost Time (s)		
Lead/Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes
Vehicle Extension (s)	4.0	4.0
Recall Mode	Min	Max
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		

Intersection Summary

Cycle Length: 200
Actuated Cycle Length: 200
Offset: 63 (32%), Referenced to phase 2:NBT and 6:SBTL, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.31
Intersection Signal Delay: 56.8 Intersection LOS: E
Intersection Capacity Utilization 117.1% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 18: US 301 & WB US 301 ON/WB US 301 OFF



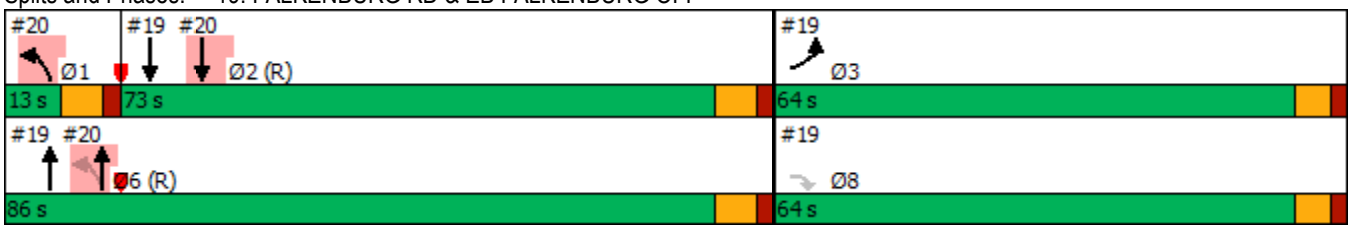


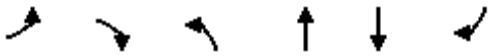
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1
Lane Configurations							
Traffic Volume (vph)	332	716	0	1019	1308	0	
Future Volume (vph)	332	716	0	1019	1308	0	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Util. Factor	0.97	0.88	1.00	0.91	0.91	1.00	
Frt		0.850					
Flt Protected	0.950						
Satd. Flow (prot)	3433	2787	0	5085	5085	0	
Flt Permitted	0.950						
Satd. Flow (perm)	3433	2787	0	5085	5085	0	
Right Turn on Red		Yes				Yes	
Satd. Flow (RTOR)		186					
Link Speed (mph)	30			30	30		
Link Distance (ft)	519			688	550		
Travel Time (s)	11.8			15.6	12.5		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	361	778	0	1108	1422	0	
Shared Lane Traffic (%)							
Lane Group Flow (vph)	361	778	0	1108	1422	0	
Turn Type	Prot	Perm		NA	NA		
Protected Phases	3			6	2		1
Permitted Phases		8					
Detector Phase	3	8		6	2		
Switch Phase							
Minimum Initial (s)	6.0	6.0		15.0	15.0		5.0
Minimum Split (s)	22.5	22.5		22.5	22.5		11.8
Total Split (s)	64.0	64.0		86.0	73.0		13.0
Total Split (%)	42.7%	42.7%		57.3%	48.7%		9%
Maximum Green (s)	57.9	57.9		79.2	66.2		6.2
Yellow Time (s)	4.1	4.1		4.8	4.8		4.8
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		
Total Lost Time (s)	6.1	6.1		6.8	6.8		
Lead/Lag					Lag		Lead
Lead-Lag Optimize?					Yes		Yes
Vehicle Extension (s)	3.5	3.5		4.0	4.0		6.0
Recall Mode	None	None		C-Max	C-Max		None
Act Effct Green (s)	41.4	41.4		95.7	66.2		
Actuated g/C Ratio	0.28	0.28		0.64	0.44		
v/c Ratio	0.38	0.86		0.34	0.63		
Control Delay	44.1	48.7		13.7	11.2		
Queue Delay	0.0	0.0		0.0	0.3		
Total Delay	44.1	48.7		13.7	11.5		
LOS	D	D		B	B		
Approach Delay	47.2			13.7	11.5		
Approach LOS	D			B	B		

Intersection Summary	
Area Type:	Other

Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 90 (60%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.55	
Intersection Signal Delay: 23.2	Intersection LOS: C
Intersection Capacity Utilization 72.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 19: FALKENBURG RD & EB FALKENBURG OFF



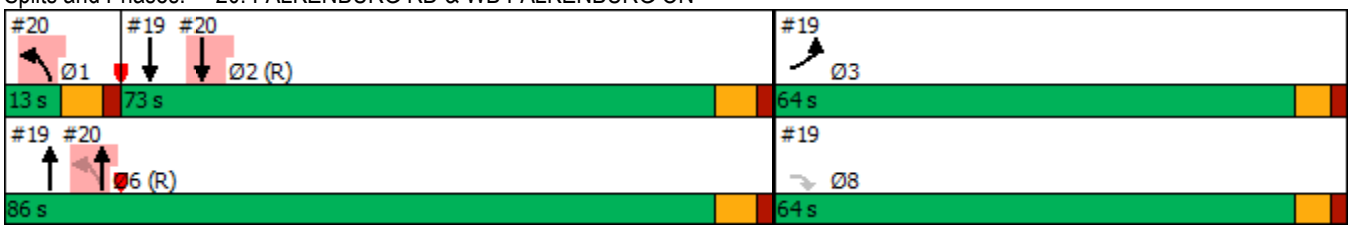


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø3	Ø8
Lane Configurations								
Traffic Volume (vph)	0	0	451	900	1308	245		
Future Volume (vph)	0	0	451	900	1308	245		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00		
Frt						0.850		
Flt Protected			0.950					
Satd. Flow (prot)	0	0	1770	3539	3539	1583		
Flt Permitted			0.055					
Satd. Flow (perm)	0	0	102	3539	3539	1583		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)						94		
Link Speed (mph)	30			30	30			
Link Distance (ft)	492			550	852			
Travel Time (s)	11.2			12.5	19.4			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	0	0	490	978	1422	266		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	0	0	490	978	1422	266		
Turn Type			pm+pt	NA	NA	Free		
Protected Phases			1	6	2		3	8
Permitted Phases			6			Free		
Detector Phase			1	6	2			
Switch Phase								
Minimum Initial (s)			5.0	15.0	15.0		6.0	6.0
Minimum Split (s)			11.8	22.5	22.5		22.5	22.5
Total Split (s)			13.0	86.0	73.0		64.0	64.0
Total Split (%)			8.7%	57.3%	48.7%		43%	43%
Maximum Green (s)			6.2	79.2	66.2		57.9	57.9
Yellow Time (s)			4.8	4.8	4.8		4.1	4.1
All-Red Time (s)			2.0	2.0	2.0		2.0	2.0
Lost Time Adjust (s)			0.0	0.0	0.0			
Total Lost Time (s)			6.8	6.8	6.8			
Lead/Lag			Lead		Lag			
Lead-Lag Optimize?			Yes		Yes			
Vehicle Extension (s)			6.0	4.0	4.0		3.5	3.5
Recall Mode			None	C-Max	C-Max		None	None
Act Effct Green (s)			95.7	95.7	66.2	150.0		
Actuated g/C Ratio			0.64	0.64	0.44	1.00		
v/c Ratio			1.55	0.43	0.91	0.17		
Control Delay			293.1	12.3	49.0	0.2		
Queue Delay			0.0	0.1	0.0	0.0		
Total Delay			293.1	12.4	49.0	0.2		
LOS			F	B	D	A		
Approach Delay				106.1	41.3			
Approach LOS				F	D			

Intersection Summary	
Area Type:	Other

Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 90 (60%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.55	
Intersection Signal Delay: 71.4	Intersection LOS: E
Intersection Capacity Utilization 72.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 20: FALKENBURG RD & WB FALKENBURG ON



StreetLight Origin-Destination Matrix, Eastbound
AM Peak Hour (7:00-8:00 AM)

All Vehicles

Day Type	1: Weekday (Tu-Th)
Day Part	08: 7am (7am-8am)

Sum of Average Daily O-D Traffic (StL Volume)	Column Labels																		
Row Labels	**[10] Morgan St**	**[10] Florida Ave**	**[7] 22nd St NB**	**[7] 22nd St SB**	**[6] I-4 EB**	**[5] 50th St NB**	**[5] 50th St SB**	**[4] 78th St NB**	**[4] 78th St SB**	**[3] US-301 NB**	**[3] US-301 SB**	**[2] Falkenburg NB**	**[2] Falkenburg SB**	**[1] I-75 NB**	**[1] I-75 SB**	**[0] Town Ctr SB**	**[0] Town Ctr NB**	**[0] Brandon EB**
[8] Twiggs St WB		0		1	10	0	1	0	1	1	2	1	4	4	2	0		
[8] Twiggs St EB	1		1	12	7	0	4	0	1	3	13	4	4	4	6	0	0	2
[8] Meridian NB			2	10	11	0	3	3	2	7	6	3	6	5	6			
[11] Selmon EB	349	319	172	144	637	46	94	94	50	44	106	82	124	84	176	1	5	4
[10] Jefferson St			8	12	64	4	4	6	5	3	5	9	8	6	17	0		
[9] Nebraska Ave			10	49	32	11	48	17	19	9	50	15	19	15	36		0	0
[7] 21st St SB	3	0	20	886	11	13	24	13	17	7	55	17	20	17	36	0		0
[7] 22nd St NB	2	0	2395		78	0	6	2	11	2	6	0	1	5	11			
[6] I-4 EB			4	2	4551	2	154	12	23	12	56	15	34	22	286	1	0	0
[5] 50th St SB	0		26	2	1		1005	37	70	40	145	43	104	48	192	2	2	1
[5] 50th St NB	0	2	19	10	10	2269		4	10	6	16	8	5	14	14		0	0
[3] US-301 SB			17		0	8	2	11			766	11	22	16	85	0		0
[3] US-301 NB	0	0	166	5	7	84	14	91	3	2690		23	10	109	25			

Trucks

Day Type	1: Weekday (Tu-Th)
Day Part	08: 7am (7am-8am)

Sum of Average Daily O-D Traffic (StL Index)	Column Labels																		
Row Labels	**[10] Morgan St**	**[10] Florida Ave**	**[7] 22nd St NB**	**[7] 22nd St SB**	**[6] I-4 EB**	**[5] 50th St NB**	**[5] 50th St SB**	**[4] 78th St NB**	**[4] 78th St SB**	**[3] US-301 NB**	**[3] US-301 SB**	**[2] Falkenburg NB**	**[2] Falkenburg SB**	**[1] I-75 NB**	**[1] I-75 SB**	**[0] Town Ctr SB**	**[0] Town Ctr NB**	**[0] Brandon EB**
[8] Twiggs St WB			1	8	2		2		1	2	9		2	4	11			
[8] Twiggs St EB		1	2	7	1		2			1	1	1						
[8] Meridian NB				10	3													
[11] Selmon EB	113	182	62	778	1537	124	232	69	40	36	282	114	217	213	347		1	1
[10] Jefferson St			5	21	25	8	2	3	1		4	5	2	1	11			
[9] Nebraska Ave			4	31	42	31	24	28	4	4	113	116	35	8	47			
[7] 21st St SB		3	32	3084	594	134	361	134	76	41	658	49	205	134	657			1
[7] 22nd St NB	14	3	1133		1124	12	9	69	11	40	44	12	21	141	1330			
[6] I-4 EB		1	12	31	8189	17	470	60	60	12	310	24	95	62	595			
[5] 50th St SB	1	1	24	51	9		3487	72	41	35	363	34	127	121	859		4	1
[5] 50th St NB			48	46	15	4466		70	9	14	40	18	9	247	224	1	2	
[3] US-301 SB	3		21	9	1	17	16	8			4110	9	11	159	750		1	
[3] US-301 NB			100	10	3	65	14	20	1	1637		58	22	490	338			

StreetLight Origin-Destination Matrix, Eastbound
AM Peak Hour (7:00-8:00 AM)

All Vehicle Types

StreetLight Volume Estimate

Origin Zones	Destination Zones										
	Florida St/ Morgan Ave	22nd St	I-4	50th St	78th St	US-301	Falkenburg Rd	I-75 NB	I-75 SB	REL East	Total
Twiggs St						32	22	13	14	2	83
Selmon West	668	316	637	140	144	150	206	84	176	10	2,531
Jefferson St		20	64	8	11	8	17	6	17	0	151
Nebraska Ave		59	32	59	36	59	34	15	36	0	330
22nd St			89	43	43	70	38	22	47	0	352
I-4				156	35	68	49	22	286	1	617
50th St					121	207	160	62	206	5	761
US-301							66	125	110		301
Total	668	395	822	406	390	594	592	349	892	18	5,126

Percent of Total Traffic

Origin Zones	Destination Zones										
	Florida St/ Morgan Ave	22nd St	I-4	50th St	78th St	US-301	Falkenburg Rd	I-75 NB	I-75 SB	REL East	Total
Twiggs St	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	2%
Selmon West	13%	6%	12%	3%	3%	3%	4%	2%	3%	0%	49%
Jefferson St	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	3%
Nebraska Ave	0%	1%	1%	1%	1%	1%	1%	0%	1%	0%	6%
22nd St	0%	0%	2%	1%	1%	1%	1%	0%	1%	0%	7%
I-4	0%	0%	0%	3%	1%	1%	1%	0%	6%	0%	12%
50th St	0%	0%	0%	0%	2%	4%	3%	1%	4%	0%	15%
US-301	0%	0%	0%	0%	0%	0%	1%	2%	2%	0%	6%
Total	13%	8%	16%	8%	8%	12%	12%	7%	17%	0%	100%

Trucks Only

StreetLight Volume Estimate

Origin Zones	Destination Zones										
	Florida St/ Morgan Ave	22nd St	I-4	50th St	78th St	US-301	Falkenburg Rd	I-75 NB	I-75 SB	REL East	Total
Twiggs St						13	3	4	11	0	31
Selmon West	295	840	1,537	356	109	318	331	213	347	2	4,348
Jefferson St		26	25	10	4	4	7	1	11	0	88
Nebraska Ave		35	42	55	32	117	151	8	47	0	487
22nd St			1,718	516	290	783	287	275	1,987	1	5,857
I-4				487	120	322	119	62	595	0	1,705
50th St					192	452	188	368	1,083	8	2,291
US-301							100	649	1,088		1,837
Total	295	901	3,322	1,424	747	2,009	1,186	1,580	5,169	11	16,644

Percent of Total Traffic

Origin Zones	Destination Zones										
	Florida St/ Morgan Ave	22nd St	I-4	50th St	78th St	US-301	Falkenburg Rd	I-75 NB	I-75 SB	REL East	Total
Twiggs St	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Selmon West	2%	5%	9%	2%	1%	2%	2%	1%	2%	0%	26%
Jefferson St	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%
Nebraska Ave	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	3%
22nd St	0%	0%	10%	3%	2%	5%	2%	2%	12%	0%	35%
I-4	0%	0%	0%	3%	1%	2%	1%	0%	4%	0%	10%
50th St	0%	0%	0%	0%	1%	3%	1%	2%	7%	0%	14%
US-301	0%	0%	0%	0%	0%	0%	1%	4%	7%	0%	11%
Total	2%	5%	20%	9%	4%	12%	7%	9%	31%	0%	100%

StreetLight Origin-Destination Matrix, Westbound
AM Peak Hour (7:00-8:00 AM)

All Vehicles

Day Type	1: Weekday (Tu-Th)
Day Part	08: 7am (7am-8am)

Sum of Average Daily O-D Traffic (StL Volume)	Column Labels												
Row Labels	**[3] US-301 NB**	**[3] US-301 SB**	**[5] 50th St NB**	**[5] 50th St SB**	**[6] I-4 WB**	**[7] 22nd St NB**	**[7] 22nd St SB**	**[9] Kennedy Blvd**	**[10] Brorein St**	**[11] Selmon WB**	**[8] Meridian SB**	**[8] Twiggs St EB**	**[8] Twiggs St WB**
[0] Brandon WB	6	4	45	1	39	509	6	614	104	325	542	15	119
[0] Town Ctr NB	5		10	1	6	124	2	150	27	55	127	6	33
[0] Town Ctr SB	1	1	1		1	27		38	3	7	41	4	13
[1] I-75 NB	738	19	156	15	498	375	9	792	400	840	262	14	134
[1] I-75 SB	211	63	11	9	31	59	1	71	39	145	39	2	21
[2] Falkenburg SB	36	11	11	2	26	32	3	44	20	89	21	0	10
[2] Falkenburg NB	101	10	118	15	119	1078	13	1152	220	584	846	17	258
[3] US-301 SB		766	8	2	17	17		18	16	49	3		6
[3] US-301 NB	2690		84	14	145	166	5	328	145	339	118	2	64
[4] 78th St NB		4	27	6	110	22	3	123	56	141	18	1	19
[4] Adamo Dr	0	2	15	5	67	160	2	197	116	336	59		63
[5] 50th St SB	40	145		1005	28	26	2	40	37	132	8	1	11
[5] 50th St NB	6	16	2269		372	19	10	271	199	476	27	4	50
[6] I-4 WB	2	3	1	7	5211	44	22	226	398	1002	39	5	33
[7] 21st St SB	7	55	13	24	3	20	886	129	136	323	8	3	12
[7] 22nd St NB	2	6	0	6	7	2395		463	143	333	52	3	190
[12] Brorein St	0	1	1	3		1	2	1		1179		1	0

Trucks

Day Type	1: Weekday (Tu-Th)
Day Part	08: 7am (7am-8am)

			27	4	58	254	9	212	26				
Sum of Average Daily O-D Traffic (StL Index)	**Column Labels**												
Row Labels	**[3] US-301 NB**	**[3] US-301 SB**	**[5] 50th St NB**	**[5] 50th St SB**	**[6] I-4 WB**	**[7] 22nd St NB**	**[7] 22nd St SB**	**[9] Kennedy Blvd**	**[10] Brorein St**	**[11] Selmon WB**	**[8] Meridian SB**	**[8] Twiggs St EB**	**[8] Twiggs St WB**
[0] Brandon WB	1		21	4	45	177	9	163	19	111	77	18	85
[0] Town Ctr NB	1		6		12	62		41	7	25	33	2	26
[0] Town Ctr SB					1	15		8		7	7		8
[1] I-75 NB	816	123	415	68	650	191	332	277	77	553	84	7	61
[1] I-75 SB	200	779	58	110	94	116	69	117	43	348	50	8	50
[2] Falkenburg SB	30	12	14	7	60	27	21	78	12	167	11	2	9
[2] Falkenburg NB	29	5	40	6	119	314	18	264	31	218	134	16	153
[3] US-301 SB		4110	17	16	103	21	9	34	17	183	7		2
[3] US-301 NB	1637		65	14	202	100	10	222	51	277	36	7	38
[4] 78th St NB	2	5	36	2	143	5	5	51	33	133		2	2
[4] Adamo Dr		1	23	27	355	19	55	239	156	954	2	2	1
[5] 50th St SB	35	363		3487	222	24	51	156	69	756		3	4
[5] 50th St NB	14	40	4466		885	48	46	196	109	1117	1	2	5
[6] I-4 WB	7	171	16	133	11946	231	238	665	443	3108	8	11	15
[7] 21st St SB	41	658	134	361	23	32	3084	71	34	403	7	5	15
[7] 22nd St NB	40	44	12	9	286	1133		231	146	1791	2	7	40
[12] Brorein St			2		1		9			696			

StreetLight Origin-Destination Matrix, Westbound
AM Peak Hour (7:00-8:00 AM)

All Vehicle Types

StreetLight Volume Estimate

Origin Zones	Destination Zones								
	US-301	50th St	I-4	22nd St	Twiggs St	Kennedy Blvd	Brorein St	Selmon West	Total
REL East		58	46	668	900	802	134	387	2,995
I-75 NB	757	171	498	384	410	792	400	840	4,252
I-75 SB	274	20	31	60	62	71	39	145	702
Falkenburg Rd	158	146	145	1,126	1,152	1,196	240	673	4,836
US-301		108	162	188	193	346	161	388	1,546
78th St		53	177	187		320	172	477	1,386
50th St			400	57		311	236	608	1,612
I-4						226	398	1,002	1,626
22nd St						592	279	656	1,527
Brorein St								1,179	1,179
Total	1,189	556	1,459	2,670	2,717	4,656	2,059	6,355	21,661

Percent of Total Traffic

Origin Zones	Destination Zones								
	US-301	50th St	I-4	22nd St	Twiggs St	Kennedy Blvd	Brorein St	Selmon West	Total
REL East	0%	0%	0%	3%	4%	4%	1%	2%	14%
I-75 NB	3%	1%	2%	2%	2%	4%	2%	4%	20%
I-75 SB	1%	0%	0%	0%	0%	0%	0%	1%	3%
Falkenburg Rd	1%	1%	1%	5%	5%	6%	1%	3%	22%
US-301	0%	0%	1%	1%	1%	2%	1%	2%	7%
78th St	0%	0%	1%	1%	0%	1%	1%	2%	6%
50th St	0%	0%	2%	0%	0%	1%	1%	3%	7%
I-4	0%	0%	0%	0%	0%	1%	2%	5%	8%
22nd St	0%	0%	0%	0%	0%	3%	1%	3%	7%
Brorein St	0%	0%	0%	0%	0%	0%	0%	5%	5%
Total	5%	3%	7%	12%	13%	21%	10%	29%	100%

Trucks Only

StreetLight Volume Estimate

Origin Zones	Destination Zones								
	US-301	50th St	I-4	22nd St	Twiggs St	Kennedy Blvd	Brorein St	Selmon West	Total
REL East		31	58	263	256	212	26	143	989
I-75 NB	939	483	650	523	152	277	77	553	3,654
I-75 SB	979	168	94	185	108	117	43	348	2,042
Falkenburg Rd	76	67	179	380	325	342	43	385	1,797
US-301		112	305	140	90	256	68	460	1,431
78th St		88	498	84		290	189	1,087	2,236
50th St			1,107	169		352	178	1,873	3,679
I-4						665	443	3,108	4,216
22nd St						302	180	2,194	2,676
Brorein St								696	696
Total	1,994	949	2,891	1,744	931	2,813	1,247	10,847	23,416

Percent of Total Traffic

Origin Zones	Destination Zones								
	US-301	50th St	I-4	22nd St	Twiggs St	Kennedy Blvd	Brorein St	Selmon West	Total
REL East	0%	0%	0%	1%	1%	1%	0%	1%	4%
I-75 NB	4%	2%	3%	2%	1%	1%	0%	2%	16%
I-75 SB	4%	1%	0%	1%	0%	0%	0%	1%	9%
Falkenburg Rd	0%	0%	1%	2%	1%	1%	0%	2%	8%
US-301	0%	0%	1%	1%	0%	1%	0%	2%	6%
78th St	0%	0%	2%	0%	0%	1%	1%	5%	10%
50th St	0%	0%	5%	1%	0%	2%	1%	8%	16%
I-4	0%	0%	0%	0%	0%	3%	2%	13%	18%
22nd St	0%	0%	0%	0%	0%	1%	1%	9%	11%
Brorein St	0%	0%	0%	0%	0%	0%	0%	3%	3%
Total	9%	4%	12%	7%	4%	12%	5%	46%	100%

StreetLight Origin-Destination Matrix, Eastbound
PM Peak Hour (4:00-5:00 PM)

All Vehicles

Day Type	1: Weekday (Tu-Th)
Day Part	17: 4pm (4pm-5pm)

Sum of Average Daily O-D Traffic (StL Volume)	Column Labels																		
Row Labels	**[10] Morgan St**	**[10] Florida Ave**	**[7] 22nd St NB**	**[7] 22nd St SB**	**[6] I-4 EB**	**[5] 50th St NB**	**[5] 50th St SB**	**[4] 78th St NB**	**[4] 78th St SB**	**[3] US-301 NB**	**[3] US-301 SB**	**[2] Falkenburg NB**	**[2] Falkenburg SB**	**[1] I-75 NB**	**[1] I-75 SB**	**[0] Town Ctr SB**	**[0] Town Ctr NB**	**[0] Brandon EB**
[8] Twiggs St WB	0		2	7	2	0	2	1	3	4	12	1	9	5	23	10	4	25
[8] Twiggs St EB			4	107	9	1	20	1	13	8	83	14	37	20	149	69	21	217
[8] Meridian NB	0		3	50	21	4	29	5	10	12	95	14	49	33	138	98	17	187
[11] Selmon EB	356	276	183	234	1047	91	332	92	70	63	556	171	175	265	728	289	75	716
[10] Jefferson St	0		30	66	151	12	20	9	12	6	139	21	38	31	197	45	11	146
[9] Nebraska Ave			17	127	104	18	131	30	35	8	219	28	45	20	210	42	14	110
[7] 21st St SB	2	0	43	2151	30	23	57	23	23	22	115	40	50	34	141	37	10	99
[7] 22nd St NB	0	0	1082		85	2	16	5	4		5	7	5	5	8	1	4	24
[6] I-4 EB	0		6	4	5837	6	239	17	49	17	177	27	45	38	341	20	8	59
[5] 50th St SB			16	3	4		2281	52	116	36	479	115	171	108	612	98	31	291
[5] 50th St NB			7	2	6	1197		6	13	0	18	11	17	48	30	9	1	18
[3] US-301 SB			14	2	1	9	6	3	0		2526	28	89	153	210	4	2	4
[3] US-301 NB			18	3	0	32	8	11	5	1142		19	21	242	23	1	1	2

Trucks

Day Type	1: Weekday (Tu-Th)
Day Part	17: 4pm (4pm-5pm)

Sum of Average Daily O-D Traffic (StL Index)	Column Labels																	
Row Labels	**[10] Morgan St**	**[10] Florida Ave**	**[7] 22nd St NB**	**[7] 22nd St SB**	**[6] I-4 EB**	**[5] 50th St NB**	**[5] 50th St SB**	**[4] 78th St NB**	**[4] 78th St SB**	**[3] US-301 NB**	**[3] US-301 SB**	**[2] Falkenburg NB**	**[2] Falkenburg SB**	**[1] I-75 NB**	**[1] I-75 SB**	**[0] Town Ctr SB**	**[0] Town Ctr NB**	**[0] Brandon EB**
[8] Twiggs St WB				3	16	1	3	1		8	5	4	1	4	6	2	2	24
[8] Twiggs St EB			1	42	6	2	7	1	2	2	12	10	2	5	15	21	2	30
[8] Meridian NB				15	13		5	1	1	2	17	2	7	14	16	20	10	65
[11] Selmon EB	183	376	250	692	2615	589	474	337	136	139	322	266	71	342	428	107	37	442
[10] Jefferson St			10	24	115	12	13	13	7	8	25	12	27	10	29		2	4
[9] Nebraska Ave			4	49	110	89	40	50	22	11	62	57	12	23	40	5	2	16
[7] 21st St SB	3		53	2586	431	177	409	122	93	49	267	87	74	77	329	50	19	171
[7] 22nd St NB	5	3	1698		583	23	146	50	11	17	39	8	20	159	669	7	1	12
[6] I-4 EB			9	11	8530	46	394	66	52	24	121	44	42	33	287	22	8	59
[5] 50th St SB		1	18	21	8		3004	60	47	38	214	37	63	91	426	33	12	93
[5] 50th St NB	3		17	14	23	2824		44	33	9	12	23	9	222	112	1	2	34
[3] US-301 SB			9	9	2	15	15	1	3		1298	5	17	236	341			
[3] US-301 NB			27	9	6	55	7	4	1	1788		12	27	561	30			

StreetLight Origin-Destination Matrix, Eastbound
PM Peak Hour (4:00-5:00 PM)

All Vehicle Types

StreetLight Volume Estimate

Origin Zones	Destination Zones										
	Florida St/ Morgan Ave	22nd St	I-4	50th St	78th St	US-301	Falkenburg Rd	I-75 NB	I-75 SB	REL East	Total
Twiggs St						214	124	58	310	648	1,354
Selmon West	632	417	1,047	423	162	619	346	265	728	1,080	5,719
Jefferson St		96	151	32	21	145	59	31	197	202	934
Nebraska Ave		144	104	149	65	227	73	20	210	166	1,158
22nd St			115	98	55	142	102	39	149	175	875
I-4				245	66	194	72	38	341	87	1,043
50th St					187	533	314	156	642	448	2,280
US-301							157	395	233		785
Total	632	657	1,417	947	556	2,074	1,247	1,002	2,810	2,806	14,148

Percent of Total Traffic

Origin Zones	Destination Zones										
	Florida St/ Morgan Ave	22nd St	I-4	50th St	78th St	US-301	Falkenburg Rd	I-75 NB	I-75 SB	REL East	Total
Twiggs St	0%	0%	0%	0%	0%	2%	1%	0%	2%	5%	10%
Selmon West	4%	3%	7%	3%	1%	4%	2%	2%	5%	8%	40%
Jefferson St	0%	1%	1%	0%	0%	1%	0%	0%	1%	1%	7%
Nebraska Ave	0%	1%	1%	1%	0%	2%	1%	0%	1%	1%	8%
22nd St	0%	0%	1%	1%	0%	1%	1%	0%	1%	1%	6%
I-4	0%	0%	0%	2%	0%	1%	1%	0%	2%	1%	7%
50th St	0%	0%	0%	0%	1%	4%	2%	1%	5%	3%	16%
US-301	0%	0%	0%	0%	0%	0%	1%	3%	2%	0%	6%
Total	4%	5%	10%	7%	4%	15%	9%	7%	20%	20%	100%

Trucks Only

StreetLight Volume Estimate

Origin Zones	Destination Zones										
	Florida St/ Morgan Ave	22nd St	I-4	50th St	78th St	US-301	Falkenburg Rd	I-75 NB	I-75 SB	REL East	Total
Twiggs St						46	26	23	37	176	308
Selmon West	559	942	2,615	1,063	473	461	337	342	428	586	7,806
Jefferson St		34	115	25	20	33	39	10	29	6	311
Nebraska Ave		53	110	129	72	73	69	23	40	23	592
22nd St			1,014	755	276	372	189	236	998	260	4,100
I-4				440	118	145	86	33	287	89	1,198
50th St					184	273	132	313	538	175	1,615
US-301							61	797	371		1,229
Total	559	1,029	3,854	2,412	1,143	1,403	939	1,777	2,728	1,315	17,159

Percent of Total Traffic

Origin Zones	Destination Zones										
	Florida St/ Morgan Ave	22nd St	I-4	50th St	78th St	US-301	Falkenburg Rd	I-75 NB	I-75 SB	REL East	Total
Twiggs St	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	2%
Selmon West	3%	5%	15%	6%	3%	3%	2%	2%	2%	3%	45%
Jefferson St	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	2%
Nebraska Ave	0%	0%	1%	1%	0%	0%	0%	0%	0%	0%	3%
22nd St	0%	0%	6%	4%	2%	2%	1%	1%	6%	2%	24%
I-4	0%	0%	0%	3%	1%	1%	1%	0%	2%	1%	7%
50th St	0%	0%	0%	0%	1%	2%	1%	2%	3%	1%	9%
US-301	0%	0%	0%	0%	0%	0%	0%	5%	2%	0%	7%
Total	3%	6%	22%	14%	7%	8%	5%	10%	16%	8%	100%

StreetLight Origin-Destination Matrix, Westbound
PM Peak Hour (4:00-5:00 PM)

All Vehicles

Day Type	1: Weekday (Tu-Th)
Day Part	17: 4pm (4pm-5pm)

Sum of Average Daily O-D Traffic (StL Volume)	Column Labels												
Row Labels	**[3] US-301 NB**	**[3] US-301 SB**	**[5] 50th St NB**	**[5] 50th St SB**	**[6] I-4 WB**	**[7] 22nd St NB**	**[7] 22nd St SB**	**[9] Kennedy Blvd**	**[10] Brorein St**	**[11] Selmon WB**	**[8] Meridian SB**	**[8] Twiggs St EB**	**[8] Twiggs St WB**
[0] Brandon WB	3		1	2	1	1		2	2	7		0	0
[0] Town Ctr NB	0	0		2		0		1	0	0	1		
[0] Town Ctr SB		1	0		0			1					
[1] I-75 NB	221	23	62	17	425	55	12	233	128	445	7	4	7
[1] I-75 SB	47	59	10	3	39	12	1	42	47	135	2	2	1
[2] Falkenburg SB	21	13	13	2	38	18	1	48	40	167	5	4	2
[2] Falkenburg NB	40	7	27	1	87	22	2	77	50	185	5	2	6
[3] US-301 SB		2526	9	6	34	14	2	16	11	80	0	0	1
[3] US-301 NB	1142		32	8	95	18	3	64	45	166	5	2	4
[4] 78th St NB		7	10	9	51	5	1	32	16	60	2	1	3
[4] Adamo Dr	2	2	5	14	62	22	2	56	54	234	3		8
[5] 50th St SB	36	479		2281	34	16	3	32	30	120	3	1	3
[5] 50th St NB	0	18	1197		247	7	2	75	43	163	5	2	6
[6] I-4 WB	1	8	1	8	4445	41	38	129	234	937	12	8	14
[7] 21st St SB	22	115	23	57	9	43	2151	98	129	494	1	0	4
[7] 22nd St NB		5	2	16	5	1082		171	76	251	18	3	78
[12] Brorein St	0	4	0	1	1	1	1	1		858		1	0

Trucks

Day Type	1: Weekday (Tu-Th)
Day Part	17: 4pm (4pm-5pm)

Sum of Average Daily O-D Traffic (StL Index)	Column Labels												
Row Labels	**[3] US-301 NB**	**[3] US-301 SB**	**[5] 50th St NB**	**[5] 50th St SB**	**[6] I-4 WB**	**[7] 22nd St NB**	**[7] 22nd St SB**	**[9] Kennedy Blvd**	**[10] Brorein St**	**[11] Selmon WB**	**[8] Meridian SB**	**[8] Twiggs St EB**	**[8] Twiggs St WB**
[0] Brandon WB	2		3		4	2	1	1		14			
[0] Town Ctr NB										3			
[0] Town Ctr SB			1	1	1					1			
[1] I-75 NB	1420	124	1244	205	983	261	245	265	88	802	4	3	2
[1] I-75 SB	100	322	81	134	102	17	34	48	16	182			
[2] Falkenburg SB	15	8	9	7	22	12	1	40	7	198			
[2] Falkenburg NB	12	1	34	6	196	24	5	43	7	200			1
[3] US-301 SB		1298	15	15	24	9	9	10	5	56			
[3] US-301 NB	1788		55	7	195	27	9	41	24	345			2
[4] 78th St NB		2	47	5	85	10	1	39	8	70			
[4] Adamo Dr			7	17	77	2	19	32	7	183			
[5] 50th St SB	38	214		3004	101	18	21	70	10	214			
[5] 50th St NB	9	12	2824		534	17	14	41	36	386	3		2
[6] I-4 WB	16	50	43	108	5496	233	138	79	86	1356	2	2	4
[7] 21st St SB	49	267	177	409	20	53	2586	19	25	217			
[7] 22nd St NB	17	39	23	146	205	1698		136	86	904	4	2	5
[12] Brorein St			4				3			366			

StreetLight Origin-Destination Matrix, Westbound
PM Peak Hour (4:00-5:00 PM)

All Vehicle Types

StreetLight Volume Estimate

Origin Zones	Destination Zones								
	US-301	50th St	I-4	22nd St	Twiggs St	Kennedy Blvd	Brorein St	Selmon West	Total
REL East									0
I-75 NB	244	79	425	67		233	128	445	1,621
I-75 SB	106	13	39	13		42	47	135	395
Falkenburg Rd	81	43	125	43		125	90	352	859
US-301		55	129	37		80	56	246	603
78th St		38	113	30		88	70	294	633
50th St			281	28		107	73	283	772
I-4						129	234	937	1,300
22nd St						269	205	745	1,219
Brorein St								858	858
Total	431	228	1,112	218	0	1,073	903	4,295	8,260

Percent of Total Traffic

Origin Zones	Destination Zones								
	US-301	50th St	I-4	22nd St	Twiggs St	Kennedy Blvd	Brorein St	Selmon West	Total
REL East	0%	0%	0%	0%	0%	0%	0%	0%	0%
I-75 NB	3%	1%	5%	1%	0%	3%	2%	5%	20%
I-75 SB	1%	0%	0%	0%	0%	1%	1%	2%	5%
Falkenburg Rd	1%	1%	2%	1%	0%	2%	1%	4%	10%
US-301	0%	1%	2%	0%	0%	1%	1%	3%	7%
78th St	0%	0%	1%	0%	0%	1%	1%	4%	8%
50th St	0%	0%	3%	0%	0%	1%	1%	3%	9%
I-4	0%	0%	0%	0%	0%	2%	3%	11%	16%
22nd St	0%	0%	0%	0%	0%	3%	2%	9%	15%
Brorein St	0%	0%	0%	0%	0%	0%	0%	10%	10%
Total	5%	3%	13%	3%	0%	13%	11%	52%	100%

Trucks Only

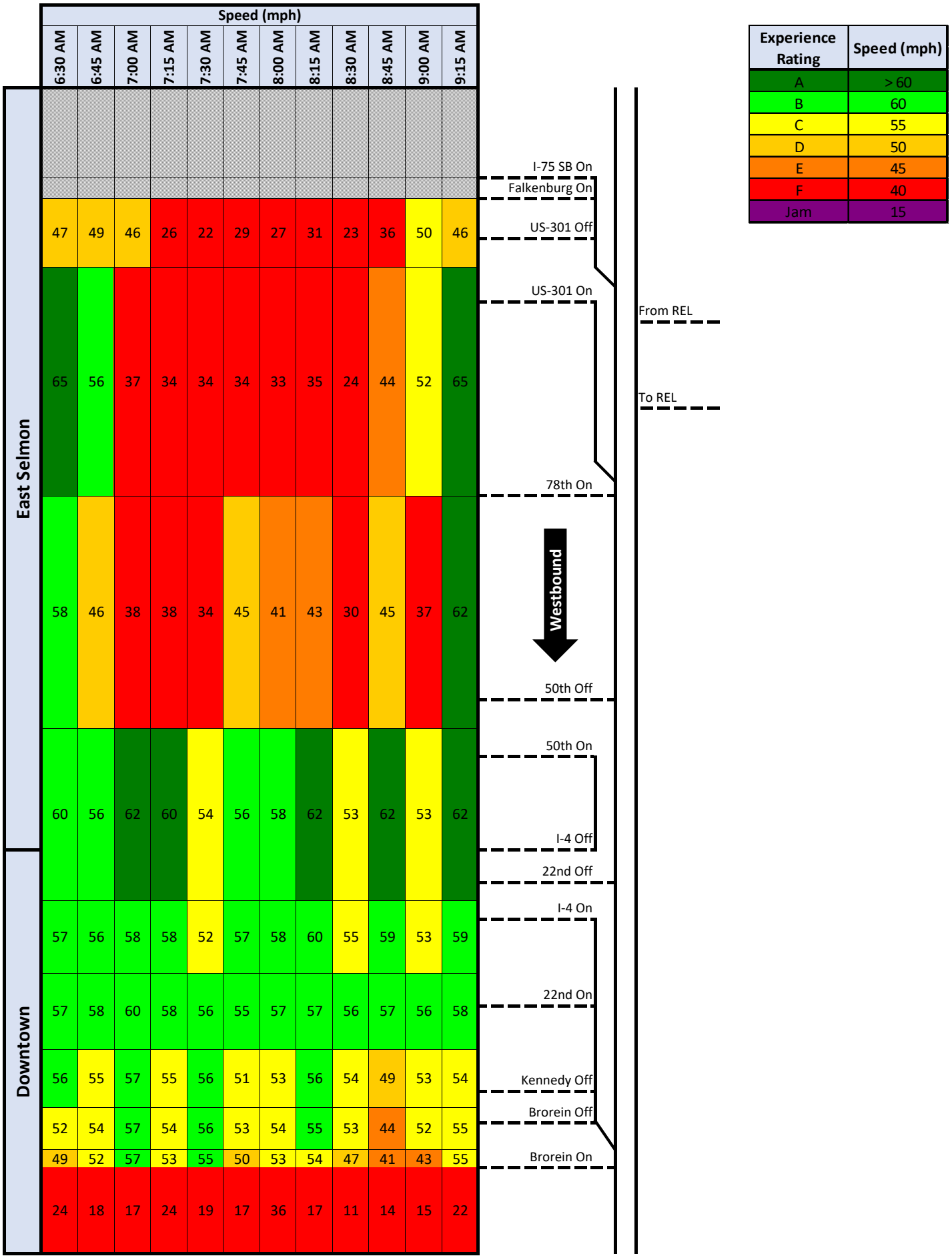
StreetLight Volume Estimate

Origin Zones	Destination Zones								
	US-301	50th St	I-4	22nd St	Twiggs St	Kennedy Blvd	Brorein St	Selmon West	Total
REL East									0
I-75 NB	1,544	1,449	983	506		265	88	802	5,637
I-75 SB	422	215	102	51		48	16	182	1,036
Falkenburg Rd	36	56	218	42		83	14	398	847
US-301		92	219	54		51	29	401	846
78th St		76	162	32		71	15	253	609
50th St			635	70		111	46	600	1,462
I-4						79	86	1,356	1,521
22nd St						155	111	1,121	1,387
Brorein St								366	366
Total	2,002	1,888	2,319	755	0	863	405	5,479	13,711

Percent of Total Traffic

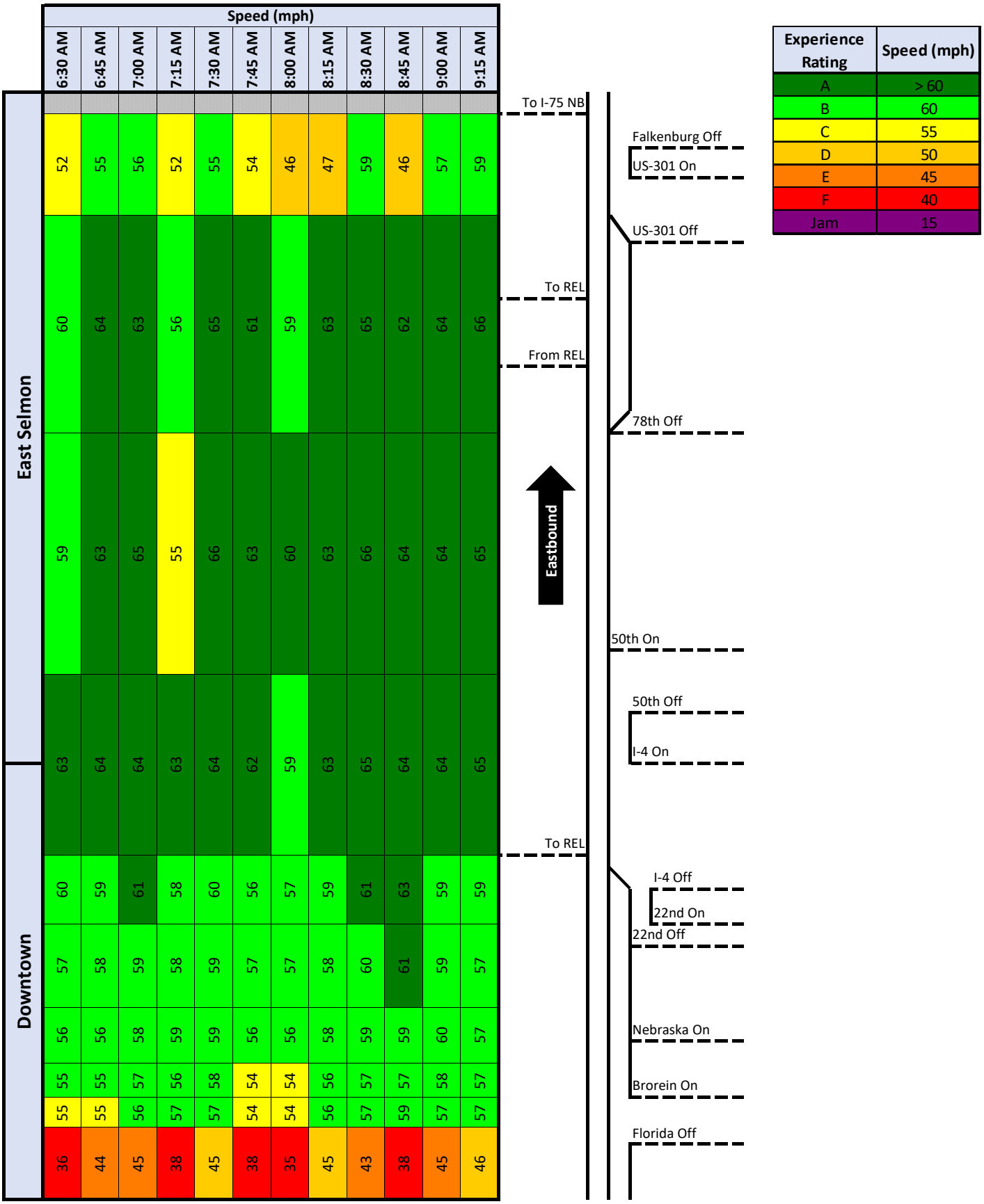
Origin Zones	Destination Zones								
	US-301	50th St	I-4	22nd St	Twiggs St	Kennedy Blvd	Brorein St	Selmon West	Total
REL East	0%	0%	0%	0%	0%	0%	0%	0%	0%
I-75 NB	11%	11%	7%	4%	0%	2%	1%	6%	41%
I-75 SB	3%	2%	1%	0%	0%	0%	0%	1%	8%
Falkenburg Rd	0%	0%	2%	0%	0%	1%	0%	3%	6%
US-301	0%	1%	2%	0%	0%	0%	0%	3%	6%
78th St	0%	1%	1%	0%	0%	1%	0%	2%	4%
50th St	0%	0%	5%	1%	0%	1%	0%	4%	11%
I-4	0%	0%	0%	0%	0%	1%	1%	10%	11%
22nd St	0%	0%	0%	0%	0%	1%	1%	8%	10%
Brorein St	0%	0%	0%	0%	0%	0%	0%	3%	3%
Total	15%	14%	17%	6%	0%	6%	3%	40%	100%

Westbound Speed-Contour Plot, Local Lanes
From Feb. 2017 Travel Time Runs
AM Peak Period (6:30-9:30 AM)

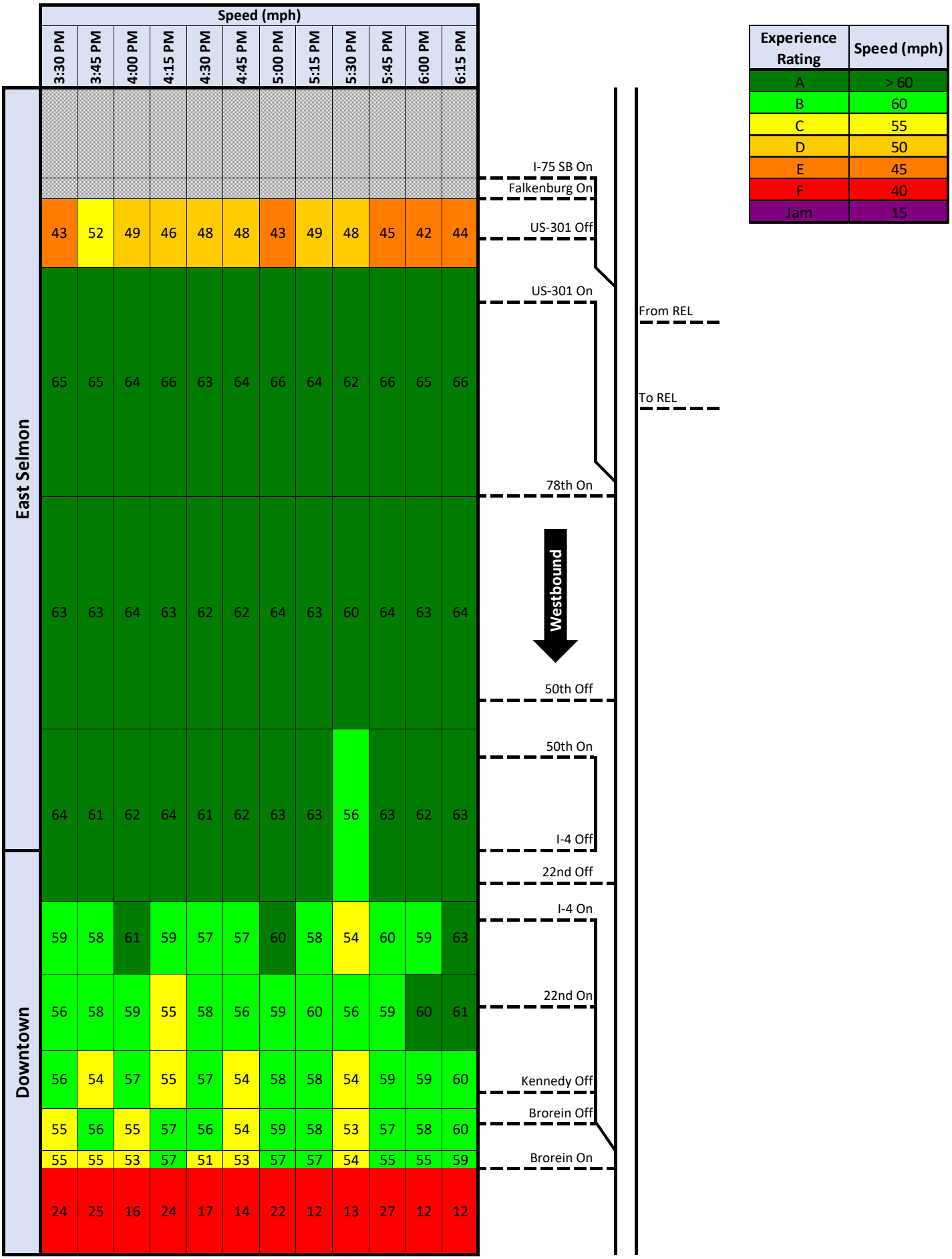


Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

Eastbound Speed-Contour Plot, Local Lanes
From Feb. 2017 Travel Time Runs
AM Peak Period (6:00-9:00 AM)

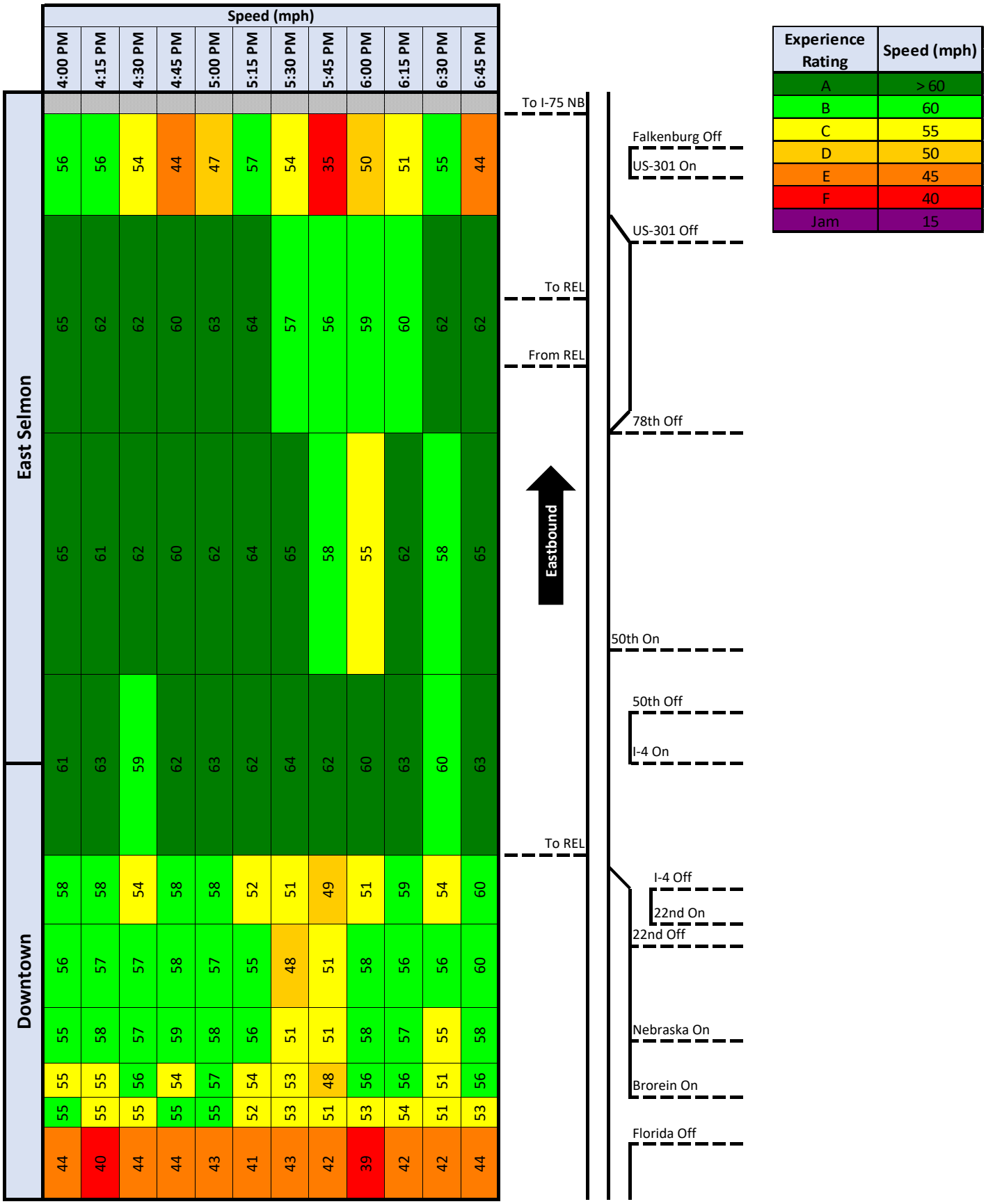


Westbound Speed-Contour Plot, Local Lanes
From Feb. 2017 Travel Time Runs
PM Peak Period (3:30-6:30 PM)



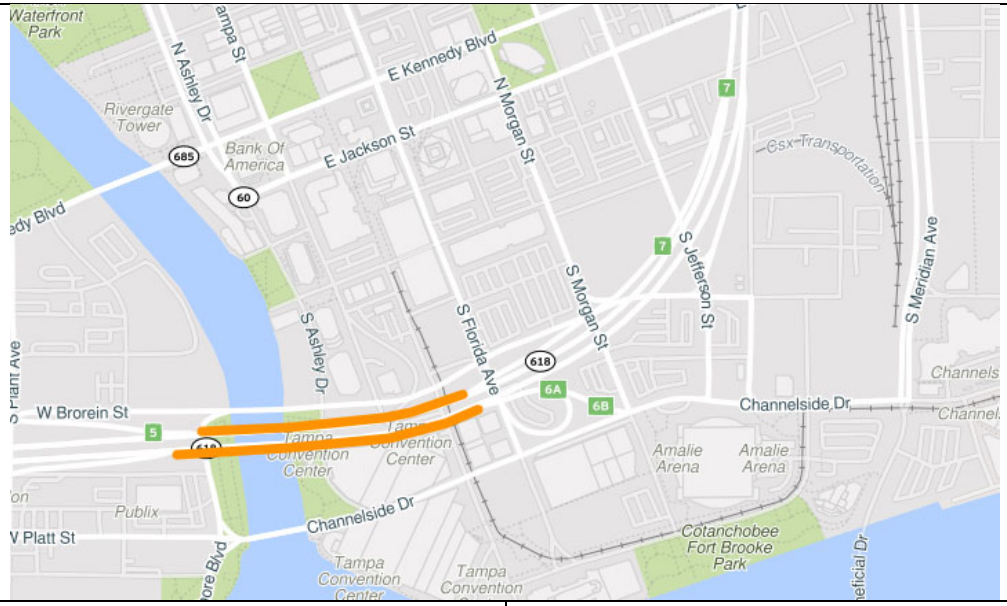
Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

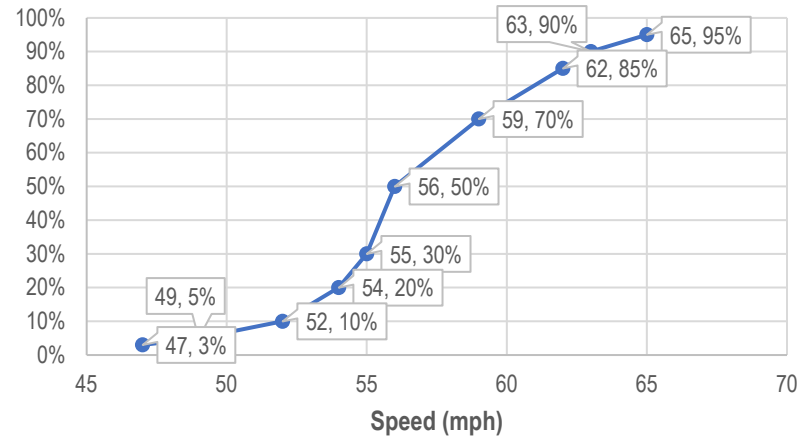
Eastbound Speed-Contour Plot, Local Lanes
From Feb. 2017 Travel Time Runs
PM Peak Period (3:30-6:30 PM)

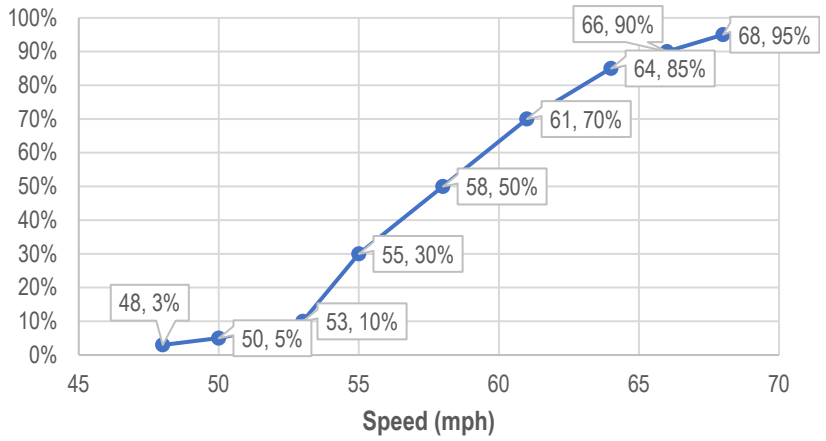


Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

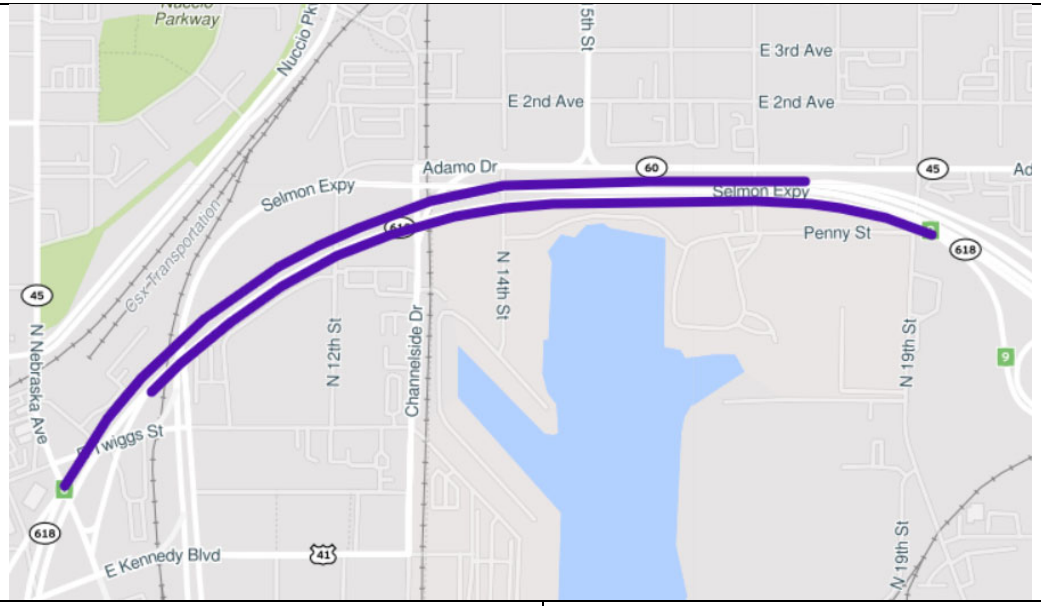
West of Brorein St

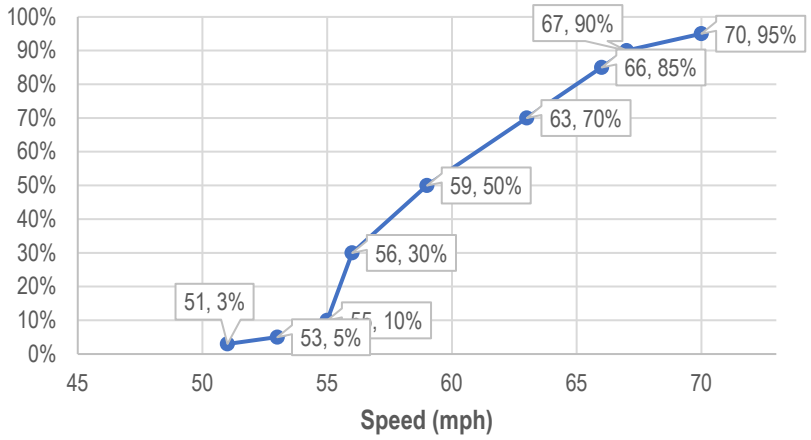


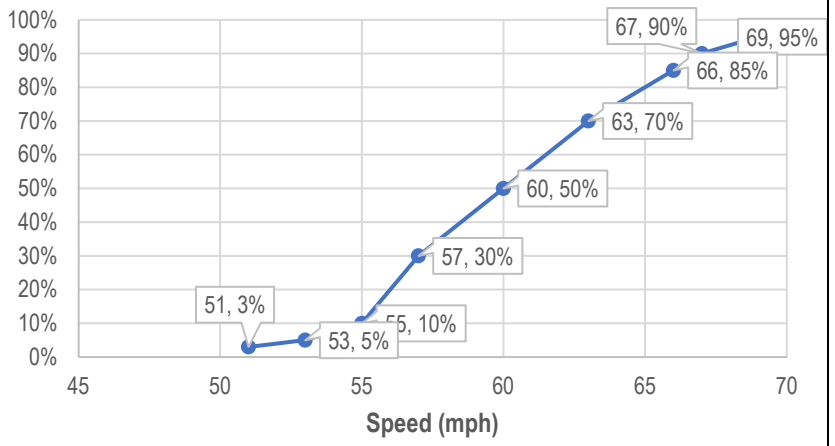




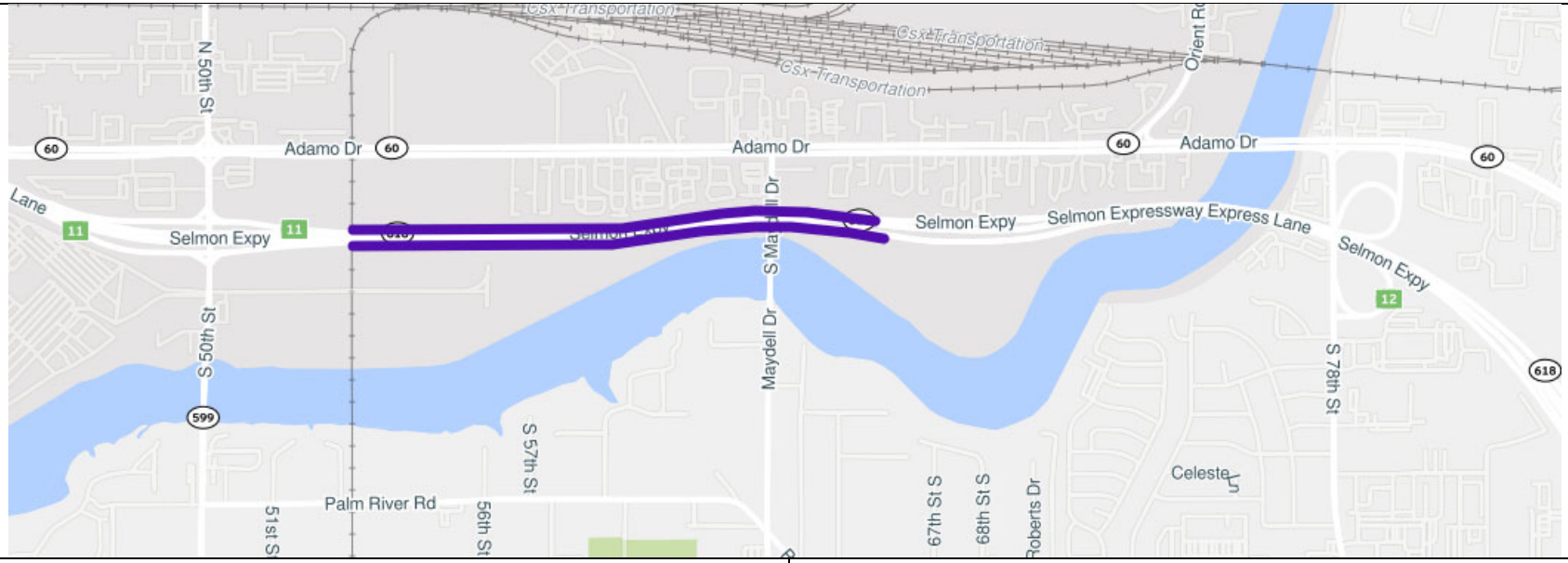
20th St to Nebraska Ave

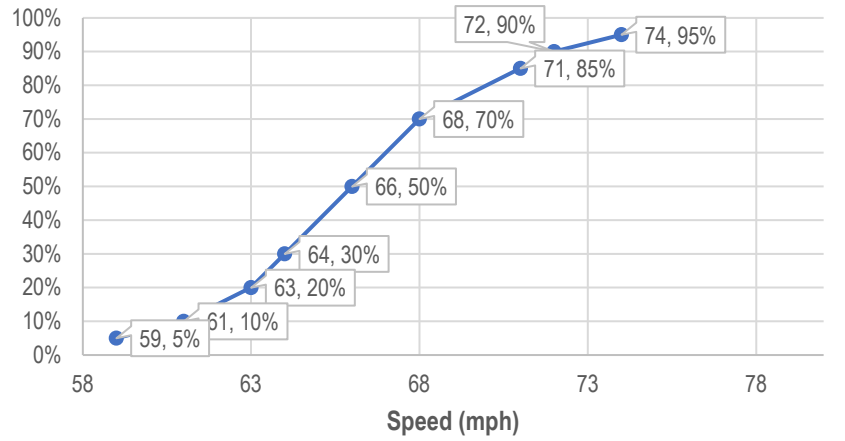


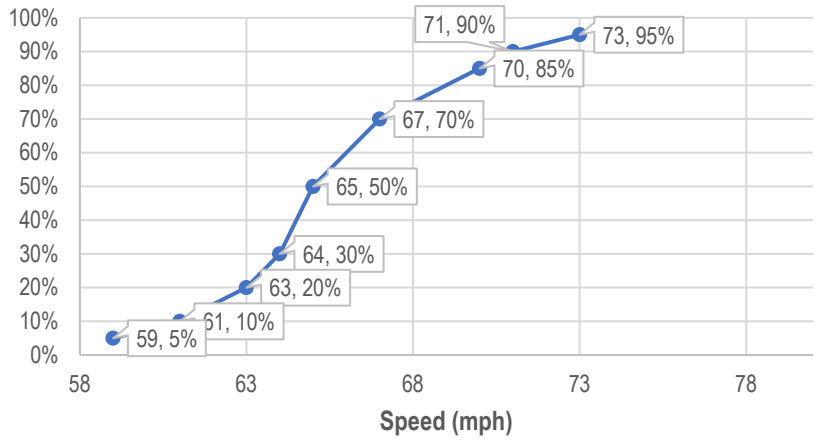




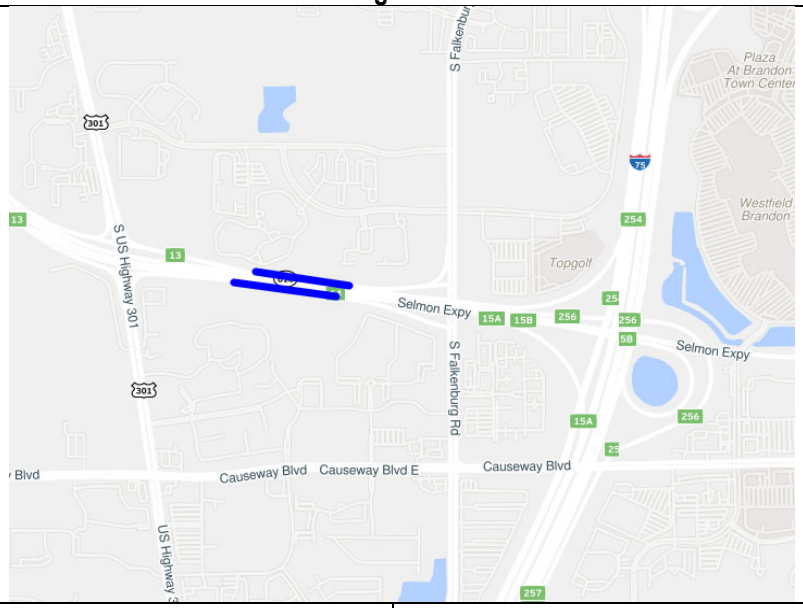
78th St to 50th St

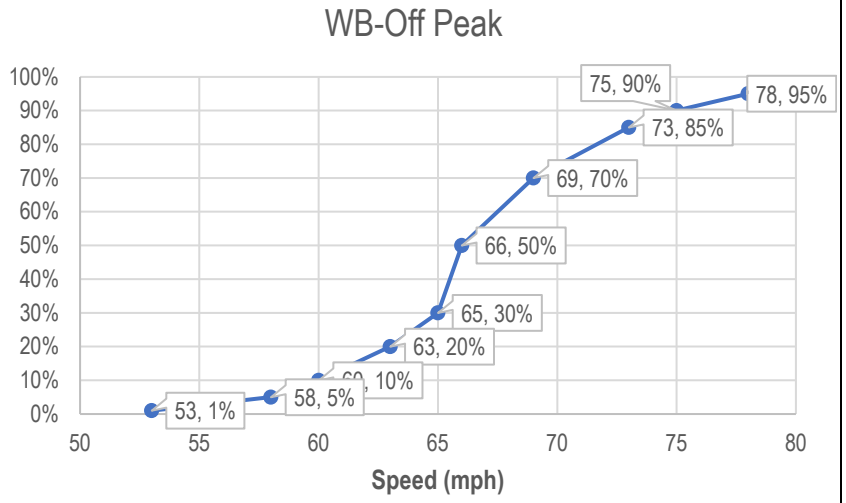


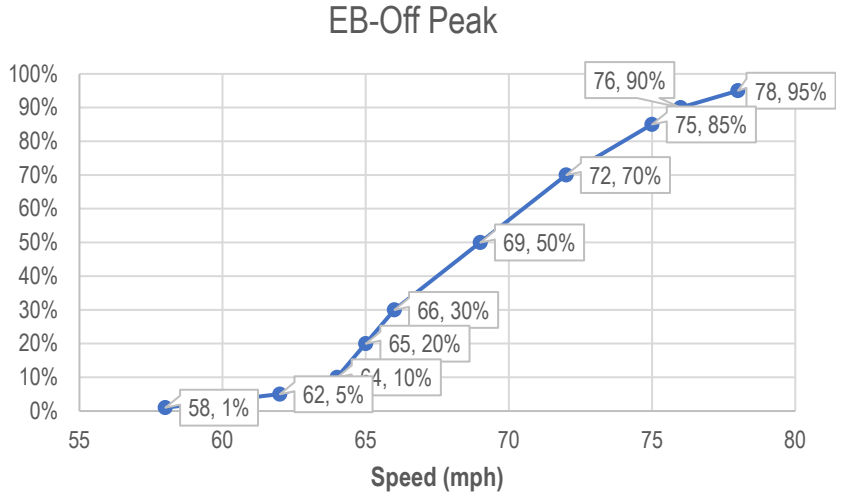




Falkenburg Rd to US-301







Appendix B: BASE YEAR TRAFFIC VOLUME DEVELOPMENT MEMORANDUM

To: Bob Frey, THEA
Govardhan Muthyalagari, HNTB

From: Jaimison Sloboden, Michael Baker International
Angela Potraza, Michael Baker International

CC: Michael Garau, Kimley-Horn

Date: December 18, 2020
Revised March 23, 2022

Subject: East Selmon Expressway PD&E Study
Base Year Traffic Volume Development

Purpose

The purpose of this memo is to summarize the base year traffic volumes that have been developed for the East Selmon Expressway PD&E. Traffic volumes were developed from existing available data, instead of collecting new traffic counts, due to the impacts to traffic patterns resulting from the COVID-19 pandemic.

Background

The Kimley-Horn and Michael Baker International team was retained to prepare the Project Development (PD&E) study related to the eastern segment of the Lee Roy Selmon Expressway from I-75 to downtown Tampa. As part of the study, traffic counts were to be collected to develop base year traffic volumes that would be used to assess existing conditions, calibrate a VISSIM microsimulation model, and be used to the develop future year Design Hour Volumes (DHVs). Ultimately, the base year traffic and DHVs will be used to inform decisions on future corridor and ramp terminal improvements, as well as construction phasing of these improvements. However, the COVID-19 pandemic has significantly reduced overall traffic volumes and altered travel patterns since March of 2020, and it does not appear that traffic will return to "normal" within the timeframe of this study. **Figure 1** provides an illustration of how traffic volumes on the Selmon Expressway have changed between March/April of 2019 and March/April of 2020, as estimated from StreetLight Data.

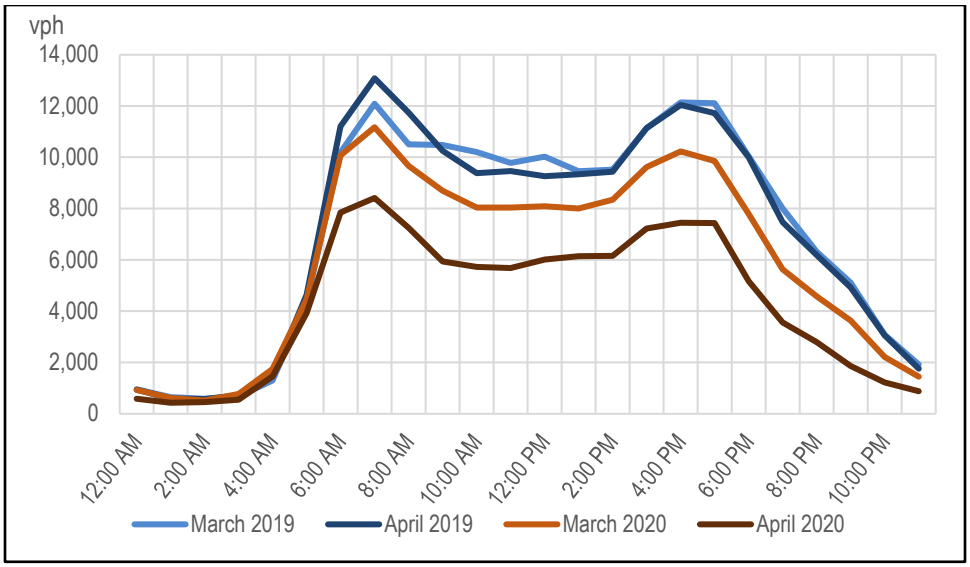


Figure 1. StreetLight Data Hourly Volume Estimates on Selmon Expressway, 2019 vs. 2020

Michael Baker assessed the available data and identified a proposed methodology for creating base year traffic volumes as documented in the East Selmon Expressway PD&E Study Proposed Traffic Data Methodology, dated July 14, 2020. The proposed methodology was approved and was carried forward as summarized in this memo.

Parameters

The year 2019 is considered to be the base year for this project. AM peak hour, PM peak hour, and annual average daily traffic (AADT) volumes were prepared for the road segments and intersections shown in **Figure 2**.

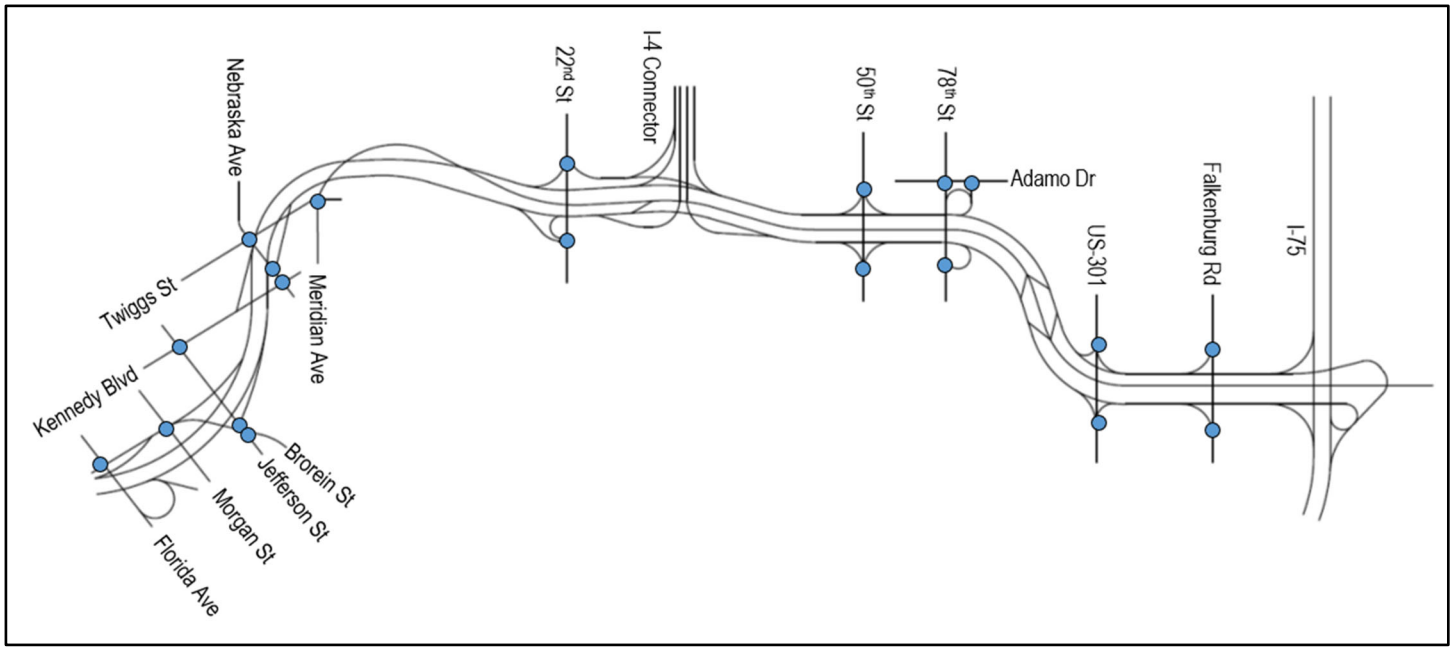


Figure 2. Study Area Roads and Intersections

Available Count Data Sources

Table 1 provides a summary of count data sources used to develop the base year traffic volumes.

Table 1. Summary of Available Count Data Sources

Data Set	Previous Study Counts	FDOT Traffic Monitoring Program	THEA Toll Gantry Counts	StreetLight Data
Turning Movement Volumes	✓	✗	✗	✗
Mainline Volumes – Local Lanes	✗	✓	✓	✗
Ramp Volumes – Local Lanes	✓	✗	✓	✗
Mainline Volumes – REL	✗	✓	✓	✗
Ramp Volumes – REL	✗	✗	✗	✗

It was originally proposed to use 2019 traffic volume estimates from StreetLight Data to help fill in the gaps in actual traffic count data. However, after extensive coordination with StreetLight staff, it was determined that this project would not be an ideal application for turning movement volume estimates due to the intricacy of the road network and closely spaced intersections. Additionally, ramp volume estimates from StreetLight were not comparable to available traffic count data, typically being much higher than known data locations. The spatial accuracy of the sourced location data is not high enough to distinguish between ramp volumes and mainline volumes in many locations. As a result, the information from StreetLight Data was not used for this volume development task.

Additionally, year 2019 traffic volumes developed for the Whiting PD&E Study (**Appendix A**) were incorporated. This study provided peak hour turning movement volumes at nearly all study intersections in the downtown area. Additionally, peak hour ramp and mainline volumes were provided from west of the 21st/22nd Street interchange through the west end of the study area. The ramp and intersection volumes were incorporated into the baseline volume set developed for this study, although mainline traffic volumes were adjusted to be consistent with the data sources described in **Table 1**.

Methodology

A combination of previously collected traffic count data, more recent traffic count data, and historic data sources were used to estimate pre-pandemic traffic volumes along corridors and at intersections. The methodology originally proposed was modified slightly, and the final methodology followed is pictured in **Figure 3**.

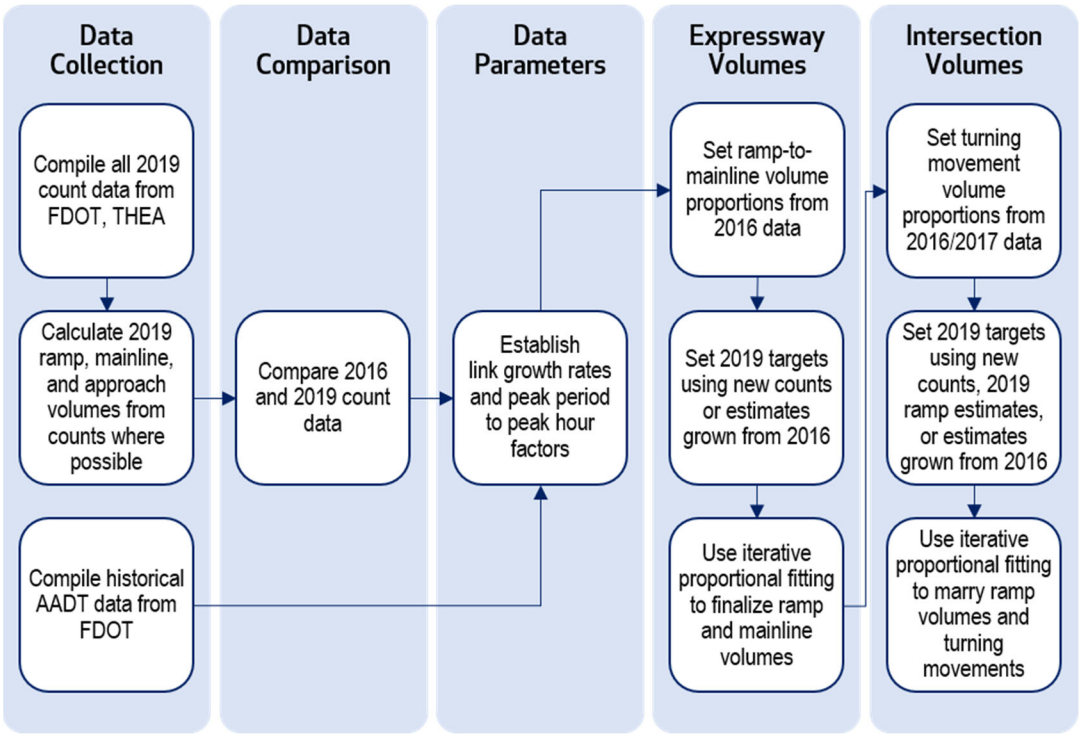


Figure 3. Methodology for Base Year Traffic Volume Development

Step 1: Data Collection

The first step was to compile all 2019 count data available through FDOT Traffic Online and from THEA toll gantries. Count data used for this task is found in **Appendix B**. Most of the available data from FDOT was collected over a 48-hour duration from Tuesday, October 15, 2019 to Wednesday, October 16, 2019. All FDOT counts were summarized in 15-minute intervals. Data from THEA toll gantries was provided for the entire month of October 2019, but counts were extracted for the dates of 10/15/2019-10/16/2019 only to yield a consistent volume set across the corridor. THEA data was summarized in hourly intervals only. Where possible, ramp volumes were calculated by using addition/subtraction between count stations. The availability of 2019 count data provides complete coverage of the REL through lanes and ramps to/from the local lanes. Local lane segment coverage is not as consistent, with notable gaps at the US-301 interchange and at the I-4 Connector.

Based on this information, the AM peak hour was identified as 7:00-8:00 AM and the PM peak hour was identified as 4:30-5:30 PM. This differs slightly from the previously completed Feasibility Study, which identified the peak hours at 7:30-8:30 AM and 5:00-6:00 PM.

Step 2: Data Comparison

The 2019 count data was used in place of 2016 data where possible. However, consistency was checked between the two data years. A detailed comparison of the data sources is contained in **Appendix C**. The findings of this comparison indicate that the changes in traffic volumes from 2016 to 2019 along the Selmon Expressway corridor do not follow a discernible pattern. Growth rates vary by direction, peak hour, and location along the corridor. Most of the comparisons indicated that traffic volumes have increased, as would be expected, although the magnitude of that increase is sporadic. Even ramps located at the same interchange have experienced substantially different changes in traffic volumes in the past three years. Additionally, some ramps and mainline locations have notably lower traffic volumes during the peak hours, most likely due to increasing congestion and the resulting peak hour spreading. Overall, the three-year growth rates varied from -4% to 27% at the locations considered.

As a result of these findings, it does not seem reasonable to identify an average growth rate based on this data alone. Alternatively, the historical AADT data available through FDOT was used to calculate location-specific growth rates for estimating 2019 volumes as needed to complete the base year volume set.

Step 3: Data Parameters

A two-step iterative proportional fitting (IPF) process was used to develop the base year volume set. Using IPF, 2016 traffic counts were proportionally scaled to meet "targets" for 2019 base year volumes. Target volumes for the year 2019 were set using actual counts where available. For other segments, year 2019 targets were set by applying a growth rate to 2016 volumes.

Based on the findings of the data comparison task, growth rates were primarily established using the available historical AADT reports obtained through FDOT traffic online. Linear annual growth rates were calculated as necessary for individual ramps and crossroads, and the same growth rates were used for each direction in the AM peak hour, PM peak hour, and annual average daily traffic (AADT) volumes. Growth rates needed for mainline (local lane) volume estimates were determined by comparing 2016 counts and 2019 counts. These rates were established separately for each direction of travel and each peak hour. The annual growth rates applied to peak hour volumes are summarized in **Figure 4**; growth rates are not shown at the locations for which 2019 count data was available.

The initial proportions for IPF were developed from 2016 count data. Due to differences in peaking characteristics between 2016 and 2019, proportions were calculated from multi-hour timeframes and scaled down to peak hour volumes. For ramp volume estimates (Step 4), proportions were calculated from 6-10 AM and 3-7 PM. For turning movement estimates (Step 5), proportions were calculated from 7-9 AM and 4-6 PM. The peak period to peak hour factors were developed from the available 2019 count data. All growth rates and peak period to peak hour factors used are contained in **Appendix D**.

Step 4: Expressway Volumes

The gaps in data present along the Selmon Expressway local lanes were first addressed using IPF at the following locations:

- Selmon Expressway/US-301 Interchange
  - Eastbound Off-Ramp
  - Eastbound On-Ramp
  - Westbound Off-Ramp
  - Westbound On-Ramp
- Selmon Expressway/50th Street Interchange
  - Eastbound On-Ramp
  - Westbound Off-Ramp
- Selmon Expressway/I-4 Connector/78th Street Interchange
  - Eastbound Off-Ramp to I-4 Connector
  - Eastbound On-Ramp from 22nd Street
  - Eastbound On-Ramp from I-4 Connector
  - Westbound Off-Ramp to I-4 Connector
  - Westbound Off-Ramp to 22nd Street
- Selmon Expressway/Brorein Street Interchange
  - Westbound On-Ramp

The initial proportions of mainline traffic to ramp traffic were obtained from the 2016 count data. Target volumes for the ramps listed above were set by applying a growth rate to 2016 peak period volumes and factoring peak period volumes

down to the peak hour. A final proportioning was performed as necessary to ensure that all known count data was matched on each leg of the interchange.

Ramp volumes were estimated beginning at the east end of the corridor and moving to the west. Resulting mainline volumes from the IPF task at the 50th Street interchange were carried to the adjacent interchange at the I-4 Connector/22nd Street to ensure balancing between locations. IPF spreadsheets used to complete the local lane and ramp volume set are contained in **Appendix E**.

Step 5: Intersection Volumes

Iterative proportional fitting was also used to determine 2019 turning movement estimates. The initial turning movement proportions were set using the count data collected in 2016 (Downtown Study) and 2017 (Feasibility Study). These proportions were calculated from the entire AM peak period (7-9 AM) and PM peak period (4-6 PM). Target volumes for the year 2019 were set as follows:

1. Ramp Intersection Legs
    a. Using actual 2019 count data, where available
    b. Using 2019 ramp volume estimates from previous IPF task
2. Non-Ramp Intersection Legs
    a. Using actual 2019 count data, where available (uncommon)
    b. Using 2019 volume estimates from IPF at adjacent intersection, if applicable
    c. Applying a growth rate and peak period to peak hour factor to volumes from 2016/2017 data

A final proportioning was performed as necessary to ensure that all known count data was matched on each leg of the intersection. IPF spreadsheets used to complete the intersection volume set are contained in **Appendix F**.

Step 6: Final Volume Set

The final 2019 volume set results in complete balance between turning movement flows, on/off ramp volumes, and mainline volumes. The AM and PM peak hour volumes are illustrated in **Figure 5**. Annual average daily traffic (AADT) is shown in **Figure 6**.

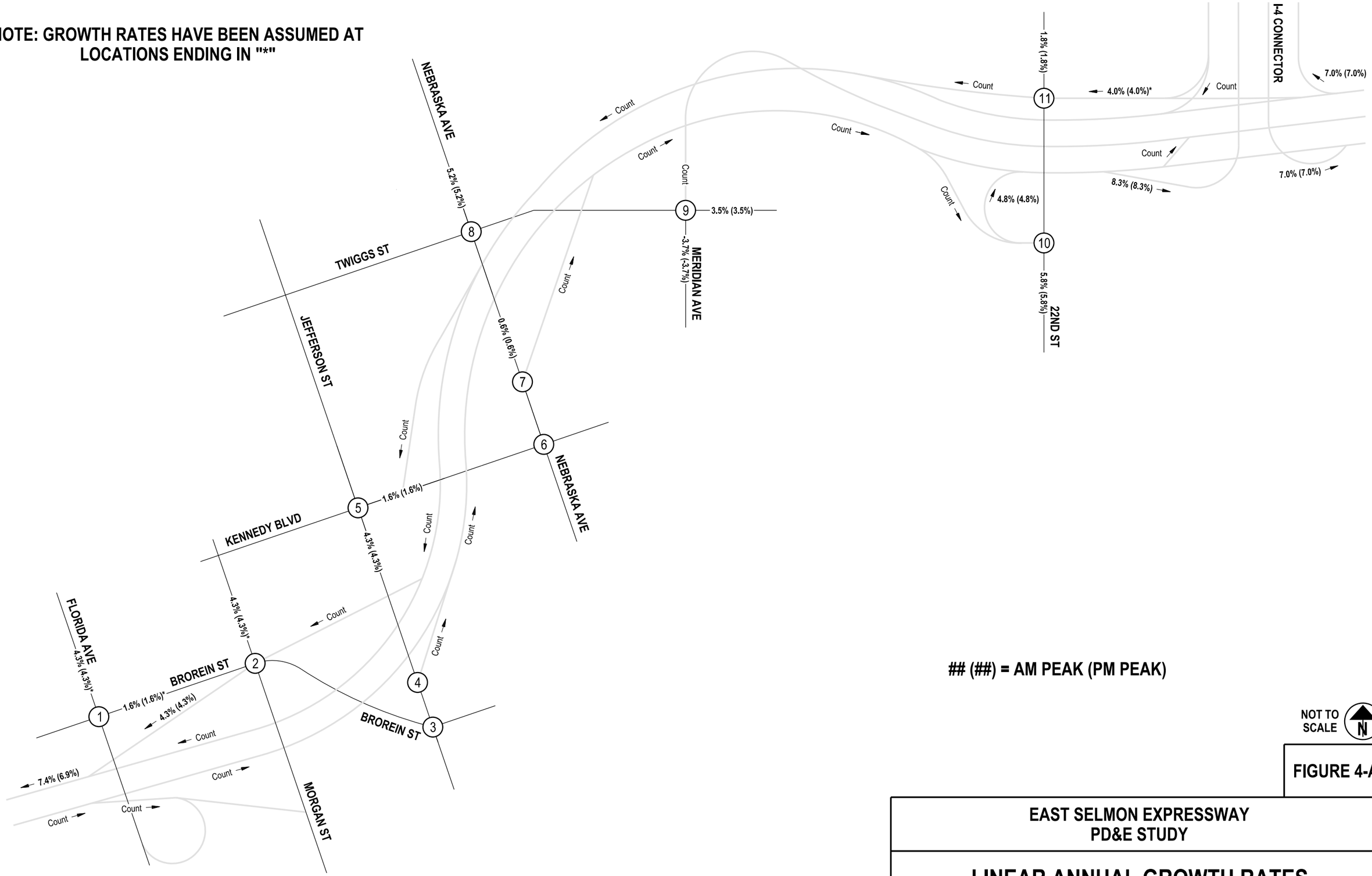
Nebraska PD&E Updates

Newer traffic count information within the downtown portion of the study area became available through the Nebraska PD&E effort. This information was used to update the AM peak hour volumes at the following intersections:

- Nebraska Ave and Selmon Eastbound On-Ramp (Intersection #7)
- Nebraska Ave and Twiggs St (Intersection #8)
- Twiggs St and Meridian Ave (Intersection #9)

All supporting documentation of updates to the AM peak hour volumes can be found in **Appendix G**. The updates have been incorporated into the peak hour volumes shown in **Figure 5**.

NOTE: GROWTH RATES HAVE BEEN ASSUMED AT LOCATIONS ENDING IN "*"



(##) = AM PEAK (PM PEAK)

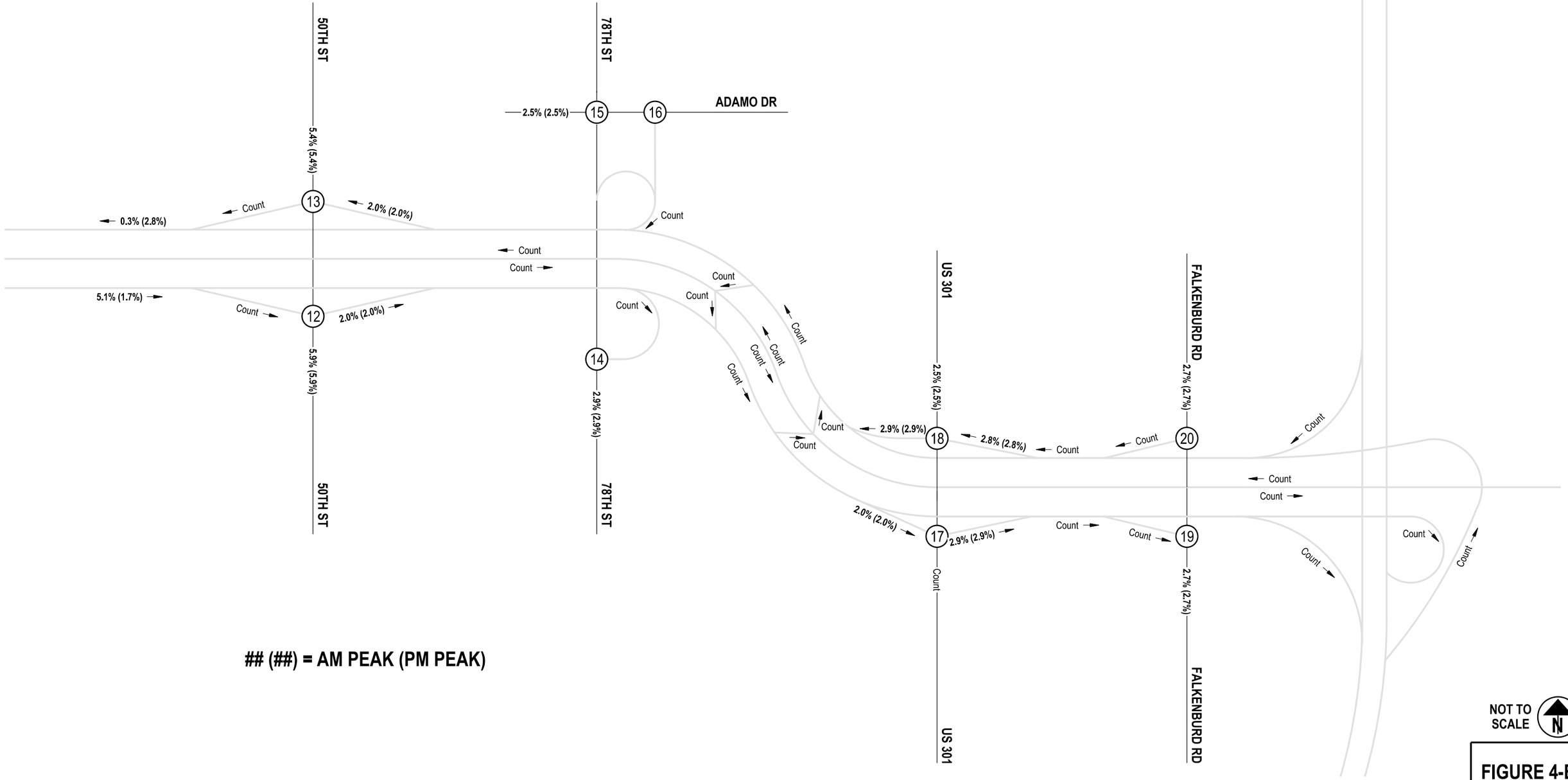
NOT TO SCALE

N

FIGURE 4-A

EAST SELMON EXPRESSWAY
PD&E STUDY

LINEAR ANNUAL GROWTH RATES



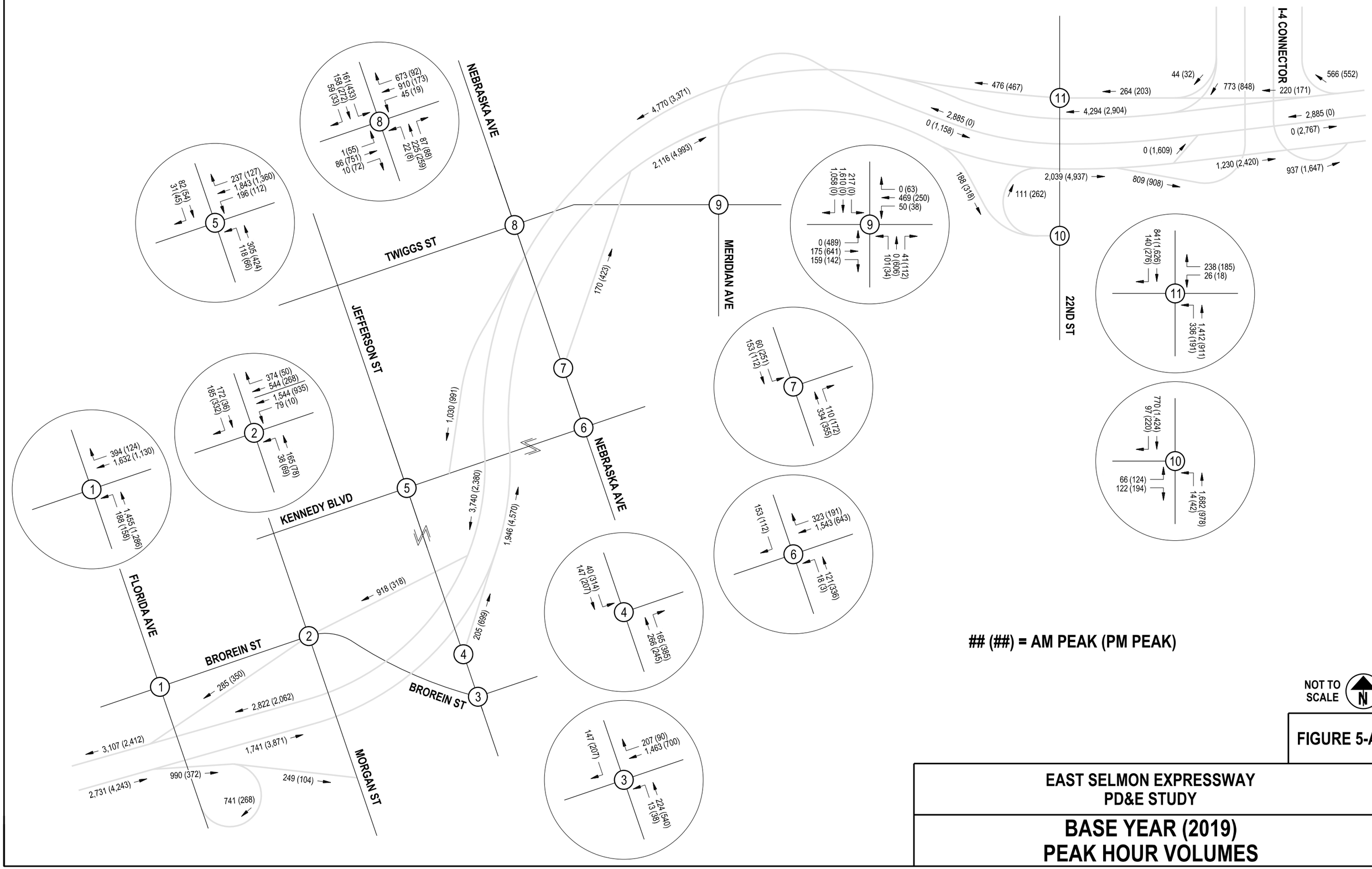
(##) = AM PEAK (PM PEAK)

NOT TO SCALE

FIGURE 4-B

EAST SELMON EXPRESSWAY
PD&E STUDY

LINEAR ANNUAL GROWTH RATES



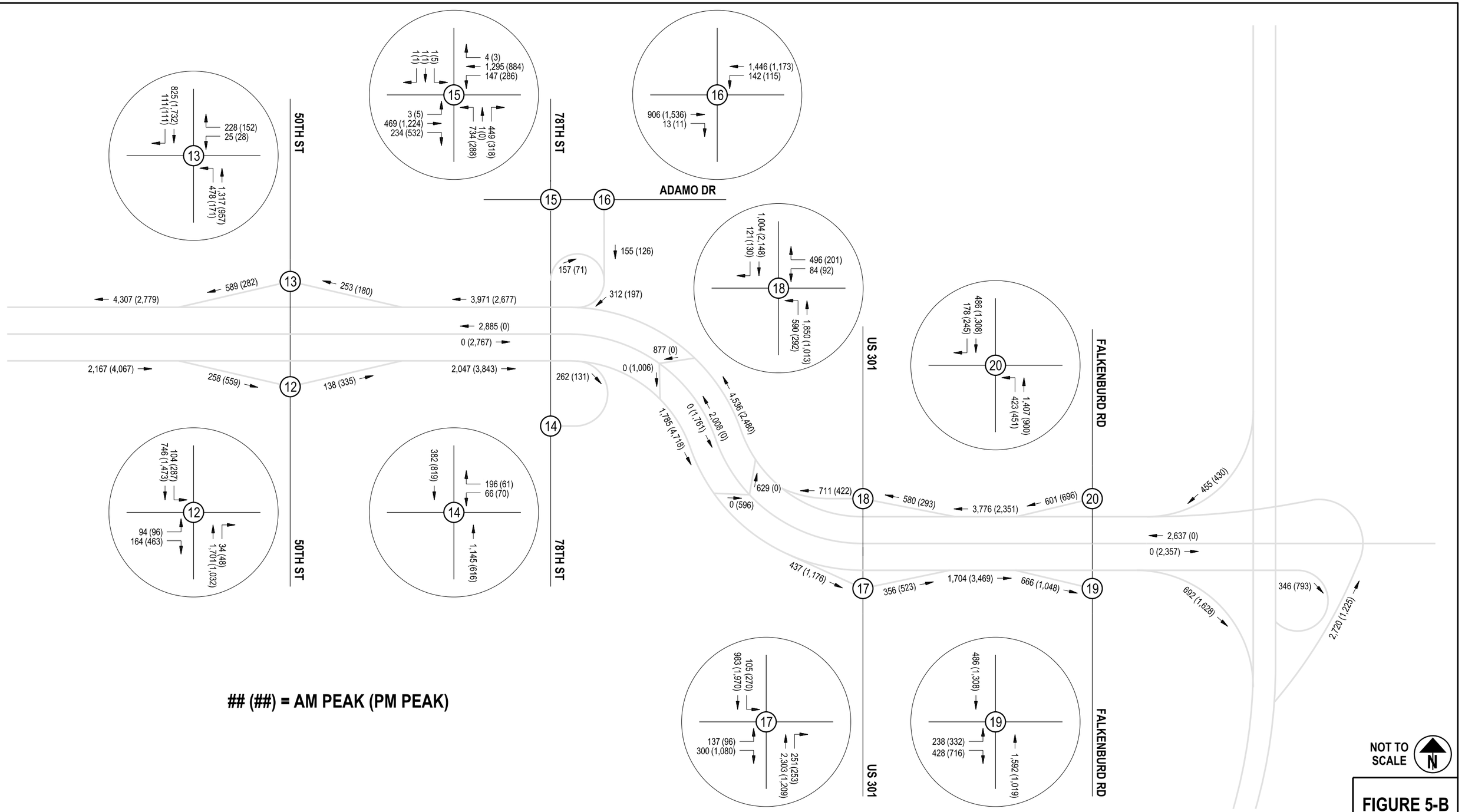
(##) = AM PEAK (PM PEAK)

NOT TO SCALE

FIGURE 5-A

EAST SELMON EXPRESSWAY
PD&E STUDY

BASE YEAR (2019)
PEAK HOUR VOLUMES



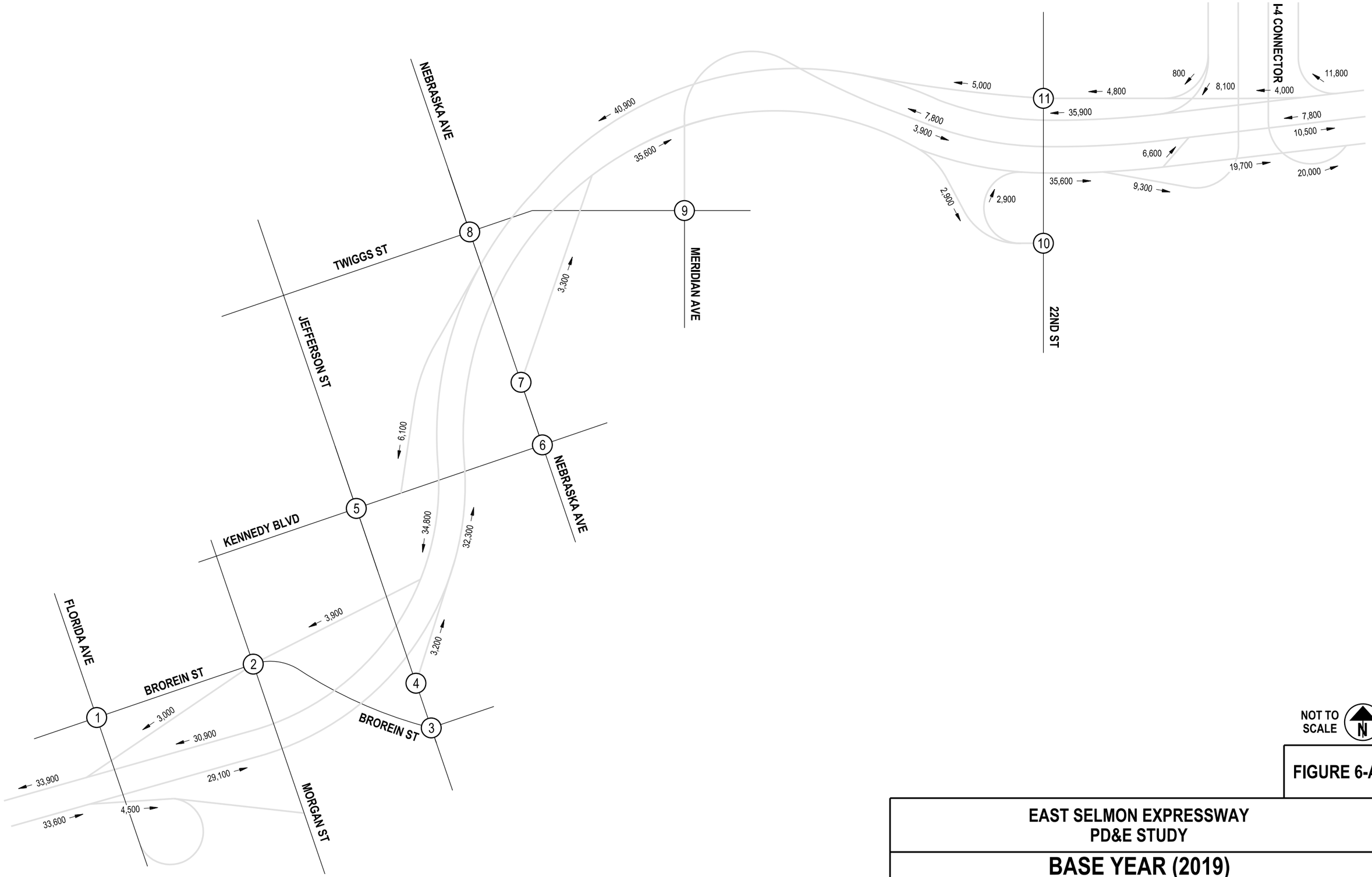
(##) = AM PEAK (PM PEAK)

NOT TO SCALE

FIGURE 5-B

EAST SELMON EXPRESSWAY
PD&E STUDY

BASE YEAR (2019)
PEAK HOUR VOLUMES

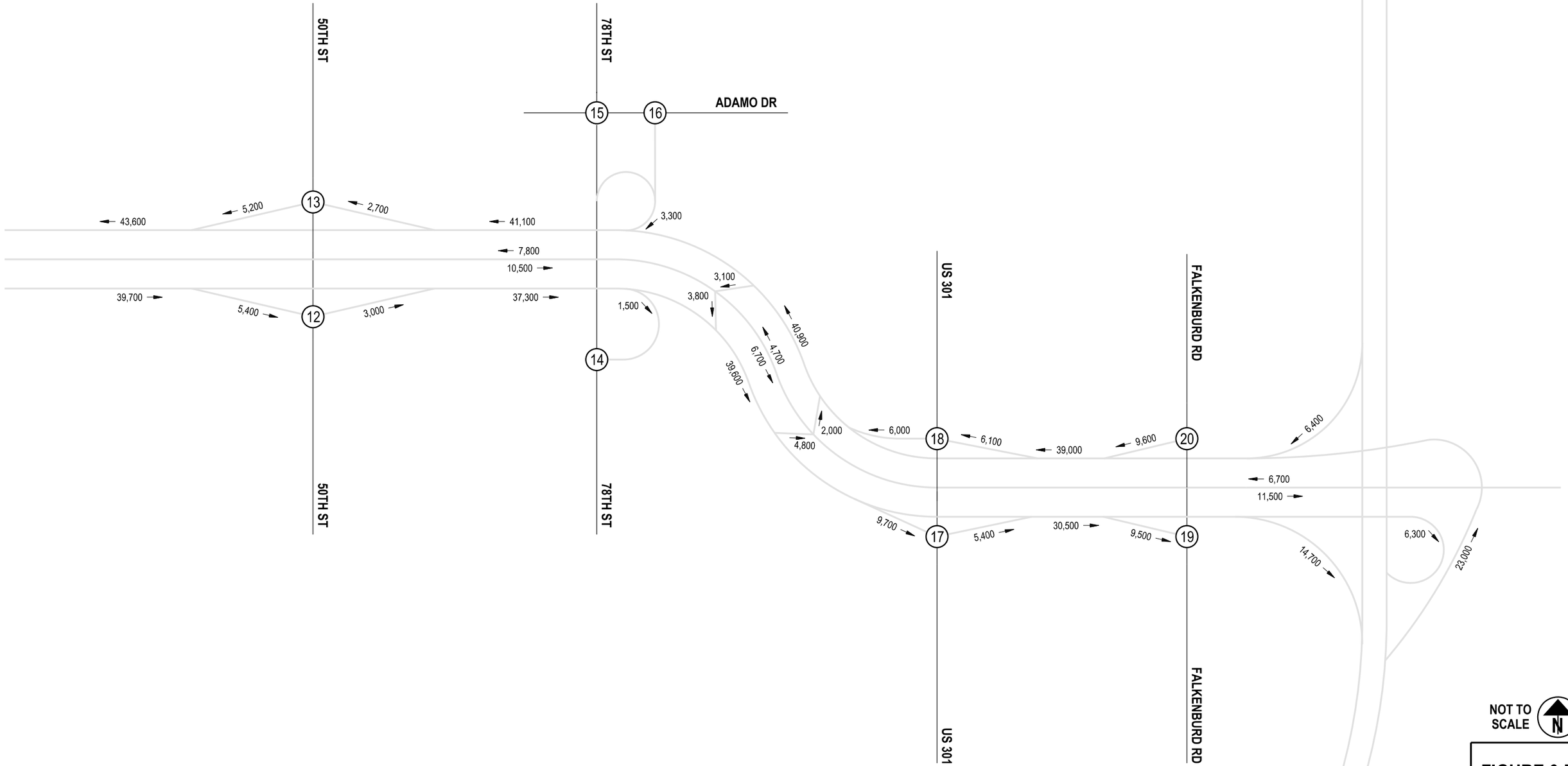


NOT TO SCALE

FIGURE 6-A

EAST SELMON EXPRESSWAY
PD&E STUDY

BASE YEAR (2019)
ANNUAL AVERAGE DAILY TRAFFIC



NOT TO SCALE

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FIGURE 6-B

EAST SELMON EXPRESSWAY
PD&E STUDY

BASE YEAR (2019)
ANNUAL AVERAGE DAILY TRAFFIC

Appendix C: VISSIM CALIBRATION REPORT

Michael Baker
INTERNATIONAL

We Make a Difference

East Selmon Expressway PD&E Study

VISSIM Calibration Report

Prepared For:
Tampa Hillsborough Expressway Authority

FINAL REPORT
November 11, 2021

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Purpose

The purpose of this report is to summarize the calibration and validation of the existing condition VISSIM model for the East Selmon Expressway PD&E study. The model was initially created (July 2017) for the East Selmon Expressway Feasibility Study and was updated with more recent (2019) traffic data. The previously completed calibration checks were enhanced with the use of new visualization techniques to further understand model operations. These new techniques highlighted opportunities to improve the model representation of existing traffic flow on westbound Selmon Expressway. The model was re-calibrated, thereby improving the accuracy of future year analyses and recommendations.

Project Description

The Kimley-Horn and Michael Baker International team has been retained to prepare the Project Development and Environment (PD&E) study related to the eastern segment of the Lee Roy Selmon Expressway from I-75 to downtown Tampa. As part of this study, the VISSIM microsimulation model developed for the previously completed *Lee Roy Selmon Expressway Planning/Feasibility Study from Brorein to I-75* (RS&H, June 2019) was updated with more current traffic information. This report, along with the accompanying document *Selmon East Corridor Study VISSIM Existing Conditions Model Development and Calibration Report* (RS&H, Jul7 2017), are contained in **Appendix A**. The VISSIM model was originally calibrated using traffic data collected in 2016 and 2017[1]. The approach to the new PD&E effort is to review the previous model network, update traffic volumes and signal timing inputs, and then enhance and validate the VISSIM model using industry standard targets. The updated VISSIM model will be used to assess future corridor and ramp terminal improvements.

The purpose of microsimulation model calibration is to replicate driver behavior and apply this behavior to future alternatives. The accurate reflection of driver behavior will reduce uncertainty and error in evaluations of future traffic conditions. Calibration is an iterative process in which we adjust behavior-related parameters to reflect known traffic operations within a reasonable degree of error. Since calibrated models replicate vehicle throughput, observed speeds and bottlenecks, the quality of traffic data is essential. The traffic data collected sets the standard for what the model should reflect.

Study Area

The project limits extend approximately 10 miles along the Selmon Expressway local lanes from I-75 to Florida St in downtown Tampa. For the reversible express lanes (REL), the project limits extend approximately 8.8 miles from I-75 to the western terminus at Twiggs St in downtown Tampa. The study area roads and intersections are illustrated in **Figure 1**, aligning with the limits of the VISSIM model.

The intersections within the study limits are listed in **Table 1**. **Table 2** summarizes the functional classifications and posted speed limits of all roadways within the limits of the project study area.

[1] *Selmon East Corridor Study VISSIM Existing Conditions Model Development and Calibration Report*, RS&H, July 2017.

Figure 1. Study Area Roads and Intersections

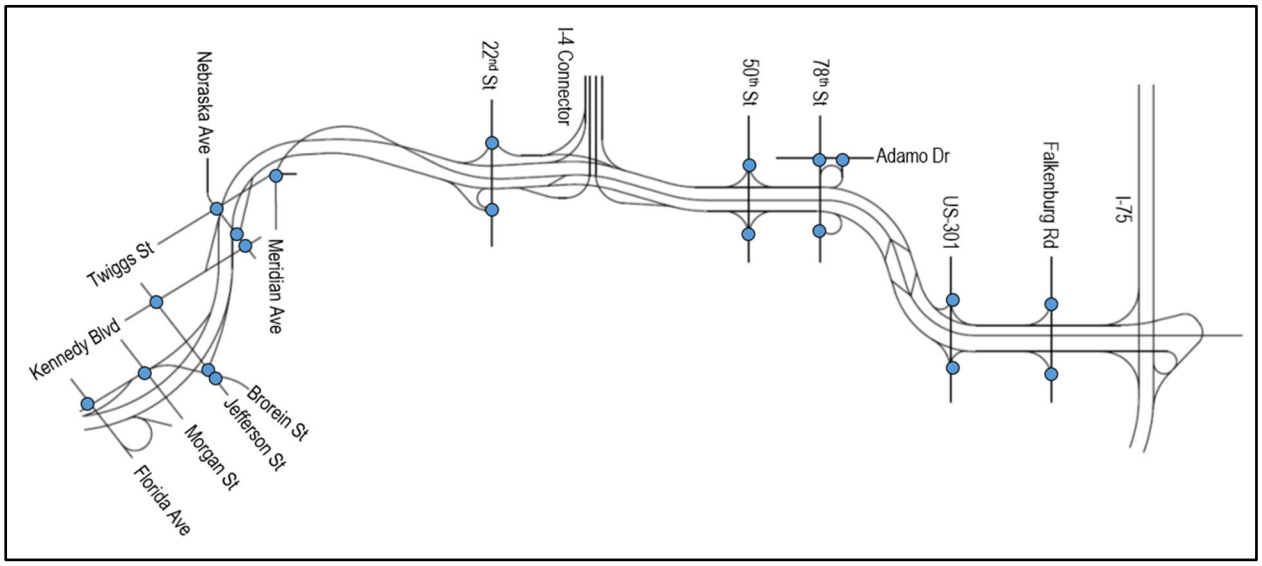


Table 1. Study Area Intersections

Number	Intersection
1	Florida Ave & Brorein St
2	Morgan St & Brorein St
3	Jefferson St & Brorein St
4	Jefferson St & EB Selmon Expressway On-Ramp
5	Kennedy Blvd & Jefferson St
6	Kennedy Blvd & Nebraska Ave
7	Nebraska Ave & EB Selmon Expressway On-Ramp
8	Twiggs St & Nebraska Ave
9	Twiggs St & Meridian Ave
10	21st St/22nd St & WB Selmon Expressway Ramps
11	21st St/22nd St & EB Selmon Expressway Ramps
12	50th St/ WB Selmon Expressway Ramps
13	50th St & EB Selmon Expressway Ramps
14	Adamo Dr & 78th St
15	Adamo Dr & WB Selmon Expressway On-Ramp
16	78th St & EB Selmon Expressway Off-Ramp
17	US-301 & WB Selmon Expressway Ramps
18	US-301 & EB Selmon Expressway Ramps
19	Falkenburg Rd & WB Selmon Expressway On-Ramp
20	Falkenburg Rd & EB Selmon Expressway Off-Ramp

Table 2. Study Area Roadways

Roadway	FDOT Functional Classification[2]	Speed Limit (mph)
Selmon Expressway Local Lanes	Principal Arterial – Freeway and Expressway Urban	55/65
Selmon Expressway REL	Principal Arterial – Freeway and Expressway Urban	40/65
Florida Ave	Minor Arterial Urban	30
Brorein St	Major Collector Urban	35
Morgan St	Major Collector Urban	25
Jefferson St	Major Collector Urban	30
Kennedy Blvd	Principal Arterial-Other Urban	30
Nebraska Ave	Minor Arterial Urban	35
Twiggs St	Major Collector Urban	30
Meridian Ave	Major Collector Urban	40
21st/22nd St	Principal Arterial-Other Urban	35
50th St	Principal Arterial-Other Urban	40
78th St	Major Collector Urban	45
Adamo Dr	Principal Arterial-Other Urban	50
US-301	Principal Arterial-Other Urban	50
Falkenburg Rd	Minor Arterial Urban	45

Calibration Approach

The approach to calibration begins with building an error free model that encapsulates the spatial and temporal limits of the desired project study area. This means that the physical limits of the model need to extend beyond the desired study area enough to capture the pattern of traffic flow and to allow for congestion (queuing) to be fully contained within the model. The temporal limit is the duration of the modeled traffic with the varying traffic volume data that allows the build-up to, and the recovery of, congestion in the peak hour. In most urban settings, a three-hour model window with data varying in 15-minute periods will capture this situation. The East Selmon model has been established to reflect the spatial and temporal limits necessary for calibration. Other base model inputs include:

- Freeflow Speeds
- Heavy Truck Percentages
- Existing Signal Timings
- Origin-Destination Data

[2] *Florida Department of Transportation*, 2010 Urban Area Boundaries and Federal Functional Classification Hillsborough County, January 2014.

Calibration Measures

The calibration data is assembled to compare statistical measurements of the model outputs. **Table 3** summarizes the data used in calibration and the statistical methods and targets used to compare the model outputs.

Table 3. Calibration Data and Statistical Criteria[3]

Measure	Criteria

Traffic Volume	• Sum of link volumes within calibration area to be within 5%.
	• Simulated and measured link volumes for more than 85% of links to be:
	  ○ Within 100 vph for volumes less than 700 vph
	  ○ Within 15% for volumes between 700 vph and 2700 vph
	  ○ Within 400 vph, for volumes greater than 2700 vph.
	• Simulated and measured link volumes for more than 85% of links to have a GEH* statistic value of five (5) or lower.
	
	GEH is the Geoffrey E. Havers empirical formula which helps compare and validate model output volumes to measured volumes. The formula is shown below.
	$GEH = \sqrt{\frac{2 * (M - C)^2}{M + C}}$
	M = Simulation model output volume
	C = Observed/input volume.

Travel Time	• Simulated travel time within ±15% for routes with observed travel times greater than seven (7) minutes. • Simulated travel time within ±15% (or 1 min if higher) for >85% of segments.[4]
Location of Bottlenecks	Check consistency with field conditions of the following: on- and off-ramp queuing; weaving maneuvers; patterns and extent of queue at intersection and congested links; lane utilization/choice; location of bottlenecks; etc.

[3] *Florida Department of Transportation Traffic Analysis Handbook*, Florida Department of Transportation Systems Implementation Office, May 2021.

[4] *Traffic Analysis Toolbox Volume III: Guidelines for Applying Traffic Microsimulation Modeling Software*, Federal Highway Administration, June 2004.

Calibration Parameters

The model parameters in **Table 4** are most often adjusted to achieve calibration of a limited-access system. Typical ranges for each parameter are provided for basic freeway segments and for weaving/merge/diverge areas. These parameters were the primary focus for this study.

Table 4. VISSIM Model Calibration Parameters[3]

Parameter	Acceptable Range	
	Basic Freeway Segment	**Weaving/Merge/Diverge**
Desired Speed Decisions	Based on Field Observations	Based on Field Observations
Freeway Car Following		
CC0 Standstill Distance	>4.00 ft	>4.92 ft
CC1 Headway Time	0.7 to 3.0 s	0.9 to 3.0 s
CC2 'Following' Variation	6.56 to 22.97 ft	13.12 to 39.37 ft
Lane Change		
Safety Distance Reduction Factor	0.1 – 0.9	0.1 – 0.9
Emergency Stop	Based on Field Observations	Based on Field Observations
Lane Change	Based on Field Observations	Based on Field Observations

Calibration Data

The data collection effort for this project was scheduled to occur in 2020 and would include new traffic count and travel time data. However, the COVID-19 pandemic caused significantly reduced overall traffic volumes and altered travel patterns throughout 2020. Therefore data collection was not considered valid or feasible during 2020. Instead, Michael Baker utilized a combination of previously collected and newly available (2019) data to update the model. Since new data suitable for re-calibration of the model was not available, the task became validating and enhancing the existing conditions model created for the Feasibility Study rather than re-calibrating the model with new data.

Traffic Volumes

Existing (base year) traffic volume inputs set the target values for vehicle throughput and impact traffic operations along the corridor and intersections. 2019 is the base year for this project. We prepared traffic volumes for the AM peak hour (7:00-8:00 AM) and PM peak hour (4:30-5:30 PM) for the road segments and intersections shown in **Figure 1**. We used a combination of previously collected traffic count data, more recent traffic count data, and historical data sources to estimate pre-pandemic traffic volumes at these locations. The approved base year traffic volumes and associated documentation are found in **Appendix B**.

Peak Period Volumes

Accurately modeling the Selmon Expressway requires that the model duration extend beyond just the peak hour and includes traffic fluctuations in increments less than an hour (usually 15-minute increments). As part of the modeling process, traffic volume inputs were updated to 2019 counts. The 2019 counts for the local lanes, reversible express lanes (REL), and ramps are generally considered reliable due to the availability of data on FDOT Traffic Online and from Tampa Hillsborough Expressway Authority toll gantries. However, there were notable gaps in data at the US-301 interchange and the I-4 Connector. Additionally, no new traffic count data was available at the turning movement level. Base year volumes at these locations were estimated from 2016 data using growth rates and an iterative proportional fitting process. A detailed comparison between 2016 data and 2019 data showed that peaking characteristics have changed between these years; thus, these traffic volume estimates introduce a degree of uncertainty in the existing VISSIM model inputs.

15-Minute Distributions

The previously developed VISSIM model used a composite 15-minute volume distribution applied to all traffic volume inputs (2017 data). In the PD&E model update, a different method for the 15-minute distribution involved using the actual 15-minute count data where available from FDOT or Tampa Hillsborough Expressway Authority toll gantries. There were 10 locations out of 30 total where 2019 counts were not available; data from other locations with similar characteristics were utilized in these instances. **Table 5** summarizes the data sources used for each location. We applied 15-minute volume distributions over the following three-and-a-half-hour timeframe:

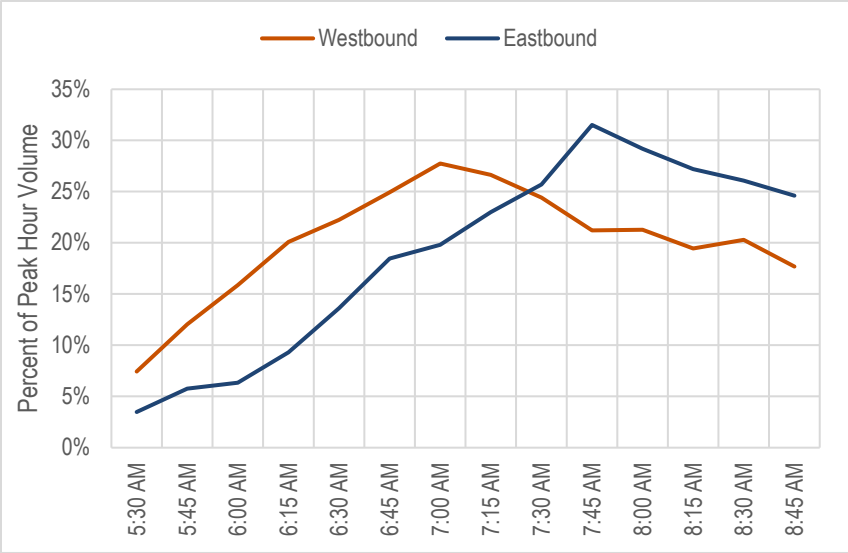
- 30-minute Seeding Interval
- Hour 1 = Pre-Peak Hour
- Hour 2 = Peak Hour
- Hour 3 = Post-Peak Hour

Table 5. Summary of 15-Minute Volume Distribution Sources

Location	Direction	Source	Count ID
I-75	Northbound	FDOT	102874
	Southbound	FDOT	102872
REL	Westbound	FDOT	109934
Falkenburg Rd	Northbound	Use US-301 Count (105325)	
	Southbound	Use US-301 Count (105325)	
US-301	Northbound	FDOT	105325
	Southbound	FDOT	105325
78th St	Northbound	Use US-301 Count (105325)	
	Southbound	Use US-301 Count (105325)	
Adamo Dr	Eastbound	FDOT	103048
	Westbound	FDOT	103048
50th St	Northbound	FDOT	105223 / 105104
	Southbound	FDOT	105223 / 105104
I-4	Eastbound	FDOT	102028
	Westbound	FDOT	102028
21st St / 22nd St	Northbound	FDOT	105090 / 105301
	Southbound	FDOT	105300
Twiggs St	Eastbound	FDOT	109040
	Westbound	FDOT	109040
Meridian Ave	Northbound	FDOT	101259
Nebraska Ave	Northbound	FDOT	101564
	Southbound	FDOT	101563
Kennedy Blvd	Westbound	FDOT	101565
Jefferson St	Northbound	Use Nebraska Ave Count (105073 / 101563)	
	Southbound	Use Nebraska Ave Count (105073 / 101563)	
Brorein St	Westbound	Use Kennedy Blvd Count (105312)	
Morgan St	Northbound	Use Nebraska Ave Count (105073)	
	Southbound	Use Nebraska Ave Count (105073)	
Florida Ave	Northbound	Use Nebraska Ave Count (105073)	
Selmon Expressway	Eastbound	Tampa Hillsborough Expressway Authority	101725 / 101735

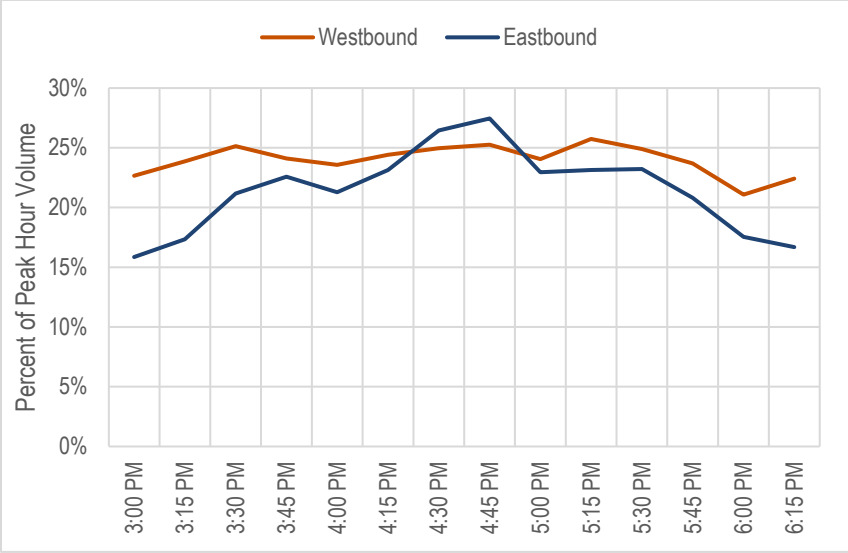
Figure 2 shows the resulting volume distribution by direction during the AM peak period of 5:30-9:00 AM. Traffic on westbound Selmon peaks earlier and has a smoother profile, indicating possible peak hour spreading. In the eastbound direction, traffic peaks later at 7:45 AM and exhibits a sharper peak.

Figure 2. Directional Volume Distributions on Selmon Expressway Local Lanes and REL, AM Peak Period



PM peak period volume distributions from 3:00-6:30 PM are shown in **Figure 3**. Westbound volumes are relatively steady throughout with no clear peak. In the eastbound direction, volumes peak around 4:30 PM to 4:45 PM, but the peak is not as sharp as in the AM.

Figure 3. Directional Volume Distributions on Selmon Expressway Local Lanes and REL, PM Peak Period



While data was not available at every location, the use of actual count data to develop 15-minute distributions is a more accurate representation than the previously utilized composite distributions. As a result, this aspect of the volume inputs is not thought to introduce any additional uncertainty into the existing model. The resulting 15-minute volume inputs for the AM and PM model timeframes are in **Appendix C**.

Origin-Destination (Routing Decisions)

Vehicle routing decisions are the representation of study area origin-destination (OD) patterns in VISSIM. In the feasibility model, routing decisions were developed using Bluetooth data collected in February 2017. The routing decisions were updated for the PD&E model using StreetLight Data. StreetLight Data obtains location data from smartphones, which is used to discern OD patterns. The data from Streetlight is more robust than Bluetooth due to a larger sample size and data collection over a longer time. For the PD&E model, StreetLight Data was obtained for the months of March, April, September, and October of 2019. We developed AM and PM peak hour OD matrices separately for all vehicle types as well as trucks; this information is in **Appendix C**.

Travel Times

Travel times were collected and used to assess traffic operations along the East Selmon Expressway corridor. Existing travel time data was available from the previously completed Feasibility Study. Additional travel time information was obtained from StreetLight Data.

Travel time data on the East Selmon corridor was collected in February of 2017 as part of the previously completed Feasibility Study effort. Travel time runs were collected over three weekdays (Tu-Th) during the AM peak period of 6:30 AM to 9:30 AM and the PM peak period of 3:30 PM and 6:30 PM, resulting in more than 150 directional corridor runs. **Tables 6 and 7** summarize the average travel time and speed by segment from Florida Ave to US-301 for the AM and PM peak hours based on the Feasibility Study data.

Table 6. Summary of Feasibility Study Travel Time Data, Westbound Local Lanes

Segment		AM Peak Hour (7:30-8:30 AM)		PM Peak Hour (5:00-6:00 PM)	
Description	Distance (ft)	Travel Time (sec)	Speed (mph)	Travel Time (sec)	Speed (mph)
Falkenburg Rd to US-301	4,520	125	27	70	46
US-301 to 78th St	9,680	239	34	102	65
78th St to 50th St	10,640	202	41	115	63
50th St to I-4 Connector	8,040	97	57	90	61
I-4 Connector to 20th St	3,280	39	57	38	58
20th St to Channelside Dr	3,780	46	56	44	59
Channelside Dr to Kennedy Blvd	2,820	35	54	33	57
Kennedy Blvd to Jefferson St	1,510	19	55	18	57
Jefferson St to Florida Ave	1,270	16	53	15	56
Westbound Total	**45,540**	**818**	**45**	**525**	**60**

Table 7. Summary of Feasibility Study Travel Time and Speed Data, Eastbound Local Lanes

Segment		AM Peak Hour (7:30-8:30 AM)		PM Peak Hour (5:00-6:00 PM)	
Description	Distance (ft)	Travel Time (sec)	Speed (mph)	Travel Time (sec)	Speed (mph)
Florida Ave to Jefferson St	1,300	16	55	16	53
Jefferson St to Kennedy St	1,540	18	55	20	53
Kennedy Blvd to Channelside Dr	2,760	32	57	34	54
Channelside Dr to 20th St	3,720	44	58	48	53
20th St to I-4 Connector	3,350	39	58	44	53
I-4 Connector to 50th St	7,980	86	62	87	62
50th St to 78th St	10,620	112	63	122	60
78th St to US-301	9,710	103	62	114	58
US-301 to Falkenburg Rd	4,280	62	50	64	47
Eastbound Total	**45,260**	**512**	**60**	**549**	**57**

Average travel time information was also obtained from StreetLight Data for the month of October 2019. Due to the close proximity of the REL and the local lanes along the corridor, a special project request was submitted to StreetLight Data to distinguish the results between the two facilities. Hourly travel time information was provided for every day of the week. Weekday (Tu-Th) AM and PM peak period travel time data was compared to the February 2017 data as shown in **Tables 8 and 9**. Results were simplified into four segments for comparison, as travel time segments and distances differed between the February 2017 data and StreetLight Data. The four segments selected are roughly equal in length between the two data sets.

Table 8. AM Peak Hour Travel Time and Speed Data Comparison

Segment	Distance (ft)		Travel Time (sec)		Difference (sec)	Percent Difference
	Feb. 2017 Data	StreetLight Data	Feb. 2017 Data	StreetLight Data		
Westbound						
Falkenburg Rd to US-301	4,520	5,190	125	106	-19	-15%
US-301 to 78th St	9,680	8,290	239	204	-35	-15%
78th St to 50th St	10,640	12,150	202	190	-12	-6%
50th St to 20th St	11,320	11,740	136	154	18	13%
20th St to Florida Ave	9,380	7,540	116	136	20	17%
Westbound Total	**45,540**	**44,910**	**818**	**790**	**-28**	**-3%**
Eastbound						
Florida Ave to 20th St	9,320	8,110	110	107	-3	-3%
20th St to 50th St	11,330	10,980	125	130	5	4%
50th St to 78th St	10,620	12,380	112	149	37	33%
78th St to US-301	9,710	8,090	103	93	-10	-10%
US-301 to Falkenburg Rd	4,280	6,000	62	51	-11	-18%
Eastbound Total	**45,260**	**45,560**	**512**	**530**	**18**	**4%**

Table 9. PM Peak Hour Travel Time and Speed Data Comparison

Segment	Distance (ft)		Travel Time (sec)		Difference (sec)	Percent Difference
	Feb. 2017 Data	StreetLight Data	Feb. 2017 Data	StreetLight Data		
Westbound						
Falkenburg Rd to US-301	4,520	5,190	70	61	-9	-13%
US-301 to 78th St	9,680	8,290	102	89	-13	-13%
78th St to 50th St	10,640	12,150	115	134	19	17%
50th St to 20th St	11,320	11,740	128	145	17	13%
20th St to Florida Ave	9,380	7,540	110	110	0	0%
Westbound Total	**45,540**	**44,910**	**525**	**539**	**14**	**3%**
Eastbound						
Florida Ave to 20th St	9,320	8,110	118	125	7	6%
20th St to 50th St	11,330	10,980	131	149	18	14%
50th St to 78th St	10,620	12,380	122	156	34	28%
78th St to US-301	9,710	8,090	114	113	-1	-1%
US-301 to Falkenburg Rd	4,280	6,000	64	56	-8	-13%
Eastbound Total	**45,260**	**45,560**	**549**	**599**	**50**	**9%**

The total corridor travel times during the peak periods are relatively similar between the two data sets and are within 10% of each other. There are, however, larger variations in travel times at the segment level. The eastbound segment of 50th St to 78th St exhibits the largest difference between the two data sets, which is about 30% in both the AM and PM peak hours. Additionally, comparisons vary from segment to segment with no consistent trend.

Figures 4-7 compare the average speeds along the corridor for each peak hour and direction of travel. StreetLight Data results typically yield higher travel speeds, with larger differences from one segment to another. The speeds on most segments vary by under 5 mph, although certain segments suggest travel speeds that are over 10 mph greater based on the StreetLight Data.

Figure 4. Westbound Speed Comparison, AM Peak Hour

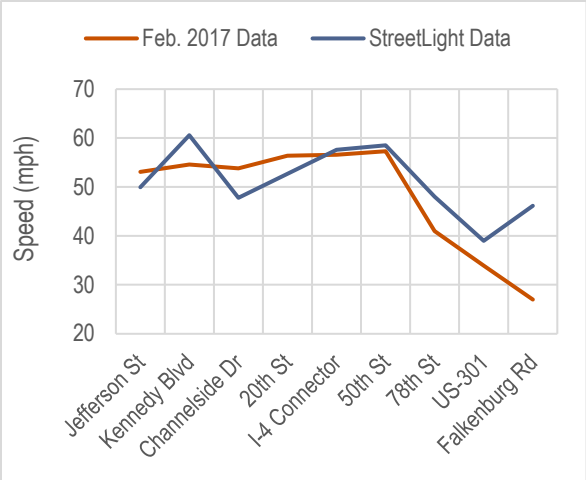


Figure 5. Eastbound Speed Comparison, AM Peak Hour

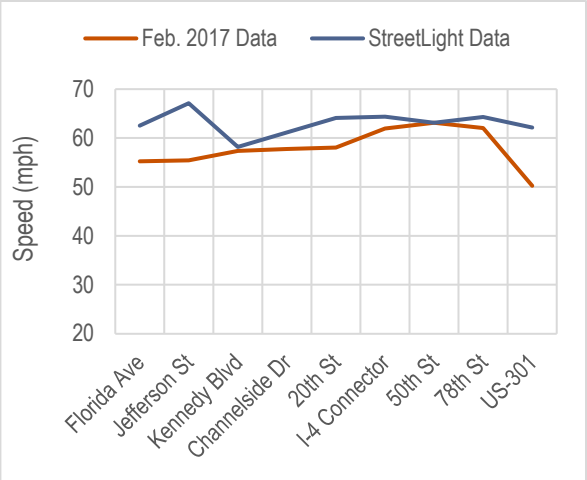


Figure 6. Westbound Speed Comparison, PM Peak Hour

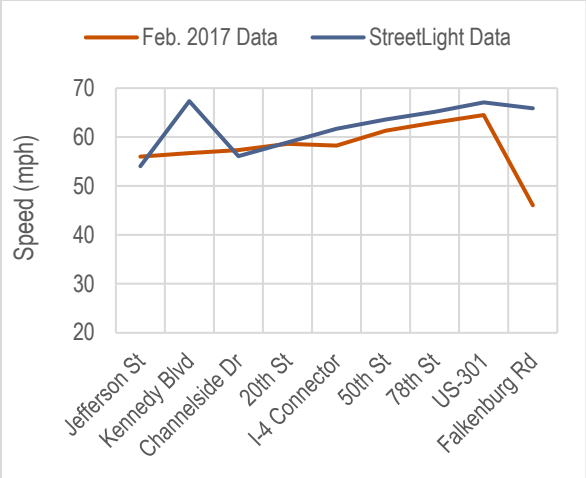
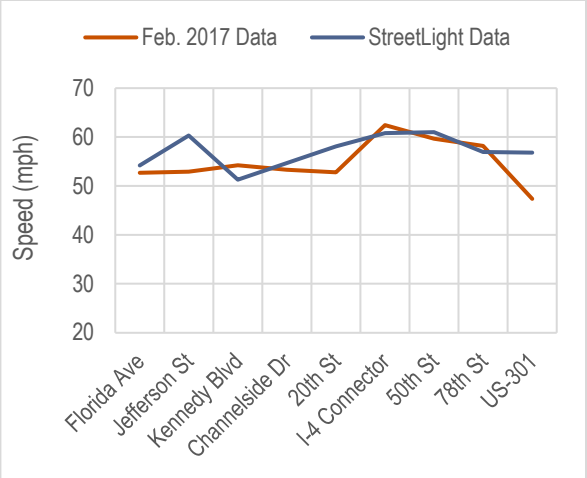


Figure 7. Eastbound Speed Comparison, PM Peak Hour



Although the February 2017 data is older, the travel time measurements by segment match the available field observations and speed data used to assess the location of bottlenecks, discussed in the following section. As a result, the data from February 2017 was used as the basis of existing model validation efforts to maintain consistency between available data sets for travel time and observational metrics.

Location of Bottlenecks

Detailed speed data was available from travel time runs conducted in February of 2017 for the Feasibility Study. This information was used to create speed-contour plots highlighting the locations of bottlenecks along the corridor. The speed range color scheme used in the speed-contour plots is shown in **Table 10**.

Table 10. Speed-Contour Plot Color Scale

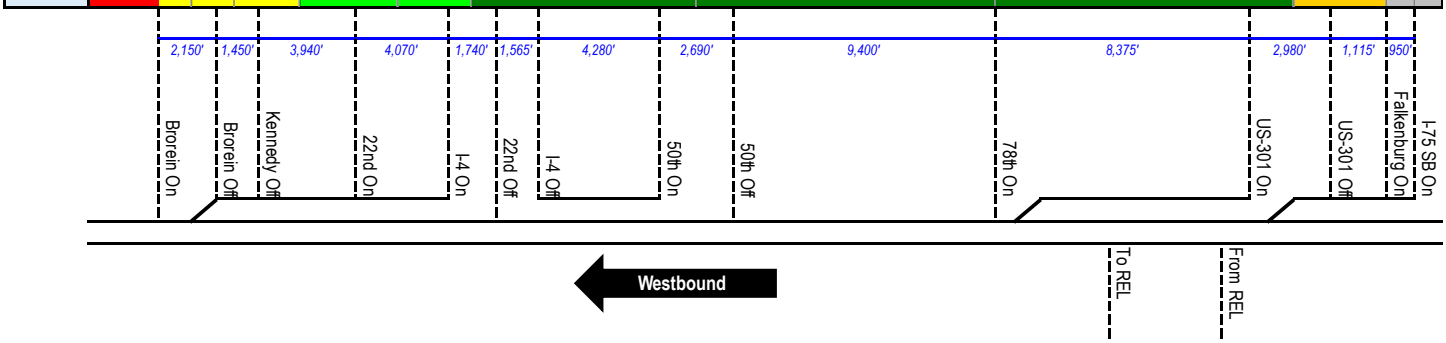
Speed Range	Experience Rating	Color Designation
≥60	A	
≥55-60	B	
≥50-55	C	
≥45-50	D	
≥40-45	E	
<40	F	

In the AM peak hour, congestion was present in the westbound direction of travel in the local lanes starting at Falkenburg Rd and ending at 50th St, where speeds ranged from 20 mph up to nearly 70 mph. Additionally, significant queuing was observed due to the right turn movement from the REL terminus to Twiggs St. The maximum observed queue in the AM peak is approximately one mile based on information from the City of Tampa Traffic Management Center. In the eastbound direction, significant congestion or speed reductions were not evident. Observed speeds through the downtown area were about 55 mph, increasing to approximately 65 mph east of the I-4 Connector. The local lane speed-contour plot for the AM peak period (6:30-9:30 AM) is shown in **Exhibit 1**.

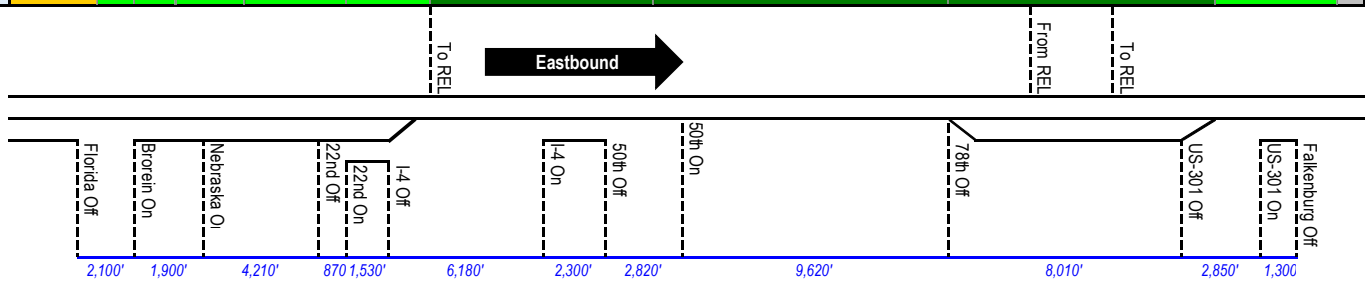
In the PM peak hour, the eastbound direction experienced congestion near the I-4 Connector ramps with travel speeds ranging from 30-65 mph. In the westbound direction, freeflow conditions were observed with travel speeds of 65 mph east of the I-4 Connector and 55 mph through downtown. The local lane speed-contour plot for the PM peak period (3:30-6:30 PM) is shown in **Exhibit 2**.

Exhibit 1. Existing Speed-Contour Plots (Local Lanes), AM Peak Period[4]

6:30 AM	24	49	52	56	57	57	60	58	65	47	
6:45 AM	18	52	54	55	58	56	56	46	56	49	
7:00 AM	17	57	57	57	60	58	62	38	37	46	
7:15 AM	24	53	54	55	58	58	60	38	34	26	
7:30 AM	19	55	56	56	56	52	54	34	34	22	
7:45 AM	17	50	53	51	55	57	56	45	34	29	
8:00 AM	36	53	54	53	57	58	58	41	33	27	
8:15 AM	17	54	55	56	57	60	62	43	35	31	
8:30 AM	11	47	53	54	56	55	53	30	24	23	
8:45 AM	14	41	44	49	57	59	62	45	44	36	
9:00 AM	15	43	52	53	56	53	53	37	52	50	
9:15 AM	22	55	55	54	58	59	62	62	65	46	

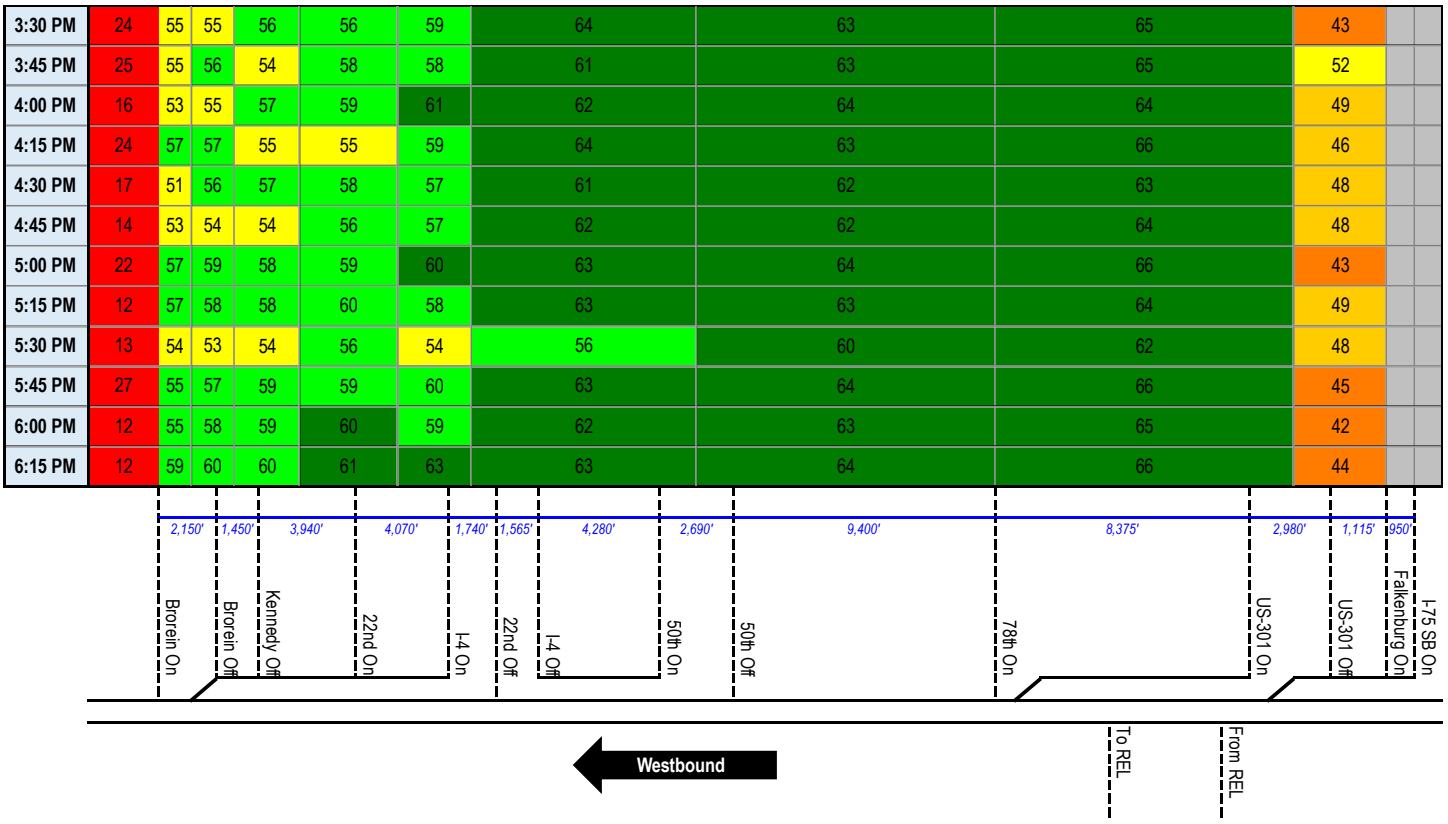


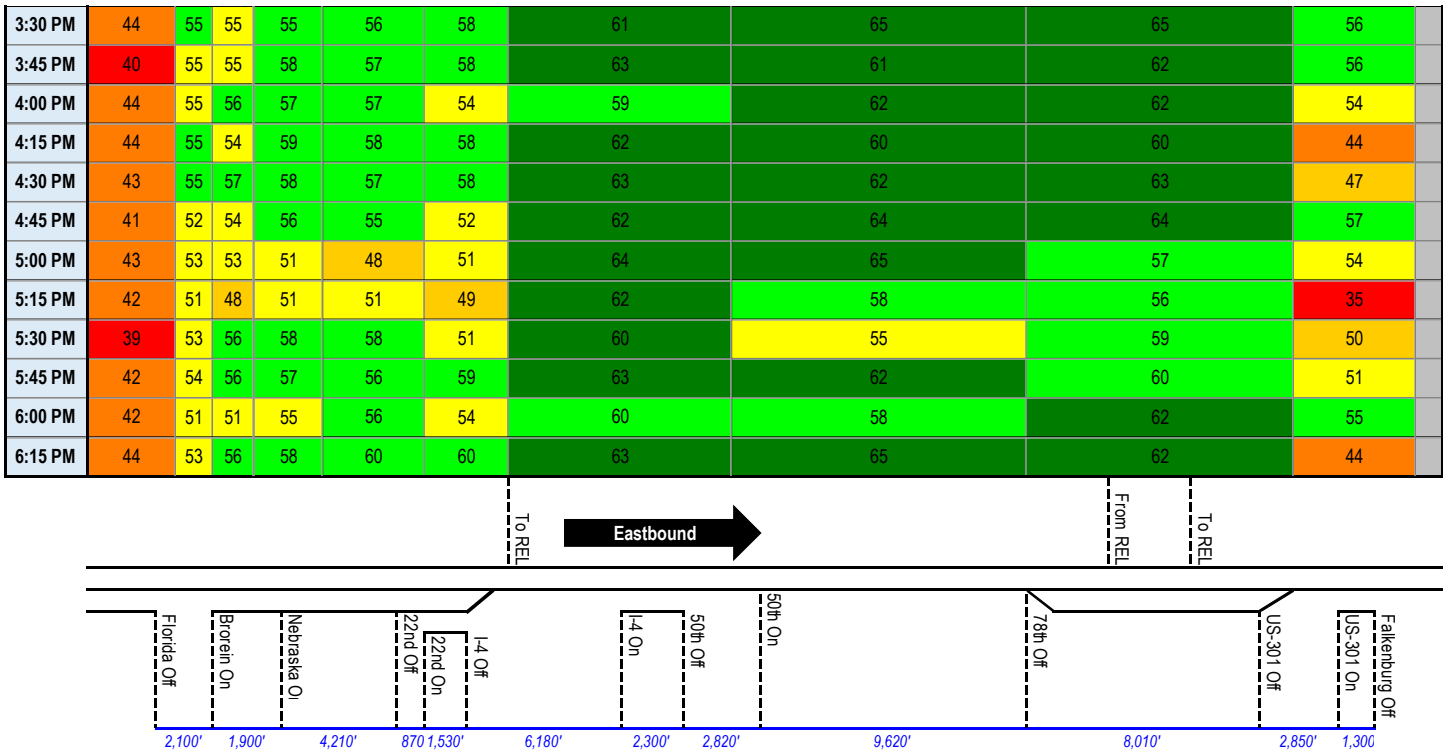
6:30 AM	36	55	55	56	57	60	63	59	60	52
6:45 AM	44	55	55	56	58	59	64	63	64	55
7:00 AM	45	56	57	58	59	61	64	65	63	56
7:15 AM	38	57	56	59	58	58	63	55	56	52
7:30 AM	45	57	58	59	59	60	64	66	65	55
7:45 AM	38	54	54	56	57	56	62	63	61	54
8:00 AM	35	54	54	56	57	57	59	60	59	46
8:15 AM	45	56	56	58	58	59	63	63	63	47
8:30 AM	43	57	57	59	60	61	65	66	65	59
8:45 AM	38	59	57	59	61	63	64	64	62	46
9:00 AM	45	57	58	60	59	59	64	64	64	57
9:15 AM	46	57	57	57	57	59	65	65	66	59



[4] February 2017 Travel Time Runs, RS&H

Exhibit 2. Existing Speed-Contour Plots (Local Lanes), PM Peak Period





Review of Feasibility VISSIM Model

Model Network & Traffic Control

The model network, including links, number of lanes, and traffic control, were checked for accuracy against existing conditions. The existing lane configuration diagram is found in **Appendix D**. It should be noted that at the time of this report, the lane configurations on Brorein St at Morgan St and Nebraska Ave are different than they were in 2019 due to implementation of two-way operation. The most recent signal timing information for signalized study area intersections was obtained from the City of Tampa and Hillsborough County (**Appendix E**). No errors were found in this review. However, we did find that an extra lane was coded on the REL near the westbound terminus at Twiggs St/Meridian Ave. The existing southbound right turn lane from the REL is approximately 350' long, whereas the coded turn lane storage was nearly 2500'. Calibration documentation indicates that the coding change was based upon observations that drivers utilize the outside shoulder for additional storage space. With an AM peak hour volume of over 1,500 vph, the southbound right-turn movement queues significantly due to the downstream bottleneck at Twiggs St and Nebraska Ave. As a result, the coding of the REL westbound terminus was found to be acceptable.

Vehicle Inputs and Routing Decisions

Vehicle inputs and origin-destination tables were verified against the peak hour volume exhibits provided in the Feasibility Study documentation. All inputs were found to be consistent, except for the westbound volumes in the AM peak hour. The summary in **Table 11** shows that volumes from I-75 and the REL were increased by 100-350 vph for an overall westbound volume increase of 600 vph. The documentation indicates that the peak hour volumes developed from count data did not produce the congestion in the westbound local lanes that was observed in the field. It was noted that volumes counted at the downstream location were near capacity, indicating the presence of a bottleneck and the possibility of constrained volumes entering the network from upstream locations. The input volumes were increased to represent demand volumes, as opposed to constrained volumes, and the resulting congestion in the local lanes.

Table 11. Comparison of Existing AM Peak Hour Volumes and Model Input Volumes, Feasibility Study

Input Location	Peak Hour Volume (vph)	Input Volume (vph)	Difference (vph)
From I-75 NB	2,905	3,255	+350
From I-75 SB	680	780	+100
From REL WB	2,322	2,472	+150
Total	**5,907**	**6,507**	**+600**

Demand volumes are measured with counts from a location that is upstream of the constrained location. This data was not available from the Feasibility Study or through FDOT Traffic Online. Thus, the estimation of demand volumes could not be corroborated, although the reasoning behind this assumption was sound. Additionally, model results do not show traffic backing up on to the I-75 ramps or on the REL, even with the increase in traffic volumes.

Vehicle Compositions

Both local lane and arterial vehicle compositions utilized a heavy vehicle percentage of 3% and passenger car percentage of 97%. For the REL, it was assumed that 100% of vehicles were passenger cars. The vehicle compositions were verified by looking at 2019 count data available through FDOT traffic online. In the local lanes, the daily truck percentage ranged from 5.9% to 7.8% with an average of 7.0%. On the arterials and local road network, daily truck percentages ranged from 1.3% to 14.6% with an average of 6.9%. The daily and design hour truck percentages are

summarized by facility in **Table 12**. Design hour truck percentages were estimated by assuming roughly half of the daily truck percentage.

Table 12. 2019 Daily and Design Hour Truck Percentages

Facility	Daily	Design Hour (AM and PM)
Local Lanes	7.0%	3.5%
Reversible Express Lanes (REL)	0.0%	0.0%
Arterials	6.9%	3.5%

Desired Speed

Desired speed decisions were consistent with posted speed limits. In the local lanes, the desired speed is 65 mph from Falkenburg Rd to the I-4 Connector and reduces to 55 mph through the west end of the network. In the REL, the desired speed is 50 mph at the east end, 40 mph at the west end, and 65 mph in between. There were no areas of the model that force lower speeds to simulate slowdowns and congestion. Reduced speed areas are used around curves and at intersections as appropriate. However, it was noted that linear desired speed distributions were used throughout the model.

Driver Behaviors

The model identified driving behaviors separately for arterials, basic freeway segments, and freeway merge/diverge areas. Changes to default driving behaviors were as follows:

- Cooperative lane change with maximum acceleration adjusted from -9.84 ft/sec^2 to -25 ft/sec^2
- Diffusion time increased to 200 seconds for arterial roads
- Headway time increased from 0.9 sec to 1.25 sec for freeway car-following parameters
- Lane change safety distance reduction factor was reduced from 0.60 to 0.40 for merge/diverge areas
- Lane change distances
    - 2500’ at diverge locations
    - 1500’ at lane drop locations
    - 500’-1500’ at merge locations

Measures of Effectiveness

The measures of effectiveness selected for this validation effort were traffic volumes, travel times, and location of bottlenecks. Validation targets summarized in **Table 3** ensure models best represent real-world conditions.

- **Traffic Volumes:** Traffic volumes were validated for the East Selmon local lanes, reversible express lanes, and ramps. Intersection volumes were checked but are not to be included as part of this documentation due to the lack of new turning movement count data.
- **Travel Times**: Segment and total corridor travel times were reviewed in each direction of travel.
- **Location of Bottlenecks:** We prepared speed-contour plots to visually compare the bottleneck locations from the model with data obtained from the February 2017 travel time runs. In addition, observed queueing at the REL westbound terminus at Twiggs St was verified in the AM peak hour.

Validation Review

We updated the existing feasibility model to reflect new data. **Table 13** is a summary of these model updates.

Table 13. Summary of Initial Model Revisions

Parameter	Summary of Revisions
Model Network	Added source/sink node on Kennedy Blvd between the intersections at Nebraska Ave and Jefferson St.
Traffic Control	Updated signal timings with information obtained from City of Tampa/Hillsborough County.
Vehicle Inputs	Updated based on approved base year traffic volumes. Increased traffic from I-75 NB and I-75 SB by the same magnitude as shown in **Table 11**.
Routing Decisions	Updated based on approved base year traffic volumes and StreetLight Data origin-destination tables.
Vehicle Compositions	Increased design hour truck percentage (AM and PM) to 3.5% for Selmon local lanes and arterials.
Desired Speed	None.
Driving Behavior	None.
Lane Change Distances	None.

VISSIM version 10.00-16 was used to run the model with the updates listed above. The results of the initial validation check are contained in **Appendix F**. The GEH target was met for 100% of the links throughout the network, and the sum of total network volumes is within 2-3% for each direction of travel.

Both segment and total corridor travel times produced by the model were validated against February 2017 data for this task. In the AM peak hour (**Table 14**), westbound segment travel times are within 15% for seven of the nine segments, or less than 85%. The travel time on the segment from Falkenburg Rd to US-301 was not previously calibrated, and as a result, the model produces a travel time that is 52% less than the measured travel time. Additionally, the segment from 78th St to 50th St produces a modeled travel time that is 33% less than the measured travel time. While the total corridor travel time is within 15%, it is desirable to improve the depictions of traffic flow in this critical section of the corridor.

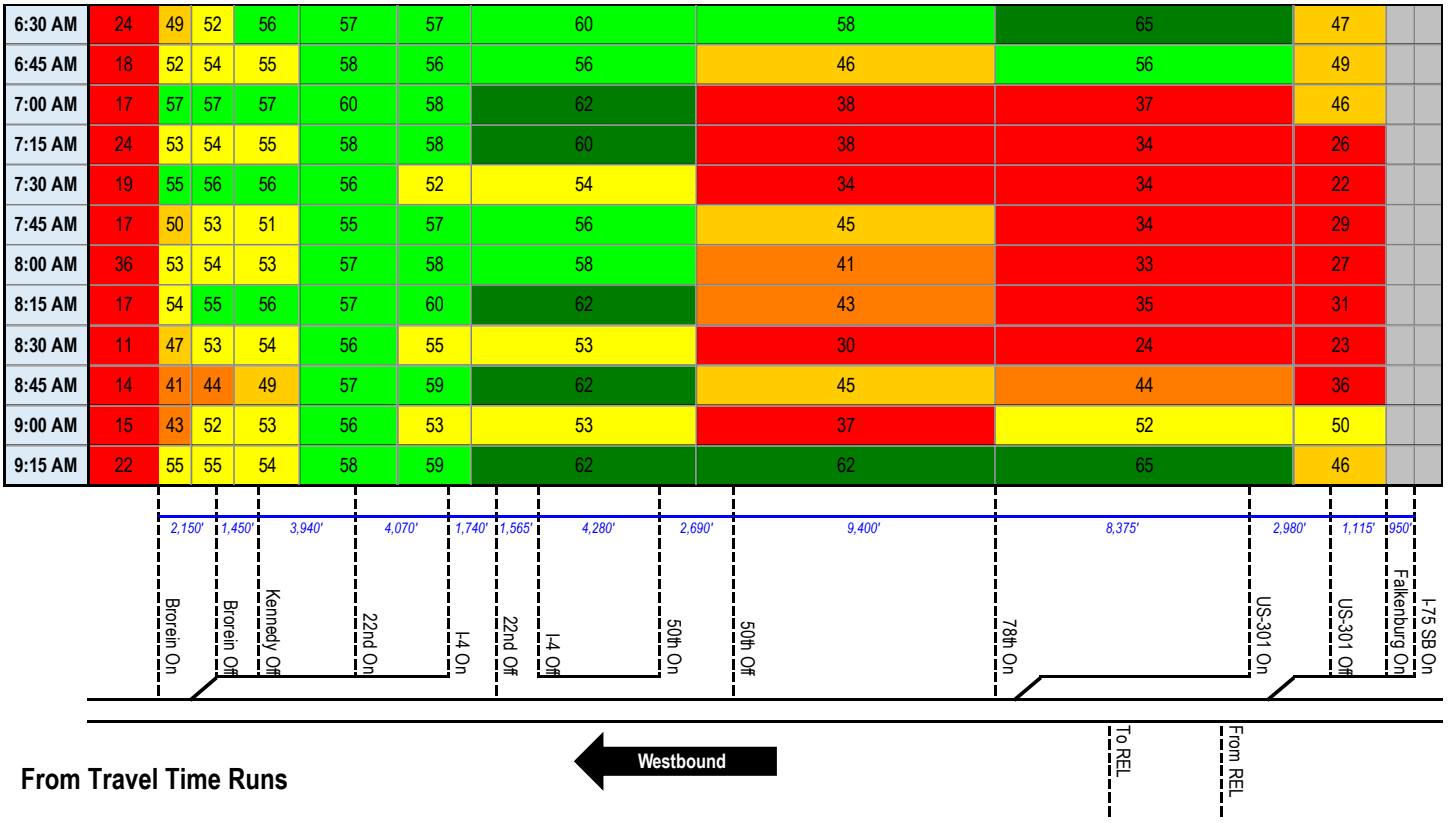
Table 14. Westbound Travel Time Comparison (Local Lanes) for Validation Check, AM Peak Hour

From	To	2017 Measured Travel Time (sec)	VISSIM Modeled Travel Time (sec)	Difference (sec)	Percent Difference
Falkenburg Rd	US-301	125	60	-65	-52%
US-301	78th St	239	266	27	11%
78th St	50th St	202	136	-66	-33%
50th St	I-4 Connector	97	94	-3	-3%
I-4 Connector	20th St	39	43	4	10%
20th St	Channelside Dr	46	51	5	11%
Channelside Dr	Kennedy Blvd	35	38	3	9%
Kennedy Blvd	Jefferson St	19	20	1	5%
Jefferson St	Florida Ave	16	17	1	6%
Total		**818**	**725**	**-93**	**-11%**

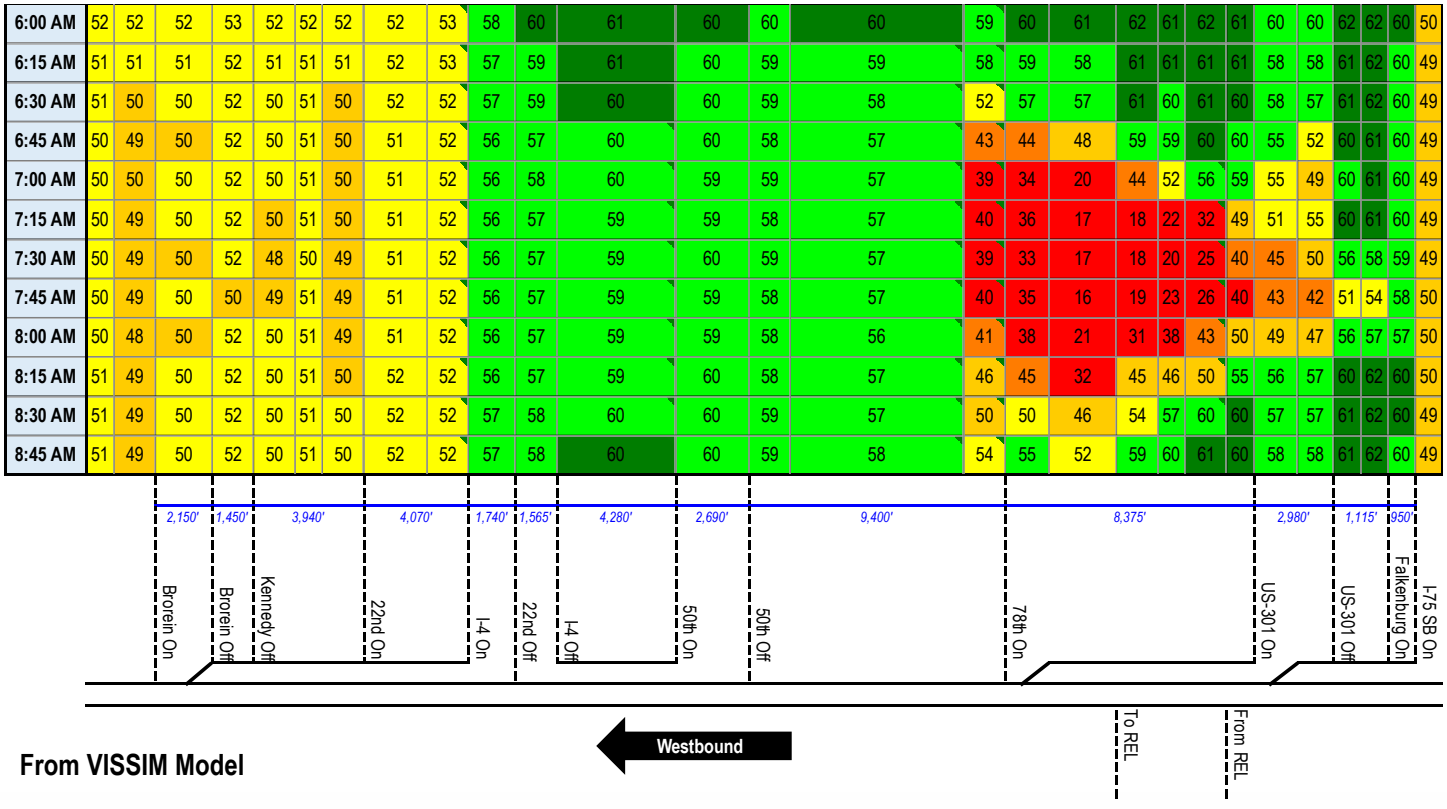
Exhibit 3 on the following page compares the westbound AM speed-contour plots from the travel time data (top pane) and from the VISSIM model (bottom pane). These plots show existing congestion on the westbound Selmon Expressway, which identified an area of the model that could be better represented. While the bottleneck between Falkenburg and US-301 is present, the travel speeds immediately upstream and downstream of this segment are much higher than measured. Upon closer inspection, it seemed likely that roadway constraints west of 78th St are causing drivers to be more cautious in this section. These constraints include large piers on either side of the roadway where the elevated REL crosses over the westbound lanes and a service area not in the model. **Figure 8** (right) shows an example of these constraints.

Figure 8. Westbound Local Lanes Roadway Constraints, 78th St to 50th St

Exhibit 3. Westbound Speed-Contour Plot Comparison (Local Lanes) for Validation Check, AM Peak Period



From Travel Time Runs



From VISSIM Model

In the PM peak hour (**Table 15**), the eastbound segment travel times are ±15% for seven of the nine segments or less than 85%. The segment of 20th St through the I-4 Connector ramps has a modeled travel time that is 25% greater than the measured travel time. The section from US-301 to Falkenburg Rd produces a travel time that is 25% less than the measured time.

Table 15. Eastbound Travel Time Comparison (Local Lanes) for Validation Check, PM Peak Hour

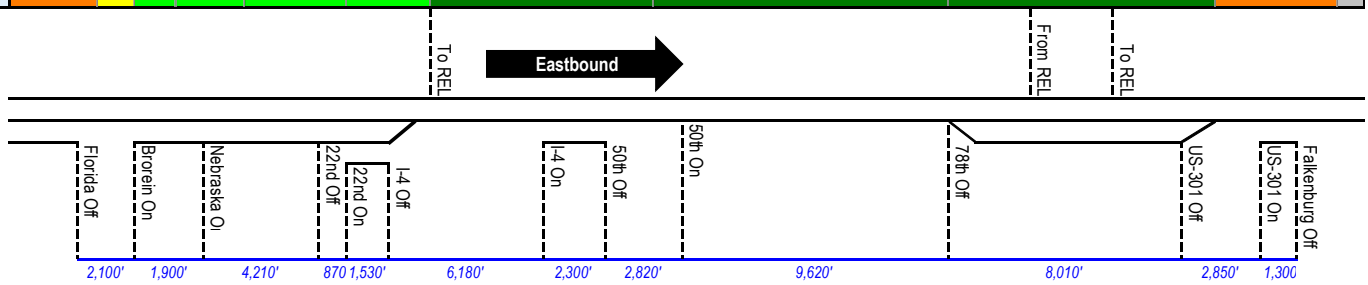
From	To	2017 Measured Travel Time (sec)	VISSIM Modeled Travel Time (sec)	Difference (sec)	Percent Difference
Florida Ave	Jefferson St	16	17	1	6%
Jefferson St	Kennedy Blvd	20	21	1	5%
Kennedy Blvd	Channelside Dr	34	36	2	6%
Channelside Dr	20th St	48	50	2	4%
20th St	I-4 Connector	44	55	11	25%
I-4 Connector	50th St	87	90	3	3%
50th St	78th St	122	124	2	2%
78th St	US-301	114	108	-6	-5%
US-301	Falkenburg Rd	64	48	-16	-25%
Total		**549**	**549**	**0**	**0%**

The comparison of eastbound local lane speed-contour plots for the PM peak period is shown in **Exhibit 4**. In this case, slower speeds of 35-45 mph are present leading up to the lane drop location near the I-4 Connector, illustrated in both the travel time and model data. However, speed data shows that drivers are traveling over the posted speed limit, and the model is therefore underestimating travel speeds in this section. Additionally, drivers are traveling at much slower speeds approaching the east end of the Selmon Expressway. This trend was exhibited in both the AM and PM for both directions of travel. Slower travel speeds at the west end of the study area network are not represented in the model due to influences outside of the study area network.

These results highlight the opportunity to improve model representation of driver behavior, particularly in the westbound direction. The proposed changes and the impact on simulation results are summarized in the following section.

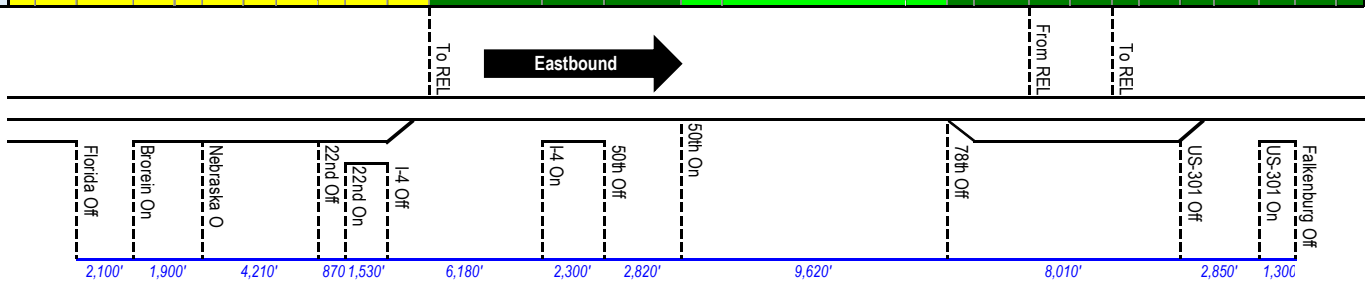
Exhibit 4. Eastbound Speed-Contour Plot Comparison (Local Lanes) for Validation Check, PM Peak Period

3:30 PM	44	55	55	55	56	58	61	65	65	56	
3:45 PM	40	55	55	58	57	58	63	61	62	56	
4:00 PM	44	55	56	57	57	54	59	62	62	54	
4:15 PM	44	55	54	59	58	58	62	60	60	44	
4:30 PM	43	55	57	58	57	58	63	62	63	47	
4:45 PM	41	52	54	56	55	52	62	64	64	57	
5:00 PM	43	53	53	51	48	51	64	65	57	54	
5:15 PM	42	51	48	51	51	49	62	58	56	35	
5:30 PM	39	53	56	58	58	51	60	55	59	50	
5:45 PM	42	54	56	57	56	59	63	62	60	51	
6:00 PM	42	51	51	55	56	54	60	58	62	55	
6:15 PM	44	53	56	58	60	60	63	65	62	44	



From Travel Time Runs

3:30 PM	50	51	51	53	52	52	52	52	51	52	49	62	60	60	58	59	60	60	62	62	61	61	62	61	60	62	61	63
3:45 PM	49	51	51	52	52	52	51	52	51	52	48	62	60	60	58	59	59	60	62	62	61	61	62	61	61	62	62	63
4:00 PM	49	51	51	52	52	52	51	52	51	52	48	62	60	60	57	59	59	60	62	61	61	61	61	61	60	62	61	63
4:15 PM	48	51	50	52	52	51	51	51	51	52	44	62	60	60	57	59	59	60	62	61	61	60	61	61	60	61	61	63
4:30 PM	44	51	50	52	52	51	51	51	51	52	40	62	59	59	57	59	59	60	62	61	60	60	61	60	60	61	61	63
4:45 PM	44	51	50	52	52	51	51	51	51	51	39	62	59	59	56	59	59	59	62	61	60	60	61	60	60	61	61	63
5:00 PM	44	51	50	52	52	51	51	51	51	51	43	62	60	59	56	59	59	60	62	61	60	60	61	60	59	61	61	63
5:15 PM	44	51	50	52	52	51	51	51	51	51	41	62	60	59	56	59	59	60	62	61	60	60	61	60	59	61	61	63
5:30 PM	44	51	50	52	52	51	51	51	50	47	42	62	60	60	57	59	59	60	62	61	60	60	61	61	60	61	61	63
5:45 PM	46	51	50	52	52	51	51	51	51	49	41	62	60	60	58	59	60	60	62	61	61	60	61	60	60	61	61	63
6:00 PM	51	52	51	53	52	52	52	52	52	52	49	62	61	60	59	59	60	60	62	61	61	60	61	61	60	62	61	63
6:15 PM	52	52	52	53	53	52	52	52	52	53	51	63	61	61	59	60	60	60	62	61	61	61	61	61	60	62	62	63



From VISSIM Model

Model Re-Calibration

We developed options to improve the model representation of traffic flow through an iterative process that focused on matching AM operations in the westbound direction from Falkenburg Rd to 50th St. We began with addressing the perceived reduction in capacity between 78th St, and 50th St by creating a new driving behavior with the following modifications to the default car-following parameters:

- Car Following, Headway Time (CC1) = 1.4 sec
- Car Following, Following Variation (CC2) = 21.00 ft
- Lane Change, Safety Distance Reduction Factor = 0.90

This modified driving behavior was applied to basic freeway segments downstream of the 78th St merge to just past the second overhead crossover location of the REL shown in pink in the screenshot below (**Figure 9**).

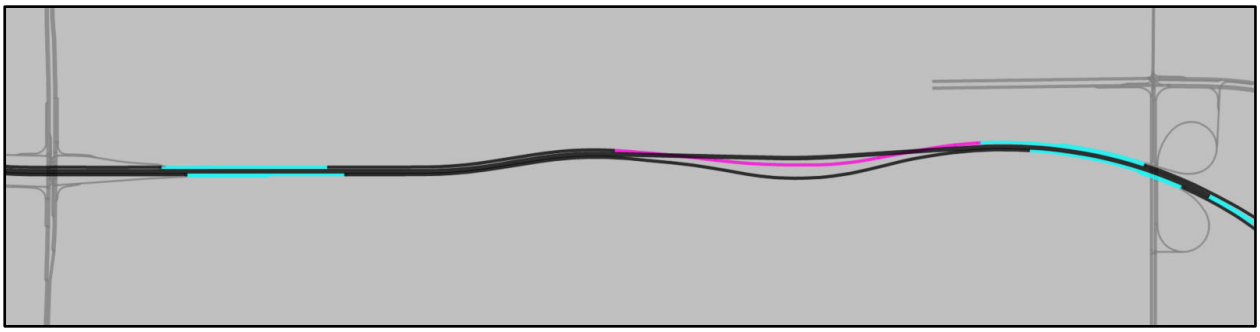


Figure 9. Modified Driving Behavior Extents (Pink) Between 78th St and 50th St

With no other changes to the model, this modified driving behavior resulted in significant congestion and delay in the westbound direction that was far worse than what was measured in the field. It was hypothesized that this was due to a possible overestimation of demand volumes arriving from I-75 NB and I-75 SB, which combined with the decreased capacity between 78th St and 50th St caused the network to be overloaded. Previously implemented volume adjustments were therefore removed so that inputs matched the 2019 peak hour volumes.

When the volume adjustments were removed, the model no longer displayed congestion and operated superior to field-measured conditions. A series of changes to desired speed decisions, lane change distances, and driving behavior parameters were combined to achieve a result that was found to improve the representation of field conditions. These changes are summarized in **Appendix G**.

Vehicle Compositions

Model vehicle 2D/3D distributions were updated to match the published North American default distribution[5]. For heavy goods vehicles (HGV), it was noted that the distribution did not add up to 100%. Percentages were therefore scaled proportionally to yield a total distribution of 100%, as shown below in **Table 16**.

Table 16. Vehicle Compositions

Vehicle Type	23/3D Model	Share
"Car"	LtTruck_Ford_f150_2009	19.2%
	Car_Honda_Accord_2003	12.9%
	SUV_Jeep_Grand_Cherokee_2002	5.8%
	LtTruck_Chevrolet_Silverado_2008	15.1%
	Van_Plymouth_Voyager_1999	5.5%
	SUV_Ford_Explorer_2008	10.6%
	Van_Nissan_Quest_1995	6.4%
	Car_Nissan_Altima_2005	6.0%
	SUV_GMC_Yukon_XL_2008	5.0%
	Car_Toyota_Camry_2006	13.5%
	Total	**100%**
"Heavy Goods Vehicle" (HGV)	Truck	27.6%
	HGV_Flatbed_Truck	5.0%
	HGV_WB50_Tractor	47.7%
	HGV_WB40_Tractor	10.5%
	HGV_WB67d_Tractor	4.7%
	HGV_WB65_Tractor	4.5%
	Total	**100%**

Desired Speed Decisions

Desired speed decisions for reduced speed areas at intersections were updated to match commonly accepted turning movement speeds. Specific guidance is not provided in the FDOT Traffic Analysis Handbook (2021), therefore the speeds in **Table 17** were determined from the WSDOT Protocol for VISSIM Simulation[6].

Table 17. Desired Speed Distributions for Intersection Turning Movements

Vehicle Type	Desired Speed (mph)	
	Right Turn	Left Turn
"Car"	10	15
"Heavy Goods Vehicle" (HGV)	5	10

For traffic in the local lanes and REL, desired speed distributions were adjusted to more accurately reflect conditions for the minimum and maximum speeds observed in field. The speed distribution profiles were developed based on the off-peak (freeflow) speeds. HERE speed data was obtained through the Regional Integrated Transportation Information System (RITIS) platform for several locations along the Selmon Expressway local lanes. Data was obtained for weekdays (Tuesday-Thursday) during the month of October 2019. The minimum and maximum speeds were determined based on this data, as well as the distribution of speeds in between. In many cases, the average speeds

[5] *New North American Vehicle Models and Distributions*, PTV America, Inc., January 2010.
[6] *Protocol for VISSIM Simulation*, Washington Department of Transportation, September 2014.

on the local lane segments were in excess of the posted speed limits. Speed distribution profiles implemented in the model are illustrated in **Appendix G.**

Results

The complete set of re-calibration model results are contained in **Appendix H**. AM peak hour GEH statistics are summarized in **Table 18** and **Table 19**. In the westbound direction, the GEH target is met for 14 of the 16 links (>85%) on the local lanes and 100% of links on the REL. In the eastbound direction, the GEH target is met for 100% of links. The sum of total network volumes is within 5% for each direction of travel.

PM peak hour data is summarized in **Table 20** and **Table 21**. The GEH target is met for 100% of links in both directions of travel, and the sum of the total network volumes is within 3%.

Table 18. Final Westbound GEH Statistics, AM Peak Hour

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH	Calibration Targets			
						GEH	Flow < 700 vph	Flow 700-2,700 vph	Flow > 2,700 vph
						<5	±100 vph	±15%	±400 vph
Local Lanes									
I-75 to Falkenburg Rd	3,175	3,133	-42	1%	0.7	YES	-	-	YES
Falkenburg Rd to US-301	3,776	3,711	-65	2%	1.1	YES	-	-	YES
Between US-301 Ramps	3,196	3,105	-91	3%	1.6	YES	-	-	YES
US-301 to REL	3,907	3,657	-250	6%	4.1	YES	-	-	YES
Between REL Ramps	4,536	4,273	-263	6%	4.0	YES	-	-	YES
REL to 78th St	3,659	3,433	-226	6%	3.8	YES	-	-	YES
78th St to 50th St	3,971	3,683	-288	7%	4.7	YES	-	-	YES
Between 50th St Ramps	3,718	3,420	-298	8%	5.0	YES	-	-	YES
50th St to I-4	4,307	3,981	-326	8%	5.1	NO	-	-	YES
I-4 Off to 22nd St Off	3,741	3,435	-306	8%	5.1	NO	-	-	YES
22nd St Off to I-4 On	3,521	3,233	-288	8%	5.0	YES	-	-	YES
I-4 On to 22nd St On	4,294	3,998	-296	7%	4.6	YES	-	-	YES
22nd St to Kennedy Blvd	4,770	4,465	-305	6%	4.5	YES	-	-	YES
Kennedy Blvd to Brorein St	3,740	3,528	-212	6%	3.5	YES	-	-	YES
Between Brorein St Ramps	2,822	2,654	-168	6%	3.2	YES	-	-	YES
Selmon Continue West	3,107	2,866	-241	8%	4.4	YES	-	-	YES
Reversible Express Lanes									
From Brandon	2,637	2,622	-15	1%	0.3	YES	-	YES	-
LL Off (Ramp 5) to LL On (Ramp 3)	2,008	2,072	64	3%	1.4	YES	-	YES	-
LL On (Ramp 3) to Twiggs St	2,885	2,905	20	1%	0.4	YES	-	-	YES
NETWORK TOTAL	**67,770**	**64,173**	**-3,597**	**5%**					

Table 19. Final Eastbound GEH Statistics, AM Peak Hour

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH	Calibration Targets			
						GEH	Flow < 700 vph	Flow 700-2,700 vph	Flow > 2,700 vph
						<5	±100 vph	±15%	±400 vph
Local Lanes									
Falkenburg Rd to I-75	1,038	1,010	-28	3%	0.9	YES	-	YES	-
US-301 to Falkenburg Rd	1,704	1,644	-60	4%	1.5	YES	-	YES	-
Between US-301 Ramps	1,348	1,301	-47	3%	1.3	YES	-	YES	-
78th St to US-301	1,785	1,736	-49	3%	1.2	YES	-	YES	-
50th St to 78th St	2,047	2,005	-42	2%	0.9	YES	-	YES	-
Between 50th St Ramps	1,909	1,872	-37	2%	0.8	YES	-	YES	-
I-4 to 50th St	2,167	2,107	-60	3%	1.3	YES	-	YES	-
Between I-4 Ramps	1,230	1,178	-52	4%	1.5	YES	-	YES	-
22nd St to I-4	2,039	1,971	-68	3%	1.5	YES	-	YES	-
Between 22nd St Ramps	1,928	1,861	-67	3%	1.5	YES	-	YES	-
Nebraska Ave to 22nd St	2,116	2,055	-61	3%	1.3	YES	-	YES	-
Brorein St to Nebraska Ave	1,946	1,907	-39	2%	0.9	YES	-	YES	-
Florida Ave to Brorein St	1,741	1,722	-19	1%	0.5	YES	-	YES	-
From Selmon West	2,731	2,743	12	0%	0.2	YES	-	-	YES
NETWORK TOTAL	**25,729**	**25,112**	**-617**	**2%**					

Table 20. Final Westbound GEH Statistics, PM Peak Hour

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH	Calibration Targets			
						GEH	Flow < 700 vph	Flow 700-2,700 vph	Flow > 2,700 vph
						<5	±100 vph	±15%	±400 vph
Local Lanes									
I-75 to Falkenburg Rd	1,655	1,619	-36	2%	0.9	YES	-	YES	-
Falkenburg Rd to US-301	2,351	2,311	-40	2%	0.8	YES	-	YES	-
Between US-301 Ramps	2,058	2,023	-35	2%	0.8	YES	-	YES	-
US-301 to 78th St	2,480	2,426	-54	2%	1.1	YES	-	YES	-
78th St to 50th St	2,677	2,625	-52	2%	1.0	YES	-	YES	-
Between 50th St Ramps	2,497	2,442	-55	2%	1.1	YES	-	YES	-
50th St to I-4	2,779	2,712	-67	2%	1.3	YES	-	-	YES
I-4 Off to 22nd St Off	2,227	2,163	-64	3%	1.4	YES	-	YES	-
22nd St Off to I-4 On	2,056	1,993	-63	3%	1.4	YES	-	YES	-
I-4 On to 22nd St On	2,904	2,826	-78	3%	1.5	YES	-	-	YES
22nd St to Kennedy Blvd	3,371	3,282	-89	3%	1.5	YES	-	-	YES
Kennedy Blvd to Brorein St	2,380	2,301	-79	3%	1.6	YES	-	YES	-
Between Brorein St Ramps	2,062	1,993	-69	3%	1.5	YES	-	YES	-
Selmon Continue West	2,412	2,272	-140	6%	2.9	YES	-	YES	-
NETWORK TOTAL	**33,909**	**32,987**	**-922**	**3%**					

Table 21. Final Eastbound GEH Statistics, PM Peak Hour

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH	Calibration Targets			
						GEH	Flow < 700 vph	Flow 700-2,700 vph	Flow > 2,700 vph
						<5	±100 vph	±15%	±400 vph
Local Lanes									
Falkenburg Rd to I-75	2,421	2,391	-30	1%	0.6	YES	-	YES	-
US-301 to Falkenburg Rd	3,469	3,420	-49	1%	0.8	YES	-	-	YES
Between US-301 Ramps	2,946	2,909	-37	1%	0.7	YES	-	-	YES
REL to US-301	4,122	3,992	-130	3%	2.0	YES	-	-	YES
Between REL Ramps	4,718	4,668	-50	1%	0.7	YES	-	-	YES
78th St to REL	3,712	3,701	-11	0%	0.2	YES	-	-	YES
50th St to 78th St	3,843	3,824	-19	0%	0.3	YES	-	-	YES
Between 50th St Ramps	3,508	3,497	-11	0%	0.2	YES	-	-	YES
I-4 to 50th St	4,067	4,012	-55	1%	0.9	YES	-	-	YES
REL Off to I-4 On	2,420	2,368	-52	2%	1.1	YES	-	YES	-
I-4 Off to REL Off	4,029	3,902	-127	3%	2.0	YES	-	-	YES
22nd St to I-4	4,937	4,811	-126	3%	1.8	YES	-	-	YES
Between 22nd St Ramps	4,675	4,557	-118	3%	1.7	YES	-	-	YES
Nebraska Ave to 22nd St	4,993	4,884	-109	2%	1.5	YES	-	-	YES
Brorein St to Nebraska Ave	4,570	4,434	-136	3%	2.0	YES	-	-	YES
Florida Ave to Brorein St	3,871	3,752	-119	3%	1.9	YES	-	-	YES
From Selmon West	4,243	4,116	-127	3%	2.0	YES	-	-	YES
Reversible Express Lanes									
To Brandon	2,357	2,308	-49	2%	1.0	YES	-	YES	-
LL Off (Ramp 2) to LL On (Ramp 4)	1,761	1,704	-57	3%	1.4	YES	-	YES	-
LL On (Ramp 1) to LL Off (Ramp 2)	2,767	2,694	-73	3%	1.4	YES	-	-	YES
Twiggs St to LL On (Ramp 2)	1,158	1,142	-16	1%	0.5	YES	-	YES	-
NETWORK TOTAL	**74,587**	**73,086**	**-1,501**	**2%**					

Travel time comparisons quantify the implications at the segment level. In the AM peak hour (**Table 22**), segment travel times are within 15% for all segments in both travel directions. The total corridor travel times vary by 1% compared to the measured times.

In the PM peak hour (**Table 23**), the total corridor travel times are within 1% of the measured travel times in each direction of travel. Eight of the nine segments (>85%) have travel times within 15% of measured times in the westbound and eastbound directions. Calibration requirements are satisfied, and additional changes are not required. Additionally, the segments that have higher travel time variations are not critical in the PM peak hour due to the low volumes and lack of issues. Finally, it was desirable to maintain the same calibration changes between the AM and PM model files.

Travel time data was not available for the REL segments. However, it is expected that the REL operates at near freeflow speeds except in the segments that are closest to the Twiggs St terminus. VISSIM travel time results and the comparison to freeflow travel speeds are shown in **Appendix H**.

Table 22. Travel Time Comparison, AM Peak Hour

From	To	2017 Measured Travel Time (sec)	VISSIM Modeled Travel Time (sec)	Difference (sec)	Percent Difference
Westbound					
Falkenburg Rd	US-301	125	120	-5	-4%
US-301	78th St	239	265	26	11%
78th St	50th St	202	196	-6	-3%
50th St	I-4 Connector	97	90	-7	-7%
I-4 Connector	20th St	39	40	1	3%
20th St	Channelside Dr	46	46	0	0%
Channelside Dr	Kennedy Blvd	35	35	0	0%
Kennedy Blvd	Jefferson St	19	18	-1	-5%
Jefferson St	Florida Ave	16	16	0	0%
Total		**818**	**826**	**8**	**1%**
Eastbound					
Florida Ave	Jefferson St	16	15	-1	-6%
Jefferson St	Kennedy Blvd	18	19	1	6%
Kennedy Blvd	Channelside Dr	32	32	0	0%
Channelside Dr	20th St	44	44	0	0%
20th St	I-4 Connector	39	38	-1	-3%
I-4 Connector	50th St	86	94	8	9%
50th St	78th St	112	116	4	4%
78th St	US-301	103	103	0	0%
US-301	Falkenburg Rd	62	55	-7	-11%
Total		**512**	**516**	**4**	**1%**

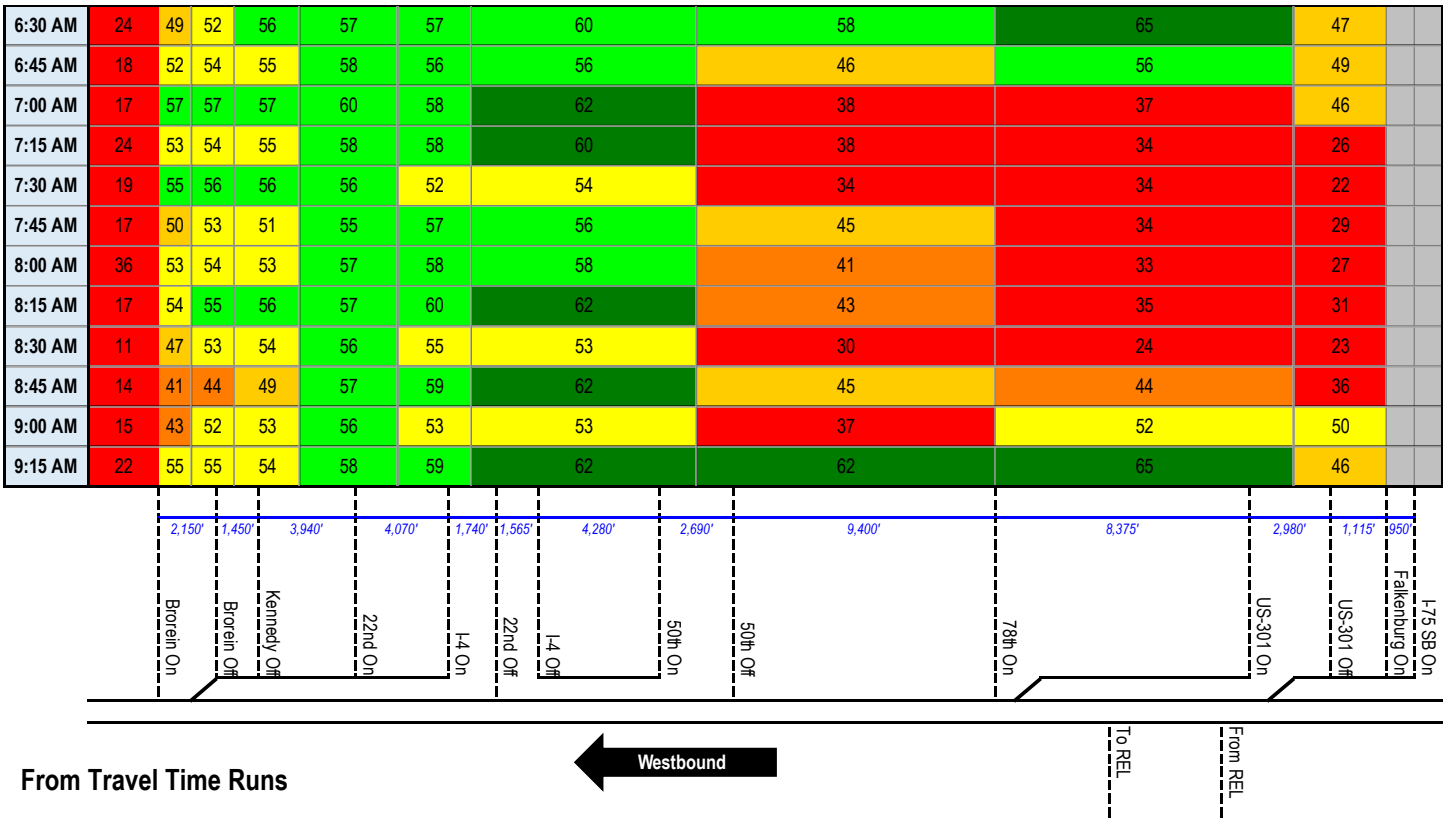
Table 23. Travel Time Comparison, PM Peak Hour

From	To	2017 Measured Travel Time (sec)	VISSIM Modeled Travel Time (sec)	Difference (sec)	Percent Difference
Westbound					
Falkenburg Rd	US-301	70	52	-18	-26%
US-301	78th St	102	106	4	4%
78th St	50th St	115	119	4	3%
50th St	I-4 Connector	90	87	-3	-3%
I-4 Connector	20th St	38	39	1	3%
20th St	Channelside Dr	44	45	1	2%
Channelside Dr	Kennedy Blvd	33	34	1	3%
Kennedy Blvd	Jefferson St	18	18	0	0%
Jefferson St	Florida Ave	15	15	0	0%
Total		**525**	**515**	**-10**	**-2%**
Eastbound					
Florida Ave	Jefferson St	16	16	0	0%
Jefferson St	Kennedy Blvd	20	20	0	0%
Kennedy Blvd	Channelside Dr	34	34	0	0%
Channelside Dr	20th St	48	46	-2	-4%
20th St	I-4 Connector	44	51	7	16%
I-4 Connector	50th St	87	98	11	13%
50th St	78th St	122	122	0	0%
78th St	US-301	114	106	-8	-7%
US-301	Falkenburg Rd	64	57	-7	-11%
Total		**549**	**550**	**1**	**0%**

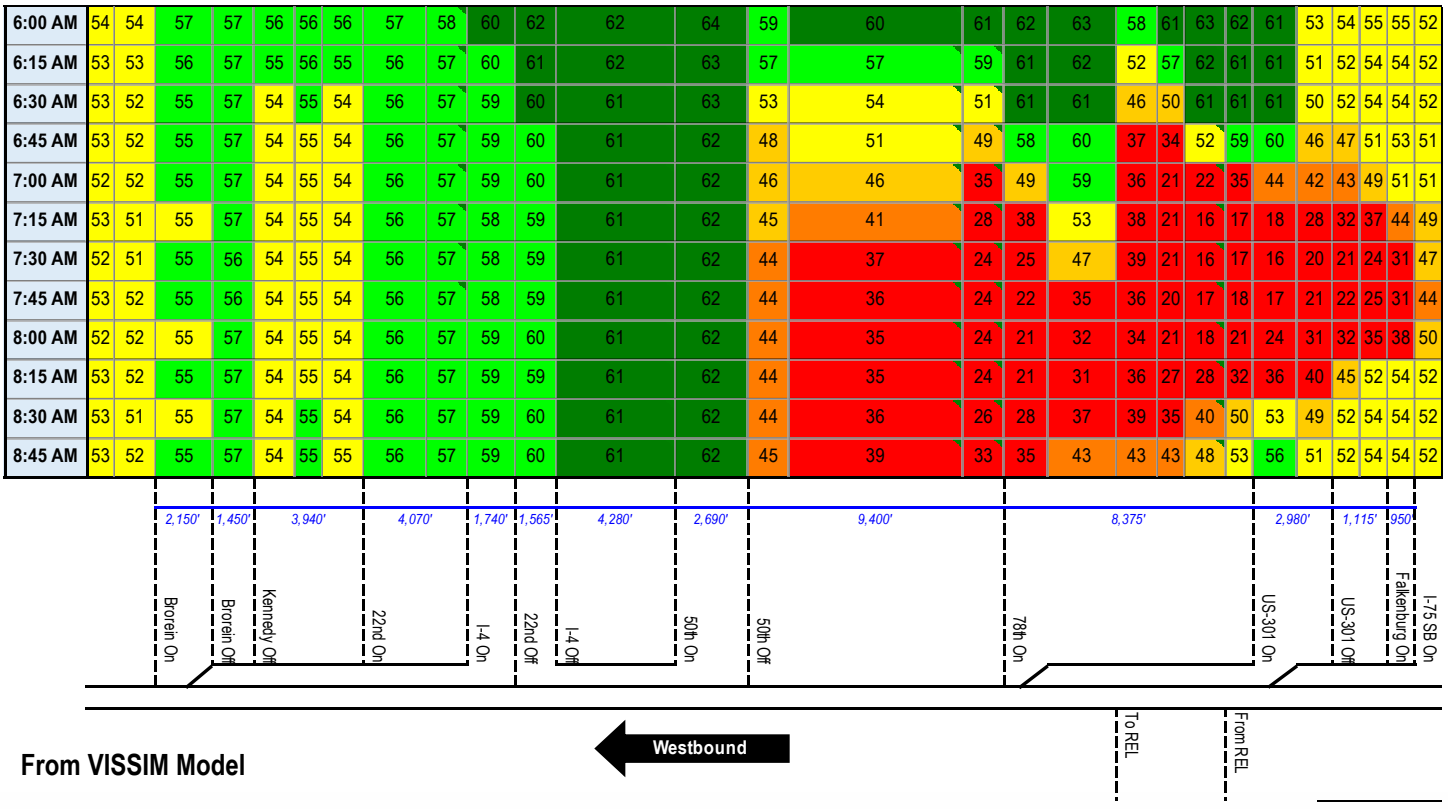
Exhibit 5 shows that the westbound speed-contour plot for the AM peak period closely represents the field-measured conditions. Congestion is present continuously from Falkenburg Rd to 50th St. The build-up and dissipation of the congestion is also similar.

Changes to eastbound PM peak period results are not as drastic, as shown in **Exhibit 6**. However, calibration adjustments provide for faster travel through downtown and the I-4 Connector, displayed in the field-measured data. The model does not represent minor congestion at the western edge of the study area due to closely spaced ramps upstream of the model limits, which are not accounted for in the model.

Exhibit 5. Final Westbound Speed-Contour Plot Comparison (Local Lanes), AM Peak Period



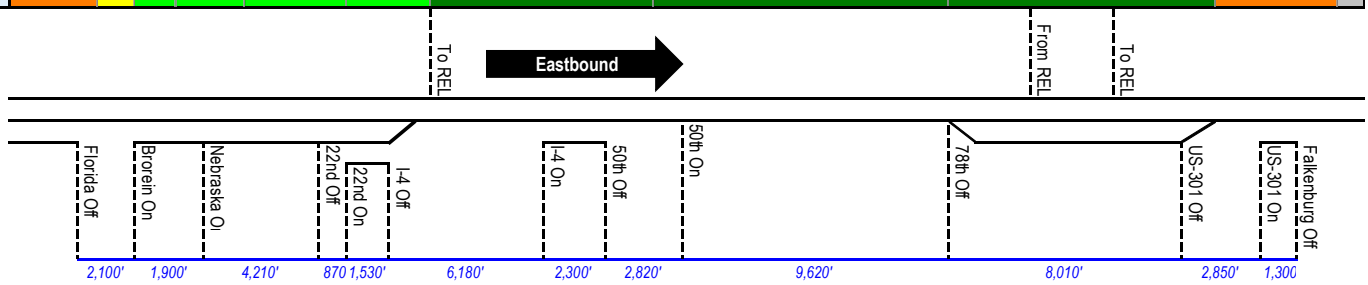
From Travel Time Runs



From VISSIM Model

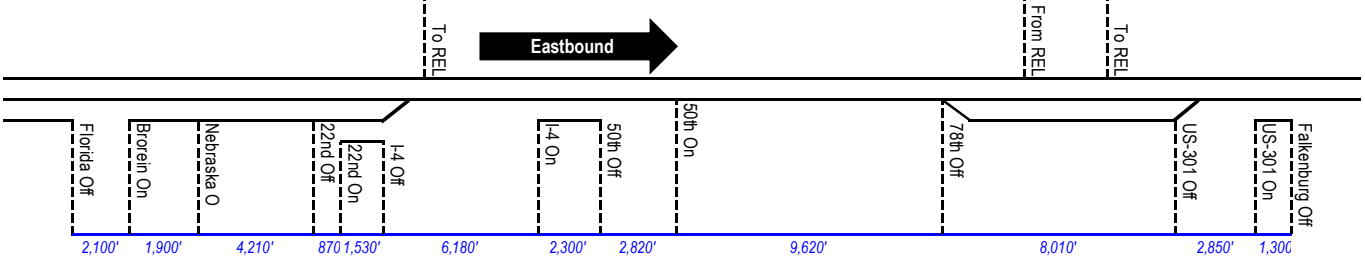
Exhibit 6. Final Eastbound Speed-Contour Plot Comparison (Local Lanes), PM Peak Period

3:30 PM	44	55	55	55	56	58	61	65	65	56	
3:45 PM	40	55	55	58	57	58	63	61	62	56	
4:00 PM	44	55	56	57	57	54	59	62	62	54	
4:15 PM	44	55	54	59	58	58	62	60	60	44	
4:30 PM	43	55	57	58	57	58	63	62	63	47	
4:45 PM	41	52	54	56	55	52	62	64	64	57	
5:00 PM	43	53	53	51	48	51	64	65	57	54	
5:15 PM	42	51	48	51	51	49	62	58	56	35	
5:30 PM	39	53	56	58	58	51	60	55	59	50	
5:45 PM	42	54	56	57	56	59	63	62	60	51	
6:00 PM	42	51	51	55	56	54	60	58	62	55	
6:15 PM	44	53	56	58	60	60	63	65	62	44	



From Travel Time Runs

3:30 PM	52	54	53	56	56	56	56	56	56	57	52	57	55	56	60	61	61	62	64	63	62	62	63	62	52	51	51	52
3:45 PM	51	54	53	56	56	56	56	56	56	57	51	58	55	56	60	61	61	62	64	63	62	62	62	62	52	51	51	52
4:00 PM	52	54	53	56	56	56	56	56	56	57	50	57	55	56	59	61	61	61	64	62	62	61	62	62	52	51	51	52
4:15 PM	50	53	53	55	55	55	55	56	55	56	47	57	54	56	59	61	61	61	64	62	62	61	62	61	51	51	51	52
4:30 PM	45	53	52	55	55	55	55	56	55	56	44	57	54	55	57	60	61	61	63	62	61	60	61	61	51	51	51	52
4:45 PM	46	53	52	55	55	55	55	56	55	56	43	57	54	55	57	60	61	61	63	62	61	61	62	61	51	51	51	52
5:00 PM	46	53	52	55	55	55	55	56	55	56	44	57	54	55	58	60	61	61	64	62	61	60	61	61	51	50	51	52
5:15 PM	45	53	53	55	55	55	55	56	55	54	43	57	54	55	57	60	61	61	64	62	61	60	61	61	51	51	51	52
5:30 PM	45	53	53	55	55	55	55	56	52	52	45	57	55	56	59	61	61	61	64	62	61	61	61	61	51	51	51	52
5:45 PM	47	53	53	55	55	55	55	56	53	52	45	57	55	56	59	61	61	61	64	62	62	61	62	61	51	51	51	52
6:00 PM	54	55	54	56	56	56	56	57	56	57	51	58	56	56	60	61	61	61	64	62	62	61	62	62	51	51	51	52
6:15 PM	55	55	54	56	56	57	57	57	57	57	54	58	56	57	61	62	62	62	64	62	62	62	62	62	52	51	51	52



From VISSIM Model

Node results for ramp terminals are also summarized in **Appendix H**. In the AM, 98% of ramps and intersection approaches have a GEH of less than 5, and the total volume is within 3% for all links. Additionally, the queue length at the westbound terminus of the REL at Twiggs St is nearly one mile which is consistent with observations from the City of Tampa Traffic Management Center. In the PM, all ramps and intersection approaches have a GEH of less than 5, and the total volume is within 1% for all links.

Lastly, Highway Capacity Manual (HCM) levels of service are summarized by segment as shown in **Appendix I**. These results were not used for the calibration effort but provided a snapshot of the relative density along the corridor. In the AM, the westbound local lanes generally operate at level of service F from Falkenburg Rd to the 50th St off-ramp. The rest of the corridor operates at level of service C/D. The eastbound lanes operate at level of service A/B. In the PM peak hour, the westbound local lanes operate at level of service B/C. The eastbound local lanes are near capacity with level of service E just upstream of the local lane to REL ramp at the I-4 Connector. The rest of the corridor largely operates at level of service B-D.

Conclusion

This report summarizes the model review, validation check, and re-calibration effort that was conducted for the East Selmon PD&E Study. New data could not be collected for this task, namely field observations and travel time runs, due to the COVID-19 pandemic. As a result, it was assumed that the data collected in 2016/2017 was still valid. Using enhanced visualization techniques to assess the location of bottlenecks, opportunities to improve the model representation of existing traffic operations were identified. An extensive re-calibration process was performed, identifying a series of changes to driver behavior parameters that replicated field-measured data within allowable tolerances. These improvements to the model will be carried forward to future year analyses, improving the ability to assess alternatives in critical sections of the corridor.

Westbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH	Calibration Targets			
						GEH	Flow < 700 vph	Flow 700-2,700 vph	Flow > 2,700 vph
						<5	±100 vph	±15%	±400 vph
Local Lanes									
I-75 to Falkenburg Rd	3,175	3,133	-42	1%	0.7	YES	-	-	YES
Falkenburg Rd to US-301	3,776	3,711	-65	2%	1.1	YES	-	-	YES
Between US-301 Ramps	3,196	3,105	-91	3%	1.6	YES	-	-	YES
US-301 to REL	3,907	3,657	-250	6%	4.1	YES	-	-	YES
Between REL Ramps	4,536	4,273	-263	6%	4.0	YES	-	-	YES
REL to 78th St	3,659	3,433	-226	6%	3.8	YES	-	-	YES
78th St to 50th St	3,971	3,683	-288	7%	4.7	YES	-	-	YES
Between 50th St Ramps	3,718	3,420	-298	8%	5.0	YES	-	-	YES
50th St to I-4	4,307	3,981	-326	8%	5.1	NO	-	-	YES
I-4 Off to 22nd St Off	3,741	3,435	-306	8%	5.1	NO	-	-	YES
22nd St Off to I-4 On	3,521	3,233	-288	8%	5.0	YES	-	-	YES
I-4 On to 22nd St On	4,294	3,998	-296	7%	4.6	YES	-	-	YES
22nd St to Kennedy Blvd	4,770	4,465	-305	6%	4.5	YES	-	-	YES
Kennedy Blvd to Brorein St	3,740	3,528	-212	6%	3.5	YES	-	-	YES
Between Brorein St Ramps	2,822	2,654	-168	6%	3.2	YES	-	-	YES
Selmon Continue West	3,107	2,866	-241	8%	4.4	YES	-	-	YES
Reversible Express Lanes									
From Brandon	2,637	2,622	-15	1%	0.3	YES	-	YES	-
LL Off (Ramp 5) to LL On (Ramp 3)	2,008	2,072	64	3%	1.4	YES	-	YES	-
LL On (Ramp 3) to Twiggs St	2,885	2,905	20	1%	0.4	YES	-	-	YES
NETWORK TOTAL	**67,770**	**64,173**	**-3,597**	**5%**					

Eastbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH	Calibration Targets			
						GEH	Flow < 700 vph	Flow 700-2,700 vph	Flow > 2,700 vph
						<5	±100 vph	±15%	±400 vph
Local Lanes									
Falkenburg Rd to I-75	1,038	1,010	-28	3%	0.9	YES	-	YES	-
US-301 to Falkenburg Rd	1,704	1,644	-60	4%	1.5	YES	-	YES	-
Between US-301 Ramps	1,348	1,301	-47	3%	1.3	YES	-	YES	-
78th St to US-301	1,785	1,736	-49	3%	1.2	YES	-	YES	-
50th St to 78th St	2,047	2,005	-42	2%	0.9	YES	-	YES	-
Between 50th St Ramps	1,909	1,872	-37	2%	0.8	YES	-	YES	-
I-4 to 50th St	2,167	2,107	-60	3%	1.3	YES	-	YES	-
Between I-4 Ramps	1,230	1,178	-52	4%	1.5	YES	-	YES	-
22nd St to I-4	2,039	1,971	-68	3%	1.5	YES	-	YES	-
Between 22nd St Ramps	1,928	1,861	-67	3%	1.5	YES	-	YES	-
Nebraska Ave to 22nd St	2,116	2,055	-61	3%	1.3	YES	-	YES	-
Brorein St to Nebraska Ave	1,946	1,907	-39	2%	0.9	YES	-	YES	-
Florida Ave to Brorein St	1,741	1,722	-19	1%	0.5	YES	-	YES	-
From Selmon West	2,731	2,743	12	0%	0.2	YES	-	-	YES
NETWORK TOTAL	**25,729**	**25,112**	**-617**	**2%**					

Westbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH	Calibration Targets			
						GEH	Flow < 700 vph	Flow 700-2,700 vph	Flow > 2,700 vph
						<5	±100 vph	±15%	±400 vph
Local Lanes									
I-75 to Falkenburg Rd	1,655	1,619	-36	2%	0.9	YES	-	YES	-
Falkenburg Rd to US-301	2,351	2,311	-40	2%	0.8	YES	-	YES	-
Between US-301 Ramps	2,058	2,023	-35	2%	0.8	YES	-	YES	-
US-301 to 78th St	2,480	2,426	-54	2%	1.1	YES	-	YES	-
78th St to 50th St	2,677	2,625	-52	2%	1.0	YES	-	YES	-
Between 50th St Ramps	2,497	2,442	-55	2%	1.1	YES	-	YES	-
50th St to I-4	2,779	2,712	-67	2%	1.3	YES	-	-	YES
I-4 Off to 22nd St Off	2,227	2,163	-64	3%	1.4	YES	-	YES	-
22nd St Off to I-4 On	2,056	1,993	-63	3%	1.4	YES	-	YES	-
I-4 On to 22nd St On	2,904	2,826	-78	3%	1.5	YES	-	-	YES
22nd St to Kennedy Blvd	3,371	3,282	-89	3%	1.5	YES	-	-	YES
Kennedy Blvd to Brorein St	2,380	2,301	-79	3%	1.6	YES	-	YES	-
Between Brorein St Ramps	2,062	1,993	-69	3%	1.5	YES	-	YES	-
Selmon Continue West	2,412	2,272	-140	6%	2.9	YES	-	YES	-
NETWORK TOTAL	**33,909**	**32,987**	**-922**	**3%**					

Eastbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH	Calibration Targets			
						GEH	Flow < 700 vph	Flow 700-2,700 vph	Flow > 2,700 vph
						<5	±100 vph	±15%	±400 vph
Local Lanes									
Falkenburg Rd to I-75	2,421	2,391	-30	1%	0.6	YES	-	YES	-
US-301 to Falkenburg Rd	3,469	3,420	-49	1%	0.8	YES	-	-	YES
Between US-301 Ramps	2,946	2,909	-37	1%	0.7	YES	-	-	YES
REL to US-301	4,122	3,992	-130	3%	2.0	YES	-	-	YES
Between REL Ramps	4,718	4,668	-50	1%	0.7	YES	-	-	YES
78th St to REL	3,712	3,701	-11	0%	0.2	YES	-	-	YES
50th St to 78th St	3,843	3,824	-19	0%	0.3	YES	-	-	YES
Between 50th St Ramps	3,508	3,497	-11	0%	0.2	YES	-	-	YES
I-4 to 50th St	4,067	4,012	-55	1%	0.9	YES	-	-	YES
REL Off to I-4 On	2,420	2,368	-52	2%	1.1	YES	-	YES	-
I-4 Off to REL Off	4,029	3,902	-127	3%	2.0	YES	-	-	YES
22nd St to I-4	4,937	4,811	-126	3%	1.8	YES	-	-	YES
Between 22nd St Ramps	4,675	4,557	-118	3%	1.7	YES	-	-	YES
Nebraska Ave to 22nd St	4,993	4,884	-109	2%	1.5	YES	-	-	YES
Brorein St to Nebraska Ave	4,570	4,434	-136	3%	2.0	YES	-	-	YES
Florida Ave to Brorein St	3,871	3,752	-119	3%	1.9	YES	-	-	YES
From Selmon West	4,243	4,116	-127	3%	2.0	YES	-	-	YES
Reversible Express Lanes									
To Brandon	2,357	2,308	-49	2%	1.0	YES	-	YES	-
LL Off (Ramp 2) to LL On (Ramp 4)	1,761	1,704	-57	3%	1.4	YES	-	YES	-
LL On (Ramp 1) to LL Off (Ramp 2)	2,767	2,694	-73	3%	1.4	YES	-	-	YES
Twiggs St to LL On (Ramp 2)	1,158	1,142	-16	1%	0.5	YES	-	YES	-
NETWORK TOTAL	**74,587**	**73,086**	**-1,501**	**2%**					

Travel Times by Segment, Local Lanes
AM Peak Hour (7:00-8:00 AM)

From	To	2017 Measured Travel Time (sec)	VISSIM Modeled Travel Time (sec)	Difference (sec)	Percent Difference
Westbound					
Falkenburg Rd	US-301	125	120	-5	-4%
US-301	78th St	239	265	26	11%
78th St	50th St	202	196	-6	-3%
50th St	I-4 Connector	97	90	-7	-7%
I-4 Connector	20th St	39	40	1	3%
20th St	Channelside Dr	46	46	0	0%
Channelside Dr	Kennedy Blvd	35	35	0	0%
Kennedy Blvd	Jefferson St	19	18	-1	-5%
Jefferson St	Florida Ave	16	16	0	0%
Total		**818**	**826**	**8**	**1%**
Eastbound					
Florida Ave	Jefferson St	16	15	-1	-6%
Jefferson St	Kennedy Blvd	18	19	1	6%
Kennedy Blvd	Channelside Dr	32	32	0	0%
Channelside Dr	20th St	44	44	0	0%
20th St	I-4 Connector	39	38	-1	-3%
I-4 Connector	50th St	86	94	8	9%
50th St	78th St	112	116	4	4%
78th St	US-301	103	103	0	0%
US-301	Falkenburg Rd	62	55	-7	-11%
Total		**512**	**516**	**4**	**1%**

Travel Times by Segment, REL Lanes
AM Peak Hour (7:00-8:00 AM)

From	To	Free Flow Travel Time (sec)	VISSIM Modeled Travel Time (sec)	Difference (sec)	Percent Difference
Westbound REL					
Falkenburg Rd	US-301	45	46	1	2%
US-301	78th St	102	101	-1	-1%
78th St	50th St	111	113	2	2%
50th St	I-4 Connector	84	86	2	2%
I-4 Connector	20th St	35	36	1	3%
20th St	Channelside Dr	39	114	75	192%
Channelside Dr	Twiggs St	31	141	110	355%
Total		**447**	**637**	**190**	**43%**

Travel Times by Segment, Local Lanes
PM Peak Hour (4:30-5:30 PM)

From	To	2017 Measured Travel Time (sec)	VISSIM Modeled Travel Time (sec)	Difference (sec)	Percent Difference
Westbound					
Falkenburg Rd	US-301	70	52	-18	-26%
US-301	78th St	102	106	4	4%
78th St	50th St	115	119	4	3%
50th St	I-4 Connector	90	87	-3	-3%
I-4 Connector	20th St	38	39	1	3%
20th St	Channelside Dr	44	45	1	2%
Channelside Dr	Kennedy Blvd	33	34	1	3%
Kennedy Blvd	Jefferson St	18	18	0	0%
Jefferson St	Florida Ave	15	15	0	0%
Total		**525**	**515**	**-10**	**-2%**
Eastbound					
Florida Ave	Jefferson St	16	16	0	0%
Jefferson St	Kennedy Blvd	20	20	0	0%
Kennedy Blvd	Channelside Dr	34	34	0	0%
Channelside Dr	20th St	48	46	-2	-4%
20th St	I-4 Connector	44	51	7	16%
I-4 Connector	50th St	87	98	11	13%
50th St	78th St	122	122	0	0%
78th St	US-301	114	106	-8	-7%
US-301	Falkenburg Rd	64	57	-7	-11%
Total		**549**	**550**	**1**	**0%**

Travel Times by Segment, REL Lanes
PM Peak Hour (4:30-5:30 PM)

From	To	Free Flow Travel Time (sec)	VISSIM Modeled Travel Time (sec)	Difference (sec)	Percent Difference
Eastbound REL					
Twiggs St	Channelside Dr	31	33	2	6%
Channelside Dr	20th St	39	47	8	21%
20th St	I-4 Connector	35	37	2	6%
I-4 Connector	50th St	84	89	5	6%
50th St	78th St	111	122	11	10%
78th St	US-301	102	114	12	12%
US-301	Falkenburg Rd	45	51	6	13%
Total		**447**	**493**	**46**	**10%**

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
52	52	52	51	51	49	47	44	50	52	52	52
55	54	54	53	51	44	31	31	38	54	54	54
55	54	54	51	49	37	24	25	35	52	54	54
54	52	52	47	43	32	21	22	32	45	52	52
53	51	50	46	42	28	20	21	31	40	49	51
61	61	61	60	44	18	16	17	24	36	53	56
62	61	61	59	35	17	17	18	21	32	50	53
63	62	61	52	22	16	16	17	18	28	40	48
61	57	50	34	21	21	21	20	21	27	35	43
58	52	46	37	36	38	39	36	34	36	39	43
63	62	61	60	59	53	47	35	32	31	37	43
62	61	61	58	49	38	25	22	21	21	28	35
61	59	51	49	35	28	24	24	24	24	26	33
60	57	54	51	46	41	37	36	35	35	36	39
59	57	53	48	46	45	44	44	44	44	44	45
64	63	63	62	62	62	62	62	62	62	62	62
62	62	61	61	61	61	61	61	61	61	61	61
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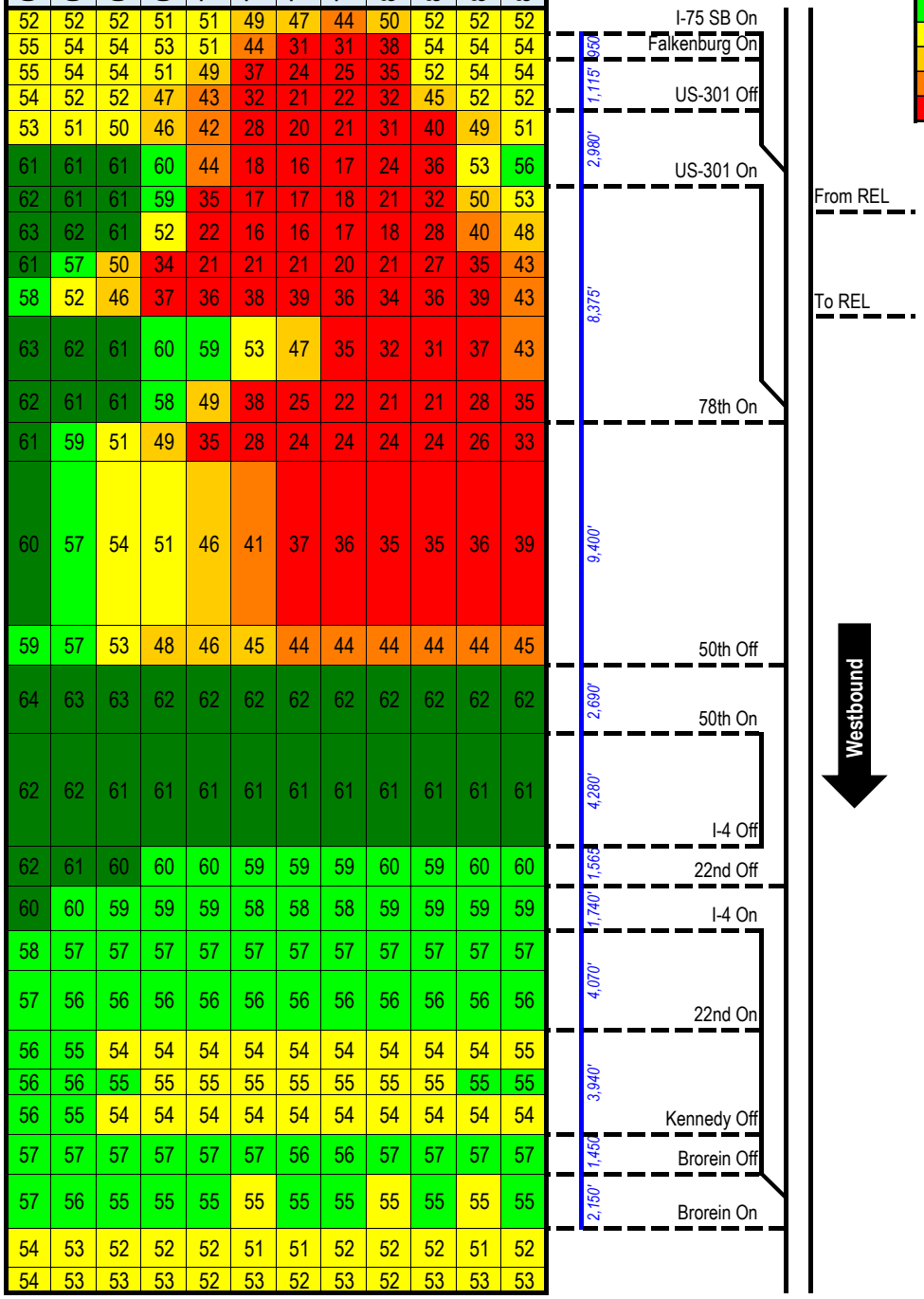
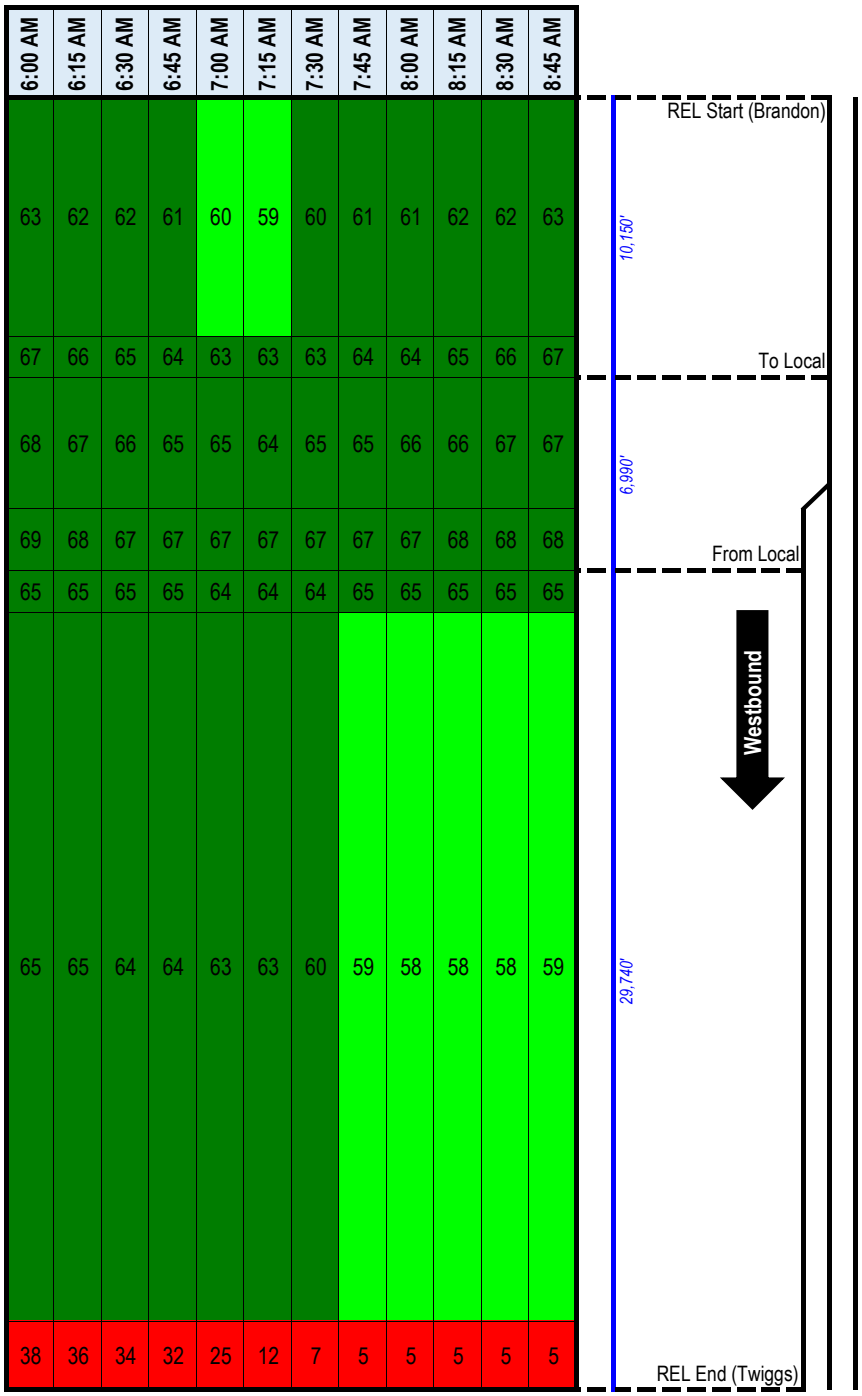
58	57	57	57	57	57	57	57	57	57	57	57
57	56	56	56	56	56	56	56	56	56	56	56
56	55	54	54	54	54	54	54	54	54	54	55
56	56	55	55	55	55	55	55	55	55	55	55
56	55	54	54	54	54	54	54	54	54	54	54
57	57	57	57	57	57	56	56	57	57	57	57
57	56	55	55	55	55	55	55	55	55	55	55
54	53	52	52	52	51	51	52	52	52	51	52
54	53	53	53	52	53	52	53	52	53	53	53

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40



Westbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)



Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40

Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
52	52	52	52	52	52	52	52	52	52	52	52
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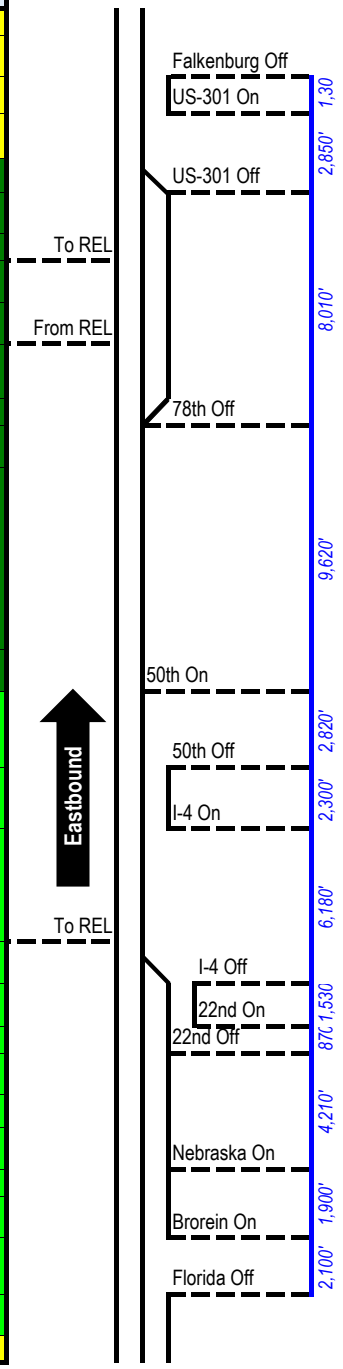
58	58	57	57	56	56	56	55	55	56	56	56
57	57	57	56	56	55	55	52	53	54	54	55

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40



Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
54	54	54	54	54	54	54	54	54	54	54	54
56	56	56	57	56	56	57	56	56	57	57	57
58	58	58	58	58	58	58	58	58	58	58	58
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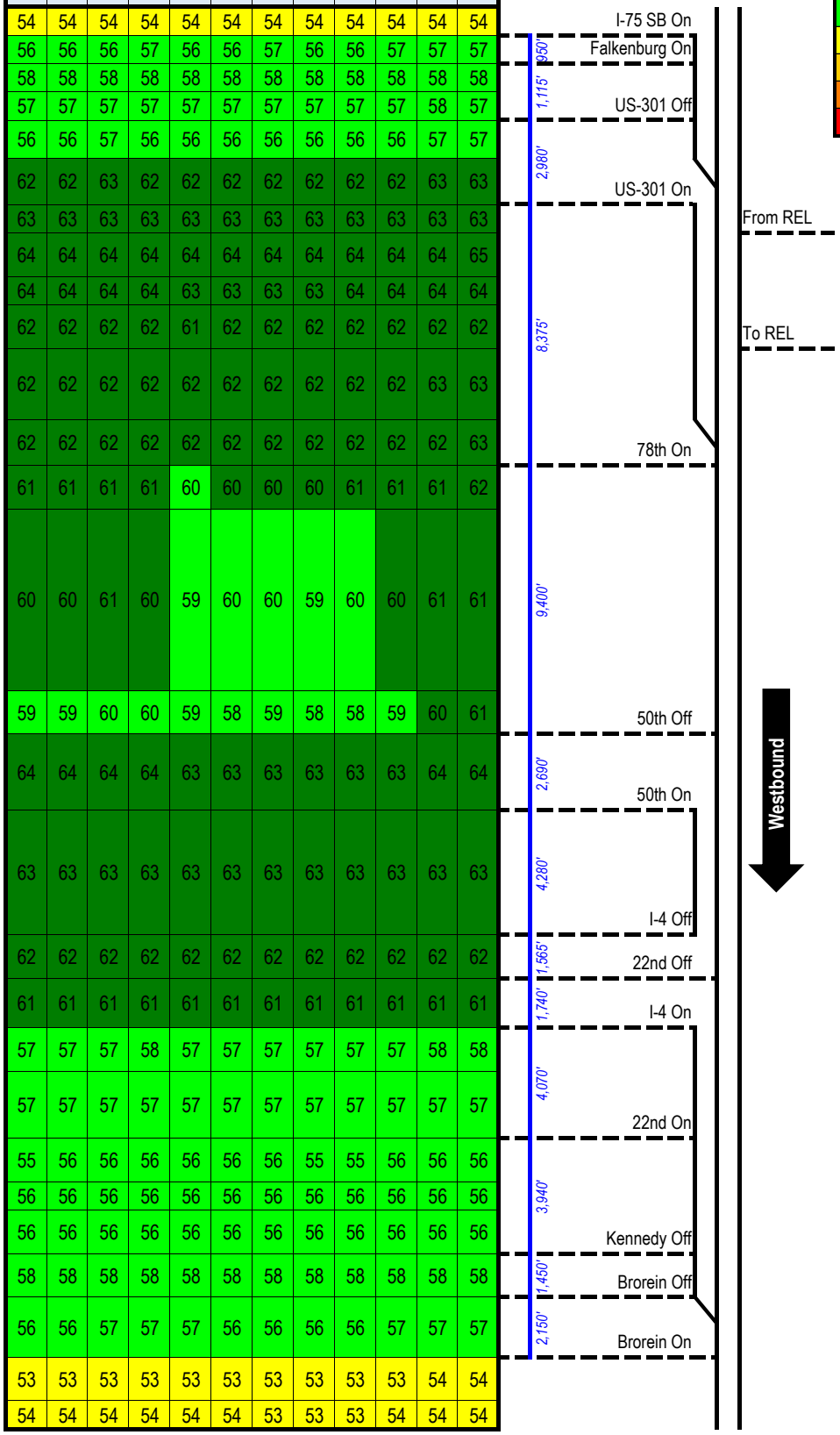
53	53	53	53	53	53	53	53	53	53	54	54
54	54	54	54	54	54	53	53	53	54	54	54

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40



Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
52	52	52	52	52	52	52	52	52	52	52	52
51	51	51	51	51	51	51	51	51	51	51	51
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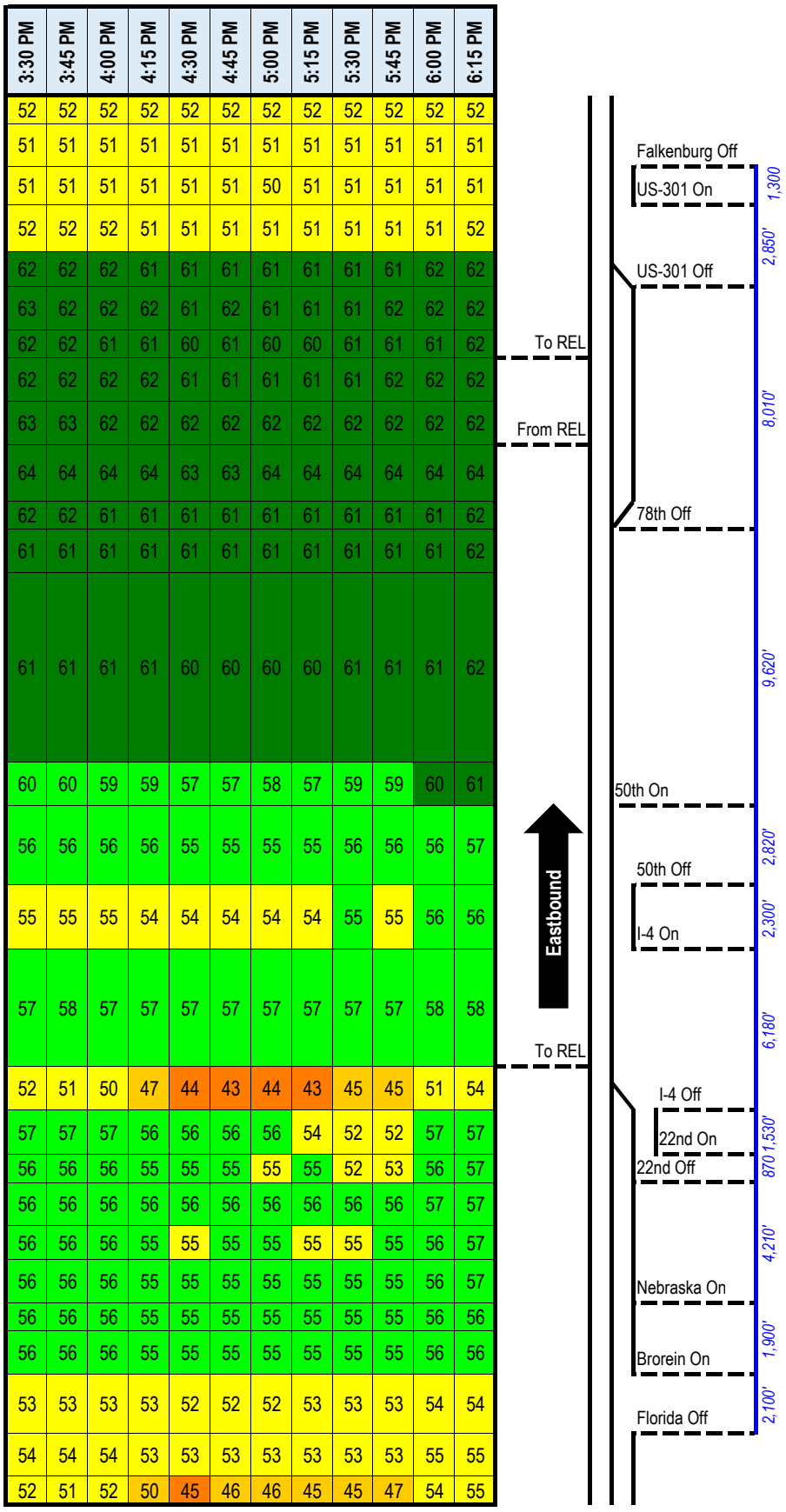
64	64	64	64	63	63	64	64	64	64	64	64
62	62	61	61	61	61	61	61	61	61	61	62
61	61	61	61	61	61	61	61	61	61	61	62
61	61	61	61	60	60	60	60	61	61	61	62
60	60	59	59	57	57	58	57	59	59	60	61
56	56	56	56	55	55	55	55	56	56	56	57
55	55	55	54	54	54	54	54	55	55	56	56
57	58	57	57	57	57	57	57	57	57	58	58
52	51	50	47	44	43	44	43	45	45	51	54
57	57	57	56	56	56	56	54	52	52	57	57
56	56	56	55	55	55	55	55	52	53	56	57
56	56	56	56	56	56	56	56	56	56	57	57
56	56	56	55	55	55	55	55	55	55	56	57
56	56	56	55	55	55	55	55	55	55	56	57
56	56	56	55	55	55	55	55	55	55	56	56
56	56	56	55	55	55	55	55	55	55	56	56
53	53	53	53	52	52	52	53	53	53	54	54
54	54	54	53	53	53	53	53	53	53	55	55
52	51	52	50	45	46	46	45	45	47	54	55

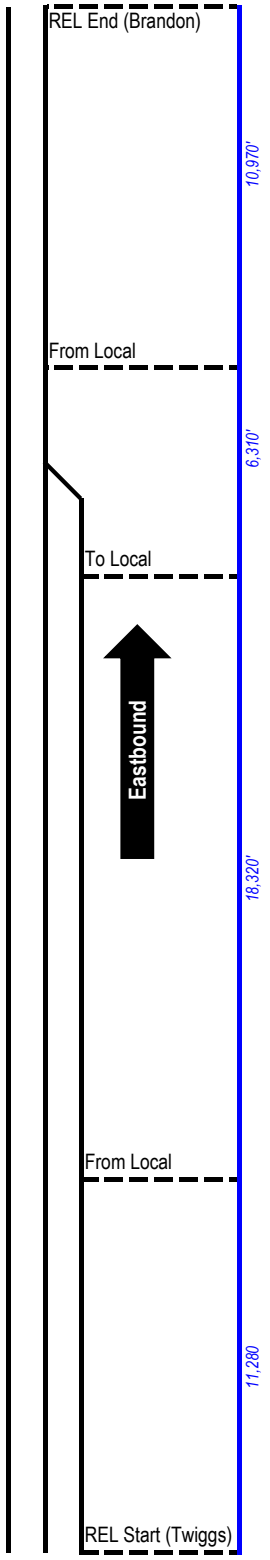
Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40



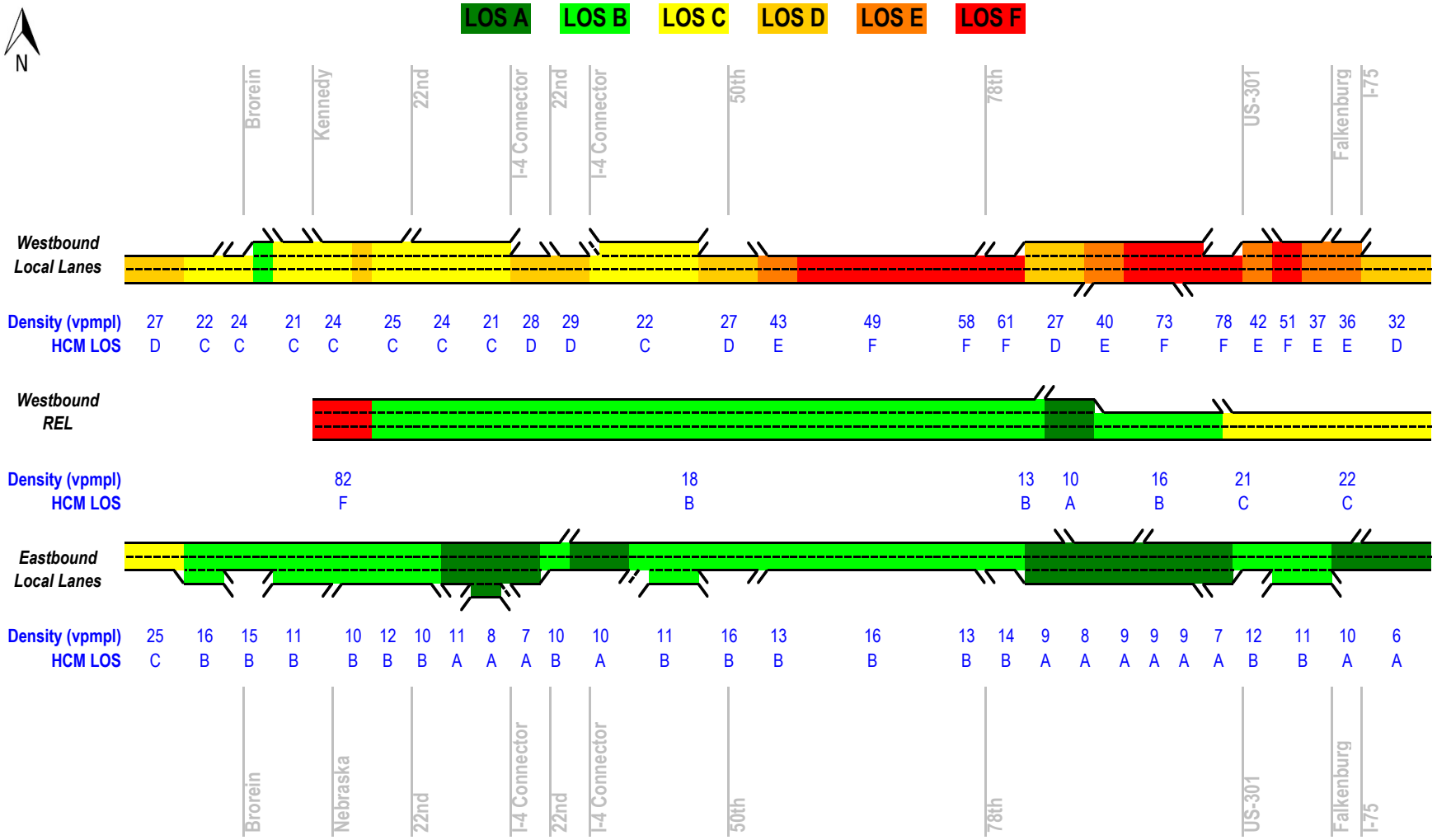
Eastbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
55	55	55	54	54	54	54	54	54	54	54	55
59	58	58	58	58	57	57	57	58	57	58	59
59	58	58	58	58	58	58	58	58	58	58	59
59	59	59	59	59	58	58	58	59	58	59	59
59	59	58	58	57	57	56	56	56	57	57	58
60	60	60	60	59	59	59	59	59	59	59	60
60	60	60	60	59	59	59	59	59	59	60	60
59	59	59	59	59	59	59	59	59	59	59	59
36	36	36	36	36	36	36	36	36	36	36	36

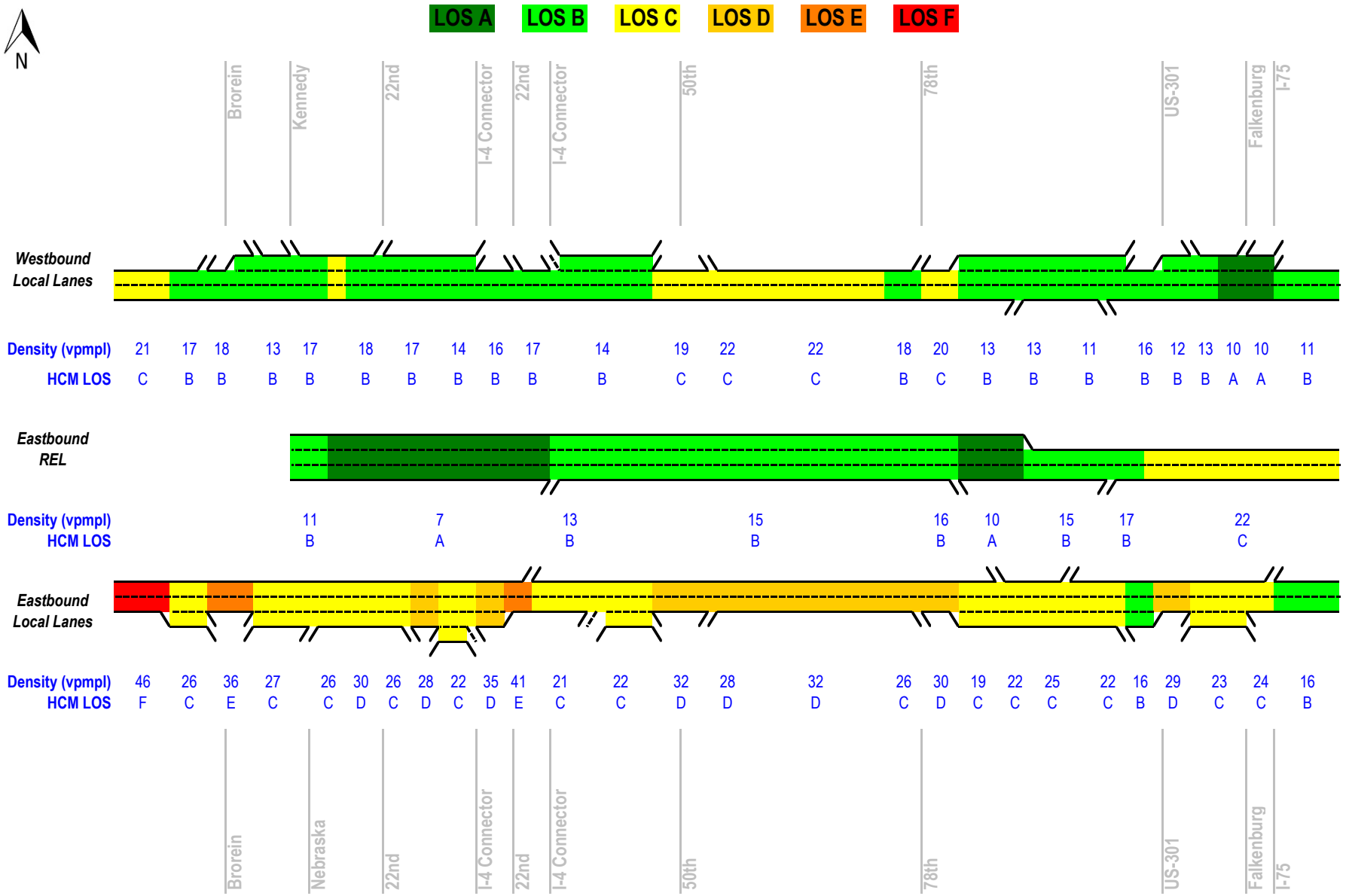
Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40



Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)



Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)



Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

Node ID	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
244	EB Morgan Off	Eastbound	Thru	249	247	-2	-1%	249	247	2	1%	0.1									
244	EB Florida Off	Eastbound	Right	741	756	15	2%	741	756	-15	-2%	0.5									
245	WB Brorein On	Westbound	Thru	285	218	-67	-24%	285	218	67	24%	4.2									
200	EB Jefferson On	Eastbound	Thru	205	196	-9	-4%	205	196	9	4%	0.6									
207	WB Brorein Off	Westbound	Thru	918	875	-43	-5%	918	875	43	5%	1.4									
204	EB Nebraska On	Eastbound	Thru	170	160	-10	-6%	170	160	10	6%	0.8									
243	WB Kennedy Off	Northbound	Thru	1,030	938	-92	-9%	1,030	938	92	9%	2.9									
205	22nd St and Selmon Expressway	Eastbound	Left	66	67	1	2%	188	185	3	2%	0.2	Signal	14.1	B	11	B	3	A	4.2	93.2
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	122	118	-4	-3%						Signal	8.7	A					7.1	113.4
		Westbound	Left	26	25	-1	-4%	264	255	9	3%	0.6	Signal	21.9	C	10	B			3.8	74.0
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	238	230	-8	-3%						Signal	9.1	A					18.8	159.6
		Northbound	Left	336	328	-8	-2%	1,696	1,688	8	0%	0.2	Signal	8.1	A	2	A			16.0	256.3
			Thru	1,346	1,346	0	0%						Signal	0.5	A					0.0	0.0
			Right	14	14	0	0%						Signal	2.9	A					0.1	22.7
		Southbound	Left	97	100	3	3%	981	988	-7	-1%	0.2	Signal	1.8	A	1	A			0.0	4.2
			Thru	744	752	8	1%						Signal	0.2	A					0.0	0.0
			Right	140	136	-4	-3%						Signal	2.5	A					0.5	55.3
217	EB Selmon to I-4	Eastbound	Thru	809	783	-26	-3%	809	783	26	3%	0.9									
223	WB 22nd Off	Westbound	Left	220	210	-10	-5%	220	210	10	5%	0.7									
223	WB I-4 22nd Off	Westbound	Right	44	46	2	5%	44	46	-2	-5%	0.3									
222	WB I-4 to Selmon	Westbound	Thru	773	758	-15	-2%	773	758	15	2%	0.5									
220	WB Selmon to I-4	Westbound	Thru	566	537	-29	-5%	566	537	29	5%	1.2									
219	EB I-4 to EB Selmon	Eastbound	Thru	937	944	7	1%	937	944	-7	-1%	0.2									
201	50th St and Selmon Expressway	Eastbound	Left	94	89	-5	-5%	258	245	13	5%	0.8	Signal	49.7	D	19	B	13	B	21.9	174.0
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	164	156	-8	-5%						Signal	1.9	A					0.0	0.0
		Westbound	Left	25	23	-2	-8%	253	229	24	9%	1.5	Signal	122.3	F	74	E			5.9	65.1
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	228	206	-22	-10%						Signal	69.1	E					0.0	0.0
		Northbound	Left	478	457	-21	-4%	1,735	1,706	29	2%	0.7	Signal	12.3	B	8	A			14.9	266.5
			Thru	1,223	1,216	-7	-1%						Signal	6.3	A					16.5	222.8
			Right	34	33	-1	-3%						Signal	2.2	A					0.0	13.1
		Southbound	Left	104	108	4	4%	936	928	8	1%	0.3	Signal	10.1	B	5	A			0.8	72.8
			Thru	721	713	-8	-1%						Signal	4.6	A					3.2	114.1
			Right	111	107	-4	-4%						Signal	3.6	A					0.7	72.5
209	78th St and EB Off Selmon Expressway	Eastbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-	1	A	-	-
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	0	0	0	-						Signal	-	-					-	-
		Westbound	Left	66	64	-2	-3%	262	253	9	3%	0.6	Signal	10.7	B	3	A			3.7	77.0
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	196	189	-7	-4%						Signal	0.7	A					0.0	0.0
		Northbound	Left	0	0	0	-	1,145	1,138	7	1%	0.2	Signal	-	-	0	A			-	-
			Thru	1,145	1,138	-7	-1%						Signal	0.4	A					0.0	0.0
			Right	0	0	0	-						Signal	-	-					-	-
		Southbound	Left	0	0	0	-	382	401	-19	-5%	1.0	Signal	-	-	0	A			-	-
			Thru	382	401	19	5%						Signal	0.1	A					0.0	0.0
			Right	0	0	0	-						Signal	-	-					-	-
216	WB 78th Direct On	Westbound	Left	155	166	11	7%	155	166	-11	-7%	0.9									
216	WB 78th Loop On	Westbound	Right	157	153	-4	-3%	157	153	4	3%	0.3									

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

Node ID	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay						Queue	
														Movement		Approach		Intersection		Movement
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
241	US-301 and EB Selmon Expressway	Eastbound	Left	137	127	-10	-7%	437	421	16	4%	0.8	Signal	85.4	F	26	C	14	B	68.7	283.6
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	300	294	-6	-2%						Signal	1.1	A					0.0	0.0
		Westbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-			-	-
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	0	0	0	-						Signal	-	-					-	-
		Northbound	Left	0	0	0	-	2,554	2,512	42	2%	0.8	Signal	-	-	16	B			-	-
			Thru	2,303	2,271	-32	-1%						Signal	17.7	B					155.1	980.2
			Right	251	241	-10	-4%						Signal	2.4	A					0.2	54.8
		Southbound	Left	105	105	0	0%	1,088	1,086	2	0%	0.1	Signal	14.2	B	3	A			2.4	137.1
			Thru	983	981	-2	0%						Signal	1.9	A					3.9	62.1
			Right	0	0	0	-						Signal	-	-					-	-
242	US-301 and WB Selmon Expressway	Eastbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-	17	B	-	-
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	0	0	0	-						Signal	-	-					-	-
		Westbound	Left	84	79	-5	-6%	580	574	6	1%	0.2	Signal	88.2	F	18	B			48.5	327.5
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	496	495	-1	0%						Signal	6.6	A					11.4	334.9
		Northbound	Left	590	573	-17	-3%	2,440	2,396	44	2%	0.9	Signal	11.0	B	3	A			29.1	302.3
			Thru	1,850	1,823	-27	-1%						Signal	1.0	A					1.2	63.8
			Right	0	0	0	-						Signal	-	-					-	-
		Southbound	Left	0	0	0	-	1,125	1,122	3	0%	0.1	Signal	-	-	45	D			-	-
			Thru	1,004	1,006	2	0%						Signal	49.2	D					127.5	467.6
			Right	121	116	-5	-4%						Signal	4.0	A					1.7	89.4
211	Falkenburg Rd and Selmon Expressway	Eastbound	Left	238	231	-7	-3%	666	635	31	5%	1.2	Signal	38.6	D	18	B	11	B	33.7	174.3
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	428	404	-24	-6%						Signal	6.4	A					6.2	88.8
		Westbound	Left	0	0	0	-	0	0	0	-	-	Signal	17.7	B	-	-			109.1	691.1
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	0	0	0	-						Signal	3.2	A					0.0	0.0
		Northbound	Left	423	422	-1	0%	1,592	1,585	7	0%	0.2	Signal	10.4	B	7	A			8.9	216.1
			Thru	1,169	1,163	-6	-1%						Signal	5.5	A					16.4	242.1
			Right	0	0	0	-						Signal	-	-					-	-
		Southbound	Left	0	0	0	-	664	675	-11	-2%	0.4	Signal	-	-	14	B			-	-
			Thru	486	505	19	4%						Signal	18.3	B					28.3	214.0
			Right	178	170	-8	-4%						Signal	2.7	A					0.4	49.1
211	NB I-75 to WB Selmon	Westbound	Left	2,720	2,676	-44	-2%	2,720	2,676	44	2%	0.8									
211	SB I-75 to WB Selmon	Westbound	Right	455	451	-4	-1%	455	451	4	1%	0.2									
212	EB Selmon to NB I-75	Eastbound	Left	346	335	-11	-3%	346	335	11	3%	0.6									
212	EB Selmon to SB I-75	Eastbound	Right	692	675	-17	-2%	692	675	17	2%	0.7									
6	Twiggs St and Meridian Ave	Eastbound	Left	0	0	0	-	530	511	19	4%	0.8	Signal	-	-	63	E	148	F	46.4	250.2
			Thru	413	401	-12	-3%						Signal	64.7	E					46.4	250.2
			Right	117	110	-7	-6%						Signal	58.1	E					52.4	264.6
		Westbound	Left	47	46	-1	-2%	504	516	-12	-2%	0.5	Signal	33.5	C	27	C			57.4	347.6
			Thru	457	470	13	3%						Signal	26.4	C					57.4	347.6
			Right	0	0	0	-						Signal	-	-					70.7	372.0
		Northbound	Left	58	52	-6	-10%	98	89	9	9%	0.9	Signal	74.4	E	46	D			18.0	96.3
			Thru	0	0	0	-						Signal	-	-					18.0	96.3
			Right	40	37	-3	-8%						Signal	5.7	A					34.9	131.6
		Southbound	Left	121	120	-1	-1%	2,885	2,597	288	10%	5.5	Signal	56.3	E	193	F			2,892.9	5,217.6
			Thru	1,196	1,165	-31	-3%						Signal	58.1	E					2,892.9	5,217.6
			Right	1,568	1,312	-256	-16%						Signal	324.4	F					2,755.3	5,073.5
235	WB REL to Selmon (Ramp 5)	Westbound	Thru	629	553	-76	-12%	629	553	76	12%	3.1									
230	WB Selmon to REL (Ramp 3)	Westbound	Thru	877	835	-42	-5%	877	835	42	5%	1.4									
NETWORK TOTAL								**36,241**	**35,247**	**994**	**3%**										

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (4:30-5:30 PM)

Node ID	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay						Queue	
														Movement		Approach		Intersection		Movement
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
244	EB Morgan Off	Eastbound	Thru	104	107	3	3%	104	107	-3	-3%	0.3									
244	EB Florida Off	Eastbound	Right	268	259	-9	-3%	268	259	9	3%	0.6									
245	WB Brorein On	Westbound	Thru	350	286	-64	-18%	350	286	64	18%	3.6									
200	EB Jefferson On	Eastbound	Thru	699	694	-5	-1%	699	694	5	1%	0.2									
207	WB Brorein Off	Westbound	Thru	318	312	-6	-2%	318	312	6	2%	0.3									
204	EB Nebraska On	Eastbound	Thru	423	442	19	4%	423	442	-19	-4%	0.9									
243	WB Kennedy Off	Northbound	Thru	991	979	-12	-1%	991	979	12	1%	0.4									
205	22nd St and Selmon Expressway	Eastbound	Left	124	125	1	1%	318	323	-5	-2%	0.3	Signal	19.2	B	16	B	4	A	12.9	121.7
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	194	198	4	2%						Signal	13.4	B					18.8	181.9
		Westbound	Left	18	18	0	0%	203	205	-2	-1%	0.1	Signal	19.1	B	10	A			2.2	79.5
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	185	187	2	1%						Signal	8.6	A					14.0	146.3
		Northbound	Left	191	185	-6	-3%	1,020	997	23	2%	0.7	Signal	16.7	B	4	A			32.5	244.9
			Thru	787	771	-16	-2%						Signal	0.2	A					0.0	0.0
			Right	42	41	-1	-2%						Signal	5.6	A					0.7	48.8
		Southbound	Left	220	214	-6	-3%	1,902	1,883	19	1%	0.4	Signal	3.3	A	1	A			0.0	20.7
			Thru	1,406	1,399	-7	0%						Signal	0.3	A					0.0	0.0
			Right	276	270	-6	-2%						Signal	2.1	A					0.4	74.9
217	EB Selmon to I-4	Eastbound	Thru	908	866	-42	-5%	908	866	42	5%	1.4									
223	WB 22nd Off	Westbound	Left	171	171	0	0%	171	171	0	0%	0.0									
223	WB I-4 22nd Off	Westbound	Right	32	34	2	6%	32	34	-2	-6%	0.3									
222	WB I-4 to Selmon	Westbound	Thru	848	834	-14	-2%	848	834	14	2%	0.5									
220	WB Selmon to I-4	Westbound	Thru	552	542	-10	-2%	552	542	10	2%	0.4									
219	EB I-4 to EB Selmon	Eastbound	Thru	1,647	1,672	25	2%	1,647	1,672	-25	-2%	0.6									
201	50th St and Selmon Expressway	Eastbound	Left	96	91	-5	-5%	559	543	16	3%	0.7	Signal	49.7	D	12	B	9	A	21.2	151.3
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	463	452	-11	-2%						Signal	4.8	A					0.0	2.7
		Westbound	Left	28	30	2	7%	180	174	6	3%	0.5	Signal	62.4	E	19	B			7.6	83.1
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	152	144	-8	-5%						Signal	10.2	B					0.0	0.0
		Northbound	Left	171	165	-6	-4%	1,080	1,069	11	1%	0.3	Signal	16.9	B	9	A			5.8	136.8
			Thru	861	854	-7	-1%						Signal	8.1	A					16.8	181.5
			Right	48	50	2	4%						Signal	2.7	A					0.1	31.1
		Southbound	Left	287	285	-2	-1%	1,843	1,807	36	2%	0.8	Signal	9.2	A	7	A			2.5	121.0
			Thru	1,445	1,414	-31	-2%						Signal	6.4	A					9.2	205.3
			Right	111	108	-3	-3%						Signal	2.4	A					0.1	32.5
209	78th St and EB Off Selmon Expressway	Eastbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-	1	A	-	-
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	0	0	0	-						Signal	-	-					-	-
		Westbound	Left	70	64	-6	-9%	131	128	3	2%	0.3	Signal	9.5	A	5	A			3.3	75.6
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	61	64	3	5%						Signal	0.5	A					0.0	0.0
		Northbound	Left	0	0	0	-	616	615	1	0%	0.0	Signal	-	-	0	A			-	-
			Thru	616	615	-1	0%						Signal	0.2	A					0.0	0.0
			Right	0	0	0	-						Signal	-	-					-	-
		Southbound	Left	0	0	0	-	819	830	-11	-1%	0.4	Signal	-	-	0	A			-	-
			Thru	819	830	11	1%						Signal	0.2	A					0.0	0.0
			Right	0	0	0	-						Signal	-	-					-	-
216	WB 78th Direct On	Westbound	Left	126	132	6	5%	126	132	-6	-5%	0.5									
216	WB 78th Loop On	Westbound	Right	71	70	-1	-1%	71	70	1	1%	0.1									

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (4:30-5:30 PM)

Node ID	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay						Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
241	US-301 and EB Selmon Expressway	Eastbound	Left	96	90	-6	-6%	1,176	1,162	14	1%	0.4	Signal	84.1	F	10	A	9	A	48.1	222.9
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	1,080	1,072	-8	-1%						Signal	3.5	A					0.0	5.2
		Westbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-			-	-
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	0	0	0	-						Signal	-	-					-	-
		Northbound	Left	0	0	0	-	1,462	1,420	42	3%	1.1	Signal	-	-	19	B			-	-
			Thru	1,209	1,173	-36	-3%						Signal	22.7	C					74.6	429.1
			Right	253	247	-6	-2%						Signal	2.2	A					1.0	99.7
		Southbound	Left	270	266	-4	-1%	2,240	2,251	-11	0%	0.2	Signal	9.3	A	3	A			5.9	240.7
			Thru	1,970	1,985	15	1%						Signal	2.1	A					4.4	79.9
			Right	0	0	0	-						Signal	-	-					-	-
242	US-301 and WB Selmon Expressway	Eastbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-	28	C	-	-
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	0	0	0	-						Signal	-	-					-	-
		Westbound	Left	92	88	-4	-4%	293	286	7	2%	0.4	Signal	91.4	F	30	C			55.1	319.9
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	201	198	-3	-1%						Signal	2.6	A					0.4	69.4
		Northbound	Left	292	286	-6	-2%	1,305	1,264	41	3%	1.1	Signal	22.3	C	5	A			23.6	194.8
			Thru	1,013	978	-35	-3%						Signal	0.6	A					0.0	0.0
			Right	0	0	0	-						Signal	-	-					-	-
		Southbound	Left	0	0	0	-	2,278	2,289	-11	0%	0.2	Signal	-	-	40	D			-	-
			Thru	2,148	2,164	16	1%						Signal	42.5	D					307.8	1,087.9
			Right	130	125	-5	-4%						Signal	4.8	A					0.5	52.9
211	Falkenburg Rd and Selmon Expressway	Eastbound	Left	332	332	0	0%	1,048	1,030	18	2%	0.6	Signal	54.1	D	24	C	24	C	62.7	238.6
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	716	698	-18	-3%						Signal	9.5	A					18.9	155.1
		Westbound	Left	0	0	0	-	0	0	0	-	-	Signal	2.4	A	-	-			0.0	0.0
			Thru	0	0	0	-						Signal	-	-					-	-
			Right	0	0	0	-						Signal	0.9	A					0.0	0.0
		Northbound	Left	451	450	-1	0%	1,019	1,011	8	1%	0.3	Signal	30.1	C	18	B			27.0	346.5
			Thru	568	561	-7	-1%						Signal	8.0	A					16.8	222.0
			Right	0	0	0	-						Signal	-	-					-	-
		Southbound	Left	0	0	0	-	1,553	1,559	-6	0%	0.2	Signal	-	-	28	C			-	-
			Thru	1,308	1,315	7	1%						Signal	32.1	C					178.1	916.2
			Right	245	244	-1	0%						Signal	5.3	A					3.5	147.1
211	NB I-75 to WB Selmon	Westbound	Left	1,225	1,196	-29	-2%	1,225	1,196	29	2%	0.8									
211	SB I-75 to WB Selmon	Westbound	Right	430	424	-6	-1%	430	424	6	1%	0.3									
212	EB Selmon to NB I-75	Eastbound	Left	793	777	-16	-2%	793	777	16	2%	0.6									
212	EB Selmon to SB I-75	Eastbound	Right	1,628	1,612	-16	-1%	1,628	1,612	16	1%	0.4									
6	Twiggs St and Meridian Ave	Eastbound	Left	489	495	6	1%	1,272	1,296	-24	-2%	0.7	Signal	74.9	E	73	E	62	E	219.9	1,318.4
			Thru	641	656	15	2%						Signal	71.6	E					219.9	1,318.4
			Right	142	145	3	2%						Signal	69.8	E					225.7	1,332.8
		Westbound	Left	38	36	-2	-5%	351	354	-3	-1%	0.2	Signal	48.1	D	45	D			68.9	289.1
			Thru	250	253	3	1%						Signal	47.7	D					68.9	289.1
			Right	63	65	2	3%						Signal	33.9	C					86.8	313.5
		Northbound	Left	34	30	-4	-12%	752	727	25	3%	0.9	Signal	54.1	D	53	D			96.6	345.0
			Thru	606	587	-19	-3%						Signal	53.6	D					96.6	345.0
			Right	112	110	-2	-2%						Signal	46.4	D					124.7	380.3
		Southbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-			0.0	0.0
			Thru	0	0	0	-						Signal	-	-					0.0	0.0
			Right	0	0	0	-						Signal	-	-					0.0	0.0
235	WB REL to Selmon (Ramp 5)	Westbound	Thru	0	0	0	-	0	0	0	-	-									
230	WB Selmon to REL (Ramp 3)	Westbound	Thru	0	0	0	-	0	0	0	-	-									
NETWORK TOTAL								**35,004**	**34,632**	**372**	**1%**										

Appendix D: TRAFFIC FORECASTING REPORT

Michael Baker
INTERNATIONAL

We Make a Difference

East Selmon Expressway PD&E Study

Traffic Forecasting Report

Prepared For:
Tampa Hillsborough Expressway Authority

FINAL REPORT
March 23, 2022

Final Report

East Selmon Expressway PD&E
Traffic Forecasting Report

prepared for

Tampa Hillsborough Expressway Authority

prepared by

Michael Baker International

date

March 23, 2022

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APPENDICES

1.0 Introduction

The Kimley-Horn and Michael Baker International (Michael Baker) team are preparing the Project Development and Environment (PD&E) study related to the eastern segment of the Lee Roy Selmon Expressway from I-75 to downtown Tampa. The project study area roads and intersections are in **Figure 1**.

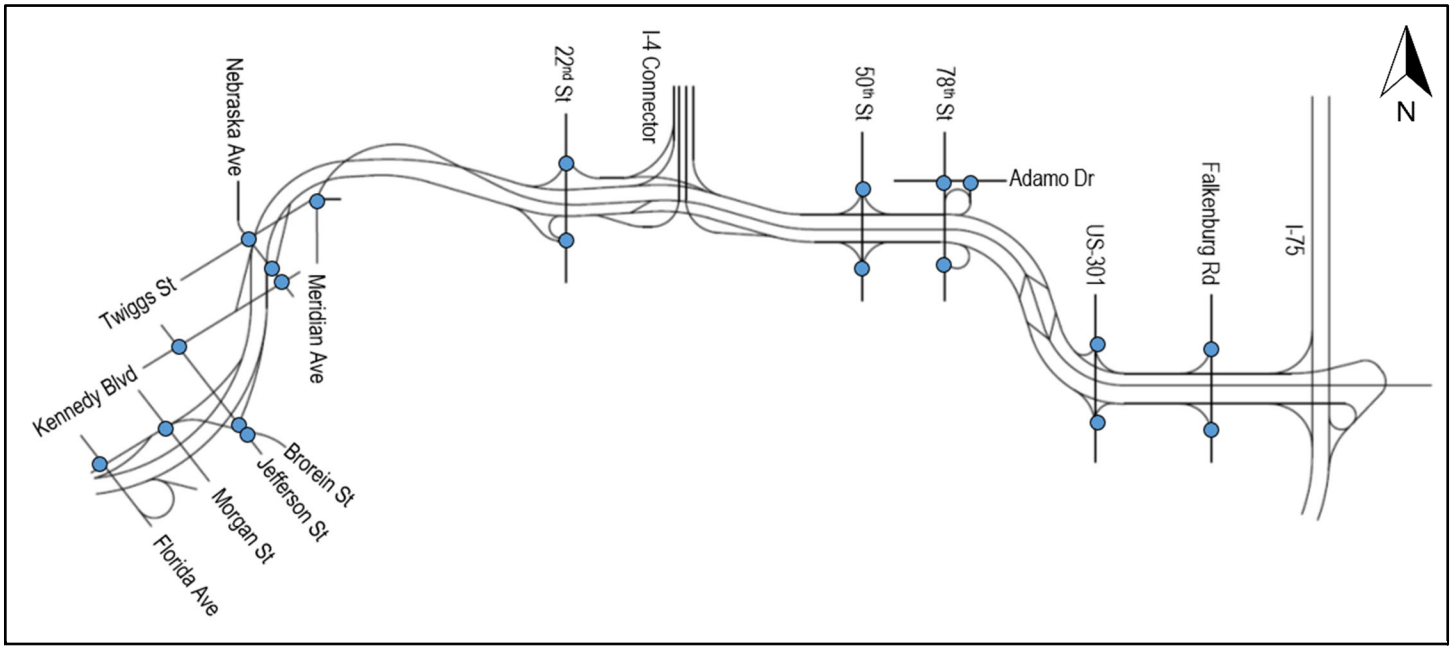


Figure 1. Study Area Roads and Intersections

The Selmon Expressway is a tolled facility owned and operated by the Tampa-Hillsborough Expressway Authority (THEA). Within the project area, drivers may use either the local lanes or the Reversible Express Lanes (REL), which operate in the peak direction of travel (westbound in the AM, eastbound the rest of the day). The local lanes and REL have the same rate.

The project includes widening the local lanes and REL, additional access to and from the REL, and other ramp improvements. Traffic forecasts contained in this report will support design decisions and obtain approvals. These analyses will also be used to refine designs to serve forecast traffic demands. The basis for the traffic forecasts is from the latest version of the Tampa Bay Regional Planning Model (TBRPM v9.2) which was validated for the model subarea. In addition, project-specific model runs were completed as described in the following sections.

1.1 Purpose

This report aims to document the procedure and results for forecasting annual average daily traffic (AADT) and design hour volumes (DHVs) related to the East Selmon Expressway PD&E Study. The model subarea boundary and location are in **Figure 2**. The project corridor extends approximately nine (9) miles from I-75 to downtown Tampa. As shown, the model subarea boundary extends beyond the project corridor boundaries.

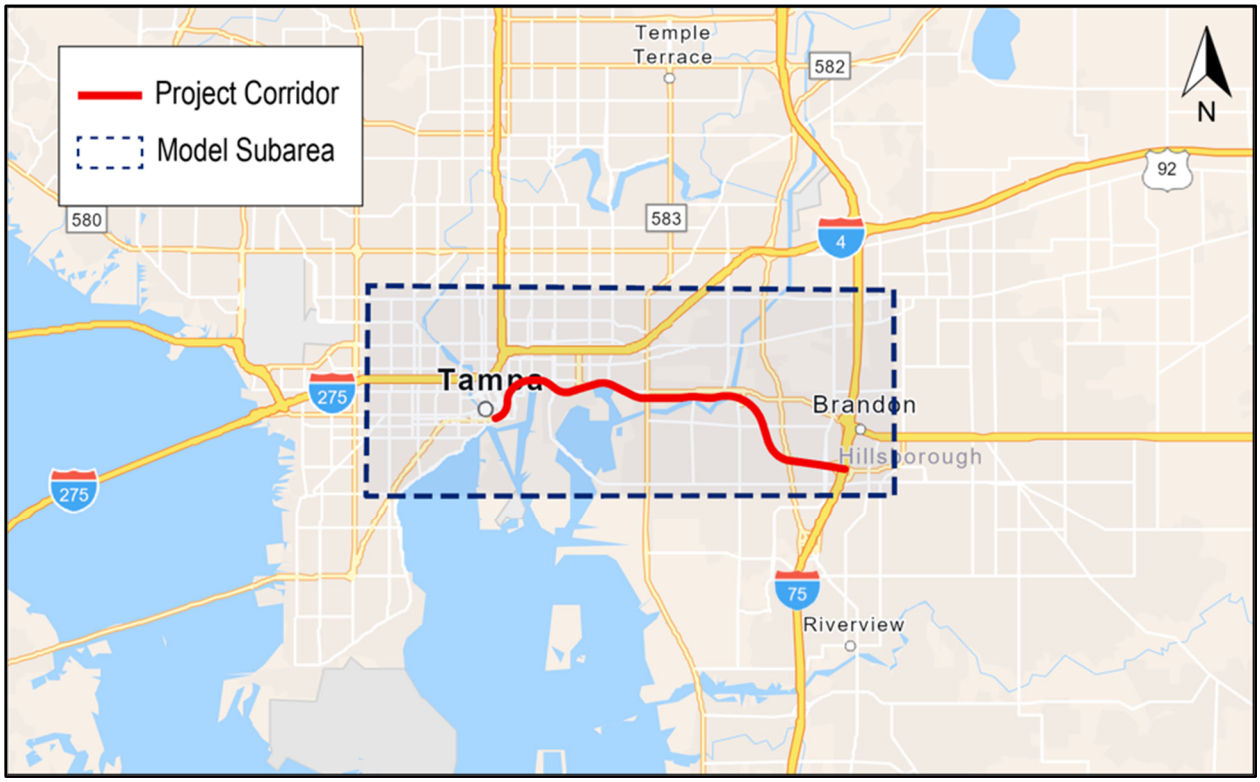


Figure 2. Model Subarea Boundary

1.2 Other Projects

There are three other ongoing PD&E studies on the Selmon Expressway that are related to this project:

1. South Selmon PD&E – Widening of approximately 4.5 miles of the Selmon Expressway from Himes Ave to the Whiting St overpass in downtown Tampa (the western boundary of the East Selmon PD&E).
2. Whiting PD&E – Improve access to downtown Tampa from westbound Selmon Expressway, including modifications to the existing off-ramp to Florida Ave/Channelside Dr and a new off-ramp to Whiting St.
3. Nebraska PD&E – Improvements to the downtown network immediately surrounding the REL terminus at Meridian Ave.

The forecasting efforts for South Selmon and Whiting used the previous version of the TBRPM, and their proposed improvements do not include East Selmon improvements. Therefore the forecasts from these

projects are referenced but not duplicated; however, the proposed improvements have been incorporated into the new TBRPM model used for the East Selmon PD&E Study. In addition, the Nebraska PD&E is concurrent with the East Selmon PD&E Study; information was shared between the two projects for consistency.

2.0 Methodology

The traffic forecasting methodology for this project consists of five steps. The first step, model validation, includes reviewing the travel demand model calibration and subarea validation checks. Next, the model is coded and run for each design scenario. Then, model results translate into traffic forecasts for annual average daily traffic volumes (AADTs) and design hour volumes (DHVs). Next, intersection turning movement volumes are developed based on DHVs. Finally, forecasts are checked for reasonableness and consistency by comparing historical trends, population & employment trends, and peaking and directional characteristics.

2.1 Existing Data

The most recent count data available for this project is from 2019. The 2019 AADTs and peak hour volumes are in **Appendix A**.

Count data from 2019 was used to calculate the existing K-Factors, D-Factors, and percentage of traffic using the Reversible Express Lanes (REL), as shown in Table 1. K- and D-Factor values in Table 1 reflect total directional traffic, i.e., local lanes and reversible express lanes combined. In comparison, the year 2019 factors published by FDOT Traffic Online for this facility (local lanes and REL) are K = 8% and D = 58.9%. The peak direction of traffic for the East Selmon Expressway is westbound during the AM peak hour and eastbound during the PM peak hour. The base year traffic memo is in **Appendix E.**

Table 1. Summary of Existing K-Factors and D-Factors

East Selmon Expressway Segment	AM Peak (7:00-8:00 AM)			PM Peak (4:30-5:30 PM)		
	K-Factor	D-Factor	Percent on REL	K-Factor	D-Factor	Percent on REL
East of Falkenburg Rd	10.0%	84.8%	45.4%	9.4%	74.3%	49.3%
US-301 to 78th St	9.1%	78.6%	30.7%	9.7%	72.3%	27.2%
50th St to I-4	9.2%	76.8%	40.1%	9.5%	71.1%	40.5%
22nd St to Kennedy Blvd/Nebraska Ave	11.1%	78.3%	37.7%	10.8%	64.6%	18.8%
West of Brorein St	8.6%	53.2%	-	9.9%	63.8%	-

Additionally, historic AADT information was obtained from FDOT Traffic Online for 2009 through 2020 for three local lane locations and one location in the REL along East Selmon Expressway (**Figure 3**). The amount of traffic using the REL has remained relatively constant over the past 11 years. Traffic in the local lanes has experienced steady growth, especially since 2014. There appears to be an anomaly in the data on the segment west of 50th St in 2016, which shows a significant increase in traffic before returning to normal patterns.

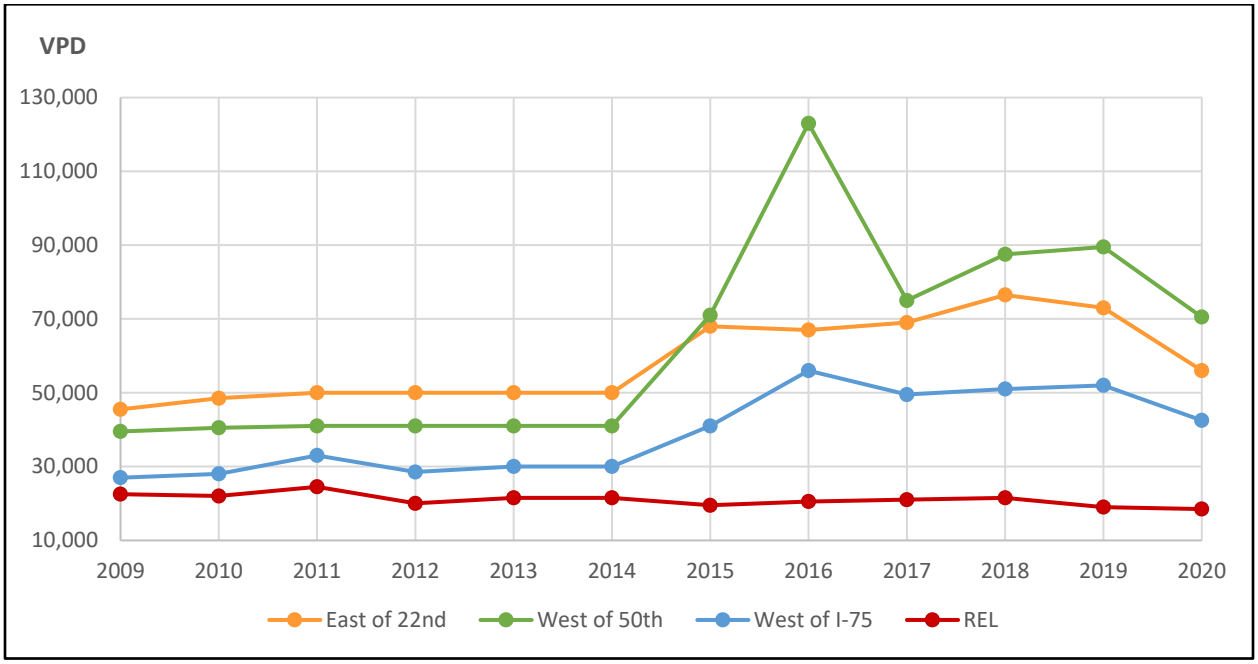


Figure 3. East Selmon Expressway Historic AADT Data

2.2 Step 1 - Tampa Bay Regional Planning Model Summary & Validation

Version 9.2 of the Tampa Bay Regional Planning Model (TBRPM) is the most recent model version. The TBRPM covers District 7 of the Florida Department of Transportation, including Hillsborough, Pinellas, Pasco, Hernando, Citrus Counties, and Port Manatee. THEA retained Gannet Flemming to refine the Base Year (2015) model assignments against available traffic data. They also refined the intermediate year (2035) and forecast (2045) cost affordable model networks to reflect planned improvements, including the South Selmon and East Selmon projects[1]. In addition, there were special considerations for the zone structure and network loading points around the planned Coca-Cola headquarters development in the southwest quadrant of Selmon Expressway and US-301.

[1] Selmon Expressway Model Refinement Study, Gannett Fleming, January 2021

2.2.1 Cost Affordable Networks

The cost-affordable model network includes programmed projects on the Selmon Expressway and neighboring facilities. The relevant planned projects affecting the East Selmon Expressway are in **Table 2**.

Table 2. Cost Affordable Projects by Model Year

Project	Description	Intermediate Year (2035)	Forecast Year (2045)
Selmon Expressway West Extension	The 1.9-mile extension of Selmon Expressway (in the median of Gandy Blvd).	X	X
South Selmon Interim	Widening Selmon Expressway to 6-lanes from Himes Ave to Whiting St overpass.	X	
South Selmon Final	Widening Selmon Expressway to 8-lanes from Himes Ave to Whiting St overpass.		X
Whiting Rd Off-Ramp	Modifications to westbound Selmon Expressway off-ramp to: Florida Ave/Channelside and new westbound off-ramp to Whiting St.	X	X
East Selmon Phase 1	Widening Selmon Expressway from I-75 to I-4.	X	
East Selmon Phase 2	Widening Selmon Expressway from I-4 to Brorein St.	X	X
Tampa Bay Next	I-275 Express Lanes and I-4 corridors throughout the Tampa Bay region.	X	X
I-75 Express Lanes	I-75 Express Lanes from Bruce B. Downs Blvd to Moccasin Wallow Rd.		X

2.2.2 Time-of-Day Structure

The TBRPM is a time-of-day based model split into four time periods:

1. AM Peak – 6:30 AM to 9:00 AM
2. Midday Off-Peak – 9:00 AM to 3:30 PM
3. PM Peak – 3:30 PM to 6:30 PM
4. Evening/Overnight Off-Peak – 6:30 PM to 6:30 AM

2.2.3 Subarea Validation Checks

Michael Baker evaluated the updated 2015 model network in the study area to determine how well the model performed compared to the 2015 traffic counts[1]. One measure of model validation is the Root Mean Square Error (RMSE); a lower number indicates a better performance. For the TBRPM, RMSE values from 32 to 39 are considered acceptable[2]. For the region, the RMSE was 32.4, showing acceptable model performance for a regional model. Similarly, the RMSE for the study area was 32.5, which indicates the model's good performance in the study area.

Additionally, a screen line analysis within the study area shows good model performance regarding traffic flows through the study area. **Figure 4** shows the screen lines created within the study area, while **Table 3** compares the model daily traffic to the daily traffic counts for each screen line. Screen lines 1, 2, 4, 5, and 7 show that the model performs within 8% of east/west flows through the study area, which is of primary concern for this study. While screen lines 3 and 6 indicate that the model overestimates volumes on the north/south roadways in this area of the model network, closer inspection of the model assignment indicates that the overestimation is primarily around Causeway Blvd and US-41. More importantly, links closer to the East Selmon Expressway and I-74 show a strong match between model volumes and observed counts.

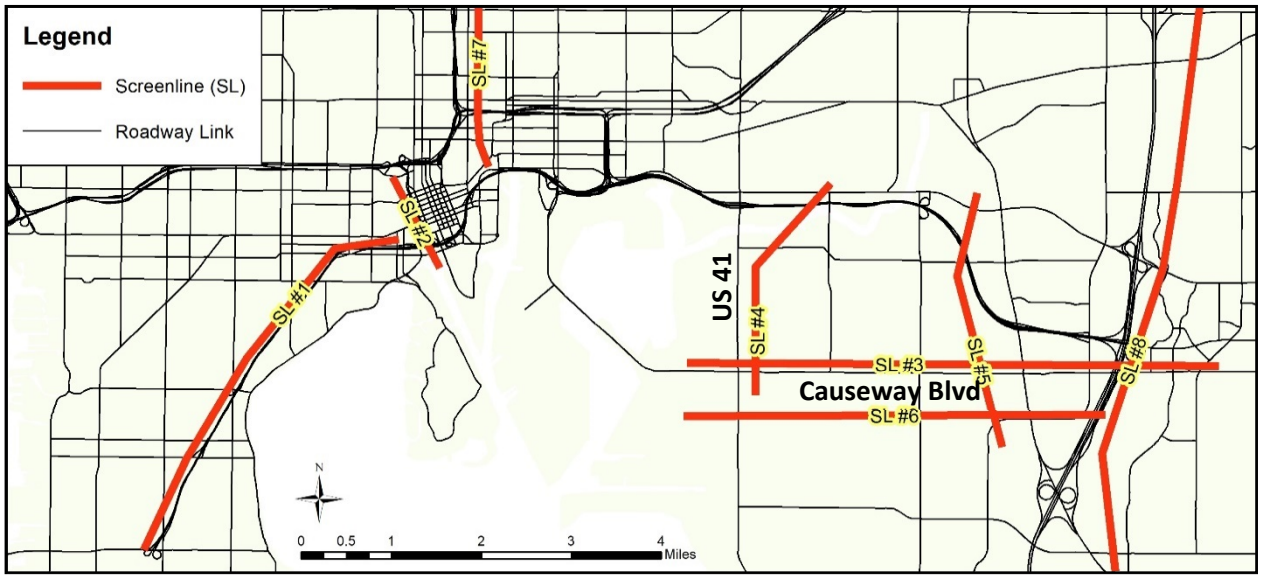


Figure 4. Screenlines Near East Selmon Expressway

[2] Florida Department of Transportation, "Tampa Bay Regional Planning Model v8.0, Technical Report No. 1, Validation Report". (2015).

Table 3. Screenline Summary Near East Selmon Expressway

Screenline	Number of Links	Base Year 2015		
		2015 Model PSWADT	2015 Count PSWADT	Model Volume/ Count Ratio
1	8	131,280	123,600	1.06
2	5	130,180	137,490	0.95
3	6	187,980	150,910	1.25
4	4	131,390	130,300	1.01
5	5	109,370	102,990	1.06
6	4	124,590	98,000	1.27
7 (Partial)	4	237,900	220,500	1.08
8 (Partial)	5	229,740	205,500	1.12

Note: PSWADT is the Peak Season Weekday Average Daily Traffic. For screenlines with volumes greater than 100,000 daily vehicles, the acceptable volume/count range is between 0.90 and 1.10[2].

2.3 Step 2 - Project Model Runs

2.3.1 Forecast Years & Project Phasing

The forecast years established for this project are 2026, 2036, and 2046. The year 2026 includes the additional slip ramps to access the REL in the westbound direction of travel. These ramps operational in 2023, consist of the following:

- Ramp 3, direct connector ramp from I-75 Northbound to REL Westbound
- Ramp 2, egress ramp from REL Westbound to the East Selmon Expressway Local Lanes Westbound at I-4 Connector

The intermediate study year is 2036 and represents Phase 1 and Phase 2 improvements identified in the 2019 feasibility study[3]. Improvements include widening the local lanes from I-75 to I-4 and other minor ramp improvements.

The design year is 2046 and represents the build-out of Phases 1, 2, and 3 identified in the feasibility study. Phase 3 includes widening the local lanes from I-4 to the west end interface with the South Selmon project and off-ramp widening in the downtown area.

[3] *Lee Roy Selmon Expressway Planning/Feasibility Study from Brorein Street to I-75*, Reynolds Smith & Hills, June 2019.

2.3.2 Model Scenarios

The cost affordable improvements are in the No-Build and Build scenarios for each study year. For example, the 2035 model represents the project study year 2036, while 2045 represents the project study year 2046. The No-Build scenarios for each model/study year include no improvements to East Selmon Expressway, except for the construction of Ramps 2 and 3. **Table 4** summarizes the exact improvements in each future model year and scenario.

Table 4. Model Scenario Descriptions

Improvement	2035		2045	
	No-Build	Build	No-Build	Build
Mainline Improvements				
Ramp 1 (WB), REL to Local Lane Egress at Kennedy		X		X
Ramp 2 (WB), REL to Local Lane Egress at I-4	X		X	
Ramp 3 (WB), I-75 NB to REL Direct Connector	X	X	X	X
Relocate existing REL to Local Lane Ramp @ US-301 (WB)		X		X
REL I-75 SB Direct Connector (EB)		X		X
Add 1 local lane in each direction, I-75 to I-4		X		X
Add 1 express lane, Ramp 3 to existing 3 lane section		X		X
Add 1 local lane in each direction, I-4 to Brorein				X
Ramp/Local Road Improvements				
Twiggs St Aux Lane (WB) from Meridian to Nebraska		X		X
US-301 Two-Lane EB Off-Ramp		X		X
US-301 Aux Lane (WB) from EB Off-Ramp to Causeway Blvd		X		X
Signals at 22nd Street Ramp Terminals		X		X
Kennedy Blvd Two-Lane WB Off-Ramp				X
Brorein St Two-Lane WB Off-Ramp				X

2.4 Step 3a - Forecast AADTs

The change in daily assignments between the model base year and the forecast years of 2035 and 2045 determined the growth. Next, the increase in traffic from the models was applied to the 2019 count data to forecast AADTs for 2035 and 2045. Finally, straight-line interpolation or extrapolation was applied to quantify AADTs for the project study years 2026, 2036, and 2046. **Appendix B** contains the results.

2.5 Step 3b - Forecast DHVs

The *FDOT Project Traffic Forecasting Handbook* (2019) calculations for DHVs occur by applying K- and D-Factors to daily traffic forecasts. The East Selmon Expressway is a unique facility given the REL system and the strong commuting characteristics, as evidenced by D-Factors ranging from 50-85%. The REL, in effect, increases the directional capacity and skews the factors applicable beyond what applies to a

typical freeway. The factors are potentially skewed, but the impact of regional patterns and the attractiveness of the corridor may not be fully realized. The TBRPM is a time of day capacity-constrained model that considers the nuances of capacity constraints in the region, the attractiveness of the added capacity in peak directions with the REL, and the possible impact of tolls. For these reasons, peak period traffic assignments and conversion factors were used to develop DHVs. These DHVs were, in turn, compared to existing K- and D-Factors for reasonableness.

2.5.1 Model Period to Hour Factors

The typical conversion of the peak period volumes to peak hour volumes uses the entire model region averages. The default AM factor for this model is 0.4521, and the default PM factor is 0.3602. It was determined that these factors did not align with the operations along the East Selmon Expressway; therefore, new factors were developed.

Eight (8) local lane counts and six (6) REL counts from 2019 to calculate project-specific peak period to peak hour factors. **Table 5** shows the average factors by direction and facility. In the AM, the local lane factors are slightly lower than the model default factor of 0.4521, indicating more evenly spread volumes over the peak period. However, the REL factor is somewhat higher. On the other hand, the local lane factors are relatively similar to the default factor in the PM, although the REL factor is still higher. A weighted average was developed to account for the magnitude of traffic in the local lanes and REL using this data. Then, the weighted average factor of 0.4274 for the AM and 0.3810 for the PM were applied to model period assignments to estimate model peak hour assignments.

Table 5. Average Peak Period to Peak Hour Factors, East Selmon Expressway

Direction	Facility	AM Peak (7:00-8:00 AM)	PM Peak (4:30-5:30 PM)
Westbound	Local Lanes	0.4066	0.3651
	REL	0.4803	-
Eastbound	Local Lanes	0.4152	0.3779
	REL	-	0.4097
Weighted Average		**0.4274**	**0.3810**

2.5.2 Forecast Refinement

The calculated growth from the base year to each horizon year (2035 and 2045) was applied to the 2019 count data to develop a peak hour forecast for 2035 and 2045. Then, straight-line interpolation/extrapolation was applied to develop the peak hour forecasts for the project study years of 2026, 2036, and 2046.

The peak hour model assignments showed that the local lanes exceeded available capacity while ample capacity was available in the REL. Travel demand models often under-assign traffic to a REL such as this one. Therefore, a manual procedure was applied to reassign local lane traffic to the REL to take advantage of available capacity. For this process, the capacity assumption of the local lanes was 2,060 vehicles per hour per lane (vphpl) based on level of service E. The REL was assumed to have a slightly lower capacity of 1,725 vphpl (LOS D) to ensure premium performance over local lanes. The balanced forecasts represent a more equitable volume-to-capacity ratio between the local lanes and REL.

2.6 Step 4 - Intersection Turning Movements

An iterative proportional fitting procedure converted link DHVs to turning movement volumes at project intersections. The base turning movement proportions utilized the existing 2019 volumes in **Appendix A**. Target volumes for each year, and each condition was based on DHV forecasts developed in the previous section. The resulting forecasted turning movements are in **Appendix C.**

2.7 Step 5 Reasonableness Checking

Future traffic forecasts are developed based on NCHRP 255[4] and NCHPR 765[5]. These publications prescribe a methodology for developing estimated future traffic volumes from a travel demand model and existing count data. To ensure that the traffic forecasts for the East Selmon Expressway are sound, Michael Baker conducted a series of reasonableness checks that reviewed population growth by traffic analysis zone (TAZ). We then reviewed the daily traffic projections and design hour K- and D-Factors. A summary of the reasonableness checks is in **Appendix D**.

2.7.1 Regional Growth Patterns

One of the primary drivers of traffic growth is where and when development occurs. The Tampa Bay region will add over 900,000 people from 2015 to 2045, representing 38% growth, or 1.3% per year. Select links on the East Selmon Expressway were analyzed to identify the TAZs that contribute a significant number of trips to the project corridor using a 400 trip-per-day threshold. These TAZs experienced a total growth percentage of 85% or 2.8% per year. Select links were further analyzed by considering only westbound trips on the East Selmon Expressway with a threshold of 200 trips per day; the growth percentages were the same. A summary of the growth rates are in **Table 6**, and the TAZs contributing to East Selmon Expressway traffic are in **Figure 5**.

Table 6. Population Growth Analysis[6]

Description	Total Population by Year			Population Growth (2015 to 2045)	Growth %	Annual Growth %
	2015	2035	2045			
All TAZs	2,410,882	3,079,650	3,327,201	916,319	38%	1.3%
TAZs with >400 Trips per Day on East Selmon Expressway	531,142	886,621	982,873	451,731	85%	2.8%
TAZs with >200 Trips per Day on East Selmon Expressway (Westbound)	443,437	733,503	821,839	378,40	85%	2.8%

[4] Pedersen, N.J. and Samdahl, D.R., "NCHRP Report 255: Highway Traffic Data for Urbanized Area Project Planning and Design." *National Cooperative Highway Research Program Report*, Washington DC. (1982).
[5] CDM Smith, Horowitz, A., Creasey, T., Pendyala, R., and Chen, M., "NCHRP Report 765: Analytical Travel Forecasting Approaches for Project-Level Planning and Design." *National Cooperative Highway Research Program Report*, Washington DC. (2014).
[6] Source: TBRPM Version 9.2 data files

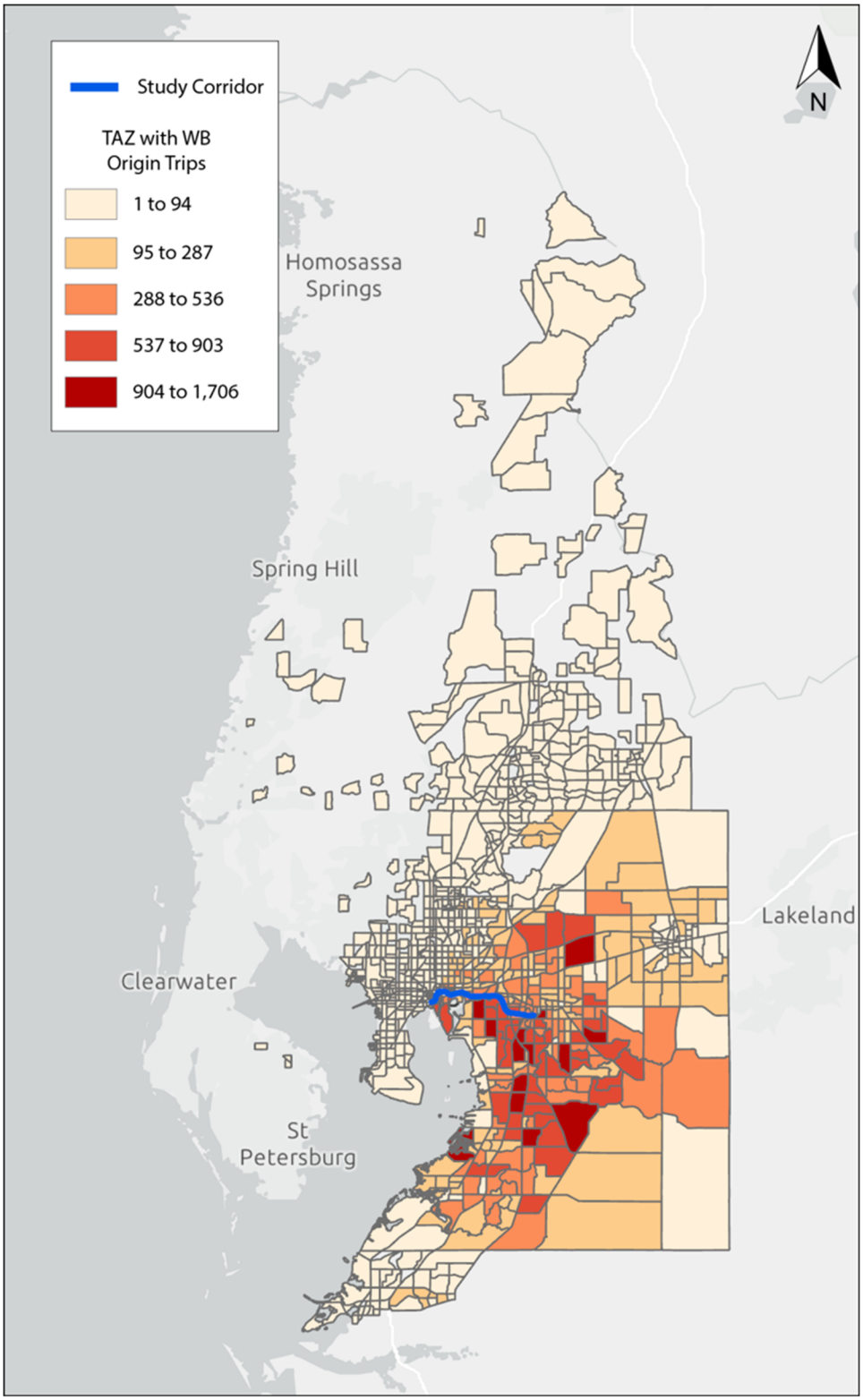


Figure 5. TAZs Contributing to East Selmon Expressway Westbound Traffic (>200 trips per day)

2.7.2 AADT Growth

The growth in AADT derived from the model was compared to historical trends and selected linear growth rates at several locations along the corridor. These growth trends represent bidirectional AADT totals, including local lane and REL traffic. **Figure 6** compares growth trends on East Selmon Expressway west of 22nd St, and **Figure 7** compares growth trends west of I-75. The traffic growth is in line with historical trends in both locations, which corresponds to an annual growth rate of about 3.5% per year. The increase in population in the TAZs contributing to a majority of the trips saw a 2.8% yearly increase.

Traffic counts from 2020 were excluded from the analysis due to the COVID-19 pandemic causing an artificial reduction in traffic. Therefore, the forecast assumption is that traffic patterns and growth trends return to normal. However, traffic sensitivity testing could be done to assess the impact of telecommuting.

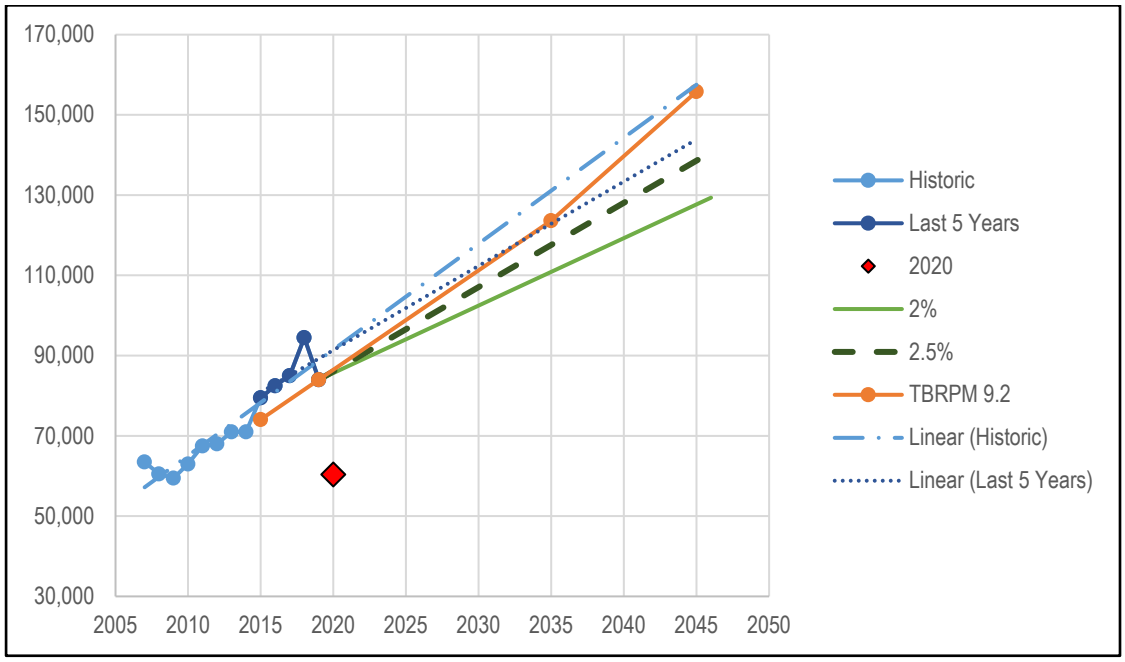


Figure 6. East Selmon Expressway AADT Growth Comparison, West of 22nd St

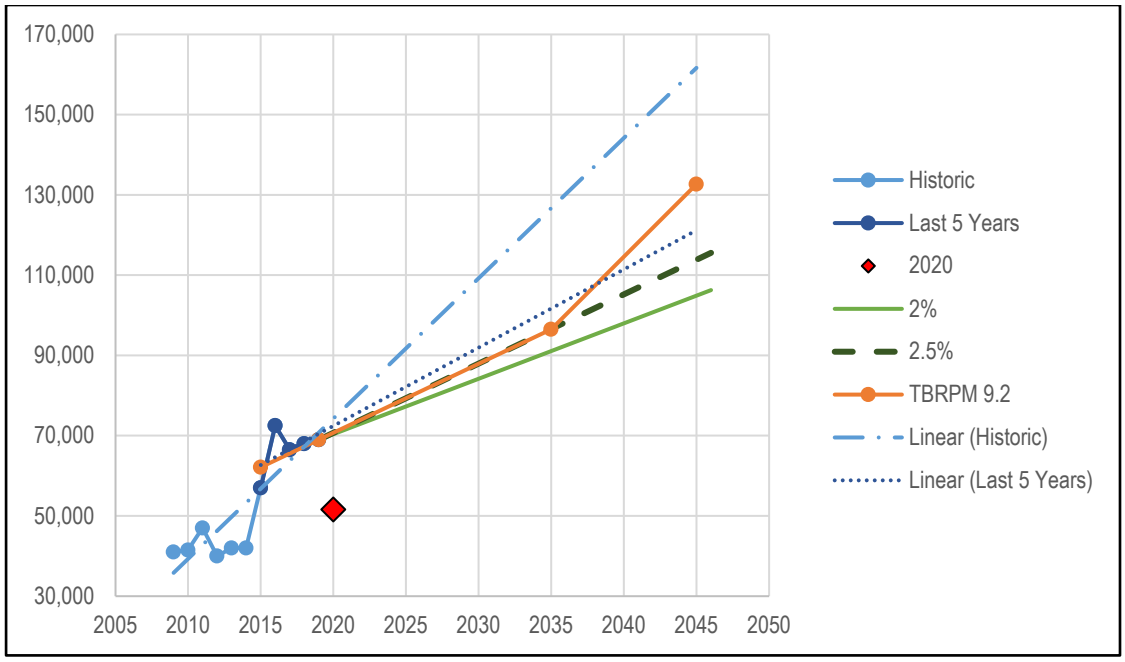


Figure 7. East Selmon Expressway AADT Growth Comparison, West of I-75[7]

2.7.3 K-Factors

Table 7 and **Table 8** summarize the comparisons of K-Factors for the AM peak hour and PM peak hour, respectively. The 2019 existing K-Factors are in the range of 9-11%. These K-Factors are reasonable given the relatively low AADTs and the commuter peaking characteristics. However, the daily volumes will increase significantly due to the projected growth in population and the role of the East Selmon Expressway in the supporting transportation network. As a result, the peak hour volumes will spread, resulting in lower K-Factors. Therefore, a reduction in K-Factor would be expected over time as peak hour spreading occurs. Instead of holding the K-Factor constant, future year forecasts were developed by applying a percentage to the directional peak period volumes to account for this phenomenon. The resulting K-Factors range from 7-10%, reflecting realistic expectations in traffic changing over time.

[7] The growth in traffic near I-75 was substantial in 2014, however, the the rate from 2014-2019 was around 2.5% and used for comparison.

Table 7. AM Peak Hour K-Factors

Location on East Selmon Expressway		2019	2026	2036		2046	
From	To	Counts	Opening	No Build	Build	No Build	Build
East of Falkenburg Rd		10%	9%	8%	8%	8%	8%
US-301	78th St	9%	8%	7%	8%	7%	8%
50th St	I-4	9%	9%	8%	8%	7%	8%
22nd St	Kennedy Blvd/ Nebraska Ave	11%	10%	9%	9%	8%	9%
West of Brorein St		9%	8%	8%	8%	8%	8%
Average		**10%**	**9%**	**8%**	**8%**	**8%**	**8%**

Table 8. PM Peak Hour K-Factors

Location on East Selmon Expressway		2019	2026	2036		2046	
From	To	Counts	Opening	No Build	Build	No Build	Build
East of Falkenburg Rd		9%	9%	9%	8%	8%	8%
US-301	78th St	10%	9%	8%	9%	8%	8%
50th St	I-4	9%	9%	8%	8%	7%	8%
22nd St	Kennedy Blvd/ Nebraska Ave	11%	10%	9%	9%	9%	9%
West of Brorein St		10%	9%	9%	9%	8%	9%
Average		**10%**	**9%**	**9%**	**9%**	**8%**	**8%**

2.7.4 D-Factors

Table 9 and **Table 10** summarize D-Factors that include local lane and REL traffic for the AM peak hour and PM peak hour, respectively. In 2019 (and prior years when REL was in place), the D-Factors are significantly high in the peak commuting direction, ranging from 53%-85%. Again, these percentages reflect the increased capacity with the REL and are much higher than standard D-Factors for freeways without express lanes. The REL is a permanent facility. With the proposed project improvements, including added capacity and new access to the REL, it is anticipated that the directionality will remain high, similar to the existing condition.

Table 9. AM Peak Hour D-Factors

Location on East Selmon Expressway		2019	2026	2036		2046	
From	To	Counts	Opening	No Build	Build	No Build	Build
East of Falkenburg Rd		85%	83%	81%	83%	82%	83%
US-301	78th St	79%	77%	76%	78%	77%	78%
50th St	I-4	77%	76%	76%	78%	76%	77%
22nd St	Kennedy Blvd/ Nebraska Ave	78%	78%	79%	79%	78%	79%
West of Brorein St		53%	50%	51%	53%	52%	53%
Average		**74%**	**73%**	**73%**	**74%**	**73%**	**74%**

Table 10. PM Peak Hour D-Factors

Location on East Selmon Expressway		2019	2026	2036		2046	
From	To	Counts	Opening	No Build	Build	No Build	Build
East of Falkenburg Rd		74%	76%	78%	78%	74%	74%
US-301	78th St	72%	73%	73%	74%	73%	73%
50th St	I-4	71%	72%	73%	73%	73%	72%
22nd St	Kennedy Blvd/ Nebraska Ave	65%	66%	67%	66%	66%	66%
West of Brorein St		64%	60%	60%	61%	62%	63%
Average		**69%**	**69%**	**70%**	**71%**	**70%**	**69%**

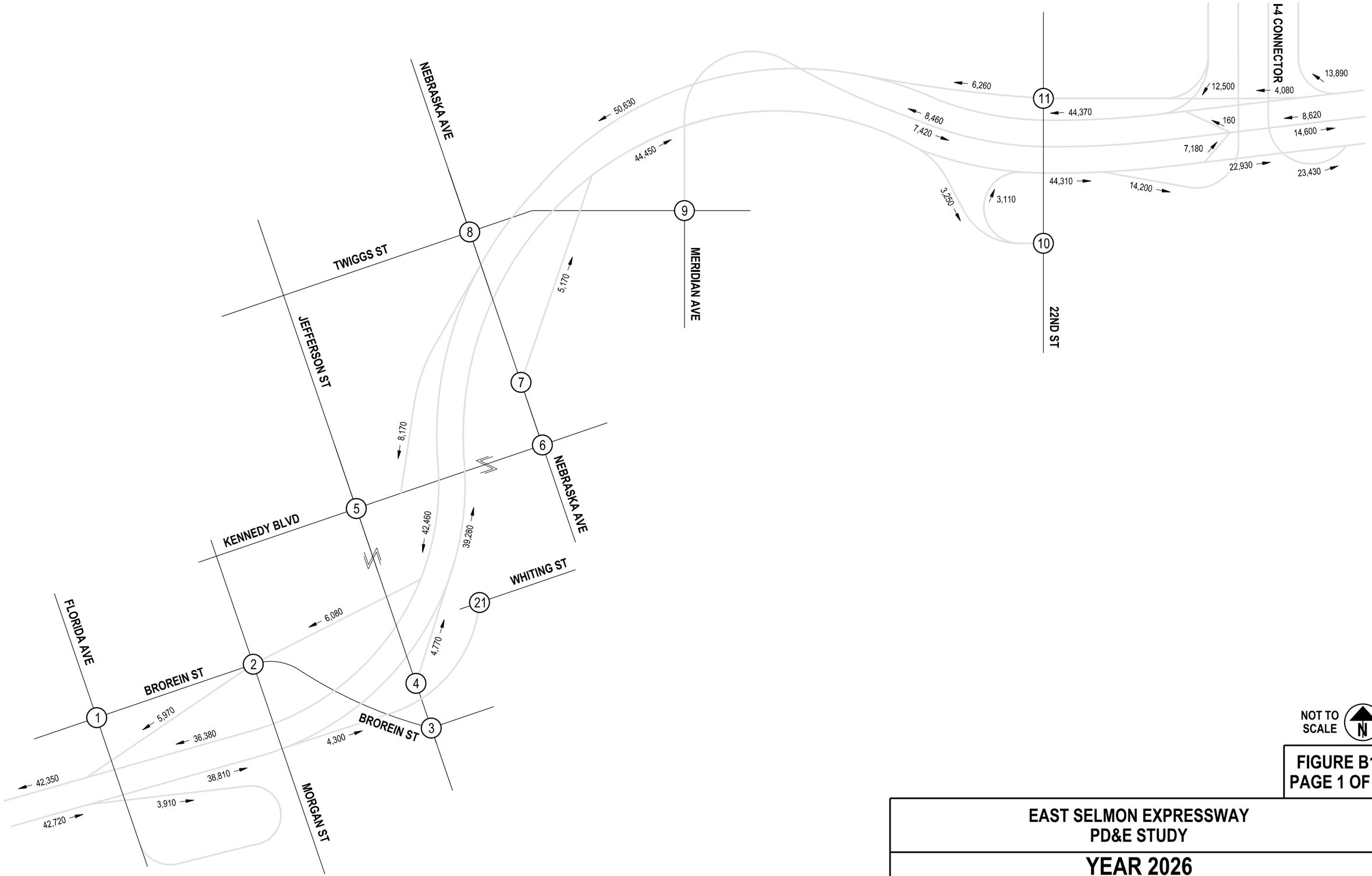
3.0 Conclusions

The growth in daily traffic on the East Selmon Expressway is consistent with historical traffic trends. In addition, it is in line with projected growth in population for areas with the most likely users of the corridor.

The methodology for developing DHVs did not follow the standard procedure of applying set K- and D-Factors to daily forecasts. However, the results are within reasonable expectations of how this unique system performs, given the directional capacity with the REL. Furthermore, following the standard procedure would require tempering the K- and D-Factors into "normal" ranges (higher K-Factor and lower D-Factor). The result would likely be lower DHVs in the peak direction and DHVs too high in the off-peak direction. This outcome would result in unrealistic design expectations.

4.0 Next Steps

Future year traffic analysis will occur upon approval of the traffic forecasts.



NOT TO SCALE

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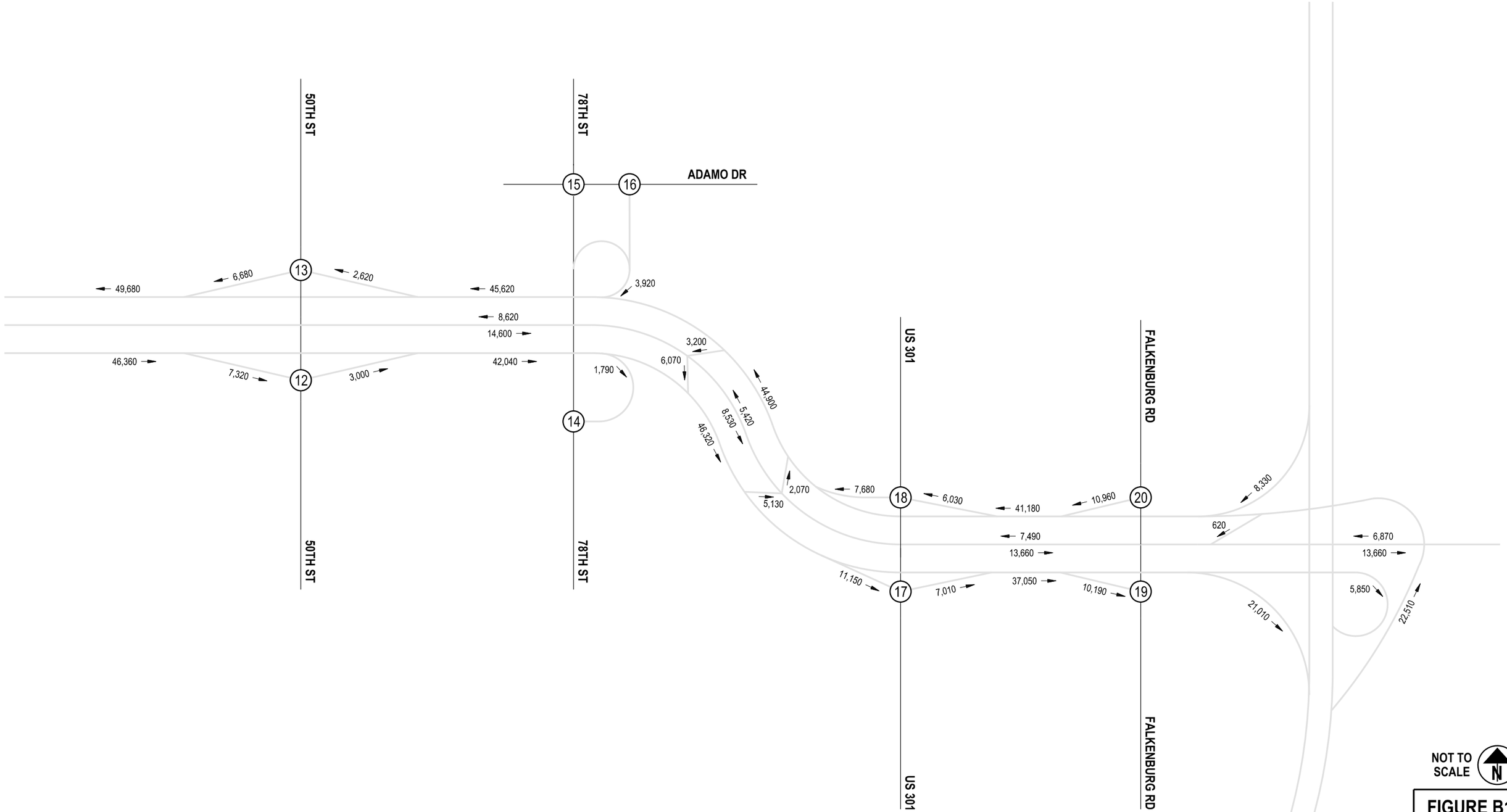
FIGURE B1
PAGE 1 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2026
ANNUAL AVERAGE DAILY TRAFFIC



NOT TO SCALE

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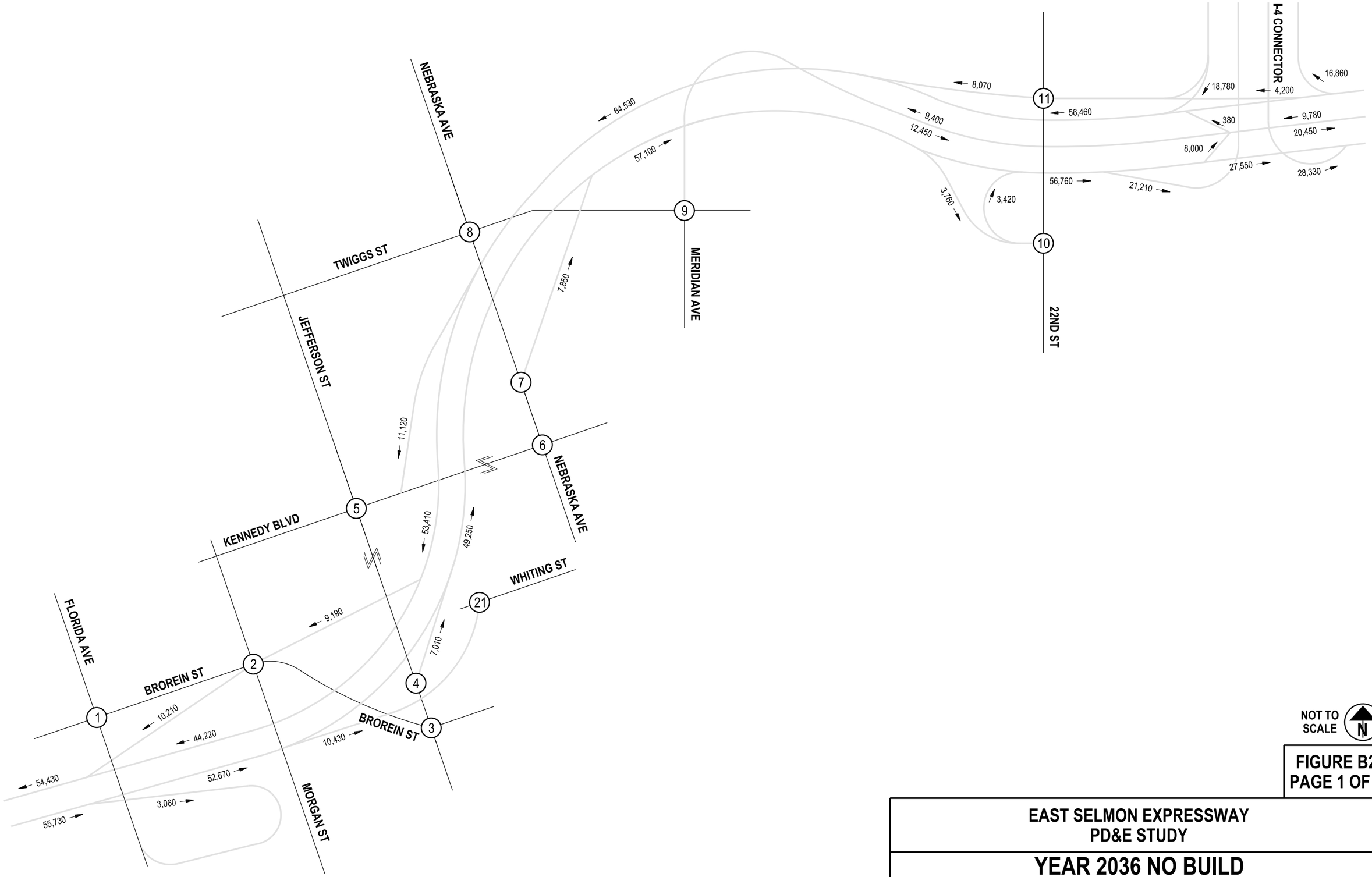
FIGURE B1
PAGE 2 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2026
ANNUAL AVERAGE DAILY TRAFFIC



NOT TO SCALE

FIGURE B2
PAGE 1 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2036 NO BUILD
ANNUAL AVERAGE DAILY TRAFFIC

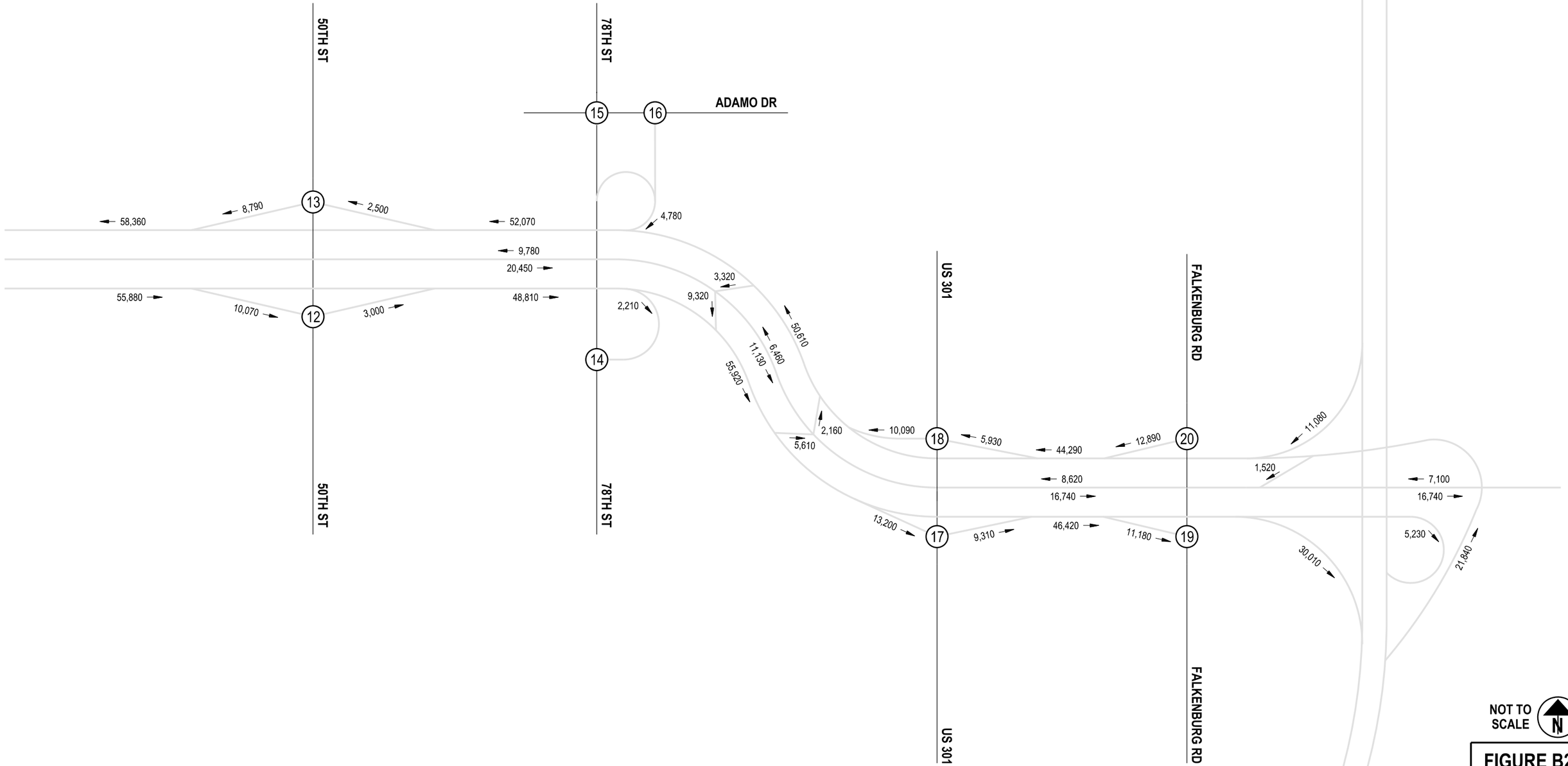


FIGURE B2
PAGE 2 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2036 NO BUILD
ANNUAL AVERAGE DAILY TRAFFIC

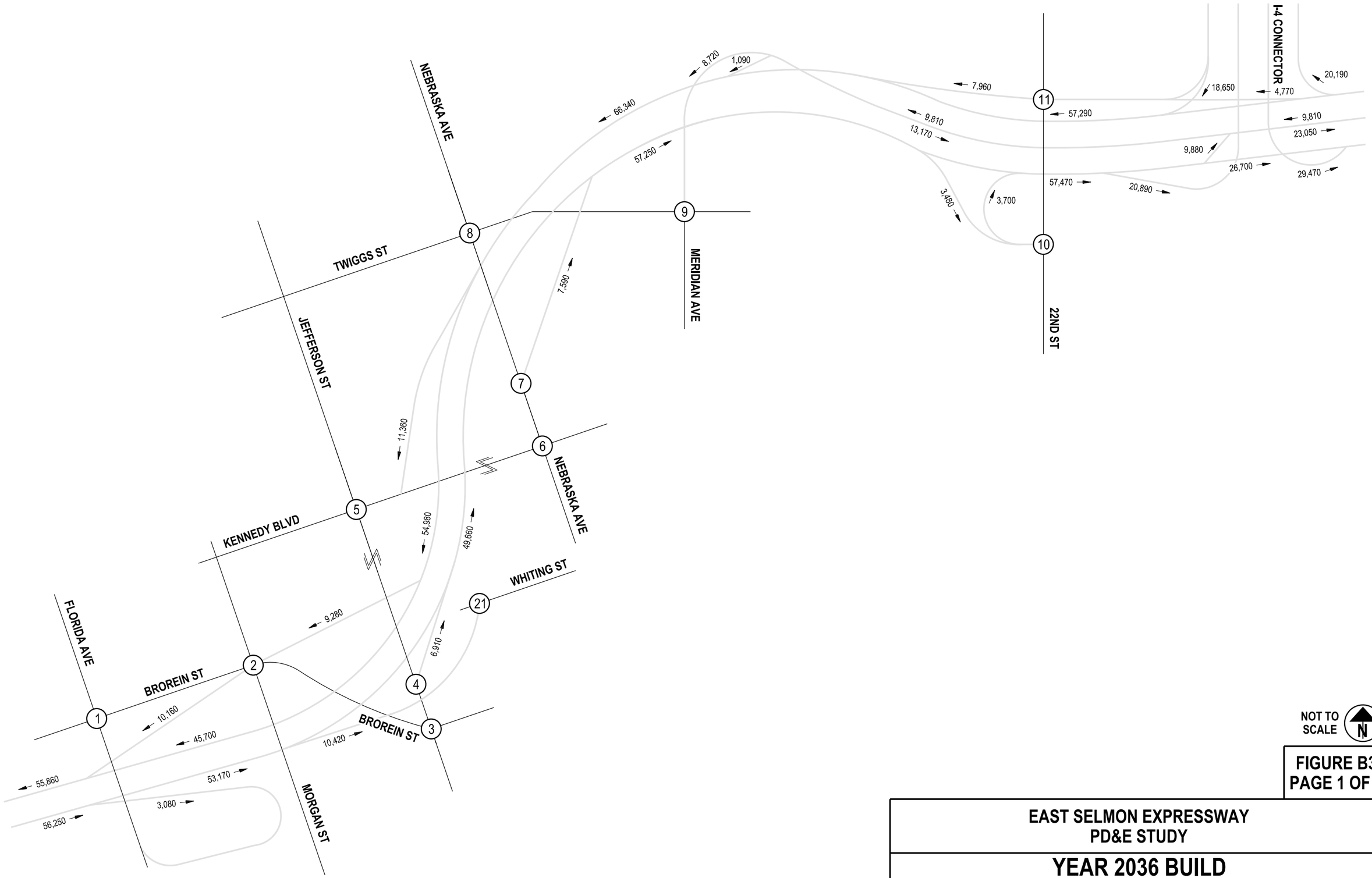


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FIGURE B3
PAGE 1 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2036 BUILD
ANNUAL AVERAGE DAILY TRAFFIC

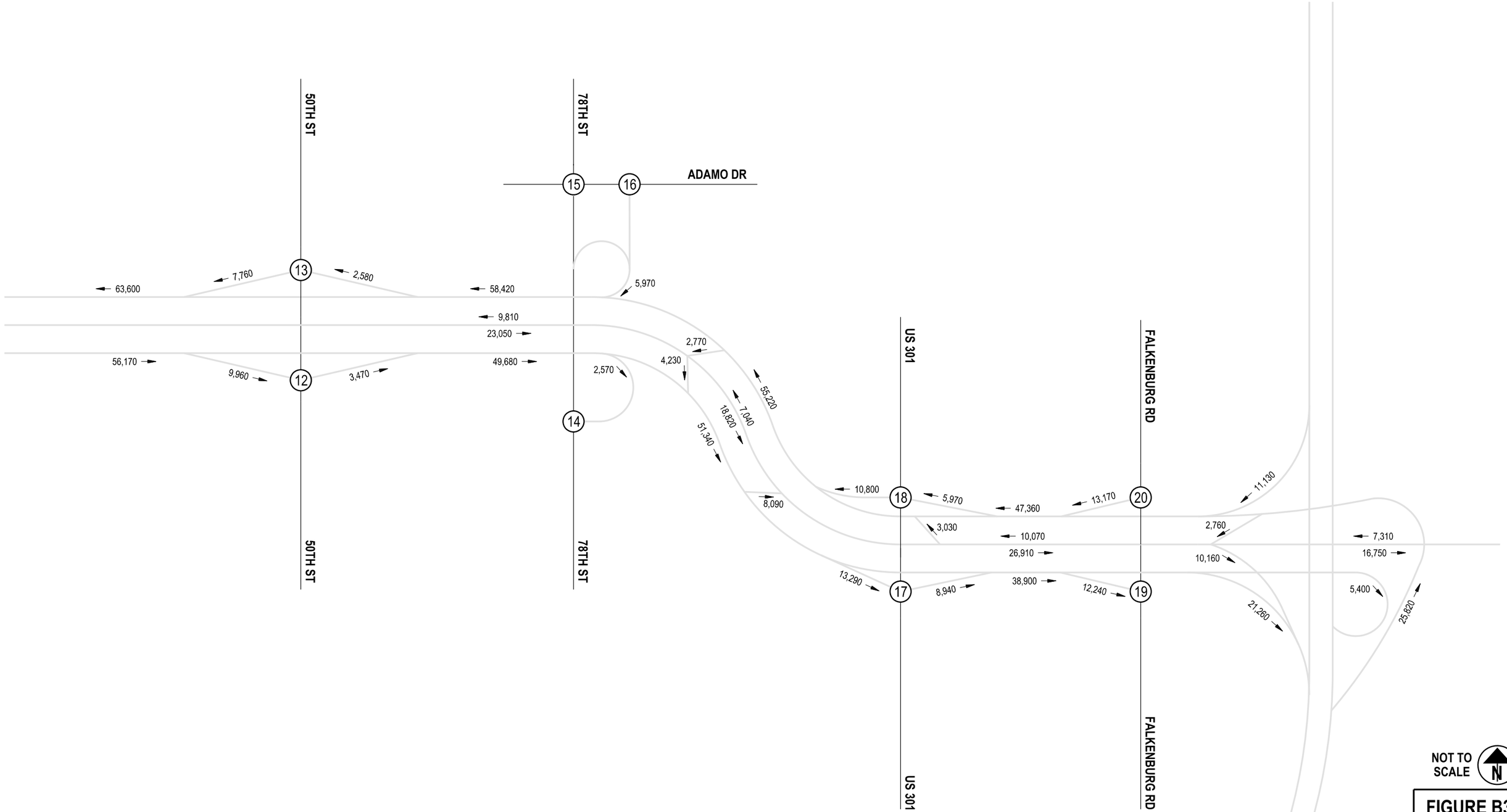
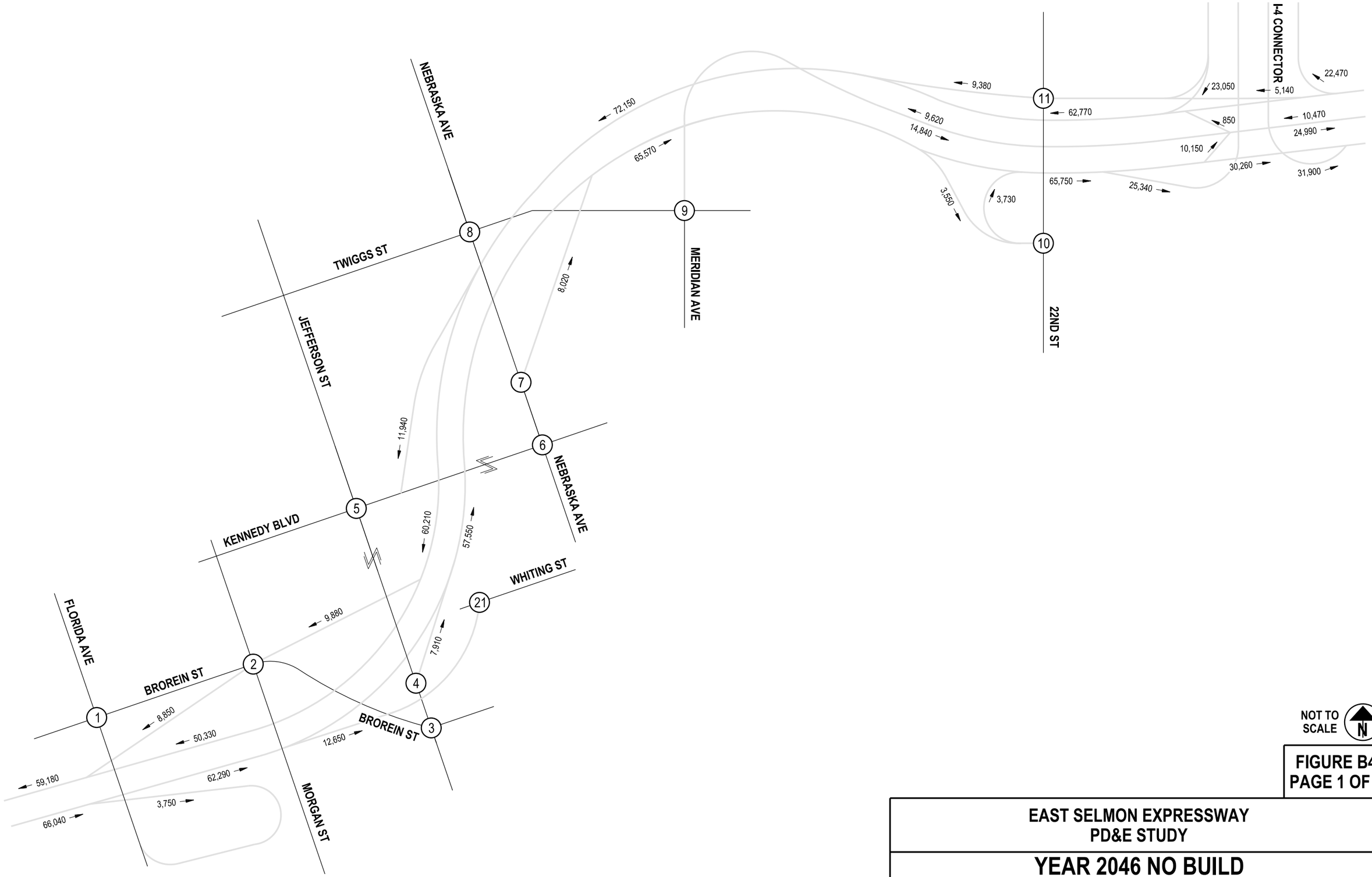


FIGURE B3
PAGE 2 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2036 BUILD
ANNUAL AVERAGE DAILY TRAFFIC



NOT TO SCALE

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FIGURE B4
PAGE 1 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2046 NO BUILD
ANNUAL AVERAGE DAILY TRAFFIC

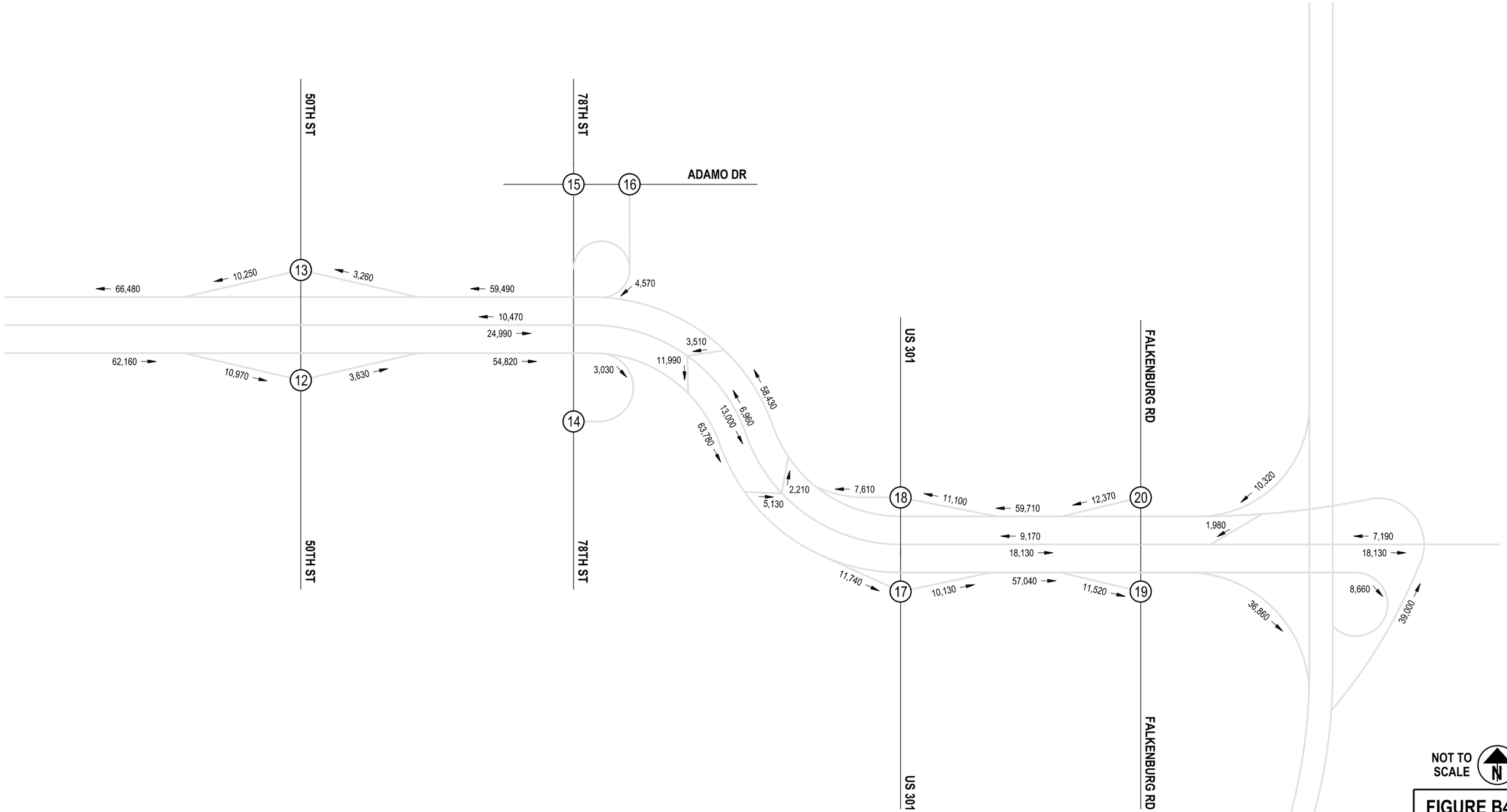
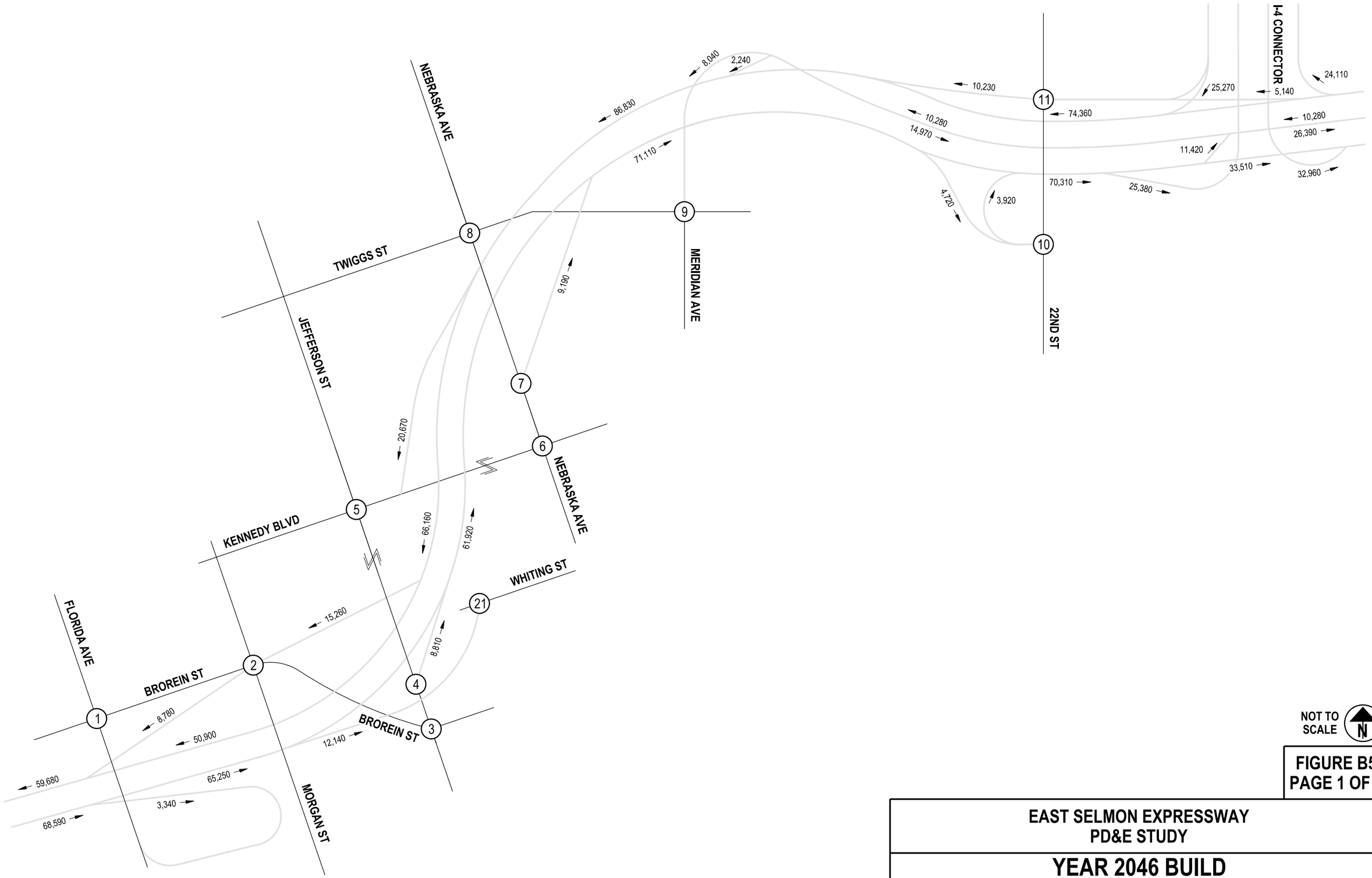


FIGURE B4
PAGE 2 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2046 NO BUILD
ANNUAL AVERAGE DAILY TRAFFIC



NOT TO SCALE

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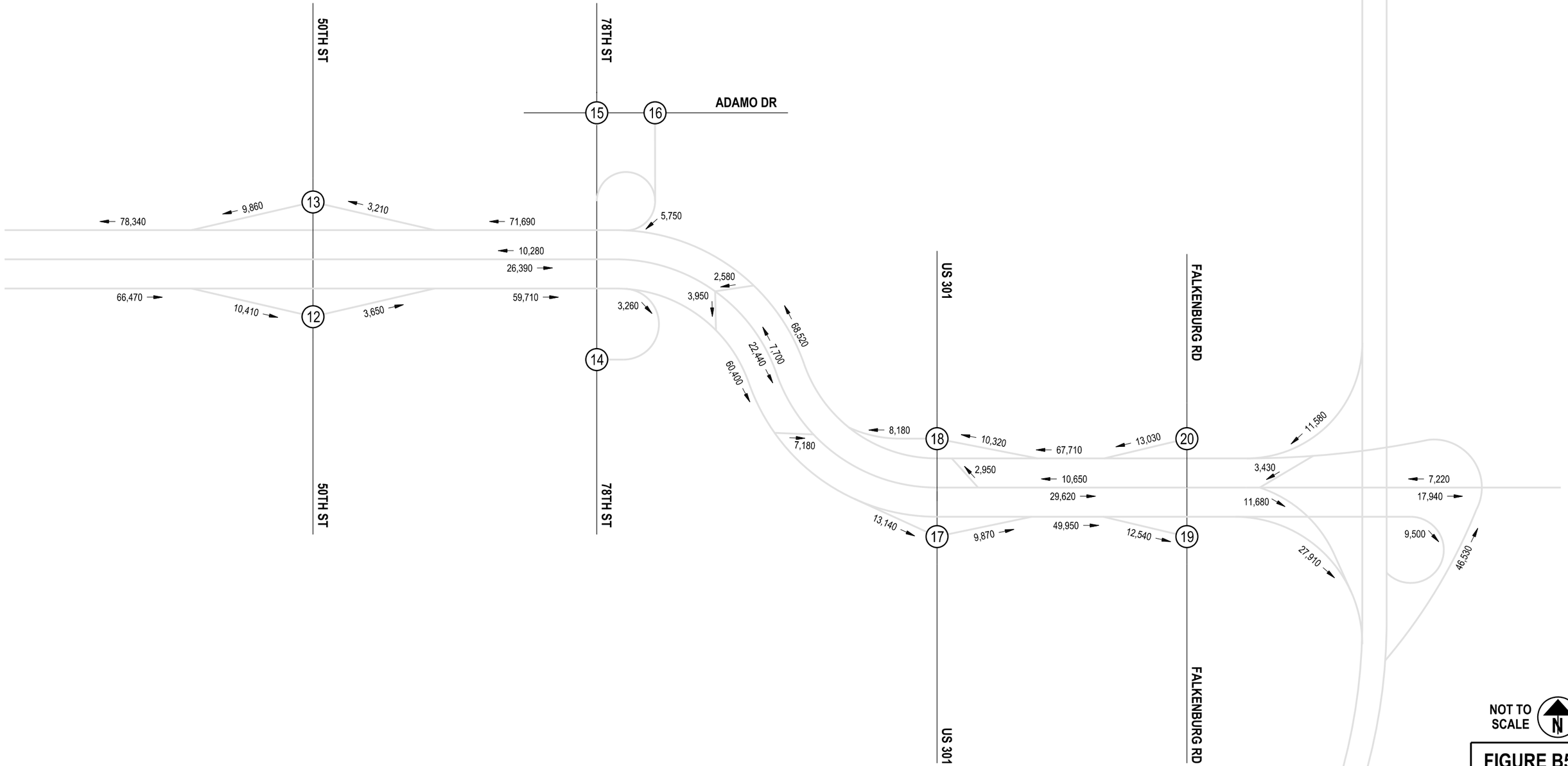
FIGURE B5
PAGE 1 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2046 BUILD
ANNUAL AVERAGE DAILY TRAFFIC

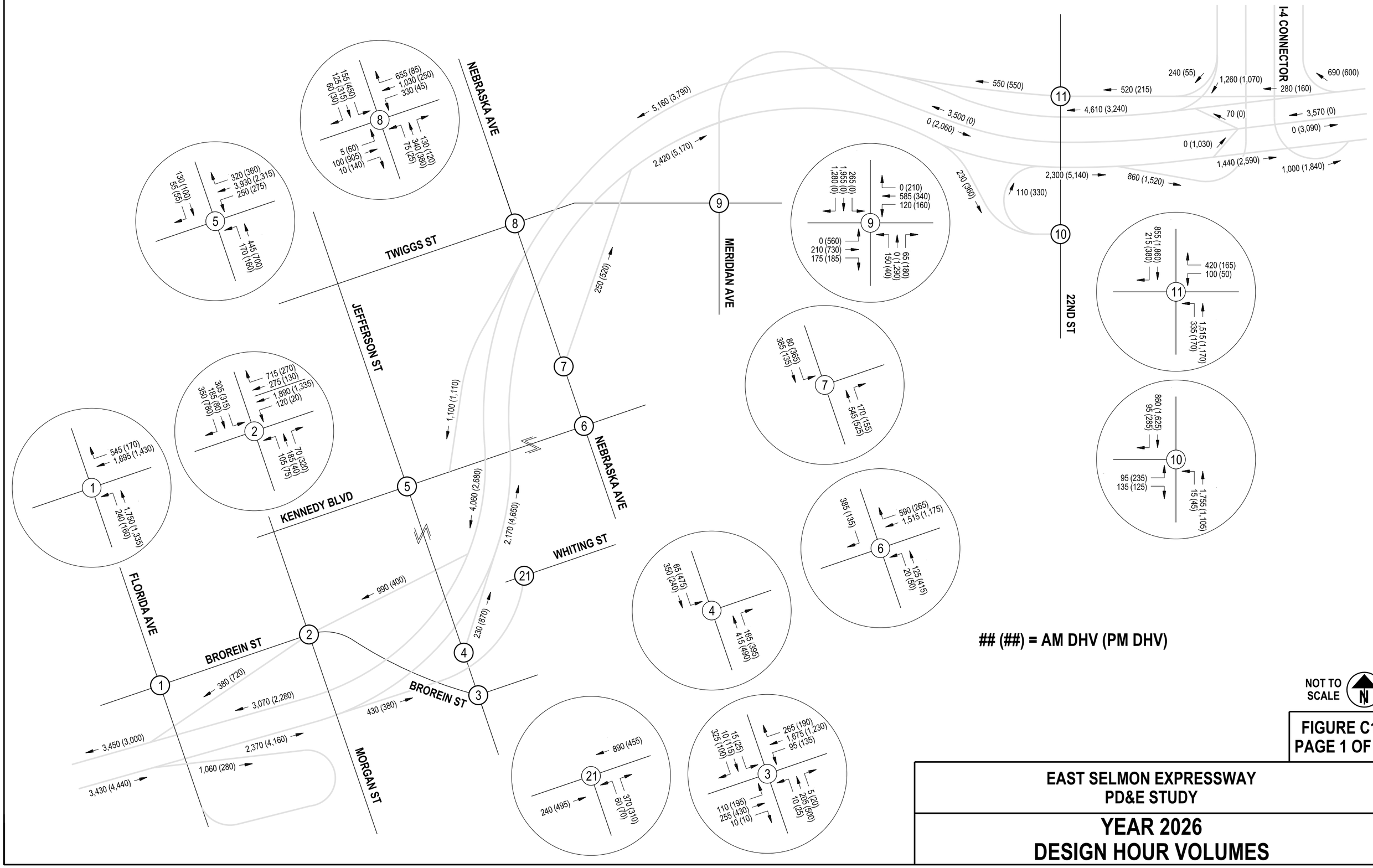


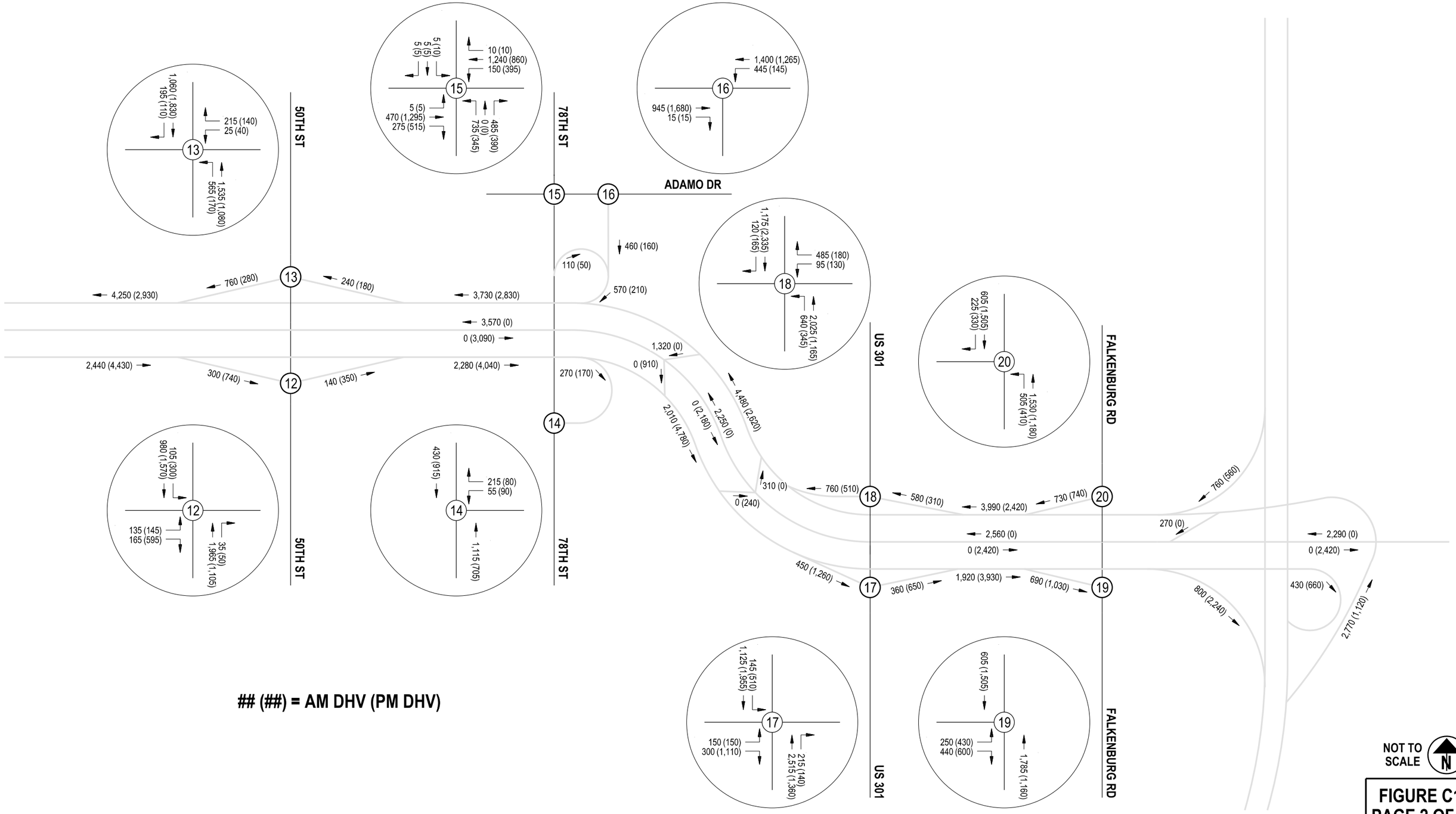
NOT TO SCALE

FIGURE B5
PAGE 2 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2046 BUILD
ANNUAL AVERAGE DAILY TRAFFIC


NEBRASKA AVE
TWIGGS ST
JEFFERSON ST
MERIDIAN AVE
22ND ST
I-4 CONNECTOR
KENNEDY BLVD
BROREIN ST
WHITING ST
FLORIDA AVE
MORGAN ST
5,160 (3,790)
2,420 (5,170)
250 (520)
1,100 (1,110)
4,060 (2,680)
2,170 (4,650)
990 (400)
230 (870)
380 (720)
3,070 (2,280)
430 (380)
3,450 (3,000)
2,370 (4,160)
1,060 (280)
3,430 (4,440)
550 (550)
520 (215)
240 (55)
1,260 (1,070)
690 (600)
280 (160)
4,610 (3,240)
3,500 (0)
0 (2,060)
70 (0)
3,570 (0)
0 (3,090)
0 (1,030)
1,440 (2,590)
1,000 (1,840)
2,300 (5,140)
860 (1,520)
110 (330)
230 (360)
(##) = AM DHV (PM DHV)
NOT TO SCALE
N
FIGURE C1
PAGE 1 OF 2
EAST SELMON EXPRESSWAY
PD&E STUDY
YEAR 2026
DESIGN HOUR VOLUMES



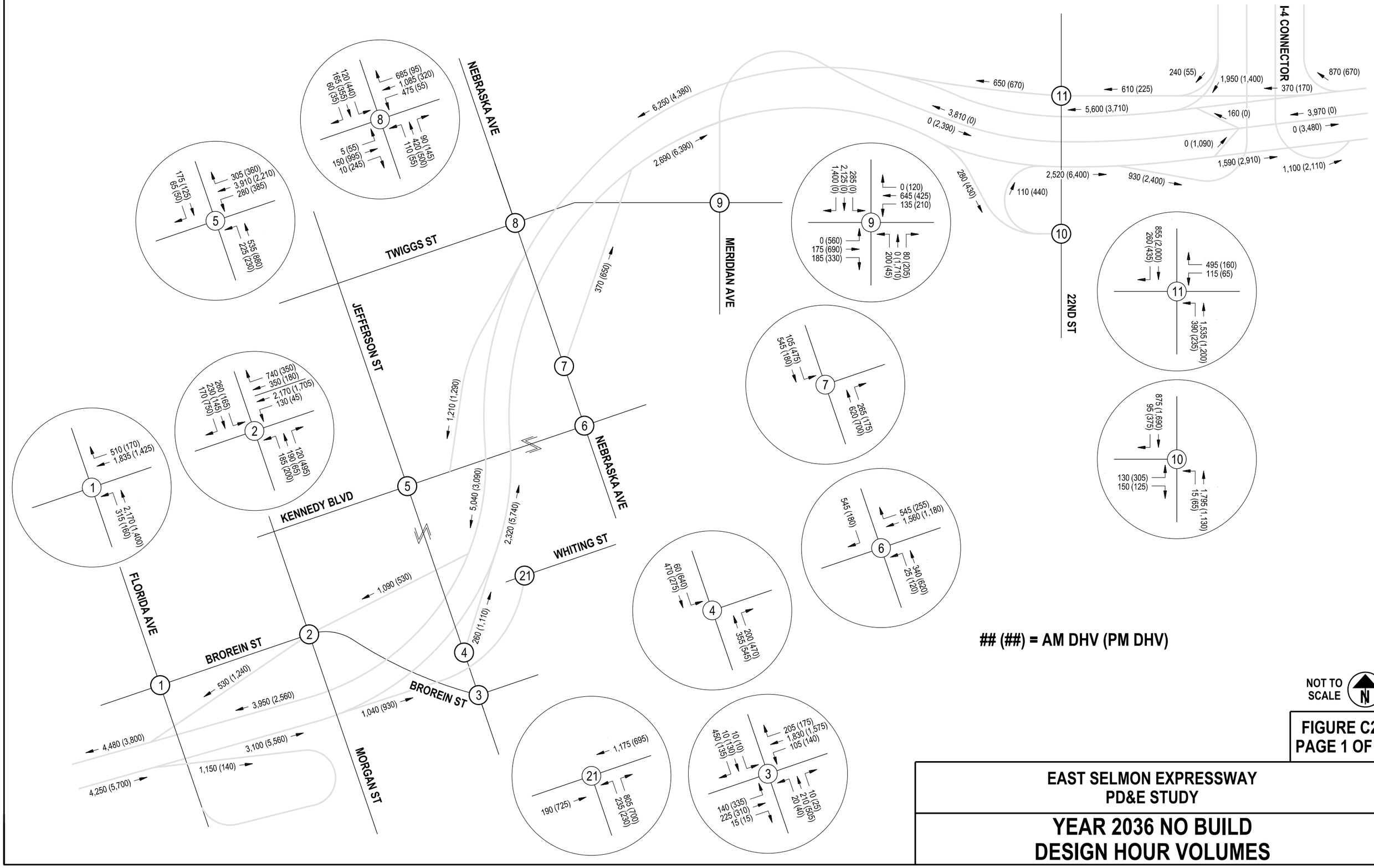
(##) = AM DHV (PM DHV)

NOT TO SCALE

FIGURE C1
PAGE 2 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2026
DESIGN HOUR VOLUMES



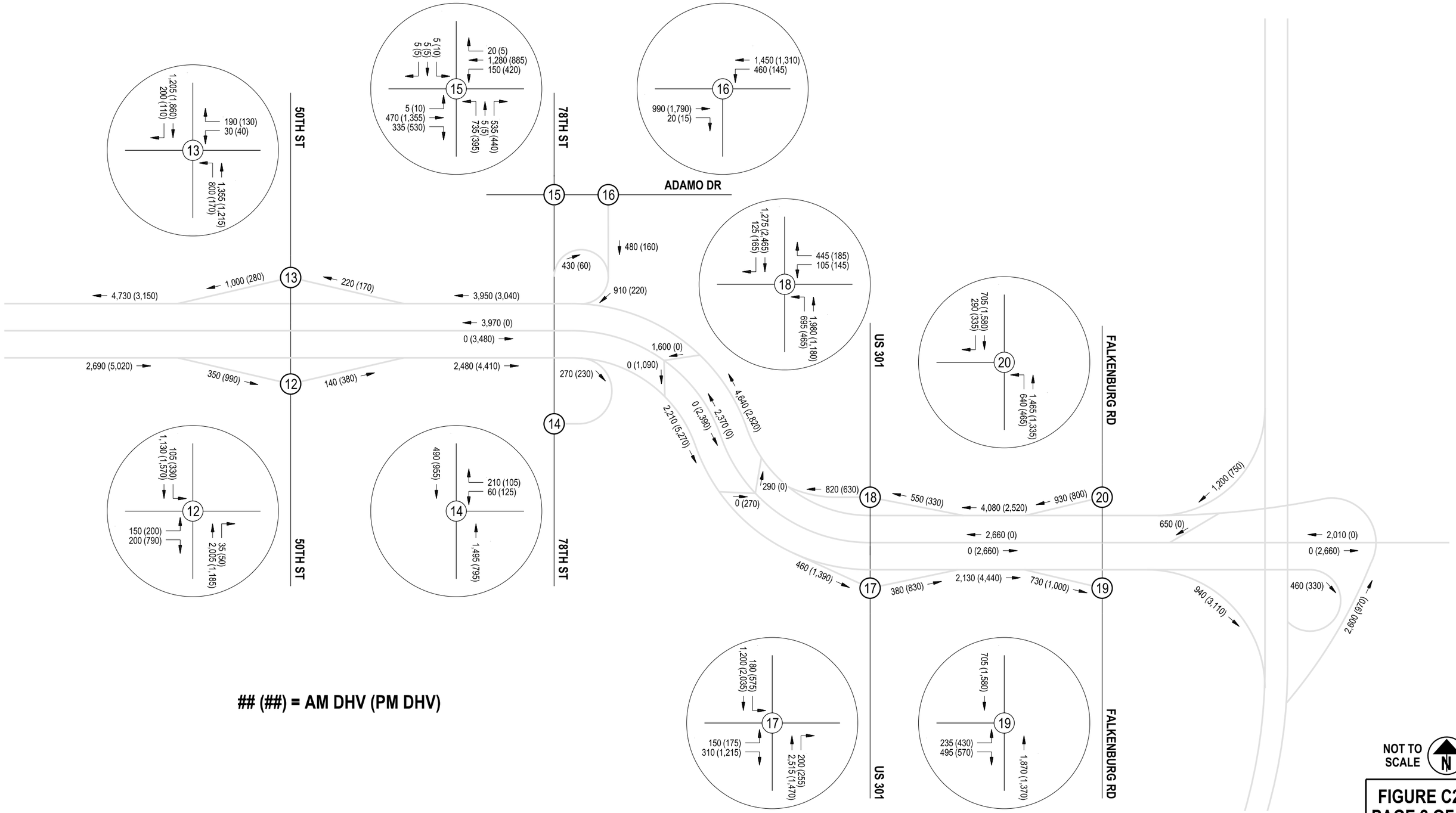
(##) = AM DHV (PM DHV)

NOT TO SCALE

FIGURE C2
PAGE 1 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2036 NO BUILD DESIGN HOUR VOLUMES



(##) = AM DHV (PM DHV)

NOT TO SCALE

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FIGURE C2
PAGE 2 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2036 NO BUILD DESIGN HOUR VOLUMES

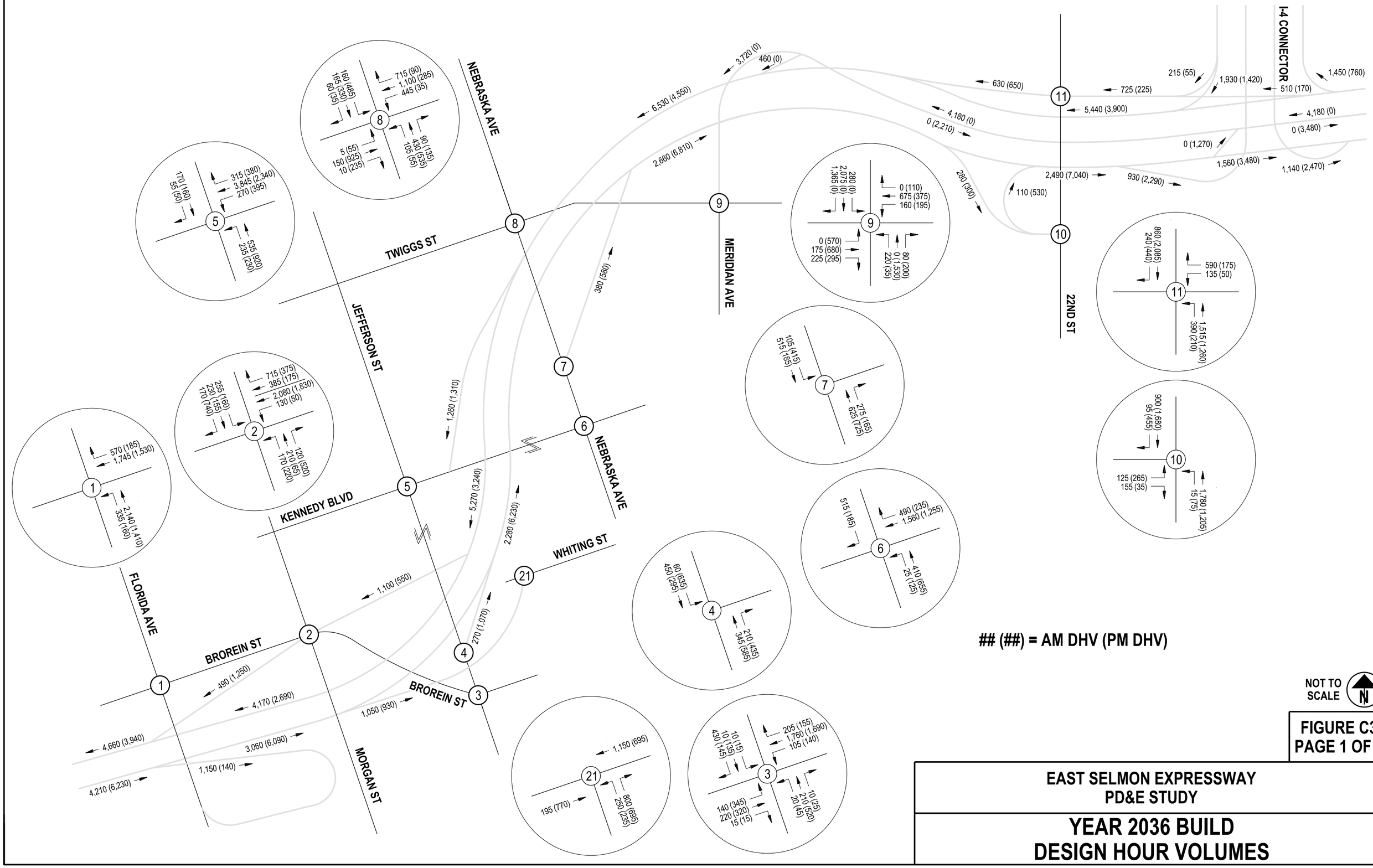
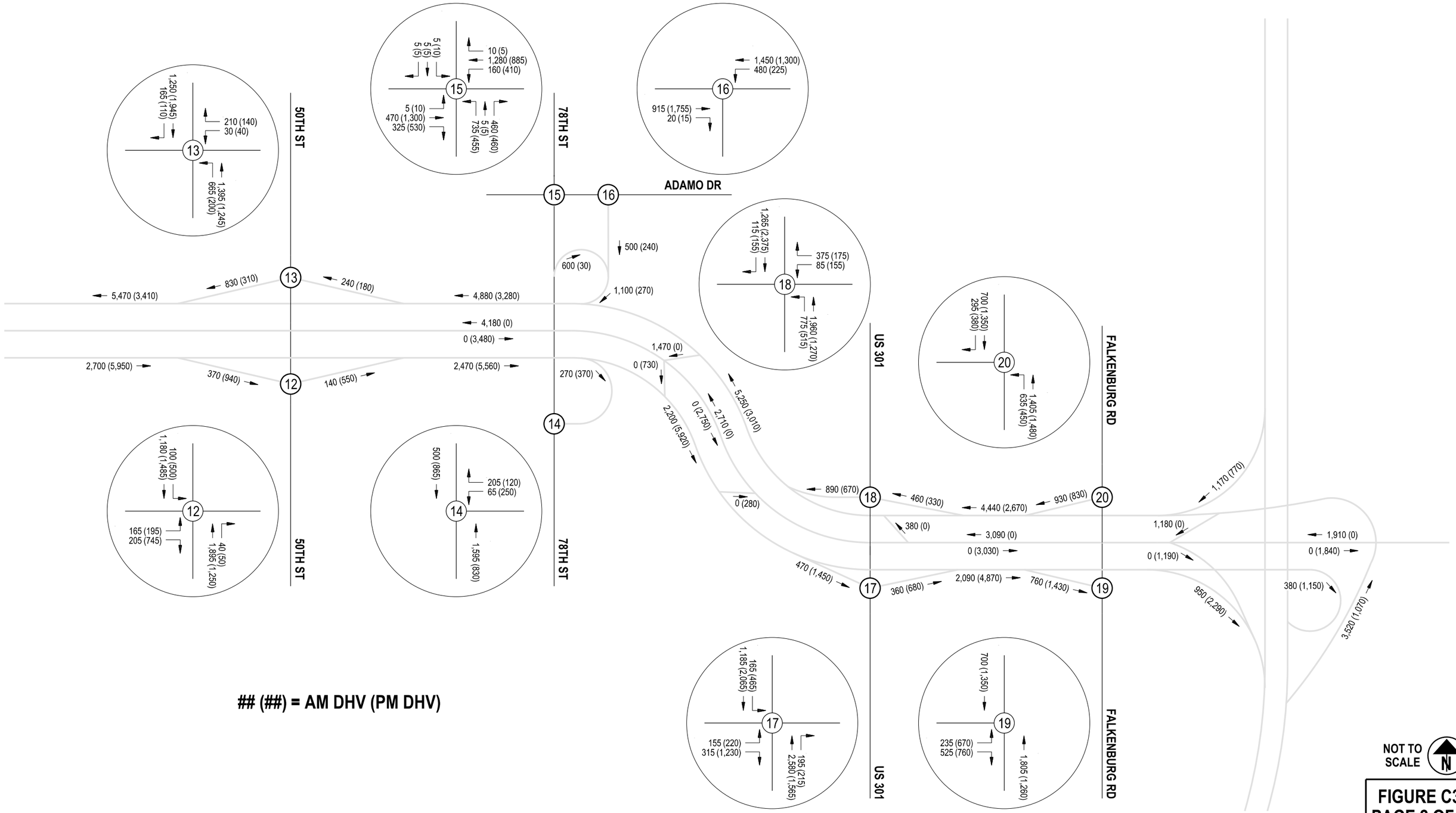


FIGURE C3
PAGE 1 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2036 BUILD
DESIGN HOUR VOLUMES



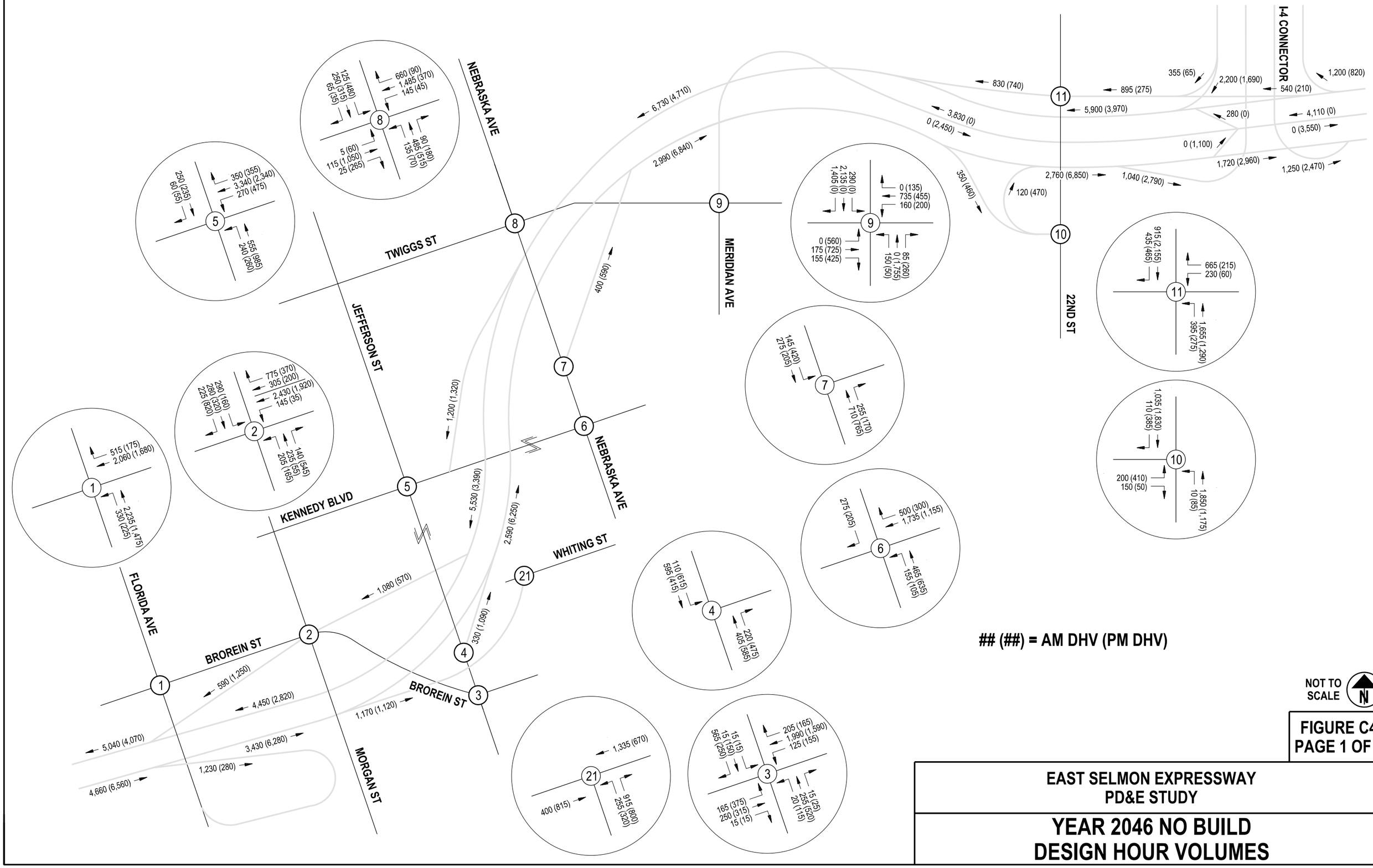
(##) = AM DHV (PM DHV)

NOT TO SCALE

FIGURE C3
PAGE 2 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2036 BUILD DESIGN HOUR VOLUMES



(##) = AM DHV (PM DHV)

NOT TO SCALE

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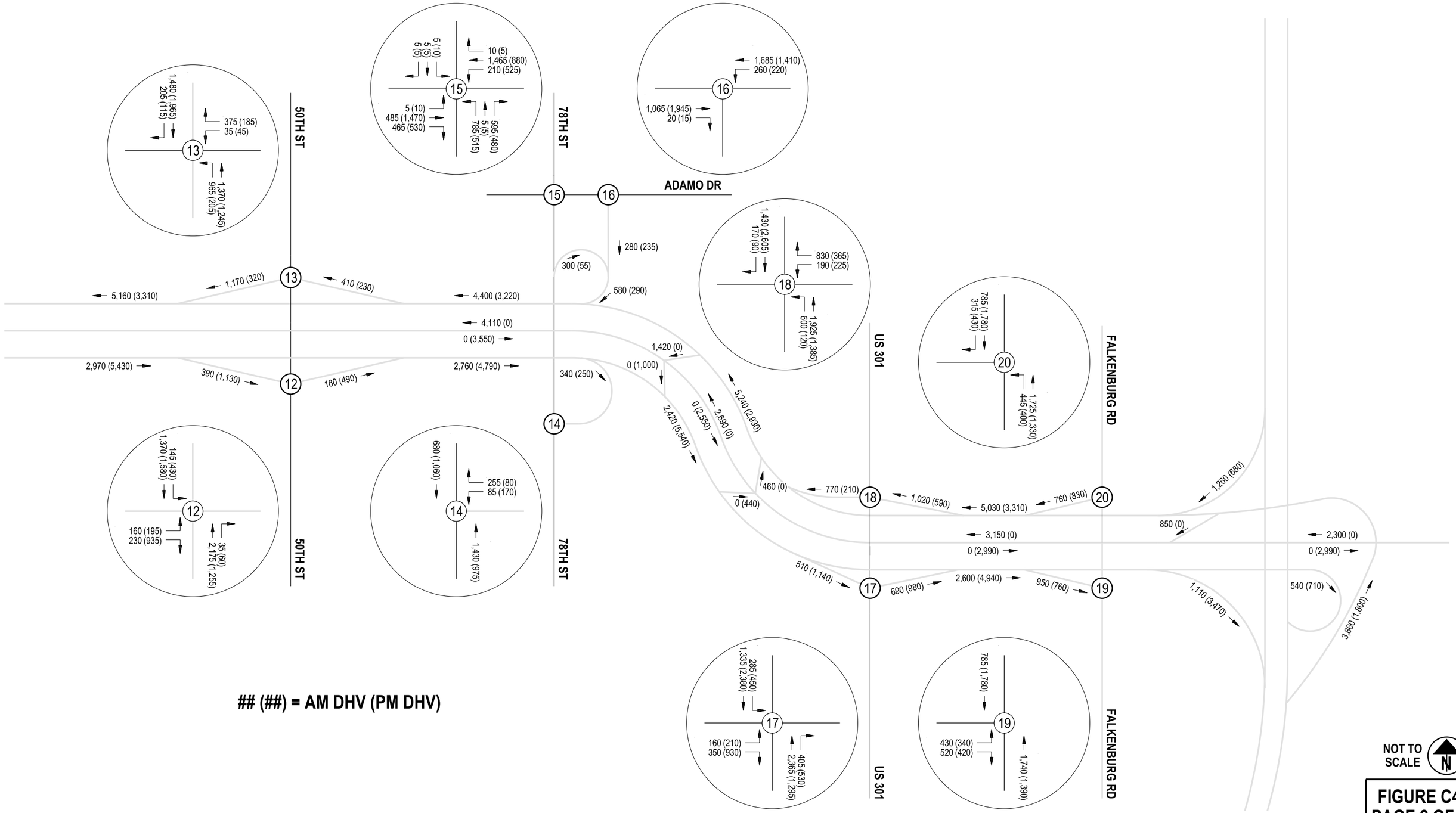
FIGURE C4
PAGE 1 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2046 NO BUILD DESIGN HOUR VOLUMES



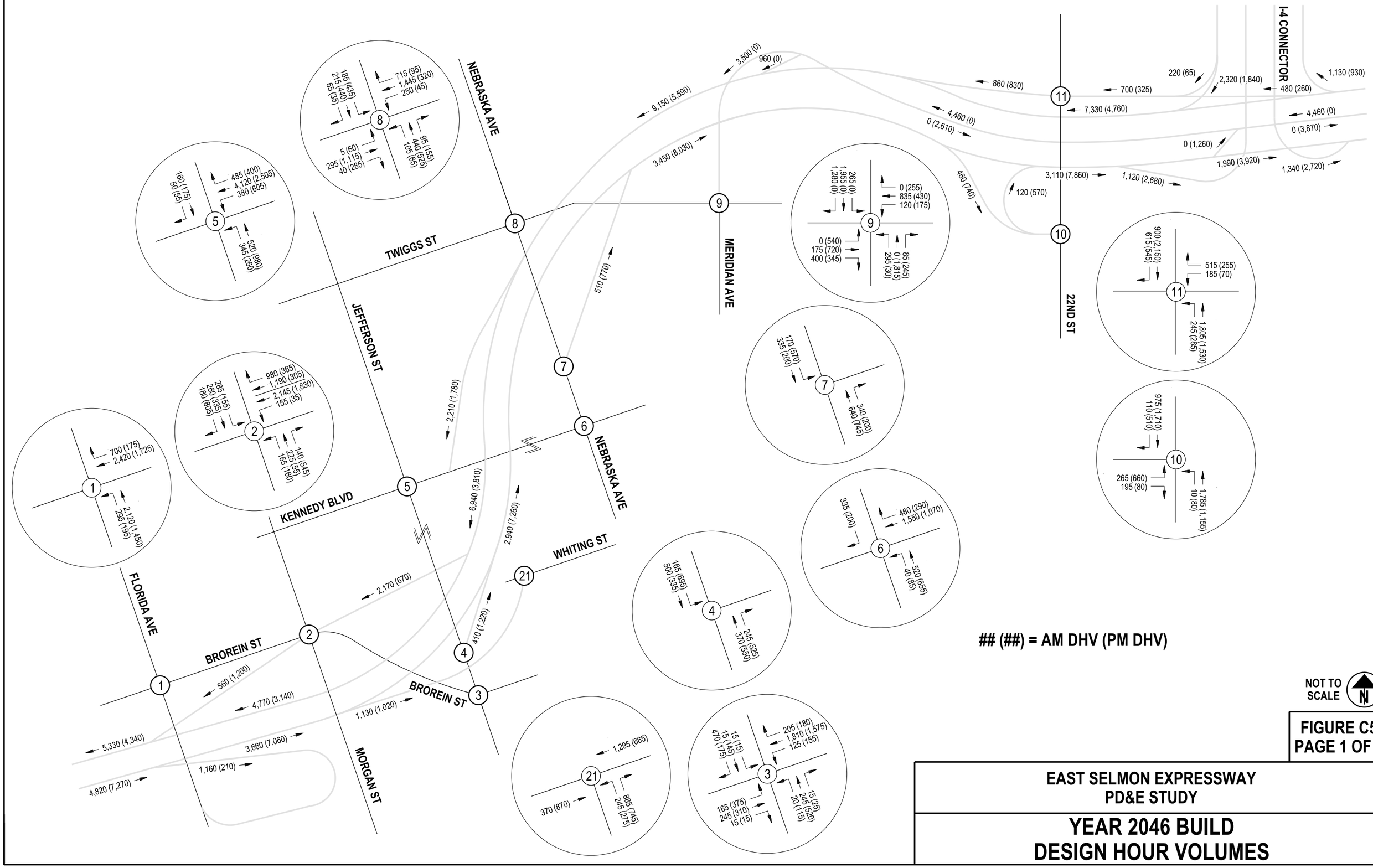
(##) = AM DHV (PM DHV)

NOT TO SCALE

FIGURE C4
PAGE 2 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2046 NO BUILD DESIGN HOUR VOLUMES



(##) = AM DHV (PM DHV)

NOT TO SCALE

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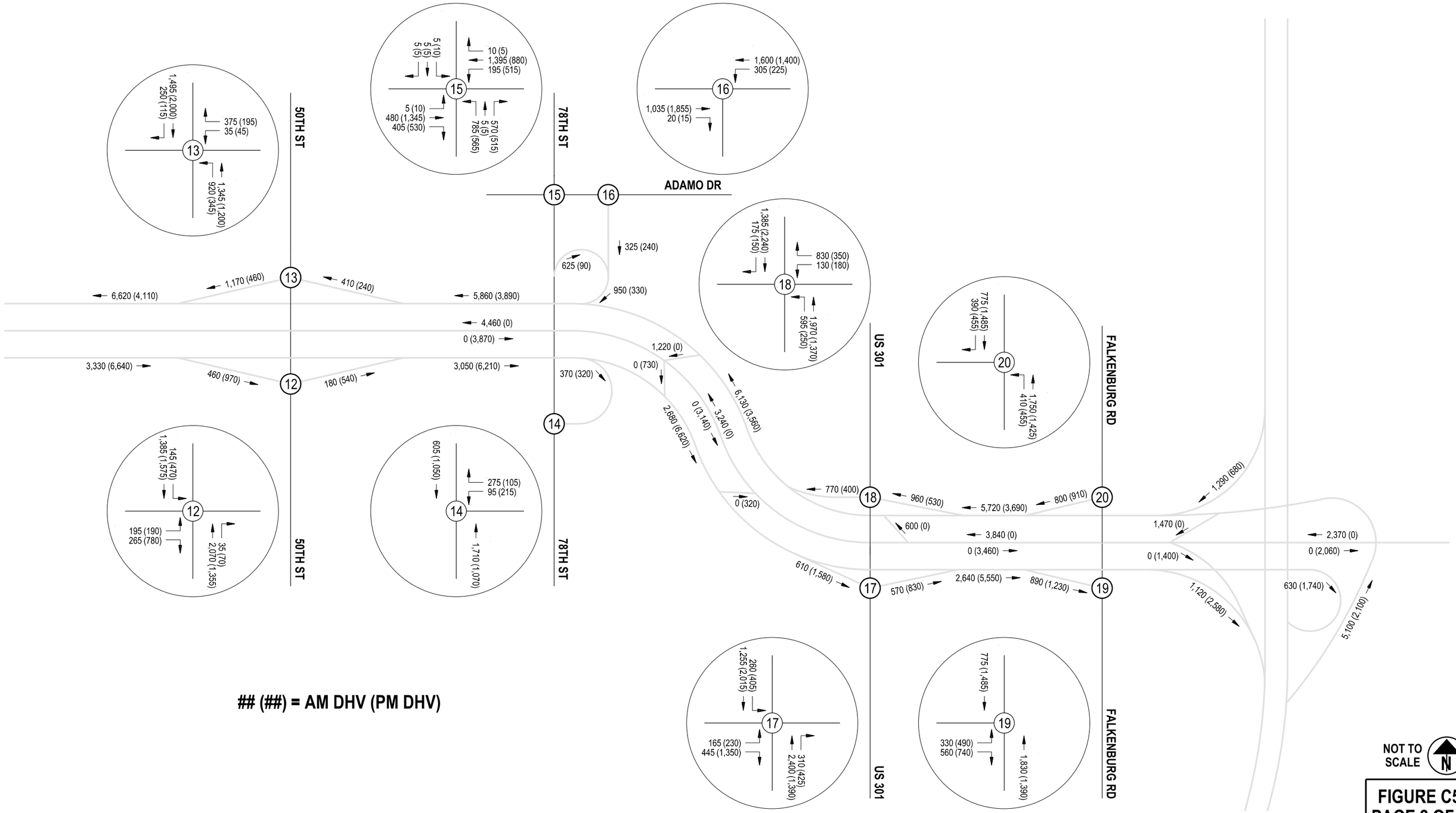
FIGURE C5
PAGE 1 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2046 BUILD DESIGN HOUR VOLUMES



(##) = AM DHV (PM DHV)

NOT TO SCALE

FIGURE C5
PAGE 2 OF 2

EAST SELMON EXPRESSWAY
PD&E STUDY

YEAR 2046 BUILD DESIGN HOUR VOLUMES

Table D-1
2019 Existing - Daily and DH Volumes and Factors

	Cutline Locations		2019 Existing - Daily Balanced Vol				Implied K Factors				2019 Existing - AM Peak Hour Volume						2019 Existing - PM Peak Hour Volume					
	Westbound	Eastbound	WB	WB REL	EB REL	EB	WB	WB REL	EB REL	EB	WB	REL	EB	2-Way	WB %	EB %	WB	REL	EB	2-Way	WB %	EB %
	On-Ramp, I-75 NB	Off-Ramp, I-75 NB	23,000	6,700	11,500	6,300	0.12	0.39	0.20	0.13	2,720	2,637	346	-	-	-	970	2,357	793	-	-	-
Selmon Mainline	East of Falkenburg On	East of Falkenburg On	29,400	6,700	11,500	21,000	0.11	0.39	0.20	0.12	3,175	2,637	1,038	6,850	85%	15%	1,720	2,357	2,421	6,498	26%	74%
	East of US-301 Off	East of US-301 On	39,000	6,700	11,500	30,500	0.10	0.39	0.20	0.11	3,776	2,637	1,704	8,117	79%	21%	2,520	2,357	3,469	8,346	30%	70%
	East of US-301 On	East of US-301 Off	32,900	6,700	11,500	25,100	0.10	0.39	0.20	0.12	3,196	2,637	1,348	7,181	81%	19%	2,190	2,357	2,946	7,493	29%	71%
	West of US-301	West of US-301 Off	38,900	6,700	11,500	34,800	0.10	0.39	0.20	0.12	3,907	2,637	1,785	8,329	79%	21%	2,820	2,357	4,122	9,299	30%	70%
	Between Ramp 5 and 3	Between Ramp 2 and 4	40,900	4,700	6,700	39,600	0.11	0.50	0.26	0.12	4,536	2,370	1,785	8,691	79%	21%	2,820	1,761	4,718	9,299	30%	70%
	East of 78th On	East of 78th Off	37,800	7,800	10,500	35,800	0.10	0.51	0.26	0.10	3,659	3,970	1,785	9,414	81%	19%	2,820	2,767	3,712	9,299	30%	70%
	East of 50th Off (THEA)	East of 50th On (THEA)	41,100	7,800	10,500	37,300	0.10	0.51	0.26	0.10	3,971	3,970	2,047	9,988	80%	20%	3,040	2,767	3,843	9,650	32%	68%
	East of 50th On	East of 50th Off	38,400	7,800	10,500	34,300	0.10	0.51	0.26	0.10	3,718	3,970	1,909	9,597	80%	20%	2,870	2,767	3,508	9,145	31%	69%
	East of I-4 Off	East of I-4 On	43,600	7,800	10,500	39,700	0.10	0.51	0.26	0.10	4,307	3,970	2,167	10,444	79%	21%	3,150	2,767	4,067	9,984	32%	68%
	West of I-4 Off	East of Ramp 1	31,800	7,800	10,500	19,700	0.12	0.51	0.26	0.12	3,741	3,970	1,230	8,941	86%	14%	2,480	2,767	2,420	7,667	32%	68%
	West of 22nd Off	East of Ramp 1	27,800	7,800	10,500	19,700	0.13	0.51	0.26	0.12	3,521	3,970	1,230	8,721	86%	14%	2,310	2,767	2,420	7,497	31%	69%
	West of New Ramp 2	East of I-4 Off	27,800	7,800	3,900	26,300	0.13	0.49	0.30	0.15	3,521	3,810	1,230	8,561	86%	14%	2,310	1,158	4,029	7,497	31%	69%
	East of 22nd On	East of 22nd On	35,900	7,800	3,900	35,600	0.12	0.49	0.30	0.14	4,294	3,810	2,039	10,143	80%	20%	3,710	1,158	4,937	9,805	38%	62%
	East of New Ramp 1	East of Nebraska On	40,900	7,800	3,900	35,600	0.12	0.49	0.30	0.14	4,770	3,810	2,116	10,696	80%	20%	4,380	1,158	4,993	10,531	42%	58%
	East of Kennedy Off	East of Nebraska On	40,900	7,800	3,900	35,600	0.12	0.49	0.30	0.14	4,770	3,810	2,116	10,696	80%	20%	4,380	1,158	4,993	10,531	42%	58%
	East of Brorein Off	East of Jefferson On	34,800	-	-	32,300	0.11	0.00	0.00	0.14	3,740	-	1,946	5,686	66%	34%	3,090	-	4,570	7,660	40%	60%
	East of Brorein On	East of Florida Off	30,900	-	-	29,100	0.09	0.00	0.00	0.13	2,822	-	1,741	4,563	62%	38%	2,560	-	3,871	6,431	40%	60%
	West of Brorein On	West of Florida Off	33,900	-	-	33,600	0.09	0.00	0.00	0.13	3,107	-	2,731	5,838	53%	47%	3,800	-	4,243	8,043	47%	53%

Table D-2
2026 Opening - Daily and DH Volumes and Factors

	Cutline Locations		2026 Opening - Daily Balanced Vol				Implied K Factors				2026 Opening - AM Peak Hour Volume						2026 Opening - PM Peak Hour Volume					
	Westbound	Eastbound	WB	WB REL	EB REL	EB	WB	WB REL	EB REL	EB	WB	REL	EB	2-Way	WB %	EB %	WB	REL	EB	2-Way	WB %	EB %
	On-Ramp, I-75 NB	Off-Ramp, I-75 NB	22,510	6,870	13,660	5,850	0.12	0.33	0.18	0.11	2,770	2,290	430	-	-	-	1,800	2,420	660	-	-	-
Selmon Mainline	East of Falkenburg On	East of Falkenburg On	30,220	7,490	13,660	26,860	0.11	0.34	0.18	0.11	3,260	2,560	1,230	7,050	83%	17%	2,480	2,420	2,900	7,800	32%	68%
	East of US-301 Off	East of US-301 On	41,180	7,490	13,660	37,050	0.10	0.34	0.18	0.11	3,990	2,560	1,920	8,470	77%	23%	3,310	2,420	3,930	9,660	34%	66%
	East of US-301 On	East of US-301 Off	35,150	7,490	13,660	30,040	0.10	0.34	0.18	0.11	3,410	2,560	1,560	7,530	79%	21%	2,720	2,420	3,280	8,420	32%	68%
	West of US-301	West of US-301 Off	42,830	7,490	13,660	41,180	0.10	0.34	0.18	0.11	4,170	2,560	2,010	8,740	77%	23%	2,930	2,420	4,540	9,890	30%	70%
	Between Ramp 5 and 3	Between Ramp 2 and 4	44,900	5,420	8,530	46,320	0.10	0.42	0.26	0.10	4,480	2,250	2,010	8,740	77%	23%	2,930	2,180	4,780	9,890	30%	70%
	East of 78th On	East of 78th Off	41,700	8,620	14,600	40,250	0.08	0.41	0.21	0.10	3,160	3,570	2,010	8,740	77%	23%	2,930	3,090	3,870	9,890	30%	70%
	East of 50th Off (THEA)	East of 50th On (THEA)	45,620	8,620	14,600	42,040	0.08	0.41	0.21	0.10	3,730	3,570	2,280	9,580	76%	24%	3,220	3,090	4,040	10,350	31%	69%
	East of 50th On	East of 50th Off	43,000	8,620	14,600	39,040	0.08	0.41	0.21	0.09	3,490	3,570	2,140	9,200	77%	23%	2,990	3,090	3,690	9,770	31%	69%
	East of I-4 Off	East of I-4 On	49,680	8,620	14,600	46,360	0.09	0.41	0.21	0.10	4,250	3,570	2,440	10,260	76%	24%	3,310	3,090	4,430	10,830	31%	69%
	West of I-4 Off	East of Ramp 1	35,790	8,620	14,600	22,930	0.10	0.41	0.21	0.11	3,560	3,570	1,440	8,570	83%	17%	2,490	3,090	2,590	8,170	30%	70%
	West of 22nd Off	East of Ramp 1	31,710	8,620	14,600	22,930	0.10	0.41	0.21	0.11	3,280	3,570	1,440	8,290	83%	17%	2,280	3,090	2,590	7,960	29%	71%
	West of New Ramp 2	East of I-4 Off	31,870	8,460	7,420	30,110	0.11	0.41	0.28	0.12	3,350	3,500	1,440	8,290	83%	17%	2,280	2,060	3,620	7,960	29%	71%
	East of 22nd On	East of 22nd On	44,370	8,460	7,420	44,310	0.10	0.41	0.28	0.12	4,610	3,500	2,300	10,410	78%	22%	3,970	2,060	5,140	11,170	36%	64%
	East of New Ramp 1	East of Nebraska On	50,630	8,460	7,420	44,450	0.10	0.41	0.28	0.12	5,160	3,500	2,420	11,080	78%	22%	4,710	2,060	5,170	11,940	39%	61%
	East of Kennedy Off	East of Nebraska On	50,630	8,460	7,420	44,450	0.10	0.41	0.28	0.12	5,160	3,500	2,420	11,080	78%	22%	4,710	2,060	5,170	11,940	39%	61%
	East of Brorein Off	East of Jefferson On	42,460	-	-	39,280	0.10	0.00	0.00	0.12	4,060	-	2,170	6,230	65%	35%	3,390	-	4,650	8,040	42%	58%
	East of Brorein On	East of Florida Off	36,380	-	-	38,810	0.08	0.00	0.00	0.11	3,070	-	2,370	5,440	56%	44%	2,820	-	4,160	6,980	40%	60%
	West of Brorein On	West of Florida Off	42,350	-	-	42,720	0.08	0.00	0.00	0.10	3,450	-	3,430	6,880	50%	50%	4,070	-	4,440	8,510	48%	52%

Table D-3
2036 No-Build - Daily and DH Volumes and Factors

	Cutline Locations		2036 No-Build - Daily Balanced Vol				Implied K Factors				2036 No-Build - AM Peak Hour Volume						2036 No-Build - PM Peak Hour Volume					
	Westbound	Eastbound	WB	WB REL	EB REL	EB	WB	WB REL	EB REL	EB	WB	REL	EB	2-Way	WB %	EB %	WB	REL	EB	2-Way	WB %	EB %
	On-Ramp, I-75 NB	Off-Ramp, I-75 NB	21,840	7,100	16,740	5,230	0.12	0.28	0.16	0.06	2,600	2,010	460	-	-	-	970	2,660	330	-	-	-
Selmon Mainline	East of Falkenburg On	East of Falkenburg On	31,400	8,620	16,740	35,240	0.10	0.31	0.16	0.10	3,150	2,660	1,400	7,210	81%	19%	1,720	2,660	3,440	7,820	22%	78%
	East of US-301 Off	East of US-301 On	44,290	8,620	16,740	46,420	0.09	0.31	0.16	0.10	4,080	2,660	2,130	8,870	76%	24%	2,520	2,660	4,440	9,620	26%	74%
	East of US-301 On	East of US-301 Off	38,360	8,620	16,740	37,110	0.09	0.31	0.16	0.10	3,530	2,660	1,750	7,940	78%	22%	2,190	2,660	3,610	8,460	26%	74%
	West of US-301	West of US-301 Off	48,450	8,620	16,740	50,310	0.10	0.27	0.16	0.10	4,640	2,370	2,210	9,220	76%	24%	2,820	2,660	5,000	10,480	27%	73%
	Between Ramp 5 and 3	Between Ramp 2 and 4	50,610	6,460	11,130	55,920	0.09	0.37	0.21	0.09	4,640	2,370	2,210	9,220	76%	24%	2,820	2,390	5,270	10,480	27%	73%
	East of 78th On	East of 78th Off	47,290	9,780	20,450	46,600	0.06	0.41	0.17	0.09	3,040	3,970	2,210	9,220	76%	24%	2,820	3,480	4,180	10,480	27%	73%
	East of 50th Off (THEA)	East of 50th On (THEA)	52,070	9,780	20,450	48,810	0.08	0.41	0.17	0.09	3,950	3,970	2,480	10,400	76%	24%	3,040	3,480	4,410	10,930	28%	72%
	East of 50th On	East of 50th Off	49,570	9,780	20,450	45,810	0.08	0.41	0.17	0.09	3,730	3,970	2,340	10,040	77%	23%	2,870	3,480	4,030	10,380	28%	72%
	East of I-4 Off	East of I-4 On	58,360	9,780	20,450	55,880	0.08	0.41	0.17	0.09	4,730	3,970	2,690	11,390	76%	24%	3,150	3,480	5,020	11,650	27%	73%
	West of I-4 Off	East of Ramp 1	41,500	9,780	20,450	27,550	0.09	0.41	0.17	0.11	3,860	3,970	1,590	9,420	83%	17%	2,480	3,480	2,910	8,870	28%	72%
	West of 22nd Off	East of Ramp 1	37,310	9,780	20,450	27,550	0.09	0.41	0.17	0.11	3,490	3,970	1,590	9,050	82%	18%	2,310	3,480	2,910	8,700	27%	73%
	West of New Ramp 2	East of I-4 Off	37,680	9,400	12,450	35,550	0.10	0.41	0.19	0.11	3,650	3,810	1,590	9,050	82%	18%	2,310	2,390	4,000	8,700	27%	73%
	East of 22nd On	East of 22nd On	56,460	9,400	12,450	56,760	0.10	0.41	0.19	0.11	5,600	3,810	2,520	11,930	79%	21%	3,710	2,390	6,400	12,500	30%	70%
	East of New Ramp 1	East of Nebraska On	64,530	9,400	12,450	57,100	0.10	0.41	0.19	0.11	6,250	3,810	2,690	12,750	79%	21%	4,380	2,390	6,390	13,160	33%	67%
	East of Kennedy Off	East of Nebraska On	64,530	9,400	12,450	57,100	0.10	0.41	0.19	0.11	6,250	3,810	2,690	12,750	79%	21%	4,380	2,390	6,390	13,160	33%	67%
	East of Brorein Off	East of Jefferson On	53,410	-	-	49,250	0.09	0.00	0.00	0.12	5,040	-	2,320	7,360	68%	32%	3,090	-	5,740	8,830	35%	65%
	East of Brorein On	East of Florida Off	44,220	-	-	52,670	0.09	0.00	0.00	0.11	3,950	-	3,100	7,050	56%	44%	2,560	-	5,560	8,120	32%	68%
	West of Brorein On	West of Florida Off	54,430	-	-	55,730	0.08	0.00	0.00	0.10	4,480	-	4,250	8,730	51%	49%	3,800	-	5,700	9,500	40%	60%

Table D-4
2036 Build - Daily and DH Volumes and Factors

	Cutline Locations		2036 Build - Daily Balanced Vol				Implied K Factors				2036 Build - AM Peak Hour Volume						2036 Build - PM Peak Hour Volume					
	Westbound	Eastbound	WB	WB REL	EB REL	EB	WB	WB REL	EB REL	EB	WB	REL	EB	2-Way	WB %	EB %	WB	REL	EB	2-Way	WB %	EB %
	On-Ramp, I-75 NB	Off-Ramp, I-75 NB	25,820	7,310	16,750	5,400	0.14	0.26	0.11	0.21	3,520	1,910	380	-	-	-	1,070	1,840	1,150	-	-	-
Selmon Mainline	East of Falkenburg On	East of Falkenburg On	34,190	10,070	26,910	26,660	0.10	0.31	0.11	0.13	3,510	3,090	1,330	7,930	83%	17%	1,840	3,030	3,440	8,310	22%	78%
	East of US-301 Off	East of US-301 On	47,360	10,070	26,910	38,900	0.09	0.31	0.11	0.13	4,440	3,090	2,090	9,620	78%	22%	2,670	3,030	4,870	10,570	25%	75%
	East of US-301 On	East of US-301 Off	41,390	10,070	26,910	29,960	0.10	0.31	0.11	0.14	3,980	3,090	1,730	8,800	80%	20%	2,340	3,030	4,190	9,560	24%	76%
	West of US-301	West of US-301 Off	52,190	10,070	26,910	43,250	0.10	0.27	0.11	0.13	5,250	2,710	2,200	10,160	78%	22%	3,010	3,030	5,640	11,680	26%	74%
	Between Ramp 5 and 3	Between Ramp 2 and 4	55,220	7,040	18,820	51,340	0.10	0.38	0.15	0.12	5,250	2,710	2,200	10,160	78%	22%	3,010	2,750	5,920	11,680	26%	74%
	East of 78th On	East of 78th Off	52,450	9,810	23,050	47,110	0.07	0.43	0.15	0.11	3,780	4,180	2,200	10,160	78%	22%	3,010	3,480	5,190	11,680	26%	74%
	East of 50th Off (THEA)	East of 50th On (THEA)	58,420	9,810	23,050	49,680	0.08	0.43	0.15	0.11	4,880	4,180	2,470	11,530	79%	21%	3,280	3,480	5,560	12,320	27%	73%
	East of 50th On	East of 50th Off	55,840	9,810	23,050	46,210	0.08	0.43	0.15	0.11	4,640	4,180	2,330	11,150	79%	21%	3,100	3,480	5,010	11,590	27%	73%
	East of I-4 Off	East of I-4 On	63,600	9,810	23,050	56,170	0.09	0.43	0.15	0.11	5,470	4,180	2,700	12,350	78%	22%	3,410	3,480	5,950	12,840	27%	73%
	West of I-4 Off	East of Ramp 1	43,410	9,810	23,050	26,700	0.09	0.43	0.15	0.13	4,020	4,180	1,560	9,760	84%	16%	2,650	3,480	3,480	9,610	28%	72%
	West of 22nd Off	East of Ramp 1	38,640	9,810	23,050	26,700	0.09	0.43	0.15	0.13	3,510	4,180	1,560	9,250	83%	17%	2,480	3,480	3,480	9,440	26%	74%
	West of New Ramp 2	East of I-4 Off	38,640	9,810	13,170	36,580	0.09	0.43	0.17	0.13	3,510	4,180	1,560	9,250	83%	17%	2,480	2,210	4,750	9,440	26%	74%
	East of 22nd On	East of 22nd On	57,290	9,810	13,170	57,470	0.09	0.43	0.17	0.12	5,440	4,180	2,490	12,110	79%	21%	3,900	2,210	7,040	13,150	30%	70%
	East of New Ramp 1	East of Nebraska On	65,250	9,810	13,170	57,250	0.09	0.43	0.17	0.12	6,070	4,180	2,660	12,910	79%	21%	4,550	2,210	6,810	13,570	34%	66%
	East of Kennedy Off	East of Nebraska On	66,340	8,720	13,170	57,250	0.10	0.43	0.17	0.12	6,530	3,720	2,660	12,910	79%	21%	4,550	2,210	6,810	13,570	34%	66%
	East of Brorein Off	East of Jefferson On	54,980	-	-	49,660	0.10	0.00	0.00	0.13	5,270	-	2,280	7,550	70%	30%	3,240	-	6,230	9,470	34%	66%
	East of Brorein On	East of Florida Off	45,700	-	-	53,170	0.09	0.00	0.00	0.11	4,170	-	3,060	7,230	58%	42%	2,690	-	6,090	8,780	31%	69%
	West of Brorein On	West of Florida Off	55,860	-	-	56,250	0.08	0.00	0.00	0.11	4,660	-	4,210	8,870	53%	47%	3,940	-	6,230	10,170	39%	61%

Table D-5
2046 No-Build - Daily and DH Volumes and Factors

	Cutline Locations		2046 No-Build - Daily Balanced Vol				Implied K Factors				2046 No-Build - AM Peak Hour Volume						2046 No-Build - PM Peak Hour Volume					
	Westbound	Eastbound	WB	WB REL	EB REL	EB	WB	WB REL	EB REL	EB	WB	REL	EB	2-Way	WB %	EB %	WB	REL	EB	2-Way	WB %	EB %
	On-Ramp, I-75 NB	Off-Ramp, I-75 NB	39,000	7,190	18,130	8,660	0.10	0.32	0.16	0.08	3,860	2,300	540	-	-	-	1,800	2,990	710	-	-	-
Selmon Mainline	East of Falkenburg On	East of Falkenburg On	47,340	9,170	18,130	45,520	0.09	0.34	0.16	0.09	4,270	3,150	1,650	9,070	82%	18%	2,480	2,990	4,180	9,650	26%	74%
	East of US-301 Off	East of US-301 On	59,710	9,170	18,130	57,040	0.08	0.34	0.16	0.09	5,030	3,150	2,600	10,780	76%	24%	3,310	2,990	4,940	11,240	29%	71%
	East of US-301 On	East of US-301 Off	48,610	9,170	18,130	46,910	0.08	0.34	0.16	0.08	4,010	3,150	1,910	9,070	79%	21%	2,720	2,990	3,960	9,670	28%	72%
	West of US-301	West of US-301 Off	56,220	9,170	18,130	58,650	0.09	0.29	0.16	0.09	5,240	2,690	2,420	10,350	77%	23%	2,930	2,990	5,100	11,020	27%	73%
	Between Ramp 5 and 3	Between Ramp 2 and 4	58,430	6,960	13,000	63,780	0.09	0.39	0.20	0.09	5,240	2,690	2,420	10,350	77%	23%	2,930	2,550	5,540	11,020	27%	73%
	East of 78th On	East of 78th Off	54,920	10,470	24,990	51,790	0.07	0.39	0.14	0.09	3,820	4,110	2,420	10,350	77%	23%	2,930	3,550	4,540	11,020	27%	73%
	East of 50th Off (THEA)	East of 50th On (THEA)	59,490	10,470	24,990	54,820	0.07	0.39	0.14	0.09	4,400	4,110	2,760	11,270	76%	24%	3,220	3,550	4,790	11,560	28%	72%
	East of 50th On	East of 50th Off	56,230	10,470	24,990	51,190	0.07	0.39	0.14	0.08	3,990	4,110	2,580	10,680	76%	24%	2,990	3,550	4,300	10,840	28%	72%
	East of I-4 Off	East of I-4 On	66,480	10,470	24,990	62,160	0.08	0.39	0.14	0.09	5,160	4,110	2,970	12,240	76%	24%	3,310	3,550	5,430	12,290	27%	73%
	West of I-4 Off	East of Ramp 1	44,010	10,470	24,990	30,260	0.09	0.39	0.14	0.10	3,960	4,110	1,720	9,790	82%	18%	2,490	3,550	2,960	9,000	28%	72%
	West of 22nd Off	East of Ramp 1	38,870	10,470	24,990	30,260	0.09	0.39	0.14	0.10	3,420	4,110	1,720	9,250	81%	19%	2,280	3,550	2,960	8,790	26%	74%
	West of New Ramp 2	East of I-4 Off	39,720	9,630	14,840	40,410	0.09	0.40	0.17	0.10	3,700	3,830	1,720	9,250	81%	19%	2,280	2,450	4,060	8,790	26%	74%
	East of 22nd On	East of 22nd On	62,770	9,630	14,840	65,750	0.09	0.40	0.17	0.10	5,900	3,830	2,760	12,490	78%	22%	3,970	2,450	6,850	13,270	30%	70%
	East of New Ramp 1	East of Nebraska On	72,150	9,630	14,840	65,570	0.09	0.40	0.17	0.10	6,730	3,830	2,990	13,550	78%	22%	4,710	2,450	6,840	14,000	34%	66%
	East of Kennedy Off	East of Nebraska On	72,150	9,630	14,840	65,570	0.09	0.40	0.17	0.10	6,730	3,830	2,990	13,550	78%	22%	4,710	2,450	6,840	14,000	34%	66%
	East of Brorein Off	East of Jefferson On	60,210	-	-	57,550	0.09	0.00	0.00	0.11	5,530	-	2,590	8,120	68%	32%	3,390	-	6,250	9,640	35%	65%
	East of Brorein On	East of Florida Off	50,330	-	-	62,290	0.09	0.00	0.00	0.10	4,450	-	3,430	7,880	56%	44%	2,820	-	6,280	9,100	31%	69%
	West of Brorein On	West of Florida Off	59,180	-	-	66,040	0.09	0.00	0.00	0.10	5,040	-	4,660	9,700	52%	48%	4,070	-	6,560	10,630	38%	62%

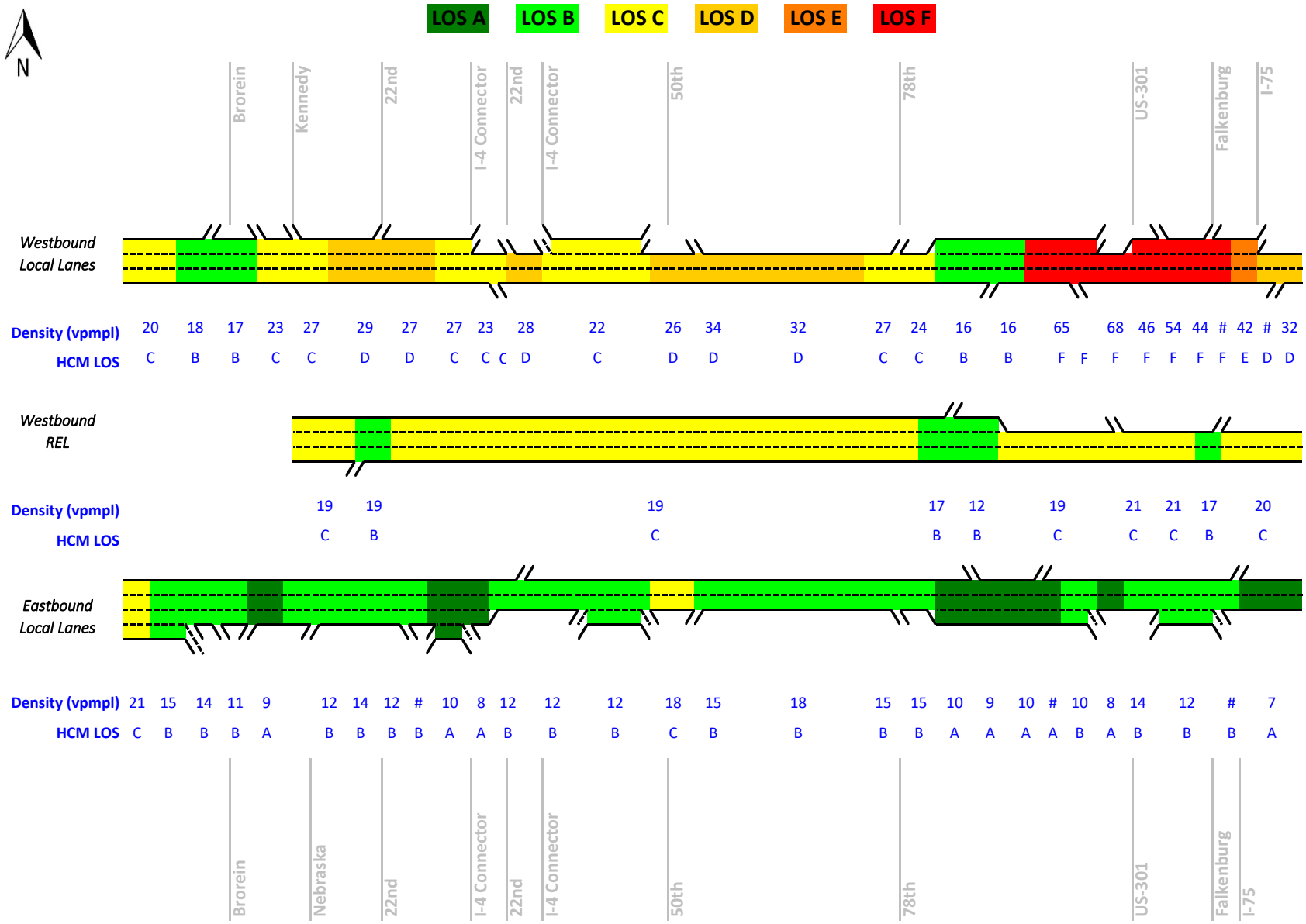
Table D-6
2046 Build - Daily and DH Volumes and Factors

	Cutline Locations		2046 Build - Daily Balanced Vol				Implied K Factors				2046 Build - AM Peak Hour Volume						2046 Build - PM Peak Hour Volume					
	Westbound	Eastbound	WB	WB REL	EB REL	EB	WB	WB REL	EB REL	EB	WB	REL	EB	2-Way	WB %	EB %	WB	REL	EB	2-Way	WB %	EB %
	On-Ramp, I-75 NB	Off-Ramp, I-75 NB	46,530	7,220	17,940	9,500	0.11	0.33	0.11	0.18	5,100	2,370	630	-	-	-	2,100	2,060	1,740	-	-	-
Selmon Mainline	East of Falkenburg On	East of Falkenburg On	54,680	10,650	29,620	37,410	0.09	0.36	0.12	0.12	4,920	3,840	1,750	10,510	83%	17%	2,780	3,460	4,320	10,560	26%	74%
	East of US-301 Off	East of US-301 On	67,710	10,650	29,620	49,950	0.08	0.36	0.12	0.11	5,720	3,840	2,640	12,200	78%	22%	3,690	3,460	5,550	12,700	29%	71%
	East of US-301 On	East of US-301 Off	57,390	10,650	29,620	40,080	0.08	0.36	0.12	0.12	4,760	3,840	2,070	10,670	81%	19%	3,160	3,460	4,720	11,340	28%	72%
	West of US-301	West of US-301 Off	65,570	10,650	29,620	53,220	0.09	0.30	0.12	0.12	6,130	3,240	2,680	12,050	78%	22%	3,560	3,460	6,300	13,320	27%	73%
	Between Ramp 5 and 3	Between Ramp 2 and 4	68,520	7,700	22,440	60,400	0.09	0.42	0.14	0.11	6,130	3,240	2,680	12,050	78%	22%	3,560	3,140	6,620	13,320	27%	73%
	East of 78th On	East of 78th Off	65,940	10,280	26,390	56,450	0.07	0.43	0.15	0.10	4,910	4,460	2,680	12,050	78%	22%	3,560	3,870	5,890	13,320	27%	73%
	East of 50th Off (THEA)	East of 50th On (THEA)	71,690	10,280	26,390	59,710	0.08	0.43	0.15	0.10	5,860	4,460	3,050	13,370	77%	23%	3,890	3,870	6,210	13,970	28%	72%
	East of 50th On	East of 50th Off	68,480	10,280	26,390	56,060	0.08	0.43	0.15	0.10	5,450	4,460	2,870	12,780	78%	22%	3,650	3,870	5,670	13,190	28%	72%
	East of I-4 Off	East of I-4 On	78,340	10,280	26,390	66,470	0.08	0.43	0.15	0.10	6,620	4,460	3,330	14,410	77%	23%	4,110	3,870	6,640	14,620	28%	72%
	West of I-4 Off	East of Ramp 1	54,230	10,280	26,390	33,510	0.10	0.43	0.15	0.12	5,490	4,460	1,990	11,940	83%	17%	3,180	3,870	3,920	10,970	29%	71%
	West of 22nd Off	East of Ramp 1	49,090	10,280	26,390	33,510	0.10	0.43	0.15	0.12	5,010	4,460	1,990	11,460	83%	17%	2,920	3,870	3,920	10,710	27%	73%
	West of New Ramp 2	East of I-4 Off	49,090	10,280	14,970	44,920	0.10	0.43	0.17	0.12	5,010	4,460	1,990	11,460	83%	17%	2,920	2,610	5,180	10,710	27%	73%
	East of 22nd On	East of 22nd On	74,360	10,280	14,970	70,300	0.10	0.43	0.17	0.11	7,330	4,460	3,110	14,900	79%	21%	4,760	2,610	7,860	15,230	31%	69%
	East of New Ramp 1	East of Nebraska On	84,590	10,280	14,970	71,110	0.10	0.43	0.17	0.11	8,190	4,460	3,450	16,100	79%	21%	5,590	2,610	8,030	16,230	34%	66%
	East of Kennedy Off	East of Nebraska On	86,830	8,040	14,970	71,110	0.11	0.44	0.17	0.11	9,150	3,500	3,450	16,100	79%	21%	5,590	2,610	8,030	16,230	34%	66%
	East of Brorein Off	East of Jefferson On	66,160	-	-	61,920	0.10	0.00	0.00	0.12	6,940	-	2,940	9,880	70%	30%	3,810	-	7,260	11,070	34%	66%
	East of Brorein On	East of Florida Off	50,900	-	-	65,250	0.09	0.00	0.00	0.11	4,770	-	3,660	8,430	57%	43%	3,140	-	7,060	10,200	31%	69%
	West of Brorein On	West of Florida Off	59,680	-	-	68,590	0.09	0.00	0.00	0.11	5,330	-	4,820	10,150	53%	47%	4,340	-	7,270	11,610	37%	63%

Appendix E: NO-BUILD CONDITIONS

Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

2026 No-Build



Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	58.2	29.1	D
Upstream of REL Ramp 3 Off	Diverge	1,443	2	63.1	31.6	D
REL Ramp 3 to I-75 SB	Basic Freeway	990	2	64.0	32.0	D
Downstream of I-75 SB On	Merge	1,503	3	126.3	42.1	E
I-75 to Falkenburg Rd	Basic Freeway	874	3	153.4	51.1	F
Downstream of Falkenburg Rd On	Merge	704	4	176.3	44.1	F
Upstream of US-301 Off	Diverge	407	3	161.0	53.7	F
Between US-301 Ramps (3 lanes)	Basic Freeway	1,306	3	136.6	45.5	F
Between US-301 Ramps (2 lanes)	Basic Freeway	1,593	2	136.6	68.3	F
Downstream of US-301 On	Merge	241	3	166.5	55.5	F
Downstream of REL On	Merge	1,602	3	224.0	65.5	F
Between REL Ramps	Basic Freeway	923	3	194.5	64.8	F
Upstream of REL Off	Diverge	1,478	3	47.4	15.8	B
REL to 78th St (3 lanes)	Basic Freeway	2,439	3	47.6	15.9	B
REL to 78th St (2 lanes)	Basic Freeway	1,591	2	47.3	23.6	C
Downstream of 78th St On	Merge	1,580	2	63.7	26.8	C
78th St to 50th St	Basic Freeway	6,235	2	64.5	32.2	D
Upstream of 50th St Off	Diverge	1,592	2	67.9	34.0	D
Between 50th St Ramps	Basic Freeway	2,621	2	52.3	26.2	D
50th St to I-4	Weave	4,281	3	66.2	22.1	C
Upstream of 22nd Off	Diverge	1,552	2	56.3	28.2	D
22nd St Off to REL Ramp 2 On	Basic Freeway	347	2	50.5	25.2	C
Downstream of REL Ramp 2 On	Merge	1,354	2	54.2	22.8	C
Downstream of I-4 On	Merge	1,711	3	80.0	26.7	C
I-4 On to 22nd St On	Basic Freeway	2,282	3	80.5	26.8	D
Downstream of 22nd St On	Merge	1,489	3	95.4	28.7	D
22nd St to Kennedy Blvd Off	Basic Freeway	885	3	90.9	30.3	D
Upstream of Kennedy Blvd Off	Diverge	1,531	3	90.9	26.6	C
Upstream of Brorein St Off	Diverge	1,450	3	68.3	22.8	C
Between Brorein St Ramps	Basic Freeway	2,054	3	50.8	16.9	B
Downstream of Brorein St On	Merge	1,457	3	59.3	18.2	B
Selmon Continue West	Basic Freeway	2,495	3	59.2	19.7	C

Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
From Brandon	Basic Freeway	4,533	2	39.8	19.9	C
Downstream of LL On (at I-75)	Merge	1,498	2	40.3	16.9	B
LL On to LL Off	Basic Freeway	2,520	2	41.2	20.6	C
Upstream of LL Off (at US-301)	Diverge	1,521	2	41.3	20.6	C
LL Off to LL On (2 lanes)	Basic Freeway	4,733	2	37.2	18.6	C
LL Off to LL On (3 lanes)	Basic Freeway	2,229	3	35.6	11.9	B
Downstream of LL On (at US-301)	Merge	1,526	3	57.6	16.8	B
LL On to LL Off	Basic Freeway	15,517	3	57.3	19.1	C
Upstream of LL Off (at I-4)	Diverge	1,497	3	56.8	18.9	B
LL Off to Twiggs St	Basic Freeway	8,527	3	56.3	18.8	C
To Twiggs St	Basic Freeway	2,481	4	162.9	40.7	E

Eastbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 NB	Basic Freeway	2,395	2	15	7	A
Upstream of I-75 SB Off	Diverge	1,762	2	23	12	B
US-301 to Falkenburg Rd	Weave	1,310	3	36	12	B
Between US-301 Ramps (2 lanes)	Basic Freeway	1,629	2	29	14	B
Between US-301 Ramps (3 lanes)	Basic Freeway	1,207	3	24	8	A
Upstream of US-301 Off	Diverge	1,490	3	30	10	B
REL to US-301	Basic Freeway	293	3	30	10	A
Upstream of REL Off	Basic Freeway	1,809	3	30	10	A
Downstream of REL On	Basic Freeway	1,502	3	30	9	A
78th St to REL (3 lanes)	Basic Freeway	1,956	3	30	10	A
78th St to REL (2 lanes)	Basic Freeway	877	2	31	15	B
Upstream of 78th St Off	Diverge	1,497	2	35	15	B
50th St to 78th St	Basic Freeway	6,583	2	36	18	B
Downstream of 50th St On	Merge	1,502	2	36	15	B
Between 50th St Ramps	Basic Freeway	2,764	2	36	18	C
I-4 to 50th St	Weave	2,225	3	42	12	B
REL Off to I-4 On	Basic Freeway	4,061	2	24	12	B
Upstream of REL Off (2 lanes)	Basic Freeway	581	2	24	12	B
Upstream of REL Off (3 lanes)	Basic Freeway	1,508	3	24	8	A
22nd St On to I-4 Off	Weave	1,541	4	38	10	A
Between 22nd St Ramps	Basic Freeway	862	3	37	12	B
Upstream of 22nd St Off	Diverge	1,507	3	41	12	B
Nebraska Ave to 22nd St	Basic Freeway	1,180	3	41	14	B
Downstream of Nebraska Ave On	Merge	1,495	3	40	12	B
Brorein St to Nebraska Ave	Basic Freeway	341	3	37	12	B
Downstream of Brorein St On	Merge	1,531	4	37	9	A
Whiting St to Brorein St	Basic Freeway	1,180	3	34	11	B
Upstream of Whiting St Off	Diverge	818	3	41	14	B
Upstream of Florida Ave Off	Diverge	1,706	4	61	15	B
From Selmon West	Basic Freeway	2,487	3	62	21	C

Westbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	2,770	2,736	-34	1%	0.7
REL Ramp 3 to I-75 SB	2,500	2,474	-26	1%	0.5
I-75 to Falkenburg Rd	3,260	3,172	-88	3%	1.6
Falkenburg Rd to US-301	3,990	3,872	-118	3%	1.9
Between US-301 Ramps	3,410	3,277	-133	4%	2.3
US-301 On to REL On	4,170	3,892	-278	7%	4.4
Between REL Ramps	4,480	4,192	-288	6%	4.4
REL to 78th St	3,160	2,914	-246	8%	4.5
78th St to 50th St	3,730	3,503	-227	6%	3.8
Between 50th St Ramps	3,490	3,277	-213	6%	3.7
50th St to I-4	4,250	3,979	-271	6%	4.2
I-4 Off to 22nd St Off	3,560	3,299	-261	7%	4.5
22nd St Off to REL Ramp 2 On	3,280	3,025	-255	8%	4.5
REL Ramp 2 to I-4 On	3,350	3,126	-224	7%	3.9
I-4 On to 22nd St On	4,610	4,363	-247	5%	3.7
22nd St to Kennedy Blvd	5,160	4,917	-243	5%	3.4
Kennedy Blvd to Brorein St	4,060	3,843	-217	5%	3.5
Between Brorein St Ramps	3,070	2,911	-159	5%	2.9
Selmon Continue West	3,450	3,217	-233	7%	4.0
Reversible Express Lanes					
From Brandon	2,290	2,272	-18	1%	0.4
LL On (at I-75) to LL Off (at US-301)	2,560	2,540	-20	1%	0.4
LL Off (at US-301) to LL On (at US-301)	2,250	2,302	52	2%	1.1
LL On (at US-301) to LL Off (at I-4)	3,570	3,558	23	1%	0.4
LL Off (at I-4) to Twiggs St	3,500	3,525	25	1%	0.4
NETWORK TOTAL	**83,920**	**80,188**	**-3,732**	**4%**	

Eastbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 NB	800	775	-25	3%	0.9
Falkenburg Rd to I-75	1,230	1,206	-24	2%	0.7
US-301 to Falkenburg Rd	1,920	1,869	-51	3%	1.2
Between US-301 Ramps	1,560	1,516	-44	3%	1.1
REL Off to US-301	2,010	1,936	-74	4%	1.7
Between REL Ramps	2,010	1,959	-51	3%	1.1
78th St to REL	2,010	1,946	-64	3%	1.4
50th St to 78th St	2,280	2,246	-34	2%	0.7
Between 50th St Ramps	2,140	2,112	-28	1%	0.6
I-4 to 50th St	2,440	2,375	-65	3%	1.3
REL Off to I-4 On	1,440	1,393	-47	3%	1.3
I-4 Off to REL Off	1,440	1,609	169	12%	4.3
22nd St On to I-4 Off	2,300	2,229	-71	3%	1.5
Between 22nd St Ramps	2,190	2,134	-56	3%	1.2
Nebraska Ave to 22nd St	2,420	2,372	-48	2%	1.0
Brorein St to Nebraska Ave	2,170	2,096	-74	3%	1.6
Whiting St to Brorein St	1,940	1,921	-19	1%	0.4
Upstream of Whiting St Off	2,370	2,329	-41	2%	0.9
From Selmon West	3,430	3,418	-12	0%	0.2
NETWORK TOTAL	**38,100**	**37,440**	**-660**	**2%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (7:00-9:00 AM)

2026 No-Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
East Selmon	48	47	47	47	47	47	47	48	48	48	47	47
	47	46	46	46	46	46	43	43	44	47	44	46
	56	55	55	55	55	54	46	40	38	51	51	51
	56	55	55	54	54	47	29	26	30	39	47	47
	55	54	55	51	50	37	23	22	26	30	36	39
	54	51	52	47	44	32	22	20	26	29	32	36
	54	49	49	42	39	29	22	21	26	28	29	34
	53	49	48	43	40	31	26	24	29	31	31	37
	61	60	60	56	44	32	20	19	25	30	33	38
	62	60	60	53	37	30	20	20	24	29	33	37
	63	61	59	47	27	21	17	17	18	25	29	31
	61	55	46	34	21	22	21	22	21	26	28	28
	58	52	45	40	39	41	43	44	44	44	44	43
	63	62	62	61	61	61	62	62	62	62	62	62
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	61	59	56	52	54	55	54	58	56	56	58	58
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	62	62	61	61	60	60	60	60	60	60	60	60
Downtown	61	60	59	59	59	59	59	59	58	59	58	59
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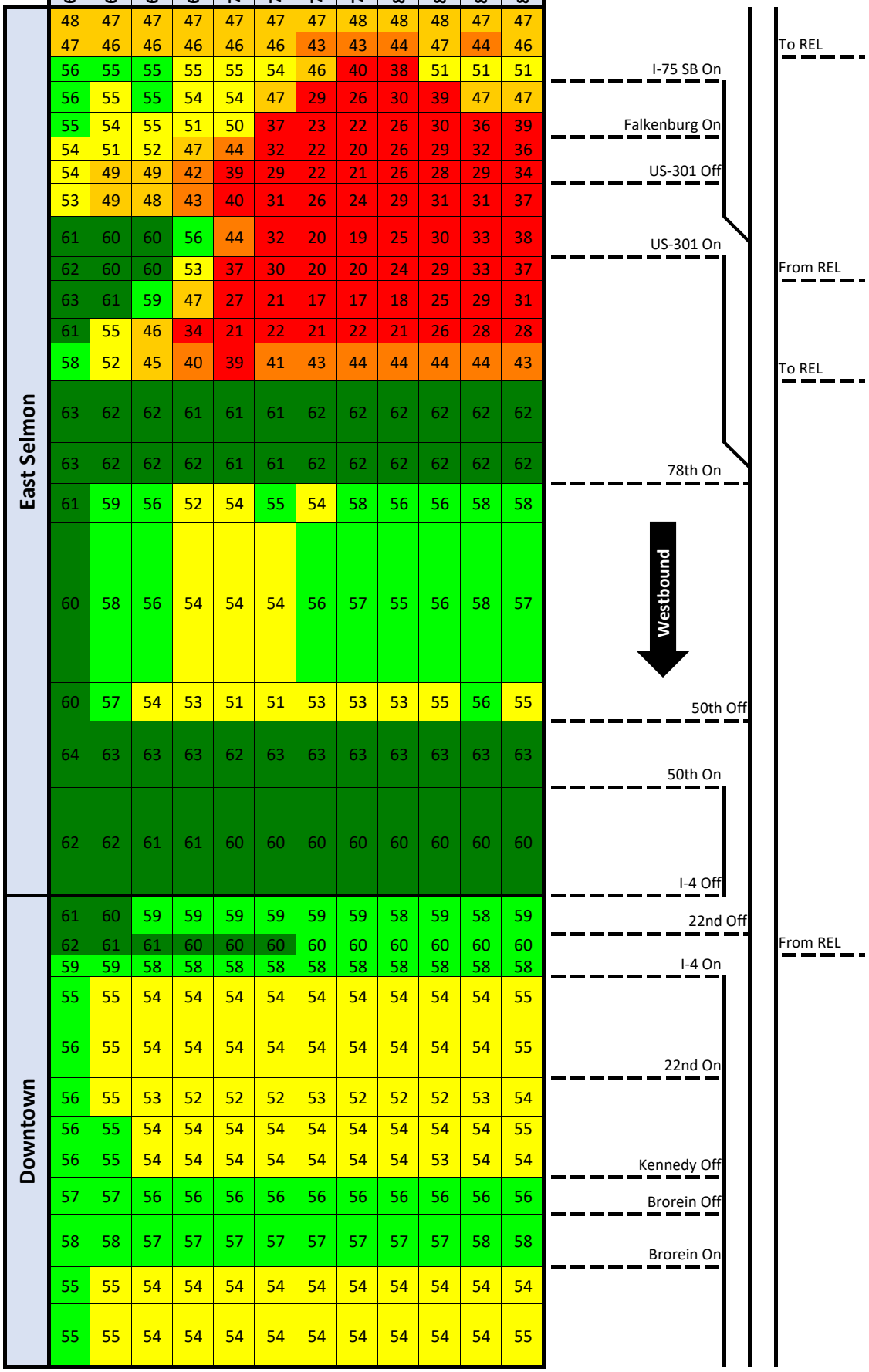

Westbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2026 No-Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
	59	59	58	58	57	57	57	58	58	58	59	59
	65	65	64	64	62	63	63	64	64	65	65	65
	64	64	63	62	61	61	62	63	63	64	64	64
	64	64	63	62	61	61	62	63	63	63	63	64
East Selmon	64	64	63	62	61	62	62	63	63	63	63	64
	65	65	65	65	65	65	65	65	66	65	65	65
	63	63	63	62	62	62	62	62	63	63	63	63
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	65	64	64	64	63	63	63	63	64	64	64	65
Downtown	65	64	64	63	63	62	63	63	63	63	64	64
	31	30	29	28	28	27	27	28	28	29	29	30

REL Start (Brandon)
From I-75 NB
To Local
From Local
To Local
REL End (Twiggs)

Westbound

Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2026 No-Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
East Selmon	52	53	53	52	52	52	52	52	52	52	52	52
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Downtown	60	60	59	59	58	58	58	57	57	58	58	58
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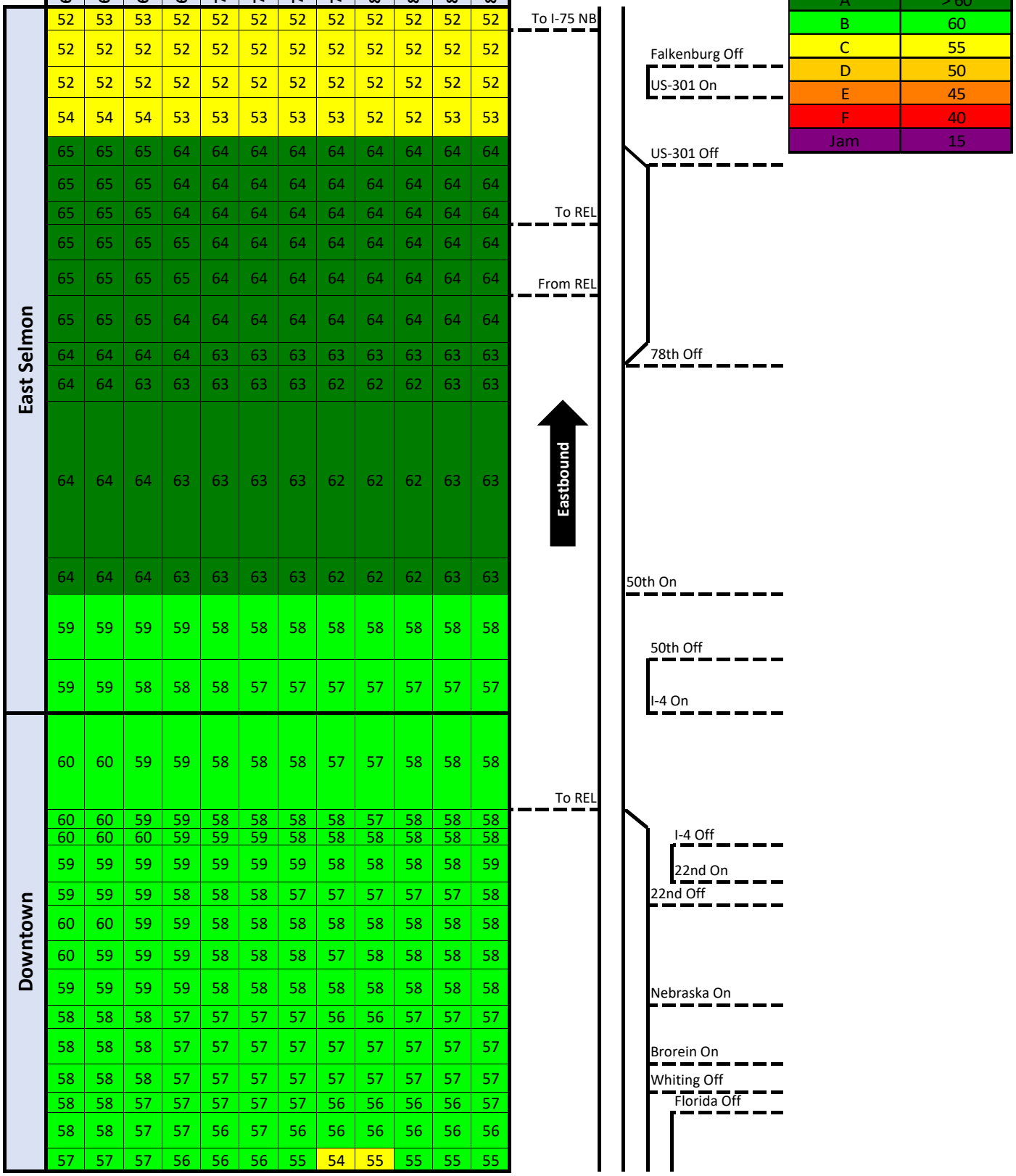


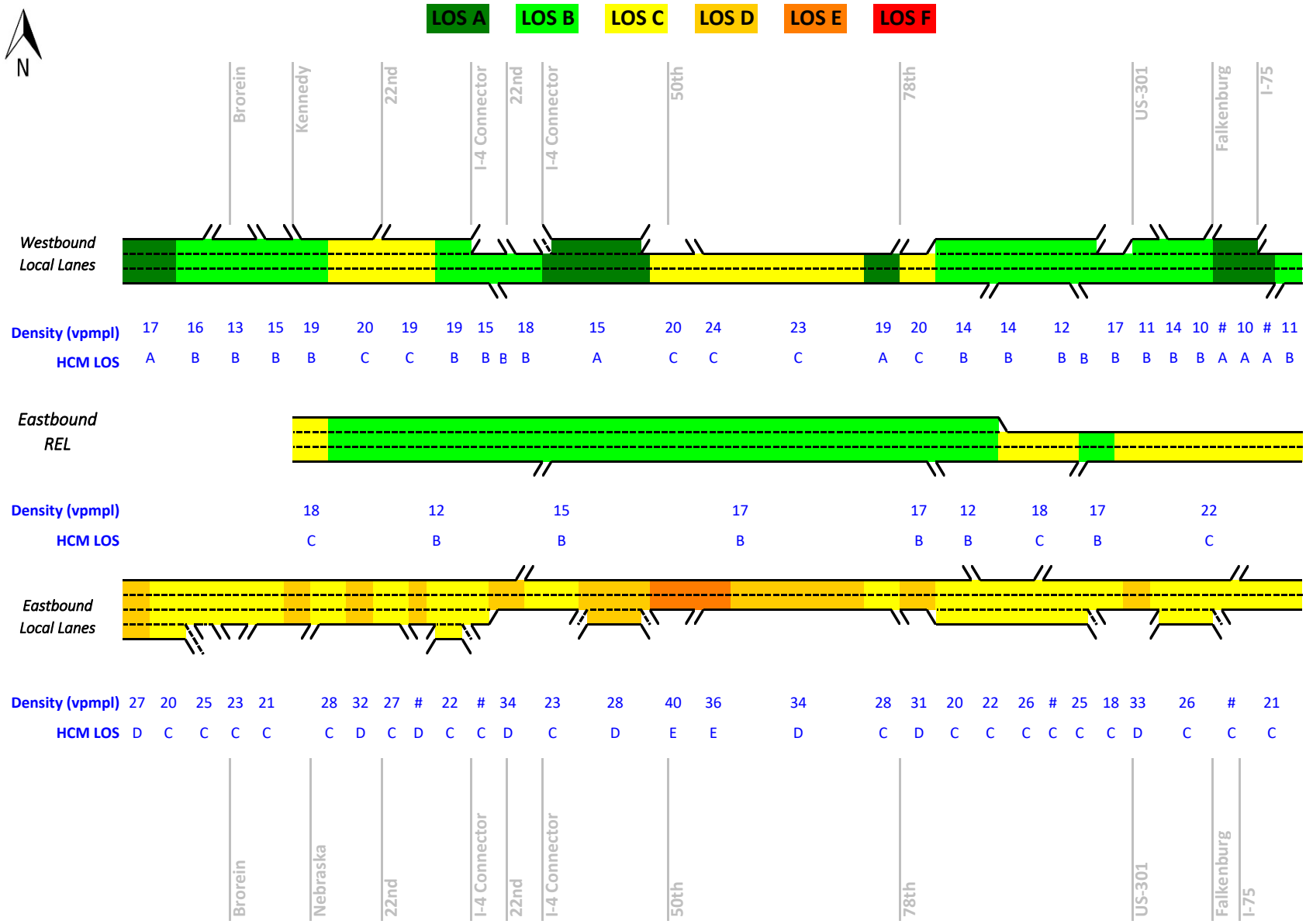
Travel Times by Segment, Local Lanes
AM Peak Hour (7:00-8:00 AM)

2026 No-Build

From	To	2019 Existing VISSIM Travel Time (min)	2026 No-Build Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	2.0	2.2	0	8%
US-301	78th St	4.4	3.4	-1	-22%
78th St	50th St	3.3	2.1	-1	-35%
50th St	I-4 Connector	1.5	1.5	0	0%
I-4 Connector	20th St	0.7	0.7	0	0%
20th St	Channelside Dr	0.8	0.8	0	4%
Channelside Dr	Kennedy Blvd	0.6	0.6	0	-3%
Kennedy Blvd	Jefferson St	0.3	0.3	0	0%
Jefferson St	Florida Ave	0.3	0.3	0	-6%
Total		**13.8**	**11.8**	**-2**	**-14%**
Eastbound					
Florida Ave	Jefferson St	0.3	0.3	0	0%
Jefferson St	Kennedy Blvd	0.3	0.3	0	0%
Kennedy Blvd	Channelside Dr	0.5	0.5	0	0%
Channelside Dr	20th St	0.7	0.7	0	0%
20th St	I-4 Connector	0.6	0.7	0	3%
I-4 Connector	50th St	1.6	1.6	0	0%
50th St	78th St	1.9	1.9	0	0%
78th St	US-301	1.7	1.7	0	0%
US-301	Falkenburg Rd	0.9	0.9	0	2%
Total		**8.6**	**8.6**	**0**	**0%**

Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2026 No-Build



Westbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2026 No-Build

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	22.3	11.2	B
Upstream of REL Ramp 3 Off	Basic Freeway	1,443	2	22.6	11.3	B
REL Ramp 3 to I-75 SB	Basic Freeway	990	2	19.3	9.6	A
Downstream of I-75 SB On	Merge	1,503	3	29.0	9.7	A
I-75 to Falkenburg Rd	Basic Freeway	874	3	29.1	9.7	A
Downstream of Falkenburg Rd On	Merge	704	4	41.2	10.3	B
Upstream of US-301 Off	Diverge	407	3	41.5	13.8	B
Between US-301 Ramps (3 lanes)	Basic Freeway	1,306	3	33.3	11.1	B
Between US-301 Ramps (2 lanes)	Basic Freeway	1,593	2	33.3	16.6	B
Downstream of US-301 On	Merge	241	3	39.4	13.1	B
Downstream of REL On	Basic Freeway	1,602	3	39.7	11.6	B
Between REL Ramps	Basic Freeway	923	3	40.2	13.4	B
Upstream of REL Off	Basic Freeway	1,478	3	41.0	13.7	B
REL to 78th St (3 lanes)	Basic Freeway	2,439	3	41.0	13.7	B
REL to 78th St (2 lanes)	Basic Freeway	1,591	2	40.9	20.5	C
Downstream of 78th St On	Merge	1,580	2	45.7	19.0	A
78th St to 50th St	Basic Freeway	6,235	2	46.5	23.2	C
Upstream of 50th St Off	Diverge	1,592	2	47.0	23.5	C
Between 50th St Ramps	Basic Freeway	2,621	2	40.6	20.3	C
50th St to I-4	Weave	4,281	3	44.9	15.0	A
Upstream of 22nd Off	Diverge	1,552	2	36.1	18.0	B
22nd St Off to REL Ramp 2 On	Basic Freeway	347	2	33.2	16.6	B
Downstream of REL Ramp 2 On	Basic Freeway	1,354	2	34.9	14.7	B
Downstream of I-4 On	Merge	1,711	3	57.1	19.0	B
I-4 On to 22nd St On	Basic Freeway	2,282	3	57.4	19.1	C
Downstream of 22nd St On	Merge	1,489	3	67.6	20.5	C
22nd St to Kennedy Blvd Off	Basic Freeway	885	3	65.8	21.9	C
Upstream of Kennedy Blvd Off	Diverge	1,531	3	65.8	19.2	B
Upstream of Brorein St Off	Diverge	1,450	3	45.0	15.0	B
Between Brorein St Ramps	Basic Freeway	2,054	3	38.1	12.7	B
Downstream of Brorein St On	Merge	1,457	3	52.1	15.9	B
Selmon Continue West	Basic Freeway	2,495	3	51.5	17.2	A

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2026 No-Build

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 NB	Basic Freeway	2,395	2	43	21	C
Upstream of I-75 SB Off	Diverge	1,762	2	56	28	C
US-301 to Falkenburg Rd	Weave	1,310	3	77	26	C
Between US-301 Ramps (2 lanes)	Basic Freeway	1,629	2	65	33	D
Between US-301 Ramps (3 lanes)	Basic Freeway	1,207	3	54	18	C
Upstream of US-301 Off	Diverge	1,490	3	74	25	C
REL to US-301	Basic Freeway	293	3	74	25	C
Upstream of REL Off	Diverge	1,809	3	77	26	C
Downstream of REL On	Merge	1,502	3	76	22	C
78th St to REL (3 lanes)	Basic Freeway	1,956	3	60	20	C
78th St to REL (2 lanes)	Basic Freeway	877	2	62	31	D
Upstream of 78th St Off	Diverge	1,497	2	66	28	C
50th St to 78th St	Basic Freeway	6,583	2	68	34	D
Downstream of 50th St On	Merge	1,502	2	87	36	E
Between 50th St Ramps	Basic Freeway	2,764	2	79	40	E
I-4 to 50th St	Weave	2,225	3	95	28	D
REL Off to I-4 On	Basic Freeway	4,061	2	46	23	C
Upstream of REL Off (2 lanes)	Diverge	581	2	69	34	D
Upstream of REL Off (3 lanes)	Basic Freeway	1,508	3	73	24	C
22nd St On to I-4 Off	Weave	1,541	4	90	22	C
Between 22nd St Ramps	Basic Freeway	862	3	89	30	D
Upstream of 22nd St Off	Diverge	1,507	3	93	27	C
Nebraska Ave to 22nd St	Basic Freeway	1,180	3	95	32	D
Downstream of Nebraska Ave On	Merge	1,495	3	96	28	C
Brorein St to Nebraska Ave	Basic Freeway	341	3	87	29	D
Downstream of Brorein St On	Merge	1,531	4	83	21	C
Whiting St to Brorein St	Basic Freeway	1,180	3	68	23	C
Upstream of Whiting St Off	Diverge	818	3	75	25	C
Upstream of Florida Ave Off	Diverge	1,706	4	80	20	C
From Selmon West	Basic Freeway	2,487	3	81	27	D

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2026 No-Build

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
To Brandon	Basic Freeway	9,395	2	44	22	C
Downstream of LL On (at US-301)	Merge	1,494	2	41	17	B
LL Off to LL On (2 lanes)	Basic Freeway	3,918	2	36	18	C
LL Off to LL On (3 lanes)	Basic Freeway	2,364	3	36	12	B
Upstream of LL Off (at US-301)	Diverge	1,540	3	52	17	B
LL On to LL Off	Basic Freeway	15,162	3	51	17	B
Downstream of LL On (at I-4)	Merge	1,572	3	51	15	B
Twiggs St to LL On	Basic Freeway	9,696	3	35	12	B
From Twiggs St	Basic Freeway	1,547	3	55	18	C

Westbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	1,120	1,097	-23	2%	0.7
REL Ramp 3 to I-75 SB	1,120	1,096	-24	2%	0.7
I-75 to Falkenburg Rd	1,680	1,650	-30	2%	0.7
Falkenburg Rd to US-301	2,420	2,379	-41	2%	0.8
Between US-301 Ramps	2,110	2,073	-37	2%	0.8
US-301 On to REL On	2,620	2,540	-80	3%	1.6
Between REL Ramps	2,620	2,539	-81	3%	1.6
REL to 78th St	2,620	2,525	-95	4%	1.9
78th St to 50th St	2,830	2,749	-81	3%	1.5
Between 50th St Ramps	2,650	2,576	-74	3%	1.4
50th St to I-4	2,930	2,824	-106	4%	2.0
I-4 Off to 22nd St Off	2,330	2,230	-100	4%	2.1
22nd St Off to REL Ramp 2 On	2,170	2,068	-102	5%	2.2
REL Ramp 2 to I-4 On	2,170	2,090	-80	4%	1.7
I-4 On to 22nd St On	3,240	3,144	-96	3%	1.7
22nd St to Kennedy Blvd	3,790	3,682	-108	3%	1.8
Kennedy Blvd to Brorein St	2,680	2,592	-88	3%	1.7
Between Brorein St Ramps	2,280	2,206	-74	3%	1.6
Selmon Continue West	3,000	2,821	-179	6%	3.3
NETWORK TOTAL	**46,380**	**44,879**	**-1,501**	**3%**	

Eastbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 NB	2,240	2,192	-48	2%	1.0
Falkenburg Rd to I-75	2,900	2,806	-94	3%	1.8
US-301 to Falkenburg Rd	3,930	3,811	-119	3%	1.9
Between US-301 Ramps	3,280	3,258	-22	1%	0.4
REL Off to US-301	4,540	4,451	-89	2%	1.3
Between REL Ramps	4,780	4,734	-46	1%	0.7
78th St to REL	3,870	3,820	-50	1%	0.8
50th St to 78th St	4,040	4,027	-13	0%	0.2
Between 50th St Ramps	3,690	3,702	12	0%	0.2
I-4 to 50th St	4,430	4,410	-20	0%	0.3
REL Off to I-4 On	2,590	2,581	-9	0%	0.2
I-4 Off to REL Off	3,620	3,974	354	10%	5.8
22nd St On to I-4 Off	5,140	5,065	-75	1%	1.0
Between 22nd St Ramps	4,810	4,773	-37	1%	0.5
Nebraska Ave to 22nd St	5,170	5,135	-35	1%	0.5
Brorein St to Nebraska Ave	4,650	4,543	-107	2%	1.6
Whiting St to Brorein St	3,780	3,783	3	0%	0.0
Upstream of Whiting St Off	4,160	4,120	-40	1%	0.6
From Selmon West	4,440	4,433	-7	0%	0.1
Reversible Express Lanes					
To Brandon	2,420	2,347	-73	3%	1.5
LL Off (at US-301) to LL On (at US-301)	2,180	2,120	-60	3%	1.3
LL On (at I-4) to LL Off (at US-301)	3,090	3,022	-68	2%	1.2
Twiggs St to LL On (at I-4)	2,060	2,005	-55	3%	1.2
NETWORK TOTAL	**85,810**	**85,113**	**-697**	**1%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2026 No-Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	49	49	49	49	49	49	49	49	49	49	49	49
	49	49	49	49	49	49	49	49	49	49	49	49
	57	57	57	57	57	57	57	57	57	57	57	57
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Downtown	62	62	62	62	62	62	62	62	62	62	62	62
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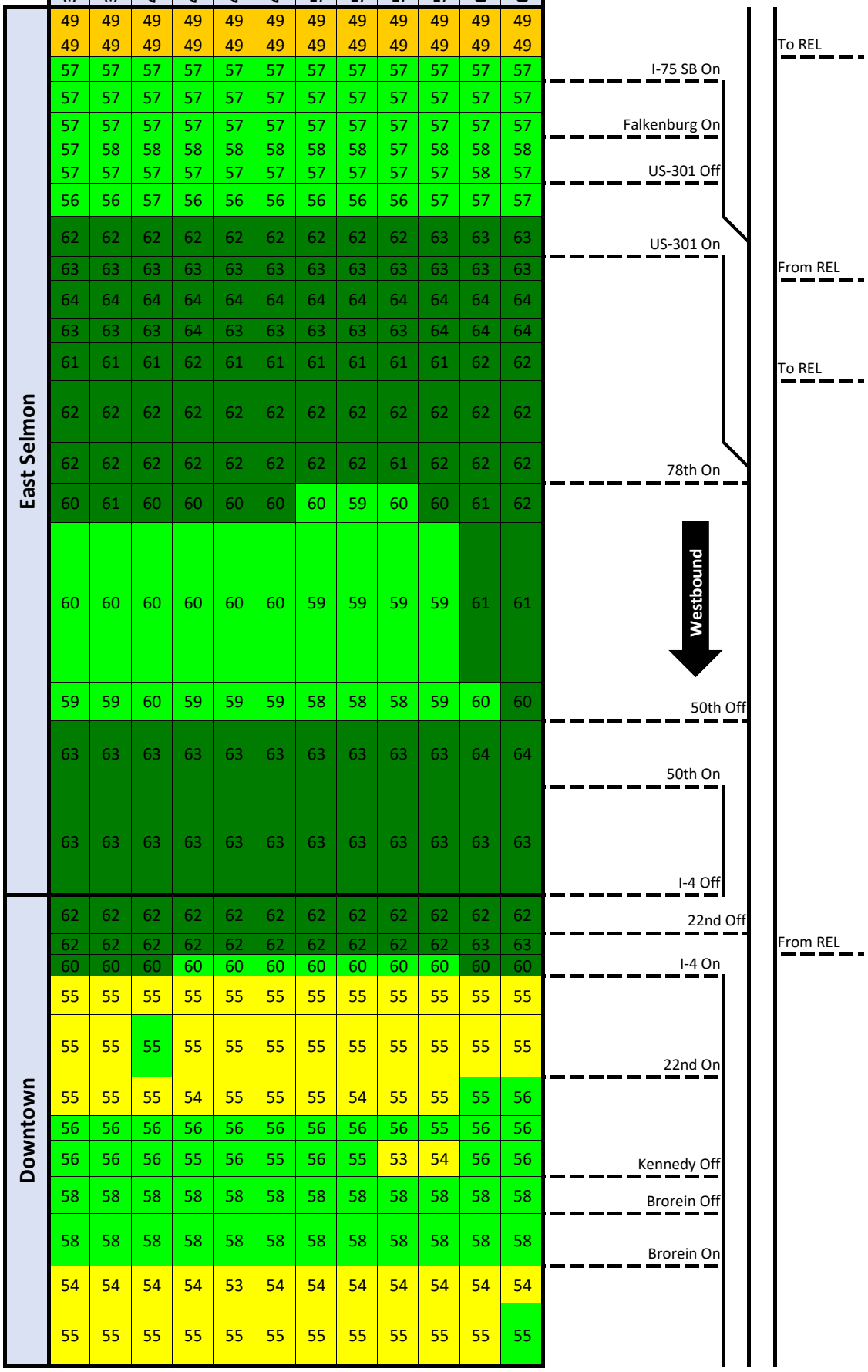

Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2036 No Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	52	52	52	52	52	52	52	52	51	52	52	52
	51	51	51	51	50	50	50	50	50	51	51	51
	50	50	50	50	50	49	49	50	50	50	50	50
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Downtown	57	57	57	57	57	56	55	56	57	57	57	58
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	56	55	56	55	54	54	55	55	55	56	56	56

To I-75 NB
To REL
From REL
To REL

Eastbound

Falkenburg Off
US-301 On
US-301 Off
78th Off
50th On
50th Off
I-4 On
I-4 Off
22nd On
22nd Off
Nebraska On
Brorein On
Whiting Off
Florida Off

Eastbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2026 No-Build

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	55	55	55	55	54	54	54	54	54	54	55	55
	59	59	59	58	58	58	58	58	58	58	59	59
	59	59	59	59	59	58	58	58	58	59	59	59
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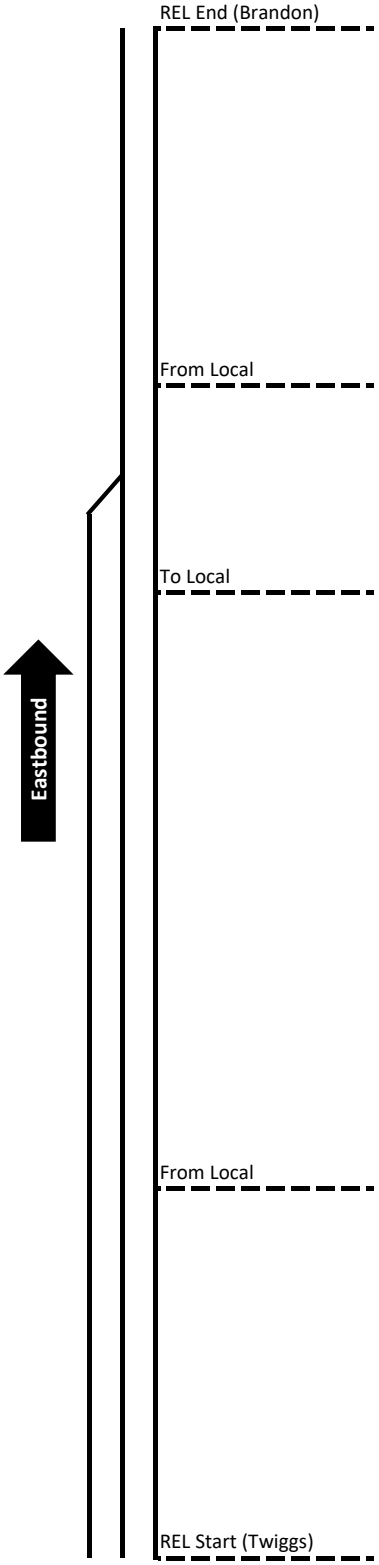
	60	60	60	60	60	59	59	59	59	60	60	60
Downtown	60	60	60	59	59	59	59	59	59	60	60	60
	57	57	57	57	57	57	56	56	56	57	57	57
	36	36	36	36	36	37	36	36	36	36	37	36

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15



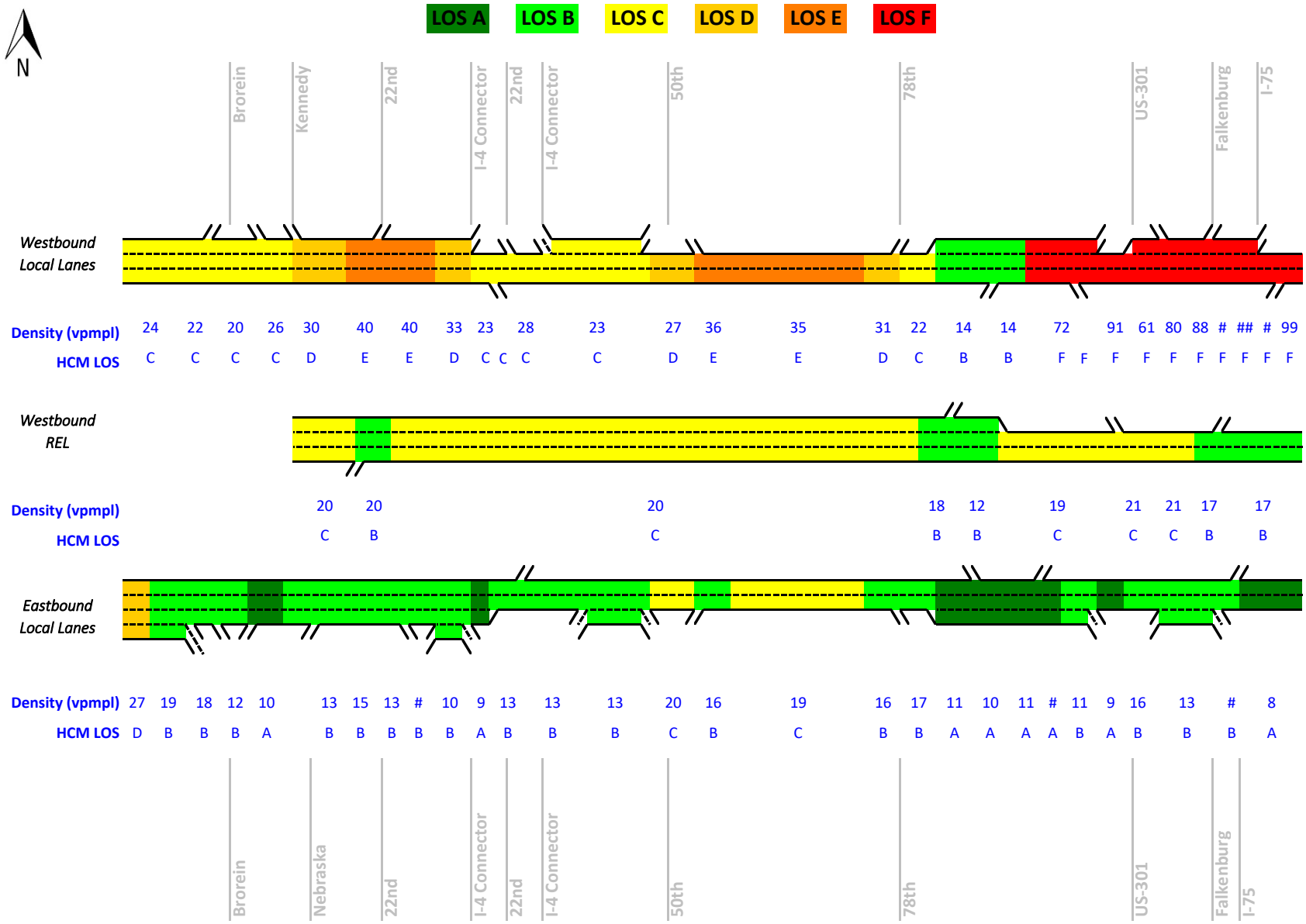
Travel Times by Segment, Local Lanes
PM Peak Hour (4:30-5:30 PM)

2026 No-Build

From	To	2019 Existing VISSIM Travel Time (min)	2026 No-Build Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	0.9	0.9	0	0%
US-301	78th St	1.8	1.8	0	1%
78th St	50th St	2.0	2.0	0	1%
50th St	I-4 Connector	1.5	1.5	0	0%
I-4 Connector	20th St	0.7	0.7	0	0%
20th St	Channelside Dr	0.8	0.8	0	2%
Channelside Dr	Kennedy Blvd	0.6	0.6	0	0%
Kennedy Blvd	Jefferson St	0.3	0.3	0	0%
Jefferson St	Florida Ave	0.3	0.3	0	0%
Total		**8.6**	**8.6**	**0**	**1%**
Eastbound					
Florida Ave	Jefferson St	0.3	0.3	0	0%
Jefferson St	Kennedy Blvd	0.3	0.3	0	0%
Kennedy Blvd	Channelside Dr	0.6	0.6	0	3%
Channelside Dr	20th St	0.8	0.8	0	0%
20th St	I-4 Connector	0.9	0.7	0	-19%
I-4 Connector	50th St	1.6	1.8	0	8%
50th St	78th St	2.0	2.2	0	7%
78th St	US-301	1.8	1.8	0	1%
US-301	Falkenburg Rd	1.0	1.0	0	2%
Total		**9.2**	**9.4**	**0**	**2%**

Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

2036 No-Build



Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	154.0	77.0	F
Upstream of REL Ramp 3 Off	Diverge	1,443	2	197.1	98.5	F
REL Ramp 3 to I-75 SB	Basic Freeway	990	2	238.8	119.4	F
Downstream of I-75 SB On	Merge	1,503	3	350.4	116.8	F
I-75 to Falkenburg Rd	Basic Freeway	874	3	343.1	114.4	F
Downstream of Falkenburg Rd On	Merge	704	4	350.5	87.6	F
Upstream of US-301 Off	Diverge	407	3	239.4	79.8	F
Between US-301 Ramps (3 lanes)	Basic Freeway	1,306	3	182.1	60.7	F
Between US-301 Ramps (2 lanes)	Basic Freeway	1,593	2	182.1	91.1	F
Downstream of US-301 On	Merge	241	3	207.4	69.1	F
Downstream of REL On	Merge	1,602	3	246.7	71.7	F
Between REL Ramps	Basic Freeway	923	3	194.3	64.8	F
Upstream of REL Off	Diverge	1,478	3	43.2	14.4	B
REL to 78th St (3 lanes)	Basic Freeway	2,439	3	42.8	14.3	B
REL to 78th St (2 lanes)	Basic Freeway	1,591	2	43.6	21.8	C
Downstream of 78th St On	Merge	1,580	2	73.1	30.8	D
78th St to 50th St	Basic Freeway	6,235	2	70.7	35.3	E
Upstream of 50th St Off	Diverge	1,592	2	71.7	35.8	E
Between 50th St Ramps	Basic Freeway	2,621	2	53.6	26.8	D
50th St to I-4	Weave	4,281	3	67.8	22.6	C
Upstream of 22nd Off	Diverge	1,552	2	55.6	27.8	C
22nd St Off to REL Ramp 2 On	Basic Freeway	347	2	48.9	24.4	C
Downstream of REL Ramp 2 On	Merge	1,354	2	54.5	22.9	C
Downstream of I-4 On	Merge	1,711	3	100.3	33.4	D
I-4 On to 22nd St On	Basic Freeway	2,282	3	119.3	39.8	E
Downstream of 22nd St On	Merge	1,489	3	148.9	39.5	E
22nd St to Kennedy Blvd Off	Basic Freeway	885	3	102.3	34.1	D
Upstream of Kennedy Blvd Off	Diverge	1,531	3	102.3	29.9	D
Upstream of Brorein St Off	Diverge	1,450	3	78.1	26.0	C
Between Brorein St Ramps	Basic Freeway	2,054	3	60.8	20.3	C
Downstream of Brorein St On	Merge	1,457	3	72.9	22.3	C
Selmon Continue West	Basic Freeway	2,495	3	72.2	24.1	C

Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
From Brandon	Basic Freeway	4,533	2	34.6	17.3	B
Downstream of LL On (at I-75)	Merge	1,498	2	41.4	17.3	B
LL On to LL Off	Basic Freeway	2,520	2	42.2	21.1	C
Upstream of LL Off (at US-301)	Diverge	1,521	2	42.4	21.2	C
LL Off to LL On (2 lanes)	Basic Freeway	4,733	2	37.6	18.8	C
LL Off to LL On (3 lanes)	Basic Freeway	2,229	3	36.1	12.0	B
Downstream of LL On (at US-301)	Merge	1,526	3	61.2	17.9	B
LL On to LL Off	Basic Freeway	15,517	3	60.1	20.0	C
Upstream of LL Off (at I-4)	Diverge	1,497	3	59.6	19.9	B
LL Off to Twiggs St	Basic Freeway	8,527	3	58.5	19.5	C
To Twiggs St	Basic Freeway	2,481	4	171.9	43.0	E

Eastbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

2036 No-Build

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 NB	Basic Freeway	2,395	2	17	8	A
Upstream of I-75 SB Off	Diverge	1,762	2	26	13	B
US-301 to Falkenburg Rd	Weave	1,310	3	40	13	B
Between US-301 Ramps (2 lanes)	Basic Freeway	1,629	2	32	16	B
Between US-301 Ramps (3 lanes)	Basic Freeway	1,207	3	26	9	A
Upstream of US-301 Off	Diverge	1,490	3	33	11	B
REL to US-301	Basic Freeway	293	3	33	11	A
Upstream of REL Off	Basic Freeway	1,809	3	33	11	A
Downstream of REL On	Basic Freeway	1,502	3	33	10	A
78th St to REL (3 lanes)	Basic Freeway	1,956	3	33	11	A
78th St to REL (2 lanes)	Basic Freeway	877	2	33	17	B
Upstream of 78th St Off	Diverge	1,497	2	38	16	B
50th St to 78th St	Basic Freeway	6,583	2	38	19	C
Downstream of 50th St On	Merge	1,502	2	38	16	B
Between 50th St Ramps	Basic Freeway	2,764	2	40	20	C
I-4 to 50th St	Weave	2,225	3	46	13	B
REL Off to I-4 On	Basic Freeway	4,061	2	26	13	B
Upstream of REL Off (2 lanes)	Basic Freeway	581	2	26	13	B
Upstream of REL Off (3 lanes)	Basic Freeway	1,508	3	26	9	A
22nd St On to I-4 Off	Weave	1,541	4	41	10	B
Between 22nd St Ramps	Basic Freeway	862	3	40	13	B
Upstream of 22nd St Off	Diverge	1,507	3	44	13	B
Nebraska Ave to 22nd St	Basic Freeway	1,180	3	44	15	B
Downstream of Nebraska Ave On	Merge	1,495	3	44	13	B
Brorein St to Nebraska Ave	Basic Freeway	341	3	39	13	B
Downstream of Brorein St On	Merge	1,531	4	39	10	A
Whiting St to Brorein St	Basic Freeway	1,180	3	36	12	B
Upstream of Whiting St Off	Diverge	818	3	54	18	B
Upstream of Florida Ave Off	Diverge	1,706	4	77	19	B
From Selmon West	Basic Freeway	2,487	3	82	27	D

Westbound GEH Statistics *2036 No-Build*
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	3,860	2,342	-1,518	39%	27.3
REL Ramp 3 to I-75 SB	3,010	1,604	-1,406	47%	29.3
I-75 to Falkenburg Rd	4,270	2,608	-1,662	39%	28.3
Falkenburg Rd to US-301	5,030	3,511	-1,519	30%	23.2
Between US-301 Ramps	4,010	3,037	-973	24%	16.4
US-301 On to REL On	4,780	3,726	-1,054	22%	16.2
Between REL Ramps	5,240	4,108	-1,132	22%	16.6
REL to 78th St	3,820	2,650	-1,170	31%	20.6
78th St to 50th St	4,400	3,555	-845	19%	13.4
Between 50th St Ramps	3,990	3,346	-644	16%	10.6
50th St to I-4	5,160	4,058	-1,102	21%	16.2
I-4 Off to 22nd St Off	3,960	3,247	-713	18%	11.9
22nd St Off to REL Ramp 2 On	3,420	2,927	-493	14%	8.8
REL Ramp 2 to I-4 On	3,700	3,054	-646	17%	11.1
I-4 On to 22nd St On	5,900	4,835	-1,065	18%	14.5
22nd St to Kennedy Blvd	6,730	5,466	-1,264	19%	16.2
Kennedy Blvd to Brorein St	5,530	4,372	-1,158	21%	16.5
Between Brorein St Ramps	4,450	3,464	-986	22%	15.7
Selmon Continue West	5,040	3,879	-1,161	23%	17.4
Reversible Express Lanes					
From Brandon	2,300	1,989	-311	14%	6.7
LL On (at I-75) to LL Off (at US-301)	3,150	2,546	-604	19%	11.3
LL Off (at US-301) to LL On (at US-301)	2,690	2,270	-420	16%	8.4
LL On (at US-301) to LL Off (at I-4)	4,110	3,704	-266	6%	4.3
LL Off (at I-4) to Twiggs St	3,830	3,655	-175	5%	2.9
NETWORK TOTAL	**102,380**	**79,951**	**-22,429**	**22%**	

Eastbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 NB	1,110	885	-225	20%	7.1
Falkenburg Rd to I-75	1,650	1,346	-304	18%	7.9
US-301 to Falkenburg Rd	2,600	2,040	-560	22%	11.6
Between US-301 Ramps	1,910	1,666	-244	13%	5.8
REL Off to US-301	2,420	2,080	-340	14%	7.2
Between REL Ramps	2,420	2,104	-316	13%	6.6
78th St to RE	2,420	2,093	-327	14%	6.9
50th St to 78th St	2,760	2,386	-374	14%	7.4
Between 50th St Ramps	2,580	2,280	-300	12%	6.1
I-4 to 50th St	2,970	2,596	-374	13%	7.1
REL Off to I-4 On	1,720	1,513	-207	12%	5.2
I-4 Off to REL Off	1,720	1,737	17	1%	0.4
22nd St On to I-4 Off	2,760	2,378	-382	14%	7.5
Between 22nd St Ramps	2,640	2,280	-360	14%	7.3
Nebraska Ave to 22nd St	2,990	2,557	-433	14%	8.2
Brorein St to Nebraska Ave	2,590	2,197	-393	15%	8.0
Whiting St to Brorein St	2,260	2,039	-221	10%	4.8
Upstream of Whiting St Off	3,430	3,027	-403	12%	7.1
From Selmon West	4,660	4,226	-434	9%	6.5
NETWORK TOTAL	**47,610**	**41,430**	**-6,180**	**13%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (7:00-9:00 AM)

2036 No-Build

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
East Selmon	48	47	47	47	47	33	11	8	7	8	8	9
	46	46	46	46	41	16	7	7	8	8	8	10
	56	56	56	53	35	7	5	5	5	5	5	6
	56	55	55	45	16	7	6	6	7	7	7	8
	55	54	53	34	11	8	7	7	8	7	8	9
	55	51	50	28	12	10	9	10	11	10	10	12
	54	46	46	25	15	15	14	15	15	15	15	17
	53	46	45	29	20	20	19	20	21	20	21	26
	61	60	56	29	17	17	16	17	17	17	18	21
	62	60	54	28	18	18	18	18	19	19	19	21
	62	57	42	20	17	16	17	17	17	17	17	17
	60	43	27	22	21	21	21	21	21	21	21	21
	57	46	39	43	44	44	45	44	44	44	44	44
	63	62	62	62	62	62	62	62	62	62	62	63
	63	62	62	62	62	62	62	59	60	62	62	62
	60	58	53	52	54	54	49	46	51	54	56	59
	61	58	54	53	54	54	51	50	52	55	56	58
	60	56	53	51	50	52	50	48	51	54	53	54
	63	63	63	62	63	63	62	62	62	63	63	63
	62	61	60	60	60	60	60	60	61	60	60	61
Downtown	60	59	58	59	58	59	58	59	59	58	59	60
	61	61	60	60	60	60	60	60	60	60	60	61
	59	58	58	58	58	58	57	55	56	56	58	58
	54	54	53	53	53	51	50	49	49	47	45	50
	55	54	54	52	47	46	46	40	38	38	37	42
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	54	54	54	53	53	53	53	53	53	52	53	53
	55	54	54	54	54	54	54	54	54	54	54	54

I-75 SB On
Falkenburg On
US-301 Off
US-301 On
78th On
50th Off
50th On
I-4 Off
22nd Off
I-4 On
22nd On
Kennedy Off
Brorein Off
Brorein On

To REL
From REL
To REL
From REL

Westbound

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

Westbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2036 No-Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
REL Start (Brandon)												
East Selmon	59	59	58	58	57	57	58	58	58	59	59	59
From I-75 NB	62	62	62	61	61	61	62	63	63	63	63	63
	62	61	61	60	60	60	61	62	62	62	62	62
To Local	61	61	60	60	59	60	61	61	61	61	62	61
	61	61	60	60	60	60	61	61	61	61	61	61
From Local	62	62	62	62	63	63	64	63	63	63	63	62
	62	61	61	61	60	60	61	61	62	61	62	61
Westbound	64	63	63	62	62	62	62	63	63	63	63	63
To Local	65	64	64	63	63	63	63	63	64	64	64	64
Downtown	65	64	63	63	62	62	63	63	63	63	64	64
REL End (Twiggs)	31	29	28	28	28	27	26	27	28	29	29	29

Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2036 No-Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
East Selmon	52	52	52	52	52	52	52	52	52	52	52	52
	52	52	52	52	51	52	52	52	52	52	52	52
	52	52	52	52	52	52	52	51	51	51	51	52
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	65	64	64	64	63	64	64	63	63	63	63	64
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	59	59	59	58	58	58	58	57	57	57	57	58
	59	58	58	58	57	57	57	56	56	56	57	57
Downtown	60	59	59	59	58	58	58	57	57	57	58	58
	60	59	59	59	58	58	58	57	57	57	58	58
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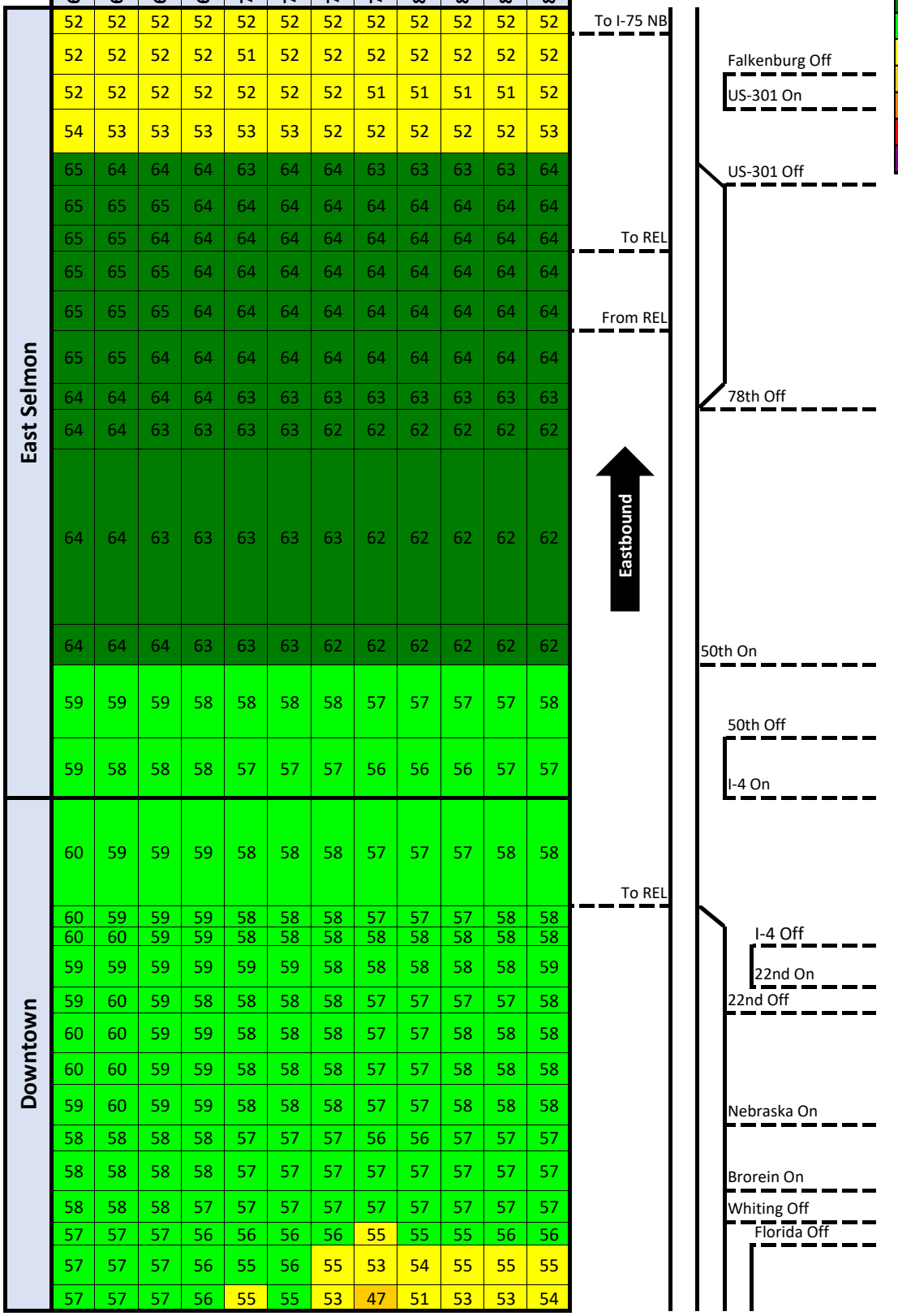


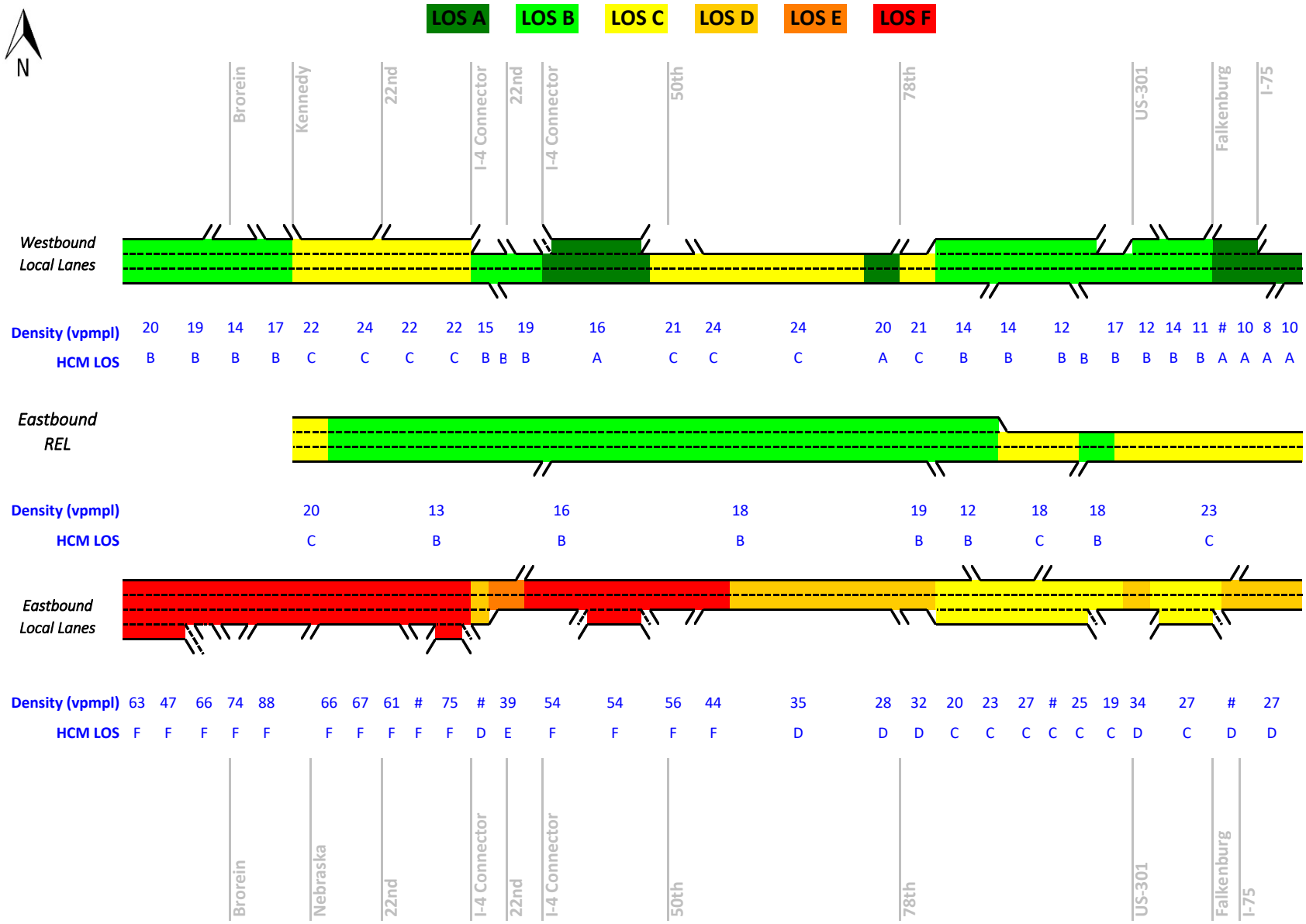
Travel Times by Segment, Local Lanes
AM Peak Hour (7:00-8:00 AM)

2036 No-Build

From	To	2019 Existing VISSIM Travel Time (min)	2036 No-Build Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	2.0	4.7	3	136%
US-301	78th St	4.4	3.9	0	-11%
78th St	50th St	3.3	2.3	-1	-30%
50th St	I-4 Connector	1.5	1.5	0	0%
I-4 Connector	20th St	0.7	0.7	0	8%
20th St	Channelside Dr	0.8	1.1	0	37%
Channelside Dr	Kennedy Blvd	0.6	0.6	0	0%
Kennedy Blvd	Jefferson St	0.3	0.3	0	0%
Jefferson St	Florida Ave	0.3	0.3	0	-6%
Total		**13.8**	**15.3**	**2**	**11%**
Eastbound					
Florida Ave	Jefferson St	0.3	0.3	0	0%
Jefferson St	Kennedy Blvd	0.3	0.3	0	0%
Kennedy Blvd	Channelside Dr	0.5	0.5	0	0%
Channelside Dr	20th St	0.7	0.7	0	0%
20th St	I-4 Connector	0.6	0.7	0	3%
I-4 Connector	50th St	1.6	1.6	0	1%
50th St	78th St	1.9	2.0	0	1%
78th St	US-301	1.7	1.7	0	1%
US-301	Falkenburg Rd	0.9	0.9	0	2%
Total		**8.6**	**8.7**	**0**	**1%**

Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2036 No-Build



Westbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	19.0	9.5	A
Upstream of REL Ramp 3 Off	Basic Freeway	1,443	2	19.2	9.6	A
REL Ramp 3 to I-75 SB	Basic Freeway	990	2	16.4	8.2	A
Downstream of I-75 SB On	Merge	1,503	3	29.5	9.8	A
I-75 to Falkenburg Rd	Basic Freeway	874	3	29.6	9.9	A
Downstream of Falkenburg Rd On	Merge	704	4	42.8	10.7	B
Upstream of US-301 Off	Diverge	407	3	43.0	14.3	B
Between US-301 Ramps (3 lanes)	Basic Freeway	1,306	3	34.7	11.6	B
Between US-301 Ramps (2 lanes)	Basic Freeway	1,593	2	34.7	17.4	B
Downstream of US-301 On	Merge	241	3	40.5	13.5	B
Downstream of REL On	Basic Freeway	1,602	3	40.8	11.9	B
Between REL Ramps	Basic Freeway	923	3	41.5	13.8	B
Upstream of REL Off	Basic Freeway	1,478	3	42.3	14.1	B
REL to 78th St (3 lanes)	Basic Freeway	2,439	3	42.4	14.1	B
REL to 78th St (2 lanes)	Basic Freeway	1,591	2	42.3	21.1	C
Downstream of 78th St On	Merge	1,580	2	47.5	19.8	A
78th St to 50th St	Basic Freeway	6,235	2	48.5	24.2	C
Upstream of 50th St Off	Diverge	1,592	2	48.5	24.2	C
Between 50th St Ramps	Basic Freeway	2,621	2	42.1	21.0	C
50th St to I-4	Weave	4,281	3	46.7	15.6	A
Upstream of 22nd Off	Diverge	1,552	2	37.4	18.7	B
22nd St Off to REL Ramp 2 On	Basic Freeway	347	2	34.4	17.2	B
Downstream of REL Ramp 2 On	Basic Freeway	1,354	2	36.2	15.2	B
Downstream of I-4 On	Merge	1,711	3	65.0	21.7	C
I-4 On to 22nd St On	Basic Freeway	2,282	3	65.3	21.8	C
Downstream of 22nd St On	Merge	1,489	3	80.6	24.1	C
22nd St to Kennedy Blvd Off	Basic Freeway	885	3	75.9	25.3	C
Upstream of Kennedy Blvd Off	Diverge	1,531	3	75.9	22.2	C
Upstream of Brorein St Off	Diverge	1,450	3	51.0	17.0	B
Between Brorein St Ramps	Basic Freeway	2,054	3	42.1	14.0	B
Downstream of Brorein St On	Merge	1,457	3	61.4	18.7	B
Selmon Continue West	Basic Freeway	2,495	3	60.0	20.0	B

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2036 No-Build

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 NB	Basic Freeway	2,395	2	55	27	D
Upstream of I-75 SB Off	Diverge	1,762	2	61	30	D
US-301 to Falkenburg Rd	Weave	1,310	3	80	27	C
Between US-301 Ramps (2 lanes)	Basic Freeway	1,629	2	67	34	D
Between US-301 Ramps (3 lanes)	Basic Freeway	1,207	3	56	19	C
Upstream of US-301 Off	Diverge	1,490	3	76	25	C
REL to US-301	Basic Freeway	293	3	77	26	C
Upstream of REL Off	Diverge	1,809	3	80	27	C
Downstream of REL On	Merge	1,502	3	79	23	C
78th St to REL (3 lanes)	Basic Freeway	1,956	3	61	20	C
78th St to REL (2 lanes)	Basic Freeway	877	2	63	32	D
Upstream of 78th St Off	Diverge	1,497	2	67	28	D
50th St to 78th St	Basic Freeway	6,583	2	70	35	D
Downstream of 50th St On	Merge	1,502	2	109	44	F
Between 50th St Ramps	Basic Freeway	2,764	2	112	56	F
I-4 to 50th St	Weave	2,225	3	193	54	F
REL Off to I-4 On	Basic Freeway	4,061	2	108	54	F
Upstream of REL Off (2 lanes)	Diverge	581	2	78	39	E
Upstream of REL Off (3 lanes)	Basic Freeway	1,508	3	86	29	D
22nd St On to I-4 Off	Weave	1,541	4	301	75	F
Between 22nd St Ramps	Basic Freeway	862	3	187	62	F
Upstream of 22nd St Off	Diverge	1,507	3	213	61	F
Nebraska Ave to 22nd St	Basic Freeway	1,180	3	200	67	F
Downstream of Nebraska Ave On	Merge	1,495	3	230	66	F
Brorein St to Nebraska Ave	Basic Freeway	341	3	219	73	F
Downstream of Brorein St On	Merge	1,531	4	352	88	F
Whiting St to Brorein St	Basic Freeway	1,180	3	222	74	F
Upstream of Whiting St Off	Diverge	818	3	197	66	F
Upstream of Florida Ave Off	Diverge	1,706	4	189	47	F
From Selmon West	Basic Freeway	2,487	3	189	63	F

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
To Brandon	Basic Freeway	9,395	2	45	23	C
Downstream of LL On (at US-301)	Merge	1,494	2	42	18	B
LL Off to LL On (2 lanes)	Basic Freeway	3,918	2	37	18	C
LL Off to LL On (3 lanes)	Basic Freeway	2,364	3	37	12	B
Upstream of LL Off (at US-301)	Diverge	1,540	3	56	19	B
LL On to LL Off	Basic Freeway	15,162	3	54	18	B
Downstream of LL On (at I-4)	Merge	1,572	3	54	16	B
Twiggs St to LL On	Basic Freeway	9,696	3	40	13	B
From Twiggs St	Basic Freeway	1,547	3	61	20	C

Westbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	970	938	-32	3%	1.0
REL Ramp 3 to I-75 SB	970	938	-32	3%	1.0
I-75 to Falkenburg Rd	1,720	1,677	-43	2%	1.0
Falkenburg Rd to US-301	2,520	2,470	-50	2%	1.0
Between US-301 Ramps	2,190	2,158	-32	1%	0.7
US-301 On to REL On	2,820	2,607	-213	8%	4.1
Between REL Ramps	2,820	2,606	-214	8%	4.1
REL to 78th St	2,820	2,594	-226	8%	4.3
78th St to 50th St	3,040	2,830	-210	7%	3.9
Between 50th St Ramps	2,870	2,664	-206	7%	3.9
50th St to I-4	3,150	2,930	-220	7%	4.0
I-4 Off to 22nd St Off	2,480	2,304	-176	7%	3.6
22nd St Off to REL Ramp 2 On	2,310	2,137	-173	7%	3.7
REL Ramp 2 to I-4 On	2,310	2,160	-150	6%	3.2
I-4 On to 22nd St On	3,710	3,539	-171	5%	2.8
22nd St to Kennedy Blvd	4,380	4,197	-183	4%	2.8
Kennedy Blvd to Brorein St	3,090	2,929	-161	5%	2.9
Between Brorein St Ramps	2,560	2,427	-133	5%	2.7
Selmon Continue West	3,800	3,263	-537	14%	9.0
NETWORK TOTAL	**50,530**	**47,368**	**-3,162**	**6%**	

Eastbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 NB	3,110	2,799	-311	10%	5.7
Falkenburg Rd to I-75	3,440	3,052	-388	11%	6.8
US-301 to Falkenburg Rd	4,440	3,948	-492	11%	7.6
Between US-301 Ramps	3,610	3,370	-240	7%	4.1
REL Off to US-301	5,000	4,589	-411	8%	5.9
Between REL Ramps	5,270	4,907	-363	7%	5.1
78th St to REL (3 lanes)	4,180	3,864	-316	8%	5.0
50th St to 78th St	4,410	4,108	-302	7%	4.6
Between 50th St Ramps	4,030	3,721	-309	8%	5.0
I-4 to 50th St	5,020	4,470	-550	11%	8.0
REL Off to I-4 On	2,910	2,406	-504	17%	9.8
I-4 Off to REL Off	4,000	3,827	-173	4%	2.8
22nd St On to I-4 Off	6,400	5,218	-1,182	18%	15.5
Between 22nd St Ramps	5,960	4,861	-1,099	18%	14.9
Nebraska Ave to 22nd St	6,390	5,281	-1,109	17%	14.5
Brorein St to Nebraska Ave	5,740	4,710	-1,030	18%	14.2
Whiting St to Brorein St	4,630	4,133	-497	11%	7.5
Upstream of Whiting St Off	5,560	4,956	-604	11%	8.3
From Selmon West	5,700	5,263	-437	8%	5.9
Reversible Express Lanes					
To Brandon	2,660	2,429	-231	9%	4.6
LL Off (at US-301) to LL On (at US-301)	2,390	2,152	-238	10%	5.0
LL On (at I-4) to LL Off (at US-301)	3,480	3,188	-292	8%	5.1
Twiggs St to LL On (at I-4)	2,390	2,256	-134	6%	2.8
NETWORK TOTAL	**100,720**	**89,507**	**-11,213**	**11%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2036 No-Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	49	49	49	49	49	49	49	49	49	49	49	50
	49	49	49	49	49	49	49	49	49	49	49	49
	57	57	57	57	57	57	57	57	57	57	57	57
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	63	63	63	63	63	63	63	63	63	63	64	64
	63	63	63	63	63	63	63	63	63	63	63	63
Downtown	62	62	62	62	62	62	62	62	62	62	62	62
	63	62	62	62	62	62	62	62	62	63	63	63
	60	60	60	60	60	60	60	60	60	60	60	60
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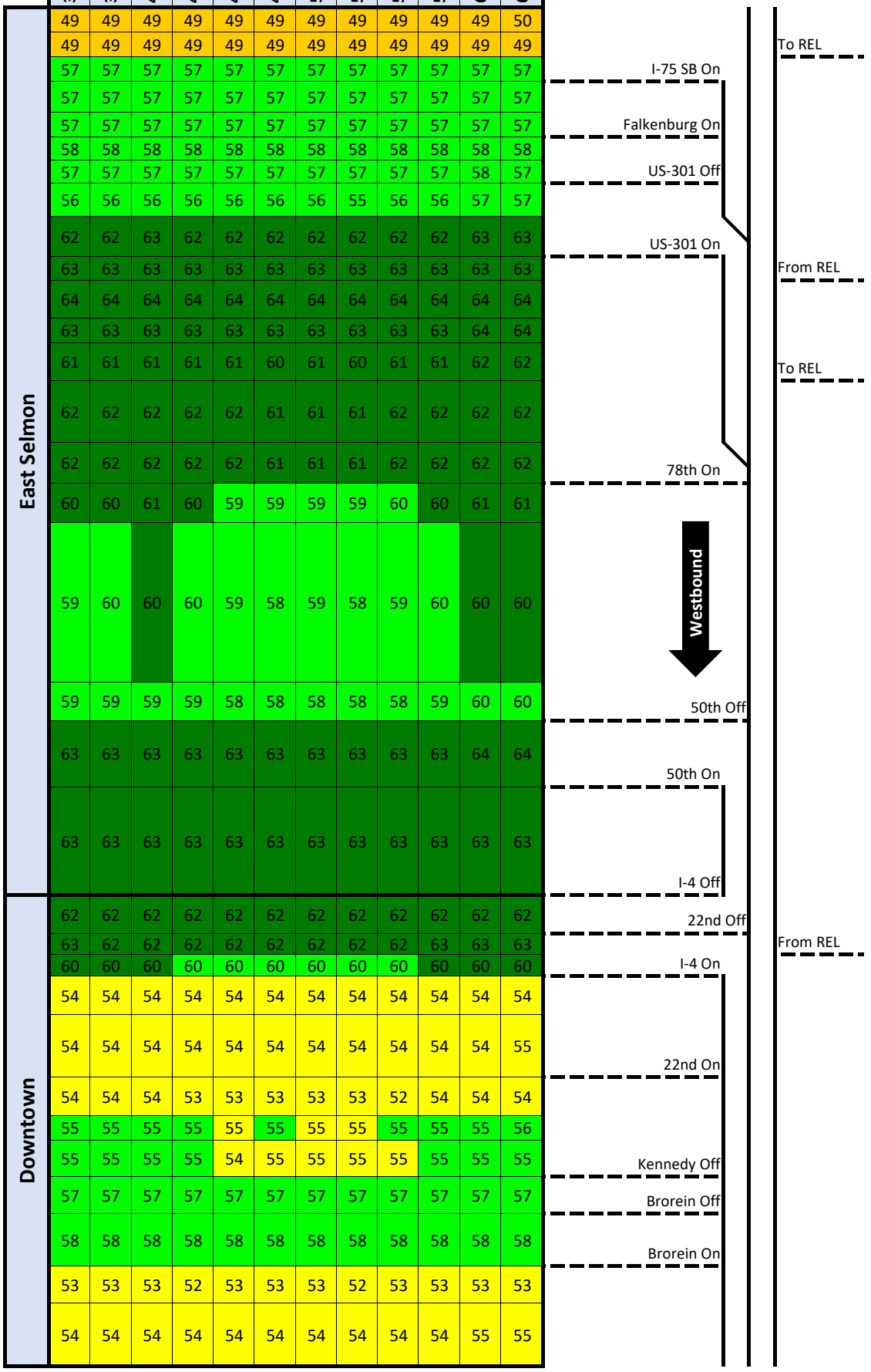

Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2036 No-Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	51	51	51	51	51	51	51	51	51	51	51	51
	51	51	51	50	50	50	50	50	51	51	51	51
	50	50	50	50	50	49	49	49	49	50	50	50
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	53	47	43	41	35	34	35	39	43	50	53	55
	51	48	46	41	31	31	32	33	42	48	52	53
Downtown	57	57	55	55	43	31	30	36	45	52	57	57
	54	53	53	53	52	46	46	47	48	53	55	55
	54	53	52	52	49	43	42	44	45	49	51	51
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	56	56	56	55	43	22	10	8	8	8	8	9
	56	55	56	55	53	41	14	9	9	10	10	10
	54	54	54	54	53	48	21	13	12	13	14	14
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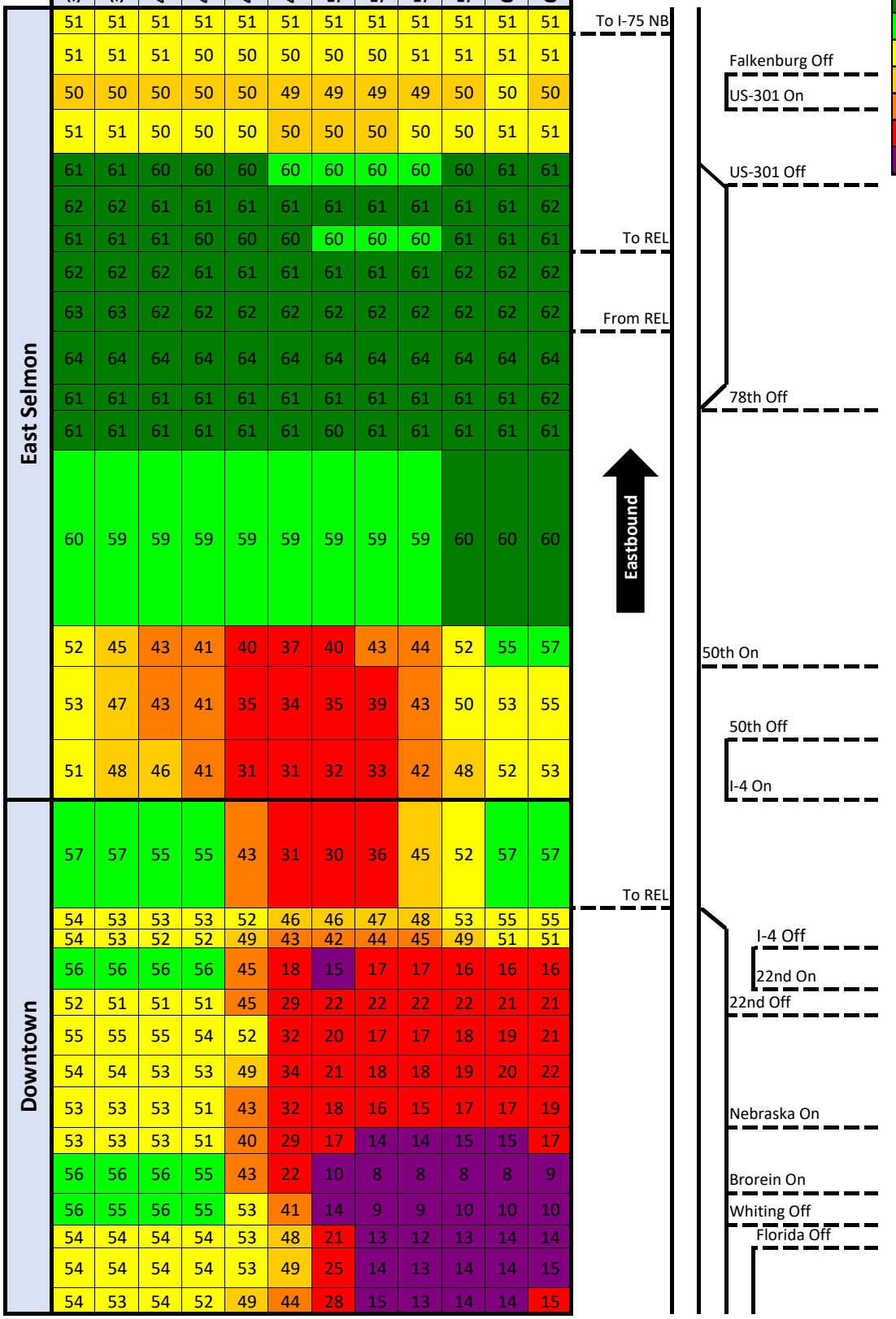
	54	53	54	52	49	44	28	15	13	14	14	15



Eastbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2036 No-Build

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	55	54	54	54	54	54	54	54	54	54	54	55
	59	58	58	58	57	58	57	57	58	58	58	58
	59	59	59	58	58	58	58	58	59	59	59	59
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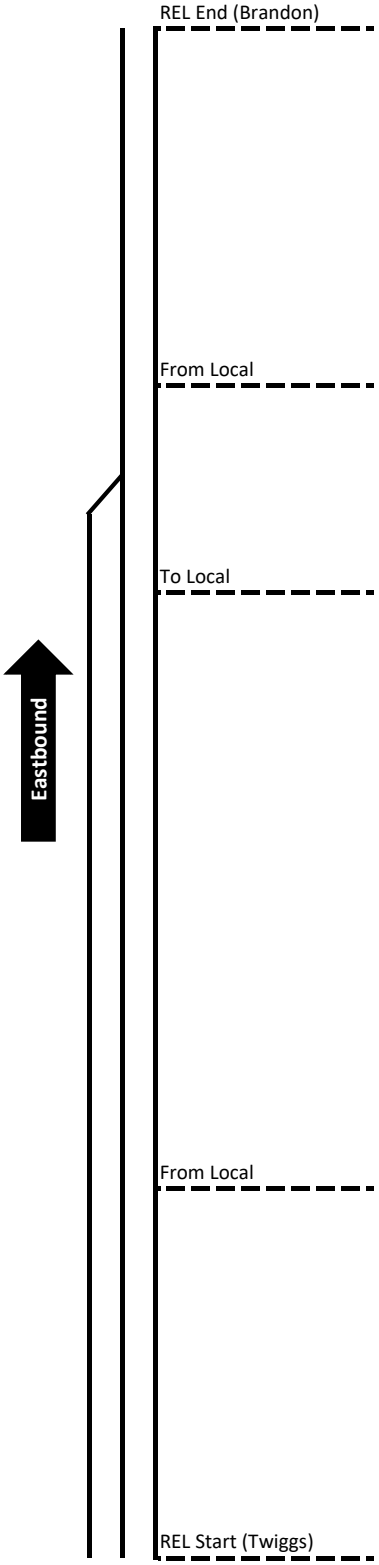
	59	59	58	58	57	57	57	57	57	57	58	58
	60	60	60	59	59	59	59	59	59	59	60	60
Downtown	60	60	59	59	59	58	58	59	59	59	59	60
	57	57	56	56	56	56	56	56	56	56	57	56
	37	37	37	37	37	37	37	37	37	37	37	37

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15



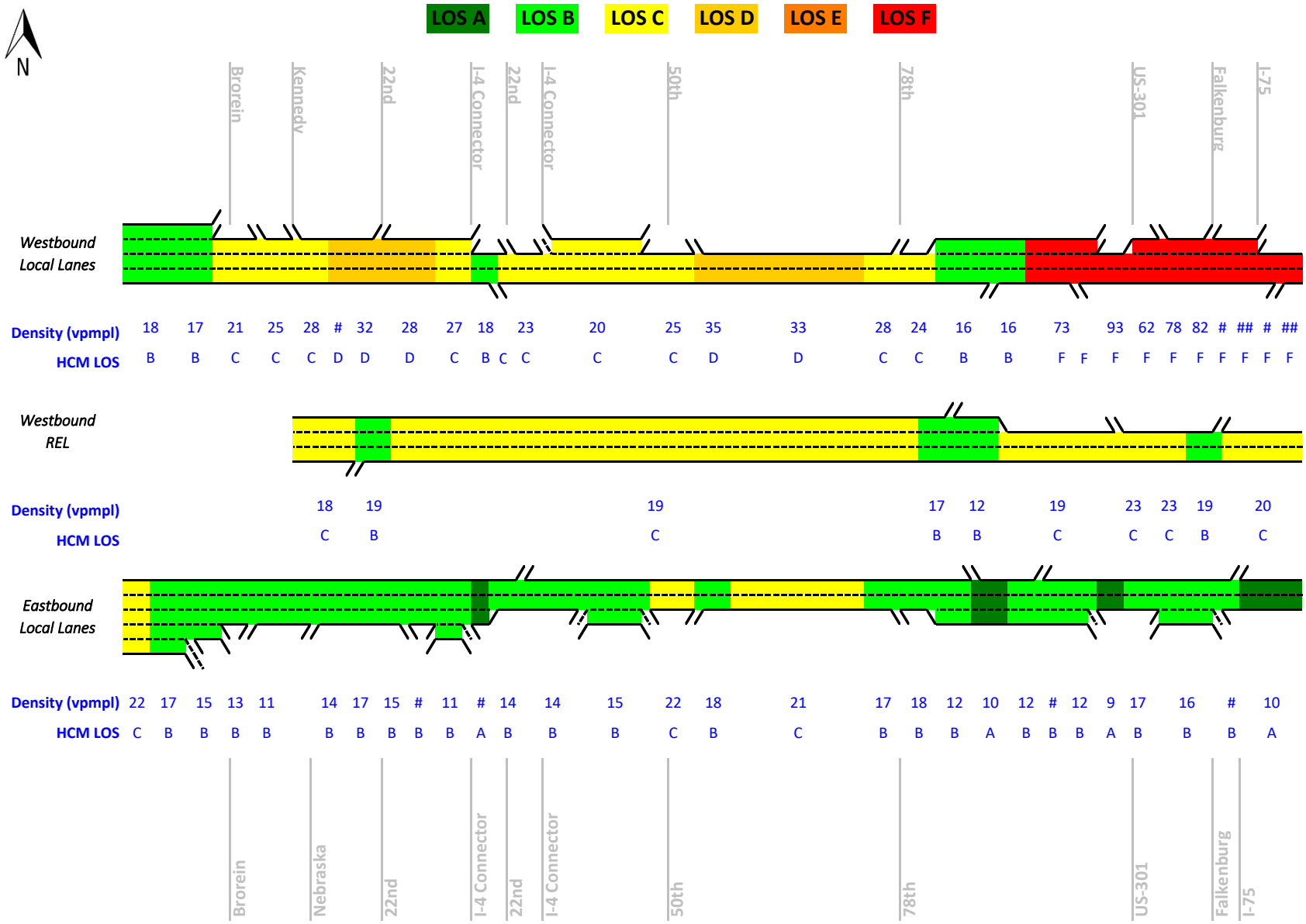
Travel Times by Segment, Local Lanes
PM Peak Hour (4:30-5:30 PM)

2036 No-Build

From	To	2019 Existing VISSIM Travel Time (min)	2036 No-Build Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	0.9	0.9	0	0%
US-301	78th St	1.8	1.8	0	1%
78th St	50th St	2.0	2.0	0	1%
50th St	I-4 Connector	1.5	1.5	0	0%
I-4 Connector	20th St	0.7	0.7	0	0%
20th St	Channelside Dr	0.8	0.8	0	4%
Channelside Dr	Kennedy Blvd	0.6	0.6	0	0%
Kennedy Blvd	Jefferson St	0.3	0.3	0	0%
Jefferson St	Florida Ave	0.3	0.3	0	0%
Total		**8.6**	**8.6**	**0**	**1%**
Eastbound					
Florida Ave	Jefferson St	0.3	0.7	0	156%
Jefferson St	Kennedy Blvd	0.3	1.2	1	245%
Kennedy Blvd	Channelside Dr	0.6	1.6	1	188%
Channelside Dr	20th St	0.8	1.7	1	120%
20th St	I-4 Connector	0.9	1.2	0	34%
I-4 Connector	50th St	1.6	3.5	2	116%
50th St	78th St	2.0	2.4	0	19%
78th St	US-301	1.8	1.8	0	1%
US-301	Falkenburg Rd	1.0	1.0	0	2%
Total		**9.2**	**15.0**	**6**	**63%**

Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

2046 No-Build



Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	235.0	117.5	F
Upstream of REL Ramp 3 Off	Diverge	1,443	2	235.7	117.8	F
REL Ramp 3 to I-75 SB	Basic Freeway	990	2	269.5	134.8	F
Downstream of I-75 SB On	Merge	1,503	3	351.9	117.3	F
I-75 to Falkenburg Rd	Basic Freeway	874	3	328.3	109.4	F
Downstream of Falkenburg Rd On	Merge	704	4	329.8	82.4	F
Upstream of US-301 Off	Diverge	407	3	233.0	77.7	F
Between US-301 Ramps (3 lanes)	Basic Freeway	1,306	3	186.7	62.2	F
Between US-301 Ramps (2 lanes)	Basic Freeway	1,593	2	186.7	93.3	F
Downstream of US-301 On	Merge	241	3	210.7	70.2	F
Downstream of REL On	Merge	1,602	3	254.2	73.5	F
Between REL Ramps	Basic Freeway	923	3	192.5	64.2	F
Upstream of REL Off	Diverge	1,478	3	47.7	15.9	B
REL to 78th St (3 lanes)	Basic Freeway	2,439	3	47.8	15.9	B
REL to 78th St (2 lanes)	Basic Freeway	1,591	2	47.7	23.9	C
Downstream of 78th St On	Merge	1,580	2	65.6	27.7	C
78th St to 50th St	Basic Freeway	6,235	2	66.3	33.2	D
Upstream of 50th St Off	Diverge	1,592	2	69.0	34.5	D
Between 50th St Ramps	Basic Freeway	2,621	2	50.9	25.5	C
50th St to I-4	Weave	4,281	3	60.2	20.1	C
Upstream of 22nd Off	Diverge	1,552	2	45.8	22.9	C
22nd St Off to REL Ramp 2 On	Basic Freeway	347	2	37.8	18.9	C
Downstream of REL Ramp 2 On	Merge	1,354	2	42.6	17.9	B
Downstream of I-4 On	Merge	1,711	3	80.1	26.7	C
I-4 On to 22nd St On	Basic Freeway	2,282	3	83.4	27.8	D
Downstream of 22nd St On	Merge	1,489	3	111.6	32.1	D
22nd St to Kennedy Blvd Off	Basic Freeway	885	3	94.4	31.5	D
Upstream of Kennedy Blvd Off	Diverge	1,531	3	94.4	27.6	C
Upstream of Brorein St Off	Diverge	1,450	3	75.1	25.0	C
Between Brorein St Ramps	Basic Freeway	2,054	3	61.6	20.5	C
Downstream of Brorein St On	Merge	1,460	4	71.7	16.7	B
Selmon Continue West	Basic Freeway	2,495	4	71.9	18.0	B

Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
From Brandon	Basic Freeway	4,533	2	40.0	20.0	C
Downstream of LL On (at I-75)	Merge	1,498	2	45.7	19.2	B
LL On to LL Off	Basic Freeway	2,520	2	46.5	23.2	C
Upstream of LL Off (at US-301)	Diverge	1,521	2	46.5	23.2	C
LL Off to LL On (2 lanes)	Basic Freeway	4,733	2	38.6	19.3	C
LL Off to LL On (3 lanes)	Basic Freeway	2,229	3	37.0	12.3	B
Downstream of LL On (at US-301)	Merge	1,526	3	58.6	17.1	B
LL On to LL Off	Basic Freeway	15,517	3	57.6	19.2	C
Upstream of LL Off (at I-4)	Diverge	1,497	3	57.0	19.0	B
LL Off to Twiggs St	Basic Freeway	8,527	3	54.7	18.2	C
To Twiggs St	Basic Freeway	2,481	4	160.8	40.2	E

Eastbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 NB	Basic Freeway	2,395	2	20	10	A
Upstream of I-75 SB Off	Diverge	1,762	2	30	15	B
US-301 to Falkenburg Rd	Weave	1,310	3	48	16	B
Between US-301 Ramps (2 lanes)	Basic Freeway	1,629	2	34	17	B
Between US-301 Ramps (3 lanes)	Basic Freeway	1,207	3	28	9	A
Upstream of US-301 Off	Diverge	1,490	3	36	12	B
REL to US-301	Basic Freeway	293	3	35	12	B
Upstream of REL Off	Basic Freeway	1,809	3	35	12	B
Downstream of REL On	Basic Freeway	1,502	3	35	10	A
78th St to REL (3 lanes)	Basic Freeway	1,956	3	36	12	B
78th St to REL (2 lanes)	Basic Freeway	877	2	36	18	B
Upstream of 78th St Off	Diverge	1,497	2	42	17	B
50th St to 78th St	Basic Freeway	6,583	2	42	21	C
Downstream of 50th St On	Merge	1,502	2	42	18	B
Between 50th St Ramps	Basic Freeway	2,764	2	44	22	C
I-4 to 50th St	Weave	2,225	3	51	15	B
REL Off to I-4 On	Basic Freeway	4,061	2	29	14	B
Upstream of REL Off (2 lanes)	Basic Freeway	581	2	29	14	B
Upstream of REL Off (3 lanes)	Basic Freeway	1,508	3	29	10	A
22nd St On to I-4 Off	Weave	1,541	4	45	11	B
Between 22nd St Ramps	Basic Freeway	862	3	44	15	B
Upstream of 22nd St Off	Diverge	1,507	3	50	15	B
Nebraska Ave to 22nd St	Basic Freeway	1,180	3	50	17	B
Downstream of Nebraska Ave On	Merge	1,495	3	50	14	B
Brorein St to Nebraska Ave	Basic Freeway	341	3	44	15	B
Downstream of Brorein St On	Merge	1,531	4	44	11	B
Whiting St to Brorein St	Basic Freeway	1,180	3	40	13	B
Upstream of Whiting St Off	Diverge	818	4	60	15	B
Upstream of Florida Ave Off	Diverge	1,706	5	84	17	B
From Selmon West	Basic Freeway	2,487	4	87	22	C

Westbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	3,860	2,333	-1,527	40%	27.4
REL Ramp 3 to I-75 SB	3,010	1,813	-1,197	40%	24.4
I-75 to Falkenburg Rd	4,270	3,063	-1,207	28%	19.9
Falkenburg Rd to US-301	5,030	3,807	-1,223	24%	18.4
Between US-301 Ramps	4,010	2,999	-1,011	25%	17.1
US-301 On to REL On	4,780	3,645	-1,135	24%	17.5
Between REL Ramps	5,240	4,191	-1,049	20%	15.3
REL to 78th St	3,820	2,938	-882	23%	15.2
78th St to 50th St	4,400	3,536	-864	20%	13.7
Between 50th St Ramps	3,990	3,202	-788	20%	13.1
50th St to I-4	5,160	3,697	-1,463	28%	22.0
I-4 Off to 22nd St Off	3,960	2,754	-1,206	30%	20.8
22nd St Off to REL Ramp 2 On	3,420	2,323	-1,097	32%	20.5
REL Ramp 2 to I-4 On	3,700	2,512	-1,188	32%	21.3
I-4 On to 22nd St On	5,900	4,320	-1,580	27%	22.1
22nd St to Kennedy Blvd	6,730	5,165	-1,565	23%	20.3
Kennedy Blvd to Brorein St	5,530	4,215	-1,315	24%	18.8
Between Brorein St Ramps	4,450	3,494	-956	21%	15.2
Selmon Continue West	5,040	3,942	-1,098	22%	16.4
Reversible Express Lanes					
From Brandon	2,300	2,281	-19	1%	0.4
LL On (at I-75) to LL Off (at US-301)	3,150	2,788	-362	12%	6.7
LL Off (at US-301) to LL On (at US-301)	2,690	2,341	-349	13%	7.0
LL On (at US-301) to LL Off (at I-4)	4,110	3,515	-455	11%	7.4
LL Off (at I-4) to Twiggs St	3,830	3,432	-398	10%	6.6
NETWORK TOTAL	**102,380**	**78,307**	**-24,073**	**24%**	

Eastbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 NB	1,110	1,050	-60	5%	1.8
Falkenburg Rd to I-75	1,650	1,561	-89	5%	2.2
US-301 to Falkenburg Rd	2,600	2,459	-141	5%	2.8
Between US-301 Ramps	1,910	1,786	-124	7%	2.9
REL Off to US-301	2,420	2,249	-171	7%	3.5
Between REL Ramps	2,420	2,276	-144	6%	3.0
78th St to REL	2,420	2,266	-154	6%	3.2
50th St to 78th St	2,760	2,622	-138	5%	2.7
Between 50th St Ramps	2,580	2,528	-52	2%	1.0
I-4 to 50th St	2,970	2,882	-88	3%	1.6
REL Off to I-4 On	1,720	1,649	-71	4%	1.7
I-4 Off to REL Off	1,720	1,902	182	11%	4.3
22nd St On to I-4 Off	2,760	2,631	-129	5%	2.5
Between 22nd St Ramps	2,640	2,526	-114	4%	2.2
Nebraska Ave to 22nd St	2,990	2,883	-107	4%	2.0
Brorein St to Nebraska Ave	2,590	2,486	-104	4%	2.1
Whiting St to Brorein St	2,260	2,244	-16	1%	0.3
Upstream of Whiting St Off	3,430	3,365	-65	2%	1.1
From Selmon West	4,660	4,640	-20	0%	0.3
NETWORK TOTAL	**47,610**	**46,005**	**-1,605**	**3%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (7:00-9:00 AM)

2046 No-Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
East Selmon	45	41	38	18	11	10	10	10	10	11	11	13
	45	44	42	16	10	10	10	10	10	11	11	13
	55	55	41	9	7	7	7	7	7	7	8	9
	55	50	21	10	9	9	9	9	9	9	10	11
	54	38	17	11	10	10	9	9	10	10	10	12
	52	35	20	13	12	12	11	12	12	12	13	15
	51	34	26	18	16	16	16	16	17	17	18	20
	50	42	37	22	20	20	19	19	21	21	24	28
	61	60	37	18	16	16	16	16	17	17	19	22
	61	60	32	19	18	17	17	18	18	19	20	22
	62	55	22	17	16	16	16	17	17	17	17	18
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	63	63	63	63	63	63	63	63	63	63	63	63
	61	61	60	60	61	61	62	62	62	62	63	63
Downtown	60	59	59	59	60	60	61	61	61	60	58	59
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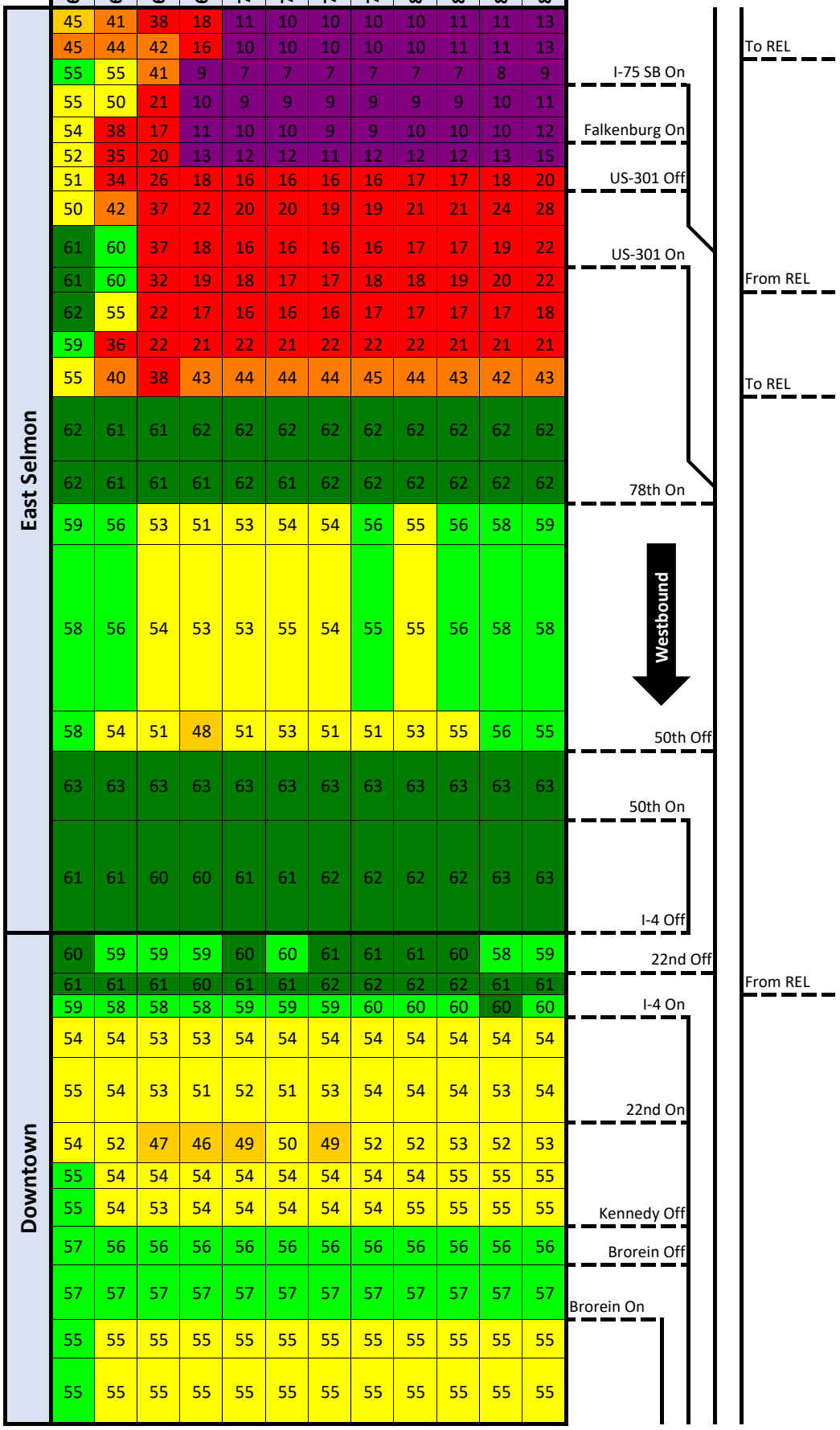

Westbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2046 No-Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
REL Start (Brandon)												
East Selmon	59	59	58	58	57	57	57	58	58	58	59	59
From I-75 NB												
	62	61	61	61	61	60	61	62	62	63	63	63
	61	60	60	60	60	60	60	61	61	61	62	62
	60	60	59	60	60	60	60	61	61	61	61	61
To Local												
	60	60	59	60	61	61	61	61	61	61	61	61
	61	61	61	62	63	64	63	63	63	63	63	63
From Local												
	61	61	60	61	61	61	61	62	62	62	62	62
	63	63	62	62	62	62	62	63	63	63	63	63
Downtown	65	64	63	63	63	63	63	63	63	64	64	64
To Local												
	65	64	63	63	63	63	63	63	63	63	64	64
	30	29	29	28	28	27	27	28	28	29	29	29
REL End (Twiggs)												

Westbound

Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2046 No-Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
East Selmon	53	52	52	52	52	52	52	52	52	52	52	52
	52	52	52	52	52	52	52	51	51	52	51	52
	52	52	52	52	52	51	51	51	51	51	51	51
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Downtown	60	60	59	58	58	58	57	57	57	57	57	57
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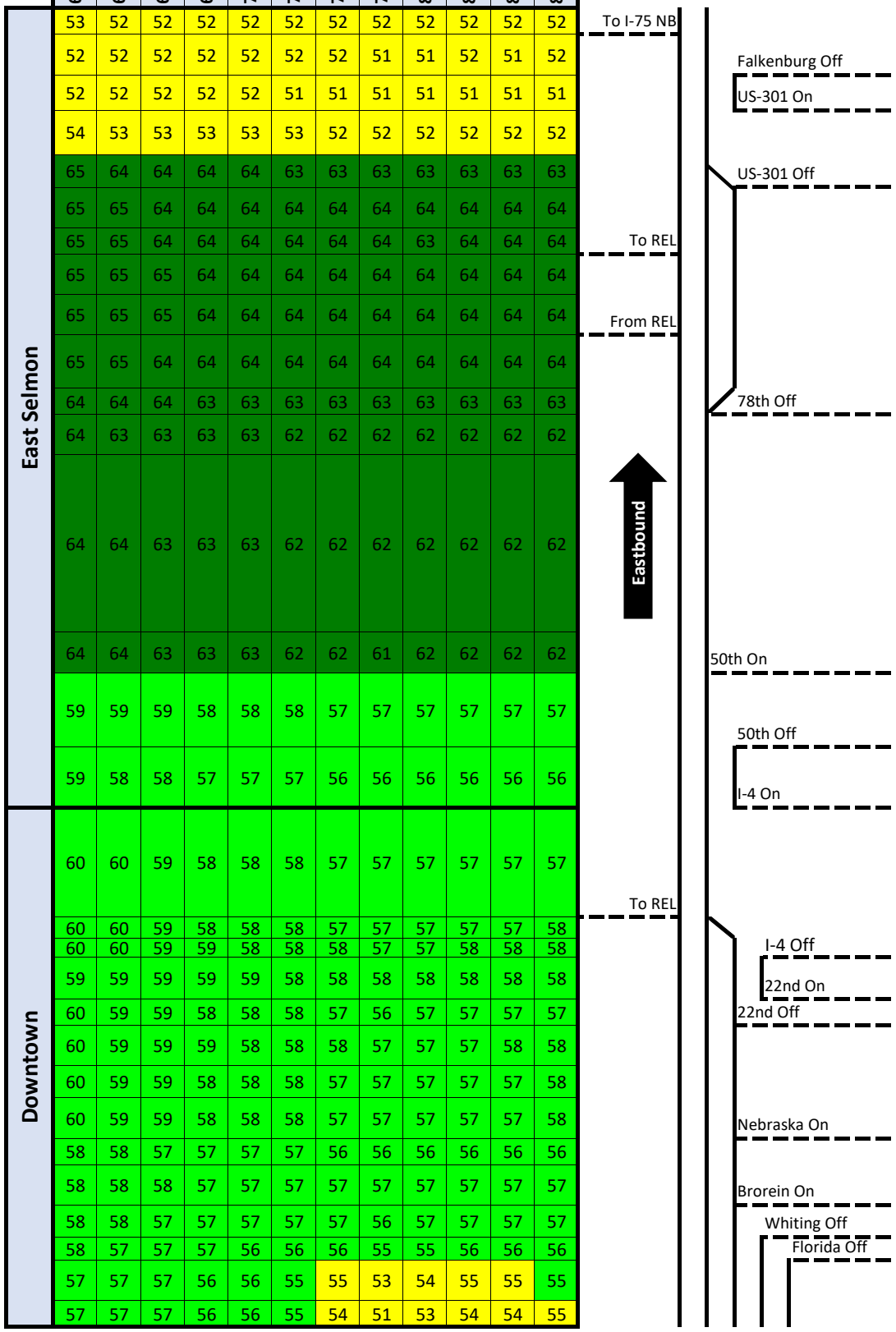


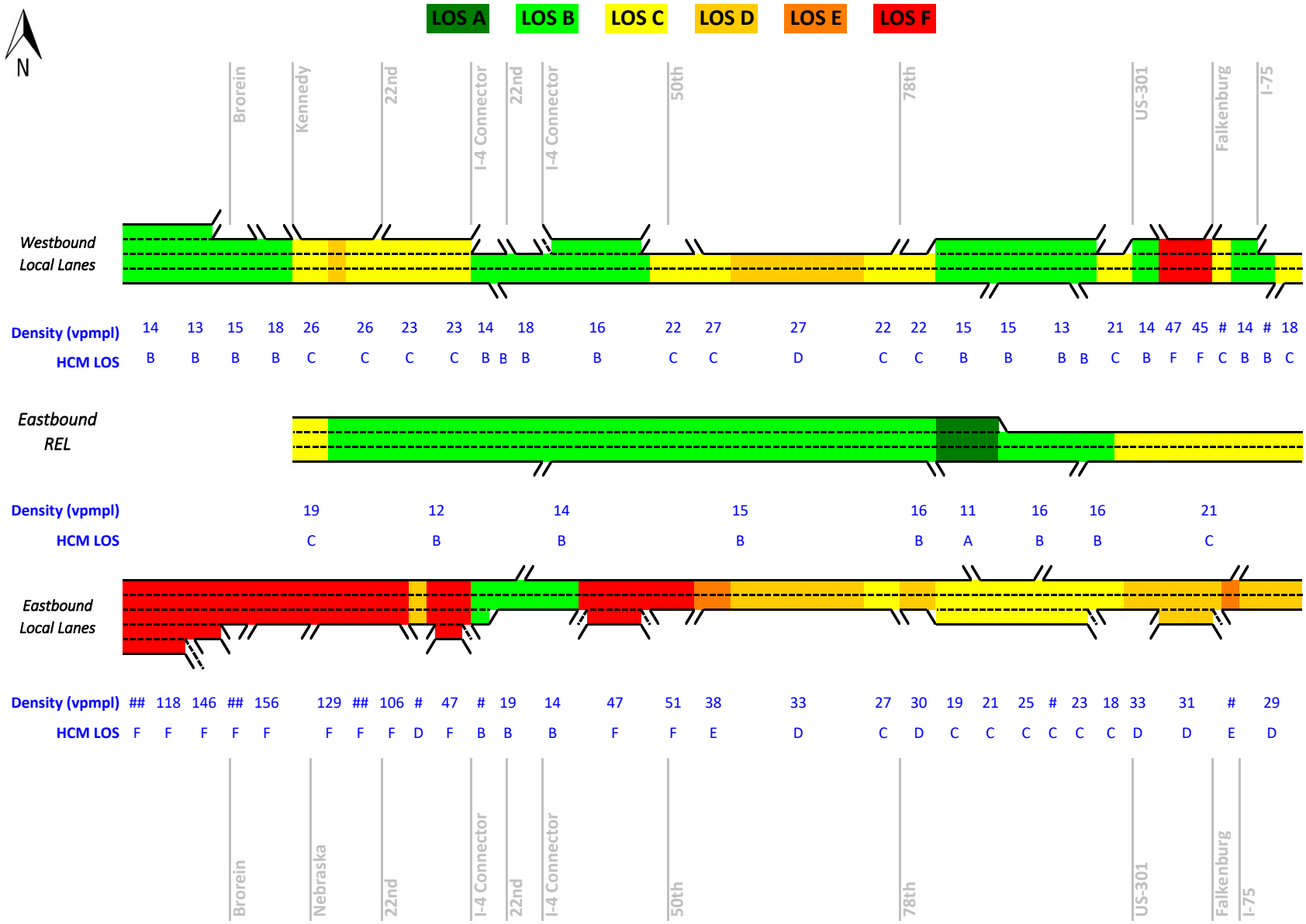
Travel Times by Segment, Local Lanes
AM Peak Hour (7:00-8:00 AM)

2046 No-Build

From	To	2019 Existing VISSIM Travel Time (min)	2046 No-Build Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	2.0	4.2	2	112%
US-301	78th St	4.4	4.1	0	-8%
78th St	50th St	3.3	2.2	-1	-34%
50th St	I-4 Connector	1.5	1.5	0	-2%
I-4 Connector	20th St	0.7	0.7	0	0%
20th St	Channelside Dr	0.8	0.9	0	11%
Channelside Dr	Kennedy Blvd	0.6	0.6	0	-3%
Kennedy Blvd	Jefferson St	0.3	0.3	0	0%
Jefferson St	Florida Ave	0.3	0.3	0	-6%
Total		**13.8**	**14.6**	**1**	**6%**
Eastbound					
Florida Ave	Jefferson St	0.3	0.3	0	0%
Jefferson St	Kennedy Blvd	0.3	0.3	0	0%
Kennedy Blvd	Channelside Dr	0.5	0.6	0	3%
Channelside Dr	20th St	0.7	0.7	0	0%
20th St	I-4 Connector	0.6	0.7	0	3%
I-4 Connector	50th St	1.6	1.6	0	1%
50th St	78th St	1.9	2.0	0	1%
78th St	US-301	1.7	1.7	0	1%
US-301	Falkenburg Rd	0.9	0.9	0	2%
Total		**8.6**	**8.7**	**0**	**1%**

Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2046 No-Build



Westbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	36.5	18.2	C
Upstream of REL Ramp 3 Off	Basic Freeway	1,443	2	36.8	18.4	C
REL Ramp 3 to I-75 SB	Basic Freeway	990	2	31.5	15.8	B
Downstream of I-75 SB On	Merge	1,503	3	43.4	14.5	B
I-75 to Falkenburg Rd	Basic Freeway	874	3	62.7	20.9	C
Downstream of Falkenburg Rd On	Merge	704	4	180.6	45.1	F
Upstream of US-301 Off	Diverge	407	3	139.9	46.6	F
Between US-301 Ramps (3 lanes)	Basic Freeway	1,306	3	41.9	14.0	B
Between US-301 Ramps (2 lanes)	Basic Freeway	1,593	2	41.9	20.9	C
Downstream of US-301 On	Merge	241	3	43.0	14.3	B
Downstream of REL On	Basic Freeway	1,602	3	43.2	12.6	B
Between REL Ramps	Basic Freeway	923	3	43.8	14.6	B
Upstream of REL Off	Basic Freeway	1,478	3	45.0	15.0	B
REL to 78th St (3 lanes)	Basic Freeway	2,439	3	45.1	15.0	B
REL to 78th St (2 lanes)	Basic Freeway	1,591	2	44.9	22.5	C
Downstream of 78th St On	Merge	1,580	2	52.5	22.0	C
78th St to 50th St	Basic Freeway	6,235	2	53.4	26.7	D
Upstream of 50th St Off	Diverge	1,592	2	53.5	26.8	C
Between 50th St Ramps	Basic Freeway	2,621	2	44.4	22.2	C
50th St to I-4	Weave	4,281	3	47.2	15.7	B
Upstream of 22nd Off	Diverge	1,552	2	35.5	17.8	B
22nd St Off to REL Ramp 2 On	Basic Freeway	347	2	32.0	16.0	B
Downstream of REL Ramp 2 On	Basic Freeway	1,354	2	33.7	14.2	B
Downstream of I-4 On	Merge	1,711	3	68.8	22.9	C
I-4 On to 22nd St On	Basic Freeway	2,282	3	69.0	23.0	C
Downstream of 22nd St On	Merge	1,489	3	86.4	25.7	C
22nd St to Kennedy Blvd Off	Basic Freeway	885	3	90.6	30.2	D
Upstream of Kennedy Blvd Off	Diverge	1,531	3	90.6	26.2	C
Upstream of Brorein St Off	Diverge	1,450	3	54.9	18.3	B
Between Brorein St Ramps	Basic Freeway	2,054	3	44.9	15.0	B
Downstream of Brorein St On	Merge	1,460	4	56.1	13.1	B
Selmon Continue West	Basic Freeway	2,495	4	56.3	14.1	B

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2046 No-Build

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 NB	Basic Freeway	2,395	2	57	29	D
Upstream of I-75 SB Off	Diverge	1,762	2	72	36	E
US-301 to Falkenburg Rd	Weave	1,310	3	92	31	D
Between US-301 Ramps (2 lanes)	Basic Freeway	1,629	2	66	33	D
Between US-301 Ramps (3 lanes)	Basic Freeway	1,207	3	55	18	C
Upstream of US-301 Off	Diverge	1,490	3	68	23	C
REL to US-301	Basic Freeway	293	3	68	23	C
Upstream of REL Off	Diverge	1,809	3	74	25	C
Downstream of REL On	Merge	1,502	3	73	21	C
78th St to REL (3 lanes)	Basic Freeway	1,956	3	58	19	C
78th St to REL (2 lanes)	Basic Freeway	877	2	60	30	D
Upstream of 78th St Off	Diverge	1,497	2	64	27	C
50th St to 78th St	Basic Freeway	6,583	2	65	33	D
Downstream of 50th St On	Merge	1,502	2	95	38	E
Between 50th St Ramps	Basic Freeway	2,764	2	102	51	F
I-4 to 50th St	Weave	2,225	3	165	47	F
REL Off to I-4 On	Basic Freeway	4,061	2	28	14	B
Upstream of REL Off (2 lanes)	Diverge	581	2	39	19	B
Upstream of REL Off (3 lanes)	Basic Freeway	1,508	3	40	13	B
22nd St On to I-4 Off	Weave	1,541	4	188	47	F
Between 22nd St Ramps	Basic Freeway	862	3	104	35	D
Upstream of 22nd St Off	Diverge	1,507	3	369	106	F
Nebraska Ave to 22nd St	Basic Freeway	1,180	3	343	114	F
Downstream of Nebraska Ave On	Merge	1,495	3	454	129	F
Brorein St to Nebraska Ave	Basic Freeway	341	3	389	130	F
Downstream of Brorein St On	Merge	1,531	4	624	156	F
Whiting St to Brorein St	Basic Freeway	1,180	3	439	146	F
Upstream of Whiting St Off	Diverge	818	4	583	146	F
Upstream of Florida Ave Off	Diverge	1,706	5	592	118	F
From Selmon West	Basic Freeway	2,487	4	563	141	F

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
To Brandon	Basic Freeway	9,395	2	42	21	C
Downstream of LL On (at US-301)	Merge	1,494	2	39	16	B
LL Off to LL On (2 lanes)	Basic Freeway	3,918	2	32	16	B
LL Off to LL On (3 lanes)	Basic Freeway	2,364	3	32	11	A
Upstream of LL Off (at US-301)	Diverge	1,540	3	47	16	B
LL On to LL Off	Basic Freeway	15,162	3	46	15	B
Downstream of LL On (at I-4)	Merge	1,572	3	47	14	B
Twiggs St to LL On	Basic Freeway	9,696	3	37	12	B
From Twiggs St	Basic Freeway	1,547	3	58	19	C

Westbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	1,800	1,765	-35	2%	0.8
REL Ramp 3 to I-75 SB	1,800	1,760	-40	2%	0.9
I-75 to Falkenburg Rd	2,480	2,426	-54	2%	1.1
Falkenburg Rd to US-301	3,310	3,119	-191	6%	3.4
Between US-301 Ramps	2,720	2,574	-146	5%	2.8
US-301 On to REL On	2,930	2,760	-170	6%	3.2
Between REL Ramps	2,930	2,758	-172	6%	3.2
REL to 78th St	2,930	2,740	-190	6%	3.6
78th St to 50th St	3,220	3,031	-189	6%	3.4
Between 50th St Ramps	2,990	2,805	-185	6%	3.4
50th St to I-4	3,310	2,983	-327	10%	5.8
I-4 Off to 22nd St Off	2,490	2,212	-278	11%	5.7
22nd St Off to REL Ramp 2 On	2,280	2,005	-275	12%	5.9
REL Ramp 2 to I-4 On	2,280	2,027	-253	11%	5.4
I-4 On to 22nd St On	3,970	3,716	-254	6%	4.1
22nd St to Kennedy Blvd	4,710	4,401	-309	7%	4.6
Kennedy Blvd to Brorein St	3,390	3,125	-265	8%	4.6
Between Brorein St Ramps	2,820	2,584	-236	8%	4.5
Selmon Continue West	4,070	3,110	-960	24%	16.0
NETWORK TOTAL	**56,430**	**51,900**	**-4,530**	**8%**	

Eastbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 NB	3,470	2,918	-552	16%	9.8
Falkenburg Rd to I-75	4,180	3,538	-642	15%	10.3
US-301 to Falkenburg Rd	4,940	4,155	-785	16%	11.6
Between US-301 Ramps	3,960	3,273	-687	17%	11.4
REL Off to US-301	5,100	4,157	-943	18%	13.9
Between REL Ramps	5,540	4,566	-974	18%	13.7
78th St to REL	4,540	3,684	-856	19%	13.4
50th St to 78th St	4,790	3,886	-904	19%	13.7
Between 50th St Ramps	4,300	3,575	-725	17%	11.5
I-4 to 50th St	5,430	4,123	-1,307	24%	18.9
REL Off to I-4 On	2,960	1,560	-1,400	47%	29.4
I-4 Off to REL Off	4,060	2,498	-1,562	38%	27.3
22nd St On to I-4 Off	6,850	3,413	-3,437	50%	48.0
Between 22nd St Ramps	6,380	2,923	-3,457	54%	50.7
Nebraska Ave to 22nd St	6,840	2,998	-3,842	56%	54.8
Brorein St to Nebraska Ave	6,250	2,773	-3,477	56%	51.8
Whiting St to Brorein St	5,160	2,552	-2,608	51%	42.0
Upstream of Whiting St Off	6,280	3,038	-3,242	52%	47.5
From Selmon West	6,560	3,255	-3,305	50%	47.2
Reversible Express Lanes					
To Brandon	2,990	2,288	-702	23%	13.7
LL Off (at US-301) to LL On (at US-301)	2,550	1,904	-646	25%	13.7
LL On (at I-4) to LL Off (at US-301)	3,550	2,757	-793	22%	14.1
Twiggs St to LL On (at I-4)	2,450	2,102	-348	14%	7.3
NETWORK TOTAL	**109,130**	**71,936**	**-37,194**	**34%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2046 No-Build

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	48	49	49	49	48	48	48	48	48	48	49	49
	48	48	48	48	48	48	48	48	48	48	48	48
	56	56	56	56	56	56	56	56	56	56	56	56
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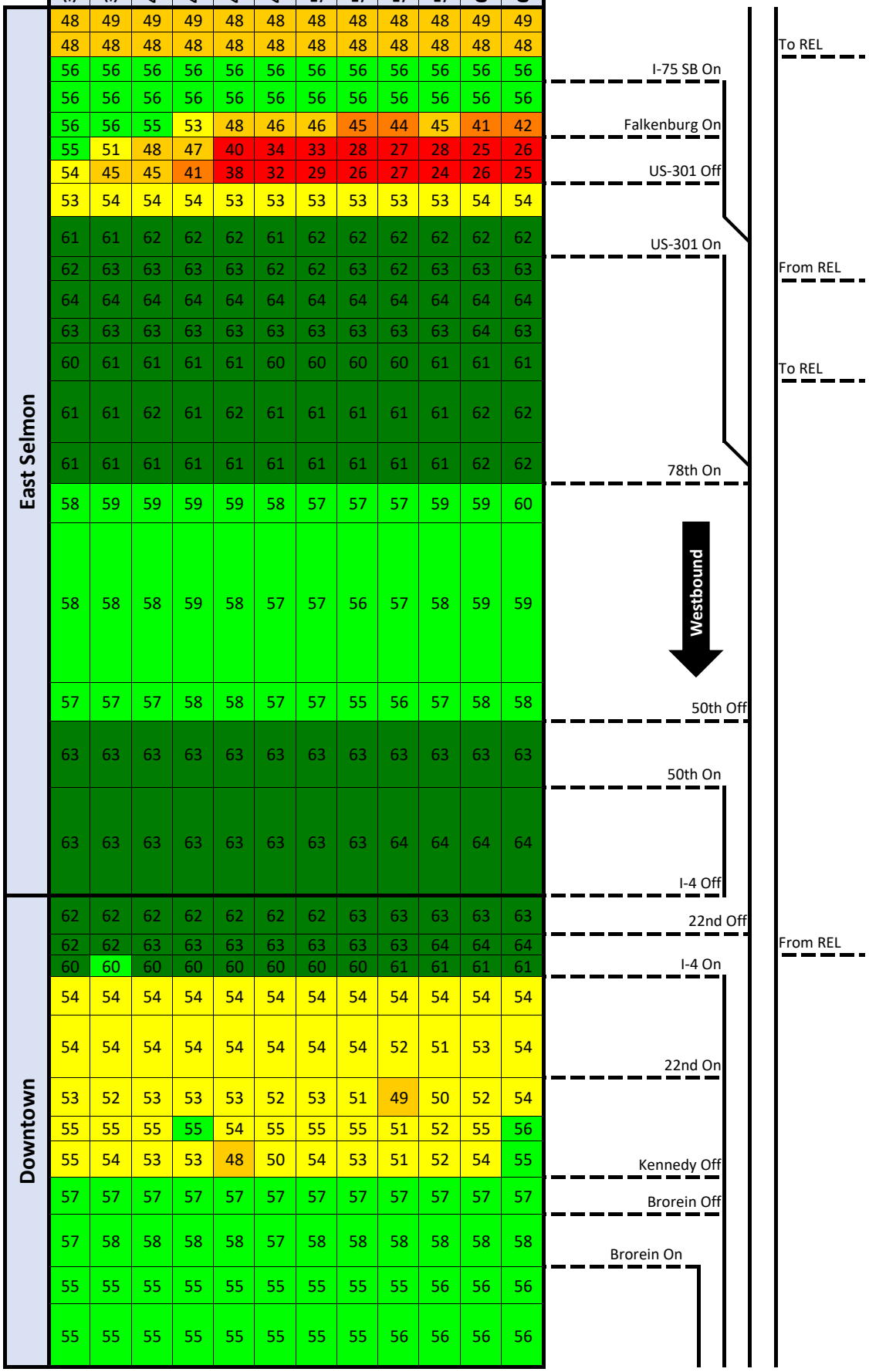
	57	58	58	58	58	57	58	58	58	58	58	58
	55	55	55	55	55	55	55	55	55	56	56	56
	55	55	55	55	55	55	55	55	56	56	56	56

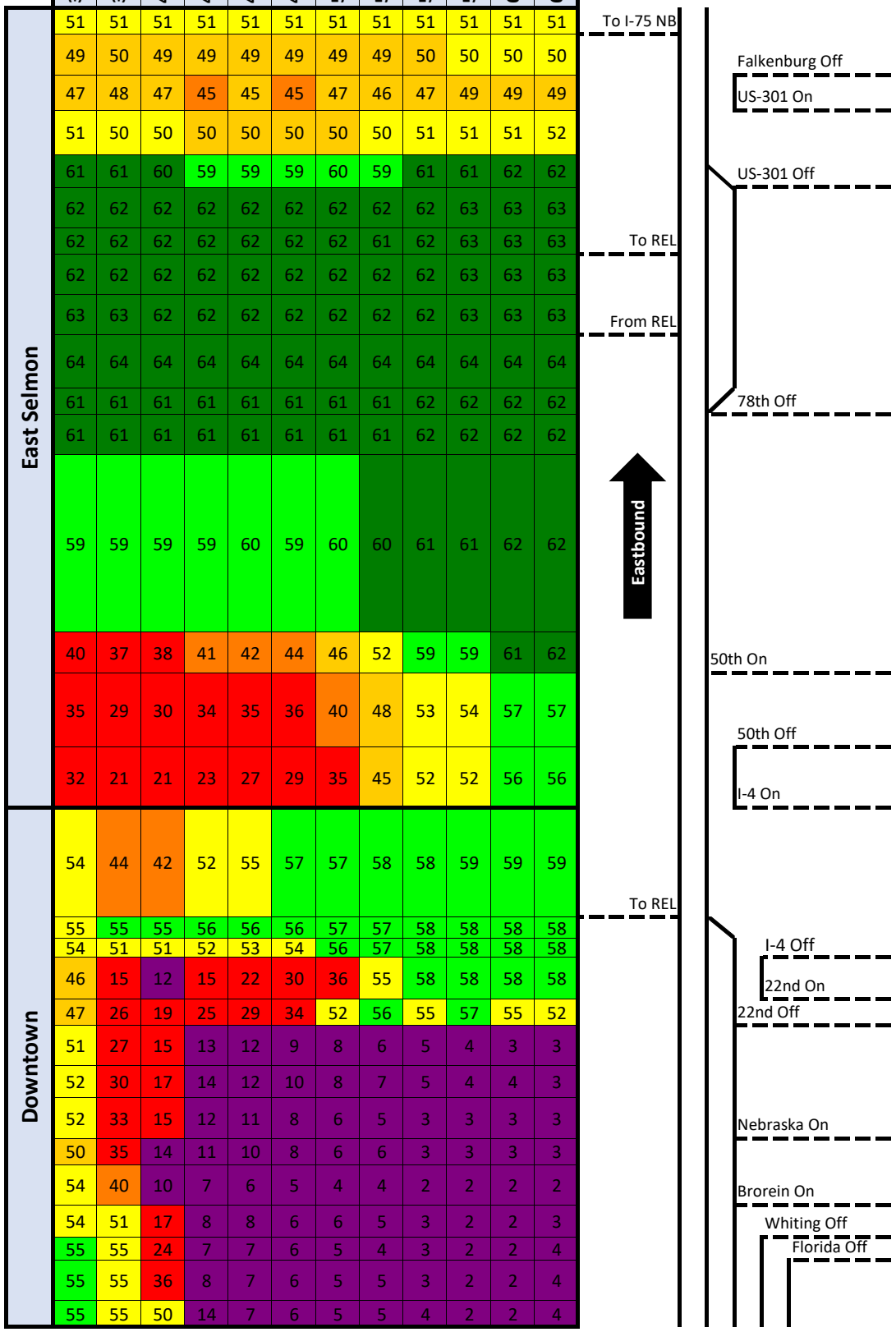


Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2046 No-Build

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	51	51	51	51	51	51	51	51	51	51	51	51
	49	50	49	49	49	49	49	49	50	50	50	50
	47	48	47	45	45	45	47	46	47	49	49	49
	51	50	50	50	50	50	50	50	51	51	51	52
	61	61	60	59	59	59	60	59	61	61	62	62
	62	62	62	62	62	62	62	62	62	63	63	63
	62	62	62	62	62	62	62	61	62	63	63	63
	62	62	62	62	62	62	62	62	62	63	63	63
	63	63	62	62	62	62	62	62	62	63	63	63
	64	64	64	64	64	64	64	64	64	64	64	64
	61	61	61	61	61	61	61	61	62	62	62	62
	61	61	61	61	61	61	61	61	62	62	62	62
	59	59	59	59	60	59	60	60	61	61	62	62
	40	37	38	41	42	44	46	52	59	59	61	62
	35	29	30	34	35	36	40	48	53	54	57	57
	32	21	21	23	27	29	35	45	52	52	56	56
Downtown	54	44	42	52	55	57	57	58	58	59	59	59
	55	55	55	56	56	56	57	57	58	58	58	58
	54	51	51	52	53	54	56	57	58	58	58	58
	46	15	12	15	22	30	36	55	58	58	58	58
	47	26	19	25	29	34	52	56	55	57	55	52
	51	27	15	13	12	9	8	6	5	4	3	3
	52	30	17	14	12	10	8	7	5	4	4	3
	52	33	15	12	11	8	6	5	3	3	3	3
	50	35	14	11	10	8	6	6	3	3	3	3
	54	40	10	7	6	5	4	4	2	2	2	2
	54	51	17	8	8	6	6	5	3	2	2	3
	55	55	24	7	7	6	5	4	3	2	2	4
	55	55	36	8	7	6	5	5	3	2	2	4
	55	55	50	14	7	6	5	5	4	2	2	4

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

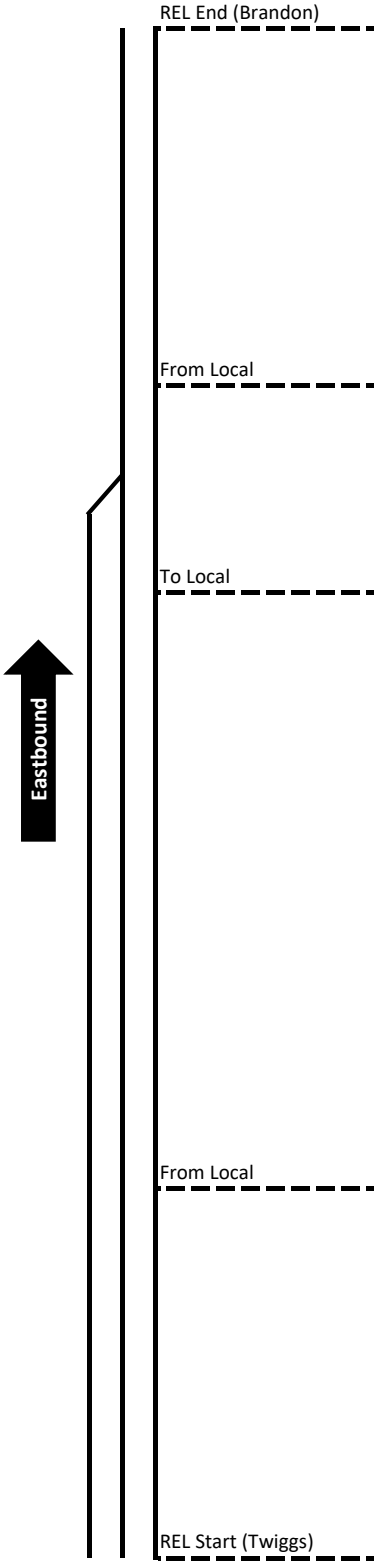


Eastbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2046 No-Build

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	55	55	54	54	54	54	54	55	55	55	56	56
	59	58	58	58	58	58	58	58	59	59	60	60
	59	59	59	59	59	59	59	59	59	60	60	60
	60	60	59	59	59	59	59	59	59	60	60	60
	59	59	59	58	58	58	58	58	58	59	59	60
	60	60	60	59	60	59	59	59	60	60	60	60
Downtown	60	60	59	59	59	59	59	59	59	60	60	60
	57	57	57	56	56	56	56	56	56	56	56	56
	37	37	37	37	37	37	37	37	37	37	37	37

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15



Travel Times by Segment, Local Lanes
PM Peak Hour (4:30-5:30 PM)

2046 No-Build

From	To	2019 Existing VISSIM Travel Time (min)	2046 No-Build Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	0.9	0.9	0	8%
US-301	78th St	1.8	1.8	0	2%
78th St	50th St	2.0	2.0	0	3%
50th St	I-4 Connector	1.5	1.5	0	0%
I-4 Connector	20th St	0.7	0.7	0	0%
20th St	Channelside Dr	0.8	0.8	0	7%
Channelside Dr	Kennedy Blvd	0.6	0.6	0	3%
Kennedy Blvd	Jefferson St	0.3	0.3	0	0%
Jefferson St	Florida Ave	0.3	0.3	0	0%
Total		**8.6**	**8.8**	**0**	**3%**
Eastbound					
Florida Ave	Jefferson St	0.3	2.6	2	863%
Jefferson St	Kennedy Blvd	0.3	2.9	3	765%
Kennedy Blvd	Channelside Dr	0.6	3.7	3	553%
Channelside Dr	20th St	0.8	2.1	1	170%
20th St	I-4 Connector	0.9	0.9	0	-4%
I-4 Connector	50th St	1.6	2.2	1	35%
50th St	78th St	2.0	2.3	0	15%
78th St	US-301	1.8	1.8	0	1%
US-301	Falkenburg Rd	1.0	1.0	0	7%
Total		**9.2**	**19.4**	**10**	**111%**

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2026 No-Build

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	2,770	2,748	-22	-1%	2,770	2,748	-22	-1%	0.4									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	430	431	1	0%	430	431	1	0%	0.0									
	SB I-75 to WB Selmon Expressway	Westbound	On-Ramp	760	754	-6	-1%	760	754	-6	-1%	0.2									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	800	777	-23	-3%	800	777	-23	-3%	0.8									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	250	245	-5	-2%	690	668	-22	-3%	0.8	Signal	44.1	D	20	C	14	B	40.8	180.4
			Right	440	423	-17	-4%						Signal	6.6	A					7.2	99.3
		Northbound	Left	505	501	-4	-1%	1,785	1,767	-18	-1%	0.4	Signal	14.0	B	9	A			16.8	333.8
			Thru	1,280	1,266	-14	-1%						Signal	7.0	A					26.8	327.4
		Southbound	Thru	605	613	8	1%	830	828	-2	0%	0.1	Signal	23.7	C	19	B			47.2	301.4
			Right	225	215	-10	-4%						Signal	3.7	A					1.6	96.8
	US-301 and EB Selmon Expressway	Eastbound	Left	150	145	-5	-3%	450	438	-12	-3%	0.6	Signal	54.7	D	19	B	16	B	48.7	262.7
			Right	300	293	-7	-2%						Signal	1.1	A					0.0	0.0
		Northbound	Thru	2,515	2,475	-40	-2%	2,730	2,687	-43	-2%	0.8	Signal	22.6	C	21	C			206.1	1,155.7
			Right	215	212	-3	-1%						Signal	4.0	A					0.3	56.0
		Southbound	Left	145	149	4	3%	1,270	1,271	1	0%	0.0	Signal	7.4	A	3	A			2.6	158.6
			Thru	1,125	1,122	-3	0%						Signal	2.1	A					4.6	57.3
	US-301 and WB Selmon Expressway	Westbound	Left	95	95	0	0%	580	576	-4	-1%	0.2	Signal	54.3	D	14	B	15	B	31.7	234.8
			Right	485	481	-4	-1%						Signal	5.4	A					6.6	249.2
		Northbound	Left	640	620	-20	-3%	2,665	2,622	-43	-2%	0.8	Signal	13.7	B	4	A			49.5	274.2
			Thru	2,025	2,002	-23	-1%						Signal	1.3	A					1.0	55.3
		Southbound	Thru	1,175	1,178	3	0%	1,295	1,295	0	0%	0.0	Signal	41.4	D	38	D			105.0	368.6
			Right	120	117	-3	-3%						Signal	4.2	A					1.8	95.0
	78th St and EB Selmon Expressway	Westbound	Left	55	54	-1	-2%	270	266	-4	-1%	0.2	Stop	10.7	B	3	A	1	A	3.6	85.6
			Right	215	212	-3	-1%						Stop	0.7	A					0.0	0.0
		Northbound	Thru	1,115	1,109	-6	-1%	1,115	1,109	-6	-1%	0.2	Stop	0.4	A	0	A			0.0	0.0
		Southbound	Thru	430	449	19	4%	430	449	19	4%	0.9	Stop	0.1	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	460	460	0	0%	460	460	0	0%	0.0									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	110	106	-4	-4%	110	106	-4	-4%	0.4									
	50th St and Selmon Expressway	Eastbound	Left	135	119	-16	-12%	300	278	-22	-7%	1.3	Signal	56.3	E	25	C	31	C	40.6	236.1
			Right	165	159	-6	-4%						Signal	2.1	A					0.0	0.0
		Westbound	Left	25	24	-1	-4%	240	230	-10	-4%	0.7	Signal	81.7	F	24	C			8.9	70.4
			Right	215	206	-9	-4%						Signal	17.1	B					0.0	0.0
		Northbound	Left	565	518	-47	-8%	2,000	1,952	-48	-2%	1.1	Signal	105.5	F	40	D			273.0	1,169.2
			Thru	1,400	1,400	0	0%						Signal	16.4	B					183.8	1,147.0
			Right	35	34	-1	-3%						Signal	6.3	A					0.0	11.3
		Southbound	Left	105	114	9	9%	1,255	1,247	-8	-1%	0.2	Signal	39.4	D	21	C			9.4	184.7
			Thru	955	943	-12	-1%						Signal	21.9	C					46.8	377.4
			Right	195	190	-5	-3%						Signal	6.6	A					5.1	161.0

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2026 No-Build

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay						Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	1,000	1,013	13	1%	1,000	1,013	13	1%	0.4									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	690	664	-26	-4%	690	664	-26	-4%	1.0									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	280	269	-11	-4%	280	269	-11	-4%	0.7									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	240	244	4	2%	240	244	4	2%	0.3									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	1,260	1,239	-21	-2%	1,260	1,239	-21	-2%	0.6									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	860	832	-28	-3%	860	832	-28	-3%	1.0									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	95	91	-4	-4%	230	224	-6	-3%	0.4	Stop	15.4	C	12	B	6	A	6.3	105.6
			Right	135	133	-2	-1%						Stop	9.7	A					8.4	114.7
		Westbound	Left	100	96	-4	-4%	520	516	-4	-1%	0.2	Stop	31.6	D	26	D			24.9	175.6
			Right	420	420	0	0%						Stop	25.0	D					123.1	464.6
		Northbound	Left	335	331	-4	-1%	1,770	1,762	-8	0%	0.2	Stop	8.1	A	2	A			16.7	259.6
			Thru	1,420	1,416	-4	0%						Stop	0.6	A					0.0	0.0
			Right	15	15	0	0%						Stop	3.4	A					0.1	22.9
		Southbound	Left	95	98	3	3%	1,070	1,081	11	1%	0.3	Stop	1.9	A	1	A			0.0	4.8
			Thru	760	768	8	1%						Stop	0.2	A					0.0	0.0
			Right	215	215	0	0%						Stop	2.6	A					0.8	79.0
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	250	243	-7	-3%	250	243	-7	-3%	0.4									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	1,100	1,061	-39	-4%	1,100	1,061	-39	-4%	1.2									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	230	220	-10	-4%	230	220	-10	-4%	0.7									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	990	948	-42	-4%	990	948	-42	-4%	1.3									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	430	432	2	0%	430	432	2	0%	0.1									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	1,060	1,054	-6	-1%	1,060	1,054	-6	-1%	0.2									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	380	332	-48	-13%	380	332	-48	-13%	2.5									
	Reversible Express Lanes																				
East Selmon	NB I-75 to REL	Westbound	On-Ramp	270	269	-1	0%	270	269	-1	0%	0.1									
East Selmon	WB REL to LL @ US-301	Westbound	Off-Ramp	310	240	-70	-23%	310	240	-70	-23%	4.2									
East Selmon	WB LL to REL @ US-301	Westbound	On-Ramp	1,320	1,274	-46	-3%	1,320	1,274	-46	-3%	1.3									
Downtown	WB REL to LL @ I-4	Westbound	Off-Ramp	70	68	-2	-3%	70	68	-2	-3%	0.2									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	0	0	0	-	385	364	-21	-5%	1.1	Signal	-	-	61	E	34	C	28.0	228.4
			Thru	210	200	-10	-5%						Signal	62.9	E					28.0	228.4
			Right	175	164	-11	-6%						Signal	58.5	E					32.5	243.0
		Westbound	Left	120	116	-4	-3%	705	699	-6	-1%	0.2	Signal	38.3	D	34	C			126.4	561.5
			Thru	585	583	-2	0%						Signal	32.6	C					126.4	561.5
			Right	0	0	0	-						Signal	-	-					143.6	585.9
		Northbound	Left	150	140	-10	-7%	215	201	-14	-7%	1.0	Signal	93.1	F	67	E			60.8	208.9
			Thru	0	0	0	-						Signal	-	-					60.8	208.9
			Right	65	61	-4	-6%						Signal	5.5	A					86.7	244.3
		Southbound	Left	265	267	2	1%	3,500	3,540	40	1%	0.7	Signal	45.5	D	29	C			281.8	1,330.0
			Thru	1,955	1,981	26	1%						Signal	42.6	D					281.8	1,330.0
			Right	1,280	1,292	12	1%						Signal	5.8	A					184.1	1,185.8
	NETWORK TOTAL							**42,370**	**41,748**	**-622**	**-1%**										

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (5:30-6:30 PM)

2026 No-Build

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	1,120	1,097	-23	-2%	1,120	1,097	-23	-2%	0.7									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	660	613	-47	-7%	660	613	-47	-7%	1.9									
	SB I-75 to WB Selmon Expressway	Westbound	On-Ramp	560	557	-3	-1%	560	557	-3	-1%	0.1									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	2,240	2,197	-43	-2%	2,240	2,197	-43	-2%	0.9									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	430	422	-8	-2%	1,030	1,020	-10	-1%	0.3	Signal	44.1	D	23	C	28	C	66.9	261.4
			Right	600	598	-2	0%						Signal	8.6	A				E	13.1	119.7
		Northbound	Left	410	403	-7	-2%	1,160	1,154	-6	-1%	0.2	Signal	25.8	C	14	B		E	16.6	259.3
			Thru	750	751	1	0%						Signal	8.0	A				E	18.0	239.2
		Southbound	Thru	1,505	1,499	-6	0%	1,835	1,825	-10	-1%	0.2	Signal	45.5	D	40	D		E	445.0	1,701.5
			Right	330	326	-4	-1%						Signal	11.9	B				E	5.3	213.6
	US-301 and EB Selmon Expressway	Eastbound	Left	150	145	-5	-3%	1,260	1,243	-17	-1%	0.5	Signal	26.5	C	6	A	15	B	21.6	203.5
			Right	1,110	1,098	-12	-1%						Signal	3.1	A					0.0	0.0
		Northbound	Thru	1,360	1,319	-41	-3%	1,500	1,454	-46	-3%	1.2	Signal	40.5	D	37	D			129.7	527.4
			Right	140	135	-5	-4%						Signal	4.9	A					1.5	87.0
		Southbound	Left	510	426	-84	-16%	2,465	2,084	-381	-15%	8.0	Signal	6.9	A	5	A			11.2	253.3
			Thru	1,955	1,658	-297	-15%						Signal	5.0	A					23.3	107.2
	US-301 and WB Selmon Expressway	Westbound	Left	130	129	-1	-1%	310	310	0	0%	0.0	Signal	117.6	F	60	E	110	F	114.1	471.3
			Right	180	181	1	1%						Signal	18.4	B		E			0.4	63.4
		Northbound	Left	345	333	-12	-3%	1,510	1,445	-65	-4%	1.7	Signal	45.9	D	11	B			86.8	264.5
			Thru	1,165	1,112	-53	-5%						Signal	1.0	A					0.0	0.0
		Southbound	Thru	2,335	1,955	-380	-16%	2,500	2,093	-407	-16%	8.5	Signal	191.2	F	185	F			1,933.0	2,246.3
			Right	165	138	-27	-16%						Signal	102.4	F					1.5	104.1
	78th St and EB Selmon Expressway	Westbound	Left	90	87	-3	-3%	170	164	-6	-4%	0.5	Stop	10.4	B	6	A	1	A	5.2	90.0
			Right	80	77	-3	-4%						Stop	0.6	A					0.0	0.0
		Northbound	Thru	705	703	-2	0%	705	703	-2	0%	0.1	Stop	0.2	A	0	A			0.0	0.0
		Southbound	Thru	915	930	15	2%	915	930	15	2%	0.5	Stop	0.2	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	160	163	3	2%	160	163	3	2%	0.2									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	50	48	-2	-4%	50	48	-2	-4%	0.3									
	50th St and Selmon Expressway	Eastbound	Left	145	147	2	1%	740	742	2	0%	0.1	Signal	47.9	D	16	B	19	B	36.7	225.4
			Right	595	595	0	0%						Signal	8.3	A					6.8	271.6
		Westbound	Left	40	40	0	0%	180	172	-8	-4%	0.6	Signal	74.1	E	25	C			11.3	103.2
			Right	140	132	-8	-6%						Signal	10.4	B					0.0	0.0
		Northbound	Left	170	157	-13	-8%	1,155	1,130	-25	-2%	0.7	Signal	39.3	D	17	B			56.2	318.5
			Thru	935	924	-11	-1%						Signal	14.5	B					72.9	392.9
			Right	50	49	-1	-2%						Signal	4.2	A					0.1	32.0
		Southbound	Left	300	282	-18	-6%	1,940	1,860	-80	-4%	1.8	Signal	27.8	C	21	C			107.9	490.3
			Thru	1,530	1,477	-53	-3%						Signal	20.4	C					129.0	607.9
			Right	110	101	-9	-8%						Signal	9.6	A					0.1	30.5

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (5:30-6:30 PM)

2026 No-Build

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	1,840	1,865	25	1%	1,840	1,865	25	1%	0.6									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	600	581	-19	-3%	600	581	-19	-3%	0.8									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	160	159	-1	-1%	160	159	-1	-1%	0.1									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	55	54	-1	-2%	55	54	-1	-2%	0.1									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	1,070	1,060	-10	-1%	1,070	1,060	-10	-1%	0.3									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	1,520	1,483	-37	-2%	1,520	1,483	-37	-2%	1.0									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	235	234	-1	0%	360	358	-2	-1%	0.1	Stop	28.3	D	23	C	4	A	46.8	269.4
			Right	125	124	-1	-1%						Stop	13.5	B					8.8	131.8
		Westbound	Left	50	50	0	0%	215	212	-3	-1%	0.2	Stop	26.2	D	12	B			9.4	96.1
			Right	165	162	-3	-2%						Stop	7.9	A					11.3	128.7
		Northbound	Left	170	166	-4	-2%	1,150	1,133	-17	-1%	0.5	Stop	20.8	C	4	A			40.4	291.6
			Thru	935	924	-11	-1%						Stop	0.3	A					0.0	0.0
			Right	45	43	-2	-4%						Stop	7.0	A					1.2	65.2
		Southbound	Left	285	276	-9	-3%	2,240	2,226	-14	-1%	0.3	Stop	3.4	A	1	A			0.0	27.2
			Thru	1,575	1,576	1	0%						Stop	0.4	A					0.0	0.0
			Right	380	374	-6	-2%						Stop	2.4	A					0.7	103.1
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	520	513	-7	-1%	520	513	-7	-1%	0.3									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	1,110	1,085	-25	-2%	1,110	1,085	-25	-2%	0.8									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	870	845	-25	-3%	870	845	-25	-3%	0.9									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	400	391	-9	-2%	400	391	-9	-2%	0.5									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	380	387	7	2%	380	387	7	2%	0.4									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	280	291	11	4%	280	291	11	4%	0.7									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	720	641	-79	-11%	720	641	-79	-11%	3.0									
	Reversible Express Lanes																				
East Selmon	EB LL to REL @ US-301	Eastbound	On-Ramp	240	231	-9	-4%	240	231	-9	-4%	0.6									
East Selmon	EB REL to LL @ US-301	Eastbound	Off-Ramp	910	885	-25	-3%	910	885	-25	-3%	0.8									
Downtown	EB LL to REL @ I-4	Eastbound	On-Ramp	1,030	1,031	1	0%	1,030	1,031	1	0%	0.0									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	560	538	-22	-4%	1,475	1,424	-51	-3%	1.3	Signal	134.3	F	134	F	79	E	1,212.0	2,642.5
			Thru	730	709	-21	-3%						Signal	131.8	F					1,212.0	2,642.5
			Right	185	177	-8	-4%						Signal	139.1	F					1,222.9	2,657.0
		Westbound	Left	160	159	-1	-1%	710	706	-4	-1%	0.2	Signal	44.3	D	31	C			102.8	476.0
			Thru	340	336	-4	-1%						Signal	32.4	C					102.8	476.0
			Right	210	211	1	0%						Signal	20.3	C					119.7	500.4
		Northbound	Left	40	42	2	5%	1,510	1,481	-29	-2%	0.7	Signal	47.8	D	49	D			185.6	639.0
			Thru	1,290	1,266	-24	-2%						Signal	49.8	D					185.6	639.0
			Right	180	173	-7	-4%						Signal	46.2	D					212.8	674.0
		Southbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-			0.0	0.0
			Thru	0	0	0	-						Signal	-	-					0.0	0.0
			Right	0	0	0	-						Signal	-	-					0.0	0.0
	NETWORK TOTAL							**43,530**	**42,046**	**-1,484**	**-3%**										

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2036 No-Build

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	2,600	2,181	-419	-16%	2,600	2,181	-419	-16%	8.6									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	460	461	1	0%	460	461	1	0%	0.0									
	SB I-75 to WB Selmon Expressway	Westbound	On-Ramp	1,200	1,112	-88	-7%	1,200	1,112	-88	-7%	2.6									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	940	886	-54	-6%	940	886	-54	-6%	1.8									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	235	220	-15	-6%	730	695	-35	-5%	1.3	Signal	44.0	D	19	B	15	B	37.5	163.5
			Right	495	475	-20	-4%						Signal	7.2	A					9.2	127.0
		Northbound	Left	640	638	-2	0%	1,870	1,857	-13	-1%	0.3	Signal	19.7	B	11	B			26.5	408.1
			Thru	1,230	1,219	-11	-1%						Signal	6.8	A					26.0	353.4
		Southbound	Thru	705	720	15	2%	995	997	2	0%	0.1	Signal	25.6	C	20	C			59.3	332.2
			Right	290	277	-13	-4%						Signal	6.4	A					4.1	158.7
	US-301 and EB Selmon Expressway	Eastbound	Left	150	143	-7	-5%	460	430	-30	-7%	1.4	Signal	55.0	D	19	B	20	C	47.1	247.0
			Right	310	287	-23	-7%						Signal	1.0	A					0.0	0.0
		Northbound	Thru	2,515	2,463	-52	-2%	2,715	2,660	-55	-2%	1.1	Signal	31.1	C	29	C			345.4	1,569.9
			Right	200	197	-3	-2%						Signal	8.9	A					0.7	71.2
		Southbound	Left	180	188	8	4%	1,380	1,367	-13	-1%	0.4	Signal	9.0	A	3	A			5.7	214.6
			Thru	1,200	1,179	-21	-2%						Signal	2.1	A					4.7	63.6
	US-301 and WB Selmon Expressway	Westbound	Left	105	94	-11	-10%	550	468	-82	-15%	3.6	Signal	53.8	D	15	B	16	B	32.7	287.0
			Right	445	374	-71	-16%						Signal	5.3	A					4.3	180.2
		Northbound	Left	695	673	-22	-3%	2,675	2,603	-72	-3%	1.4	Signal	17.2	B	5	A			71.3	279.8
			Thru	1,980	1,930	-50	-3%						Signal	1.2	A					0.7	49.6
		Southbound	Thru	1,275	1,277	2	0%	1,400	1,400	0	0%	0.0	Signal	40.0	D	37	D			108.0	416.4
			Right	125	123	-2	-2%						Signal	4.9	A					2.2	83.5
	78th St and EB Selmon Expressway	Westbound	Left	60	63	3	5%	270	264	-6	-2%	0.4	Stop	13.7	B	4	A	1	A	6.1	93.1
			Right	210	201	-9	-4%						Stop	0.7	A					0.0	0.0
		Northbound	Thru	1,495	1,474	-21	-1%	1,495	1,474	-21	-1%	0.5	Stop	0.7	A	1	A			0.0	0.0
		Southbound	Thru	490	511	21	4%	490	511	21	4%	0.9	Stop	0.1	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	480	481	1	0%	480	481	1	0%	0.0									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	430	418	-12	-3%	430	418	-12	-3%	0.6									
	50th St and Selmon Expressway	Eastbound	Left	150	140	-10	-7%	350	330	-20	-6%	1.1	Signal	77.6	E	34	C	114	F	69.6	328.2
			Right	200	190	-10	-5%						Signal	2.6	A					0.0	0.0
		Westbound	Left	30	27	-3	-10%	220	197	-23	-10%	1.6	Signal	113.6	F	35	C			14.4	105.0
			Right	190	170	-20	-11%						Signal	22.3	C					0.0	0.0
		Northbound	Left	800	528	-272	-34%	2,040	1,440	-600	-29%	14.4	Signal	354.8	F	191	F			2,479.8	3,231.9
			Thru	1,205	887	-318	-26%						Signal	96.4	F					2,446.6	3,229.4
			Right	35	25	-10	-29%						Signal	87.8	F					0.0	6.1
		Southbound	Left	105	95	-10	-10%	1,405	1,318	-87	-6%	2.4	Signal	57.0	E	62	E			276.6	568.0
			Thru	1,100	1,034	-66	-6%						Signal	67.9	E					350.0	906.0
			Right	200	189	-11	-6%						Signal	31.5	C					11.4	194.3

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2036 No-Build

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	1,100	1,112	12	1%	1,100	1,112	12	1%	0.4									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	870	793	-77	-9%	870	793	-77	-9%	2.7									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	370	318	-52	-14%	370	318	-52	-14%	2.8									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	240	226	-14	-6%	240	226	-14	-6%	0.9									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	1,950	1,797	-153	-8%	1,950	1,797	-153	-8%	3.5									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	2,400	866	-1,534	-64%	2,400	866	-1,534	-64%	38.0									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	130	120	-10	-8%	280	266	-14	-5%	0.8	Stop	17.0	C	13	B	8	A	9.3	114.1
			Right	150	146	-4	-3%						Stop	10.1	B					9.8	138.1
		Westbound	Left	115	101	-14	-12%	610	547	-63	-10%	2.6	Stop	42.6	E	40	E			36.6	214.4
			Right	495	446	-49	-10%						Stop	39.8	E					176.1	590.3
		Northbound	Left	390	384	-6	-2%	1,810	1,800	-10	-1%	0.2	Stop	9.7	A	3	A			24.3	273.6
			Thru	1,405	1,403	-2	0%						Stop	0.6	A					0.0	0.0
			Right	15	13	-2	-13%						Stop	3.5	A					0.1	24.2
		Southbound	Left	95	101	6	6%	1,115	1,124	9	1%	0.3	Stop	1.9	A	1	A			0.0	4.6
			Thru	760	762	2	0%						Stop	0.2	A					0.0	0.0
			Right	260	261	1	0%						Stop	3.5	A					1.8	125.2
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	370	333	-37	-10%	370	333	-37	-10%	2.0									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	1,210	1,074	-136	-11%	1,210	1,074	-136	-11%	4.0									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	260	208	-52	-20%	260	208	-52	-20%	3.4									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	1,090	923	-167	-15%	1,090	923	-167	-15%	5.3									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	1,040	1,020	-20	-2%	1,040	1,020	-20	-2%	0.6									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	1,150	1,152	2	0%	1,150	1,152	2	0%	0.1									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	530	436	-94	-18%	530	436	-94	-18%	4.3									
	Reversible Express Lanes																				
East Selmon	NB I-75 to REL	Westbound	On-Ramp	650	553	-97	-15%	650	553	-97	-15%	4.0									
East Selmon	WB REL to LL @ US-301	Westbound	Off-Ramp	290	286	-4	-1%	290	286	-4	-1%	0.2									
East Selmon	WB LL to REL @ US-301	Westbound	On-Ramp	1,600	1,447	-153	-10%	1,600	1,447	-153	-10%	3.9									
Downtown	WB REL to LL @ I-4	Westbound	Off-Ramp	160	96	-64	-40%	160	96	-64	-40%	5.7									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	0	0	0	-	360	337	-23	-6%	1.2	Signal	-	-	94	F	37	D	27.4	246.0
			Thru	175	168	-7	-4%						Signal	97.2	F					27.4	246.0
			Right	185	169	-16	-9%						Signal	90.6	F					32.3	260.6
		Westbound	Left	135	130	-5	-4%	780	762	-18	-2%	0.6	Signal	54.6	D	46	D			214.0	704.3
			Thru	645	632	-13	-2%						Signal	44.6	D					214.0	704.3
			Right	0	0	0	-						Signal	-	-					233.8	728.7
		Northbound	Left	200	192	-8	-4%	280	271	-9	-3%	0.5	Signal	64.8	E	47	D			49.0	200.3
			Thru	0	0	0	-						Signal	-	-					49.0	200.3
			Right	80	79	-1	-1%						Signal	5.5	A					72.9	235.7
		Southbound	Left	285	279	-6	-2%	3,810	3,687	-123	-3%	2.0	Signal	43.3	D	29	C			349.0	1,642.0
			Thru	2,125	2,068	-57	-3%						Signal	40.4	D					349.0	1,642.0
			Right	1,400	1,340	-60	-4%						Signal	7.5	A					247.4	1,497.8
	NETWORK TOTAL							**49,480**	**44,984**	**-4,496**	**-9%**										

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (5:30-6:30 PM)

2036 No-Build

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	970	938	-32	-3%	970	938	-32	-3%	1.0									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	330	251	-79	-24%	330	251	-79	-24%	4.6									
	SB I-75 to WB Selmon Expressway	Westbound	On-Ramp	750	742	-8	-1%	750	742	-8	-1%	0.3									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	3,110	2,803	-307	-10%	3,110	2,803	-307	-10%	5.6									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	430	389	-41	-10%	1,000	908	-92	-9%	3.0	Signal	44.5	D	24	C	33	C	62.7	250.9
			Right	570	519	-51	-9%						Signal	8.2	A				E	10.1	108.1
		Northbound	Left	465	465	0	0%	1,370	1,366	-4	0%	0.1	Signal	28.3	C	15	B		E	18.7	294.2
			Thru	905	901	-4	0%						Signal	8.1	A				E	22.4	254.4
		Southbound	Thru	1,580	1,551	-29	-2%	1,915	1,879	-36	-2%	0.8	Signal	57.6	E	51	D		E	752.5	2,204.6
			Right	335	328	-7	-2%						Signal	22.0	C				E	8.3	252.3
	US-301 and EB Selmon Expressway	Eastbound	Left	175	157	-18	-10%	1,390	1,289	-101	-7%	2.8	Signal	27.0	C	6	A	175	F	24.6	195.5
			Right	1,215	1,132	-83	-7%						Signal	3.0	A					0.0	0.0
		Northbound	Thru	1,470	1,112	-358	-24%	1,725	1,308	-417	-24%	10.7	Signal	612.6	F	577	F			2,903.4	3,017.7
			Right	255	196	-59	-23%						Signal	374.3	F					3.0	191.6
		Southbound	Left	575	391	-184	-32%	2,610	1,833	-777	-30%	16.5	Signal	8.2	A	7	A			17.9	259.4
			Thru	2,035	1,442	-593	-29%						Signal	6.4	A					27.4	107.2
	US-301 and WB Selmon Expressway	Westbound	Left	145	137	-8	-6%	330	312	-18	-5%	1.0	Signal	164.7	F	98	F	170	F	243.6	808.4
			Right	185	175	-10	-5%						Signal	45.7	D		E			0.2	49.2
		Northbound	Left	465	346	-119	-26%	1,645	1,269	-376	-23%	9.9	Signal	47.8	D	14	B			97.9	269.9
			Thru	1,180	923	-257	-22%						Signal	1.0	A					0.0	0.0
		Southbound	Thru	2,465	1,697	-768	-31%	2,630	1,804	-826	-31%	17.5	Signal	301.3	F	293	F			2,116.6	2,256.2
			Right	165	107	-58	-35%						Signal	162.4	F					1.1	76.0
	78th St and EB Selmon Expressway	Westbound	Left	125	109	-16	-13%	230	200	-30	-13%	2.0	Stop	11.4	B	6	A	1	A	6.9	98.5
			Right	105	91	-14	-13%						Stop	0.6	A					0.0	0.0
		Northbound	Thru	795	793	-2	0%	795	793	-2	0%	0.1	Stop	0.2	A	0	A			0.0	0.0
		Southbound	Thru	955	962	7	1%	955	962	7	1%	0.2	Stop	0.3	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	160	163	3	2%	160	163	3	2%	0.2									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	60	59	-1	-2%	60	59	-1	-2%	0.1									
	50th St and Selmon Expressway	Eastbound	Left	200	164	-36	-18%	990	792	-198	-20%	6.6	Signal	78.4	E	35	C	21	C	51.5	273.6
			Right	790	628	-162	-21%						Signal	23.2	C					172.5	1,219.7
		Westbound	Left	40	38	-2	-5%	170	159	-11	-6%	0.9	Signal	76.3	E	26	C			11.6	98.6
			Right	130	121	-9	-7%						Signal	10.7	B					0.0	0.0
		Northbound	Left	170	168	-2	-1%	1,235	1,220	-15	-1%	0.4	Signal	54.6	D	18	B			14.5	196.0
			Thru	1,015	1,001	-14	-1%						Signal	13.0	B					36.3	261.9
			Right	50	51	1	2%						Signal	4.1	A					0.2	39.5
		Southbound	Left	330	329	-1	0%	1,970	1,939	-31	-2%	0.7	Signal	38.9	D	16	B			23.5	318.5
			Thru	1,530	1,507	-23	-2%						Signal	12.1	B					31.3	362.8
			Right	110	103	-7	-6%						Signal	2.4	A					0.1	34.1

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (5:30-6:30 PM)

2036 No-Build

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	2,110	2,114	4	0%	2,110	2,114	4	0%	0.1									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	670	611	-59	-9%	670	611	-59	-9%	2.3									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	170	164	-6	-4%	170	164	-6	-4%	0.5									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	55	53	-2	-4%	55	53	-2	-4%	0.3									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	1,400	1,385	-15	-1%	1,400	1,385	-15	-1%	0.4									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	2,400	1,835	-565	-24%	2,400	1,835	-565	-24%	12.3									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	305	222	-83	-27%	430	315	-115	-27%	6.0	Stop	241.5	F	227	F	26	D	1,074.4	2,662.8
			Right	125	93	-32	-26%						Stop	191.4	F					7.0	114.6
		Westbound	Left	65	62	-3	-5%	225	216	-9	-4%	0.6	Stop	55.8	F	22	C			28.9	151.6
			Right	160	154	-6	-4%						Stop	7.8	A					10.3	137.8
		Northbound	Left	235	224	-11	-5%	1,195	1,169	-26	-2%	0.8	Stop	60.5	F	14	B			1,274.4	2,944.3
			Thru	895	881	-14	-2%						Stop	0.4	A					0.5	17.2
			Right	65	64	-1	-2%						Stop	43.0	E					3.0	87.9
		Southbound	Left	375	359	-16	-4%	2,435	2,416	-19	-1%	0.4	Stop	38.3	E	7	A			0.1	45.0
			Thru	1,625	1,630	5	0%						Stop	0.6	A					0.0	0.0
			Right	435	427	-8	-2%						Stop	3.1	A					1.8	172.2
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	650	575	-75	-12%	650	575	-75	-12%	3.0									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	1,290	1,257	-33	-3%	1,290	1,257	-33	-3%	0.9									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	1,110	830	-280	-25%	1,110	830	-280	-25%	9.0									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	530	509	-21	-4%	530	509	-21	-4%	0.9									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	930	831	-99	-11%	930	831	-99	-11%	3.3									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	140	134	-6	-4%	140	134	-6	-4%	0.5									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	1,240	850	-390	-31%	1,240	850	-390	-31%	12.1									
	Reversible Express Lanes																				
East Selmon	EB LL to REL @ US-301	Eastbound	On-Ramp	270	265	-5	-2%	270	265	-5	-2%	0.3									
East Selmon	EB REL to LL @ US-301	Eastbound	Off-Ramp	1,090	1,019	-71	-7%	1,090	1,019	-71	-7%	2.2									
Downtown	EB LL to REL @ I-4	Eastbound	On-Ramp	1,090	948	-142	-13%	1,090	948	-142	-13%	4.4									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	560	434	-126	-23%	1,580	1,241	-339	-21%	9.0	Signal	201.6	F	207	F	97	F	868.0	2,152.5
			Thru	690	555	-135	-20%						Signal	199.9	F					868.0	2,152.5
			Right	330	252	-78	-24%						Signal	232.0	F					879.0	2,167.0
		Westbound	Left	210	204	-6	-3%	755	746	-9	-1%	0.3	Signal	70.4	E	50	D			201.3	756.7
			Thru	425	419	-6	-1%						Signal	45.6	D					201.3	756.7
			Right	120	123	3	3%						Signal	32.4	C					221.3	781.1
		Northbound	Left	45	48	3	7%	1,960	1,871	-89	-5%	2.0	Signal	43.7	D	43	D			232.1	822.5
			Thru	1,710	1,632	-78	-5%						Signal	43.2	D					232.1	822.5
			Right	205	191	-14	-7%						Signal	41.0	D					259.5	857.4
		Southbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-			0.0	0.0
			Thru	0	0	0	-						Signal	-	-					0.0	0.0
			Right	0	0	0	-						Signal	-	-					0.0	0.0
	NETWORK TOTAL							**50,065**	**44,343**	**-5,722**	**-11%**										

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2046 No-Build

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	3,860	2,325	-1,535	-40%	3,860	2,325	-1,535	-40%	27.6									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	540	511	-29	-5%	540	511	-29	-5%	1.3									
	SB I-75 to WB Selmon Expressway	Westbound	On-Ramp	1,260	1,266	6	0%	1,260	1,266	6	0%	0.2									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	1,110	1,052	-58	-5%	1,110	1,052	-58	-5%	1.8									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	430	404	-26	-6%	950	902	-48	-5%	1.6	Signal	43.4	D	23	C	17	B	64.7	251.9
			Right	520	498	-22	-4%						Signal	7.1	A					9.2	110.2
		Northbound	Left	445	445	0	0%	1,740	1,735	-5	0%	0.1	Signal	17.3	B	11	B			17.9	280.2
			Thru	1,295	1,290	-5	0%						Signal	8.9	A					35.3	390.8
		Southbound	Thru	785	803	18	2%	1,100	1,109	9	1%	0.3	Signal	27.9	C	21	C			74.8	395.6
			Right	315	306	-9	-3%						Signal	4.3	A					2.3	142.3
	US-301 and EB Selmon Expressway	Eastbound	Left	160	156	-4	-3%	510	476	-34	-7%	1.5	Signal	52.8	D	18	B	23	C	52.0	272.2
			Right	350	320	-30	-9%						Signal	1.2	A					0.0	0.0
		Northbound	Thru	2,365	2,311	-54	-2%	2,770	2,707	-63	-2%	1.2	Signal	38.6	D	35	C			444.4	1,772.7
			Right	405	396	-9	-2%						Signal	11.3	B					6.9	271.9
		Southbound	Left	285	288	3	1%	1,620	1,580	-40	-2%	1.0	Signal	9.4	A	3	A			12.8	256.5
			Thru	1,335	1,292	-43	-3%						Signal	2.1	A					5.5	67.5
	US-301 and WB Selmon Expressway	Westbound	Left	190	150	-40	-21%	1,020	813	-207	-20%	6.8	Signal	53.2	D	17	B	18	B	59.2	761.6
			Right	830	663	-167	-20%						Signal	8.6	A					17.4	405.5
		Northbound	Left	600	575	-25	-4%	2,525	2,467	-58	-2%	1.2	Signal	22.5	C	6	A			83.7	280.5
			Thru	1,925	1,892	-33	-2%						Signal	1.3	A					0.4	38.1
		Southbound	Thru	1,430	1,434	4	0%	1,600	1,600	0	0%	0.0	Signal	40.2	D	37	D			113.2	426.4
			Right	170	166	-4	-2%						Signal	4.3	A					2.3	88.9
	78th St and EB Selmon Expressway	Westbound	Left	85	81	-4	-5%	340	321	-19	-6%	1.0	Stop	13.9	B	4	A	1	A	7.4	106.9
			Right	255	240	-15	-6%						Stop	0.7	A					0.0	0.0
		Northbound	Thru	1,430	1,409	-21	-1%	1,430	1,409	-21	-1%	0.6	Stop	0.6	A	1	A			0.0	0.0
		Southbound	Thru	680	697	17	3%	680	697	17	3%	0.6	Stop	0.2	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	280	285	5	2%	280	285	5	2%	0.3									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	300	294	-6	-2%	300	294	-6	-2%	0.3									
	50th St and Selmon Expressway	Eastbound	Left	160	148	-12	-8%	390	371	-19	-5%	1.0	Signal	88.5	F	37	D	281	F	83.7	344.6
			Right	230	223	-7	-3%						Signal	2.9	A					0.0	0.0
		Westbound	Left	35	26	-9	-26%	410	344	-66	-16%	3.4	Signal	114.0	F	27	C			14.8	92.2
			Right	375	318	-57	-15%						Signal	19.5	B					0.0	0.0
		Northbound	Left	965	333	-632	-65%	2,210	815	-1,395	-63%	35.9	Signal	586.1	F	343	F			3,076.6	3,222.5
			Thru	1,210	469	-741	-61%						Signal	174.9	F					3,069.2	3,219.9
			Right	35	13	-22	-63%						Signal	166.5	F					0.0	2.0
		Southbound	Left	145	93	-52	-36%	1,685	1,309	-376	-22%	9.7	Signal	71.0	E	378	F			925.6	1,749.7
			Thru	1,335	1,050	-285	-21%						Signal	422.5	F					1,067.2	2,206.8
			Right	205	166	-39	-19%						Signal	266.9	F					10.8	178.8

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2046 No-Build

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	1,250	1,267	17	1%	1,250	1,267	17	1%	0.5									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	1,200	930	-270	-23%	1,200	930	-270	-23%	8.3									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	540	432	-108	-20%	540	432	-108	-20%	4.9									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	355	257	-98	-28%	355	257	-98	-28%	5.6									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	2,200	1,807	-393	-18%	2,200	1,807	-393	-18%	8.8									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	1,040	982	-58	-6%	1,040	982	-58	-6%	1.8									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	200	191	-9	-5%	350	336	-14	-4%	0.8	Stop	21.7	C	17	C	69	F	22.6	184.7
			Right	150	145	-5	-3%						Stop	10.9	B					9.7	129.1
		Westbound	Left	230	148	-82	-36%	895	633	-262	-29%	9.5	Stop	485.9	F	436	F			1,127.4	1,944.9
			Right	665	485	-180	-27%						Stop	420.9	F					1,915.0	2,156.1
		Northbound	Left	395	391	-4	-1%	1,860	1,852	-8	0%	0.2	Stop	10.9	B	3	A			29.9	286.6
			Thru	1,455	1,451	-4	0%						Stop	0.7	A					0.0	0.0
			Right	10	10	0	0%						Stop	3.8	A					0.1	18.8
		Southbound	Left	110	114	4	4%	1,350	1,355	5	0%	0.1	Stop	2.2	A	2	A			0.0	10.8
			Thru	805	807	2	0%						Stop	0.3	A					0.0	0.0
			Right	435	434	-1	0%						Stop	4.7	A					4.8	178.8
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	400	361	-39	-10%	400	361	-39	-10%	2.0									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	1,200	934	-266	-22%	1,200	934	-266	-22%	8.1									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	330	302	-28	-8%	330	302	-28	-8%	1.6									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	1,080	738	-342	-32%	1,080	738	-342	-32%	11.3									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	1,170	1,155	-15	-1%	1,170	1,155	-15	-1%	0.4									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	1,230	1,233	3	0%	1,230	1,233	3	0%	0.1									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	590	454	-136	-23%	590	454	-136	-23%	6.0									
	Reversible Express Lanes																				
East Selmon	NB I-75 to REL	Westbound	On-Ramp	850	510	-340	-40%	850	510	-340	-40%	13.0									
East Selmon	WB REL to LL @ US-301	Westbound	Off-Ramp	460	451	-9	-2%	460	451	-9	-2%	0.4									
East Selmon	WB LL to REL @ US-301	Westbound	On-Ramp	1,420	1,243	-177	-12%	1,420	1,243	-177	-12%	4.9									
Downtown	WB REL to LL @ I-4	Westbound	Off-Ramp	280	162	-118	-42%	280	162	-118	-42%	7.9									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	0	0	0	-	330	306	-24	-7%	1.3	Signal	-	-	83	F	35	D	24.1	203.8
			Thru	175	166	-9	-5%						Signal	86.3	F					24.1	203.8
			Right	155	140	-15	-10%						Signal	79.6	E					28.5	218.4
		Westbound	Left	160	158	-2	-1%	895	891	-4	0%	0.1	Signal	45.9	D	40	D			193.8	830.5
			Thru	735	733	-2	0%						Signal	39.1	D					193.8	830.5
			Right	0	0	0	-						Signal	-	-					212.3	854.9
		Northbound	Left	150	143	-7	-5%	235	226	-9	-4%	0.6	Signal	67.6	E	45	D			39.2	160.4
			Thru	0	0	0	-						Signal	-	-					39.2	160.4
			Right	85	83	-2	-2%						Signal	5.4	A					63.3	195.7
		Southbound	Left	290	260	-30	-10%	3,830	3,432	-398	-10%	6.6	Signal	44.7	D	29	C			312.9	1,483.7
			Thru	2,135	1,908	-227	-11%						Signal	42.4	D					312.9	1,483.7
			Right	1,405	1,264	-141	-10%						Signal	6.5	A					212.9	1,339.6
	NETWORK TOTAL							**53,670**	**46,637**	**-7,033**	**-13%**										

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (5:30-6:30 PM)

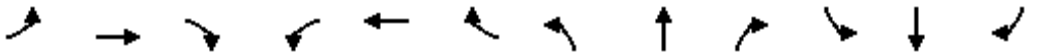
2046 No-Build

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	1,800	1,761	-39	-2%	1,800	1,761	-39	-2%	0.9									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	710	625	-85	-12%	710	625	-85	-12%	3.3									
	SB I-75 to WB Selmon Expressway	Westbound	On-Ramp	680	672	-8	-1%	680	672	-8	-1%	0.3									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	3,470	2,921	-549	-16%	3,470	2,921	-549	-16%	9.7									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	340	282	-58	-17%	760	634	-126	-17%	4.8	Signal	44.7	D	24	C	97	F	47.1	204.1
			Right	420	352	-68	-16%						Signal	7.7	A				E	5.3	79.6
		Northbound	Left	400	381	-19	-5%	1,390	1,369	-21	-2%	0.6	Signal	154.7	F	48	D		E	63.7	385.3
			Thru	990	988	-2	0%						Signal	6.9	A				E	19.6	265.4
		Southbound	Thru	1,780	1,383	-397	-22%	2,210	1,698	-512	-23%	11.6	Signal	139.4	F	164	F		E	1,836.9	3,028.2
			Right	430	315	-115	-27%						Signal	272.1	F				E	911.1	1,500.9
	US-301 and EB Selmon Expressway	Eastbound	Left	210	184	-26	-12%	1,140	942	-198	-17%	6.1	Signal	32.9	C	8	A	14	B	37.1	271.9
			Right	930	758	-172	-18%						Signal	2.5	A					0.0	0.0
		Northbound	Thru	1,295	1,268	-27	-2%	1,825	1,782	-43	-2%	1.0	Signal	39.5	D	30	C			112.9	422.9
			Right	530	514	-16	-3%						Signal	5.7	A					12.6	306.2
		Southbound	Left	450	379	-71	-16%	2,830	2,435	-395	-14%	7.7	Signal	6.0	A	5	A			10.6	253.8
			Thru	2,380	2,056	-324	-14%						Signal	4.8	A					24.3	118.0
	US-301 and WB Selmon Expressway	Westbound	Left	225	201	-24	-11%	590	531	-59	-10%	2.5	Signal	280.9	F	216	F	124	F	1,238.0	1,661.2
			Right	365	330	-35	-10%						Signal	175.9	F		E			0.6	82.7
		Northbound	Left	120	115	-5	-4%	1,505	1,452	-53	-4%	1.4	Signal	46.5	D	5	A			19.4	157.7
			Thru	1,385	1,337	-48	-3%						Signal	1.0	A					0.0	0.0
		Southbound	Thru	2,605	2,233	-372	-14%	2,695	2,310	-385	-14%	7.7	Signal	180.5	F	178	F			1,979.9	2,250.4
			Right	90	77	-13	-14%						Signal	103.4	F					0.1	39.0
	78th St and EB Selmon Expressway	Westbound	Left	170	119	-51	-30%	250	175	-75	-30%	5.1	Stop	13.5	B	9	A	1	A	10.3	142.5
			Right	80	56	-24	-30%						Stop	0.6	A					0.0	0.0
		Northbound	Thru	975	978	3	0%	975	978	3	0%	0.1	Stop	0.3	A	0	A			0.0	0.0
		Southbound	Thru	1,060	974	-86	-8%	1,060	974	-86	-8%	2.7	Stop	0.3	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	235	226	-9	-4%	235	226	-9	-4%	0.6									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	55	52	-3	-5%	55	52	-3	-5%	0.4									
	50th St and Selmon Expressway	Eastbound	Left	195	103	-92	-47%	1,130	623	-507	-45%	17.1	Signal	100.0	F	42	D	88	F	40.4	232.8
			Right	935	520	-415	-44%						Signal	30.8	C					247.4	1,419.0
		Westbound	Left	45	40	-5	-11%	230	219	-11	-5%	0.7	Signal	81.8	F	26	C			16.0	110.4
			Right	185	179	-6	-3%						Signal	13.2	B					0.0	0.0
		Northbound	Left	205	110	-95	-46%	1,315	940	-375	-29%	11.2	Signal	75.2	E	118	F			1,147.2	1,813.7
			Thru	1,050	784	-266	-25%						Signal	125.2	F					1,153.5	1,817.4
			Right	60	46	-14	-23%						Signal	98.3	F					0.2	27.8
		Southbound	Left	430	235	-195	-45%	2,080	1,312	-768	-37%	18.6	Signal	187.8	F	99	F			1,547.6	2,369.5
			Thru	1,535	1,005	-530	-35%						Signal	81.9	F					1,532.5	2,368.6
			Right	115	72	-43	-37%						Signal	45.0	D					0.1	30.7

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (5:30-6:30 PM)

2046 No-Build

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	2,470	2,567	97	4%	2,470	2,567	97	4%	1.9									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	820	757	-63	-8%	820	757	-63	-8%	2.2									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	210	203	-7	-3%	210	203	-7	-3%	0.5									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	65	63	-2	-3%	65	63	-2	-3%	0.3									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	1,690	1,691	1	0%	1,690	1,691	1	0%	0.0									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	2,790	1,296	-1,494	-54%	2,790	1,296	-1,494	-54%	33.1									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	410	30	-380	-93%	460	35	-425	-92%	27.0	Stop	2,995.8	F	2982	F	68	F	5,281.0	5,776.4
			Right	50	5	-45	-90%						Stop	2,898.9	F					0.4	65.0
		Westbound	Left	60	56	-4	-7%	275	260	-15	-5%	0.9	Stop	115.8	F	34	D			49.2	231.0
			Right	215	204	-11	-5%						Stop	12.0	B					22.6	203.6
		Northbound	Left	275	220	-55	-20%	1,260	1,171	-89	-7%	2.6	Stop	468.0	F	121	F			5,755.7	6,250.7
			Thru	900	879	-21	-2%						Stop	18.6	C					395.2	1,022.7
			Right	85	72	-13	-15%						Stop	304.7	F					130.2	745.5
		Southbound	Left	385	385	0	0%	2,620	2,610	-10	0%	0.2	Stop	30.8	D	9	A			0.2	55.1
			Thru	1,770	1,760	-10	-1%						Stop	5.8	A					1.8	27.8
			Right	465	465	0	0%						Stop	5.6	A					14.0	200.3
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	590	249	-341	-58%	590	249	-341	-58%	16.6									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	1,320	1,261	-59	-4%	1,320	1,261	-59	-4%	1.6									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	1,090	328	-762	-70%	1,090	328	-762	-70%	28.6									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	570	550	-20	-4%	570	550	-20	-4%	0.8									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	1,120	492	-628	-56%	1,120	492	-628	-56%	22.1									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	280	133	-147	-53%	280	133	-147	-53%	10.2									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	1,250	526	-724	-58%	1,250	526	-724	-58%	24.3									
	Reversible Express Lanes																				
East Selmon	EB LL to REL @ US-301	Eastbound	On-Ramp	440	366	-74	-17%	440	366	-74	-17%	3.7									
East Selmon	EB REL to LL @ US-301	Eastbound	Off-Ramp	1,000	842	-158	-16%	1,000	842	-158	-16%	5.2									
Downtown	EB LL to REL @ I-4	Eastbound	On-Ramp	1,100	648	-452	-41%	1,100	648	-452	-41%	15.3									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	560	267	-293	-52%	1,710	812	-898	-53%	25.3	Signal	986.4	F	1049	F	309	F	1,288.4	2,106.0
			Thru	725	354	-371	-51%						Signal	970.2	F					1,288.4	2,106.0
			Right	425	191	-234	-55%						Signal	1,280.4	F					1,298.2	2,120.6
		Westbound	Left	200	185	-15	-8%	790	739	-51	-6%	1.8	Signal	244.0	F	176	F			170.6	683.2
			Thru	455	424	-31	-7%						Signal	157.5	F					170.6	683.2
			Right	135	130	-5	-4%						Signal	137.4	F					187.9	707.6
		Northbound	Left	50	52	2	4%	2,065	2,006	-59	-3%	1.3	Signal	88.4	F	58	E			377.6	1,129.7
			Thru	1,755	1,706	-49	-3%						Signal	57.5	E					377.6	1,129.7
			Right	260	248	-12	-5%						Signal	56.1	E					407.2	1,165.1
		Southbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-			0.0	0.0
			Thru	0	0	0	-						Signal	-	-					0.0	0.0
			Right	0	0	0	-						Signal	-	-					0.0	0.0
	NETWORK TOTAL							**54,920**	**44,236**	**-10,684**	**-19%**										

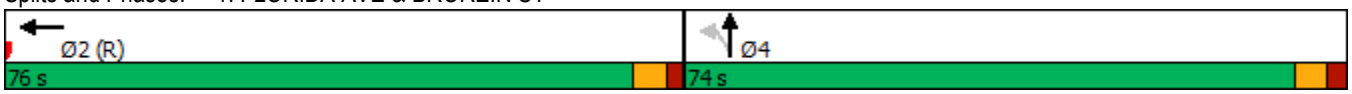


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1695	545	240	1750	0	0	0	0
Future Volume (vph)	0	0	0	0	1695	545	240	1750	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	1.00	1.00	1.00	1.00
Frt					0.964							
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6177	0	1770	5085	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	6177	0	1770	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					3		20					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		273			600			296			353	
Travel Time (s)		6.2			13.6			6.7			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1842	592	261	1902	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2434	0	261	1902	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Minimum Split (s)					30.0		37.0	37.0				
Total Split (s)					76.0		74.0	74.0				
Total Split (%)					50.7%		49.3%	49.3%				
Maximum Green (s)					70.2		67.9	67.9				
Yellow Time (s)					3.7		3.7	3.7				
All-Red Time (s)					2.1		2.4	2.4				
Lost Time Adjust (s)					0.0		0.0	0.0				
Total Lost Time (s)					5.8		6.1	6.1				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		23.0	23.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					70.2		67.9	67.9				
Actuated g/C Ratio					0.47		0.45	0.45				
v/c Ratio					0.84		0.32	0.83				
Control Delay					9.0		27.0	43.3				
Queue Delay					2.0		2.3	16.6				
Total Delay					11.0		29.3	59.9				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					B		C	E				
Approach Delay					11.0			56.2				
Approach LOS					B			E				

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 28 (19%), Referenced to phase 2:WBT and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 32.3		Intersection LOS: C	
Intersection Capacity Utilization 77.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: FLORIDA AVE & BROREIN ST

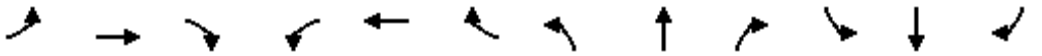


Lane Group	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	SWR	SWR2
Lane Configurations										
Traffic Volume (vph)	120	1890	105	185	70	305	185	350	275	715
Future Volume (vph)	120	1890	105	185	70	305	185	350	275	715
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.959			0.902		0.850	0.850
Flt Protected		0.997	0.950			0.950				
Satd. Flow (prot)	0	3529	1770	1786	0	1770	1680	0	1583	1583
Flt Permitted		0.997	0.133			0.234				
Satd. Flow (perm)	0	3529	248	1786	0	436	1680	0	1583	1583
Right Turn on Red										Yes
Satd. Flow (RTOR)										686
Link Speed (mph)		30		30			30			
Link Distance (ft)		591		494			379			
Travel Time (s)		13.4		11.2			8.6			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	2054	114	201	76	332	201	380	299	777
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	2184	114	277	0	332	581	0	299	777
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Left	Left	Right	Left	Left	Right	R NA	Right
Median Width(ft)		12		12			12			
Link Offset(ft)		0		0			0			
Crosswalk Width(ft)		16		16			16			
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		15		9	15		9	9	9
Number of Detectors	1	2	1	2		1	2		1	1
Detector Template	Left	Thru	Left	Thru		Left	Thru		Right	Right
Leading Detector (ft)	20	100	20	100		20	100		20	20
Trailing Detector (ft)	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel										
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94		94			94			
Detector 2 Size(ft)		6		6			6			
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			
Detector 2 Channel										
Detector 2 Extend (s)		0.0		0.0			0.0			
Turn Type	Perm	NA	pm+pt	NA		pm+pt	NA		Perm	Free
Protected Phases		2	7	4		3	8			
Permitted Phases	2		4			8			2	Free
Detector Phase	2	2	7	4		3	8		2	
Switch Phase										
Minimum Initial (s)	10.0	10.0	5.0	10.0		5.0	10.0		10.0	

Lane Group	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	SWR	SWR2
Minimum Split (s)	25.0	25.0	11.0	32.0		11.0	32.0		25.0	
Total Split (s)	88.0	88.0	11.0	36.0		26.0	51.0		88.0	
Total Split (%)	58.7%	58.7%	7.3%	24.0%		17.3%	34.0%		58.7%	
Maximum Green (s)	82.3	82.3	5.3	30.0		20.3	45.0		82.3	
Yellow Time (s)	3.7	3.7	3.7	3.7		3.7	3.7		3.7	
All-Red Time (s)	2.0	2.0	2.0	2.3		2.0	2.3		2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.7	5.7	6.0		5.7	6.0		5.7	
Lead/Lag			Lead	Lag		Lead	Lag			
Lead-Lag Optimize?			Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	None	Max		None	Max		C-Max	
Walk Time (s)	7.0	7.0		7.0			7.0		7.0	
Flash Dont Walk (s)	12.0	12.0		19.0			19.0		12.0	
Pedestrian Calls (#/hr)	0	0		0			0		0	
Act Effct Green (s)		82.3	35.6	30.0		56.3	45.0		82.3	150.0
Actuated g/C Ratio		0.55	0.24	0.20		0.38	0.30		0.55	1.00
v/c Ratio		1.13	1.02	0.78		0.97	1.15		0.34	0.49
Control Delay		92.6	129.9	72.5		78.5	135.6		20.2	1.1
Queue Delay		0.2	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		92.8	129.9	72.5		78.5	135.6		20.3	1.1
LOS		F	F	E		E	F		C	A
Approach Delay		92.8		89.2			114.9			
Approach LOS		F		F			F			

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 2 (1%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.15			
Intersection Signal Delay: 76.6		Intersection LOS: E	
Intersection Capacity Utilization 129.0%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: WB BROREIN ON/WB BROREIN OFF & MORGAN ST & BROREIN ST

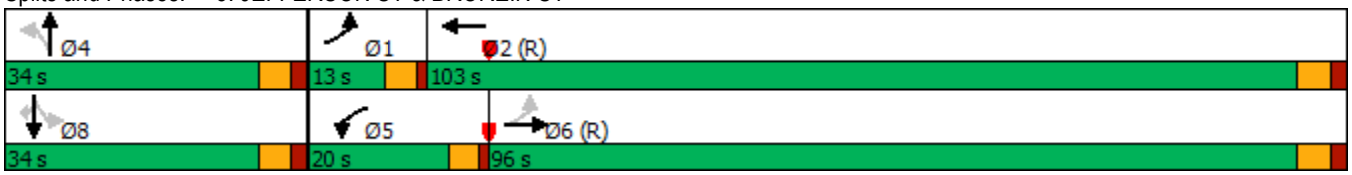


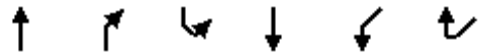
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	255	10	95	1675	265	10	205	5	15	10	325
Future Volume (vph)	110	255	10	95	1675	265	10	205	5	15	10	325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	80		0	115		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.994			0.980			0.997				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1852	0	1770	3468	0	1770	3529	0	1770	1863	1583
Flt Permitted	0.043			0.950			0.750			0.545		
Satd. Flow (perm)	80	1852	0	1770	3468	0	1397	3529	0	1015	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2			24			1				114
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		591			202			322			162	
Travel Time (s)		13.4			4.6			7.3			3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	277	11	103	1821	288	11	223	5	16	11	353
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	288	0	103	2109	0	11	228	0	16	11	353
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6						4			8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6		5	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	10.0	24.0		10.0	24.0		24.0	24.0		24.0	24.0	24.0
Total Split (s)	13.0	96.0		20.0	103.0		34.0	34.0		34.0	34.0	34.0
Total Split (%)	8.7%	64.0%		13.3%	68.7%		22.7%	22.7%		22.7%	22.7%	22.7%
Maximum Green (s)	8.5	90.3		15.5	97.3		28.3	28.3		28.3	28.3	28.3
Yellow Time (s)	3.5	3.7		3.5	3.7		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	1.0	2.0		1.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	5.7		4.5	5.7		5.7	5.7		5.7	5.7	5.7
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	Max
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)	102.2	92.7		13.1	97.5		28.3	28.3		28.3	28.3	28.3
Actuated g/C Ratio	0.68	0.62		0.09	0.65		0.19	0.19		0.19	0.19	0.19
v/c Ratio	0.81	0.25		0.67	0.93		0.04	0.34		0.08	0.03	0.90
Control Delay	64.4	13.2		86.7	32.2		50.5	54.2		51.7	50.2	66.5
Queue Delay	0.0	0.0		0.0	7.9		0.0	0.0		0.0	0.0	77.9
Total Delay	64.4	13.2		86.7	40.0		50.5	54.2		51.7	50.2	144.4
LOS	E	B		F	D		D	D		D	D	F
Approach Delay		28.3			42.2			54.1			137.8	
Approach LOS		C			D			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 33 (22%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 52.5		Intersection LOS: D	
Intersection Capacity Utilization 97.5%		ICU Level of Service F	
Analysis Period (min) 15			

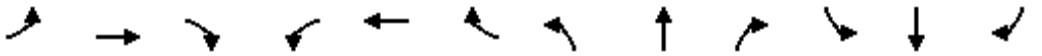
Splits and Phases: 3: JEFFERSON ST & BROREIN ST



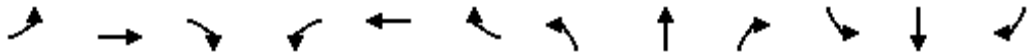


Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	415	165	65	350	0	0
Future Volume (vph)	415	165	65	350	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	115		0	0
Storage Lanes		1	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	162			583	231	
Travel Time (s)	3.7			13.3	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	451	179	71	380	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	451	179	71	380	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 32.1%		ICU Level of Service A	
Analysis Period (min) 15			



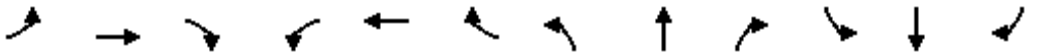
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	250	3930	320	170	445	0	0	130	55
Future Volume (vph)	0	0	0	250	3930	320	170	445	0	0	130	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.989						0.955	
Flt Protected				0.950				0.986				
Satd. Flow (prot)	0	0	0	1770	6337	0	0	3490	0	0	3380	0
Flt Permitted				0.950				0.779				
Satd. Flow (perm)	0	0	0	1770	6337	0	0	2757	0	0	3380	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					26							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			319			716			284	
Travel Time (s)		13.1			7.3			16.3			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	272	4272	348	185	484	0	0	141	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	272	4620	0	0	669	0	0	201	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					4			2			2	
Permitted Phases				4			2					
Minimum Split (s)				26.0	26.0		26.0	26.0			26.0	
Total Split (s)				108.0	108.0		42.0	42.0			42.0	
Total Split (%)				72.0%	72.0%		28.0%	28.0%			28.0%	
Maximum Green (s)				102.3	102.3		36.1	36.1			36.1	
Yellow Time (s)				3.7	3.7		3.7	3.7			3.7	
All-Red Time (s)				2.0	2.0		2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0			0.0			0.0	
Total Lost Time (s)				5.7	5.7			5.9			5.9	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				13.0	13.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				102.3	102.3			36.1			36.1	
Actuated g/C Ratio				0.68	0.68			0.24			0.24	
v/c Ratio				0.23	1.07			1.01			0.25	
Control Delay				8.6	56.2			93.0			47.0	
Queue Delay				0.0	0.7			0.0			0.0	
Total Delay				8.6	57.0			93.0			47.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				A	E			F			D	
Approach Delay					54.3			93.0			47.0	
Approach LOS					D			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 21 (14%), Referenced to phase 2:NBSB and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 58.5		Intersection LOS: E	
Intersection Capacity Utilization 102.4%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 5: JEFFERSON ST & KENNEDY BLVD

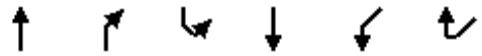


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1515	590	20	125	0	0	0	385
Future Volume (vph)	0	0	0	0	1515	590	20	125	0	0	0	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88
Frt					0.958							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4872	0	1770	1863	0	0	0	2787
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	4872	0	1770	1863	0	0	0	2787
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					135		22					65
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		847			465			292			201	
Travel Time (s)		19.3			10.6			6.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1647	641	22	136	0	0	0	418
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2288	0	22	136	0	0	0	418
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				Perm
Protected Phases					4			6				
Permitted Phases							6					2
Minimum Split (s)					30.0		25.0	25.0				27.0
Total Split (s)					104.0		46.0	46.0				46.0
Total Split (%)					69.3%		30.7%	30.7%				30.7%
Maximum Green (s)					98.2		40.1	40.1				40.1
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.1		2.2	2.2				2.2
Lost Time Adjust (s)					0.0		0.0	0.0				0.0
Total Lost Time (s)					5.8		5.9	5.9				5.9
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				7.0
Flash Dont Walk (s)					17.0		12.0	12.0				14.0
Pedestrian Calls (#/hr)					0		0	0				0
Act Effct Green (s)					98.2		40.1	40.1				40.1
Actuated g/C Ratio					0.65		0.27	0.27				0.27
v/c Ratio					0.71		0.04	0.27				0.53
Control Delay					17.0		14.4	45.3				33.7
Queue Delay					0.3		0.0	0.0				0.0
Total Delay					17.3		14.4	45.3				33.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					B		B	D				C
Approach Delay					17.3			41.0			33.8	
Approach LOS					B			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 37 (25%), Referenced to phase 2:SBR and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 21.0		Intersection LOS: C	
Intersection Capacity Utilization 78.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: NEBRASKA AVE & KENNEDY BLVD



Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	545	170	80	385	0	0
Future Volume (vph)	545	170	80	385	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	130		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt	0.968					
Flt Protected			0.950			
Satd. Flow (prot)	1803	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1803	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			390	272	
Travel Time (s)	4.6			8.9	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	592	185	87	418	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	777	0	87	418	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

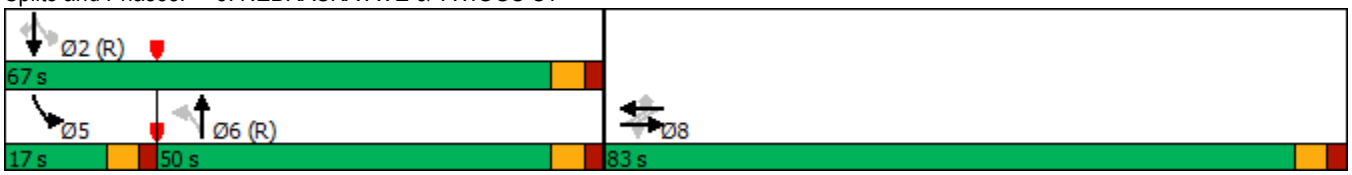
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	100	10	330	1030	655	75	340	130	155	125	60
Future Volume (vph)	5	100	10	330	1030	655	75	340	130	155	125	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	150		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.987				0.850		0.959				0.850
Flt Protected		0.998			0.988		0.950			0.950		
Satd. Flow (prot)	0	3486	0	0	3497	1583	1770	1786	0	1770	3539	1583
Flt Permitted		0.901			0.826		0.666			0.080		
Satd. Flow (perm)	0	3147	0	0	2923	1583	1241	1786	0	149	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				389		13				59
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			652			390			257	
Travel Time (s)		17.7			14.8			8.9			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	109	11	359	1120	712	82	370	141	168	136	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	125	0	0	1479	712	82	511	0	168	136	65
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm
Protected Phases		8			8			6		5	2	
Permitted Phases	8			8		8	6			2		2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8		8	8	8	6	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		5.0	10.0	10.0
Minimum Split (s)	30.0	30.0		30.0	30.0	30.0	28.0	28.0		11.0	28.0	28.0
Total Split (s)	83.0	83.0		83.0	83.0	83.0	50.0	50.0		17.0	67.0	67.0
Total Split (%)	55.3%	55.3%		55.3%	55.3%	55.3%	33.3%	33.3%		11.3%	44.7%	44.7%
Maximum Green (s)	76.9	76.9		76.9	76.9	76.9	44.0	44.0		11.3	61.0	61.0
Yellow Time (s)	3.7	3.7		3.7	3.7	3.7	3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.4		2.4	2.4	2.4	2.3	2.3		2.0	2.3	2.3
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.1			6.1	6.1	6.0	6.0		5.7	6.0	6.0
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		2.0	3.0	3.0
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Dont Walk (s)	16.0	16.0		16.0	16.0	16.0	15.0	15.0			15.0	15.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	0
Act Effct Green (s)		76.9			76.9	76.9	44.0	44.0		61.3	61.0	61.0
Actuated g/C Ratio		0.51			0.51	0.51	0.29	0.29		0.41	0.41	0.41
v/c Ratio		0.08			0.99	0.71	0.23	0.96		0.92	0.09	0.10
Control Delay		17.2			36.3	7.6	36.0	67.4		84.1	27.7	7.8
Queue Delay		0.0			12.7	0.5	0.0	7.7		0.0	0.0	0.0
Total Delay		17.2			48.9	8.1	36.0	75.1		84.1	27.7	7.8
LOS		B			D	A	D	E		F	C	A
Approach Delay		17.2			35.7			69.7			49.9	
Approach LOS		B			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 97 (65%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 42.7		Intersection LOS: D	
Intersection Capacity Utilization 90.6%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 8: NEBRASKA AVE & TWIGGS ST



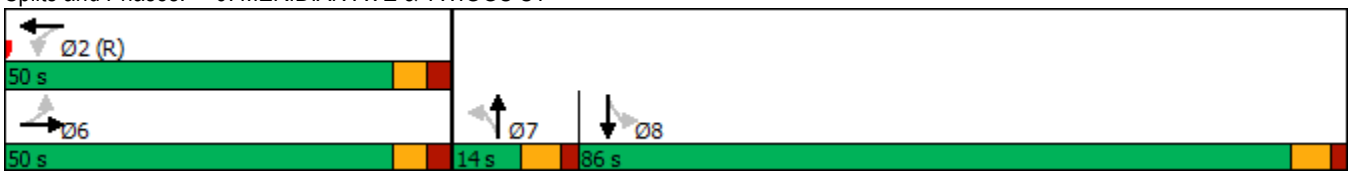
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	210	175	120	585	0	150	0	65	265	1955	1280
Future Volume (vph)	0	210	175	120	585	0	150	0	65	265	1955	1280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	1.00
Frt		0.932						0.954				0.850
Flt Protected					0.992			0.966			0.994	
Satd. Flow (prot)	0	3299	0	0	3511	0	0	4686	0	0	5055	1583
Flt Permitted					0.707			0.940			0.843	
Satd. Flow (perm)	0	3299	0	0	2502	0	0	4560	0	0	4287	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		99						74				415
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			772			501			413	
Travel Time (s)		14.8			17.5			11.4			9.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	228	190	130	636	0	163	0	71	288	2125	1391
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	418	0	0	766	0	0	234	0	0	2413	1391
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	Free
Protected Phases		6			2			7			8	
Permitted Phases	6			2			7			8		Free
Detector Phase	6	6		2	2		7	7		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	46.0	46.0		17.0	17.0		12.0	12.0		17.0	17.0	
Total Split (s)	50.0	50.0		50.0	50.0		14.0	14.0		86.0	86.0	
Total Split (%)	33.3%	33.3%		33.3%	33.3%		9.3%	9.3%		57.3%	57.3%	
Maximum Green (s)	43.2	43.2		43.2	43.2		7.6	7.6		79.6	79.6	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	2.8	2.8		2.8	2.8		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.8			6.8			6.4			6.4	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0										
Flash Dont Walk (s)	32.0	32.0										
Pedestrian Calls (#/hr)	0	0										
Act Effct Green (s)		43.2			43.2			7.6			79.6	150.0
Actuated g/C Ratio		0.29			0.29			0.05			0.53	1.00
v/c Ratio		0.41			1.06			1.37dl			1.06	0.88
Control Delay		38.2			102.0			65.6			71.9	7.6
Queue Delay		0.0			14.6			0.0			0.0	0.7
Total Delay		38.2			116.6			65.6			71.9	8.3
LOS		D			F			E			E	A
Approach Delay		38.2			116.6			65.6			48.7	
Approach LOS		D			F			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 16 (11%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 58.6		Intersection LOS: E	
Intersection Capacity Utilization 104.5%		ICU Level of Service G	
Analysis Period (min) 15			

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

Splits and Phases: 9: MERIDIAN AVE & TWIGGS ST



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Lane Configurations									
Traffic Volume (vph)	95	135	15	1755	860	0	95	0	0
Future Volume (vph)	95	135	15	1755	860	0	95	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt		0.850					0.850		
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	5085	5085	0	1583	0	0
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	5085	5085	0	1583	0	0
Link Speed (mph)	30			30	30			30	
Link Distance (ft)	404			536	498			405	
Travel Time (s)	9.2			12.2	11.3			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	103	147	16	1908	935	0	103	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	103	147	16	1908	935	0	103	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right	Right	Left	Right
Median Width(ft)	12			12	12			0	
Link Offset(ft)	0			0	0			0	
Crosswalk Width(ft)	16			16	16			16	
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9	9	15	9
Sign Control	Stop			Free	Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations								
Traffic Vol, veh/h	95	135	15	1755	860	0	0	0
Future Vol, veh/h	95	135	15	1755	860	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	-	-
Storage Length	0	0	0	-	-	0	-	-
Veh in Median Storage, #	0	-	-	0	0	-	0	-
Grade, %	0	-	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	103	147	16	1908	935	0	0	0

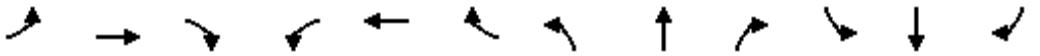
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1730	468	935	0	-	0
Stage 1	935	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	130	463	421	-	-	0
Stage 1	265	-	-	-	-	0
Stage 2	368	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	125	463	421	-	-	-
Mov Cap-2 Maneuver	125	-	-	-	-	-
Stage 1	255	-	-	-	-	-
Stage 2	368	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	53.1	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	421	-	125	463	-
HCM Lane V/C Ratio	0.039	-	0.826	0.317	-
HCM Control Delay (s)	13.9	-	105.3	16.3	-
HCM Lane LOS	B	-	F	C	-
HCM 95th %tile Q(veh)	0.1	-	5	1.3	-

Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations											
Traffic Volume (vph)	0	0	335	1515	0	0	855	0	100	0	420
Future Volume (vph)	0	0	335	1515	0	0	855	0	100	0	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00	1.00	1.00	1.00
Frt											0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Flt Permitted			0.950						0.950		
Satd. Flow (perm)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	264			498			271			329	
Travel Time (s)	6.0			11.3			6.2			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	364	1647	0	0	929	0	109	0	457
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	364	1647	0	0	929	0	109	0	457
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			12	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Sign Control	Free			Free			Free			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 61.9%		ICU Level of Service B	
Analysis Period (min) 15			

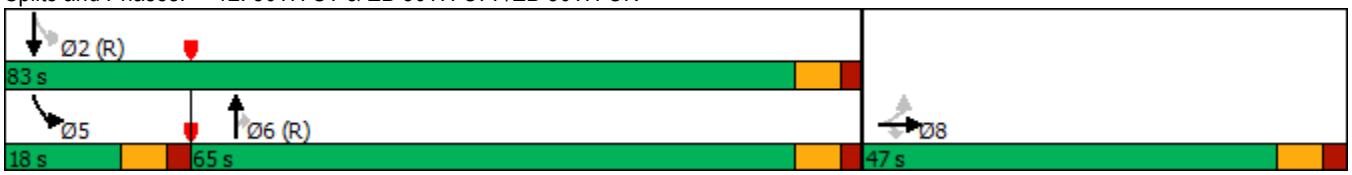


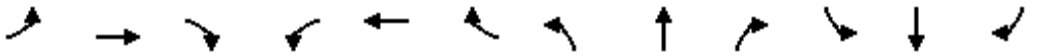
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	0	165	0	0	0	0	1965	35	105	980	0
Future Volume (vph)	135	0	165	0	0	0	0	1965	35	105	980	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.052		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	97	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			99						89			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		549			603			383			284	
Travel Time (s)		12.5			13.7			8.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	147	0	179	0	0	0	0	2136	38	114	1065	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	147	179	0	0	0	0	2136	38	114	1065	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8						6	2		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8	8					6	6	5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	5.0	10.0	
Minimum Split (s)	47.0	47.0	47.0					17.0	17.0	12.0	24.0	
Total Split (s)	47.0	47.0	47.0					65.0	65.0	18.0	83.0	
Total Split (%)	36.2%	36.2%	36.2%					50.0%	50.0%	13.8%	63.8%	
Maximum Green (s)	40.1	40.1	40.1					58.5	58.5	11.3	76.5	
Yellow Time (s)	4.4	4.4	4.4					4.4	4.4	4.4	4.4	
All-Red Time (s)	2.5	2.5	2.5					2.1	2.1	2.3	2.1	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.9	6.9					6.5	6.5	6.7	6.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0					3.0	3.0	2.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Dont Walk (s)	33.0	33.0	33.0								10.0	
Pedestrian Calls (#/hr)	0	0	0								0	
Act Effct Green (s)		18.5	18.5					83.5	83.5	97.9	98.1	
Actuated g/C Ratio		0.14	0.14					0.64	0.64	0.75	0.75	
v/c Ratio		0.58	0.58					0.52	0.04	0.66	0.28	
Control Delay		60.6	30.1					14.0	0.1	55.6	8.7	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.4	
Total Delay		60.6	30.1					14.0	0.1	55.6	9.1	
LOS		E	C					B	A	E	A	
Approach Delay		43.8						13.7			13.6	
Approach LOS		D						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 93 (72%), Referenced to phase 2:SBTL and 6:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 16.4		Intersection LOS: B	
Intersection Capacity Utilization 72.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 12: 50TH ST & EB 50TH OFF/EB 50TH ON



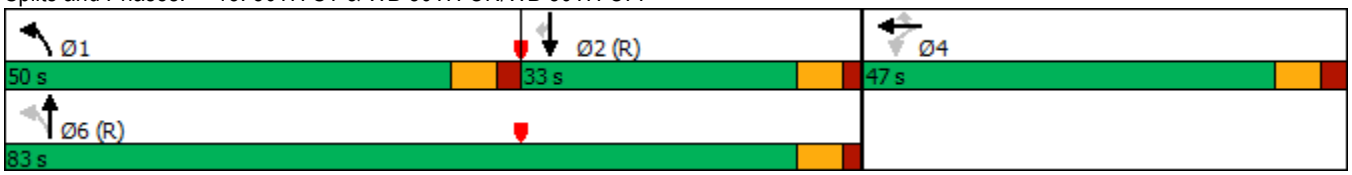


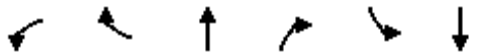
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	25	0	215	565	1535	0	0	1060	195
Future Volume (vph)	0	0	0	25	0	215	565	1535	0	0	1060	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	140		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.136					
Satd. Flow (perm)	0	0	0	0	1770	1583	253	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						86						212
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		457			359			284			339	
Travel Time (s)		10.4			8.2			6.5			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	27	0	234	614	1668	0	0	1152	212
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	27	234	614	1668	0	0	1152	212
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				4	4	4	1	6			2	2
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	10.0
Minimum Split (s)				47.0	47.0	47.0	12.0	24.0			24.0	24.0
Total Split (s)				47.0	47.0	47.0	50.0	83.0			33.0	33.0
Total Split (%)				36.2%	36.2%	36.2%	38.5%	63.8%			25.4%	25.4%
Maximum Green (s)				39.8	39.8	39.8	43.2	76.6			26.6	26.6
Yellow Time (s)				4.4	4.4	4.4	4.4	4.4			4.4	4.4
All-Red Time (s)				2.8	2.8	2.8	2.4	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.2	7.2	6.8	6.4			6.4	6.4
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	2.0	3.0			3.0	3.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)				32.0	32.0	32.0		10.0			10.0	10.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)					19.3	19.3	96.7	97.1			45.4	45.4
Actuated g/C Ratio					0.15	0.15	0.74	0.75			0.35	0.35
v/c Ratio					0.10	0.76	0.86	0.44			0.51	0.31
Control Delay					45.1	48.2	27.8	2.1			37.1	6.5
Queue Delay					0.0	0.0	0.4	0.0			0.0	0.0
Total Delay					45.1	48.2	28.1	2.1			37.1	6.5
LOS					D	D	C	A			D	A
Approach Delay					47.8			9.1			32.4	
Approach LOS					D			A			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 19.8		Intersection LOS: B	
Intersection Capacity Utilization 72.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 13: 50TH ST & WB 50TH ON/WB 50TH OFF





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	55	0	1115	0	0	430
Future Volume (vph)	55	0	1115	0	0	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	3539	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	3539	0	0	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	292		343			439
Travel Time (s)	6.6		7.8			10.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	0	1212	0	0	467
Shared Lane Traffic (%)						
Lane Group Flow (vph)	60	0	1212	0	0	467
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.8%		ICU Level of Service A	
Analysis Period (min) 15			

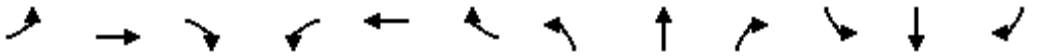
Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	0	1115	0	0	430
Future Vol, veh/h	55	0	1115	0	0	430
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	0	1212	0	0	467

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1446	-	0	-	-	-
Stage 1	1212	-	-	-	-	-
Stage 2	234	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-
Pot Cap-1 Maneuver	122	0	-	0	0	-
Stage 1	244	0	-	0	0	-
Stage 2	783	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	122	-	-	-	-	-
Mov Cap-2 Maneuver	205	-	-	-	-	-
Stage 1	244	-	-	-	-	-
Stage 2	783	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.6	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	205	-
HCM Lane V/C Ratio	-	0.292	-
HCM Control Delay (s)	-	29.6	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	1.2	-

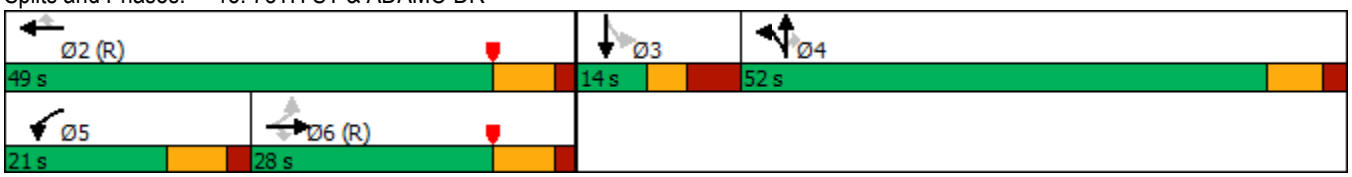


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	470	275	150	1240	10	735	0	485	5	5	5
Future Volume (vph)	5	470	275	150	1240	10	735	0	485	5	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	0		315	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.955	
Flt Protected	0.950			0.950			0.950	0.950			0.984	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1681	1681	1583	0	1750	0
Flt Permitted	0.135			0.950			0.950	0.950				
Satd. Flow (perm)	251	3539	1583	1770	3539	1583	1681	1681	1583	0	1779	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			299			115			525		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		887			638			788			238	
Travel Time (s)		20.2			14.5			17.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	511	299	163	1348	11	799	0	527	5	5	5
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	5	511	299	163	1348	11	399	400	527	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		25			25			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Perm	NA	
Protected Phases		6		5	2		4	4			3	
Permitted Phases	6		6			2			4	3		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6	6	5	2	2	4	4	4	3	3	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	26.0	26.0	26.0	13.0	27.0	27.0	52.0	52.0	52.0	14.0	14.0	
Total Split (s)	28.0	28.0	28.0	21.0	49.0	49.0	52.0	52.0	52.0	14.0	14.0	
Total Split (%)	24.3%	24.3%	24.3%	18.3%	42.6%	42.6%	45.2%	45.2%	45.2%	12.2%	12.2%	
Maximum Green (s)	20.8	20.8	20.8	13.8	41.8	41.8	44.9	44.9	44.9	6.0	6.0	
Yellow Time (s)	5.2	5.2	5.2	5.2	5.2	5.2	4.8	4.8	4.8	3.4	3.4	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.3	4.6	4.6	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.1	7.1		8.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0			
Flash Dont Walk (s)	11.0	11.0	11.0		12.0	12.0	37.0	37.0	37.0			
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0			
Act Effct Green (s)	34.3	34.3	34.3	13.7	55.3	55.3	39.8	39.8	39.8		6.0	
Actuated g/C Ratio	0.30	0.30	0.30	0.12	0.48	0.48	0.35	0.35	0.35		0.05	
v/c Ratio	0.07	0.48	0.44	0.77	0.79	0.01	0.69	0.69	0.59		0.15	
Control Delay	41.6	38.3	7.0	73.1	32.1	0.0	38.1	38.2	5.1		44.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	41.6	38.3	7.0	73.1	32.1	0.0	38.1	38.2	5.1		44.5	
LOS	D	D	A	E	C	A	D	D	A		D	
Approach Delay		26.8			36.3			25.0			44.5	
Approach LOS		C			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 115			
Actuated Cycle Length: 115			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 30.1		Intersection LOS: C	
Intersection Capacity Utilization 91.7%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 15: 78TH ST & ADAMO DR



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	945	15	445	1400	0	0
Future Volume (vph)	945	15	445	1400	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	1.00
Frt		0.850				
Flt Protected				0.988		
Satd. Flow (prot)	5085	1583	0	5024	0	0
Flt Permitted				0.988		
Satd. Flow (perm)	5085	1583	0	5024	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	638			376	435	
Travel Time (s)	14.5			8.5	9.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1027	16	484	1522	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1027	16	0	2006	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	25			25	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	61.0%	ICU Level of Service	B
Analysis Period (min)	15		

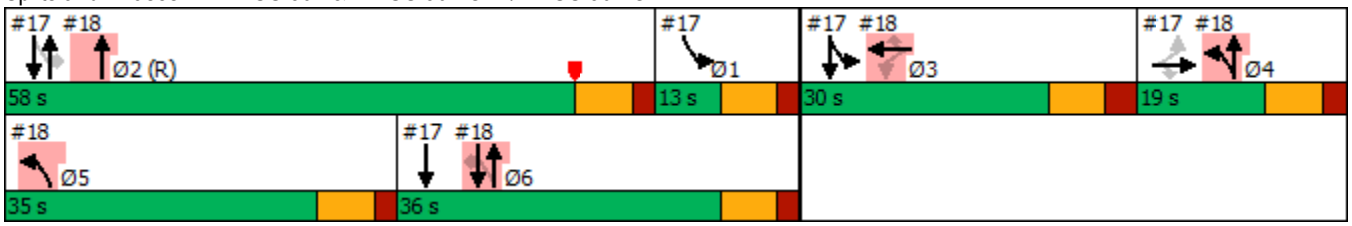
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	0	300	0	0	0	0	2515	215	145	1125	0
Future Volume (vph)	150	0	300	0	0	0	0	2515	215	145	1125	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	315		500	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.079		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	147	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237						234			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		739			677			1414			381	
Travel Time (s)		16.8			15.4			32.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	0	326	0	0	0	0	2734	234	158	1223	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	326	0	0	0	0	2734	234	158	1223	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0			30			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	D.P+P	NA	
Protected Phases		4						2		1 3	6 3 2	
Permitted Phases	4		4						2	2		

Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4					2	2	1 3	6 3 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					15.0	15.0			
Minimum Split (s)	13.0	13.0	13.0					23.0	23.0			
Total Split (s)	19.0	19.0	19.0					58.0	58.0			
Total Split (%)	15.8%	15.8%	15.8%					48.3%	48.3%			
Maximum Green (s)	11.5	11.5	11.5					50.9	50.9			
Yellow Time (s)	5.1	5.1	5.1					5.1	5.1			
All-Red Time (s)	2.4	2.4	2.4					2.0	2.0			
Lost Time Adjust (s)		0.0	0.0					0.0	0.0			
Total Lost Time (s)		7.5	7.5					7.1	7.1			
Lead/Lag	Lag	Lag	Lag					Lead	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes					Yes	Yes			
Vehicle Extension (s)	4.0	4.0	4.0					3.0	3.0			
Recall Mode	None	None	None					C-Max	C-Max			
Act Effct Green (s)		11.5	11.5					50.9	50.9	86.8	93.9	
Actuated g/C Ratio		0.10	0.10					0.42	0.42	0.72	0.78	
v/c Ratio		0.96	0.89					1.01	0.29	0.27	0.31	
Control Delay		115.0	42.8					53.3	3.7	6.5	1.5	
Queue Delay		0.0	0.0					3.0	0.0	0.0	0.2	
Total Delay		115.0	42.8					56.4	3.7	6.5	1.7	
LOS		F	D					E	A	A	A	
Approach Delay		66.9						52.2			2.2	
Approach LOS		E						D			A	

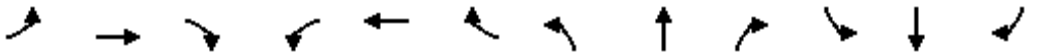
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBSB, Start of Yellow			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 39.4		Intersection LOS: D	
Intersection Capacity Utilization 81.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 17: US 301 & EB US 301 OFF/EB US 301 ON



Lane Group	Ø1	Ø3	Ø5	Ø6
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	15.0
Minimum Split (s)	13.0	13.0	13.0	23.0
Total Split (s)	13.0	30.0	35.0	36.0
Total Split (%)	11%	25%	29%	30%
Maximum Green (s)	5.9	22.2	27.9	28.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.7	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	4.0	3.0
Recall Mode	None	None	Max	Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	95	0	485	640	2025	0	0	1175	120
Future Volume (vph)	0	0	0	95	0	485	640	2025	0	0	1175	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	300		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.138					
Satd. Flow (perm)	0	0	0	0	1770	1583	257	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						235						176
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			711			381			795	
Travel Time (s)		13.2			16.2			8.7			18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	103	0	527	696	2201	0	0	1277	130
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	103	527	696	2201	0	0	1277	130
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			20			30	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	D.P+P	NA			NA	Perm
Protected Phases					3		5 4	2 4 6			6	
Permitted Phases				3		3	6					6

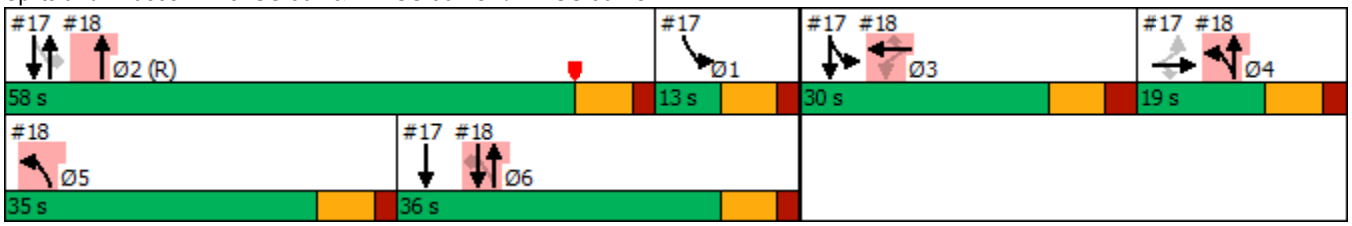
Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				3	3	3	5 4	2 4 6			6	6
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0					15.0	15.0
Minimum Split (s)				13.0	13.0	13.0					23.0	23.0
Total Split (s)				30.0	30.0	30.0					36.0	36.0
Total Split (%)				25.0%	25.0%	25.0%					30.0%	30.0%
Maximum Green (s)				22.2	22.2	22.2					28.9	28.9
Yellow Time (s)				5.1	5.1	5.1					5.1	5.1
All-Red Time (s)				2.7	2.7	2.7					2.0	2.0
Lost Time Adjust (s)					0.0	0.0					0.0	0.0
Total Lost Time (s)					7.8	7.8					7.1	7.1
Lead/Lag				Lead	Lead	Lead					Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0					3.0	3.0
Recall Mode				None	None	None					Max	Max
Act Effct Green (s)					22.2	22.2	75.8	82.9			28.9	28.9
Actuated g/C Ratio					0.18	0.18	0.63	0.69			0.24	0.24
v/c Ratio					0.31	1.09	0.92	0.63			0.83	0.25
Control Delay					45.4	93.1	38.2	1.0			48.7	3.0
Queue Delay					0.0	0.0	18.8	0.1			0.0	0.0
Total Delay					45.4	93.1	57.1	1.1			48.7	3.0
LOS					D	F	E	A			D	A
Approach Delay					85.3			14.5			44.4	
Approach LOS					F			B			D	

Intersection Summary

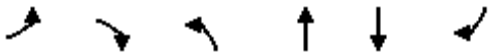
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBSB, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 32.1 Intersection LOS: C
Intersection Capacity Utilization 81.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 18: US 301 & WB US 301 ON/WB US 301 OFF



Lane Group	Ø1	Ø2	Ø4	Ø5
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	15.0	5.0	5.0
Minimum Split (s)	13.0	23.0	13.0	13.0
Total Split (s)	13.0	58.0	19.0	35.0
Total Split (%)	11%	48%	16%	29%
Maximum Green (s)	5.9	50.9	11.5	27.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.4	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0	4.0	4.0
Recall Mode	None	C-Max	None	Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

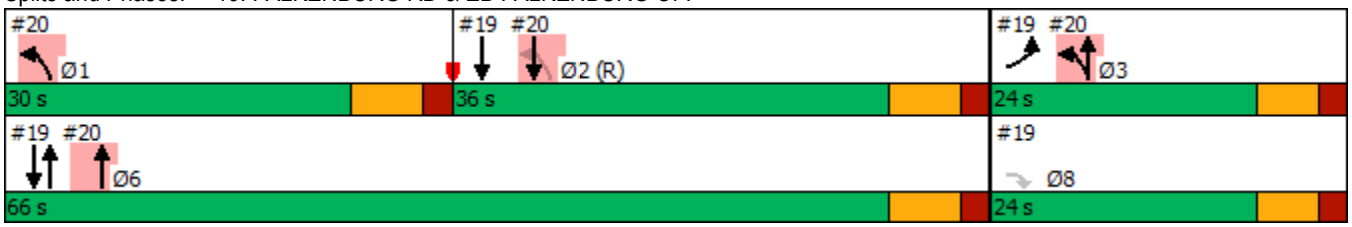


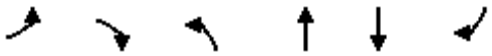
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Lane Configurations								
Traffic Volume (vph)	250	440	0	1785	605	0		
Future Volume (vph)	250	440	0	1785	605	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	0.97	0.88	1.00	0.91	0.91	1.00		
Frt		0.850						
Flt Protected	0.950							
Satd. Flow (prot)	3433	2787	0	5085	5085	0		
Flt Permitted	0.950							
Satd. Flow (perm)	3433	2787	0	5085	5085	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		478						
Link Speed (mph)	30			30	30			
Link Distance (ft)	519			688	550			
Travel Time (s)	11.8			15.6	12.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	272	478	0	1940	658	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	272	478	0	1940	658	0		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	24			30	30			
Link Offset(ft)	0			0	0			
Crosswalk Width(ft)	16			16	16			
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	9	15			9		
Number of Detectors	1	1		2	2			
Detector Template	Left	Right		Thru	Thru			
Leading Detector (ft)	20	20		100	100			
Trailing Detector (ft)	0	0		0	0			
Detector 1 Position(ft)	0	0		0	0			
Detector 1 Size(ft)	20	20		6	6			
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			
Detector 2 Position(ft)				94	94			
Detector 2 Size(ft)				6	6			
Detector 2 Type				Cl+Ex	Cl+Ex			
Detector 2 Channel								
Detector 2 Extend (s)				0.0	0.0			
Turn Type	Prot	Perm		NA	NA			
Protected Phases	3			6	6 2		1	2
Permitted Phases		8						
Detector Phase	3	8		6	6 2			
Switch Phase								
Minimum Initial (s)	6.0	6.0		15.0			5.0	15.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Minimum Split (s)	23.0	23.0		23.0			12.0	23.0
Total Split (s)	24.0	24.0		66.0			30.0	36.0
Total Split (%)	26.7%	26.7%		73.3%			33%	40%
Maximum Green (s)	17.9	17.9		59.2			23.2	29.2
Yellow Time (s)	4.1	4.1		4.8			4.8	4.8
All-Red Time (s)	2.0	2.0		2.0			2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0				
Total Lost Time (s)	6.1	6.1		6.8				
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)	3.5	3.5		4.0			6.0	4.0
Recall Mode	None	None		Max			Min	C-Max
Act Effct Green (s)	17.9	17.9		59.2	59.2			
Actuated g/C Ratio	0.20	0.20		0.66	0.66			
v/c Ratio	0.40	0.51		0.58	0.20			
Control Delay	33.4	5.2		9.4	3.7			
Queue Delay	0.0	0.0		0.0	0.0			
Total Delay	33.4	5.2		9.4	3.7			
LOS	C	A		A	A			
Approach Delay	15.4			9.4	3.7			
Approach LOS	B			A	A			

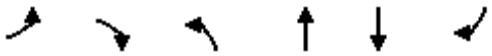
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 9.6		Intersection LOS: A	
Intersection Capacity Utilization 56.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 19: FALKENBURG RD & EB FALKENBURG OFF





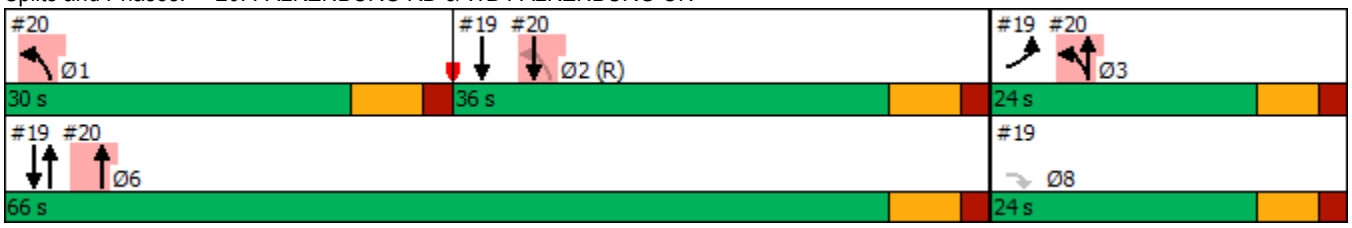
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	0	0	505	1530	605	225				
Future Volume (vph)	0	0	505	1530	605	225				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00				
Frt						0.850				
Flt Protected			0.950							
Satd. Flow (prot)	0	0	1770	3539	3539	1583				
Flt Permitted			0.343							
Satd. Flow (perm)	0	0	639	3539	3539	1583				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)						245				
Link Speed (mph)	30			30	30					
Link Distance (ft)	492			550	852					
Travel Time (s)	11.2			12.5	19.4					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				
Adj. Flow (vph)	0	0	549	1663	658	245				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	549	1663	658	245				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			30	30					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Turning Speed (mph)	15	9	15			9				
Number of Detectors			1	2	2	1				
Detector Template			Left	Thru	Thru	Right				
Leading Detector (ft)			20	100	100	20				
Trailing Detector (ft)			0	0	0	0				
Detector 1 Position(ft)			0	0	0	0				
Detector 1 Size(ft)			20	6	6	20				
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel										
Detector 1 Extend (s)			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94					
Detector 2 Size(ft)				6	6					
Detector 2 Type				Cl+Ex	Cl+Ex					
Detector 2 Channel										
Detector 2 Extend (s)				0.0	0.0					
Turn Type			D.P+P	NA	NA	Free				
Protected Phases			1 3	6 3	2		1	3	6	8
Permitted Phases			2			Free				
Detector Phase			1 3	6 3	2					
Switch Phase										
Minimum Initial (s)					15.0		5.0	6.0	15.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Minimum Split (s)					23.0		12.0	23.0	23.0	23.0
Total Split (s)					36.0		30.0	24.0	66.0	24.0
Total Split (%)					40.0%		33%	27%	73%	27%
Maximum Green (s)					29.2		23.2	17.9	59.2	17.9
Yellow Time (s)					4.8		4.8	4.1	4.8	4.1
All-Red Time (s)					2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)					0.0					
Total Lost Time (s)					6.8					
Lead/Lag					Lag		Lead			
Lead-Lag Optimize?					Yes		Yes			
Vehicle Extension (s)					4.0		6.0	3.5	4.0	3.5
Recall Mode					C-Max		Min	None	Max	None
Act Effct Green (s)			76.4	90.0	38.0	90.0				
Actuated g/C Ratio			0.85	1.00	0.42	1.00				
v/c Ratio			0.54	0.47	0.44	0.15				
Control Delay			14.2	0.8	20.4	0.2				
Queue Delay			0.0	0.0	0.0	0.0				
Total Delay			14.2	0.8	20.4	0.2				
LOS			B	A	C	A				
Approach Delay				4.1	14.9					
Approach LOS				A	B					

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 7.3		Intersection LOS: A	
Intersection Capacity Utilization 56.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 20: FALKENBURG RD & WB FALKENBURG ON

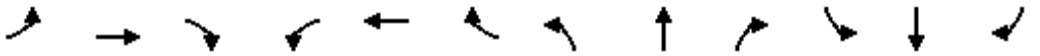


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	240	0	0	890	60	370
Future Volume (vph)	240	0	0	890	60	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.88
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3539	0	0	3539	1770	2787
Flt Permitted					0.950	
Satd. Flow (perm)	3539	0	0	3539	1770	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						402
Link Speed (mph)	30			30	30	
Link Distance (ft)	390			343	501	
Travel Time (s)	8.9			7.8	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	261	0	0	967	65	402
Shared Lane Traffic (%)						
Lane Group Flow (vph)	261	0	0	967	65	402
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases						8
Minimum Split (s)	24.0			16.0	24.0	24.0
Total Split (s)	102.0			102.0	48.0	48.0
Total Split (%)	68.0%			68.0%	32.0%	32.0%
Maximum Green (s)	96.3			96.3	42.3	42.3
Yellow Time (s)	3.7			3.7	3.7	3.7
All-Red Time (s)	2.0			2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	5.7			5.7	5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0				7.0	7.0
Flash Dont Walk (s)	11.0				11.0	11.0
Pedestrian Calls (#/hr)	0				0	0
Act Effct Green (s)	96.3			96.3	42.3	42.3
Actuated g/C Ratio	0.64			0.64	0.28	0.28
v/c Ratio	0.11			0.43	0.13	0.37
Control Delay	10.5			13.9	41.1	4.6
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	10.5			13.9	41.1	4.6

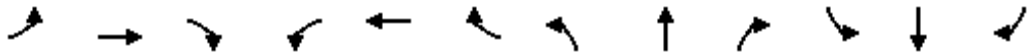
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	B			B	D	A
Approach Delay	10.5			13.9	9.7	
Approach LOS	B			B	A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay: 12.2		Intersection LOS: B	
Intersection Capacity Utilization 42.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: EB WHITING OFF & WHITING ST



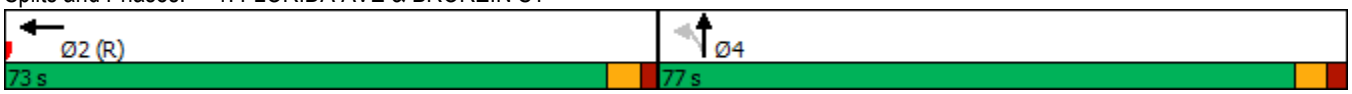
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1430	170	160	1335	0	0	0	0
Future Volume (vph)	0	0	0	0	1430	170	160	1335	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	1.00	1.00	1.00	1.00
Frt					0.984							
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6305	0	1770	5085	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	6305	0	1770	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					17		20					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		273			600			296			353	
Travel Time (s)		6.2			13.6			6.7			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1554	185	174	1451	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1739	0	174	1451	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Minimum Split (s)					30.0		37.0	37.0				
Total Split (s)					73.0		77.0	77.0				
Total Split (%)					48.7%		51.3%	51.3%				
Maximum Green (s)					67.2		70.9	70.9				
Yellow Time (s)					3.7		3.7	3.7				
All-Red Time (s)					2.1		2.4	2.4				
Lost Time Adjust (s)					0.0		0.0	0.0				
Total Lost Time (s)					5.8		6.1	6.1				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		23.0	23.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					67.2		70.9	70.9				
Actuated g/C Ratio					0.45		0.47	0.47				
v/c Ratio					0.61		0.21	0.60				
Control Delay					1.6		17.3	23.1				
Queue Delay					0.5		1.1	0.7				
Total Delay					2.0		18.4	23.8				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					A		B	C				
Approach Delay					2.0			23.2				
Approach LOS					A			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 2 (1%), Referenced to phase 2:WBT and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 12.3		Intersection LOS: B	
Intersection Capacity Utilization 59.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: FLORIDA AVE & BROREIN ST

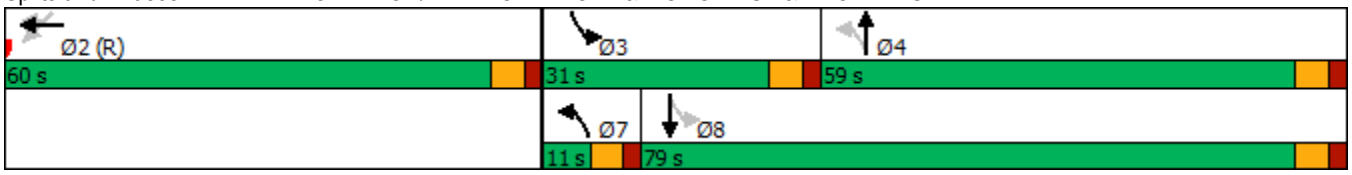


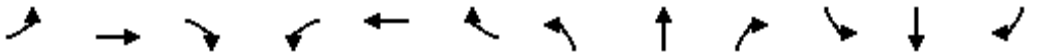
Lane Group	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	SWR	SWR2
Lane Configurations										
Traffic Volume (vph)	20	1335	75	40	320	315	80	780	130	270
Future Volume (vph)	20	1335	75	40	320	315	80	780	130	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.866			0.864		0.850	0.850
Flt Protected		0.999	0.950			0.950				
Satd. Flow (prot)	0	3536	1770	1613	0	1770	1609	0	1583	1583
Flt Permitted		0.999	0.070			0.318				
Satd. Flow (perm)	0	3536	130	1613	0	592	1609	0	1583	1583
Right Turn on Red										Yes
Satd. Flow (RTOR)										293
Link Speed (mph)		30		30			30			
Link Distance (ft)		591		494			379			
Travel Time (s)		13.4		11.2			8.6			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	1451	82	43	348	342	87	848	141	293
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	1473	82	391	0	342	935	0	141	293
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Left	Left	Right	Left	Left	Right	R NA	Right
Median Width(ft)		12		12			12			
Link Offset(ft)		0		0			0			
Crosswalk Width(ft)		16		16			16			
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		15		9	15		9	9	9
Number of Detectors	1	2	1	2		1	2		1	1
Detector Template	Left	Thru	Left	Thru		Left	Thru		Right	Right
Leading Detector (ft)	20	100	20	100		20	100		20	20
Trailing Detector (ft)	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel										
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94		94			94			
Detector 2 Size(ft)		6		6			6			
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			
Detector 2 Channel										
Detector 2 Extend (s)		0.0		0.0			0.0			
Turn Type	Perm	NA	pm+pt	NA		pm+pt	NA		Perm	Free
Protected Phases		2	7	4		3	8			
Permitted Phases	2		4			8			2	Free
Detector Phase	2	2	7	4		3	8		2	
Switch Phase										
Minimum Initial (s)	10.0	10.0	5.0	10.0		5.0	10.0		10.0	

Lane Group	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR	SWR	SWR2
Minimum Split (s)	25.0	25.0	11.0	32.0		11.0	32.0		25.0	
Total Split (s)	60.0	60.0	11.0	59.0		31.0	79.0		60.0	
Total Split (%)	40.0%	40.0%	7.3%	39.3%		20.7%	52.7%		40.0%	
Maximum Green (s)	54.3	54.3	5.3	53.0		25.3	73.0		54.3	
Yellow Time (s)	3.7	3.7	3.7	3.7		3.7	3.7		3.7	
All-Red Time (s)	2.0	2.0	2.0	2.3		2.0	2.3		2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.7	5.7	6.0		5.7	6.0		5.7	
Lead/Lag			Lead	Lag		Lead	Lag			
Lead-Lag Optimize?			Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	None	Max		None	Max		C-Max	
Walk Time (s)	7.0	7.0		7.0			7.0		7.0	
Flash Dont Walk (s)	12.0	12.0		19.0			19.0		12.0	
Pedestrian Calls (#/hr)	0	0		0			0		0	
Act Effct Green (s)		54.3	63.1	57.5		84.3	73.0		54.3	150.0
Actuated g/C Ratio		0.36	0.42	0.38		0.56	0.49		0.36	1.00
v/c Ratio		1.15	0.73	0.63		0.69	1.19		0.25	0.19
Control Delay		106.7	61.8	44.2		25.8	134.8		35.0	0.3
Queue Delay		0.1	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		106.8	61.8	44.2		25.8	134.8		35.0	0.3
LOS		F	E	D		C	F		C	A
Approach Delay		106.8		47.2			105.6			
Approach LOS		F		D			F			

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 140 (93%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.19			
Intersection Signal Delay: 87.4		Intersection LOS: F	
Intersection Capacity Utilization 121.6%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: WB BROREIN ON/WB BROREIN OFF & MORGAN ST & BROREIN ST



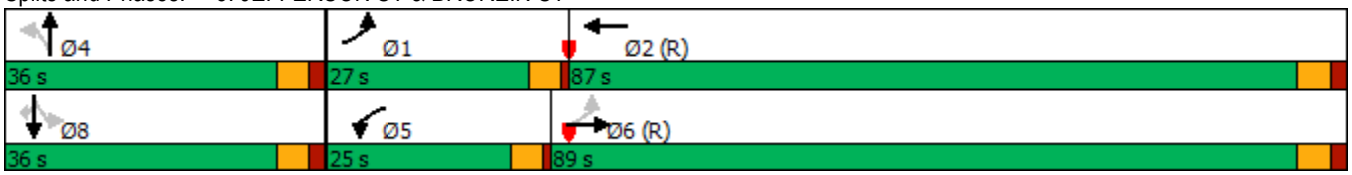


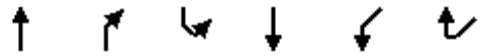
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	430	10	135	1230	190	25	500	20	25	115	100
Future Volume (vph)	195	430	10	135	1230	190	25	500	20	25	115	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	80		0	115		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.997			0.980			0.994				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1857	0	1770	3468	0	1770	3518	0	1770	1863	1583
Flt Permitted	0.077			0.950			0.605			0.179		
Satd. Flow (perm)	143	1857	0	1770	3468	0	1127	3518	0	333	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			18			2				109
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		591			202			322			162	
Travel Time (s)		13.4			4.6			7.3			3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	212	467	11	147	1337	207	27	543	22	27	125	109
Shared Lane Traffic (%)												
Lane Group Flow (vph)	212	478	0	147	1544	0	27	565	0	27	125	109
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6						4			8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6		5	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	10.0	24.0		10.0	24.0		24.0	24.0		24.0	24.0	24.0
Total Split (s)	27.0	89.0		25.0	87.0		36.0	36.0		36.0	36.0	36.0
Total Split (%)	18.0%	59.3%		16.7%	58.0%		24.0%	24.0%		24.0%	24.0%	24.0%
Maximum Green (s)	22.5	83.3		20.5	81.3		30.3	30.3		30.3	30.3	30.3
Yellow Time (s)	3.5	3.7		3.5	3.7		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	1.0	2.0		1.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	5.7		4.5	5.7		5.7	5.7		5.7	5.7	5.7
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	Max
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)	105.1	86.8		17.0	86.7		30.3	30.3		30.3	30.3	30.3
Actuated g/C Ratio	0.70	0.58		0.11	0.58		0.20	0.20		0.20	0.20	0.20
v/c Ratio	0.74	0.44		0.73	0.77		0.12	0.79		0.40	0.33	0.27
Control Delay	37.5	34.7		85.2	27.7		50.8	65.9		72.1	54.1	10.1
Queue Delay	0.0	2.8		0.0	2.9		0.0	0.0		0.0	0.0	0.0
Total Delay	37.5	37.5		85.2	30.7		50.8	65.9		72.1	54.1	10.1
LOS	D	D		F	C		D	E		E	D	B
Approach Delay		37.5			35.4			65.2			37.6	
Approach LOS		D			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 135 (90%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 41.5		Intersection LOS: D	
Intersection Capacity Utilization 84.9%		ICU Level of Service E	
Analysis Period (min) 15			

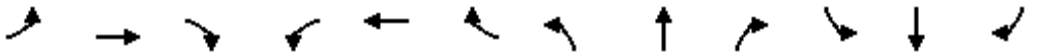
Splits and Phases: 3: JEFFERSON ST & BROREIN ST



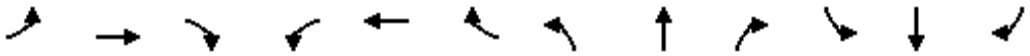


Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	490	395	475	240	0	0
Future Volume (vph)	490	395	475	240	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	115		0	0
Storage Lanes		1	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	162			583	231	
Travel Time (s)	3.7			13.3	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	533	429	516	261	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	533	429	516	261	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
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		



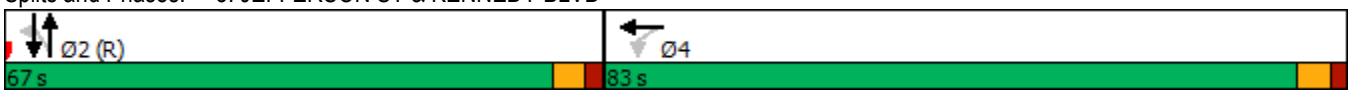
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	275	2315	360	160	700	0	0	100	55
Future Volume (vph)	0	0	0	275	2315	360	160	700	0	0	100	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.980						0.947	
Flt Protected				0.950				0.991				
Satd. Flow (prot)	0	0	0	1770	6280	0	0	3507	0	0	3352	0
Flt Permitted				0.950				0.838				
Satd. Flow (perm)	0	0	0	1770	6280	0	0	2966	0	0	3352	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					38						1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			319			716			284	
Travel Time (s)		13.1			7.3			16.3			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	299	2516	391	174	761	0	0	109	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	299	2907	0	0	935	0	0	169	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					4			2			2	
Permitted Phases				4			2					
Minimum Split (s)				26.0	26.0		26.0	26.0			26.0	
Total Split (s)				83.0	83.0		67.0	67.0			67.0	
Total Split (%)				55.3%	55.3%		44.7%	44.7%			44.7%	
Maximum Green (s)				77.3	77.3		61.1	61.1			61.1	
Yellow Time (s)				3.7	3.7		3.7	3.7			3.7	
All-Red Time (s)				2.0	2.0		2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0			0.0			0.0	
Total Lost Time (s)				5.7	5.7			5.9			5.9	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				13.0	13.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				77.3	77.3			61.1			61.1	
Actuated g/C Ratio				0.52	0.52			0.41			0.41	
v/c Ratio				0.33	0.89			0.77			0.12	
Control Delay				18.3	26.5			43.8			27.9	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				18.3	26.5			43.8			27.9	



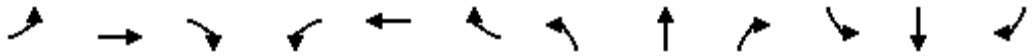
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				B	C			D			C	
Approach Delay					25.8			43.8			27.9	
Approach LOS					C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 97 (65%), Referenced to phase 2:NBSB and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 29.8		Intersection LOS: C	
Intersection Capacity Utilization 86.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: JEFFERSON ST & KENNEDY BLVD



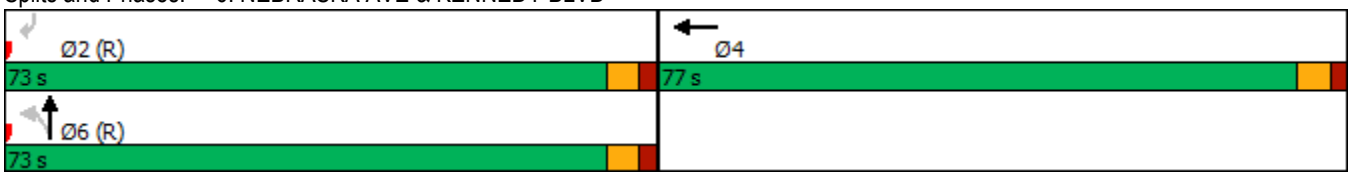
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1175	265	50	415	0	0	0	135
Future Volume (vph)	0	0	0	0	1175	265	50	415	0	0	0	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88
Frt					0.972							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4943	0	1770	1863	0	0	0	2787
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	4943	0	1770	1863	0	0	0	2787
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					46		29					50
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		847			465			292			201	
Travel Time (s)		19.3			10.6			6.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1277	288	54	451	0	0	0	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1565	0	54	451	0	0	0	147
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				Perm
Protected Phases					4			6				
Permitted Phases							6					2
Minimum Split (s)					30.0		25.0	25.0				27.0
Total Split (s)					77.0		73.0	73.0				73.0
Total Split (%)					51.3%		48.7%	48.7%				48.7%
Maximum Green (s)					71.2		67.1	67.1				67.1
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.1		2.2	2.2				2.2
Lost Time Adjust (s)					0.0		0.0	0.0				0.0
Total Lost Time (s)					5.8		5.9	5.9				5.9
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				7.0
Flash Dont Walk (s)					17.0		12.0	12.0				14.0
Pedestrian Calls (#/hr)					0		0	0				0
Act Effct Green (s)					71.2		67.1	67.1				67.1
Actuated g/C Ratio					0.47		0.45	0.45				0.45
v/c Ratio					0.66		0.07	0.54				0.12
Control Delay					30.8		12.9	33.3				17.8
Queue Delay					0.0		0.0	0.9				0.0
Total Delay					30.8		12.9	34.2				17.8

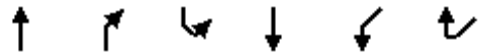


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					C		B	C				B
Approach Delay					30.8			31.9			17.8	
Approach LOS					C			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 94 (63%), Referenced to phase 2:SBR and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 30.2		Intersection LOS: C	
Intersection Capacity Utilization 60.2%		ICU Level of Service B	
Analysis Period (min) 15			

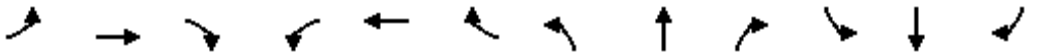
Splits and Phases: 6: NEBRASKA AVE & KENNEDY BLVD





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	525	155	365	135	0	0
Future Volume (vph)	525	155	365	135	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	130		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt	0.969					
Flt Protected			0.950			
Satd. Flow (prot)	1805	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1805	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			390	272	
Travel Time (s)	4.6			8.9	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	571	168	397	147	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	739	0	397	147	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

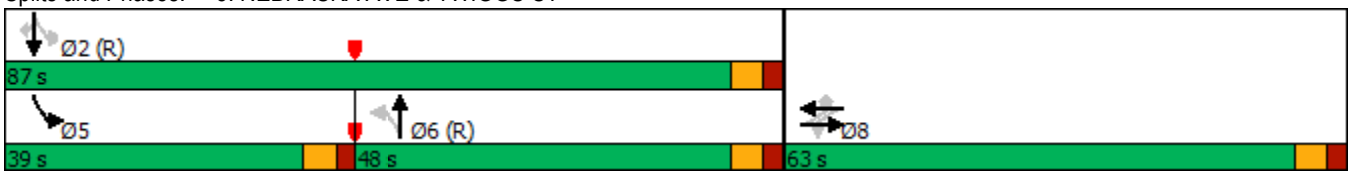


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	905	140	45	250	85	25	380	120	450	315	30
Future Volume (vph)	60	905	140	45	250	85	25	380	120	450	315	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	150		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.981				0.850		0.964				0.850
Flt Protected		0.997			0.992		0.950			0.950		
Satd. Flow (prot)	0	3462	0	0	3511	1583	1770	1796	0	1770	3539	1583
Flt Permitted		0.897			0.544		0.546			0.084		
Satd. Flow (perm)	0	3114	0	0	1925	1583	1017	1796	0	156	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12				92		10				33
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			652			390			257	
Travel Time (s)		17.7			14.8			8.9			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	984	152	49	272	92	27	413	130	489	342	33
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1201	0	0	321	92	27	543	0	489	342	33
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm
Protected Phases		8			8			6		5	2	
Permitted Phases	8			8		8	6			2		2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8		8	8	8	6	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		5.0	10.0	10.0
Minimum Split (s)	30.0	30.0		30.0	30.0	30.0	28.0	28.0		11.0	28.0	28.0
Total Split (s)	63.0	63.0		63.0	63.0	63.0	48.0	48.0		39.0	87.0	87.0
Total Split (%)	42.0%	42.0%		42.0%	42.0%	42.0%	32.0%	32.0%		26.0%	58.0%	58.0%
Maximum Green (s)	56.9	56.9		56.9	56.9	56.9	42.0	42.0		33.3	81.0	81.0
Yellow Time (s)	3.7	3.7		3.7	3.7	3.7	3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.4		2.4	2.4	2.4	2.3	2.3		2.0	2.3	2.3
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.1			6.1	6.1	6.0	6.0		5.7	6.0	6.0
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		2.0	3.0	3.0
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Dont Walk (s)	16.0	16.0		16.0	16.0	16.0	15.0	15.0			15.0	15.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	0
Act Effct Green (s)		56.9			56.9	56.9	42.0	42.0		81.3	81.0	81.0
Actuated g/C Ratio		0.38			0.38	0.38	0.28	0.28		0.54	0.54	0.54
v/c Ratio		1.01			1.00dl	0.14	0.10	1.06		1.11	0.18	0.04
Control Delay		74.1			30.6	7.4	30.8	93.0		117.3	17.9	5.0
Queue Delay		3.6			0.0	0.0	0.0	3.9		0.0	0.0	0.0
Total Delay		77.7			30.6	7.4	30.8	96.9		117.3	17.9	5.0
LOS		E			C	A	C	F		F	B	A
Approach Delay		77.7			25.4			93.8			73.6	
Approach LOS		E			C			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 104 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 72.5		Intersection LOS: E	
Intersection Capacity Utilization 111.7%		ICU Level of Service H	
Analysis Period (min) 15			
dl Defacto Left Lane. Recode with 1 though lane as a left lane.			

Splits and Phases: 8: NEBRASKA AVE & TWIGGS ST



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	560	730	185	160	340	210	40	1290	180	0	0	0
Future Volume (vph)	560	730	185	160	340	210	40	1290	180	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	1.00
Frt		0.981			0.956			0.982				
Flt Protected		0.981			0.989			0.999				
Satd. Flow (prot)	0	3406	0	0	3346	0	0	4989	0	0	5085	1863
Flt Permitted		0.534			0.497			0.950				
Satd. Flow (perm)	0	1854	0	0	1682	0	0	4744	0	0	5085	1863
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			60			15				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			772			501			413	
Travel Time (s)		14.8			17.5			11.4			9.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	609	793	201	174	370	228	43	1402	196	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1603	0	0	772	0	0	1641	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA				Free
Protected Phases	1	6			2			4			8	
Permitted Phases	6			2			4			8		Free
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	11.0	46.0		17.0	17.0		27.0	27.0		17.0	17.0	
Total Split (s)	11.0	91.0		80.0	80.0		42.0	42.0		17.0	17.0	
Total Split (%)	7.3%	60.7%		53.3%	53.3%		28.0%	28.0%		11.3%	11.3%	
Maximum Green (s)	5.0	84.2		73.2	73.2		35.6	35.6		10.6	10.6	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	2.0	2.8		2.8	2.8		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.8			6.8			6.4			6.4	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)		7.0					7.0	7.0				
Flash Dont Walk (s)		32.0					13.0	13.0				
Pedestrian Calls (#/hr)		0					0	0				
Act Effct Green (s)		84.2			73.2			52.6				
Actuated g/C Ratio		0.56			0.49			0.35				
v/c Ratio		1.93dl			1.85dl			0.98				
Control Delay		233.4			48.2			65.4				
Queue Delay		0.0			0.0			0.0				
Total Delay		233.4			48.2			65.4				
LOS		F			D			E				
Approach Delay		233.4			48.2			65.4				
Approach LOS		F			D			E				

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.47			
Intersection Signal Delay: 129.2		Intersection LOS: F	
Intersection Capacity Utilization 109.5%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 9: MERIDIAN AVE & TWIGGS ST

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Lane Configurations									
Traffic Volume (vph)	235	125	45	1105	1625	0	285	0	0
Future Volume (vph)	235	125	45	1105	1625	0	285	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt		0.850					0.850		
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	5085	5085	0	1583	0	0
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	5085	5085	0	1583	0	0
Link Speed (mph)	30			30	30			30	
Link Distance (ft)	404			536	498			405	
Travel Time (s)	9.2			12.2	11.3			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	255	136	49	1201	1766	0	310	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	255	136	49	1201	1766	0	310	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right	Right	Left	Right
Median Width(ft)	12			12	12			0	
Link Offset(ft)	0			0	0			0	
Crosswalk Width(ft)	16			16	16			16	
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9	9	15	9
Sign Control	Stop			Free	Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 57.1%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	182.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations								
Traffic Vol, veh/h	235	125	45	1105	1625	0	0	0
Future Vol, veh/h	235	125	45	1105	1625	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	-	-
Storage Length	0	0	0	-	-	0	-	-
Veh in Median Storage, #	0	-	-	0	0	-	0	-
Grade, %	0	-	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	255	136	49	1201	1766	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2344	883	1766	0	-	0
Stage 1	1766	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	~ 61	248	164	-	-	0
Stage 1	~ 80	-	-	-	-	0
Stage 2	478	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 43	248	164	-	-	-
Mov Cap-2 Maneuver	~ 43	-	-	-	-	-
Stage 1	~ 56	-	-	-	-	-
Stage 2	478	-	-	-	-	-

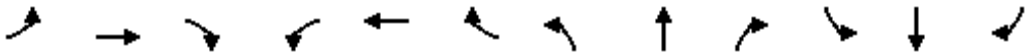
Approach	EB	NB	SB
HCM Control Delay, $	1584.6	1.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	164	-	43	248	-
HCM Lane V/C Ratio	0.298	-	5.94	0.548	-
HCM Control Delay (s)	36	-	$ 2408.4	35.8	-
HCM Lane LOS	E	-	F	E	-
HCM 95th %tile Q(veh)	1.2	-	29.8	3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations											
Traffic Volume (vph)	0	0	170	1170	0	0	1860	0	50	0	165
Future Volume (vph)	0	0	170	1170	0	0	1860	0	50	0	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00	1.00	1.00	1.00
Frt											0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Flt Permitted			0.950						0.950		
Satd. Flow (perm)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	264			498			271			329	
Travel Time (s)	6.0			11.3			6.2			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	185	1272	0	0	2022	0	54	0	179
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	185	1272	0	0	2022	0	54	0	179
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			12	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Sign Control	Free			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			

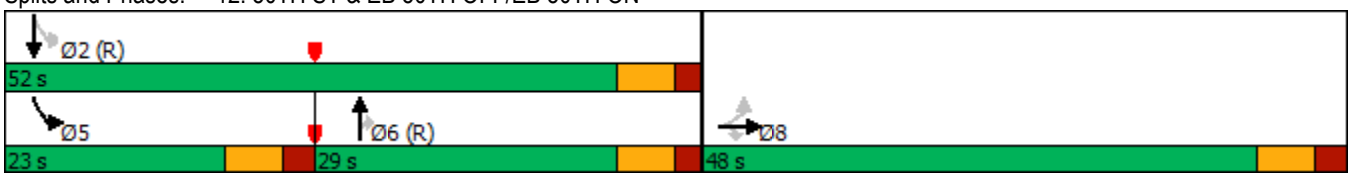


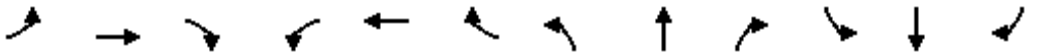
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	145	0	595	0	0	0	0	1105	50	300	1570	0
Future Volume (vph)	145	0	595	0	0	0	0	1105	50	300	1570	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.128		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	238	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			111						116			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		549			603			383			284	
Travel Time (s)		12.5			13.7			8.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	158	0	647	0	0	0	0	1201	54	326	1707	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	158	647	0	0	0	0	1201	54	326	1707	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8						6	2		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8	8					6	6	5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	5.0	10.0	
Minimum Split (s)	47.0	47.0	47.0					17.0	17.0	12.0	24.0	
Total Split (s)	48.0	48.0	48.0					29.0	29.0	23.0	52.0	
Total Split (%)	48.0%	48.0%	48.0%					29.0%	29.0%	23.0%	52.0%	
Maximum Green (s)	41.1	41.1	41.1					22.5	22.5	16.3	45.5	
Yellow Time (s)	4.4	4.4	4.4					4.4	4.4	4.4	4.4	
All-Red Time (s)	2.5	2.5	2.5					2.1	2.1	2.3	2.1	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.9	6.9					6.5	6.5	6.7	6.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0					3.0	3.0	2.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Dont Walk (s)	33.0	33.0	33.0								10.0	
Pedestrian Calls (#/hr)	0	0	0								0	
Act Effct Green (s)		39.8	39.8					24.5	24.5	46.6	46.8	
Actuated g/C Ratio		0.40	0.40					0.24	0.24	0.47	0.47	
v/c Ratio		0.22	0.93					0.77	0.11	0.93	0.72	
Control Delay		20.5	45.2					39.6	0.5	55.3	10.2	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.0	
Total Delay		20.5	45.2					39.6	0.5	55.3	10.2	
LOS		C	D					D	A	E	B	
Approach Delay		40.3						37.9			17.5	
Approach LOS		D						D			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 6 (6%), Referenced to phase 2:SBTL and 6:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 28.2		Intersection LOS: C	
Intersection Capacity Utilization 78.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 12: 50TH ST & EB 50TH OFF/EB 50TH ON



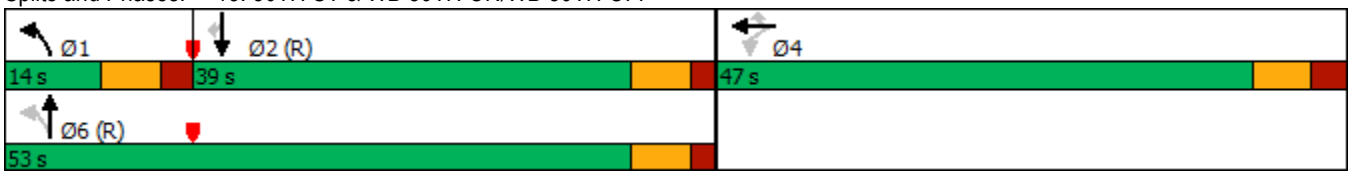


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	0	140	170	1080	0	0	1830	110
Future Volume (vph)	0	0	0	40	0	140	170	1080	0	0	1830	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	140		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.063					
Satd. Flow (perm)	0	0	0	0	1770	1583	117	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						111						120
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		457			359			284			339	
Travel Time (s)		10.4			8.2			6.5			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	43	0	152	185	1174	0	0	1989	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	43	152	185	1174	0	0	1989	120
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				4	4	4	1	6			2	2
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	10.0
Minimum Split (s)				47.0	47.0	47.0	12.0	24.0			24.0	24.0
Total Split (s)				47.0	47.0	47.0	14.0	53.0			39.0	39.0
Total Split (%)				47.0%	47.0%	47.0%	14.0%	53.0%			39.0%	39.0%
Maximum Green (s)				39.8	39.8	39.8	7.2	46.6			32.6	32.6
Yellow Time (s)				4.4	4.4	4.4	4.4	4.4			4.4	4.4
All-Red Time (s)				2.8	2.8	2.8	2.4	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.2	7.2	6.8	6.4			6.4	6.4
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	2.0	3.0			3.0	3.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)				32.0	32.0	32.0		10.0			10.0	10.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)					11.5	11.5	74.5	74.9			56.3	56.3
Actuated g/C Ratio					0.12	0.12	0.74	0.75			0.56	0.56
v/c Ratio					0.21	0.54	0.66	0.31			0.55	0.13
Control Delay					41.8	21.1	41.2	4.2			15.2	2.8
Queue Delay					0.0	0.0	0.0	0.4			0.0	0.0
Total Delay					41.8	21.1	41.2	4.6			15.2	2.8
LOS					D	C	D	A			B	A
Approach Delay					25.7			9.6			14.5	
Approach LOS					C			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 13.3		Intersection LOS: B	
Intersection Capacity Utilization 78.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: 50TH ST & WB 50TH ON/WB 50TH OFF



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	90	0	705	0	0	915
Future Volume (vph)	90	0	705	0	0	915
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	3539	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	3539	0	0	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	292		343			439
Travel Time (s)	6.6		7.8			10.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	0	766	0	0	995
Shared Lane Traffic (%)						
Lane Group Flow (vph)	98	0	766	0	0	995
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	90	0	705	0	0	915
Future Vol, veh/h	90	0	705	0	0	915
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	0	766	0	0	995

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1264	-	0	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-
Pot Cap-1 Maneuver	161	0	-	0	0	-
Stage 1	419	0	-	0	0	-
Stage 2	576	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	161	-	-	-	-	-
Mov Cap-2 Maneuver	292	-	-	-	-	-
Stage 1	419	-	-	-	-	-
Stage 2	576	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.4	0	0
HCM LOS	C		

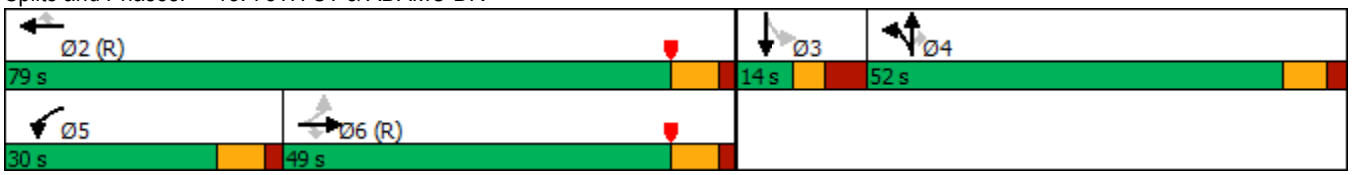
Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	292	-
HCM Lane V/C Ratio	-	0.335	-
HCM Control Delay (s)	-	23.4	-
HCM Lane LOS	-	C	-
HCM 95th %tile Q(veh)	-	1.4	-

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1295	515	395	860	10	345	0	390	10	5	5
Future Volume (vph)	5	1295	515	395	860	10	345	0	390	10	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	0		315	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.968	
Flt Protected	0.950			0.950			0.950	0.950			0.974	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1681	1681	1583	0	1756	0
Flt Permitted	0.306			0.950			0.950	0.950			0.847	
Satd. Flow (perm)	570	3539	1583	1770	3539	1583	1681	1681	1583	0	1527	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			560			91			419		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		887			638			788			238	
Travel Time (s)		20.2			14.5			17.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	1408	560	429	935	11	375	0	424	11	5	5
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	5	1408	560	429	935	11	187	188	424	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		25			25			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Perm	NA	
Protected Phases		6		5	2		4	4			3	
Permitted Phases	6		6			2			4	3		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6	6	5	2	2	4	4	4	3	3	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	26.0	26.0	26.0	13.0	27.0	27.0	52.0	52.0	52.0	14.0	14.0	
Total Split (s)	49.0	49.0	49.0	30.0	79.0	79.0	52.0	52.0	52.0	14.0	14.0	
Total Split (%)	33.8%	33.8%	33.8%	20.7%	54.5%	54.5%	35.9%	35.9%	35.9%	9.7%	9.7%	
Maximum Green (s)	41.8	41.8	41.8	22.8	71.8	71.8	44.9	44.9	44.9	6.0	6.0	
Yellow Time (s)	5.2	5.2	5.2	5.2	5.2	5.2	4.8	4.8	4.8	3.4	3.4	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.3	4.6	4.6	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.1	7.1		8.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0			
Flash Dont Walk (s)	11.0	11.0	11.0		12.0	12.0	37.0	37.0	37.0			
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0			
Act Effct Green (s)	41.8	41.8	41.8	46.8	95.8	95.8	26.5	26.5	26.5		6.0	
Actuated g/C Ratio	0.29	0.29	0.29	0.32	0.66	0.66	0.18	0.18	0.18		0.04	
v/c Ratio	0.03	1.38	0.66	0.75	0.40	0.01	0.61	0.61	0.67		0.31	
Control Delay	38.0	216.4	7.1	55.2	14.0	0.0	61.8	61.9	10.0		67.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	38.0	216.4	7.1	55.2	14.0	0.0	61.8	61.9	10.0		67.8	
LOS	D	F	A	E	B	A	E	E	A		E	
Approach Delay		156.5			26.7			34.3			67.8	
Approach LOS		F			C			C			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.38			
Intersection Signal Delay: 89.8		Intersection LOS: F	
Intersection Capacity Utilization 91.8%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 15: 78TH ST & ADAMO DR



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1680	15	145	1265	0	0
Future Volume (vph)	1680	15	145	1265	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	1.00
Frt		0.850				
Flt Protected				0.995		
Satd. Flow (prot)	5085	1583	0	5060	0	0
Flt Permitted				0.995		
Satd. Flow (perm)	5085	1583	0	5060	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	638			376	435	
Travel Time (s)	14.5			8.5	9.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1826	16	158	1375	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1826	16	0	1533	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	25			25	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		

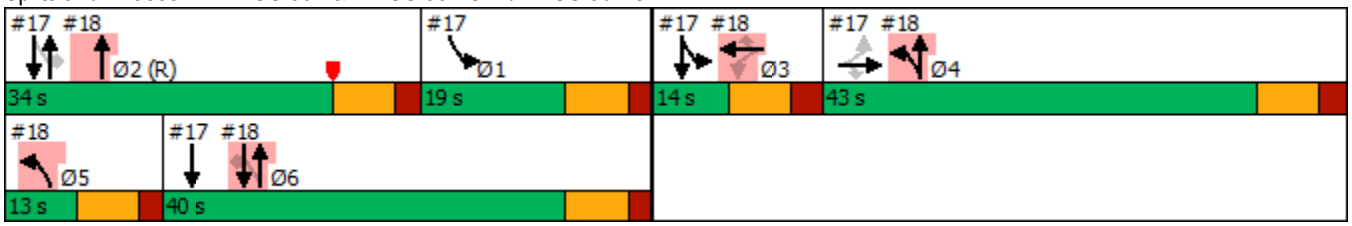
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	0	1110	0	0	0	0	1360	140	510	1955	0
Future Volume (vph)	150	0	1110	0	0	0	0	1360	140	510	1955	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	315		500	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.149		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	278	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			259						192			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		739			677			1414			381	
Travel Time (s)		16.8			15.4			32.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	0	1207	0	0	0	0	1478	152	554	2125	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	1207	0	0	0	0	1478	152	554	2125	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0			30			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	D.P+P	NA	
Protected Phases		4						2		1 3	6 3 2	
Permitted Phases	4		4						2	2		

Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4					2	2	1 3	6 3 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					15.0	15.0			
Minimum Split (s)	13.0	13.0	13.0					23.0	23.0			
Total Split (s)	43.0	43.0	43.0					34.0	34.0			
Total Split (%)	39.1%	39.1%	39.1%					30.9%	30.9%			
Maximum Green (s)	35.5	35.5	35.5					26.9	26.9			
Yellow Time (s)	5.1	5.1	5.1					5.1	5.1			
All-Red Time (s)	2.4	2.4	2.4					2.0	2.0			
Lost Time Adjust (s)		0.0	0.0					0.0	0.0			
Total Lost Time (s)		7.5	7.5					7.1	7.1			
Lead/Lag	Lag	Lag	Lag					Lead	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes					Yes	Yes			
Vehicle Extension (s)	4.0	4.0	4.0					3.0	3.0			
Recall Mode	None	None	None					C-Max	C-Max			
Act Effct Green (s)		35.5	35.5					26.9	26.9	52.8	59.9	
Actuated g/C Ratio		0.32	0.32					0.24	0.24	0.48	0.54	
v/c Ratio		0.29	1.76					0.94	0.29	1.14	0.77	
Control Delay		29.5	369.9					53.9	3.5	86.4	14.5	
Queue Delay		0.0	0.0					0.3	0.0	0.4	0.5	
Total Delay		29.5	369.9					54.2	3.5	86.8	14.9	
LOS		C	F					D	A	F	B	
Approach Delay		329.4						49.5			29.8	
Approach LOS		F						D			C	

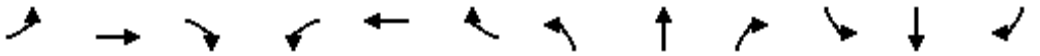
Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:NBSB, Start of Yellow			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.76			
Intersection Signal Delay: 107.7		Intersection LOS: F	
Intersection Capacity Utilization 118.7%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 17: US 301 & EB US 301 OFF/EB US 301 ON



Lane Group	Ø1	Ø3	Ø5	Ø6
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	15.0
Minimum Split (s)	13.0	13.0	13.0	23.0
Total Split (s)	19.0	14.0	13.0	40.0
Total Split (%)	17%	13%	12%	36%
Maximum Green (s)	11.9	6.2	5.9	32.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.7	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	4.0	3.0
Recall Mode	None	None	Max	Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	130	0	180	345	1165	0	0	2335	165
Future Volume (vph)	0	0	0	130	0	180	345	1165	0	0	2335	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	300		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.122					
Satd. Flow (perm)	0	0	0	0	1770	1583	227	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						256						192
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			711			381			795	
Travel Time (s)		13.2			16.2			8.7			18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	141	0	196	375	1266	0	0	2538	179
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	141	196	375	1266	0	0	2538	179
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			20			30	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	D.P+P	NA			NA	Perm
Protected Phases					3		5 4	2 4 6			6	
Permitted Phases				3		3	6					6

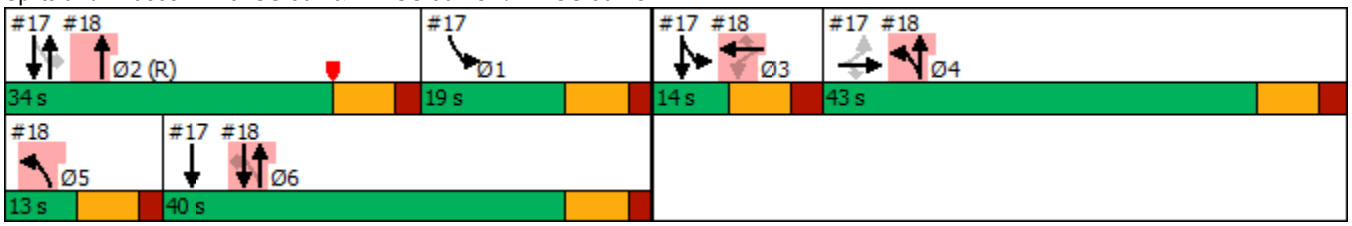
Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				3	3	3	5 4	2 4 6			6	6
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0					15.0	15.0
Minimum Split (s)				13.0	13.0	13.0					23.0	23.0
Total Split (s)				14.0	14.0	14.0					40.0	40.0
Total Split (%)				12.7%	12.7%	12.7%					36.4%	36.4%
Maximum Green (s)				6.2	6.2	6.2					32.9	32.9
Yellow Time (s)				5.1	5.1	5.1					5.1	5.1
All-Red Time (s)				2.7	2.7	2.7					2.0	2.0
Lost Time Adjust (s)					0.0	0.0					0.0	0.0
Total Lost Time (s)					7.8	7.8					7.1	7.1
Lead/Lag				Lead	Lead	Lead					Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0					3.0	3.0
Recall Mode				None	None	None					Max	Max
Act Effct Green (s)					6.2	6.2	81.8	88.9			32.9	32.9
Actuated g/C Ratio					0.06	0.06	0.74	0.81			0.30	0.30
v/c Ratio					1.42	0.59	0.44	0.31			1.32	0.29
Control Delay					278.0	9.9	42.3	0.4			182.9	4.8
Queue Delay					0.0	0.0	2.0	0.2			0.2	0.0
Total Delay					278.0	9.9	44.3	0.6			183.1	4.8
LOS					F	A	D	A			F	A
Approach Delay					122.0			10.6			171.3	
Approach LOS					F			B			F	

Intersection Summary

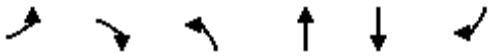
Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:NBSB, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.76
Intersection Signal Delay: 111.6 Intersection LOS: F
Intersection Capacity Utilization 118.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 18: US 301 & WB US 301 ON/WB US 301 OFF

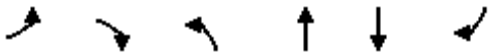


Lane Group	Ø1	Ø2	Ø4	Ø5
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	15.0	5.0	5.0
Minimum Split (s)	13.0	23.0	13.0	13.0
Total Split (s)	19.0	34.0	43.0	13.0
Total Split (%)	17%	31%	39%	12%
Maximum Green (s)	11.9	26.9	35.5	5.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.4	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0	4.0	4.0
Recall Mode	None	C-Max	None	Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary



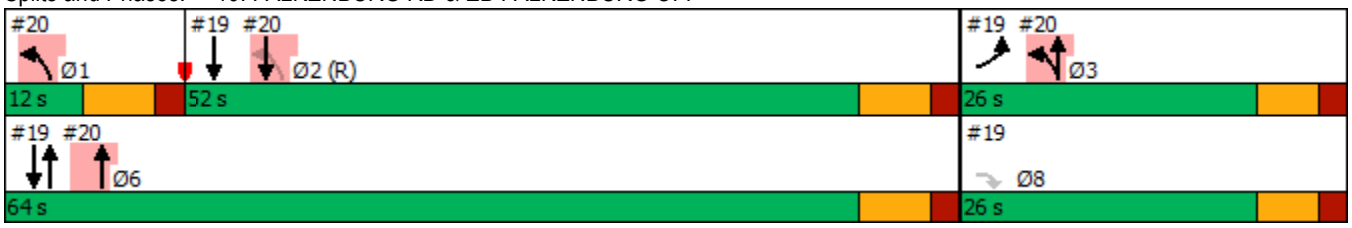
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Lane Configurations								
Traffic Volume (vph)	430	600	0	1160	1505	0		
Future Volume (vph)	430	600	0	1160	1505	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	0.97	0.88	1.00	0.91	0.91	1.00		
Frt		0.850						
Flt Protected	0.950							
Satd. Flow (prot)	3433	2787	0	5085	5085	0		
Flt Permitted	0.950							
Satd. Flow (perm)	3433	2787	0	5085	5085	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		59						
Link Speed (mph)	30			30	30			
Link Distance (ft)	519			688	550			
Travel Time (s)	11.8			15.6	12.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	467	652	0	1261	1636	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	467	652	0	1261	1636	0		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	24			30	30			
Link Offset(ft)	0			0	0			
Crosswalk Width(ft)	16			16	16			
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	9	15			9		
Number of Detectors	1	1		2	2			
Detector Template	Left	Right		Thru	Thru			
Leading Detector (ft)	20	20		100	100			
Trailing Detector (ft)	0	0		0	0			
Detector 1 Position(ft)	0	0		0	0			
Detector 1 Size(ft)	20	20		6	6			
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			
Detector 2 Position(ft)				94	94			
Detector 2 Size(ft)				6	6			
Detector 2 Type				Cl+Ex	Cl+Ex			
Detector 2 Channel								
Detector 2 Extend (s)				0.0	0.0			
Turn Type	Prot	Perm		NA	NA			
Protected Phases	3			6	6 2		1	2
Permitted Phases		8						
Detector Phase	3	8		6	6 2			
Switch Phase								
Minimum Initial (s)	6.0	6.0		15.0			5.0	15.0

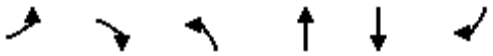


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Minimum Split (s)	23.0	23.0		23.0			12.0	23.0
Total Split (s)	26.0	26.0		64.0			12.0	52.0
Total Split (%)	28.9%	28.9%		71.1%			13%	58%
Maximum Green (s)	19.9	19.9		57.2			5.2	45.2
Yellow Time (s)	4.1	4.1		4.8			4.8	4.8
All-Red Time (s)	2.0	2.0		2.0			2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0				
Total Lost Time (s)	6.1	6.1		6.8				
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)	3.5	3.5		4.0			6.0	4.0
Recall Mode	None	None		Max			Min	C-Max
Act Effct Green (s)	19.9	19.9		57.2	57.2			
Actuated g/C Ratio	0.22	0.22		0.64	0.64			
v/c Ratio	0.62	0.98		0.39	0.51			
Control Delay	35.7	64.8		8.4	6.8			
Queue Delay	0.0	0.0		0.0	0.0			
Total Delay	35.7	64.8		8.4	6.8			
LOS	D	E		A	A			
Approach Delay	52.6			8.4	6.8			
Approach LOS	D			A	A			

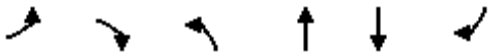
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 20.1		Intersection LOS: C	
Intersection Capacity Utilization 75.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 19: FALKENBURG RD & EB FALKENBURG OFF





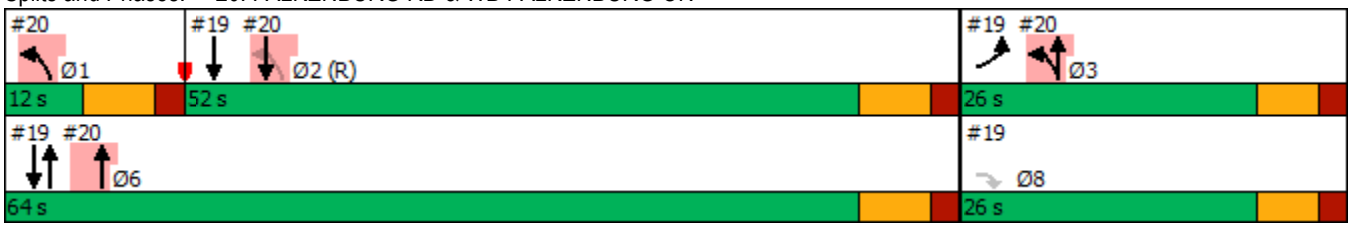
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	0	0	410	1180	1505	330				
Future Volume (vph)	0	0	410	1180	1505	330				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00				
Frt						0.850				
Flt Protected			0.950							
Satd. Flow (prot)	0	0	1770	3539	3539	1583				
Flt Permitted			0.088							
Satd. Flow (perm)	0	0	164	3539	3539	1583				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)						183				
Link Speed (mph)	30			30	30					
Link Distance (ft)	492			550	852					
Travel Time (s)	11.2			12.5	19.4					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				
Adj. Flow (vph)	0	0	446	1283	1636	359				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	446	1283	1636	359				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			30	30					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Turning Speed (mph)	15	9	15			9				
Number of Detectors			1	2	2	1				
Detector Template			Left	Thru	Thru	Right				
Leading Detector (ft)			20	100	100	20				
Trailing Detector (ft)			0	0	0	0				
Detector 1 Position(ft)			0	0	0	0				
Detector 1 Size(ft)			20	6	6	20				
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel										
Detector 1 Extend (s)			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94					
Detector 2 Size(ft)				6	6					
Detector 2 Type				Cl+Ex	Cl+Ex					
Detector 2 Channel										
Detector 2 Extend (s)				0.0	0.0					
Turn Type			D.P+P	NA	NA	Free				
Protected Phases			1 3	6 3	2		1	3	6	8
Permitted Phases			2			Free				
Detector Phase			1 3	6 3	2					
Switch Phase										
Minimum Initial (s)					15.0		5.0	6.0	15.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Minimum Split (s)					23.0		12.0	23.0	23.0	23.0
Total Split (s)					52.0		12.0	26.0	64.0	26.0
Total Split (%)					57.8%		13%	29%	71%	29%
Maximum Green (s)					45.2		5.2	19.9	57.2	19.9
Yellow Time (s)					4.8		4.8	4.1	4.8	4.1
All-Red Time (s)					2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)					0.0					
Total Lost Time (s)					6.8					
Lead/Lag					Lag		Lead			
Lead-Lag Optimize?					Yes		Yes			
Vehicle Extension (s)					4.0		6.0	3.5	4.0	3.5
Recall Mode					C-Max		Min	None	Max	None
Act Effct Green (s)			76.4	90.0	45.2	90.0				
Actuated g/C Ratio			0.85	1.00	0.50	1.00				
v/c Ratio			0.64	0.36	0.92	0.23				
Control Delay			25.7	0.4	30.9	0.3				
Queue Delay			0.0	0.0	0.0	0.0				
Total Delay			25.7	0.4	30.9	0.3				
LOS			C	A	C	A				
Approach Delay				6.9	25.4					
Approach LOS				A	C					

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:SBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 16.8		Intersection LOS: B	
Intersection Capacity Utilization 75.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 20: FALKENBURG RD & WB FALKENBURG ON

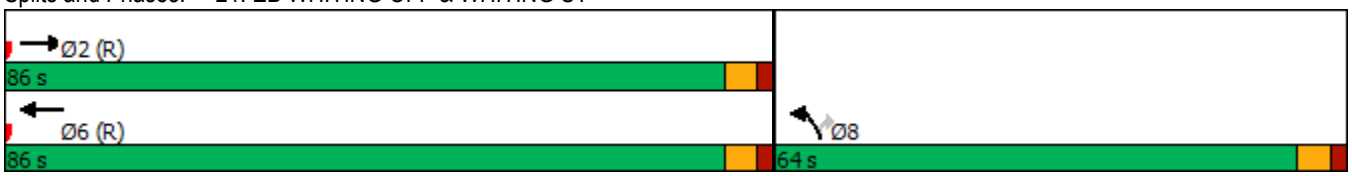


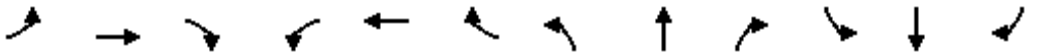
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	495	0	0	455	70	310
Future Volume (vph)	495	0	0	455	70	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.88
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3539	0	0	3539	1770	2787
Flt Permitted					0.950	
Satd. Flow (perm)	3539	0	0	3539	1770	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						337
Link Speed (mph)	30			30	30	
Link Distance (ft)	390			343	501	
Travel Time (s)	8.9			7.8	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	538	0	0	495	76	337
Shared Lane Traffic (%)						
Lane Group Flow (vph)	538	0	0	495	76	337
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases						8
Minimum Split (s)	24.0			16.0	24.0	24.0
Total Split (s)	86.0			86.0	64.0	64.0
Total Split (%)	57.3%			57.3%	42.7%	42.7%
Maximum Green (s)	80.3			80.3	58.3	58.3
Yellow Time (s)	3.7			3.7	3.7	3.7
All-Red Time (s)	2.0			2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	5.7			5.7	5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Walk Time (s)	7.0				7.0	7.0
Flash Dont Walk (s)	11.0				11.0	11.0
Pedestrian Calls (#/hr)	0				0	0
Act Effct Green (s)	80.3			80.3	58.3	58.3
Actuated g/C Ratio	0.54			0.54	0.39	0.39
v/c Ratio	0.28			0.26	0.11	0.26
Control Delay	19.6			19.3	29.9	3.3
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	19.6			19.3	29.9	3.3

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
LOS	B			B	C	A
Approach Delay	19.6			19.3	8.2	
Approach LOS	B			B	A	

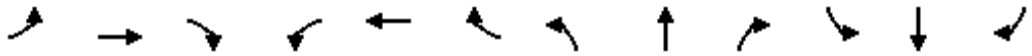
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 50			
Control Type: Pretimed			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay: 16.2		Intersection LOS: B	
Intersection Capacity Utilization 34.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: EB WHITING OFF & WHITING ST





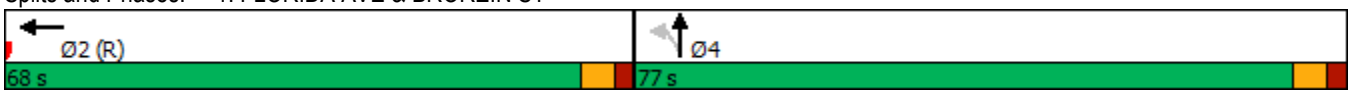
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1835	510	315	2170	0	0	0	0
Future Volume (vph)	0	0	0	0	1835	510	315	2170	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	1.00	1.00	1.00	1.00
Frt					0.967							
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6196	0	1770	5085	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	6196	0	1770	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					1		21					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		273			600			296			353	
Travel Time (s)		6.2			13.6			6.7			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1995	554	342	2359	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2549	0	342	2359	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Minimum Split (s)					30.0		37.0	37.0				
Total Split (s)					68.0		77.0	77.0				
Total Split (%)					46.9%		53.1%	53.1%				
Maximum Green (s)					62.2		70.9	70.9				
Yellow Time (s)					3.7		3.7	3.7				
All-Red Time (s)					2.1		2.4	2.4				
Lost Time Adjust (s)					0.0		0.0	0.0				
Total Lost Time (s)					5.8		6.1	6.1				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		23.0	23.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					62.2		70.9	70.9				
Actuated g/C Ratio					0.43		0.49	0.49				
v/c Ratio					0.96		0.39	0.95				
Control Delay					21.4		25.5	44.4				
Queue Delay					25.5		12.8	44.9				
Total Delay					46.9		38.3	89.3				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					D		D	F				
Approach Delay					46.9			82.8				
Approach LOS					D			F				

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 41 (28%), Referenced to phase 2:WBT, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 65.4		Intersection LOS: E	
Intersection Capacity Utilization 87.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: FLORIDA AVE & BROREIN ST

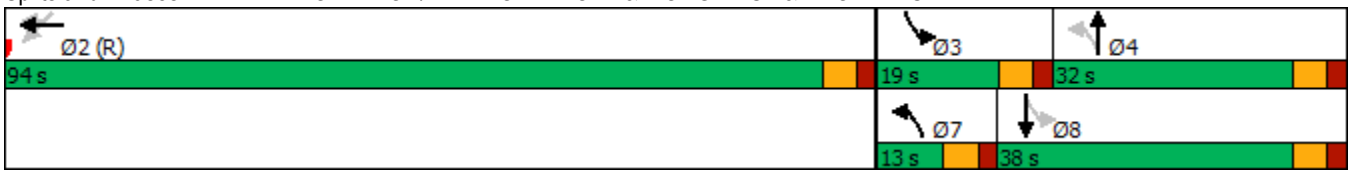


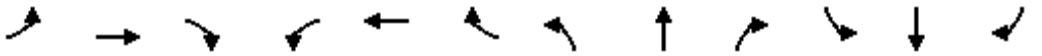
Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations										
Traffic Volume (vph)	130	2170	185	190	120	260	230	170	350	740
Future Volume (vph)	130	2170	185	190	120	260	230	170	350	740
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.942			0.936		0.850	0.850
Flt Protected		0.997	0.950			0.950				
Satd. Flow (prot)	0	3529	1770	1755	0	1770	1744	0	1583	1583
Flt Permitted		0.997	0.154			0.126				
Satd. Flow (perm)	0	3529	287	1755	0	235	1744	0	1583	1583
Right Turn on Red					Yes					Yes
Satd. Flow (RTOR)				106						578
Link Speed (mph)		30		30			30			
Link Distance (ft)		591		494			379			
Travel Time (s)		13.4		11.2			8.6			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	2359	201	207	130	283	250	185	380	804
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	2500	201	337	0	283	435	0	380	804
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Left	Left	Right	Left	Left	Right	R NA	Right
Median Width(ft)		12		12			12			
Link Offset(ft)		0		0			0			
Crosswalk Width(ft)		16		16			16			
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		15		9	15		9	9	9
Number of Detectors	1	2	1	2		1	2		1	1
Detector Template	Left	Thru	Left	Thru		Left	Thru		Right	Right
Leading Detector (ft)	20	100	20	100		20	100		20	20
Trailing Detector (ft)	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel										
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94		94			94			
Detector 2 Size(ft)		6		6			6			
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			
Detector 2 Channel										
Detector 2 Extend (s)		0.0		0.0			0.0			
Turn Type	Perm	NA	pm+pt	NA		pm+pt	NA		Perm	Free
Protected Phases		2	7	4		3	8			
Permitted Phases	2		4			8			2	Free
Detector Phase	2	2	7	4		3	8		2	
Switch Phase										
Minimum Initial (s)	10.0	10.0	5.0	10.0		5.0	10.0		10.0	

Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Minimum Split (s)	25.0	25.0	11.0	32.0		11.0	32.0		25.0	
Total Split (s)	94.0	94.0	13.0	32.0		19.0	38.0		94.0	
Total Split (%)	64.8%	64.8%	9.0%	22.1%		13.1%	26.2%		64.8%	
Maximum Green (s)	88.3	88.3	7.3	26.0		13.3	32.0		88.3	
Yellow Time (s)	3.7	3.7	3.7	3.7		3.7	3.7		3.7	
All-Red Time (s)	2.0	2.0	2.0	2.3		2.0	2.3		2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.7	5.7	6.0		5.7	6.0		5.7	
Lead/Lag			Lead	Lag		Lead	Lag			
Lead-Lag Optimize?			Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	None	Max		None	Max		C-Max	
Walk Time (s)	7.0	7.0		7.0			7.0		7.0	
Flash Dont Walk (s)	12.0	12.0		19.0			19.0		12.0	
Pedestrian Calls (#/hr)	0	0		0			0		0	
Act Effct Green (s)		88.3	33.6	26.0		45.3	32.0		88.3	145.0
Actuated g/C Ratio		0.61	0.23	0.18		0.31	0.22		0.61	1.00
v/c Ratio		1.16	1.43	0.84		1.32	1.13		0.39	0.51
Control Delay		91.1	260.5	58.1		207.7	137.1		16.1	1.2
Queue Delay		0.3	0.0	0.0		0.0	0.0		0.1	0.0
Total Delay		91.4	260.5	58.1		207.7	137.1		16.2	1.2
LOS		F	F	E		F	F		B	A
Approach Delay		91.4		133.7			164.9			
Approach LOS		F		F			F			

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 2 (1%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.43			
Intersection Signal Delay: 86.2		Intersection LOS: F	
Intersection Capacity Utilization 137.4%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: WB BROREIN ON/WB BROREIN OFF & MORGAN ST & BROREIN ST



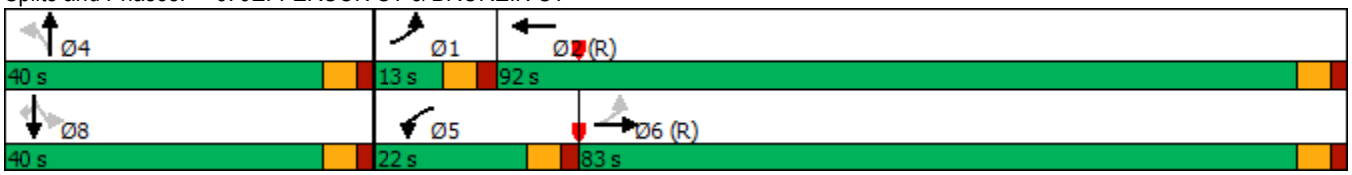


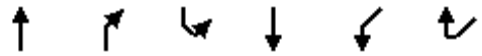
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	225	15	105	1830	205	20	210	10	10	10	450
Future Volume (vph)	140	225	15	105	1830	205	20	210	10	10	10	450
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	80		0	115		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.991			0.985			0.993				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1846	0	1770	3486	0	1770	3514	0	1770	1863	1583
Flt Permitted	0.050			0.950			0.750			0.557		
Satd. Flow (perm)	93	1846	0	1770	3486	0	1397	3514	0	1038	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			15			3				106
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		591			202			322			162	
Travel Time (s)		13.4			4.6			7.3			3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	245	16	114	1989	223	22	228	11	11	11	489
Shared Lane Traffic (%)												
Lane Group Flow (vph)	152	261	0	114	2212	0	22	239	0	11	11	489
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6						4			8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6		5	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	11.0	24.0		11.0	24.0		24.0	24.0		24.0	24.0	24.0
Total Split (s)	13.0	83.0		22.0	92.0		40.0	40.0		40.0	40.0	40.0
Total Split (%)	9.0%	57.2%		15.2%	63.4%		27.6%	27.6%		27.6%	27.6%	27.6%
Maximum Green (s)	7.3	77.3		16.3	86.3		34.3	34.3		34.3	34.3	34.3
Yellow Time (s)	3.7	3.7		3.7	3.7		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	Max
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)	87.8	80.5		13.1	86.3		34.3	34.3		34.3	34.3	34.3
Actuated g/C Ratio	0.61	0.56		0.09	0.60		0.24	0.24		0.24	0.24	0.24
v/c Ratio	1.09	0.25		0.71	1.06		0.07	0.29		0.04	0.03	1.07
Control Delay	75.8	26.7		87.5	68.2		43.8	45.9		43.6	42.9	103.9
Queue Delay	0.0	0.0		0.0	15.9		0.0	0.0		0.0	0.0	9.7
Total Delay	75.8	26.7		87.5	84.1		43.8	45.9		43.6	42.9	113.7
LOS	E	C		F	F		D	D		D	D	F
Approach Delay		44.8			84.3			45.7			110.6	
Approach LOS		D			F			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 80.6		Intersection LOS: F	
Intersection Capacity Utilization 107.6%		ICU Level of Service G	
Analysis Period (min) 15			

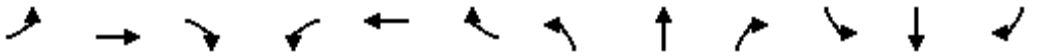
Splits and Phases: 3: JEFFERSON ST & BROREIN ST



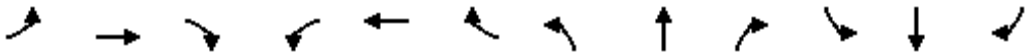


Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	355	200	60	470	0	0
Future Volume (vph)	355	200	60	470	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	115		0	0
Storage Lanes		1	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	162			583	231	
Travel Time (s)	3.7			13.3	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	386	217	65	511	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	386	217	65	511	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 28.7%		ICU Level of Service A	
Analysis Period (min) 15			



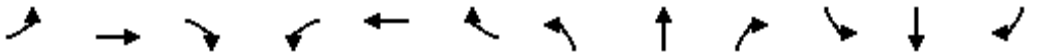
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	280	3910	305	225	535	0	0	175	65
Future Volume (vph)	0	0	0	280	3910	305	225	535	0	0	175	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.989						0.959	
Flt Protected				0.950				0.985				
Satd. Flow (prot)	0	0	0	1770	6337	0	0	3486	0	0	3394	0
Flt Permitted				0.950				0.740				
Satd. Flow (perm)	0	0	0	1770	6337	0	0	2619	0	0	3394	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					22							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			319			716			284	
Travel Time (s)		13.1			7.3			16.3			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	304	4250	332	245	582	0	0	190	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	304	4582	0	0	827	0	0	261	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					4			2			2	
Permitted Phases				4			2					
Minimum Split (s)				26.0	26.0		26.0	26.0			26.0	
Total Split (s)				96.0	96.0		49.0	49.0			49.0	
Total Split (%)				66.2%	66.2%		33.8%	33.8%			33.8%	
Maximum Green (s)				90.3	90.3		43.1	43.1			43.1	
Yellow Time (s)				3.7	3.7		3.7	3.7			3.7	
All-Red Time (s)				2.0	2.0		2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0			0.0			0.0	
Total Lost Time (s)				5.7	5.7			5.9			5.9	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				13.0	13.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				90.3	90.3			43.1			43.1	
Actuated g/C Ratio				0.62	0.62			0.30			0.30	
v/c Ratio				0.28	1.16			1.06			0.26	
Control Delay				12.3	98.4			98.4			39.6	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				12.3	98.4			98.4			39.6	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				B	F			F			D	
Approach Delay					93.1			98.4			39.6	
Approach LOS					F			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 5 (3%), Referenced to phase 2:NBSB, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay: 91.5		Intersection LOS: F	
Intersection Capacity Utilization 106.0%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 5: JEFFERSON ST & KENNEDY BLVD

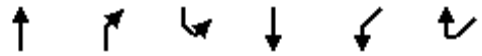


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1560	545	25	340	0	0	0	545
Future Volume (vph)	0	0	0	0	1560	545	25	340	0	0	0	545
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88
Frt					0.961							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4887	0	1770	1863	0	0	0	2787
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	4887	0	1770	1863	0	0	0	2787
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					105		22					38
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		847			465			292			201	
Travel Time (s)		19.3			10.6			6.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1696	592	27	370	0	0	0	592
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2288	0	27	370	0	0	0	592
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				Perm
Protected Phases					4			6				
Permitted Phases							6					2
Minimum Split (s)					30.0		25.0	25.0				27.0
Total Split (s)					91.0		54.0	54.0				54.0
Total Split (%)					62.8%		37.2%	37.2%				37.2%
Maximum Green (s)					85.2		48.1	48.1				48.1
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.1		2.2	2.2				2.2
Lost Time Adjust (s)					0.0		0.0	0.0				0.0
Total Lost Time (s)					5.8		5.9	5.9				5.9
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				7.0
Flash Dont Walk (s)					17.0		12.0	12.0				14.0
Pedestrian Calls (#/hr)					0		0	0				0
Act Effct Green (s)					85.2		48.1	48.1				48.1
Actuated g/C Ratio					0.59		0.33	0.33				0.33
v/c Ratio					0.79		0.04	0.60				0.62
Control Delay					24.2		14.6	45.3				33.7
Queue Delay					0.4		0.0	0.2				0.0
Total Delay					24.5		14.6	45.5				33.7

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					C		B	D				C
Approach Delay					24.5			43.4			33.7	
Approach LOS					C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 13 (9%), Referenced to phase 2:SBR and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 28.5		Intersection LOS: C	
Intersection Capacity Utilization 84.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 6: NEBRASKA AVE & KENNEDY BLVD



Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	620	265	105	545	0	0
Future Volume (vph)	620	265	105	545	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	130		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt	0.960					
Flt Protected			0.950			
Satd. Flow (prot)	1788	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1788	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			390	272	
Travel Time (s)	4.6			8.9	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	674	288	114	592	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	962	0	114	592	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

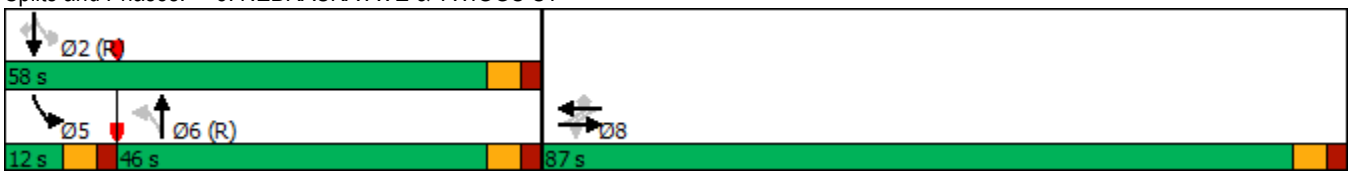
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	150	10	475	1085	685	110	420	90	120	165	60
Future Volume (vph)	5	150	10	475	1085	685	110	420	90	120	165	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	150		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.991				0.850		0.974				0.850
Flt Protected		0.999			0.985		0.950			0.950		
Satd. Flow (prot)	0	3504	0	0	3486	1583	1770	1814	0	1770	3539	1583
Flt Permitted		0.899			0.783		0.639			0.088		
Satd. Flow (perm)	0	3153	0	0	2771	1583	1190	1814	0	164	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				254		7				65
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			652			390			257	
Travel Time (s)		17.7			14.8			8.9			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	163	11	516	1179	745	120	457	98	130	179	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	179	0	0	1695	745	120	555	0	130	179	65
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm
Protected Phases		8			8			6		5	2	
Permitted Phases	8			8		8	6			2		2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8		8	8	8	6	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		5.0	10.0	10.0
Minimum Split (s)	30.0	30.0		30.0	30.0	30.0	28.0	28.0		11.0	28.0	28.0
Total Split (s)	87.0	87.0		87.0	87.0	87.0	46.0	46.0		12.0	58.0	58.0
Total Split (%)	60.0%	60.0%		60.0%	60.0%	60.0%	31.7%	31.7%		8.3%	40.0%	40.0%
Maximum Green (s)	80.9	80.9		80.9	80.9	80.9	40.0	40.0		6.3	52.0	52.0
Yellow Time (s)	3.7	3.7		3.7	3.7	3.7	3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.4		2.4	2.4	2.4	2.3	2.3		2.0	2.3	2.3
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.1			6.1	6.1	6.0	6.0		5.7	6.0	6.0
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		2.0	3.0	3.0
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Dont Walk (s)	16.0	16.0		16.0	16.0	16.0	15.0	15.0			15.0	15.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	0
Act Effct Green (s)		80.9			80.9	80.9	40.0	40.0		52.3	52.0	52.0
Actuated g/C Ratio		0.56			0.56	0.56	0.28	0.28		0.36	0.36	0.36
v/c Ratio		0.10			1.10	0.75	0.37	1.10		1.02	0.14	0.11
Control Delay		14.6			66.3	7.3	44.6	109.3		120.6	31.8	7.2
Queue Delay		0.0			1.7	1.4	0.0	0.4		0.0	0.0	0.0
Total Delay		14.6			68.1	8.7	44.6	109.7		120.6	31.8	7.2
LOS		B			E	A	D	F		F	C	A
Approach Delay		14.6			49.9			98.1			58.4	
Approach LOS		B			D			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 74 (51%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 58.0		Intersection LOS: E	
Intersection Capacity Utilization 106.3%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 8: NEBRASKA AVE & TWIGGS ST



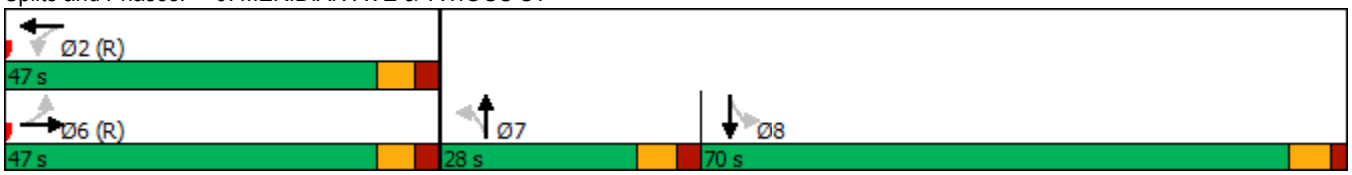
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	175	185	135	645	0	200	0	80	285	2125	1400
Future Volume (vph)	0	175	185	135	645	0	200	0	80	285	2125	1400
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	1.00
Frt		0.923						0.957				0.850
Flt Protected					0.991			0.966			0.994	
Satd. Flow (prot)	0	3267	0	0	3507	0	0	4701	0	0	5055	1583
Flt Permitted					0.719			0.918			0.828	
Satd. Flow (perm)	0	3267	0	0	2545	0	0	4468	0	0	4211	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		182						77				433
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			772			501			413	
Travel Time (s)		14.8			17.5			11.4			9.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	190	201	147	701	0	217	0	87	310	2310	1522
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	391	0	0	848	0	0	304	0	0	2620	1522
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	Free
Protected Phases		6			2			7			8	
Permitted Phases	6			2			7			8		Free
Detector Phase	6	6		2	2		7	7		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	46.0	46.0		17.0	17.0		27.0	27.0		17.0	17.0	
Total Split (s)	47.0	47.0		47.0	47.0		28.0	28.0		70.0	70.0	
Total Split (%)	32.4%	32.4%		32.4%	32.4%		19.3%	19.3%		48.3%	48.3%	
Maximum Green (s)	40.2	40.2		40.2	40.2		21.1	21.1		63.6	63.6	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	2.8	2.8		2.8	2.8		2.5	2.5		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.8			6.8			6.9			6.4	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0					7.0	7.0				
Flash Dont Walk (s)	32.0	32.0					13.0	13.0				
Pedestrian Calls (#/hr)	0	0					0	0				
Act Effct Green (s)		40.2			40.2			13.1			71.6	145.0
Actuated g/C Ratio		0.28			0.28			0.09			0.49	1.00
v/c Ratio		0.38			1.20			1.79dl			1.26	0.96
Control Delay		18.3			149.0			53.5			154.0	16.9
Queue Delay		0.0			1.8			0.0			0.0	13.2
Total Delay		18.3			150.8			53.5			154.0	30.2
LOS		B			F			D			F	C
Approach Delay		18.3			150.8			53.5			108.5	
Approach LOS		B			F			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 131 (90%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.26			
Intersection Signal Delay: 105.7		Intersection LOS: F	
Intersection Capacity Utilization 112.9%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 9: MERIDIAN AVE & TWIGGS ST



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Lane Configurations									
Traffic Volume (vph)	130	150	15	1795	875	0	95	0	0
Future Volume (vph)	130	150	15	1795	875	0	95	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt		0.850					0.850		
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	5085	5085	0	1583	0	0
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	5085	5085	0	1583	0	0
Link Speed (mph)	30			30	30			30	
Link Distance (ft)	404			536	498			405	
Travel Time (s)	9.2			12.2	11.3			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	163	16	1951	951	0	103	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	141	163	16	1951	951	0	103	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right	Right	Left	Right
Median Width(ft)	12			12	12			0	
Link Offset(ft)	0			0	0			0	
Crosswalk Width(ft)	16			16	16			16	
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9	9	15	9
Sign Control	Stop			Free	Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	10

Movement	EBL	EBR	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations								
Traffic Vol, veh/h	130	150	15	1795	875	0	0	0
Future Vol, veh/h	130	150	15	1795	875	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	-	-
Storage Length	0	0	0	-	-	0	-	-
Veh in Median Storage, #	0	-	-	0	0	-	0	-
Grade, %	0	-	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	141	163	16	1951	951	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1763	476	951	0	-	0
Stage 1	951	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	~ 125	458	413	-	-	0
Stage 1	259	-	-	-	-	0
Stage 2	360	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 120	458	413	-	-	-
Mov Cap-2 Maneuver	~ 120	-	-	-	-	-
Stage 1	249	-	-	-	-	-
Stage 2	360	-	-	-	-	-

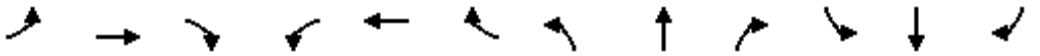
Approach	EB	NB	SB
HCM Control Delay, s	105.4	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	413	-	120	458	-
HCM Lane V/C Ratio	0.039	-	1.178	0.356	-
HCM Control Delay (s)	14.1	-	207.2	17.1	-
HCM Lane LOS	B	-	F	C	-
HCM 95th %tile Q(veh)	0.1	-	8.7	1.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations											
Traffic Volume (vph)	0	0	390	1535	0	0	855	0	115	0	495
Future Volume (vph)	0	0	390	1535	0	0	855	0	115	0	495
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00	1.00	1.00	1.00
Frt											0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Flt Permitted			0.950						0.950		
Satd. Flow (perm)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	264			498			271			329	
Travel Time (s)	6.0			11.3			6.2			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	424	1668	0	0	929	0	125	0	538
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	424	1668	0	0	929	0	125	0	538
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			12	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Sign Control	Free			Free			Free			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 67.0%		ICU Level of Service C	
Analysis Period (min) 15			

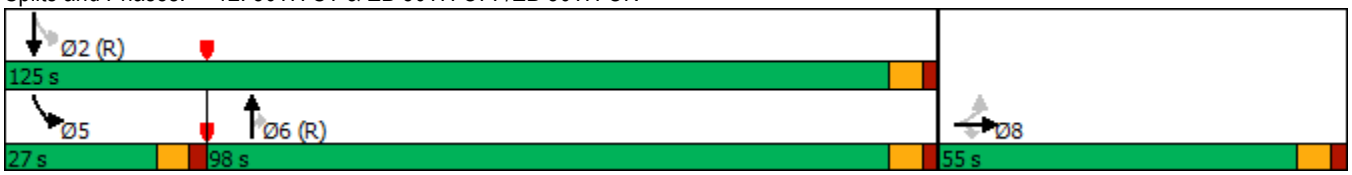


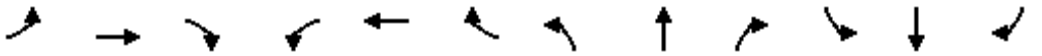
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	0	200	0	0	0	0	2005	35	105	1130	0
Future Volume (vph)	150	0	200	0	0	0	0	2005	35	105	1130	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.052		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	97	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			92						64			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		549			603			383			284	
Travel Time (s)		12.5			13.7			8.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	0	217	0	0	0	0	2179	38	114	1228	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	217	0	0	0	0	2179	38	114	1228	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8						6	2		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8	8					6	6	5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	5.0	10.0	
Minimum Split (s)	47.0	47.0	47.0					17.0	17.0	12.0	24.0	
Total Split (s)	55.0	55.0	55.0					98.0	98.0	27.0	125.0	
Total Split (%)	30.6%	30.6%	30.6%					54.4%	54.4%	15.0%	69.4%	
Maximum Green (s)	48.1	48.1	48.1					91.5	91.5	20.3	118.5	
Yellow Time (s)	4.4	4.4	4.4					4.4	4.4	4.4	4.4	
All-Red Time (s)	2.5	2.5	2.5					2.1	2.1	2.3	2.1	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.9	6.9					6.5	6.5	6.7	6.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0					3.0	3.0	2.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Dont Walk (s)	33.0	33.0	33.0								10.0	
Pedestrian Calls (#/hr)	0	0	0								0	
Act Effct Green (s)		24.7	24.7					124.6	124.6	141.7	141.9	
Actuated g/C Ratio		0.14	0.14					0.69	0.69	0.79	0.79	
v/c Ratio		0.67	0.73					0.49	0.03	0.66	0.31	
Control Delay		86.5	56.2					14.4	0.7	62.6	11.6	
Queue Delay		0.7	0.0					0.0	0.0	1.2	1.3	
Total Delay		87.2	56.2					14.4	0.7	63.8	12.9	
LOS		F	E					B	A	E	B	
Approach Delay		69.5						14.2			17.3	
Approach LOS		E						B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 118 (66%), Referenced to phase 2:SBTL and 6:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 20.6		Intersection LOS: C	
Intersection Capacity Utilization 82.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 12: 50TH ST & EB 50TH OFF/EB 50TH ON



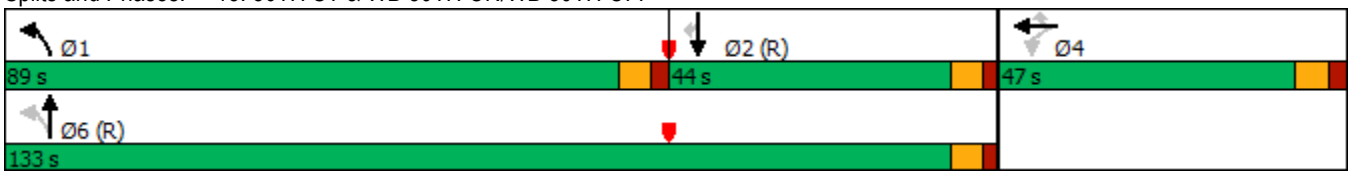


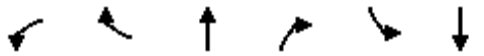
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	30	0	190	800	1355	0	0	1205	200
Future Volume (vph)	0	0	0	30	0	190	800	1355	0	0	1205	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	140		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.076					
Satd. Flow (perm)	0	0	0	0	1770	1583	142	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						67						158
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		457			359			284			339	
Travel Time (s)		10.4			8.2			6.5			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	33	0	207	870	1473	0	0	1310	217
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	33	207	870	1473	0	0	1310	217
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				4	4	4	1	6			2	2
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	10.0
Minimum Split (s)				47.0	47.0	47.0	12.0	24.0			24.0	24.0
Total Split (s)				47.0	47.0	47.0	89.0	133.0			44.0	44.0
Total Split (%)				26.1%	26.1%	26.1%	49.4%	73.9%			24.4%	24.4%
Maximum Green (s)				39.8	39.8	39.8	82.2	126.6			37.6	37.6
Yellow Time (s)				4.4	4.4	4.4	4.4	4.4			4.4	4.4
All-Red Time (s)				2.8	2.8	2.8	2.4	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.2	7.2	6.8	6.4			6.4	6.4
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	2.0	3.0			3.0	3.0
Recall Mode				None	None	None	Min	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)				32.0	32.0	32.0		10.0			10.0	10.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)					22.9	22.9	143.1	143.5			52.3	52.3
Actuated g/C Ratio					0.13	0.13	0.80	0.80			0.29	0.29
v/c Ratio					0.15	0.80	0.99	0.36			0.70	0.38
Control Delay					67.9	72.3	56.9	2.0			60.2	17.6
Queue Delay					0.1	0.0	8.8	0.1			0.1	0.0
Total Delay					68.0	72.3	65.8	2.1			60.3	17.6
LOS					E	E	E	A			E	B
Approach Delay					71.7			25.7			54.2	
Approach LOS					E			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 39.0		Intersection LOS: D	
Intersection Capacity Utilization 82.3%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 13: 50TH ST & WB 50TH ON/WB 50TH OFF





Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	60	0	1495	0	0	490
Future Volume (vph)	60	0	1495	0	0	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	3539	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	3539	0	0	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	292		343			439
Travel Time (s)	6.6		7.8			10.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	0	1625	0	0	533
Shared Lane Traffic (%)						
Lane Group Flow (vph)	65	0	1625	0	0	533
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 51.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.8

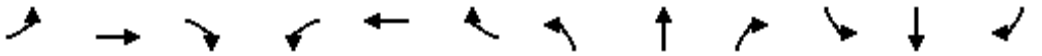
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	0	1495	0	0	490
Future Vol, veh/h	60	0	1495	0	0	490
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	0	1625	0	0	533

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1892	-	0	-	-	-
Stage 1	1625	-	-	-	-	-
Stage 2	267	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-
Pot Cap-1 Maneuver	~ 62	0	-	0	0	-
Stage 1	146	0	-	0	0	-
Stage 2	754	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	~ 62	-	-	-	-	-
Mov Cap-2 Maneuver	125	-	-	-	-	-
Stage 1	146	-	-	-	-	-
Stage 2	754	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	61.6	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	125	-
HCM Lane V/C Ratio	-	0.522	-
HCM Control Delay (s)	-	61.6	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	2.5	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

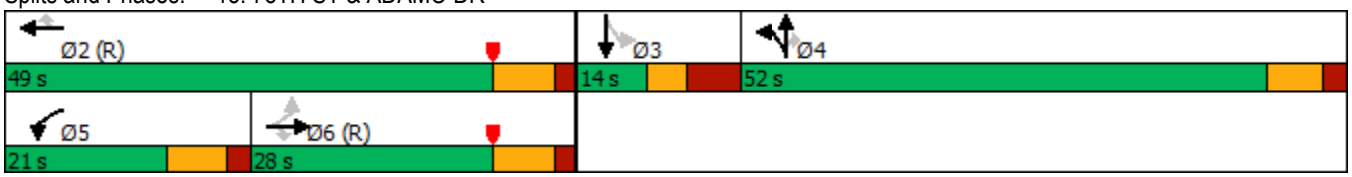


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	470	335	150	1280	20	735	5	535	5	5	5
Future Volume (vph)	5	470	335	150	1280	20	735	5	535	5	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	0		315	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.955	
Flt Protected	0.950			0.950			0.950	0.953			0.984	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1681	1686	1583	0	1750	0
Flt Permitted	0.138			0.950			0.950	0.953				
Satd. Flow (perm)	257	3539	1583	1770	3539	1583	1681	1686	1583	0	1779	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			364			115			525		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		887			638			788			238	
Travel Time (s)		20.2			14.5			17.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	511	364	163	1391	22	799	5	582	5	5	5
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	5	511	364	163	1391	22	399	405	582	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		25			25			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Perm	NA	
Protected Phases		6		5	2		4	4			3	
Permitted Phases	6		6			2			4	3		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6	6	5	2	2	4	4	4	3	3	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	26.0	26.0	26.0	13.0	27.0	27.0	52.0	52.0	52.0	14.0	14.0	
Total Split (s)	28.0	28.0	28.0	21.0	49.0	49.0	52.0	52.0	52.0	14.0	14.0	
Total Split (%)	24.3%	24.3%	24.3%	18.3%	42.6%	42.6%	45.2%	45.2%	45.2%	12.2%	12.2%	
Maximum Green (s)	20.8	20.8	20.8	13.8	41.8	41.8	44.9	44.9	44.9	6.0	6.0	
Yellow Time (s)	5.2	5.2	5.2	5.2	5.2	5.2	4.8	4.8	4.8	3.4	3.4	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.3	4.6	4.6	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.1	7.1		8.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0			
Flash Dont Walk (s)	11.0	11.0	11.0		12.0	12.0	37.0	37.0	37.0			
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0			
Act Effct Green (s)	33.6	33.6	33.6	13.7	54.6	54.6	40.5	40.5	40.5		6.0	
Actuated g/C Ratio	0.29	0.29	0.29	0.12	0.47	0.47	0.35	0.35	0.35		0.05	
v/c Ratio	0.07	0.49	0.51	0.77	0.83	0.03	0.67	0.68	0.65		0.15	
Control Delay	41.8	38.9	7.0	73.1	34.0	0.1	37.2	37.5	7.3		44.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	41.8	38.9	7.0	73.1	34.0	0.1	37.2	37.5	7.3		44.5	
LOS	D	D	A	E	C	A	D	D	A		D	
Approach Delay		25.7			37.5			24.7			44.5	
Approach LOS		C			D			C			D	

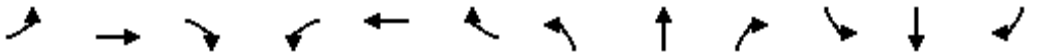
Intersection Summary			
Area Type:	Other		
Cycle Length: 115			
Actuated Cycle Length: 115			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 115			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 30.3		Intersection LOS: C	
Intersection Capacity Utilization 93.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 15: 78TH ST & ADAMO DR



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	990	20	460	1450	0	0
Future Volume (vph)	990	20	460	1450	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	1.00
Frt		0.850				
Flt Protected				0.988		
Satd. Flow (prot)	5085	1583	0	5024	0	0
Flt Permitted				0.988		
Satd. Flow (perm)	5085	1583	0	5024	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	638			376	435	
Travel Time (s)	14.5			8.5	9.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1076	22	500	1576	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1076	22	0	2076	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	25			25	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		



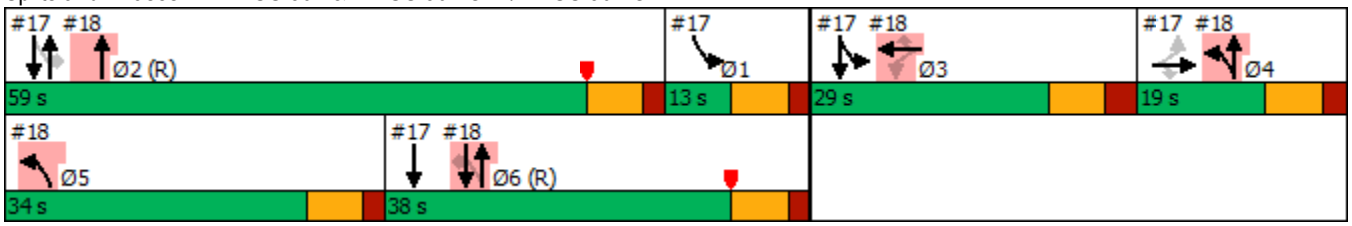
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	0	310	0	0	0	0	2515	200	180	1200	0
Future Volume (vph)	150	0	310	0	0	0	0	2515	200	180	1200	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	315		500	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.077		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	143	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237						217			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		739			677			1414			381	
Travel Time (s)		16.8			15.4			32.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	0	337	0	0	0	0	2734	217	196	1304	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	163	337	0	0	0	0	2734	217	196	1304	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0			30			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	D.P+P	NA	
Protected Phases		4						2		1 3	6 3 2	
Permitted Phases	4		4						2	2		

Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4					2	2	1 3	6 3 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					15.0	15.0			
Minimum Split (s)	13.0	13.0	13.0					23.0	23.0			
Total Split (s)	19.0	19.0	19.0					59.0	59.0			
Total Split (%)	15.8%	15.8%	15.8%					49.2%	49.2%			
Maximum Green (s)	11.5	11.5	11.5					51.9	51.9			
Yellow Time (s)	5.1	5.1	5.1					5.1	5.1			
All-Red Time (s)	2.4	2.4	2.4					2.0	2.0			
Lost Time Adjust (s)		0.0	0.0					0.0	0.0			
Total Lost Time (s)		7.5	7.5					7.1	7.1			
Lead/Lag	Lag	Lag	Lag					Lead	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes					Yes	Yes			
Vehicle Extension (s)	4.0	4.0	4.0					3.0	3.0			
Recall Mode	None	None	None					C-Max	C-Max			
Act Effct Green (s)		11.5	11.5					51.9	51.9	86.8	93.9	
Actuated g/C Ratio		0.10	0.10					0.43	0.43	0.72	0.78	
v/c Ratio		0.96	0.92					0.99	0.27	0.34	0.33	
Control Delay		115.0	48.5					48.1	3.6	8.6	1.4	
Queue Delay		43.5	0.0					6.6	0.0	0.0	0.2	
Total Delay		158.5	48.5					54.7	3.6	8.6	1.5	
LOS		F	D					D	A	A	A	
Approach Delay		84.3						51.0			2.4	
Approach LOS		F						D			A	

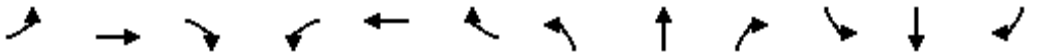
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 39.6		Intersection LOS: D	
Intersection Capacity Utilization 81.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 17: US 301 & EB US 301 OFF/EB US 301 ON



Lane Group	Ø1	Ø3	Ø5	Ø6
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	15.0
Minimum Split (s)	13.0	13.0	13.0	23.0
Total Split (s)	13.0	29.0	34.0	38.0
Total Split (%)	11%	24%	28%	32%
Maximum Green (s)	5.9	21.2	26.9	30.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.7	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	4.0	3.0
Recall Mode	None	None	Max	C-Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary



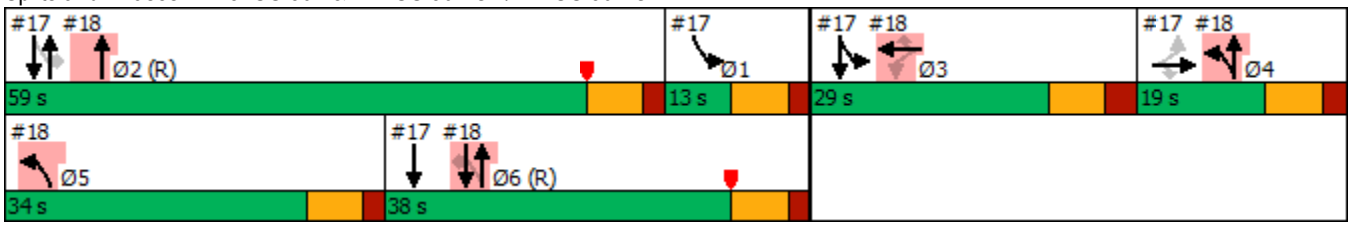
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	105	0	445	695	1980	0	0	1275	125
Future Volume (vph)	0	0	0	105	0	445	695	1980	0	0	1275	125
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	300		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.129					
Satd. Flow (perm)	0	0	0	0	1770	1583	240	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						235						176
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			711			381			795	
Travel Time (s)		13.2			16.2			8.7			18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	114	0	484	755	2152	0	0	1386	136
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	114	484	755	2152	0	0	1386	136
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			20			30	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	D.P+P	NA			NA	Perm
Protected Phases					3		5 4	2 4 6			6	
Permitted Phases				3		3	6					6

Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				3	3	3	5 4	2 4 6			6	6
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0					15.0	15.0
Minimum Split (s)				13.0	13.0	13.0					23.0	23.0
Total Split (s)				29.0	29.0	29.0					38.0	38.0
Total Split (%)				24.2%	24.2%	24.2%					31.7%	31.7%
Maximum Green (s)				21.2	21.2	21.2					30.9	30.9
Yellow Time (s)				5.1	5.1	5.1					5.1	5.1
All-Red Time (s)				2.7	2.7	2.7					2.0	2.0
Lost Time Adjust (s)					0.0	0.0					0.0	0.0
Total Lost Time (s)					7.8	7.8					7.1	7.1
Lead/Lag				Lead	Lead	Lead					Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0					3.0	3.0
Recall Mode				None	None	None					C-Max	C-Max
Act Effct Green (s)					21.2	21.2	76.8	83.9			30.9	30.9
Actuated g/C Ratio					0.18	0.18	0.64	0.70			0.26	0.26
v/c Ratio					0.37	1.02	1.02	0.61			0.84	0.25
Control Delay					47.4	72.9	61.3	0.6			47.8	3.2
Queue Delay					0.0	0.0	28.2	0.1			0.0	0.0
Total Delay					47.4	72.9	89.5	0.7			47.8	3.2
LOS					D	E	F	A			D	A
Approach Delay					68.1			23.8			43.8	
Approach LOS					E			C			D	

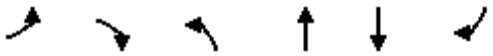
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 35.1		Intersection LOS: D	
Intersection Capacity Utilization 81.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 18: US 301 & WB US 301 ON/WB US 301 OFF



Lane Group	Ø1	Ø2	Ø4	Ø5
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	15.0	5.0	5.0
Minimum Split (s)	13.0	23.0	13.0	13.0
Total Split (s)	13.0	59.0	19.0	34.0
Total Split (%)	11%	49%	16%	28%
Maximum Green (s)	5.9	51.9	11.5	26.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.4	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0	4.0	4.0
Recall Mode	None	C-Max	None	Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

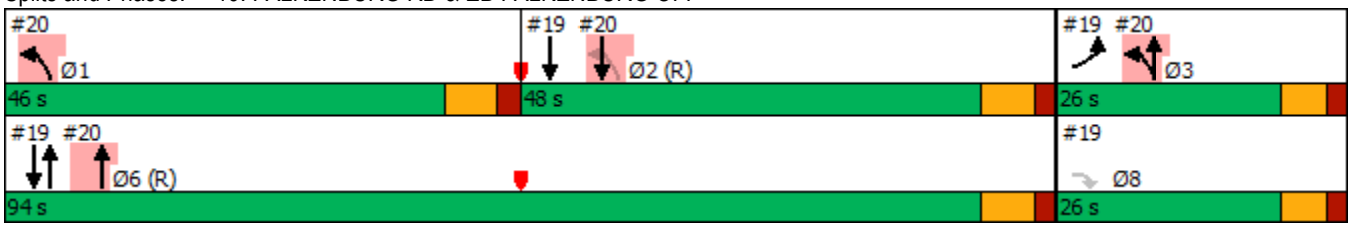


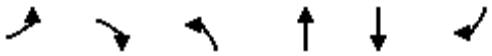
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Lane Configurations								
Traffic Volume (vph)	235	495	0	1870	705	0		
Future Volume (vph)	235	495	0	1870	705	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	0.97	0.88	1.00	0.91	0.91	1.00		
Frt		0.850						
Flt Protected	0.950							
Satd. Flow (prot)	3433	2787	0	5085	5085	0		
Flt Permitted	0.950							
Satd. Flow (perm)	3433	2787	0	5085	5085	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		488						
Link Speed (mph)	30			30	30			
Link Distance (ft)	519			688	550			
Travel Time (s)	11.8			15.6	12.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	255	538	0	2033	766	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	255	538	0	2033	766	0		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	24			30	30			
Link Offset(ft)	0			0	0			
Crosswalk Width(ft)	16			16	16			
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	9	15			9		
Number of Detectors	1	1		2	2			
Detector Template	Left	Right		Thru	Thru			
Leading Detector (ft)	20	20		100	100			
Trailing Detector (ft)	0	0		0	0			
Detector 1 Position(ft)	0	0		0	0			
Detector 1 Size(ft)	20	20		6	6			
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			
Detector 2 Position(ft)				94	94			
Detector 2 Size(ft)				6	6			
Detector 2 Type				Cl+Ex	Cl+Ex			
Detector 2 Channel								
Detector 2 Extend (s)				0.0	0.0			
Turn Type	Prot	Perm		NA	NA			
Protected Phases	3			6	6 2		1	2
Permitted Phases		8						
Detector Phase	3	8		6	6 2			
Switch Phase								
Minimum Initial (s)	6.0	6.0		15.0			5.0	15.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Minimum Split (s)	23.0	23.0		23.0			12.0	23.0
Total Split (s)	26.0	26.0		94.0			46.0	48.0
Total Split (%)	21.7%	21.7%		78.3%			38%	40%
Maximum Green (s)	19.9	19.9		87.2			39.2	41.2
Yellow Time (s)	4.1	4.1		4.8			4.8	4.8
All-Red Time (s)	2.0	2.0		2.0			2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0				
Total Lost Time (s)	6.1	6.1		6.8				
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)	3.5	3.5		4.0			6.0	4.0
Recall Mode	None	None		C-Max			Min	C-Max
Act Effct Green (s)	19.9	19.9		87.2	87.2			
Actuated g/C Ratio	0.17	0.17		0.73	0.73			
v/c Ratio	0.45	0.62		0.55	0.21			
Control Delay	48.0	9.7		8.2	3.1			
Queue Delay	0.0	0.0		0.0	0.0			
Total Delay	48.0	9.7		8.2	3.1			
LOS	D	A		A	A			
Approach Delay	22.0			8.2	3.1			
Approach LOS	C			A	A			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 10.1		Intersection LOS: B	
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 19: FALKENBURG RD & EB FALKENBURG OFF



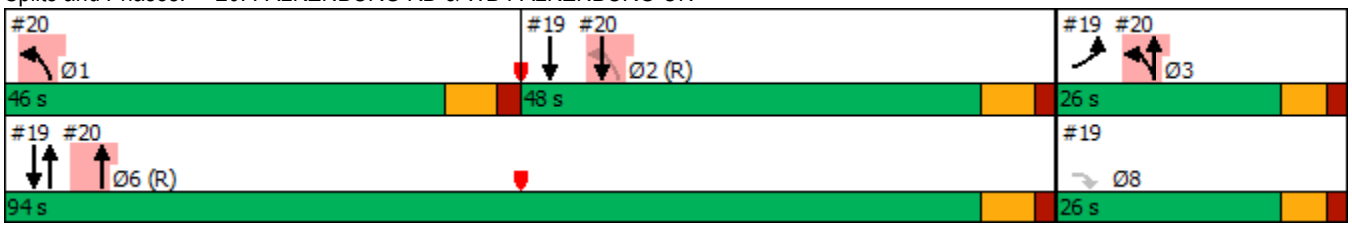


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	0	0	640	1465	705	290				
Future Volume (vph)	0	0	640	1465	705	290				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00				
Frt						0.850				
Flt Protected			0.950							
Satd. Flow (prot)	0	0	1770	3539	3539	1583				
Flt Permitted			0.270							
Satd. Flow (perm)	0	0	503	3539	3539	1583				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)						258				
Link Speed (mph)	30			30	30					
Link Distance (ft)	492			550	852					
Travel Time (s)	11.2			12.5	19.4					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				
Adj. Flow (vph)	0	0	696	1592	766	315				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	696	1592	766	315				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			30	30					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Turning Speed (mph)	15	9	15			9				
Number of Detectors			1	2	2	1				
Detector Template			Left	Thru	Thru	Right				
Leading Detector (ft)			20	100	100	20				
Trailing Detector (ft)			0	0	0	0				
Detector 1 Position(ft)			0	0	0	0				
Detector 1 Size(ft)			20	6	6	20				
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel										
Detector 1 Extend (s)			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94					
Detector 2 Size(ft)				6	6					
Detector 2 Type				Cl+Ex	Cl+Ex					
Detector 2 Channel										
Detector 2 Extend (s)				0.0	0.0					
Turn Type			D.P+P	NA	NA	Free				
Protected Phases			1 3	6 3	2		1	3	6	8
Permitted Phases			2			Free				
Detector Phase			1 3	6 3	2					
Switch Phase										
Minimum Initial (s)					15.0		5.0	6.0	15.0	6.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Minimum Split (s)					23.0		12.0	23.0	23.0	23.0
Total Split (s)					48.0		46.0	26.0	94.0	26.0
Total Split (%)					40.0%		38%	22%	78%	22%
Maximum Green (s)					41.2		39.2	19.9	87.2	19.9
Yellow Time (s)					4.8		4.8	4.1	4.8	4.1
All-Red Time (s)					2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)					0.0					
Total Lost Time (s)					6.8					
Lead/Lag					Lag		Lead			
Lead-Lag Optimize?					Yes		Yes			
Vehicle Extension (s)					4.0		6.0	3.5	4.0	3.5
Recall Mode					C-Max		Min	None	C-Max	None
Act Effct Green (s)			106.4	120.0	51.3	120.0				
Actuated g/C Ratio			0.89	1.00	0.43	1.00				
v/c Ratio			0.68	0.45	0.51	0.20				
Control Delay			13.5	0.4	28.4	0.3				
Queue Delay			0.1	0.0	0.0	0.0				
Total Delay			13.7	0.4	28.4	0.3				
LOS			B	A	C	A				
Approach Delay				4.4	20.2					
Approach LOS				A	C					

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 9.5		Intersection LOS: A	
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 20: FALKENBURG RD & WB FALKENBURG ON



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	190	0	0	1175	235	805
Future Volume (vph)	190	0	0	1175	235	805
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.88
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3539	0	0	3539	1770	2787
Flt Permitted					0.950	
Satd. Flow (perm)	3539	0	0	3539	1770	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						875
Link Speed (mph)	30			30	30	
Link Distance (ft)	390			343	501	
Travel Time (s)	8.9			7.8	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	207	0	0	1277	255	875
Shared Lane Traffic (%)						
Lane Group Flow (vph)	207	0	0	1277	255	875
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (ft)	100			100	20	20
Trailing Detector (ft)	0			0	0	0
Detector 1 Position(ft)	0			0	0	0
Detector 1 Size(ft)	6			6	20	20
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases						8
Detector Phase	2			6	8	8
Switch Phase						
Minimum Initial (s)	10.0			10.0	10.0	10.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	24.0			16.0	24.0	24.0
Total Split (s)	90.0			90.0	55.0	55.0
Total Split (%)	62.1%			62.1%	37.9%	37.9%
Maximum Green (s)	84.3			84.3	49.3	49.3
Yellow Time (s)	3.7			3.7	3.7	3.7
All-Red Time (s)	2.0			2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	5.7			5.7	5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)	7.0				7.0	7.0
Flash Dont Walk (s)	11.0				11.0	11.0
Pedestrian Calls (#/hr)	0				0	0
Act Effct Green (s)	105.1			105.1	28.5	28.5
Actuated g/C Ratio	0.72			0.72	0.20	0.20
v/c Ratio	0.08			0.50	0.73	0.70
Control Delay	6.7			10.2	66.6	6.0
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	6.7			10.2	66.6	6.0
LOS	A			B	E	A
Approach Delay	6.7			10.2	19.6	
Approach LOS	A			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 14.0		Intersection LOS: B	
Intersection Capacity Utilization 55.0%		ICU Level of Service A	
Analysis Period (min) 15			

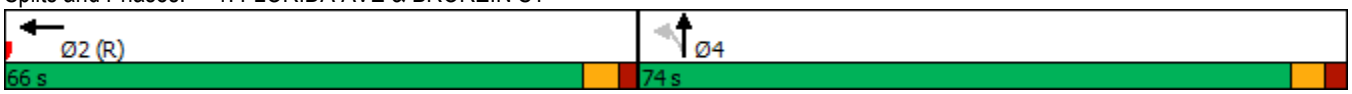
Splits and Phases: 21: EB WHITING OFF & WHITING ST

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1425	170	160	1400	0	0	0	0
Future Volume (vph)	0	0	0	0	1425	170	160	1400	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	1.00	1.00	1.00	1.00
Frt					0.984							
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6305	0	1770	5085	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	6305	0	1770	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					15		22					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		273			600			296			353	
Travel Time (s)		6.2			13.6			6.7			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1549	185	174	1522	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1734	0	174	1522	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Minimum Split (s)					30.0		37.0	37.0				
Total Split (s)					66.0		74.0	74.0				
Total Split (%)					47.1%		52.9%	52.9%				
Maximum Green (s)					60.2		67.9	67.9				
Yellow Time (s)					3.7		3.7	3.7				
All-Red Time (s)					2.1		2.4	2.4				
Lost Time Adjust (s)					0.0		0.0	0.0				
Total Lost Time (s)					5.8		6.1	6.1				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		23.0	23.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					60.2		67.9	67.9				
Actuated g/C Ratio					0.43		0.48	0.48				
v/c Ratio					0.64		0.20	0.62				
Control Delay					4.3		15.7	25.0				
Queue Delay					0.6		1.2	1.2				
Total Delay					4.9		16.9	26.2				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					A		B	C				
Approach Delay					4.9			25.2				
Approach LOS					A			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 54 (39%), Referenced to phase 2:WBT, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 15.0		Intersection LOS: B	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: FLORIDA AVE & BROREIN ST

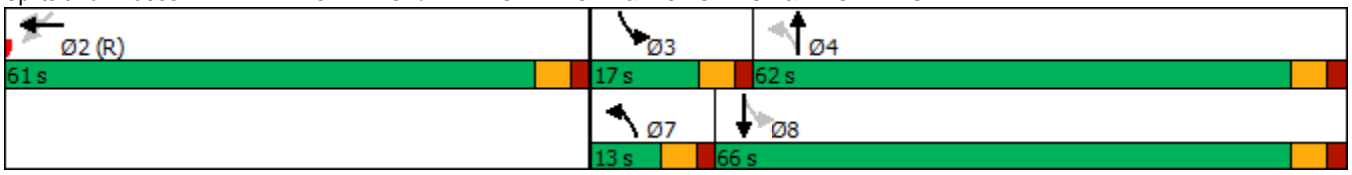


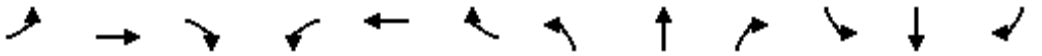
Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations										
Traffic Volume (vph)	45	1705	200	65	495	165	145	750	180	350
Future Volume (vph)	45	1705	200	65	495	165	145	750	180	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.867			0.874		0.850	0.850
Flt Protected		0.999	0.950			0.950				
Satd. Flow (prot)	0	3536	1770	1615	0	1770	1628	0	1583	1583
Flt Permitted		0.999	0.071			0.142				
Satd. Flow (perm)	0	3536	132	1615	0	265	1628	0	1583	1583
Right Turn on Red					Yes					Yes
Satd. Flow (RTOR)				325						380
Link Speed (mph)		30		30			30			
Link Distance (ft)		591		494			379			
Travel Time (s)		13.4		11.2			8.6			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	1853	217	71	538	179	158	815	196	380
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	1902	217	609	0	179	973	0	196	380
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Left	Left	Right	Left	Left	Right	R NA	Right
Median Width(ft)		12		12			12			
Link Offset(ft)		0		0			0			
Crosswalk Width(ft)		16		16			16			
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		15		9	15		9	9	9
Number of Detectors	1	2	1	2		1	2		1	1
Detector Template	Left	Thru	Left	Thru		Left	Thru		Right	Right
Leading Detector (ft)	20	100	20	100		20	100		20	20
Trailing Detector (ft)	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel										
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94		94			94			
Detector 2 Size(ft)		6		6			6			
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			
Detector 2 Channel										
Detector 2 Extend (s)		0.0		0.0			0.0			
Turn Type	Perm	NA	pm+pt	NA		pm+pt	NA		Perm	Free
Protected Phases		2	7	4		3	8			
Permitted Phases	2		4			8			2	Free
Detector Phase	2	2	7	4		3	8		2	
Switch Phase										
Minimum Initial (s)	10.0	10.0	5.0	10.0		5.0	10.0		10.0	

Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Minimum Split (s)	25.0	25.0	11.0	32.0		11.0	32.0		25.0	
Total Split (s)	61.0	61.0	13.0	62.0		17.0	66.0		61.0	
Total Split (%)	43.6%	43.6%	9.3%	44.3%		12.1%	47.1%		43.6%	
Maximum Green (s)	55.3	55.3	7.3	56.0		11.3	60.0		55.3	
Yellow Time (s)	3.7	3.7	3.7	3.7		3.7	3.7		3.7	
All-Red Time (s)	2.0	2.0	2.0	2.3		2.0	2.3		2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.7	5.7	6.0		5.7	6.0		5.7	
Lead/Lag			Lead	Lag		Lead	Lag			
Lead-Lag Optimize?			Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	None	Max		None	Max		C-Max	
Walk Time (s)	7.0	7.0		7.0			7.0		7.0	
Flash Dont Walk (s)	12.0	12.0		19.0			19.0		12.0	
Pedestrian Calls (#/hr)	0	0		0			0		0	
Act Effct Green (s)		55.3	64.0	56.4		71.2	60.0		55.3	140.0
Actuated g/C Ratio		0.40	0.46	0.40		0.51	0.43		0.40	1.00
v/c Ratio		1.36	1.50	0.72		0.71	1.40		0.31	0.24
Control Delay		185.2	280.9	21.1		34.1	219.6		31.0	0.4
Queue Delay		0.1	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		185.3	280.9	21.1		34.1	219.6		31.0	0.4
LOS		F	F	C		C	F		C	A
Approach Delay		185.3		89.4			190.7			
Approach LOS		F		F			F			

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 33 (24%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.50			
Intersection Signal Delay: 146.4		Intersection LOS: F	
Intersection Capacity Utilization 143.8%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: WB BROREIN ON/WB BROREIN OFF & MORGAN ST & BROREIN ST



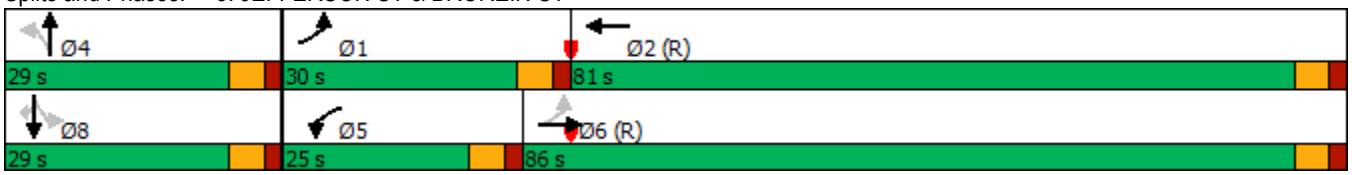


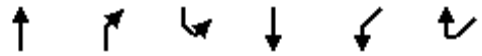
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	335	310	15	140	1575	175	40	505	25	10	130	135
Future Volume (vph)	335	310	15	140	1575	175	40	505	25	10	130	135
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	80		0	115		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.993			0.985			0.993				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1850	0	1770	3486	0	1770	3514	0	1770	1863	1583
Flt Permitted	0.049			0.950			0.546			0.172		
Satd. Flow (perm)	91	1850	0	1770	3486	0	1017	3514	0	320	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			13			3				147
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		591			202			322			162	
Travel Time (s)		13.4			4.6			7.3			3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	364	337	16	152	1712	190	43	549	27	11	141	147
Shared Lane Traffic (%)												
Lane Group Flow (vph)	364	353	0	152	1902	0	43	576	0	11	141	147
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6						4			8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6		5	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	11.0	24.0		11.0	24.0		24.0	24.0		24.0	24.0	24.0
Total Split (s)	30.0	86.0		25.0	81.0		29.0	29.0		29.0	29.0	29.0
Total Split (%)	21.4%	61.4%		17.9%	57.9%		20.7%	20.7%		20.7%	20.7%	20.7%
Maximum Green (s)	24.3	80.3		19.3	75.3		23.3	23.3		23.3	23.3	23.3
Yellow Time (s)	3.7	3.7		3.7	3.7		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	Max
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)	105.1	83.9		15.7	75.3		23.3	23.3		23.3	23.3	23.3
Actuated g/C Ratio	0.75	0.60		0.11	0.54		0.17	0.17		0.17	0.17	0.17
v/c Ratio	1.01	0.32		0.77	1.01		0.25	0.98		0.21	0.45	0.38
Control Delay	88.0	12.4		84.4	55.7		55.5	90.2		61.4	58.0	10.5
Queue Delay	0.0	0.0		0.0	34.9		0.0	0.0		0.0	0.0	0.2
Total Delay	88.0	12.4		84.4	90.6		55.5	90.2		61.4	58.0	10.7
LOS	F	B		F	F		E	F		E	E	B
Approach Delay		50.8			90.1			87.8			34.9	
Approach LOS		D			F			F			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay: 77.6		Intersection LOS: E	
Intersection Capacity Utilization 109.8%		ICU Level of Service H	
Analysis Period (min) 15			

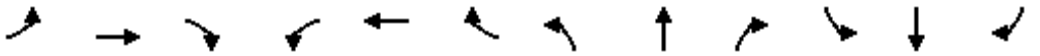
Splits and Phases: 3: JEFFERSON ST & BROREIN ST



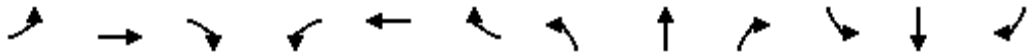


Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	545	470	640	275	0	0
Future Volume (vph)	545	470	640	275	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	115		0	0
Storage Lanes		1	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	162			583	231	
Travel Time (s)	3.7			13.3	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	592	511	696	299	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	592	511	696	299	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		



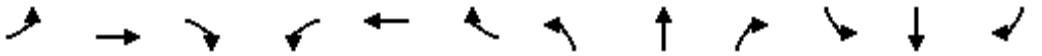
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	385	2210	360	230	880	0	0	125	50
Future Volume (vph)	0	0	0	385	2210	360	230	880	0	0	125	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.979						0.957	
Flt Protected				0.950				0.990				
Satd. Flow (prot)	0	0	0	1770	6273	0	0	3504	0	0	3387	0
Flt Permitted				0.950				0.823				
Satd. Flow (perm)	0	0	0	1770	6273	0	0	2913	0	0	3387	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					27						3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			319			716			284	
Travel Time (s)		13.1			7.3			16.3			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	418	2402	391	250	957	0	0	136	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	418	2793	0	0	1207	0	0	190	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					4			2			2	
Permitted Phases				4			2					
Minimum Split (s)				26.0	26.0		26.0	26.0			26.0	
Total Split (s)				85.0	85.0		55.0	55.0			55.0	
Total Split (%)				60.7%	60.7%		39.3%	39.3%			39.3%	
Maximum Green (s)				79.3	79.3		49.1	49.1			49.1	
Yellow Time (s)				3.7	3.7		3.7	3.7			3.7	
All-Red Time (s)				2.0	2.0		2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0			0.0			0.0	
Total Lost Time (s)				5.7	5.7			5.9			5.9	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				13.0	13.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				79.3	79.3			49.1			49.1	
Actuated g/C Ratio				0.57	0.57			0.35			0.35	
v/c Ratio				0.42	0.78			1.18			0.16	
Control Delay				10.6	13.9			132.4			31.2	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				10.6	13.9			132.4			31.2	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				B	B			F			C	
Approach Delay					13.4			132.4			31.2	
Approach LOS					B			F			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 61 (44%), Referenced to phase 2:NBSB, Start of Green			
Natural Cycle: 90			
Control Type: Pretimed			
Maximum v/c Ratio: 1.18			
Intersection Signal Delay: 45.3		Intersection LOS: D	
Intersection Capacity Utilization 92.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 5: JEFFERSON ST & KENNEDY BLVD

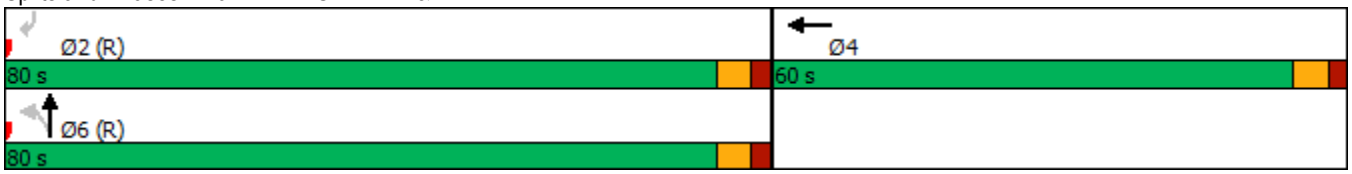


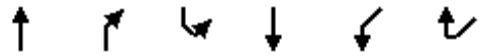
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1180	255	120	620	0	0	0	180
Future Volume (vph)	0	0	0	0	1180	255	120	620	0	0	0	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88
Frt					0.973							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4948	0	1770	1863	0	0	0	2787
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	4948	0	1770	1863	0	0	0	2787
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					40		22					22
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		847			465			292			201	
Travel Time (s)		19.3			10.6			6.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1283	277	130	674	0	0	0	196
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1560	0	130	674	0	0	0	196
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				Perm
Protected Phases					4			6				
Permitted Phases							6					2
Minimum Split (s)					30.0		25.0	25.0				27.0
Total Split (s)					60.0		80.0	80.0				80.0
Total Split (%)					42.9%		57.1%	57.1%				57.1%
Maximum Green (s)					54.2		74.1	74.1				74.1
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.1		2.2	2.2				2.2
Lost Time Adjust (s)					0.0		0.0	0.0				0.0
Total Lost Time (s)					5.8		5.9	5.9				5.9
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				7.0
Flash Dont Walk (s)					17.0		12.0	12.0				14.0
Pedestrian Calls (#/hr)					0		0	0				0
Act Effct Green (s)					54.2		74.1	74.1				74.1
Actuated g/C Ratio					0.39		0.53	0.53				0.53
v/c Ratio					0.80		0.14	0.68				0.13
Control Delay					41.1		14.2	28.8				14.4
Queue Delay					0.0		0.0	2.0				0.0
Total Delay					41.1		14.2	30.8				14.4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					D		B	C				B
Approach Delay					41.1			28.1			14.4	
Approach LOS					D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 21 (15%), Referenced to phase 2:SBR and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 35.0		Intersection LOS: C	
Intersection Capacity Utilization 70.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: NEBRASKA AVE & KENNEDY BLVD





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	700	175	475	180	0	0
Future Volume (vph)	700	175	475	180	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	130		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt	0.973					
Flt Protected			0.950			
Satd. Flow (prot)	1812	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1812	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			390	272	
Travel Time (s)	4.6			8.9	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	761	190	516	196	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	951	0	516	196	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

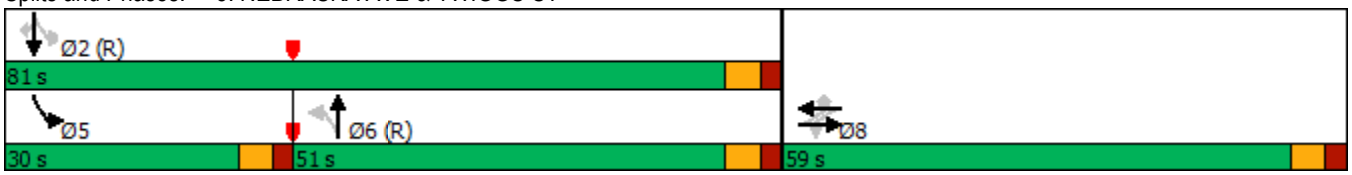
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	995	245	55	320	95	55	500	145	440	355	35
Future Volume (vph)	55	995	245	55	320	95	55	500	145	440	355	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	150		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.972				0.850		0.966				0.850
Flt Protected		0.998			0.993		0.950			0.950		
Satd. Flow (prot)	0	3433	0	0	3514	1583	1770	1799	0	1770	3539	1583
Flt Permitted		0.890			0.496		0.523			0.079		
Satd. Flow (perm)	0	3062	0	0	1755	1583	974	1799	0	147	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23				103		11				38
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			652			390			257	
Travel Time (s)		17.7			14.8			8.9			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	1082	266	60	348	103	60	543	158	478	386	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1408	0	0	408	103	60	701	0	478	386	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm
Protected Phases		8			8			6		5	2	
Permitted Phases	8			8		8	6			2		2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8		8	8	8	6	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		5.0	10.0	10.0
Minimum Split (s)	30.0	30.0		30.0	30.0	30.0	28.0	28.0		11.0	28.0	28.0
Total Split (s)	59.0	59.0		59.0	59.0	59.0	51.0	51.0		30.0	81.0	81.0
Total Split (%)	42.1%	42.1%		42.1%	42.1%	42.1%	36.4%	36.4%		21.4%	57.9%	57.9%
Maximum Green (s)	52.9	52.9		52.9	52.9	52.9	45.0	45.0		24.3	75.0	75.0
Yellow Time (s)	3.7	3.7		3.7	3.7	3.7	3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.4		2.4	2.4	2.4	2.3	2.3		2.0	2.3	2.3
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.1			6.1	6.1	6.0	6.0		5.7	6.0	6.0
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		2.0	3.0	3.0
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Dont Walk (s)	16.0	16.0		16.0	16.0	16.0	15.0	15.0			15.0	15.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	0
Act Effct Green (s)		52.9			52.9	52.9	45.0	45.0		75.3	75.0	75.0
Actuated g/C Ratio		0.38			0.38	0.38	0.32	0.32		0.54	0.54	0.54
v/c Ratio		1.20			1.13dl	0.16	0.19	1.20		1.33	0.20	0.04
Control Delay		137.3			36.1	10.1	25.9	133.2		200.8	17.3	4.6
Queue Delay		0.0			0.0	0.0	0.0	0.2		0.0	0.0	0.0
Total Delay		137.3			36.1	10.1	25.9	133.4		200.8	17.3	4.6
LOS		F			D	B	C	F		F	B	A
Approach Delay		137.3			30.8			124.9			114.0	
Approach LOS		F			C			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 40 (29%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.33			
Intersection Signal Delay: 113.6		Intersection LOS: F	
Intersection Capacity Utilization 126.8%		ICU Level of Service H	
Analysis Period (min) 15			
dl Defacto Left Lane. Recode with 1 though lane as a left lane.			

Splits and Phases: 8: NEBRASKA AVE & TWIGGS ST



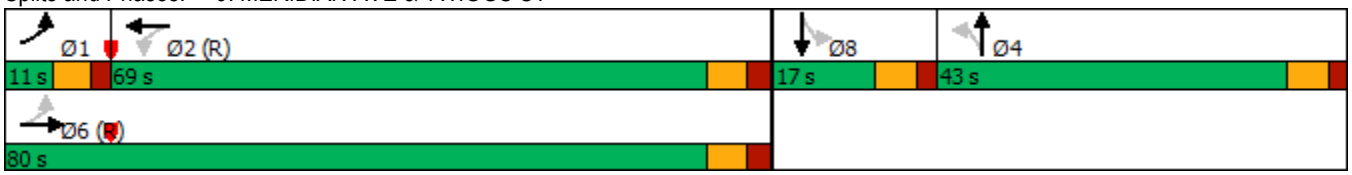
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	560	690	330	210	425	120	45	1710	205	0	0	0
Future Volume (vph)	560	690	330	210	425	120	45	1710	205	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	1.00
Frt		0.969			0.976			0.984				
Flt Protected		0.983			0.986			0.999				
Satd. Flow (prot)	0	3371	0	0	3406	0	0	4999	0	0	5085	1863
Flt Permitted		0.522			0.523			0.950				
Satd. Flow (perm)	0	1790	0	0	1807	0	0	4754	0	0	5085	1863
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			20			14				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			772			501			413	
Travel Time (s)		14.8			17.5			11.4			9.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	609	750	359	228	462	130	49	1859	223	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1718	0	0	820	0	0	2131	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA				Free
Protected Phases	1	6			2			4			8	
Permitted Phases	6			2			4			8		Free
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	11.0	46.0		17.0	17.0		27.0	27.0		17.0	17.0	
Total Split (s)	11.0	80.0		69.0	69.0		43.0	43.0		17.0	17.0	
Total Split (%)	7.9%	57.1%		49.3%	49.3%		30.7%	30.7%		12.1%	12.1%	
Maximum Green (s)	5.0	73.2		62.2	62.2		36.6	36.6		10.6	10.6	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	2.0	2.8		2.8	2.8		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.8			6.8			6.4			6.4	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)		7.0					7.0	7.0				
Flash Dont Walk (s)		32.0					13.0	13.0				
Pedestrian Calls (#/hr)		0					0	0				
Act Effct Green (s)		73.2			62.2			53.6				
Actuated g/C Ratio		0.52			0.44			0.38				
v/c Ratio		2.22dl			3.62dl			1.17				
Control Delay		344.1			71.4			119.8				
Queue Delay		0.0			0.0			0.0				
Total Delay		344.1			71.4			119.8				
LOS		F			E			F				
Approach Delay		344.1			71.4			119.8				
Approach LOS		F			E			F				

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 96 (69%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.72			
Intersection Signal Delay: 193.9		Intersection LOS: F	
Intersection Capacity Utilization 122.8%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 9: MERIDIAN AVE & TWIGGS ST



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Lane Configurations									
Traffic Volume (vph)	305	125	65	1130	1690	0	375	0	0
Future Volume (vph)	305	125	65	1130	1690	0	375	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt		0.850					0.850		
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	5085	5085	0	1583	0	0
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	5085	5085	0	1583	0	0
Link Speed (mph)	30			30	30			30	
Link Distance (ft)	404			536	498			405	
Travel Time (s)	9.2			12.2	11.3			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	332	136	71	1228	1837	0	408	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	332	136	71	1228	1837	0	408	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right	Right	Left	Right
Median Width(ft)	12			12	12			0	
Link Offset(ft)	0			0	0			0	
Crosswalk Width(ft)	16			16	16			16	
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9	9	15	9
Sign Control	Stop			Free	Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 63.2%		ICU Level of Service B	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	476.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations								
Traffic Vol, veh/h	305	125	65	1130	1690	0	0	0
Future Vol, veh/h	305	125	65	1130	1690	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	-	-
Storage Length	0	0	0	-	-	0	-	-
Veh in Median Storage, #	0	-	-	0	0	-	0	-
Grade, %	0	-	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	332	136	71	1228	1837	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2470	919	1837	0	-	0
Stage 1	1837	-	-	-	-	-
Stage 2	633	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	~ 52	235	151	-	-	0
Stage 1	~ 72	-	-	-	-	0
Stage 2	447	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 28	235	151	-	-	-
Mov Cap-2 Maneuver	~ 28	-	-	-	-	-
Stage 1	~ 38	-	-	-	-	-
Stage 2	447	-	-	-	-	-

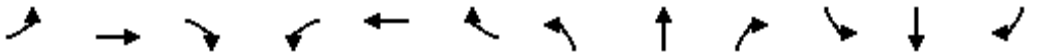
Approach	EB	NB	SB
HCM Control Delay, $	3663.1	2.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	151	-	28	235	-
HCM Lane V/C Ratio	0.468	-	11.84	0.578	-
HCM Control Delay (s)	48.2	-	$ 5148.2	39.4	-
HCM Lane LOS	E	-	F	E	-
HCM 95th %tile Q(veh)	2.2	-	41	3.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations											
Traffic Volume (vph)	0	0	235	1200	0	0	2000	0	65	0	160
Future Volume (vph)	0	0	235	1200	0	0	2000	0	65	0	160
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00	1.00	1.00	1.00
Frt											0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Flt Permitted			0.950						0.950		
Satd. Flow (perm)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	264			498			271			329	
Travel Time (s)	6.0			11.3			6.2			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	255	1304	0	0	2174	0	71	0	174
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	255	1304	0	0	2174	0	71	0	174
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			12	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Sign Control	Free			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			

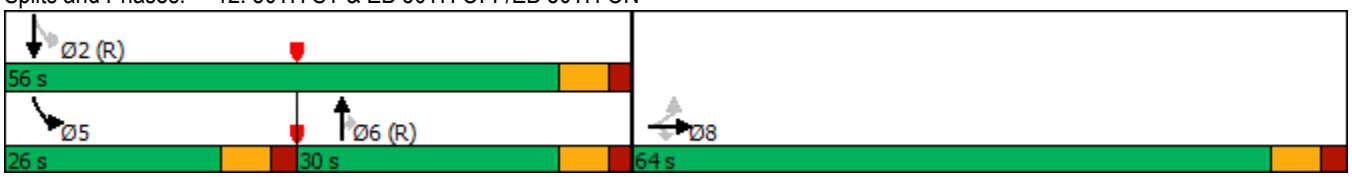


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	0	790	0	0	0	0	1185	50	330	1570	0
Future Volume (vph)	200	0	790	0	0	0	0	1185	50	330	1570	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.132		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	246	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			93						96			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		549			603			383			284	
Travel Time (s)		12.5			13.7			8.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	0	859	0	0	0	0	1288	54	359	1707	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	217	859	0	0	0	0	1288	54	359	1707	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8						6	2		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8	8					6	6	5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	5.0	10.0	
Minimum Split (s)	47.0	47.0	47.0					17.0	17.0	12.0	24.0	
Total Split (s)	64.0	64.0	64.0					30.0	30.0	26.0	56.0	
Total Split (%)	53.3%	53.3%	53.3%					25.0%	25.0%	21.7%	46.7%	
Maximum Green (s)	57.1	57.1	57.1					23.5	23.5	19.3	49.5	
Yellow Time (s)	4.4	4.4	4.4					4.4	4.4	4.4	4.4	
All-Red Time (s)	2.5	2.5	2.5					2.1	2.1	2.3	2.1	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.9	6.9					6.5	6.5	6.7	6.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0					3.0	3.0	2.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Dont Walk (s)	33.0	33.0	33.0								10.0	
Pedestrian Calls (#/hr)	0	0	0								0	
Act Effct Green (s)		57.1	57.1					23.5	23.5	49.3	49.5	
Actuated g/C Ratio		0.48	0.48					0.20	0.20	0.41	0.41	
v/c Ratio		0.26	1.07					1.03	0.14	1.04	0.81	
Control Delay		19.8	81.3					79.9	2.2	86.5	22.7	
Queue Delay		0.0	0.0					0.0	0.0	16.3	0.0	
Total Delay		19.9	81.3					79.9	2.2	102.8	22.7	
LOS		B	F					E	A	F	C	
Approach Delay		68.9						76.8			36.6	
Approach LOS		E						E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 6 (5%), Referenced to phase 2:SBTL and 6:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 56.4		Intersection LOS: E	
Intersection Capacity Utilization 90.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 12: 50TH ST & EB 50TH OFF/EB 50TH ON

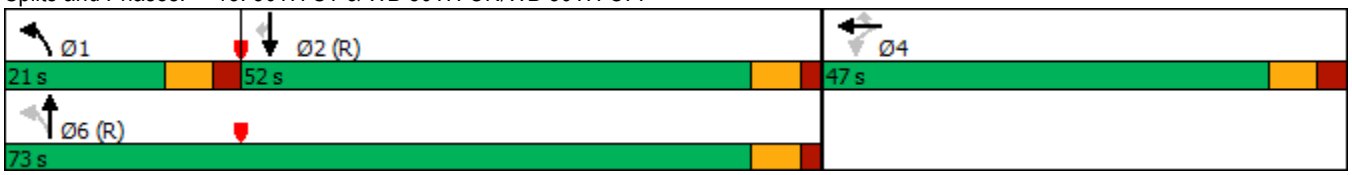


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	0	130	170	1215	0	0	1860	110
Future Volume (vph)	0	0	0	40	0	130	170	1215	0	0	1860	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	140		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.060					
Satd. Flow (perm)	0	0	0	0	1770	1583	112	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						93						109
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		457			359			284			339	
Travel Time (s)		10.4			8.2			6.5			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	43	0	141	185	1321	0	0	2022	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	43	141	185	1321	0	0	2022	120
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				4	4	4	1	6			2	2
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	10.0
Minimum Split (s)				47.0	47.0	47.0	12.0	24.0			24.0	24.0
Total Split (s)				47.0	47.0	47.0	21.0	73.0			52.0	52.0
Total Split (%)				39.2%	39.2%	39.2%	17.5%	60.8%			43.3%	43.3%
Maximum Green (s)				39.8	39.8	39.8	14.2	66.6			45.6	45.6
Yellow Time (s)				4.4	4.4	4.4	4.4	4.4			4.4	4.4
All-Red Time (s)				2.8	2.8	2.8	2.4	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.2	7.2	6.8	6.4			6.4	6.4
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	2.0	3.0			3.0	3.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)				32.0	32.0	32.0		10.0			10.0	10.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)					12.0	12.0	94.0	94.4			75.9	75.9
Actuated g/C Ratio					0.10	0.10	0.78	0.79			0.63	0.63
v/c Ratio					0.24	0.58	0.74	0.33			0.50	0.12
Control Delay					52.1	29.4	48.9	3.6			13.2	3.0
Queue Delay					0.0	0.0	2.8	0.7			0.1	0.0
Total Delay					52.1	29.4	51.7	4.3			13.3	3.0
LOS					D	C	D	A			B	A
Approach Delay					34.7			10.1			12.7	
Approach LOS					C			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 12.7		Intersection LOS: B	
Intersection Capacity Utilization 90.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 13: 50TH ST & WB 50TH ON/WB 50TH OFF



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	125	0	795	0	0	955
Future Volume (vph)	125	0	795	0	0	955
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	3539	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	3539	0	0	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	292		343			439
Travel Time (s)	6.6		7.8			10.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	0	864	0	0	1038
Shared Lane Traffic (%)						
Lane Group Flow (vph)	136	0	864	0	0	1038
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	125	0	795	0	0	955
Future Vol, veh/h	125	0	795	0	0	955
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	136	0	864	0	0	1038

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1383	-	0	-	-	-
Stage 1	864	-	-	-	-	-
Stage 2	519	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-
Pot Cap-1 Maneuver	~ 135	0	-	0	0	-
Stage 1	373	0	-	0	0	-
Stage 2	562	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	~ 135	-	-	-	-	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	373	-	-	-	-	-
Stage 2	562	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.4	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	263	-
HCM Lane V/C Ratio	-	0.517	-
HCM Control Delay (s)	-	32.4	-
HCM Lane LOS	-	D	-
HCM 95th %tile Q(veh)	-	2.7	-

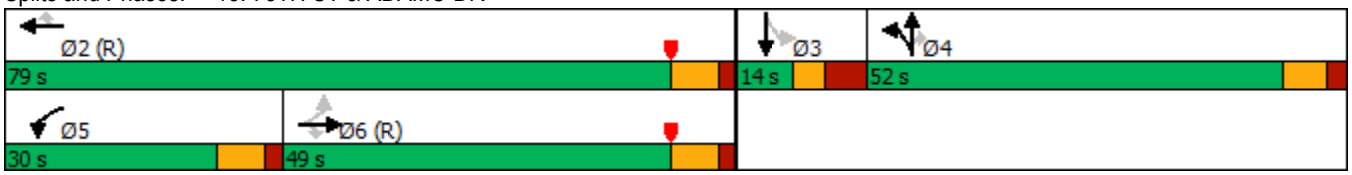
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1355	530	420	885	5	395	5	440	10	5	5
Future Volume (vph)	10	1355	530	420	885	5	395	5	440	10	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	0		315	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.968	
Flt Protected	0.950			0.950			0.950	0.953			0.974	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1681	1686	1583	0	1756	0
Flt Permitted	0.298			0.950			0.950	0.953			0.847	
Satd. Flow (perm)	555	3539	1583	1770	3539	1583	1681	1686	1583	0	1527	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			565			91			419		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		887			638			788			238	
Travel Time (s)		20.2			14.5			17.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1473	576	457	962	5	429	5	478	11	5	5
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	11	1473	576	457	962	5	219	215	478	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		25			25			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Perm	NA	
Protected Phases		6		5	2		4	4			3	
Permitted Phases	6		6			2			4	3		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6	6	5	2	2	4	4	4	3	3	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	26.0	26.0	26.0	13.0	27.0	27.0	52.0	52.0	52.0	14.0	14.0	
Total Split (s)	49.0	49.0	49.0	30.0	79.0	79.0	52.0	52.0	52.0	14.0	14.0	
Total Split (%)	33.8%	33.8%	33.8%	20.7%	54.5%	54.5%	35.9%	35.9%	35.9%	9.7%	9.7%	
Maximum Green (s)	41.8	41.8	41.8	22.8	71.8	71.8	44.9	44.9	44.9	6.0	6.0	
Yellow Time (s)	5.2	5.2	5.2	5.2	5.2	5.2	4.8	4.8	4.8	3.4	3.4	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.3	4.6	4.6	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.1	7.1		8.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0			
Flash Dont Walk (s)	11.0	11.0	11.0		12.0	12.0	37.0	37.0	37.0			
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0			
Act Effct Green (s)	41.8	41.8	41.8	42.8	91.8	91.8	30.5	30.5	30.5		6.0	
Actuated g/C Ratio	0.29	0.29	0.29	0.30	0.63	0.63	0.21	0.21	0.21		0.04	
v/c Ratio	0.07	1.44	0.67	0.88	0.43	0.00	0.62	0.61	0.72		0.31	
Control Delay	39.2	242.9	7.8	67.6	16.5	0.0	58.4	57.8	13.7		67.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	39.2	242.9	7.8	67.6	16.5	0.0	58.4	57.8	13.7		67.8	
LOS	D	F	A	E	B	A	E	E	B		E	
Approach Delay		176.1			32.8			34.8			67.8	
Approach LOS		F			C			C			E	

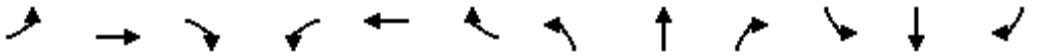
Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.44			
Intersection Signal Delay: 100.2		Intersection LOS: F	
Intersection Capacity Utilization 96.4%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 15: 78TH ST & ADAMO DR



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1790	15	145	1310	0	0
Future Volume (vph)	1790	15	145	1310	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	1.00
Frt		0.850				
Flt Protected				0.995		
Satd. Flow (prot)	5085	1583	0	5060	0	0
Flt Permitted				0.995		
Satd. Flow (perm)	5085	1583	0	5060	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	638			376	435	
Travel Time (s)	14.5			8.5	9.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1946	16	158	1424	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1946	16	0	1582	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	25			25	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	69.5%	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												
Traffic Volume (vph)	175	0	1215	0	0	0	0	1470	255	575	2035	0
Future Volume (vph)	175	0	1215	0	0	0	0	1470	255	575	2035	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	315		500	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.134		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	250	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237						277			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		739			677			1414			381	
Travel Time (s)		16.8			15.4			32.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	190	0	1321	0	0	0	0	1598	277	625	2212	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	190	1321	0	0	0	0	1598	277	625	2212	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0			30			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	D.P+P	NA	
Protected Phases		4						2		1 3	6 3 2	
Permitted Phases	4		4						2	2		

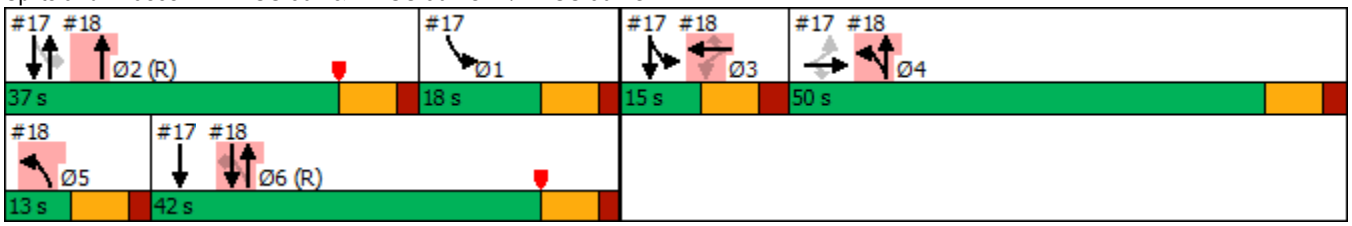
Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4					2	2	1 3	6 3 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					15.0	15.0			
Minimum Split (s)	13.0	13.0	13.0					23.0	23.0			
Total Split (s)	50.0	50.0	50.0					37.0	37.0			
Total Split (%)	41.7%	41.7%	41.7%					30.8%	30.8%			
Maximum Green (s)	42.5	42.5	42.5					29.9	29.9			
Yellow Time (s)	5.1	5.1	5.1					5.1	5.1			
All-Red Time (s)	2.4	2.4	2.4					2.0	2.0			
Lost Time Adjust (s)		0.0	0.0					0.0	0.0			
Total Lost Time (s)		7.5	7.5					7.1	7.1			
Lead/Lag	Lag	Lag	Lag					Lead	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes					Yes	Yes			
Vehicle Extension (s)	4.0	4.0	4.0					3.0	3.0			
Recall Mode	Max	Max	Max					C-Max	C-Max			
Act Effct Green (s)		42.5	42.5					29.9	29.9	55.8	62.9	
Actuated g/C Ratio		0.35	0.35					0.25	0.25	0.46	0.52	
v/c Ratio		0.30	1.85					1.00	0.46	1.41	0.83	
Control Delay		29.7	411.6					67.9	6.9	205.4	19.7	
Queue Delay		0.0	0.0					14.2	0.0	0.5	1.8	
Total Delay		29.7	411.6					82.1	6.9	205.9	21.5	
LOS		C	F					F	A	F	C	
Approach Delay		363.6						71.0			62.1	
Approach LOS		F						E			E	

Intersection Summary

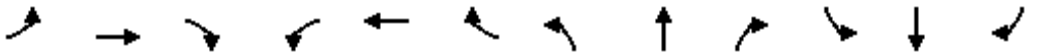
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.85
Intersection Signal Delay: 138.0 Intersection LOS: F
Intersection Capacity Utilization 126.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 17: US 301 & EB US 301 OFF/EB US 301 ON



Lane Group	Ø1	Ø3	Ø5	Ø6
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	15.0
Minimum Split (s)	13.0	13.0	13.0	23.0
Total Split (s)	18.0	15.0	13.0	42.0
Total Split (%)	15%	13%	11%	35%
Maximum Green (s)	10.9	7.2	5.9	34.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.7	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	4.0	3.0
Recall Mode	Min	None	Max	C-Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary



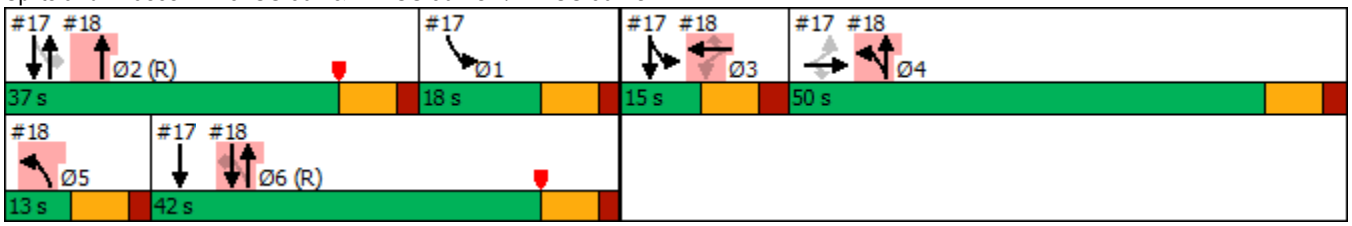
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	145	0	185	465	1180	0	0	2465	165
Future Volume (vph)	0	0	0	145	0	185	465	1180	0	0	2465	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	300		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.115					
Satd. Flow (perm)	0	0	0	0	1770	1583	214	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						235						176
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			711			381			795	
Travel Time (s)		13.2			16.2			8.7			18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	158	0	201	505	1283	0	0	2679	179
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	158	201	505	1283	0	0	2679	179
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			20			30	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	D.P+P	NA			NA	Perm
Protected Phases					3		5 4	2 4 6			6	
Permitted Phases				3		3	6					6

Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				3	3	3	5 4	2 4 6			6	6
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0					15.0	15.0
Minimum Split (s)				13.0	13.0	13.0					23.0	23.0
Total Split (s)				15.0	15.0	15.0					42.0	42.0
Total Split (%)				12.5%	12.5%	12.5%					35.0%	35.0%
Maximum Green (s)				7.2	7.2	7.2					34.9	34.9
Yellow Time (s)				5.1	5.1	5.1					5.1	5.1
All-Red Time (s)				2.7	2.7	2.7					2.0	2.0
Lost Time Adjust (s)					0.0	0.0					0.0	0.0
Total Lost Time (s)					7.8	7.8					7.1	7.1
Lead/Lag				Lead	Lead	Lead					Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0					3.0	3.0
Recall Mode				None	None	None					C-Max	C-Max
Act Effct Green (s)					7.2	7.2	90.8	97.9			34.9	34.9
Actuated g/C Ratio					0.06	0.06	0.76	0.82			0.29	0.29
v/c Ratio					1.49	0.64	0.57	0.31			1.44	0.31
Control Delay					302.6	13.6	50.1	0.3			233.5	6.4
Queue Delay					0.2	0.0	28.4	0.2			0.3	0.0
Total Delay					302.8	13.6	78.5	0.5			233.8	6.4
LOS					F	B	E	A			F	A
Approach Delay					140.8			22.6			219.6	
Approach LOS					F			C			F	

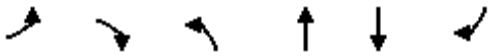
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.85			
Intersection Signal Delay: 143.6		Intersection LOS: F	
Intersection Capacity Utilization 126.7%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 18: US 301 & WB US 301 ON/WB US 301 OFF

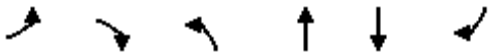


Lane Group	Ø1	Ø2	Ø4	Ø5
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	15.0	5.0	5.0
Minimum Split (s)	13.0	23.0	13.0	13.0
Total Split (s)	18.0	37.0	50.0	13.0
Total Split (%)	15%	31%	42%	11%
Maximum Green (s)	10.9	29.9	42.5	5.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.4	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0	4.0	4.0
Recall Mode	Min	C-Max	Max	Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary



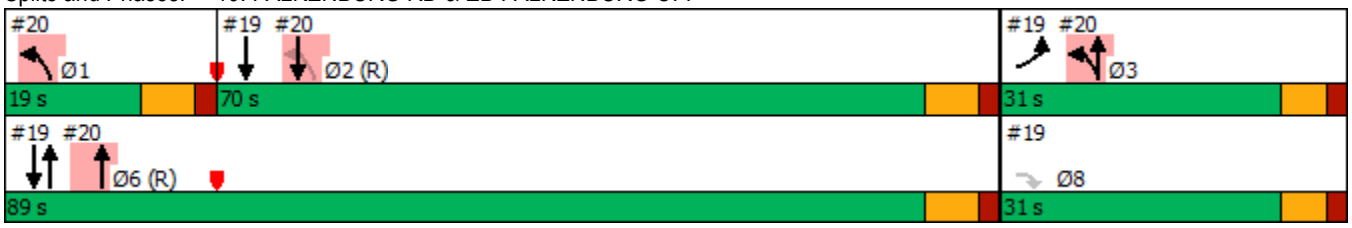
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Lane Configurations								
Traffic Volume (vph)	430	570	0	1370	1580	0		
Future Volume (vph)	430	570	0	1370	1580	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	0.97	0.88	1.00	0.91	0.91	1.00		
Frt		0.850						
Flt Protected	0.950							
Satd. Flow (prot)	3433	2787	0	5085	5085	0		
Flt Permitted	0.950							
Satd. Flow (perm)	3433	2787	0	5085	5085	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		65						
Link Speed (mph)	30			30	30			
Link Distance (ft)	519			688	550			
Travel Time (s)	11.8			15.6	12.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	467	620	0	1489	1717	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	467	620	0	1489	1717	0		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	24			30	30			
Link Offset(ft)	0			0	0			
Crosswalk Width(ft)	16			16	16			
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	9	15			9		
Number of Detectors	1	1		2	2			
Detector Template	Left	Right		Thru	Thru			
Leading Detector (ft)	20	20		100	100			
Trailing Detector (ft)	0	0		0	0			
Detector 1 Position(ft)	0	0		0	0			
Detector 1 Size(ft)	20	20		6	6			
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			
Detector 2 Position(ft)				94	94			
Detector 2 Size(ft)				6	6			
Detector 2 Type				Cl+Ex	Cl+Ex			
Detector 2 Channel								
Detector 2 Extend (s)				0.0	0.0			
Turn Type	Prot	Perm		NA	NA			
Protected Phases	3			6	6 2		1	2
Permitted Phases		8						
Detector Phase	3	8		6	6 2			
Switch Phase								
Minimum Initial (s)	6.0	6.0		15.0			5.0	15.0

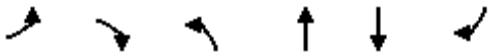


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Minimum Split (s)	23.0	23.0		23.0			12.0	23.0
Total Split (s)	31.0	31.0		89.0			19.0	70.0
Total Split (%)	25.8%	25.8%		74.2%			16%	58%
Maximum Green (s)	24.9	24.9		82.2			12.2	63.2
Yellow Time (s)	4.1	4.1		4.8			4.8	4.8
All-Red Time (s)	2.0	2.0		2.0			2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0				
Total Lost Time (s)	6.1	6.1		6.8				
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)	3.5	3.5		4.0			6.0	4.0
Recall Mode	None	None		C-Max			None	C-Max
Act Effct Green (s)	24.9	24.9		82.2	82.2			
Actuated g/C Ratio	0.21	0.21		0.68	0.68			
v/c Ratio	0.66	0.99		0.43	0.49			
Control Delay	48.7	75.2		8.9	5.4			
Queue Delay	0.3	0.0		0.0	0.1			
Total Delay	49.0	75.2		8.9	5.5			
LOS	D	E		A	A			
Approach Delay	64.0			8.9	5.5			
Approach LOS	E			A	A			

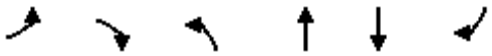
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 21.5		Intersection LOS: C	
Intersection Capacity Utilization 80.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 19: FALKENBURG RD & EB FALKENBURG OFF





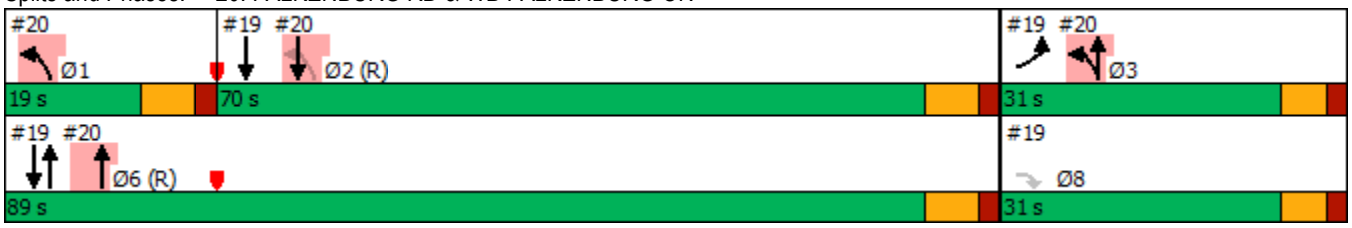
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	0	0	465	1335	1580	335				
Future Volume (vph)	0	0	465	1335	1580	335				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00				
Frt						0.850				
Flt Protected			0.950							
Satd. Flow (prot)	0	0	1770	3539	3539	1583				
Flt Permitted			0.063							
Satd. Flow (perm)	0	0	117	3539	3539	1583				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)						133				
Link Speed (mph)	30			30	30					
Link Distance (ft)	492			550	852					
Travel Time (s)	11.2			12.5	19.4					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				
Adj. Flow (vph)	0	0	505	1451	1717	364				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	505	1451	1717	364				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			30	30					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Turning Speed (mph)	15	9	15			9				
Number of Detectors			1	2	2	1				
Detector Template			Left	Thru	Thru	Right				
Leading Detector (ft)			20	100	100	20				
Trailing Detector (ft)			0	0	0	0				
Detector 1 Position(ft)			0	0	0	0				
Detector 1 Size(ft)			20	6	6	20				
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel										
Detector 1 Extend (s)			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94					
Detector 2 Size(ft)				6	6					
Detector 2 Type				Cl+Ex	Cl+Ex					
Detector 2 Channel										
Detector 2 Extend (s)				0.0	0.0					
Turn Type			D.P+P	NA	NA	Free				
Protected Phases			1 3	6 3	2		1	3	6	8
Permitted Phases			2			Free				
Detector Phase			1 3	6 3	2					
Switch Phase										
Minimum Initial (s)					15.0		5.0	6.0	15.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Minimum Split (s)					23.0		12.0	23.0	23.0	23.0
Total Split (s)					70.0		19.0	31.0	89.0	31.0
Total Split (%)					58.3%		16%	26%	74%	26%
Maximum Green (s)					63.2		12.2	24.9	82.2	24.9
Yellow Time (s)					4.8		4.8	4.1	4.8	4.1
All-Red Time (s)					2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)					0.0					
Total Lost Time (s)					6.8					
Lead/Lag					Lag		Lead			
Lead-Lag Optimize?					Yes		Yes			
Vehicle Extension (s)					4.0		6.0	3.5	4.0	3.5
Recall Mode					C-Max		None	None	C-Max	None
Act Effct Green (s)			106.4	120.0	63.7	120.0				
Actuated g/C Ratio			0.89	1.00	0.53	1.00				
v/c Ratio			0.73	0.41	0.91	0.23				
Control Delay			45.1	0.5	34.7	0.3				
Queue Delay			2.2	0.0	0.0	0.0				
Total Delay			47.3	0.5	34.7	0.3				
LOS			D	A	C	A				
Approach Delay				12.6	28.7					
Approach LOS				B	C					

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 20.9		Intersection LOS: C	
Intersection Capacity Utilization 80.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 20: FALKENBURG RD & WB FALKENBURG ON

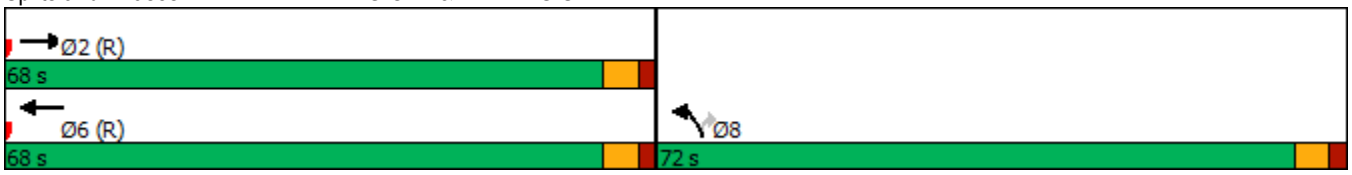


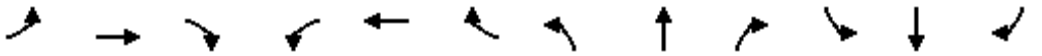
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	725	0	0	695	230	700
Future Volume (vph)	725	0	0	695	230	700
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.88
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3539	0	0	3539	1770	2787
Flt Permitted					0.950	
Satd. Flow (perm)	3539	0	0	3539	1770	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						184
Link Speed (mph)	30			30	30	
Link Distance (ft)	390			343	501	
Travel Time (s)	8.9			7.8	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	788	0	0	755	250	761
Shared Lane Traffic (%)						
Lane Group Flow (vph)	788	0	0	755	250	761
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (ft)	100			100	20	20
Trailing Detector (ft)	0			0	0	0
Detector 1 Position(ft)	0			0	0	0
Detector 1 Size(ft)	6			6	20	20
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases						8
Detector Phase	2			6	8	8
Switch Phase						
Minimum Initial (s)	10.0			10.0	10.0	10.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	24.0			16.0	24.0	24.0
Total Split (s)	68.0			68.0	72.0	72.0
Total Split (%)	48.6%			48.6%	51.4%	51.4%
Maximum Green (s)	62.3			62.3	66.3	66.3
Yellow Time (s)	3.7			3.7	3.7	3.7
All-Red Time (s)	2.0			2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	5.7			5.7	5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)	7.0				7.0	7.0
Flash Dont Walk (s)	11.0				11.0	11.0
Pedestrian Calls (#/hr)	0				0	0
Act Effct Green (s)	89.1			89.1	39.5	39.5
Actuated g/C Ratio	0.64			0.64	0.28	0.28
v/c Ratio	0.35			0.34	0.50	0.83
Control Delay	13.4			13.3	44.4	43.0
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	13.4			13.3	44.4	43.0
LOS	B			B	D	D
Approach Delay	13.4			13.3	43.3	
Approach LOS	B			B	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 25.2		Intersection LOS: C	
Intersection Capacity Utilization 54.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: EB WHITING OFF & WHITING ST



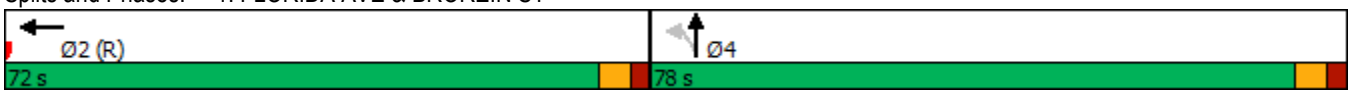


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	2060	515	330	2235	0	0	0	0
Future Volume (vph)	0	0	0	0	2060	515	330	2235	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	1.00	1.00	1.00	1.00
Frt					0.970							
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6216	0	1770	5085	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	6216	0	1770	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					1		20					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		273			600			296			353	
Travel Time (s)		6.2			13.6			6.7			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	2239	560	359	2429	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2799	0	359	2429	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Minimum Split (s)					30.0		37.0	37.0				
Total Split (s)					72.0		78.0	78.0				
Total Split (%)					48.0%		52.0%	52.0%				
Maximum Green (s)					66.2		71.9	71.9				
Yellow Time (s)					3.7		3.7	3.7				
All-Red Time (s)					2.1		2.4	2.4				
Lost Time Adjust (s)					0.0		0.0	0.0				
Total Lost Time (s)					5.8		6.1	6.1				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		23.0	23.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					66.2		71.9	71.9				
Actuated g/C Ratio					0.44		0.48	0.48				
v/c Ratio					1.02		0.42	1.00				
Control Delay					30.3		25.9	50.6				
Queue Delay					32.2		23.6	39.2				
Total Delay					62.5		49.5	89.8				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					E		D	F				
Approach Delay					62.5			84.6				
Approach LOS					E			F				

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 48 (32%), Referenced to phase 2:WBT, Start of Green			
Natural Cycle: 120			
Control Type: Pretimed			
Maximum v/c Ratio: 1.02			
Intersection Signal Delay: 73.5		Intersection LOS: E	
Intersection Capacity Utilization 91.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 1: FLORIDA AVE & BROREIN ST

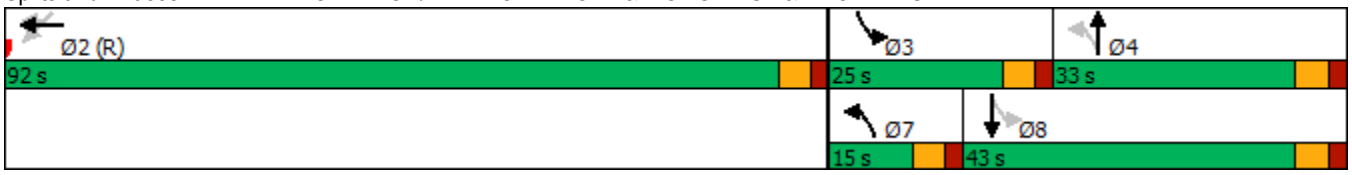


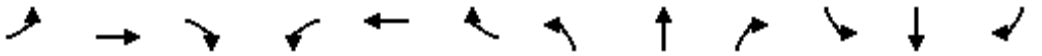
Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations										
Traffic Volume (vph)	145	2430	205	235	140	290	280	225	305	775
Future Volume (vph)	145	2430	205	235	140	290	280	225	305	775
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.944			0.933		0.850	0.850
Flt Protected		0.997	0.950			0.950				
Satd. Flow (prot)	0	3529	1770	1758	0	1770	1738	0	1583	1583
Flt Permitted		0.997	0.148			0.122				
Satd. Flow (perm)	0	3529	276	1758	0	227	1738	0	1583	1583
Right Turn on Red					Yes					Yes
Satd. Flow (RTOR)				103						670
Link Speed (mph)		30		30			30			
Link Distance (ft)		591		494			379			
Travel Time (s)		13.4		11.2			8.6			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	158	2641	223	255	152	315	304	245	332	842
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	2799	223	407	0	315	549	0	332	842
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Left	Left	Right	Left	Left	Right	R NA	Right
Median Width(ft)		12		12			12			
Link Offset(ft)		0		0			0			
Crosswalk Width(ft)		16		16			16			
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		15		9	15		9	9	9
Number of Detectors	1	2	1	2		1	2		1	1
Detector Template	Left	Thru	Left	Thru		Left	Thru		Right	Right
Leading Detector (ft)	20	100	20	100		20	100		20	20
Trailing Detector (ft)	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel										
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94		94			94			
Detector 2 Size(ft)		6		6			6			
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			
Detector 2 Channel										
Detector 2 Extend (s)		0.0		0.0			0.0			
Turn Type	Perm	NA	pm+pt	NA		pm+pt	NA		Perm	Free
Protected Phases		2	7	4		3	8			
Permitted Phases	2		4			8			2	Free
Detector Phase	2	2	7	4		3	8		2	
Switch Phase										
Minimum Initial (s)	10.0	10.0	5.0	10.0		5.0	10.0		10.0	

Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Minimum Split (s)	25.0	25.0	11.0	32.0		11.0	32.0		25.0	
Total Split (s)	92.0	92.0	15.0	33.0		25.0	43.0		92.0	
Total Split (%)	61.3%	61.3%	10.0%	22.0%		16.7%	28.7%		61.3%	
Maximum Green (s)	86.3	86.3	9.3	27.0		19.3	37.0		86.3	
Yellow Time (s)	3.7	3.7	3.7	3.7		3.7	3.7		3.7	
All-Red Time (s)	2.0	2.0	2.0	2.3		2.0	2.3		2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.7	5.7	6.0		5.7	6.0		5.7	
Lead/Lag			Lead	Lag		Lead	Lag			
Lead-Lag Optimize?			Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	None	Max		None	Max		C-Max	
Walk Time (s)	7.0	7.0		7.0			7.0		7.0	
Flash Dont Walk (s)	12.0	12.0		19.0			19.0		12.0	
Pedestrian Calls (#/hr)	0	0		0			0		0	
Act Effct Green (s)		86.3	36.6	27.0		52.3	37.0		86.3	150.0
Actuated g/C Ratio		0.58	0.24	0.18		0.35	0.25		0.58	1.00
v/c Ratio		1.38	1.40	1.02		1.14	1.28		0.36	0.53
Control Delay		191.2	246.2	93.8		135.7	188.6		18.6	1.3
Queue Delay		0.5	0.0	0.0		0.0	0.0		0.2	0.0
Total Delay		191.7	246.2	93.8		135.7	188.6		18.7	1.3
LOS		F	F	F		F	F		B	A
Approach Delay		191.7		147.7			169.3			
Approach LOS		F		F			F			

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 14 (9%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.40			
Intersection Signal Delay: 143.3		Intersection LOS: F	
Intersection Capacity Utilization 149.4%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: WB BROREIN ON/WB BROREIN OFF & MORGAN ST & BROREIN ST



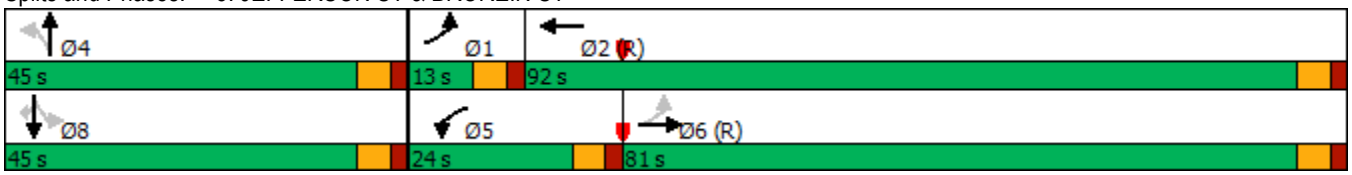


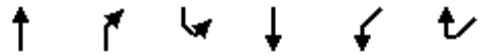
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	250	15	125	1990	205	20	255	15	15	15	565
Future Volume (vph)	165	250	15	125	1990	205	20	255	15	15	15	565
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	80		0	115		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.992			0.986			0.992				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1848	0	1770	3490	0	1770	3511	0	1770	1863	1583
Flt Permitted	0.051			0.950			0.747			0.505		
Satd. Flow (perm)	95	1848	0	1770	3490	0	1391	3511	0	941	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			12			4				103
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		591			202			322			162	
Travel Time (s)		13.4			4.6			7.3			3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	179	272	16	136	2163	223	22	277	16	16	16	614
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	288	0	136	2386	0	22	293	0	16	16	614
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6						4			8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6		5	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	11.0	24.0		11.0	24.0		24.0	24.0		24.0	24.0	24.0
Total Split (s)	13.0	81.0		24.0	92.0		45.0	45.0		45.0	45.0	45.0
Total Split (%)	8.7%	54.0%		16.0%	61.3%		30.0%	30.0%		30.0%	30.0%	30.0%
Maximum Green (s)	7.3	75.3		18.3	86.3		39.3	39.3		39.3	39.3	39.3
Yellow Time (s)	3.7	3.7		3.7	3.7		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	Max
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)	85.8	78.5		15.1	86.3		39.3	39.3		39.3	39.3	39.3
Actuated g/C Ratio	0.57	0.52		0.10	0.58		0.26	0.26		0.26	0.26	0.26
v/c Ratio	1.33	0.30		0.77	1.19		0.06	0.32		0.07	0.03	1.25
Control Delay	175.7	31.1		92.1	119.2		42.2	45.1		42.7	41.6	167.2
Queue Delay	0.0	0.0		0.0	1.1		0.0	0.0		0.0	0.0	0.3
Total Delay	175.7	31.1		92.1	120.3		42.2	45.1		42.7	41.6	167.5
LOS	F	C		F	F		D	D		D	D	F
Approach Delay		86.5			118.8			44.9			161.3	
Approach LOS		F			F			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 12 (8%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.33			
Intersection Signal Delay: 116.0		Intersection LOS: F	
Intersection Capacity Utilization 119.1%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 3: JEFFERSON ST & BROREIN ST





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	405	220	110	595	0	0
Future Volume (vph)	405	220	110	595	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	115		0	0
Storage Lanes		1	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	162			583	231	
Travel Time (s)	3.7			13.3	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	440	239	120	647	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	440	239	120	647	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

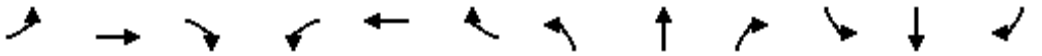
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 34.6%		ICU Level of Service A	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	270	3340	350	240	555	0	0	250	60
Future Volume (vph)	0	0	0	270	3340	350	240	555	0	0	250	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.986						0.971	
Flt Protected				0.950				0.985				
Satd. Flow (prot)	0	0	0	1770	6318	0	0	3486	0	0	3437	0
Flt Permitted				0.950				0.699				
Satd. Flow (perm)	0	0	0	1770	6318	0	0	2474	0	0	3437	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					28							
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			319			716			284	
Travel Time (s)		13.1			7.3			16.3			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	293	3630	380	261	603	0	0	272	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	293	4010	0	0	864	0	0	337	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					4			2			2	
Permitted Phases				4			2					
Minimum Split (s)				26.0	26.0		26.0	26.0			26.0	
Total Split (s)				93.0	93.0		57.0	57.0			57.0	
Total Split (%)				62.0%	62.0%		38.0%	38.0%			38.0%	
Maximum Green (s)				87.3	87.3		51.1	51.1			51.1	
Yellow Time (s)				3.7	3.7		3.7	3.7			3.7	
All-Red Time (s)				2.0	2.0		2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0			0.0			0.0	
Total Lost Time (s)				5.7	5.7			5.9			5.9	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				13.0	13.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				87.3	87.3			51.1			51.1	
Actuated g/C Ratio				0.58	0.58			0.34			0.34	
v/c Ratio				0.28	1.09			1.03			0.29	
Control Delay				10.2	67.9			85.8			37.0	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				10.2	67.9			85.8			37.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				B	E			F			D	
Approach Delay					64.0			85.8			37.0	
Approach LOS					E			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 123 (82%), Referenced to phase 2:NBSB, Start of Green			
Natural Cycle: 150			
Control Type: Pretimed			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 65.8		Intersection LOS: E	
Intersection Capacity Utilization 100.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 5: JEFFERSON ST & KENNEDY BLVD

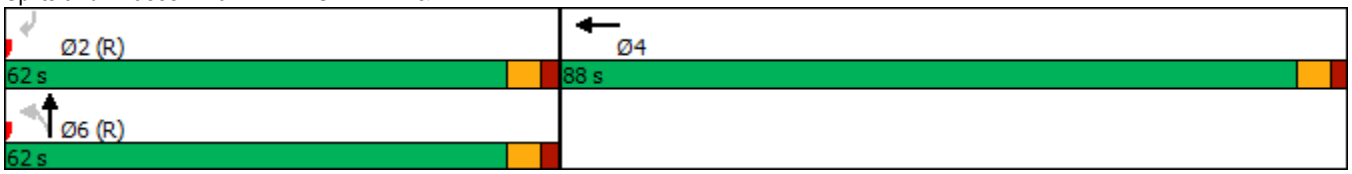


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1735	500	155	465	0	0	0	275
Future Volume (vph)	0	0	0	0	1735	500	155	465	0	0	0	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88
Frt					0.966							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4912	0	1770	1863	0	0	0	2787
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	4912	0	1770	1863	0	0	0	2787
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					76		20					20
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		847			465			292			201	
Travel Time (s)		19.3			10.6			6.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1886	543	168	505	0	0	0	299
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2429	0	168	505	0	0	0	299
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				Perm
Protected Phases					4			6				
Permitted Phases							6					2
Minimum Split (s)					30.0		25.0	25.0				27.0
Total Split (s)					88.0		62.0	62.0				62.0
Total Split (%)					58.7%		41.3%	41.3%				41.3%
Maximum Green (s)					82.2		56.1	56.1				56.1
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.1		2.2	2.2				2.2
Lost Time Adjust (s)					0.0		0.0	0.0				0.0
Total Lost Time (s)					5.8		5.9	5.9				5.9
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				7.0
Flash Dont Walk (s)					17.0		12.0	12.0				14.0
Pedestrian Calls (#/hr)					0		0	0				0
Act Effct Green (s)					82.2		56.1	56.1				56.1
Actuated g/C Ratio					0.55		0.37	0.37				0.37
v/c Ratio					0.89		0.25	0.73				0.28
Control Delay					34.2		29.6	47.6				22.1
Queue Delay					0.2		0.0	28.5				0.0
Total Delay					34.5		29.6	76.1				22.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					C		C	E				C
Approach Delay					34.5			64.5			22.1	
Approach LOS					C			E			C	

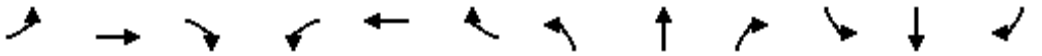
Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 78 (52%), Referenced to phase 2:SBR and 6:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 39.3		Intersection LOS: D	
Intersection Capacity Utilization 78.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: NEBRASKA AVE & KENNEDY BLVD



Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	710	255	145	275	0	0
Future Volume (vph)	710	255	145	275	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	130		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt	0.964					
Flt Protected			0.950			
Satd. Flow (prot)	1796	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1796	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			390	272	
Travel Time (s)	4.6			8.9	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	772	277	158	299	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1049	0	158	299	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

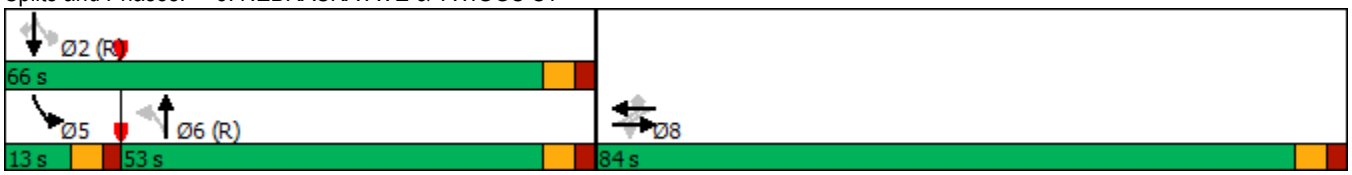


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	115	25	145	1485	660	135	485	90	125	250	65
Future Volume (vph)	5	115	25	145	1485	660	135	485	90	125	250	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	150		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.974				0.850		0.976				0.850
Flt Protected		0.998			0.996		0.950			0.950		
Satd. Flow (prot)	0	3440	0	0	3525	1583	1770	1818	0	1770	3539	1583
Flt Permitted		0.818			0.893		0.584			0.076		
Satd. Flow (perm)	0	2820	0	0	3161	1583	1088	1818	0	142	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24				249		6				23
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			652			390			257	
Travel Time (s)		17.7			14.8			8.9			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	125	27	158	1614	717	147	527	98	136	272	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	157	0	0	1772	717	147	625	0	136	272	71
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm
Protected Phases		8			8			6		5	2	
Permitted Phases	8			8		8	6			2		2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8		8	8	8	6	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		5.0	10.0	10.0
Minimum Split (s)	30.0	30.0		30.0	30.0	30.0	28.0	28.0		11.0	28.0	28.0
Total Split (s)	84.0	84.0		84.0	84.0	84.0	53.0	53.0		13.0	66.0	66.0
Total Split (%)	56.0%	56.0%		56.0%	56.0%	56.0%	35.3%	35.3%		8.7%	44.0%	44.0%
Maximum Green (s)	77.9	77.9		77.9	77.9	77.9	47.0	47.0		7.3	60.0	60.0
Yellow Time (s)	3.7	3.7		3.7	3.7	3.7	3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.4		2.4	2.4	2.4	2.3	2.3		2.0	2.3	2.3
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.1			6.1	6.1	6.0	6.0		5.7	6.0	6.0
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		2.0	3.0	3.0
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Dont Walk (s)	16.0	16.0		16.0	16.0	16.0	15.0	15.0			15.0	15.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	0
Act Effct Green (s)		77.9			77.9	77.9	47.0	47.0		60.3	60.0	60.0
Actuated g/C Ratio		0.52			0.52	0.52	0.31	0.31		0.40	0.40	0.40
v/c Ratio		0.11			1.08	0.76	0.43	1.09		1.00	0.19	0.11
Control Delay		15.7			60.2	10.1	36.7	95.1		110.9	29.7	19.9
Queue Delay		0.0			8.6	1.4	0.0	4.1		0.0	0.0	0.0
Total Delay		15.7			68.8	11.6	36.7	99.2		110.9	29.7	19.9
LOS		B			E	B	D	F		F	C	B
Approach Delay		15.7			52.3			87.3			51.3	
Approach LOS		B			D			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 79 (53%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 57.6		Intersection LOS: E	
Intersection Capacity Utilization 111.4%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 8: NEBRASKA AVE & TWIGGS ST



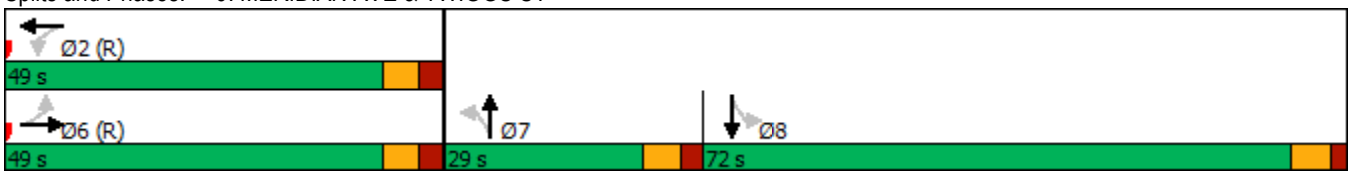
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	175	155	160	735	0	150	0	85	290	2135	1405
Future Volume (vph)	0	175	155	160	735	0	150	0	85	290	2135	1405
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	1.00
Frt		0.930						0.946				0.850
Flt Protected					0.991			0.969			0.994	
Satd. Flow (prot)	0	3291	0	0	3507	0	0	4662	0	0	5055	1583
Flt Permitted					0.736			0.909			0.838	
Satd. Flow (perm)	0	3291	0	0	2605	0	0	4373	0	0	4261	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		148						81				417
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			772			501			413	
Travel Time (s)		14.8			17.5			11.4			9.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	190	168	174	799	0	163	0	92	315	2321	1527
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	358	0	0	973	0	0	255	0	0	2636	1527
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	Free
Protected Phases		6			2			7			8	
Permitted Phases	6			2			7			8		Free
Detector Phase	6	6		2	2		7	7		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	46.0	46.0		17.0	17.0		27.0	27.0		17.0	17.0	
Total Split (s)	49.0	49.0		49.0	49.0		29.0	29.0		72.0	72.0	
Total Split (%)	32.7%	32.7%		32.7%	32.7%		19.3%	19.3%		48.0%	48.0%	
Maximum Green (s)	42.2	42.2		42.2	42.2		22.1	22.1		65.6	65.6	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	2.8	2.8		2.8	2.8		2.5	2.5		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.8			6.8			6.9			6.4	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		2.0	2.0		3.0	3.0	
Recall Mode	C-Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0					7.0	7.0				
Flash Dont Walk (s)	32.0	32.0					13.0	13.0				
Pedestrian Calls (#/hr)	0	0					0	0				
Act Effct Green (s)		42.2			42.2			10.8			76.9	150.0
Actuated g/C Ratio		0.28			0.28			0.07			0.51	1.00
v/c Ratio		0.35			1.33			1.31dl			1.21	0.96
Control Delay		30.7			199.2			53.8			131.5	17.5
Queue Delay		0.0			0.9			0.0			0.0	6.5
Total Delay		30.7			200.1			53.8			131.5	24.0
LOS		C			F			D			F	C
Approach Delay		30.7			200.1			53.8			92.1	
Approach LOS		C			F			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 3 (2%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.33			
Intersection Signal Delay: 104.8		Intersection LOS: F	
Intersection Capacity Utilization 112.6%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 9: MERIDIAN AVE & TWIGGS ST



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Lane Configurations									
Traffic Volume (vph)	200	150	10	1850	1035	0	110	0	0
Future Volume (vph)	200	150	10	1850	1035	0	110	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt		0.850					0.850		
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	5085	5085	0	1583	0	0
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	5085	5085	0	1583	0	0
Link Speed (mph)	30			30	30			30	
Link Distance (ft)	404			536	498			405	
Travel Time (s)	9.2			12.2	11.3			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	217	163	11	2011	1125	0	120	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	217	163	11	2011	1125	0	120	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right	Right	Left	Right
Median Width(ft)	12			12	12			0	
Link Offset(ft)	0			0	0			0	
Crosswalk Width(ft)	16			16	16			16	
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9	9	15	9
Sign Control	Stop			Free	Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 53.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	41.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations								
Traffic Vol, veh/h	200	150	10	1850	1035	0	0	0
Future Vol, veh/h	200	150	10	1850	1035	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	-	-
Storage Length	0	0	0	-	-	0	-	-
Veh in Median Storage, #	0	-	-	0	0	-	0	-
Grade, %	0	-	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	217	163	11	2011	1125	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1951	563	1125	0	-	0
Stage 1	1125	-	-	-	-	-
Stage 2	826	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	~ 100	402	340	-	-	0
Stage 1	~ 203	-	-	-	-	0
Stage 2	354	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 97	402	340	-	-	-
Mov Cap-2 Maneuver	~ 97	-	-	-	-	-
Stage 1	~ 197	-	-	-	-	-
Stage 2	354	-	-	-	-	-

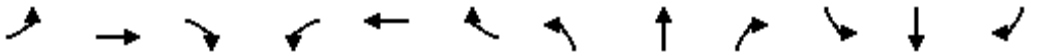
Approach	EB	NB	SB
HCM Control Delay, s	$ 386.3	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	340	-	97	402	-
HCM Lane V/C Ratio	0.032	-	2.241	0.406	-
HCM Control Delay (s)	15.9	-	$ 661.1	19.9	-
HCM Lane LOS	C	-	F	C	-
HCM 95th %tile Q(veh)	0.1	-	19.3	1.9	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations											
Traffic Volume (vph)	0	0	395	1655	0	0	915	0	230	0	665
Future Volume (vph)	0	0	395	1655	0	0	915	0	230	0	665
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00	1.00	1.00	1.00
Frt											0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Flt Permitted			0.950						0.950		
Satd. Flow (perm)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	264			498			271			329	
Travel Time (s)	6.0			11.3			6.2			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	429	1799	0	0	995	0	250	0	723
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	429	1799	0	0	995	0	250	0	723
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			12	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Sign Control	Free			Free			Free			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 79.8%		ICU Level of Service D	
Analysis Period (min) 15			

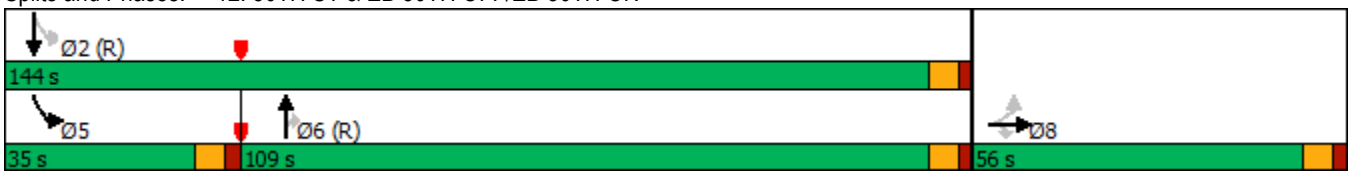


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	0	230	0	0	0	0	2175	35	145	1370	0
Future Volume (vph)	160	0	230	0	0	0	0	2175	35	145	1370	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.037		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	69	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			60						58			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		549			603			383			284	
Travel Time (s)		12.5			13.7			8.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	174	0	250	0	0	0	0	2364	38	158	1489	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	174	250	0	0	0	0	2364	38	158	1489	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8						6	2		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8	8					6	6	5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	5.0	10.0	
Minimum Split (s)	47.0	47.0	47.0					17.0	17.0	12.0	24.0	
Total Split (s)	56.0	56.0	56.0					109.0	109.0	35.0	144.0	
Total Split (%)	28.0%	28.0%	28.0%					54.5%	54.5%	17.5%	72.0%	
Maximum Green (s)	49.1	49.1	49.1					102.5	102.5	28.3	137.5	
Yellow Time (s)	4.4	4.4	4.4					4.4	4.4	4.4	4.4	
All-Red Time (s)	2.5	2.5	2.5					2.1	2.1	2.3	2.1	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.9	6.9					6.5	6.5	6.7	6.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0					3.0	3.0	2.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Dont Walk (s)	33.0	33.0	33.0								10.0	
Pedestrian Calls (#/hr)	0	0	0								0	
Act Effct Green (s)		33.2	33.2					129.9	129.9	153.2	153.4	
Actuated g/C Ratio		0.17	0.17					0.65	0.65	0.77	0.77	
v/c Ratio		0.59	0.80					0.57	0.04	0.81	0.38	
Control Delay		84.2	78.3					21.9	1.6	84.5	9.4	
Queue Delay		0.7	0.0					0.1	0.0	2.3	2.1	
Total Delay		84.9	78.3					21.9	1.6	86.8	11.5	
LOS		F	E					C	A	F	B	
Approach Delay		81.0						21.6			18.7	
Approach LOS		F						C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 200			
Actuated Cycle Length: 200			
Offset: 161 (81%), Referenced to phase 2:SBTL and 6:NBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 26.2		Intersection LOS: C	
Intersection Capacity Utilization 100.2%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 12: 50TH ST & EB 50TH OFF/EB 50TH ON

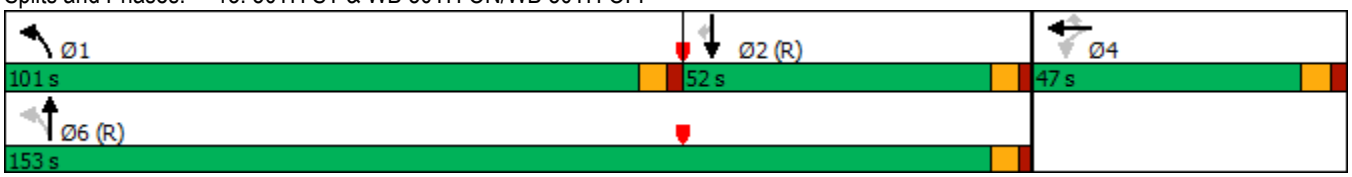


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	35	0	375	965	1370	0	0	1480	205
Future Volume (vph)	0	0	0	35	0	375	965	1370	0	0	1480	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	140		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.076					
Satd. Flow (perm)	0	0	0	0	1770	1583	142	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						73						122
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		457			359			284			339	
Travel Time (s)		10.4			8.2			6.5			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	38	0	408	1049	1489	0	0	1609	223
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	38	408	1049	1489	0	0	1609	223
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				4	4	4	1	6			2	2
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	10.0
Minimum Split (s)				47.0	47.0	47.0	12.0	24.0			24.0	24.0
Total Split (s)				47.0	47.0	47.0	101.0	153.0			52.0	52.0
Total Split (%)				23.5%	23.5%	23.5%	50.5%	76.5%			26.0%	26.0%
Maximum Green (s)				39.8	39.8	39.8	94.2	146.6			45.6	45.6
Yellow Time (s)				4.4	4.4	4.4	4.4	4.4			4.4	4.4
All-Red Time (s)				2.8	2.8	2.8	2.4	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.2	7.2	6.8	6.4			6.4	6.4
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	2.0	3.0			3.0	3.0
Recall Mode				None	None	None	Min	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)				32.0	32.0	32.0		10.0			10.0	10.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)					39.8	39.8	146.2	146.6			45.6	45.6
Actuated g/C Ratio					0.20	0.20	0.73	0.73			0.23	0.23
v/c Ratio					0.11	1.09	1.21	0.40			1.10	0.49
Control Delay					66.7	131.4	140.9	6.8			124.7	33.4
Queue Delay					0.0	0.0	2.4	0.3			0.1	0.0
Total Delay					66.7	131.4	143.3	7.1			124.8	33.4
LOS					E	F	F	A			F	C
Approach Delay					125.9			63.4			113.7	
Approach LOS					F			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 200			
Actuated Cycle Length: 200			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.21			
Intersection Signal Delay: 88.3		Intersection LOS: F	
Intersection Capacity Utilization 100.2%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 13: 50TH ST & WB 50TH ON/WB 50TH OFF



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	85	0	1430	0	0	680
Future Volume (vph)	85	0	1430	0	0	680
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	3539	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	3539	0	0	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	292		343			439
Travel Time (s)	6.6		7.8			10.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	92	0	1554	0	0	739
Shared Lane Traffic (%)						
Lane Group Flow (vph)	92	0	1554	0	0	739
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 50.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	85	0	1430	0	0	680
Future Vol, veh/h	85	0	1430	0	0	680
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	92	0	1554	0	0	739

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1924	-	0	-	-	-
Stage 1	1554	-	-	-	-	-
Stage 2	370	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-
Pot Cap-1 Maneuver	~ 59	0	-	0	0	-
Stage 1	160	0	-	0	0	-
Stage 2	669	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	~ 59	-	-	-	-	-
Mov Cap-2 Maneuver	133	-	-	-	-	-
Stage 1	160	-	-	-	-	-
Stage 2	669	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	78.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	133	-
HCM Lane V/C Ratio	-	0.695	-
HCM Control Delay (s)	-	78.2	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	3.9	-

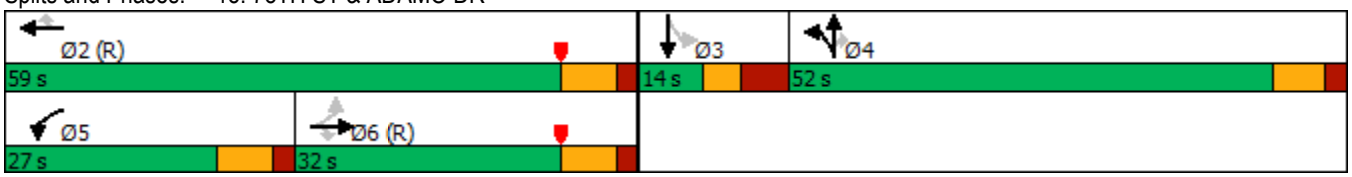
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	485	465	210	1465	10	785	5	595	5	5	5
Future Volume (vph)	5	485	465	210	1465	10	785	5	595	5	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	0		315	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.955	
Flt Protected	0.950			0.950			0.950	0.953			0.984	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1681	1686	1583	0	1750	0
Flt Permitted	0.134			0.950			0.950	0.953				
Satd. Flow (perm)	250	3539	1583	1770	3539	1583	1681	1686	1583	0	1779	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			505			106			555		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		887			638			788			238	
Travel Time (s)		20.2			14.5			17.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	527	505	228	1592	11	853	5	647	5	5	5
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	5	527	505	228	1592	11	426	432	647	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		25			25			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Perm	NA	
Protected Phases		6		5	2		4	4			3	
Permitted Phases	6		6			2			4	3		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6	6	5	2	2	4	4	4	3	3	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	26.0	26.0	26.0	13.0	27.0	27.0	52.0	52.0	52.0	14.0	14.0	
Total Split (s)	32.0	32.0	32.0	27.0	59.0	59.0	52.0	52.0	52.0	14.0	14.0	
Total Split (%)	25.6%	25.6%	25.6%	21.6%	47.2%	47.2%	41.6%	41.6%	41.6%	11.2%	11.2%	
Maximum Green (s)	24.8	24.8	24.8	19.8	51.8	51.8	44.9	44.9	44.9	6.0	6.0	
Yellow Time (s)	5.2	5.2	5.2	5.2	5.2	5.2	4.8	4.8	4.8	3.4	3.4	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.3	4.6	4.6	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.1	7.1		8.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0			
Flash Dont Walk (s)	11.0	11.0	11.0		12.0	12.0	37.0	37.0	37.0			
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0			
Act Effct Green (s)	34.8	34.8	34.8	19.2	61.1	61.1	44.0	44.0	44.0		6.0	
Actuated g/C Ratio	0.28	0.28	0.28	0.15	0.49	0.49	0.35	0.35	0.35		0.05	
v/c Ratio	0.07	0.54	0.63	0.84	0.92	0.01	0.72	0.73	0.71		0.17	
Control Delay	44.2	43.3	7.6	77.4	40.9	0.0	42.8	43.2	9.8		48.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	44.2	43.3	7.6	77.4	40.9	0.0	42.8	43.2	9.8		48.9	
LOS	D	D	A	E	D	A	D	D	A		D	
Approach Delay		25.9			45.2			28.7			48.9	
Approach LOS		C			D			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 35.0		Intersection LOS: D	
Intersection Capacity Utilization 99.5%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 15: 78TH ST & ADAMO DR



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1065	20	260	1685	0	0
Future Volume (vph)	1065	20	260	1685	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	1.00
Frt		0.850				
Flt Protected				0.993		
Satd. Flow (prot)	5085	1583	0	5050	0	0
Flt Permitted				0.993		
Satd. Flow (perm)	5085	1583	0	5050	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	638			376	435	
Travel Time (s)	14.5			8.5	9.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1158	22	283	1832	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1158	22	0	2115	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	25			25	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	65.1%	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												
Traffic Volume (vph)	160	0	350	0	0	0	0	2365	405	285	1335	0
Future Volume (vph)	160	0	350	0	0	0	0	2365	405	285	1335	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	315		500	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.100		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	186	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237						440			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		739			677			1414			381	
Travel Time (s)		16.8			15.4			32.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	174	0	380	0	0	0	0	2571	440	310	1451	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	174	380	0	0	0	0	2571	440	310	1451	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0			30			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	D.P+P	NA	
Protected Phases		4						2		1 3	6 3 2	
Permitted Phases	4		4						2	2		

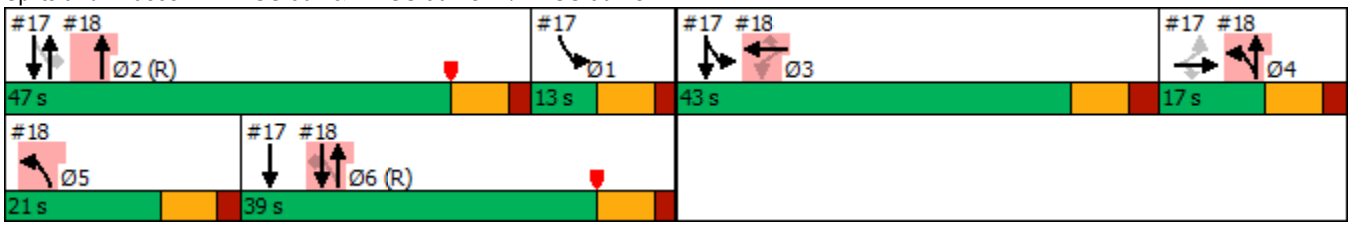
Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4					2	2	1 3	6 3 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					15.0	15.0			
Minimum Split (s)	13.0	13.0	13.0					23.0	23.0			
Total Split (s)	17.0	17.0	17.0					47.0	47.0			
Total Split (%)	14.2%	14.2%	14.2%					39.2%	39.2%			
Maximum Green (s)	9.5	9.5	9.5					39.9	39.9			
Yellow Time (s)	5.1	5.1	5.1					5.1	5.1			
All-Red Time (s)	2.4	2.4	2.4					2.0	2.0			
Lost Time Adjust (s)		0.0	0.0					0.0	0.0			
Total Lost Time (s)		7.5	7.5					7.1	7.1			
Lead/Lag	Lag	Lag	Lag					Lead	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes					Yes	Yes			
Vehicle Extension (s)	4.0	4.0	4.0					3.0	3.0			
Recall Mode	None	None	None					C-Max	C-Max			
Act Effct Green (s)		9.5	9.5					39.9	39.9	88.8	95.9	
Actuated g/C Ratio		0.08	0.08					0.33	0.33	0.74	0.80	
v/c Ratio		1.24	1.11					1.21	0.54	0.40	0.36	
Control Delay		200.8	100.3					133.9	5.3	10.4	1.0	
Queue Delay		0.0	0.0					0.2	0.0	0.0	0.2	
Total Delay		200.8	100.3					134.0	5.3	10.4	1.2	
LOS		F	F					F	A	B	A	
Approach Delay		131.9						115.2			2.8	
Approach LOS		F						F			A	

Intersection Summary

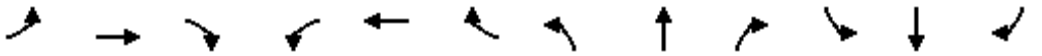
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.43
Intersection Signal Delay: 79.8 Intersection LOS: E
Intersection Capacity Utilization 101.0% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 17: US 301 & EB US 301 OFF/EB US 301 ON



Lane Group	Ø1	Ø3	Ø5	Ø6
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	15.0
Minimum Split (s)	13.0	13.0	13.0	23.0
Total Split (s)	13.0	43.0	21.0	39.0
Total Split (%)	11%	36%	18%	33%
Maximum Green (s)	5.9	35.2	13.9	31.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.7	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	4.0	3.0
Recall Mode	None	None	Max	C-Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	190	0	830	600	1925	0	0	1430	170
Future Volume (vph)	0	0	0	190	0	830	600	1925	0	0	1430	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	300		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.125					
Satd. Flow (perm)	0	0	0	0	1770	1583	233	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						235						184
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			711			381			795	
Travel Time (s)		13.2			16.2			8.7			18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	207	0	902	652	2092	0	0	1554	185
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	207	902	652	2092	0	0	1554	185
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			20			30	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	D.P+P	NA			NA	Perm
Protected Phases					3		5 4	2 4 6			6	
Permitted Phases				3		3	6					6

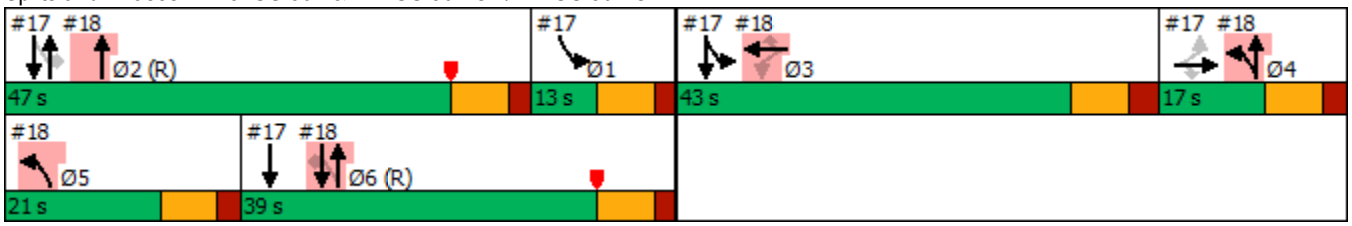
Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				3	3	3	5 4	2 4 6			6	6
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0					15.0	15.0
Minimum Split (s)				13.0	13.0	13.0					23.0	23.0
Total Split (s)				43.0	43.0	43.0					39.0	39.0
Total Split (%)				35.8%	35.8%	35.8%					32.5%	32.5%
Maximum Green (s)				35.2	35.2	35.2					31.9	31.9
Yellow Time (s)				5.1	5.1	5.1					5.1	5.1
All-Red Time (s)				2.7	2.7	2.7					2.0	2.0
Lost Time Adjust (s)					0.0	0.0					0.0	0.0
Total Lost Time (s)					7.8	7.8					7.1	7.1
Lead/Lag				Lead	Lead	Lead					Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0					3.0	3.0
Recall Mode				None	None	None					C-Max	C-Max
Act Effct Green (s)					35.2	35.2	62.8	69.9			31.9	31.9
Actuated g/C Ratio					0.29	0.29	0.52	0.58			0.27	0.27
v/c Ratio					0.40	1.43	1.26	0.71			0.91	0.33
Control Delay					36.8	228.9	166.3	6.7			51.9	6.7
Queue Delay					0.0	0.0	0.4	0.2			0.1	0.0
Total Delay					36.8	228.9	166.7	6.9			52.0	6.7
LOS					D	F	F	A			D	A
Approach Delay					193.1			44.9			47.1	
Approach LOS					F			D			D	

Intersection Summary

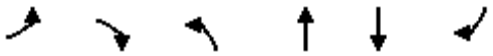
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow
Natural Cycle: 80
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.43
Intersection Signal Delay: 75.0 Intersection LOS: E
Intersection Capacity Utilization 101.0% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 18: US 301 & WB US 301 ON/WB US 301 OFF



Lane Group	Ø1	Ø2	Ø4	Ø5
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	15.0	5.0	5.0
Minimum Split (s)	13.0	23.0	13.0	13.0
Total Split (s)	13.0	47.0	17.0	21.0
Total Split (%)	11%	39%	14%	18%
Maximum Green (s)	5.9	39.9	9.5	13.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.4	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0	4.0	4.0
Recall Mode	None	C-Max	None	Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

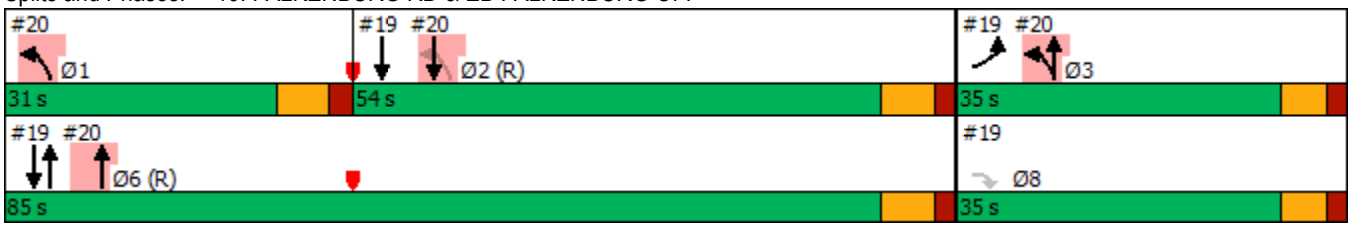


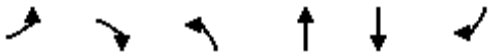
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Lane Configurations								
Traffic Volume (vph)	430	520	0	1740	785	0		
Future Volume (vph)	430	520	0	1740	785	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	0.97	0.88	1.00	0.91	0.91	1.00		
Frt		0.850						
Flt Protected	0.950							
Satd. Flow (prot)	3433	2787	0	5085	5085	0		
Flt Permitted	0.950							
Satd. Flow (perm)	3433	2787	0	5085	5085	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		346						
Link Speed (mph)	30			30	30			
Link Distance (ft)	519			688	550			
Travel Time (s)	11.8			15.6	12.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	467	565	0	1891	853	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	467	565	0	1891	853	0		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	24			30	30			
Link Offset(ft)	0			0	0			
Crosswalk Width(ft)	16			16	16			
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	9	15			9		
Number of Detectors	1	1		2	2			
Detector Template	Left	Right		Thru	Thru			
Leading Detector (ft)	20	20		100	100			
Trailing Detector (ft)	0	0		0	0			
Detector 1 Position(ft)	0	0		0	0			
Detector 1 Size(ft)	20	20		6	6			
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			
Detector 2 Position(ft)				94	94			
Detector 2 Size(ft)				6	6			
Detector 2 Type				Cl+Ex	Cl+Ex			
Detector 2 Channel								
Detector 2 Extend (s)				0.0	0.0			
Turn Type	Prot	Perm		NA	NA			
Protected Phases	3			6	6 2		1	2
Permitted Phases		8						
Detector Phase	3	8		6	6 2			
Switch Phase								
Minimum Initial (s)	6.0	6.0		15.0			5.0	15.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Minimum Split (s)	23.0	23.0		23.0			12.0	23.0
Total Split (s)	35.0	35.0		85.0			31.0	54.0
Total Split (%)	29.2%	29.2%		70.8%			26%	45%
Maximum Green (s)	28.9	28.9		78.2			24.2	47.2
Yellow Time (s)	4.1	4.1		4.8			4.8	4.8
All-Red Time (s)	2.0	2.0		2.0			2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0				
Total Lost Time (s)	6.1	6.1		6.8				
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)	3.5	3.5		4.0			6.0	4.0
Recall Mode	None	None		C-Max			Min	C-Max
Act Effct Green (s)	28.9	28.9		78.2	78.2			
Actuated g/C Ratio	0.24	0.24		0.65	0.65			
v/c Ratio	0.57	0.61		0.57	0.26			
Control Delay	43.2	18.1		12.4	4.0			
Queue Delay	0.0	0.0		0.0	0.0			
Total Delay	43.2	18.1		12.4	4.0			
LOS	D	B		B	A			
Approach Delay	29.4			12.4	4.0			
Approach LOS	C			B	A			

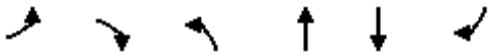
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 15.2		Intersection LOS: B	
Intersection Capacity Utilization 57.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 19: FALKENBURG RD & EB FALKENBURG OFF





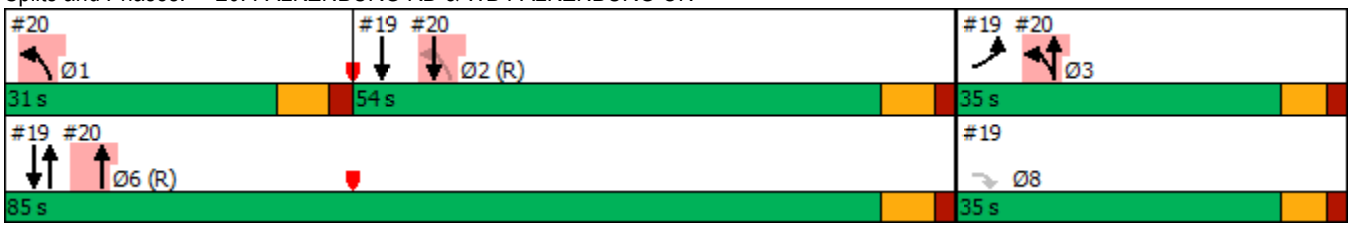
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	0	0	445	1725	785	315				
Future Volume (vph)	0	0	445	1725	785	315				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00				
Frt						0.850				
Flt Protected			0.950							
Satd. Flow (prot)	0	0	1770	3539	3539	1583				
Flt Permitted			0.256							
Satd. Flow (perm)	0	0	477	3539	3539	1583				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)						251				
Link Speed (mph)	30			30	30					
Link Distance (ft)	492			550	852					
Travel Time (s)	11.2			12.5	19.4					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				
Adj. Flow (vph)	0	0	484	1875	853	342				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	484	1875	853	342				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			30	30					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Turning Speed (mph)	15	9	15			9				
Number of Detectors			1	2	2	1				
Detector Template			Left	Thru	Thru	Right				
Leading Detector (ft)			20	100	100	20				
Trailing Detector (ft)			0	0	0	0				
Detector 1 Position(ft)			0	0	0	0				
Detector 1 Size(ft)			20	6	6	20				
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel										
Detector 1 Extend (s)			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94					
Detector 2 Size(ft)				6	6					
Detector 2 Type				Cl+Ex	Cl+Ex					
Detector 2 Channel										
Detector 2 Extend (s)				0.0	0.0					
Turn Type			D.P+P	NA	NA	Free				
Protected Phases			1 3	6 3	2		1	3	6	8
Permitted Phases			2			Free				
Detector Phase			1 3	6 3	2					
Switch Phase										
Minimum Initial (s)					15.0		5.0	6.0	15.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Minimum Split (s)					23.0		12.0	23.0	23.0	23.0
Total Split (s)					54.0		31.0	35.0	85.0	35.0
Total Split (%)					45.0%		26%	29%	71%	29%
Maximum Green (s)					47.2		24.2	28.9	78.2	28.9
Yellow Time (s)					4.8		4.8	4.1	4.8	4.1
All-Red Time (s)					2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)					0.0					
Total Lost Time (s)					6.8					
Lead/Lag					Lag		Lead			
Lead-Lag Optimize?					Yes		Yes			
Vehicle Extension (s)					4.0		6.0	3.5	4.0	3.5
Recall Mode					C-Max		Min	None	C-Max	None
Act Effct Green (s)			106.4	120.0	58.9	120.0				
Actuated g/C Ratio			0.89	1.00	0.49	1.00				
v/c Ratio			0.52	0.53	0.49	0.22				
Control Delay			19.2	1.4	22.0	0.3				
Queue Delay			0.2	0.0	0.0	0.0				
Total Delay			19.4	1.4	22.0	0.3				
LOS			B	A	C	A				
Approach Delay				5.1	15.8					
Approach LOS				A	B					

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 8.7		Intersection LOS: A	
Intersection Capacity Utilization 57.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 20: FALKENBURG RD & WB FALKENBURG ON

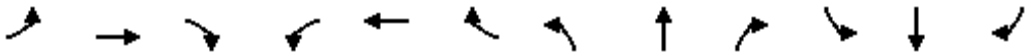


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	400	0	0	1335	255	915
Future Volume (vph)	400	0	0	1335	255	915
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.88
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3539	0	0	3539	1770	2787
Flt Permitted					0.950	
Satd. Flow (perm)	3539	0	0	3539	1770	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						732
Link Speed (mph)	30			30	30	
Link Distance (ft)	390			343	501	
Travel Time (s)	8.9			7.8	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	0	0	1451	277	995
Shared Lane Traffic (%)						
Lane Group Flow (vph)	435	0	0	1451	277	995
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (ft)	100			100	20	20
Trailing Detector (ft)	0			0	0	0
Detector 1 Position(ft)	0			0	0	0
Detector 1 Size(ft)	6			6	20	20
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases						8
Detector Phase	2			6	8	8
Switch Phase						
Minimum Initial (s)	10.0			10.0	10.0	10.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	24.0			16.0	24.0	24.0
Total Split (s)	93.0			93.0	57.0	57.0
Total Split (%)	62.0%			62.0%	38.0%	38.0%
Maximum Green (s)	87.3			87.3	51.3	51.3
Yellow Time (s)	3.7			3.7	3.7	3.7
All-Red Time (s)	2.0			2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	5.7			5.7	5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)	7.0				7.0	7.0
Flash Dont Walk (s)	11.0				11.0	11.0
Pedestrian Calls (#/hr)	0				0	0
Act Effct Green (s)	106.9			106.9	31.7	31.7
Actuated g/C Ratio	0.71			0.71	0.21	0.21
v/c Ratio	0.17			0.58	0.74	0.85
Control Delay	8.0			12.6	66.8	21.8
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	8.0			12.6	66.8	21.8
LOS	A			B	E	C
Approach Delay	8.0			12.6	31.6	
Approach LOS	A			B	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 150			
Actuated Cycle Length: 150			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 19.6		Intersection LOS: B	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 21: EB WHITING OFF & WHITING ST

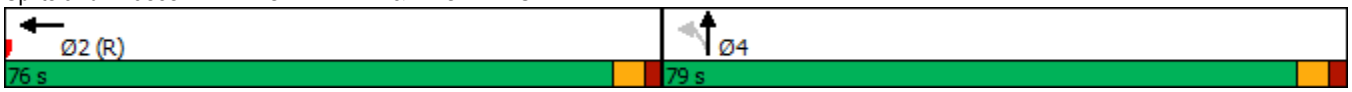


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1680	175	225	1475	0	0	0	0
Future Volume (vph)	0	0	0	0	1680	175	225	1475	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	1.00	1.00	1.00	1.00
Frt					0.986							
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6318	0	1770	5085	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	6318	0	1770	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					10		20					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		273			600			296			353	
Travel Time (s)		6.2			13.6			6.7			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1826	190	245	1603	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2016	0	245	1603	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Minimum Split (s)					30.0		37.0	37.0				
Total Split (s)					76.0		79.0	79.0				
Total Split (%)					49.0%		51.0%	51.0%				
Maximum Green (s)					70.2		72.9	72.9				
Yellow Time (s)					3.7		3.7	3.7				
All-Red Time (s)					2.1		2.4	2.4				
Lost Time Adjust (s)					0.0		0.0	0.0				
Total Lost Time (s)					5.8		6.1	6.1				
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		23.0	23.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					70.2		72.9	72.9				
Actuated g/C Ratio					0.45		0.47	0.47				
v/c Ratio					0.70		0.29	0.67				
Control Delay					2.0		22.0	31.9				
Queue Delay					1.8		2.1	3.5				
Total Delay					3.7		24.1	35.3				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					A		C	D				
Approach Delay					3.7			33.8				
Approach LOS					A			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 155			
Offset: 26 (17%), Referenced to phase 2:WBT, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 18.1		Intersection LOS: B	
Intersection Capacity Utilization 65.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: FLORIDA AVE & BROREIN ST

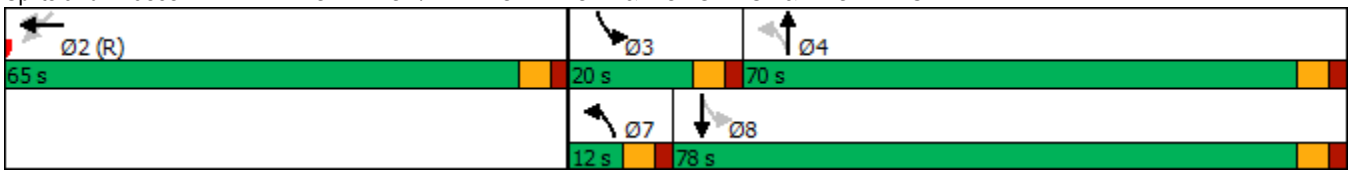


Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations										
Traffic Volume (vph)	35	1920	165	55	545	160	320	820	200	370
Future Volume (vph)	35	1920	165	55	545	160	320	820	200	370
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.864			0.892		0.850	0.850
Flt Protected		0.999	0.950			0.950				
Satd. Flow (prot)	0	3536	1770	1609	0	1770	1662	0	1583	1583
Flt Permitted		0.999	0.061			0.123				
Satd. Flow (perm)	0	3536	114	1609	0	229	1662	0	1583	1583
Right Turn on Red					Yes					Yes
Satd. Flow (RTOR)				390						402
Link Speed (mph)		30		30			30			
Link Distance (ft)		591		494			379			
Travel Time (s)		13.4		11.2			8.6			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	2087	179	60	592	174	348	891	217	402
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	2125	179	652	0	174	1239	0	217	402
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Left	Left	Right	Left	Left	Right	R NA	Right
Median Width(ft)		12		12			12			
Link Offset(ft)		0		0			0			
Crosswalk Width(ft)		16		16			16			
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		15		9	15		9	9	9
Number of Detectors	1	2	1	2		1	2		1	1
Detector Template	Left	Thru	Left	Thru		Left	Thru		Right	Right
Leading Detector (ft)	20	100	20	100		20	100		20	20
Trailing Detector (ft)	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel										
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94		94			94			
Detector 2 Size(ft)		6		6			6			
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			
Detector 2 Channel										
Detector 2 Extend (s)		0.0		0.0			0.0			
Turn Type	Perm	NA	pm+pt	NA		pm+pt	NA		Perm	Free
Protected Phases		2	7	4		3	8			
Permitted Phases	2		4			8			2	Free
Detector Phase	2	2	7	4		3	8		2	
Switch Phase										
Minimum Initial (s)	10.0	10.0	5.0	10.0		5.0	10.0		10.0	

Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Minimum Split (s)	25.0	25.0	11.0	32.0		11.0	32.0		25.0	
Total Split (s)	65.0	65.0	12.0	70.0		20.0	78.0		65.0	
Total Split (%)	41.9%	41.9%	7.7%	45.2%		12.9%	50.3%		41.9%	
Maximum Green (s)	59.3	59.3	6.3	64.0		14.3	72.0		59.3	
Yellow Time (s)	3.7	3.7	3.7	3.7		3.7	3.7		3.7	
All-Red Time (s)	2.0	2.0	2.0	2.3		2.0	2.3		2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.7	5.7	6.0		5.7	6.0		5.7	
Lead/Lag			Lead	Lag		Lead	Lag			
Lead-Lag Optimize?			Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	None	Max		None	Max		C-Max	
Walk Time (s)	7.0	7.0		7.0			7.0		7.0	
Flash Dont Walk (s)	12.0	12.0		19.0			19.0		12.0	
Pedestrian Calls (#/hr)	0	0		0			0		0	
Act Effct Green (s)		59.3	72.3	65.7		83.7	72.0		59.3	155.0
Actuated g/C Ratio		0.38	0.47	0.42		0.54	0.46		0.38	1.00
v/c Ratio		1.57	1.49	0.72		0.70	1.60		0.36	0.25
Control Delay		282.4	286.0	19.1		35.0	308.5		36.4	0.4
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		282.4	286.0	19.1		35.0	308.5		36.4	0.4
LOS		F	F	B		D	F		D	A
Approach Delay		282.4		76.6			274.8			
Approach LOS		F		E			F			

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 155			
Offset: 12 (8%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.60			
Intersection Signal Delay: 212.5		Intersection LOS: F	
Intersection Capacity Utilization 162.1%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: WB BROREIN ON/WB BROREIN OFF & MORGAN ST & BROREIN ST

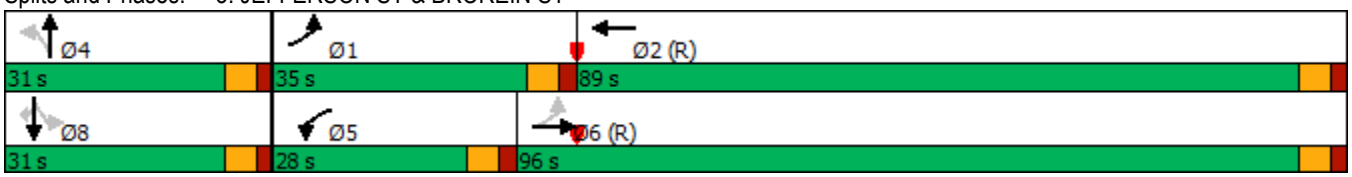


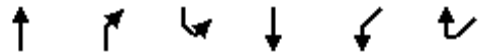
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	375	315	15	155	1590	165	115	520	25	15	150	250
Future Volume (vph)	375	315	15	155	1590	165	115	520	25	15	150	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	80		0	115		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.993			0.986			0.993				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1850	0	1770	3490	0	1770	3514	0	1770	1863	1583
Flt Permitted	0.045			0.950			0.467			0.158		
Satd. Flow (perm)	84	1850	0	1770	3490	0	870	3514	0	294	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			11			3				251
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		591			202			322			162	
Travel Time (s)		13.4			4.6			7.3			3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	408	342	16	168	1728	179	125	565	27	16	163	272
Shared Lane Traffic (%)												
Lane Group Flow (vph)	408	358	0	168	1907	0	125	592	0	16	163	272
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6						4			8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6		5	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	11.0	24.0		11.0	24.0		24.0	24.0		24.0	24.0	24.0
Total Split (s)	35.0	96.0		28.0	89.0		31.0	31.0		31.0	31.0	31.0
Total Split (%)	22.6%	61.9%		18.1%	57.4%		20.0%	20.0%		20.0%	20.0%	20.0%
Maximum Green (s)	29.3	90.3		22.3	83.3		25.3	25.3		25.3	25.3	25.3
Yellow Time (s)	3.7	3.7		3.7	3.7		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	C-Max		None	C-Max		Max	Max		Max	Max	Max
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)	118.3	94.3		18.3	83.3		25.3	25.3		25.3	25.3	25.3
Actuated g/C Ratio	0.76	0.61		0.12	0.54		0.16	0.16		0.16	0.16	0.16
v/c Ratio	1.07	0.32		0.81	1.01		0.88	1.03		0.34	0.54	0.58
Control Delay	102.9	14.4		93.8	59.5		111.7	106.5		79.1	66.8	14.1
Queue Delay	0.0	1.1		0.0	35.0		0.0	0.0		0.0	0.0	1.0
Total Delay	102.9	15.4		93.8	94.5		111.7	106.5		79.1	66.8	15.1
LOS	F	B		F	F		F	F		E	E	B
Approach Delay		62.0			94.5			107.4			36.0	
Approach LOS		E			F			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 155			
Offset: 130 (84%), Referenced to phase 2:WBT and 6:EBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.07			
Intersection Signal Delay: 84.0		Intersection LOS: F	
Intersection Capacity Utilization 112.5%		ICU Level of Service H	
Analysis Period (min) 15			

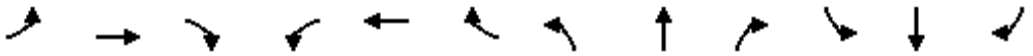
Splits and Phases: 3: JEFFERSON ST & BROREIN ST



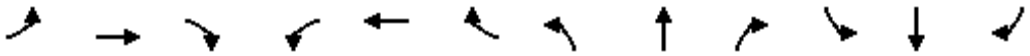


Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	585	475	615	415	0	0
Future Volume (vph)	585	475	615	415	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	115		0	0
Storage Lanes		1	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	1863	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	1863	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	162			583	231	
Travel Time (s)	3.7			13.3	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	636	516	668	451	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	636	516	668	451	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		



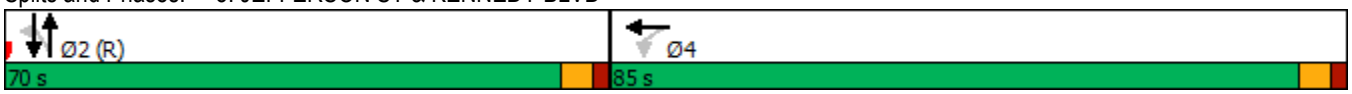
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	475	2340	355	260	985	0	0	235	55
Future Volume (vph)	0	0	0	475	2340	355	260	985	0	0	235	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.980						0.971	
Flt Protected				0.950				0.990				
Satd. Flow (prot)	0	0	0	1770	6280	0	0	3504	0	0	3437	0
Flt Permitted				0.950				0.760				
Satd. Flow (perm)	0	0	0	1770	6280	0	0	2690	0	0	3437	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					33						1	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			319			716			284	
Travel Time (s)		13.1			7.3			16.3			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	516	2543	386	283	1071	0	0	255	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	516	2929	0	0	1354	0	0	315	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type				Perm	NA		Perm	NA			NA	
Protected Phases					4			2			2	
Permitted Phases				4			2					
Minimum Split (s)				26.0	26.0		26.0	26.0			26.0	
Total Split (s)				85.0	85.0		70.0	70.0			70.0	
Total Split (%)				54.8%	54.8%		45.2%	45.2%			45.2%	
Maximum Green (s)				79.3	79.3		64.1	64.1			64.1	
Yellow Time (s)				3.7	3.7		3.7	3.7			3.7	
All-Red Time (s)				2.0	2.0		2.2	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0			0.0			0.0	
Total Lost Time (s)				5.7	5.7			5.9			5.9	
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)				7.0	7.0		7.0	7.0			7.0	
Flash Dont Walk (s)				13.0	13.0		13.0	13.0			13.0	
Pedestrian Calls (#/hr)				0	0		0	0			0	
Act Effct Green (s)				79.3	79.3			64.1			64.1	
Actuated g/C Ratio				0.51	0.51			0.41			0.41	
v/c Ratio				0.57	0.91			1.22			0.22	
Control Delay				19.0	28.0			145.7			29.8	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				19.0	28.0			145.7			29.8	

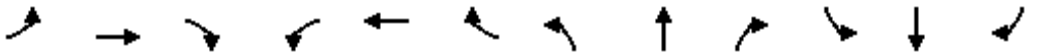


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS				B	C			F			C	
Approach Delay					26.7			145.7			29.8	
Approach LOS					C			F			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 155			
Offset: 126 (81%), Referenced to phase 2:NBSB, Start of Green			
Natural Cycle: 130			
Control Type: Pretimed			
Maximum v/c Ratio: 1.22			
Intersection Signal Delay: 58.4		Intersection LOS: E	
Intersection Capacity Utilization 97.5%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 5: JEFFERSON ST & KENNEDY BLVD



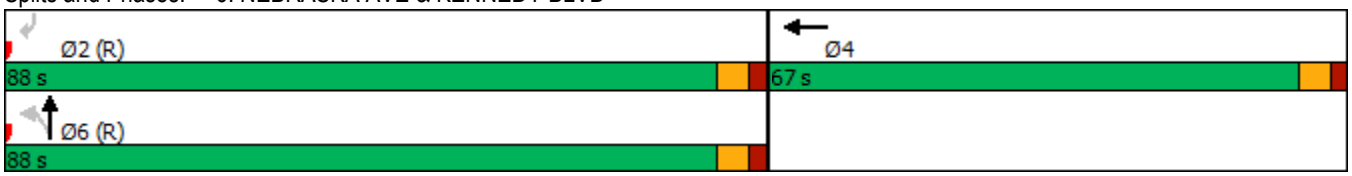


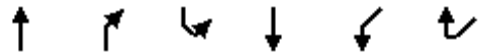
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1155	300	105	635	0	0	0	205
Future Volume (vph)	0	0	0	0	1155	300	105	635	0	0	0	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88
Frt					0.969							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4928	0	1770	1863	0	0	0	2787
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	4928	0	1770	1863	0	0	0	2787
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					49		20					25
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		847			465			292			201	
Travel Time (s)		19.3			10.6			6.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1255	326	114	690	0	0	0	223
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1581	0	114	690	0	0	0	223
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				Perm
Protected Phases					4			6				
Permitted Phases							6					2
Minimum Split (s)					30.0		25.0	25.0				27.0
Total Split (s)					67.0		88.0	88.0				88.0
Total Split (%)					43.2%		56.8%	56.8%				56.8%
Maximum Green (s)					61.2		82.1	82.1				82.1
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.1		2.2	2.2				2.2
Lost Time Adjust (s)					0.0		0.0	0.0				0.0
Total Lost Time (s)					5.8		5.9	5.9				5.9
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				7.0
Flash Dont Walk (s)					17.0		12.0	12.0				14.0
Pedestrian Calls (#/hr)					0		0	0				0
Act Effct Green (s)					61.2		82.1	82.1				82.1
Actuated g/C Ratio					0.39		0.53	0.53				0.53
v/c Ratio					0.80		0.12	0.70				0.15
Control Delay					43.9		15.4	32.0				13.6
Queue Delay					0.0		0.0	2.3				0.0
Total Delay					43.9		15.4	34.3				13.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					D		B	C				B
Approach Delay					43.9			31.6			13.6	
Approach LOS					D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 155			
Offset: 88 (57%), Referenced to phase 2:SBR and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 37.5		Intersection LOS: D	
Intersection Capacity Utilization 72.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: NEBRASKA AVE & KENNEDY BLVD





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	765	170	420	205	0	0
Future Volume (vph)	765	170	420	205	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	130		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt	0.975					
Flt Protected			0.950			
Satd. Flow (prot)	1816	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1816	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			390	272	
Travel Time (s)	4.6			8.9	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	832	185	457	223	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1017	0	457	223	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

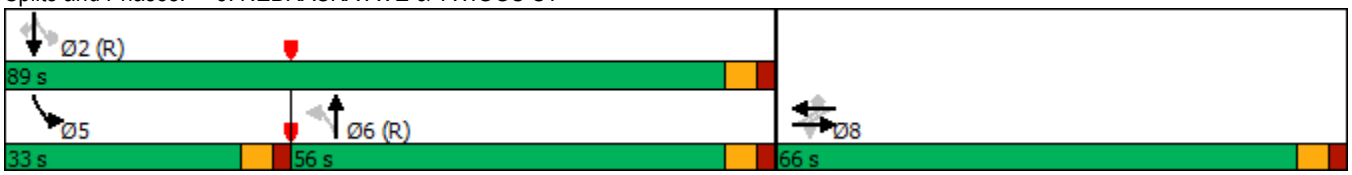
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	80.5%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1050	265	45	370	90	70	515	180	480	315	35
Future Volume (vph)	60	1050	265	45	370	90	70	515	180	480	315	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	150		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.971				0.850		0.961				0.850
Flt Protected		0.998			0.995		0.950			0.950		
Satd. Flow (prot)	0	3430	0	0	3522	1583	1770	1790	0	1770	3539	1583
Flt Permitted		0.854			0.515		0.546			0.072		
Satd. Flow (perm)	0	2935	0	0	1823	1583	1017	1790	0	134	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22				98		12				38
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			652			390			257	
Travel Time (s)		17.7			14.8			8.9			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1141	288	49	402	98	76	560	196	522	342	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1494	0	0	451	98	76	756	0	522	342	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm
Protected Phases		8			8			6		5	2	
Permitted Phases	8			8		8	6			2		2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8		8	8	8	6	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		5.0	10.0	10.0
Minimum Split (s)	30.0	30.0		30.0	30.0	30.0	28.0	28.0		11.0	28.0	28.0
Total Split (s)	66.0	66.0		66.0	66.0	66.0	56.0	56.0		33.0	89.0	89.0
Total Split (%)	42.6%	42.6%		42.6%	42.6%	42.6%	36.1%	36.1%		21.3%	57.4%	57.4%
Maximum Green (s)	59.9	59.9		59.9	59.9	59.9	50.0	50.0		27.3	83.0	83.0
Yellow Time (s)	3.7	3.7		3.7	3.7	3.7	3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.4		2.4	2.4	2.4	2.3	2.3		2.0	2.3	2.3
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.1			6.1	6.1	6.0	6.0		5.7	6.0	6.0
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		2.0	3.0	3.0
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Dont Walk (s)	16.0	16.0		16.0	16.0	16.0	15.0	15.0			15.0	15.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	0
Act Effct Green (s)		59.9			59.9	59.9	50.0	50.0		83.3	83.0	83.0
Actuated g/C Ratio		0.39			0.39	0.39	0.32	0.32		0.54	0.54	0.54
v/c Ratio		1.30			1.02dl	0.15	0.23	1.29		1.45	0.18	0.04
Control Delay		180.8			34.1	8.0	31.5	177.0		253.4	18.8	4.9
Queue Delay		0.7			0.0	0.0	0.0	0.3		0.0	0.0	0.0
Total Delay		181.5			34.1	8.0	31.5	177.4		253.4	18.8	4.9
LOS		F			C	A	C	F		F	B	A
Approach Delay		181.5			29.4			164.1			154.0	
Approach LOS		F			C			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 155			
Offset: 124 (80%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.45			
Intersection Signal Delay: 149.0		Intersection LOS: F	
Intersection Capacity Utilization 135.3%		ICU Level of Service H	
Analysis Period (min) 15			
dl Defacto Left Lane. Recode with 1 though lane as a left lane.			

Splits and Phases: 8: NEBRASKA AVE & TWIGGS ST



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	560	725	425	200	455	135	50	1755	260	0	0	0
Future Volume (vph)	560	725	425	200	455	135	50	1755	260	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	1.00
Frt		0.963			0.974			0.981				
Flt Protected		0.984			0.988			0.999				
Satd. Flow (prot)	0	3354	0	0	3406	0	0	4984	0	0	5085	1863
Flt Permitted		0.522			0.523			0.950				
Satd. Flow (perm)	0	1779	0	0	1803	0	0	4739	0	0	5085	1863
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		46			21			17				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			772			501			413	
Travel Time (s)		14.8			17.5			11.4			9.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	609	788	462	217	495	147	54	1908	283	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1859	0	0	859	0	0	2245	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA				Free
Protected Phases	1	6			2			4			8	
Permitted Phases	6			2			4			8		Free
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	11.0	46.0		17.0	17.0		27.0	27.0		17.0	17.0	
Total Split (s)	11.0	91.0		80.0	80.0		47.0	47.0		17.0	17.0	
Total Split (%)	7.1%	58.7%		51.6%	51.6%		30.3%	30.3%		11.0%	11.0%	
Maximum Green (s)	5.0	84.2		73.2	73.2		40.6	40.6		10.6	10.6	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	2.0	2.8		2.8	2.8		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.8			6.8			6.4			6.4	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	C-Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)		7.0					7.0	7.0				
Flash Dont Walk (s)		32.0					13.0	13.0				
Pedestrian Calls (#/hr)		0					0	0				
Act Effct Green (s)		84.2			73.2			57.6				
Actuated g/C Ratio		0.54			0.47			0.37				
v/c Ratio		2.18dl			3.68dl			1.27				
Control Delay		383.5			69.2			165.1				
Queue Delay		0.0			0.0			0.0				
Total Delay		383.5			69.2			165.1				
LOS		F			E			F				
Approach Delay		383.5			69.2			165.1				
Approach LOS		F			E			F				

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 155			
Offset: 26 (17%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.80			
Intersection Signal Delay: 230.3		Intersection LOS: F	
Intersection Capacity Utilization 130.0%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 9: MERIDIAN AVE & TWIGGS ST

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Lane Configurations									
Traffic Volume (vph)	410	50	85	1175	1830	0	385	0	0
Future Volume (vph)	410	50	85	1175	1830	0	385	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt		0.850					0.850		
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	5085	5085	0	1583	0	0
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	5085	5085	0	1583	0	0
Link Speed (mph)	30			30	30			30	
Link Distance (ft)	404			536	498			405	
Travel Time (s)	9.2			12.2	11.3			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	446	54	92	1277	1989	0	418	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	446	54	92	1277	1989	0	418	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right	Right	Left	Right
Median Width(ft)	12			12	12			0	
Link Offset(ft)	0			0	0			0	
Crosswalk Width(ft)	16			16	16			16	
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9	9	15	9
Sign Control	Stop			Free	Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 72.8%		ICU Level of Service C	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2132.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR	SEL	SER
Lane Configurations								
Traffic Vol, veh/h	410	50	85	1175	1830	0	0	0
Future Vol, veh/h	410	50	85	1175	1830	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	-	-
Storage Length	0	0	0	-	-	0	-	-
Veh in Median Storage, #	0	-	-	0	0	-	0	-
Grade, %	0	-	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2
Mvmt Flow	446	54	92	1277	1989	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2684	995	1989	0	-	0
Stage 1	1989	-	-	-	-	-
Stage 2	695	-	-	-	-	-
Critical Hdwy	5.74	7.14	5.34	-	-	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	3.12	-	-	-
Pot Cap-1 Maneuver	~ 39	209	127	-	-	0
Stage 1	~ 58	-	-	-	-	0
Stage 2	~ 415	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 11	209	127	-	-	-
Mov Cap-2 Maneuver	~ 11	-	-	-	-	-
Stage 1	~ 16	-	-	-	-	-
Stage 2	~ 415	-	-	-	-	-

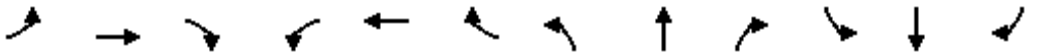
Approach	EB	NB	SB
HCM Control Delay, s	$ 16441.3	5.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	127	-	11	209	-
HCM Lane V/C Ratio	0.727	-	40.514	0.26	-
HCM Control Delay (s)	86.2	-	$ 18442.9	28.2	-
HCM Lane LOS	F	-	F	D	-
HCM 95th %tile Q(veh)	4.1	-	57.3	1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations											
Traffic Volume (vph)	0	0	275	1290	0	0	2155	0	60	0	215
Future Volume (vph)	0	0	275	1290	0	0	2155	0	60	0	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00	1.00	1.00	1.00
Frt											0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Flt Permitted			0.950						0.950		
Satd. Flow (perm)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	264			498			271			329	
Travel Time (s)	6.0			11.3			6.2			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	299	1402	0	0	2342	0	65	0	234
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	299	1402	0	0	2342	0	65	0	234
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			12	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Sign Control	Free			Free			Free			Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 59.8%		ICU Level of Service B	
Analysis Period (min) 15			

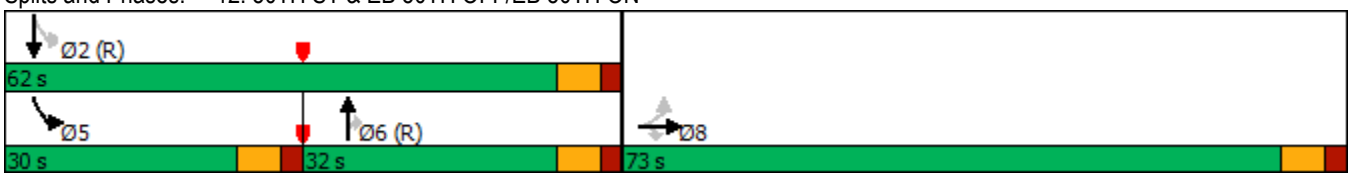


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	0	935	0	0	0	0	1255	60	430	1580	0
Future Volume (vph)	195	0	935	0	0	0	0	1255	60	430	1580	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.124		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	231	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82						86			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		549			603			383			284	
Travel Time (s)		12.5			13.7			8.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	212	0	1016	0	0	0	0	1364	65	467	1717	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	212	1016	0	0	0	0	1364	65	467	1717	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8						6	2		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8	8					6	6	5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	5.0	10.0	
Minimum Split (s)	47.0	47.0	47.0					17.0	17.0	12.0	24.0	
Total Split (s)	73.0	73.0	73.0					32.0	32.0	30.0	62.0	
Total Split (%)	54.1%	54.1%	54.1%					23.7%	23.7%	22.2%	45.9%	
Maximum Green (s)	66.1	66.1	66.1					25.5	25.5	23.3	55.5	
Yellow Time (s)	4.4	4.4	4.4					4.4	4.4	4.4	4.4	
All-Red Time (s)	2.5	2.5	2.5					2.1	2.1	2.3	2.1	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.9	6.9					6.5	6.5	6.7	6.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0					3.0	3.0	2.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Dont Walk (s)	33.0	33.0	33.0								10.0	
Pedestrian Calls (#/hr)	0	0	0								0	
Act Effct Green (s)		66.1	66.1					25.5	25.5	55.3	55.5	
Actuated g/C Ratio		0.49	0.49					0.19	0.19	0.41	0.41	
v/c Ratio		0.24	1.25					1.13	0.18	1.30	0.82	
Control Delay		20.9	150.0					117.3	5.7	181.6	22.7	
Queue Delay		0.0	0.0					0.1	0.0	0.5	0.0	
Total Delay		21.0	150.0					117.4	5.7	182.1	22.7	
LOS		C	F					F	A	F	C	
Approach Delay		127.7						112.3			56.8	
Approach LOS		F						F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 16 (12%), Referenced to phase 2:SBTL and 6:NBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.30			
Intersection Signal Delay: 91.2		Intersection LOS: F	
Intersection Capacity Utilization 99.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 12: 50TH ST & EB 50TH OFF/EB 50TH ON

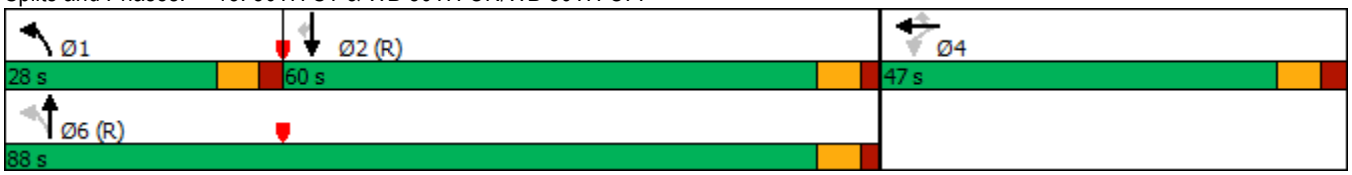


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	45	0	185	205	1245	0	0	1965	115
Future Volume (vph)	0	0	0	45	0	185	205	1245	0	0	1965	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	140		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.048					
Satd. Flow (perm)	0	0	0	0	1770	1583	89	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						82						98
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		457			359			284			339	
Travel Time (s)		10.4			8.2			6.5			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	49	0	201	223	1353	0	0	2136	125
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	49	201	223	1353	0	0	2136	125
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	pm+pt	NA			NA	Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4	6					2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				4	4	4	1	6			2	2
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	10.0
Minimum Split (s)				47.0	47.0	47.0	12.0	24.0			24.0	24.0
Total Split (s)				47.0	47.0	47.0	28.0	88.0			60.0	60.0
Total Split (%)				34.8%	34.8%	34.8%	20.7%	65.2%			44.4%	44.4%
Maximum Green (s)				39.8	39.8	39.8	21.2	81.6			53.6	53.6
Yellow Time (s)				4.4	4.4	4.4	4.4	4.4			4.4	4.4
All-Red Time (s)				2.8	2.8	2.8	2.4	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.2	7.2	6.8	6.4			6.4	6.4
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	2.0	3.0			3.0	3.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)				7.0	7.0	7.0		7.0			7.0	7.0
Flash Dont Walk (s)				32.0	32.0	32.0		10.0			10.0	10.0
Pedestrian Calls (#/hr)				0	0	0		0			0	0
Act Effct Green (s)					17.3	17.3	103.7	104.1			81.5	81.5
Actuated g/C Ratio					0.13	0.13	0.77	0.77			0.60	0.60
v/c Ratio					0.22	0.73	0.84	0.35			0.55	0.13
Control Delay					52.5	48.2	52.8	7.1			18.1	5.1
Queue Delay					0.0	0.0	3.7	0.9			0.1	0.0
Total Delay					52.5	48.2	56.6	8.0			18.2	5.1
LOS					D	D	E	A			B	A
Approach Delay					49.0			14.9			17.5	
Approach LOS					D			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 18.4		Intersection LOS: B	
Intersection Capacity Utilization 99.6%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 13: 50TH ST & WB 50TH ON/WB 50TH OFF



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	170	0	975	0	0	1060
Future Volume (vph)	170	0	975	0	0	1060
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	3539	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	3539	0	0	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	292		343			439
Travel Time (s)	6.6		7.8			10.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	185	0	1060	0	0	1152
Shared Lane Traffic (%)						
Lane Group Flow (vph)	185	0	1060	0	0	1152
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 45.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	6.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	170	0	975	0	0	1060
Future Vol, veh/h	170	0	975	0	0	1060
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	185	0	1060	0	0	1152

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1636	-	0	-	-	-
Stage 1	1060	-	-	-	-	-
Stage 2	576	-	-	-	-	-
Critical Hdwy	6.84	-	-	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	-	-
Pot Cap-1 Maneuver	~ 92	0	-	0	0	-
Stage 1	294	0	-	0	0	-
Stage 2	525	0	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	~ 92	-	-	-	-	-
Mov Cap-2 Maneuver	210	-	-	-	-	-
Stage 1	294	-	-	-	-	-
Stage 2	525	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	81.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	WBLn1	SBT
Capacity (veh/h)	-	210	-
HCM Lane V/C Ratio	-	0.88	-
HCM Control Delay (s)	-	81.8	-
HCM Lane LOS	-	F	-
HCM 95th %tile Q(veh)	-	6.9	-

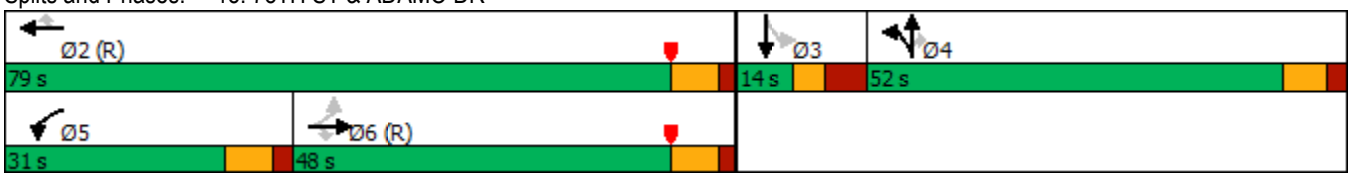
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1470	530	525	880	5	515	5	480	10	5	5
Future Volume (vph)	10	1470	530	525	880	5	515	5	480	10	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	0		315	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.968	
Flt Protected	0.950			0.950			0.950	0.953			0.974	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1681	1686	1583	0	1756	0
Flt Permitted	0.299			0.950			0.950	0.953			0.847	
Satd. Flow (perm)	557	3539	1583	1770	3539	1583	1681	1686	1583	0	1527	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			516			91			434		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		887			638			788			238	
Travel Time (s)		20.2			14.5			17.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1598	576	571	957	5	560	5	522	11	5	5
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	11	1598	576	571	957	5	280	285	522	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		25			25			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Perm	NA	
Protected Phases		6		5	2		4	4			3	
Permitted Phases	6		6			2			4	3		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6	6	5	2	2	4	4	4	3	3	
Switch Phase												
Minimum Initial (s)	15.0	15.0	15.0	5.0	15.0	15.0	6.0	6.0	6.0	6.0	6.0	
Minimum Split (s)	26.0	26.0	26.0	13.0	27.0	27.0	52.0	52.0	52.0	14.0	14.0	
Total Split (s)	48.0	48.0	48.0	31.0	79.0	79.0	52.0	52.0	52.0	14.0	14.0	
Total Split (%)	33.1%	33.1%	33.1%	21.4%	54.5%	54.5%	35.9%	35.9%	35.9%	9.7%	9.7%	
Maximum Green (s)	40.8	40.8	40.8	23.8	71.8	71.8	44.9	44.9	44.9	6.0	6.0	
Yellow Time (s)	5.2	5.2	5.2	5.2	5.2	5.2	4.8	4.8	4.8	3.4	3.4	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.3	2.3	2.3	4.6	4.6	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Lost Time (s)	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.1	7.1		8.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lag	Lag	Lag	Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	4.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	
Recall Mode	C-Max	C-Max	C-Max	None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)	7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0			
Flash Dont Walk (s)	11.0	11.0	11.0		12.0	12.0	37.0	37.0	37.0			
Pedestrian Calls (#/hr)	0	0	0		0	0	0	0	0			
Act Effct Green (s)	40.8	40.8	40.8	37.9	85.9	85.9	36.4	36.4	36.4		6.0	
Actuated g/C Ratio	0.28	0.28	0.28	0.26	0.59	0.59	0.25	0.25	0.25		0.04	
v/c Ratio	0.07	1.61	0.71	1.24	0.46	0.01	0.66	0.67	0.72		0.31	
Control Delay	40.0	311.7	11.2	166.6	19.7	0.0	55.7	56.1	14.3		67.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	40.0	311.7	11.2	166.6	19.7	0.0	55.7	56.1	14.3		67.8	
LOS	D	F	B	F	B	A	E	E	B		E	
Approach Delay		231.1			74.4			35.9			67.8	
Approach LOS		F			E			D			E	

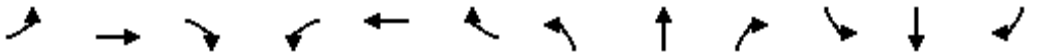
Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 145			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.61			
Intersection Signal Delay: 136.7		Intersection LOS: F	
Intersection Capacity Utilization 108.7%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 15: 78TH ST & ADAMO DR



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1945	15	220	1410	0	0
Future Volume (vph)	1945	15	220	1410	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	1.00
Frt		0.850				
Flt Protected				0.993		
Satd. Flow (prot)	5085	1583	0	5050	0	0
Flt Permitted				0.993		
Satd. Flow (perm)	5085	1583	0	5050	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	638			376	435	
Travel Time (s)	14.5			8.5	9.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2114	16	239	1533	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2114	16	0	1772	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	25			25	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		



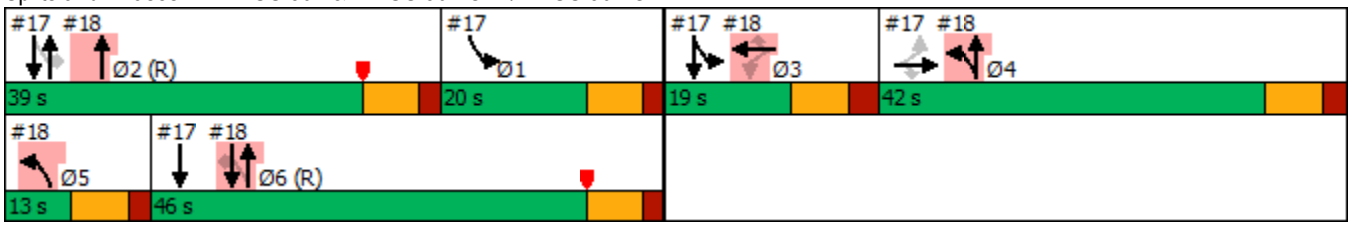
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	0	930	0	0	0	0	1295	530	450	2380	0
Future Volume (vph)	210	0	930	0	0	0	0	1295	530	450	2380	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	315		500	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.125		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	233	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			237						576			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		739			677			1414			381	
Travel Time (s)		16.8			15.4			32.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	0	1011	0	0	0	0	1408	576	489	2587	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	228	1011	0	0	0	0	1408	576	489	2587	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0			30			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	D.P+P	NA	
Protected Phases		4						2		1 3	6 3 2	
Permitted Phases	4		4						2	2		

Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4	4					2	2	1 3	6 3 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0					15.0	15.0			
Minimum Split (s)	13.0	13.0	13.0					23.0	23.0			
Total Split (s)	42.0	42.0	42.0					39.0	39.0			
Total Split (%)	35.0%	35.0%	35.0%					32.5%	32.5%			
Maximum Green (s)	34.5	34.5	34.5					31.9	31.9			
Yellow Time (s)	5.1	5.1	5.1					5.1	5.1			
All-Red Time (s)	2.4	2.4	2.4					2.0	2.0			
Lost Time Adjust (s)		0.0	0.0					0.0	0.0			
Total Lost Time (s)		7.5	7.5					7.1	7.1			
Lead/Lag	Lag	Lag	Lag					Lead	Lead			
Lead-Lag Optimize?	Yes	Yes	Yes					Yes	Yes			
Vehicle Extension (s)	4.0	4.0	4.0					3.0	3.0			
Recall Mode	Max	Max	Max					C-Max	C-Max			
Act Effct Green (s)		34.5	34.5					31.9	31.9	63.8	70.9	
Actuated g/C Ratio		0.29	0.29					0.27	0.27	0.53	0.59	
v/c Ratio		0.45	1.62					0.83	0.68	0.92	0.86	
Control Delay		38.4	311.8					46.4	7.6	19.3	18.7	
Queue Delay		0.0	0.0					0.0	0.0	34.3	7.1	
Total Delay		38.4	311.8					46.4	7.6	53.6	25.8	
LOS		D	F					D	A	D	C	
Approach Delay		261.5						35.2			30.2	
Approach LOS		F						D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.62			
Intersection Signal Delay: 77.3		Intersection LOS: E	
Intersection Capacity Utilization 115.7%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 17: US 301 & EB US 301 OFF/EB US 301 ON



Lane Group	Ø1	Ø3	Ø5	Ø6
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	15.0
Minimum Split (s)	13.0	13.0	13.0	23.0
Total Split (s)	20.0	19.0	13.0	46.0
Total Split (%)	17%	16%	11%	38%
Maximum Green (s)	12.9	11.2	5.9	38.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.7	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	4.0	3.0
Recall Mode	Min	None	Max	C-Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

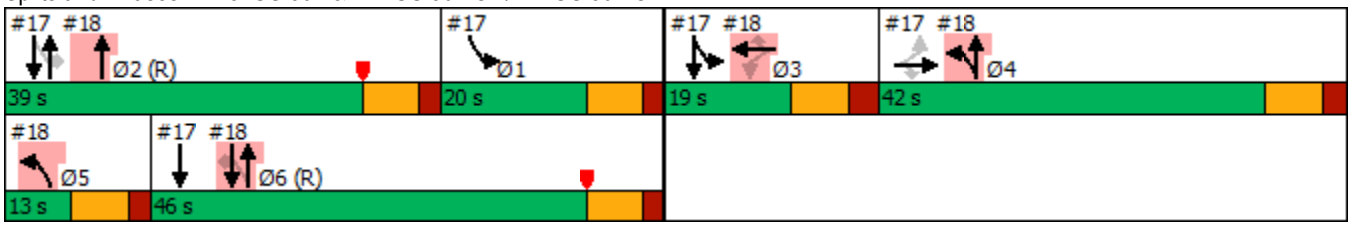
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	225	0	365	120	1385	0	0	2605	90
Future Volume (vph)	0	0	0	225	0	365	120	1385	0	0	2605	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	300		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.103					
Satd. Flow (perm)	0	0	0	0	1770	1583	192	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						235						176
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			711			381			795	
Travel Time (s)		13.2			16.2			8.7			18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	245	0	397	130	1505	0	0	2832	98
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	245	397	130	1505	0	0	2832	98
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			20			30	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	D.P+P	NA			NA	Perm
Protected Phases					3		5 4	2 4 6			6	
Permitted Phases				3		3	6					6

Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				3	3	3	5 4	2 4 6			6	6
Switch Phase												
Minimum Initial (s)				5.0	5.0	5.0					15.0	15.0
Minimum Split (s)				13.0	13.0	13.0					23.0	23.0
Total Split (s)				19.0	19.0	19.0					46.0	46.0
Total Split (%)				15.8%	15.8%	15.8%					38.3%	38.3%
Maximum Green (s)				11.2	11.2	11.2					38.9	38.9
Yellow Time (s)				5.1	5.1	5.1					5.1	5.1
All-Red Time (s)				2.7	2.7	2.7					2.0	2.0
Lost Time Adjust (s)					0.0	0.0					0.0	0.0
Total Lost Time (s)					7.8	7.8					7.1	7.1
Lead/Lag				Lead	Lead	Lead					Lag	Lag
Lead-Lag Optimize?				Yes	Yes	Yes					Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0					3.0	3.0
Recall Mode				None	None	None					C-Max	C-Max
Act Effct Green (s)					11.2	11.2	86.8	93.9			38.9	38.9
Actuated g/C Ratio					0.09	0.09	0.72	0.78			0.32	0.32
v/c Ratio					1.48	1.10	0.17	0.38			1.36	0.16
Control Delay					285.5	98.9	28.3	1.9			200.3	0.5
Queue Delay					5.2	0.0	0.0	0.2			0.2	0.0
Total Delay					290.6	98.9	28.3	2.1			200.4	0.5
LOS					F	F	C	A			F	A
Approach Delay					172.0			4.2			193.8	
Approach LOS					F			A			F	

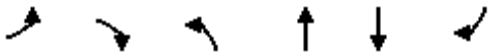
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.62			
Intersection Signal Delay: 131.5		Intersection LOS: F	
Intersection Capacity Utilization 115.7%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 18: US 301 & WB US 301 ON/WB US 301 OFF



Lane Group	Ø1	Ø2	Ø4	Ø5
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	15.0	5.0	5.0
Minimum Split (s)	13.0	23.0	13.0	13.0
Total Split (s)	20.0	39.0	42.0	13.0
Total Split (%)	17%	33%	35%	11%
Maximum Green (s)	12.9	31.9	34.5	5.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.4	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0	4.0	4.0
Recall Mode	Min	C-Max	Max	Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

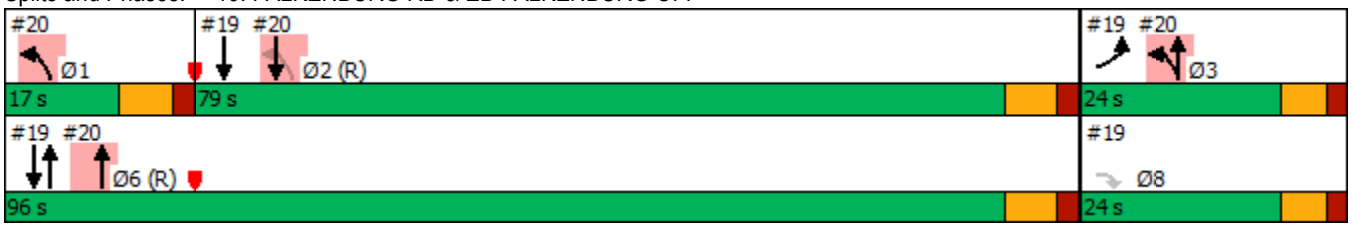


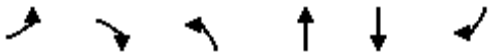
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Lane Configurations								
Traffic Volume (vph)	340	420	0	1390	1780	0		
Future Volume (vph)	340	420	0	1390	1780	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	0.97	0.88	1.00	0.91	0.91	1.00		
Frt		0.850						
Flt Protected	0.950							
Satd. Flow (prot)	3433	2787	0	5085	5085	0		
Flt Permitted	0.950							
Satd. Flow (perm)	3433	2787	0	5085	5085	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		57						
Link Speed (mph)	30			30	30			
Link Distance (ft)	519			688	550			
Travel Time (s)	11.8			15.6	12.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	370	457	0	1511	1935	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	370	457	0	1511	1935	0		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	24			30	30			
Link Offset(ft)	0			0	0			
Crosswalk Width(ft)	16			16	16			
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	9	15			9		
Number of Detectors	1	1		2	2			
Detector Template	Left	Right		Thru	Thru			
Leading Detector (ft)	20	20		100	100			
Trailing Detector (ft)	0	0		0	0			
Detector 1 Position(ft)	0	0		0	0			
Detector 1 Size(ft)	20	20		6	6			
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			
Detector 2 Position(ft)				94	94			
Detector 2 Size(ft)				6	6			
Detector 2 Type				Cl+Ex	Cl+Ex			
Detector 2 Channel								
Detector 2 Extend (s)				0.0	0.0			
Turn Type	Prot	Perm		NA	NA			
Protected Phases	3			6	6 2		1	2
Permitted Phases		8						
Detector Phase	3	8		6	6 2			
Switch Phase								
Minimum Initial (s)	6.0	6.0		15.0			5.0	15.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Minimum Split (s)	23.0	23.0		23.0			12.0	23.0
Total Split (s)	24.0	24.0		96.0			17.0	79.0
Total Split (%)	20.0%	20.0%		80.0%			14%	66%
Maximum Green (s)	17.9	17.9		89.2			10.2	72.2
Yellow Time (s)	4.1	4.1		4.8			4.8	4.8
All-Red Time (s)	2.0	2.0		2.0			2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0				
Total Lost Time (s)	6.1	6.1		6.8				
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)	3.5	3.5		4.0			6.0	4.0
Recall Mode	None	None		C-Max			None	C-Max
Act Effct Green (s)	17.9	17.9		89.2	89.2			
Actuated g/C Ratio	0.15	0.15		0.74	0.74			
v/c Ratio	0.72	0.98		0.40	0.51			
Control Delay	57.7	83.0		6.0	3.8			
Queue Delay	0.0	0.0		0.0	0.1			
Total Delay	57.7	83.0		6.0	3.9			
LOS	E	F		A	A			
Approach Delay	71.7			6.0	3.9			
Approach LOS	E			A	A			

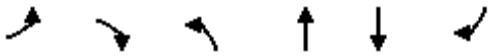
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 17.8		Intersection LOS: B	
Intersection Capacity Utilization 82.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 19: FALKENBURG RD & EB FALKENBURG OFF





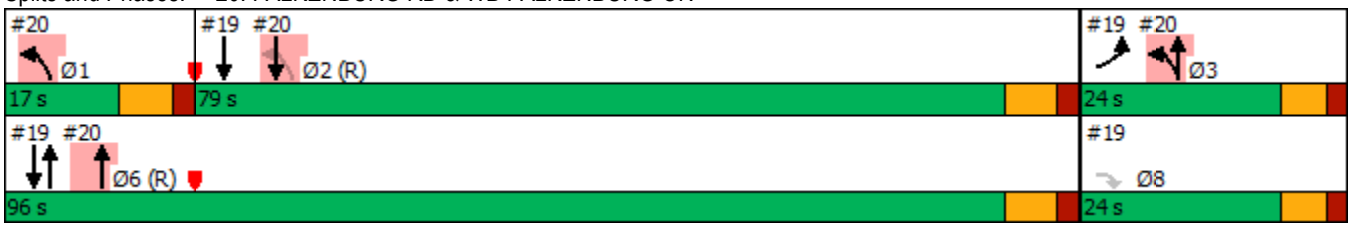
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	0	0	400	1330	1780	430				
Future Volume (vph)	0	0	400	1330	1780	430				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00				
Frt						0.850				
Flt Protected			0.950							
Satd. Flow (prot)	0	0	1770	3539	3539	1583				
Flt Permitted			0.055							
Satd. Flow (perm)	0	0	102	3539	3539	1583				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)						151				
Link Speed (mph)	30			30	30					
Link Distance (ft)	492			550	852					
Travel Time (s)	11.2			12.5	19.4					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				
Adj. Flow (vph)	0	0	435	1446	1935	467				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	435	1446	1935	467				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			30	30					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Turning Speed (mph)	15	9	15			9				
Number of Detectors			1	2	2	1				
Detector Template			Left	Thru	Thru	Right				
Leading Detector (ft)			20	100	100	20				
Trailing Detector (ft)			0	0	0	0				
Detector 1 Position(ft)			0	0	0	0				
Detector 1 Size(ft)			20	6	6	20				
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel										
Detector 1 Extend (s)			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94					
Detector 2 Size(ft)				6	6					
Detector 2 Type				Cl+Ex	Cl+Ex					
Detector 2 Channel										
Detector 2 Extend (s)				0.0	0.0					
Turn Type			D.P+P	NA	NA	Free				
Protected Phases			1 3	6 3	2		1	3	6	8
Permitted Phases			2			Free				
Detector Phase			1 3	6 3	2					
Switch Phase										
Minimum Initial (s)					15.0		5.0	6.0	15.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Minimum Split (s)					23.0		12.0	23.0	23.0	23.0
Total Split (s)					79.0		17.0	24.0	96.0	24.0
Total Split (%)					65.8%		14%	20%	80%	20%
Maximum Green (s)					72.2		10.2	17.9	89.2	17.9
Yellow Time (s)					4.8		4.8	4.1	4.8	4.1
All-Red Time (s)					2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)					0.0					
Total Lost Time (s)					6.8					
Lead/Lag					Lag		Lead			
Lead-Lag Optimize?					Yes		Yes			
Vehicle Extension (s)					4.0		6.0	3.5	4.0	3.5
Recall Mode					C-Max		None	None	C-Max	None
Act Effct Green (s)			106.4	120.0	72.2	120.0				
Actuated g/C Ratio			0.89	1.00	0.60	1.00				
v/c Ratio			0.77	0.41	0.91	0.30				
Control Delay			49.7	0.5	28.8	0.5				
Queue Delay			0.0	0.0	0.0	0.0				
Total Delay			49.7	0.5	28.8	0.5				
LOS			D	A	C	A				
Approach Delay				11.9	23.3					
Approach LOS				B	C					

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 18.3		Intersection LOS: B	
Intersection Capacity Utilization 82.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 20: FALKENBURG RD & WB FALKENBURG ON

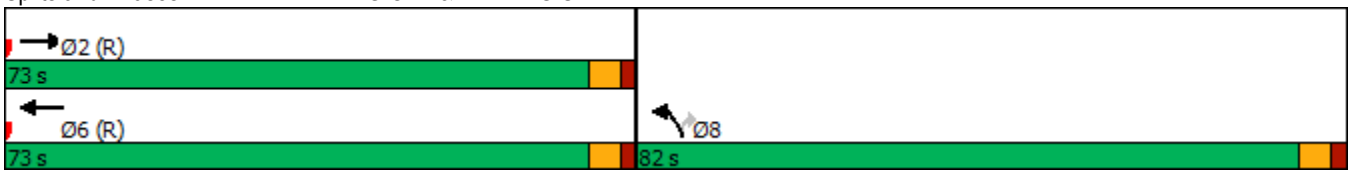


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	815	0	0	670	320	800
Future Volume (vph)	815	0	0	670	320	800
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.88
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3539	0	0	3539	1770	2787
Flt Permitted					0.950	
Satd. Flow (perm)	3539	0	0	3539	1770	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						126
Link Speed (mph)	30			30	30	
Link Distance (ft)	390			343	501	
Travel Time (s)	8.9			7.8	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	886	0	0	728	348	870
Shared Lane Traffic (%)						
Lane Group Flow (vph)	886	0	0	728	348	870
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (ft)	100			100	20	20
Trailing Detector (ft)	0			0	0	0
Detector 1 Position(ft)	0			0	0	0
Detector 1 Size(ft)	6			6	20	20
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Perm
Protected Phases	2			6	8	
Permitted Phases						8
Detector Phase	2			6	8	8
Switch Phase						
Minimum Initial (s)	10.0			10.0	10.0	10.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	24.0			16.0	24.0	24.0
Total Split (s)	73.0			73.0	82.0	82.0
Total Split (%)	47.1%			47.1%	52.9%	52.9%
Maximum Green (s)	67.3			67.3	76.3	76.3
Yellow Time (s)	3.7			3.7	3.7	3.7
All-Red Time (s)	2.0			2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	5.7			5.7	5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)	7.0				7.0	7.0
Flash Dont Walk (s)	11.0				11.0	11.0
Pedestrian Calls (#/hr)	0				0	0
Act Effct Green (s)	90.0			90.0	53.6	53.6
Actuated g/C Ratio	0.58			0.58	0.35	0.35
v/c Ratio	0.43			0.35	0.57	0.83
Control Delay	20.1			18.9	44.1	46.5
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	20.1			18.9	44.1	46.5
LOS	C			B	D	D
Approach Delay	20.1			18.9	45.8	
Approach LOS	C			B	D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 155			
Actuated Cycle Length: 155			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 30.9		Intersection LOS: C	
Intersection Capacity Utilization 60.0%		ICU Level of Service B	
Analysis Period (min) 15			

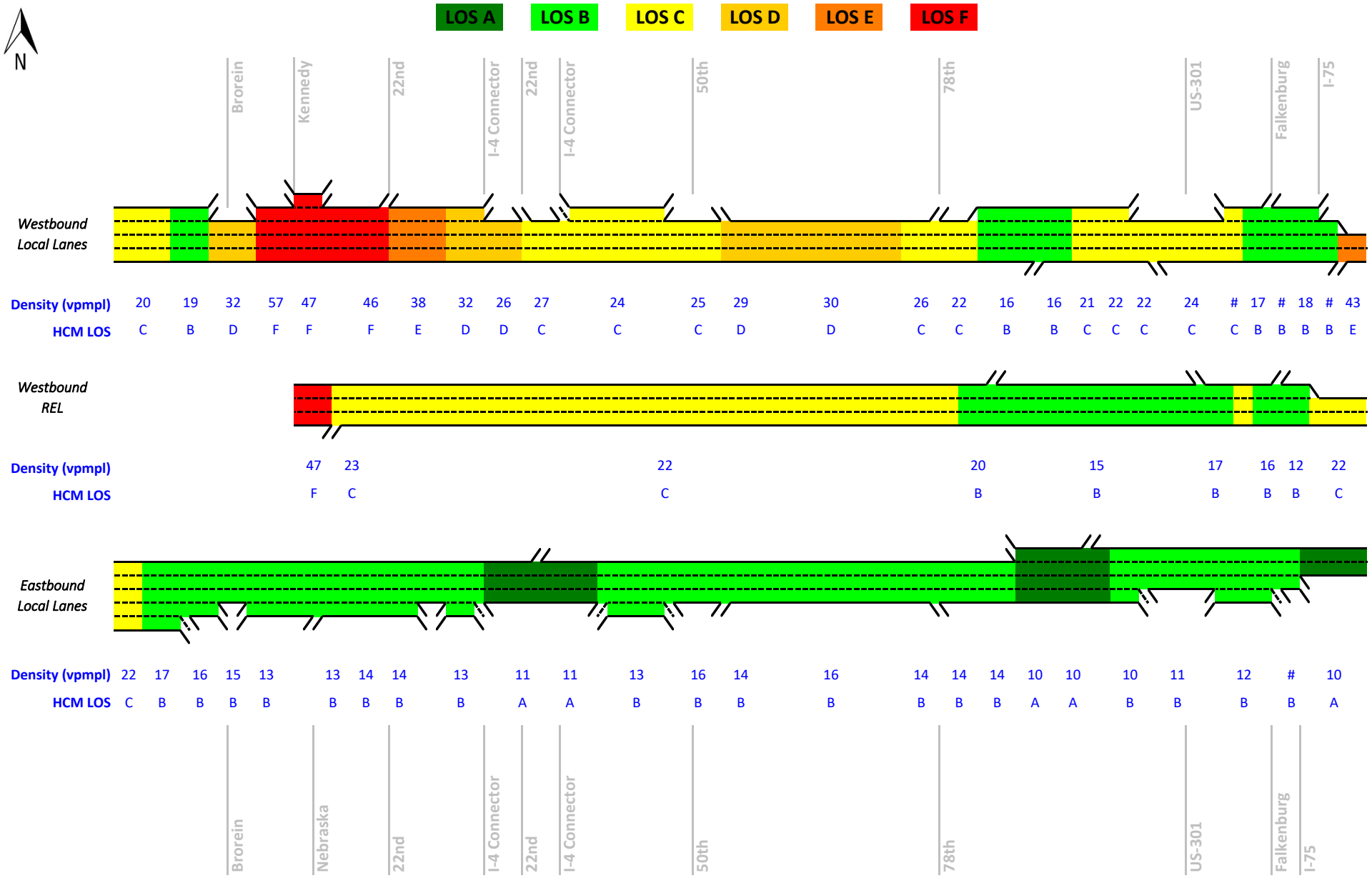
Splits and Phases: 21: EB WHITING OFF & WHITING ST



Appendix F: BUILD CONDITIONS

Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

2046 Build Alt. 1



Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	128.6	64.3	F
Upstream of REL Ramp 3 Off	Diverge	1,443	2	85.4	42.7	E
REL Ramp 3 to I-75 SB	Basic Freeway	989	3	47.2	15.7	B
Downstream of I-75 SB On	Merge	1,503	4	70.0	17.5	B
I-75 to Falkenburg Rd	Basic Freeway	874	4	70.8	17.7	B
Downstream of Falkenburg Rd On	Merge	704	5	85.8	17.2	B
Upstream of US-301 Off	Diverge	407	4	86.7	21.7	C
Between US-301 Ramps	Basic Freeway	1,306	3	70.9	23.6	C
Downstream of REL On	Merge	1,589	3	74.2	21.6	C
Downstream of US-301 On	Merge	1,573	4	88.1	22.0	C
US-301 to REL Off	Basic Freeway	1,187	4	85.6	21.4	C
Upstream of REL Off	Diverge	1,478	4	65.7	16.4	B
REL to 78th St (4 lanes)	Basic Freeway	2,442	4	65.7	16.4	B
REL to 78th St (3 lanes)	Basic Freeway	1,592	3	65.7	21.9	C
Downstream of 78th St On	Merge	1,770	3	88.7	26.1	C
78th St to 50th St	Basic Freeway	6,087	3	89.8	29.9	D
Upstream of 50th St Off	Diverge	1,592	3	87.3	29.1	D
Between 50th St Ramps	Basic Freeway	2,619	3	74.6	24.9	C
50th St to I-4	Weave	4,285	4	96.6	24.1	C
Upstream of 22nd Off	Diverge	1,552	3	81.4	27.1	C
22nd St Off to I-4 On	Basic Freeway	1,699	3	78.1	26.0	D
Downstream of I-4 On	Merge	1,503	4	128.5	32.1	D
I-4 On to 22nd St On	Basic Freeway	2,487	4	150.0	37.5	E
Downstream of 22nd St On	Merge	1,507	4	209.0	46.0	F
22nd St to REL Ramp 1 On	Basic Freeway	1,684	4	189.5	47.4	F
REL Ramp 1 On to Kennedy Blvd Off	Weave	1,147	5	237.4	47.5	F
Upstream of Brorein St Off	Diverge	1,029	4	229.8	57.5	F
Between Brorein St Ramps	Basic Freeway	2,061	3	97.3	32.4	D
Downstream of Brorein St On	Merge	1,460	4	83.1	18.7	B
Selmon Continue West	Basic Freeway	2,495	4	79.0	19.7	C

Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
From Brandon (2 lanes)	Basic Freeway	3,102	2	43.6	21.8	C
From Brandon (3 lanes)	Basic Freeway	1,429	3	35.3	11.8	B
Downstream of LL On (at I-75)	Merge	1,498	3	55.2	16.1	B
LL On to LL Off	Basic Freeway	518	3	56.4	18.8	C
Upstream of LL Off (at US-301)	Diverge	1,983	3	50.9	17.0	B
LL Off to LL On	Basic Freeway	8,473	3	46.2	15.4	B
Downstream of LL On (at US-301)	Merge	1,526	3	67.2	19.6	B
LL On to LL Off	Basic Freeway	25,347	3	64.6	21.5	C
Upstream of LL Off (at Kennedy Blvd)	Diverge	1,263	3	82.7	23.3	C
To Twiggs St	Basic Freeway	1,408	4	188.1	47.0	F

Eastbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 SB	Basic Freeway	1,229	2	20	10	A
Upstream of I-75 NB Off	Diverge	529	3	32	11	B
US-301 to Falkenburg Rd	Weave	1,310	4	49	12	B
Between US-301 Ramps	Basic Freeway	2,836	3	34	11	B
Upstream of US-301 Off	Diverge	1,483	4	40	10	B
REL to US-301	Basic Freeway	293	4	40	10	A
Upstream of REL Off	Basic Freeway	1,808	4	40	10	A
Downstream of REL On	Basic Freeway	1,502	4	40	10	A
78th St to REL (3 lanes)	Basic Freeway	1,956	3	41	14	B
78th St to REL (3 lanes)	Basic Freeway	875	3	41	14	B
Upstream of 78th St Off	Diverge	1,495	3	47	14	B
50th St to 78th St	Basic Freeway	6,583	3	47	16	B
Downstream of 50th St On	Merge	1,497	3	47	14	B
Between 50th St Ramps	Basic Freeway	2,766	3	48	16	B
I-4 to 50th St	Weave	2,226	4	56	13	B
REL Off to I-4 On	Basic Freeway	4,056	3	32	11	A
Upstream of REL Off (3 lanes)	Basic Freeway	1,500	3	32	11	A
Upstream of REL Off (3 lanes)	Basic Freeway	586	3	32	11	A
22nd St On to I-4 Off	Weave	1,541	4	51	13	B
Between 22nd St Ramps	Basic Freeway	862	3	50	17	B
Upstream of 22nd St Off	Diverge	1,505	4	57	14	B
Nebraska Ave to 22nd St	Basic Freeway	1,179	4	57	14	B
Downstream of Nebraska Ave On	Merge	1,512	4	57	13	B
Brorein St to Nebraska Ave	Basic Freeway	341	4	50	12	B
Downstream of Brorein St On	Merge	1,531	4	50	13	B
Whiting St to Brorein St	Basic Freeway	1,180	3	45	15	B
Upstream of Whiting St Off	Diverge	818	4	64	16	B
Upstream of Florida Ave Off	Diverge	1,706	5	87	17	B
From Selmon West	Basic Freeway	2,487	4	90	22	C

Westbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	5,100	3,748	-1,352	27%	20.3
REL Ramp 3 to I-75 SB	3,630	2,675	-955	26%	17.0
I-75 to Falkenburg Rd	4,920	3,964	-956	19%	14.3
Falkenburg Rd to US-301	5,720	4,762	-958	17%	13.2
Between US-301 Ramps	4,760	3,964	-796	17%	12.1
REL On to US-301 On	5,360	4,532	-828	15%	11.8
US-301 to REL Off	6,130	5,302	-828	14%	10.9
REL to 78th St	4,910	4,110	-800	16%	11.9
78th St to 50th St	5,860	5,070	-790	13%	10.7
Between 50th St Ramps	5,450	4,708	-742	14%	10.4
50th St to I-4	6,620	5,798	-822	12%	10.4
I-4 Off to 22nd St Off	5,490	4,825	-665	12%	9.3
22nd St Off to I-4 On	5,010	4,398	-612	12%	8.9
I-4 On to 22nd St On	7,330	6,127	-1,203	16%	14.7
22nd St to REL Ramp 1 On	8,190	6,865	-1,325	16%	15.3
REL Ramp 1 On to Kennedy Blvd	9,150	7,651	-1,499	16%	16.4
Kennedy Blvd to Brorein St	6,940	5,779	-1,161	17%	14.6
Between Brorein St Ramps	4,770	3,993	-777	16%	11.7
Selmon Continue West	5,330	4,314	-1,016	19%	14.6
Reversible Express Lanes					
From Brandon	2,370	2,355	-15	1%	0.3
LL On (at I-75) to LL Off (at US-301)	3,840	3,428	-412	11%	6.8
LL Off (at US-301) to LL On (at US-301)	3,240	2,831	-409	13%	7.4
LL On (at US-301) to LL Off (at Kennedy Blvd)	4,460	4,020	-440	0.1	6.7
LL Off (at Kennedy Blvd) to Twiggs St	3,500	3,148	-352	0.1	6.1
NETWORK TOTAL	**128,080**	**108,368**	**-19,712**	**15%**	

Eastbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 SB	1,120	1,069	-51	5%	1.6
Falkenburg Rd to I-75	1,750	1,671	-79	5%	1.9
US-301 to Falkenburg Rd	2,640	2,526	-114	4%	2.2
Between US-301 Ramps	2,070	1,971	-99	5%	2.2
REL Off to US-301	2,680	2,547	-133	5%	2.6
Between REL Ramps	2,680	2,580	-100	4%	2.0
78th St to REL	2,680	2,590	-90	3%	1.8
50th St to 78th St	3,050	2,962	-88	3%	1.6
Between 50th St Ramps	2,870	2,797	-73	3%	1.4
I-4 to 50th St	3,330	3,226	-104	3%	1.8
REL Off to I-4 On	1,990	1,893	-97	5%	2.2
I-4 Off to REL Off	1,990	1,893	-97	5%	2.2
22nd St On to I-4 Off	3,110	2,943	-167	5%	3.0
Between 22nd St Ramps	2,990	2,842	-148	5%	2.7
Nebraska Ave to 22nd St	3,450	3,300	-150	4%	2.6
Brorein St to Nebraska Ave	2,940	2,695	-245	8%	4.6
Whiting St to Brorein St	2,530	2,514	-16	1%	0.3
Upstream of Whiting St Off	3,660	3,590	-70	2%	1.2
From Selmon West	4,820	4,800	-20	0%	0.3
NETWORK TOTAL	**52,350**	**50,407**	**-1,943**	**4%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2046 Build Alt. 1

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
East Selmon	32	29	29	29	29	29	29	29	29	29	29	29
	44	44	44	44	44	44	44	44	44	44	43	44
	57	57	57	57	57	57	57	57	57	57	57	57
	57	57	57	57	57	57	57	57	57	57	57	57
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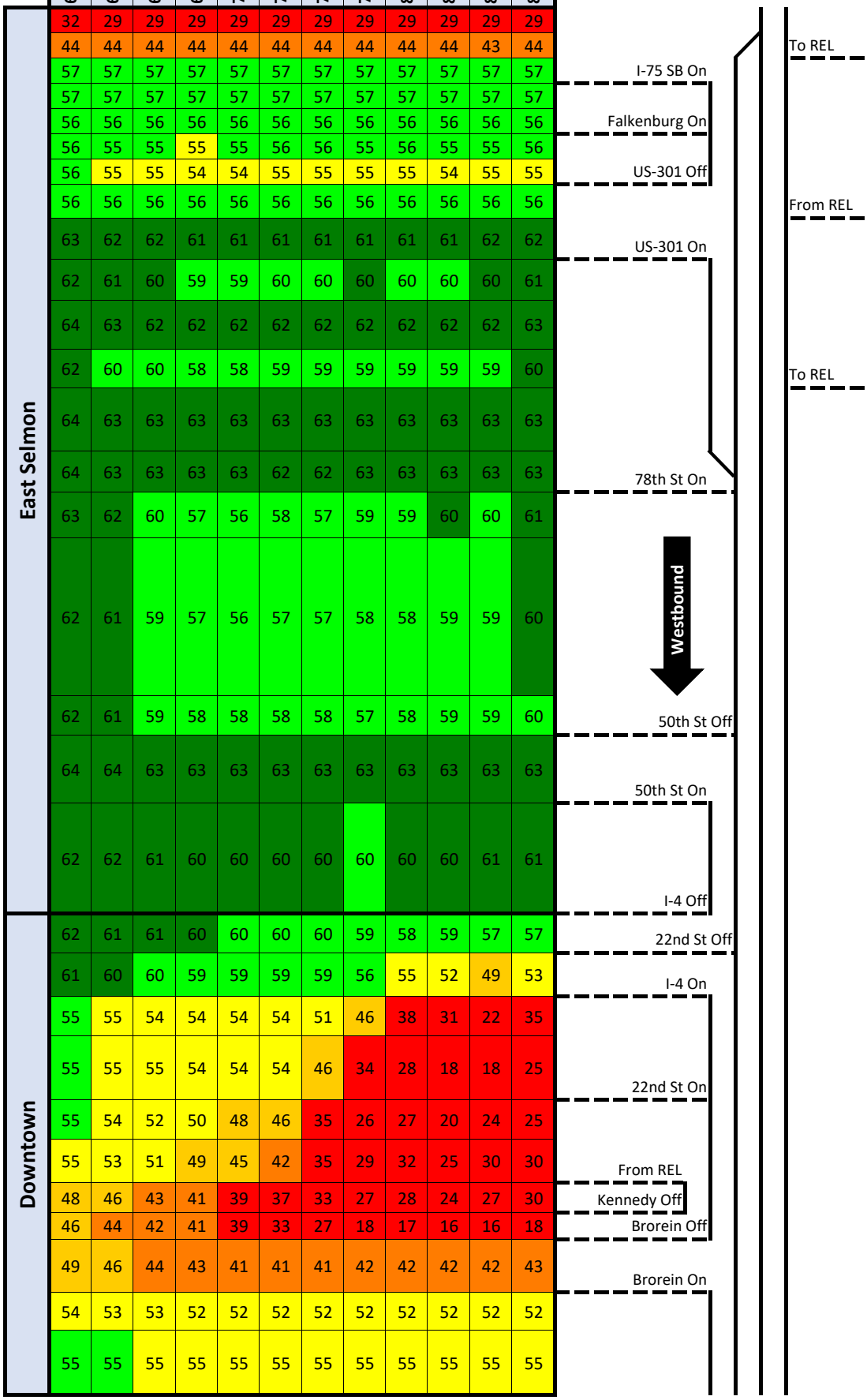
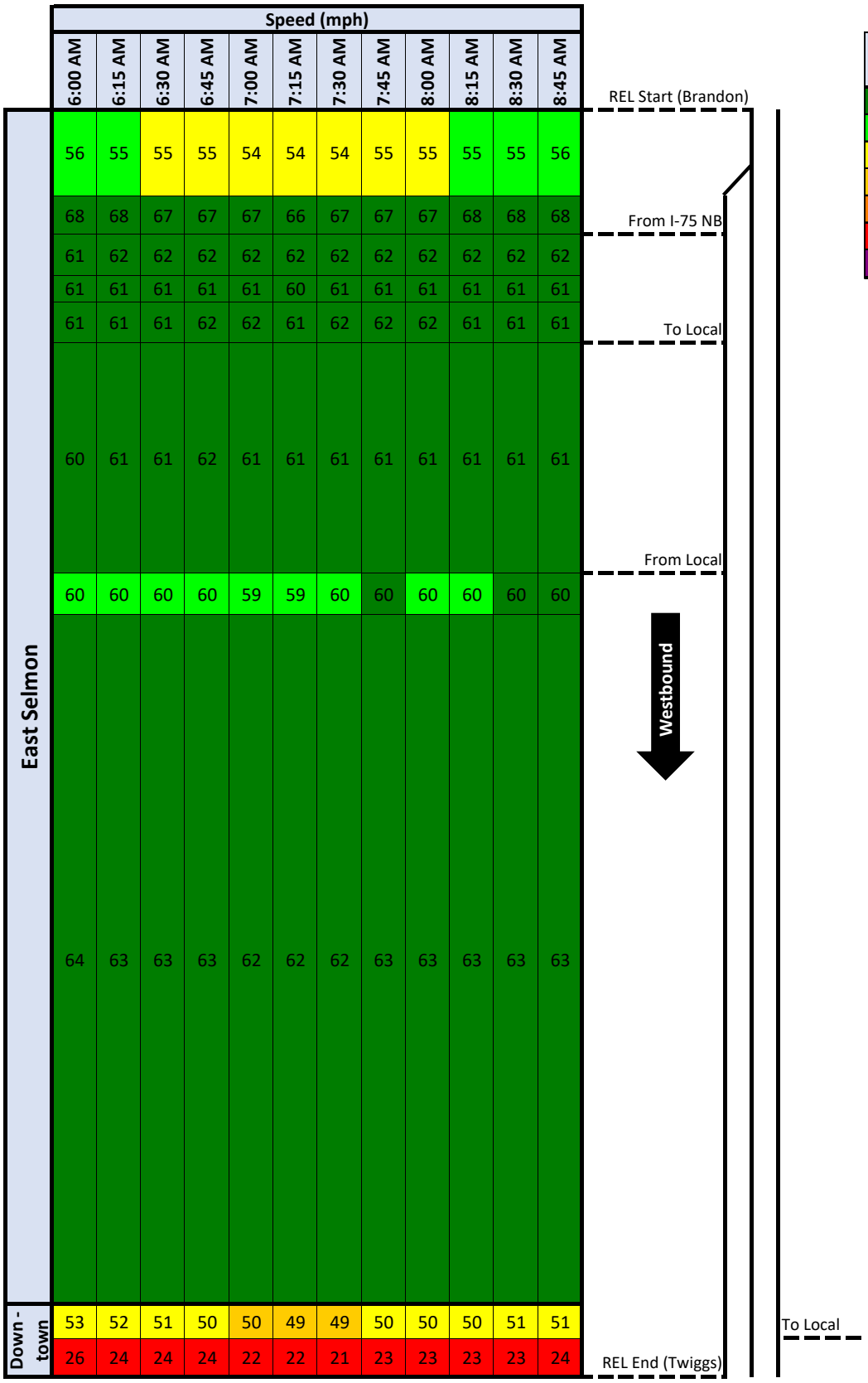
	62	62	61	60	60	60	60	60	60	60	61	61
Downtown	62	61	61	60	60	60	60	59	58	59	57	57
	61	60	60	59	59	59	59	56	55	52	49	53
	55	55	54	54	54	54	51	46	38	31	22	35
	55	55	55	54	54	54	46	34	28	18	18	25
	55	54	52	50	48	46	35	26	27	20	24	25
	55	53	51	49	45	42	35	29	32	25	30	30
	48	46	43	41	39	37	33	27	28	24	27	30
	46	44	42	41	39	33	27	18	17	16	16	18
	49	46	44	43	41	41	41	42	42	42	42	43
	54	53	53	52	52	52	52	52	52	52	52	52
	55	55	55	55	55	55	55	55	55	55	55	55



Westbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

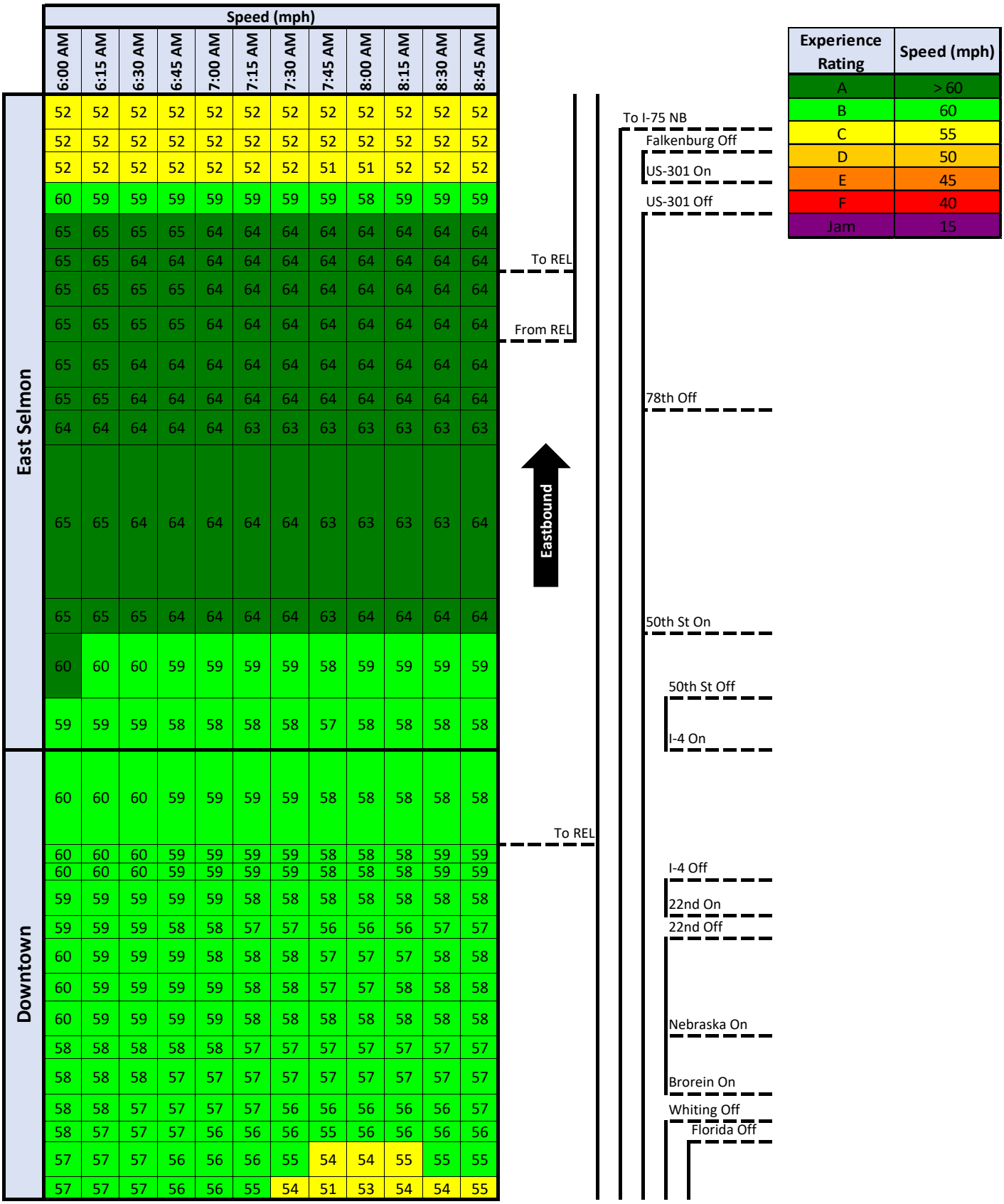
2046 Build Alt. 1



Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2046 Build Alt. 1

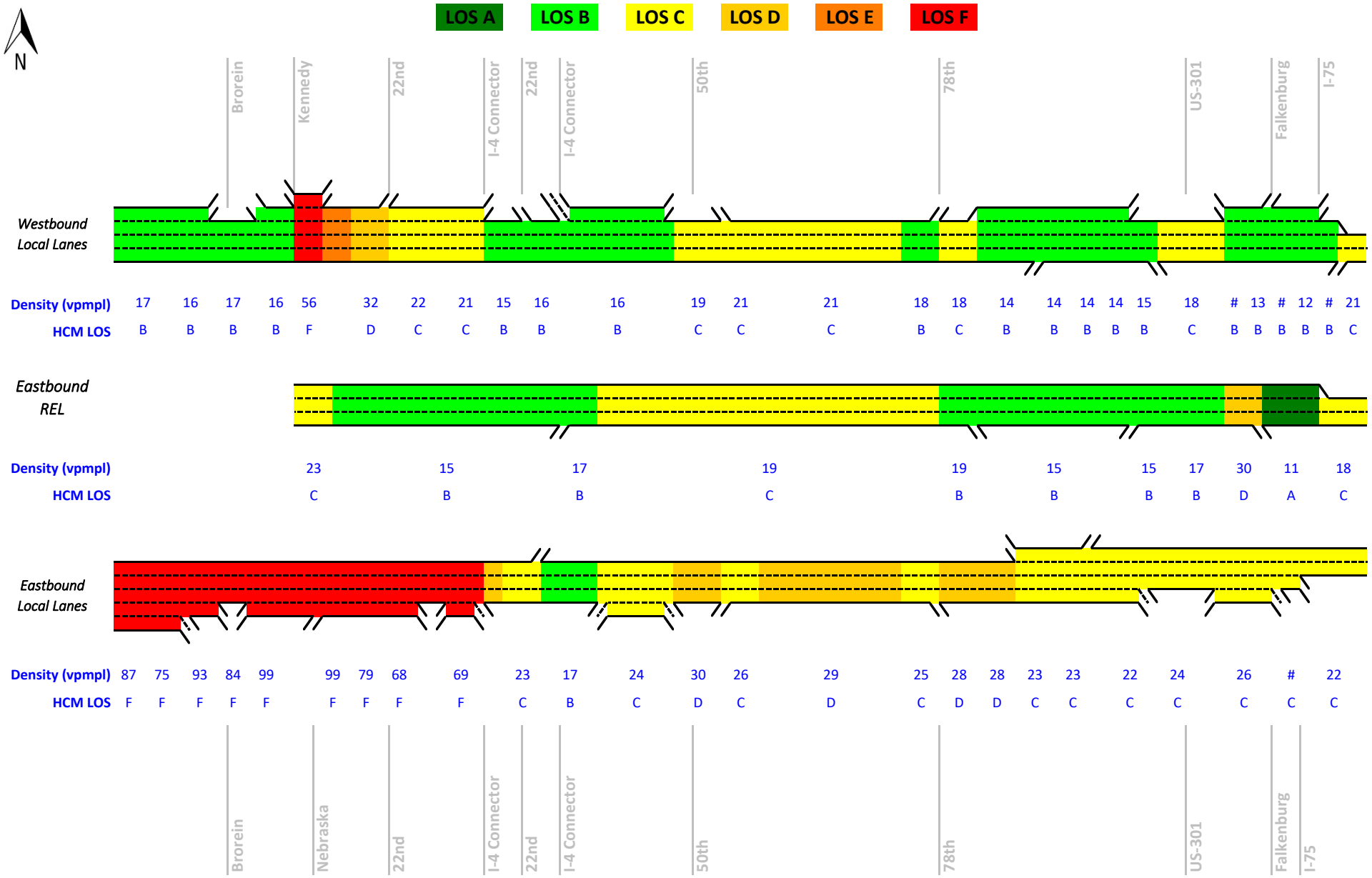


Travel Times by Segment, Local Lanes
AM Peak Hour (7:00-8:00 AM)

From	To	2046 No-Build Travel Time (min)	2046 Build Alt. 1 Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	4.2	0.9	-3	-80%
US-301	78th St	4.1	1.8	-2	-56%
78th St	50th St	2.2	2.0	0	-7%
50th St	I-4 Connector	1.5	1.5	0	1%
I-4 Connector	20th St	0.7	0.7	0	8%
20th St	Channelside Dr	0.9	1.1	0	31%
Channelside Dr	Kennedy Blvd	0.6	0.9	0	51%
Kennedy Blvd	Jefferson St	0.3	0.5	0	50%
Jefferson St	Florida Ave	0.3	0.4	0	40%
Total		**14.6**	**9.7**	**-5**	**-34%**
Eastbound					
Florida Ave	Jefferson St	0.3	0.3	0	0%
Jefferson St	Kennedy Blvd	0.3	0.3	0	0%
Kennedy Blvd	Channelside Dr	0.6	0.5	0	-3%
Channelside Dr	20th St	0.7	0.7	0	0%
20th St	I-4 Connector	0.7	0.7	0	0%
I-4 Connector	50th St	1.6	1.6	0	-2%
50th St	78th St	2.0	1.9	0	-2%
78th St	US-301	1.7	1.7	0	-1%
US-301	Falkenburg Rd	0.9	0.9	0	-2%
Total		**8.7**	**8.6**	**0**	**-1%**

Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2046 Build Alt. 1



Westbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	42.8	21.4	C
Upstream of REL Ramp 3 Off	Basic Freeway	1,443	2	43.0	21.5	C
REL Ramp 3 to I-75 SB	Basic Freeway	989	3	36.1	12.0	B
Downstream of I-75 SB On	Merge	1,503	4	47.8	12.0	B
I-75 to Falkenburg Rd	Basic Freeway	874	4	48.0	12.0	B
Downstream of Falkenburg Rd On	Merge	704	5	63.6	12.7	B
Upstream of US-301 Off	Diverge	407	4	64.1	16.0	B
Between US-301 Ramps	Basic Freeway	1,306	3	54.4	18.1	C
Downstream of REL On	Basic Freeway	466	3	51.0	14.8	B
Downstream of US-301 On	Merge	1,573	4	54.5	13.6	B
US-301 to REL Off	Basic Freeway	1,187	4	54.3	13.6	B
Upstream of REL Off	Basic Freeway	1,478	4	55.3	13.8	B
REL to 78th St (4 lanes)	Basic Freeway	2,442	4	55.4	13.8	B
REL to 78th St (3 lanes)	Basic Freeway	1,592	3	55.2	18.4	C
Downstream of 78th St On	Merge	1,770	3	61.1	17.8	B
78th St to 50th St	Basic Freeway	6,087	3	62.2	20.7	C
Upstream of 50th St Off	Diverge	1,592	3	61.9	20.6	C
Between 50th St Ramps	Basic Freeway	2,619	3	56.0	18.7	C
50th St to I-4	Weave	4,285	4	63.2	15.8	B
Upstream of 22nd Off	Diverge	1,552	3	48.7	16.2	B
22nd St Off to I-4 On	Basic Freeway	1,699	3	46.2	15.4	B
Downstream of I-4 On	Merge	1,503	4	83.8	20.9	C
I-4 On to 22nd St On	Basic Freeway	2,487	4	87.4	21.9	C
Downstream of 22nd St On	Merge	1,507	4	133.5	32.2	D
22nd St to REL Ramp 1 On	Basic Freeway	1,684	4	166.3	41.6	E
REL Ramp 1 On to Kennedy Blvd Off	Diverge	1,147	5	279.0	55.8	F
Upstream of Brorein St Off	Diverge	1,029	4	64.5	16.1	B
Between Brorein St Ramps	Basic Freeway	2,061	3	52.2	17.4	B
Downstream of Brorein St On	Merge	1,460	4	68.5	16.0	B
Selmon Continue West	Basic Freeway	2,495	4	68.9	17.2	B

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 SB	Basic Freeway	1,229	2	45	22	C
Upstream of I-75 NB Off	Diverge	529	3	81	27	C
US-301 to Falkenburg Rd	Weave	1,310	4	105	26	C
Between US-301 Ramps	Basic Freeway	2,836	3	73	24	C
Upstream of US-301 Off	Diverge	1,483	4	90	22	C
REL to US-301	Basic Freeway	293	4	90	22	C
Upstream of REL Off	Diverge	1,808	4	93	23	C
Downstream of REL On	Merge	1,502	4	93	23	C
78th St to REL (3 lanes)	Basic Freeway	1,956	3	84	28	D
78th St to REL (3 lanes)	Basic Freeway	875	3	83	28	D
Upstream of 78th St Off	Diverge	1,495	3	87	25	C
50th St to 78th St	Basic Freeway	6,583	3	88	29	D
Downstream of 50th St On	Merge	1,497	3	90	26	C
Between 50th St Ramps	Basic Freeway	2,766	3	89	30	D
I-4 to 50th St	Weave	2,226	4	104	24	C
REL Off to I-4 On	Basic Freeway	4,056	3	52	17	B
Upstream of REL Off (3 lanes)	Diverge	1,500	3	70	23	C
Upstream of REL Off (3 lanes)	Basic Freeway	586	3	82	27	D
22nd St On to I-4 Off	Weave	1,541	4	277	69	F
Between 22nd St Ramps	Basic Freeway	862	3	172	57	F
Upstream of 22nd St Off	Diverge	1,505	4	273	68	F
Nebraska Ave to 22nd St	Basic Freeway	1,179	4	318	79	F
Downstream of Nebraska Ave On	Merge	1,512	4	450	99	F
Brorein St to Nebraska Ave	Basic Freeway	341	4	407	102	F
Downstream of Brorein St On	Merge	1,531	4	396	99	F
Whiting St to Brorein St	Basic Freeway	1,180	3	251	84	F
Upstream of Whiting St Off	Diverge	818	4	374	93	F
Upstream of Florida Ave Off	Diverge	1,706	5	375	75	F
From Selmon West	Basic Freeway	2,487	4	349	87	F

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
To Brandon (2 lanes)	Basic Freeway	3,106	2	36	18	C
To Brandon (3 lanes)	Basic Freeway	2,283	3	32	11	A
Upstream of LL Off (at I-75)	Diverge	1,497	3	91	30	D
LL On to LL Off	Basic Freeway	2,493	3	51	17	B
Downstream of LL On (at US-301)	Merge	1,491	3	51	15	B
LL Off to LL On	Basic Freeway	6,279	3	46	15	B
Upstream of LL Off (at US-301)	Diverge	1,540	3	58	19	B
LL On to LL Off	Basic Freeway	15,162	3	58	19	C
Downstream of LL On (at I-4)	Merge	1,572	3	60	17	B
Twiggs St to LL On	Basic Freeway	9,696	3	44	15	B
From Twiggs St	Basic Freeway	1,547	3	68	23	C

Westbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	2,100	2,056	-44	2%	1.0
REL Ramp 3 to I-75 SB	2,100	2,053	-47	2%	1.0
I-75 to Falkenburg Rd	2,780	2,720	-60	2%	1.1
Falkenburg Rd to US-301	3,690	3,632	-58	2%	1.0
Between US-301 Ramps	3,160	3,111	-49	2%	0.9
REL On to US-301 On	3,160	3,241	81	3%	1.4
US-301 to REL Off	3,560	3,498	-62	2%	1.0
REL to 78th St	3,560	3,478	-82	2%	1.4
78th St to 50th St	3,890	3,814	-76	2%	1.2
Between 50th St Ramps	3,650	3,572	-78	2%	1.3
50th St to I-4	4,110	3,975	-135	3%	2.1
I-4 Off to 22nd St Off	3,180	3,051	-129	4%	2.3
22nd St Off to I-4 On	2,920	2,794	-126	4%	2.3
I-4 On to 22nd St On	4,760	4,600	-160	3%	2.3
22nd St to REL Ramp 1 On	5,590	5,377	-213	4%	2.9
REL Ramp 1 On to Kennedy Blvd	5,590	5,318	-272	5%	3.7
Kennedy Blvd to Brorein St	3,810	3,622	-188	5%	3.1
Between Brorein St Ramps	3,140	2,995	-145	5%	2.6
Selmon Continue West	4,340	3,791	-549	13%	8.6
NETWORK TOTAL	**69,090**	**66,698**	**-2,392**	**3%**	

Eastbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 SB	2,580	2,285	-295	11%	6.0
Falkenburg Rd to I-75	4,320	3,864	-456	11%	7.1
US-301 to Falkenburg Rd	5,550	4,935	-615	11%	8.5
Between US-301 Ramps	4,720	4,117	-603	13%	9.1
REL Off to US-301	6,300	5,451	-849	13%	11.1
Between REL Ramps	6,620	5,803	-817	12%	10.4
78th St to REL	5,890	5,144	-746	13%	10.0
50th St to 78th St	6,210	5,380	-830	13%	10.9
Between 50th St Ramps	5,670	4,999	-671	12%	9.2
I-4 to 50th St	6,640	5,706	-934	14%	11.9
REL Off to I-4 On	3,920	3,008	-912	23%	15.5
I-4 Off to REL Off	5,180	3,977	-1,203	23%	17.8
22nd St On to I-4 Off	7,860	5,806	-2,054	26%	24.8
Between 22nd St Ramps	7,290	5,291	-1,999	27%	25.2
Nebraska Ave to 22nd St	8,030	5,860	-2,170	27%	26.0
Brorein St to Nebraska Ave	7,260	5,089	-2,171	30%	27.6
Whiting St to Brorein St	6,040	4,802	-1,238	20%	16.8
Upstream of Whiting St Off	7,060	5,566	-1,494	21%	18.8
From Selmon West	7,270	5,903	-1,367	19%	16.8
Reversible Express Lanes					
To Brandon	2,060	1,752	-308	15%	7.1
LL On (at US-301) to LL Off (at I-75)	3,460	3,054	-406	12%	7.1
LL Off (at US-301) to LL On (at US-301)	3,140	2,758	-382	12%	7.0
LL On (at I-4) to LL Off (at US-301)	3,870	3,444	-426	11%	7.0
Twiggs St to LL On (at I-4)	2,610	2,457	-153	6%	3.0
NETWORK TOTAL	**129,550**	**106,450**	**-23,100**	**18%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2046 Build Alt. 1

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	48	48	48	48	48	48	48	48	48	48	48	48
	48	48	48	48	48	48	48	48	48	48	48	48
	57	57	57	57	57	57	57	57	57	57	57	57
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Downtown	63	63	63	63	63	63	63	63	63	63	63	63
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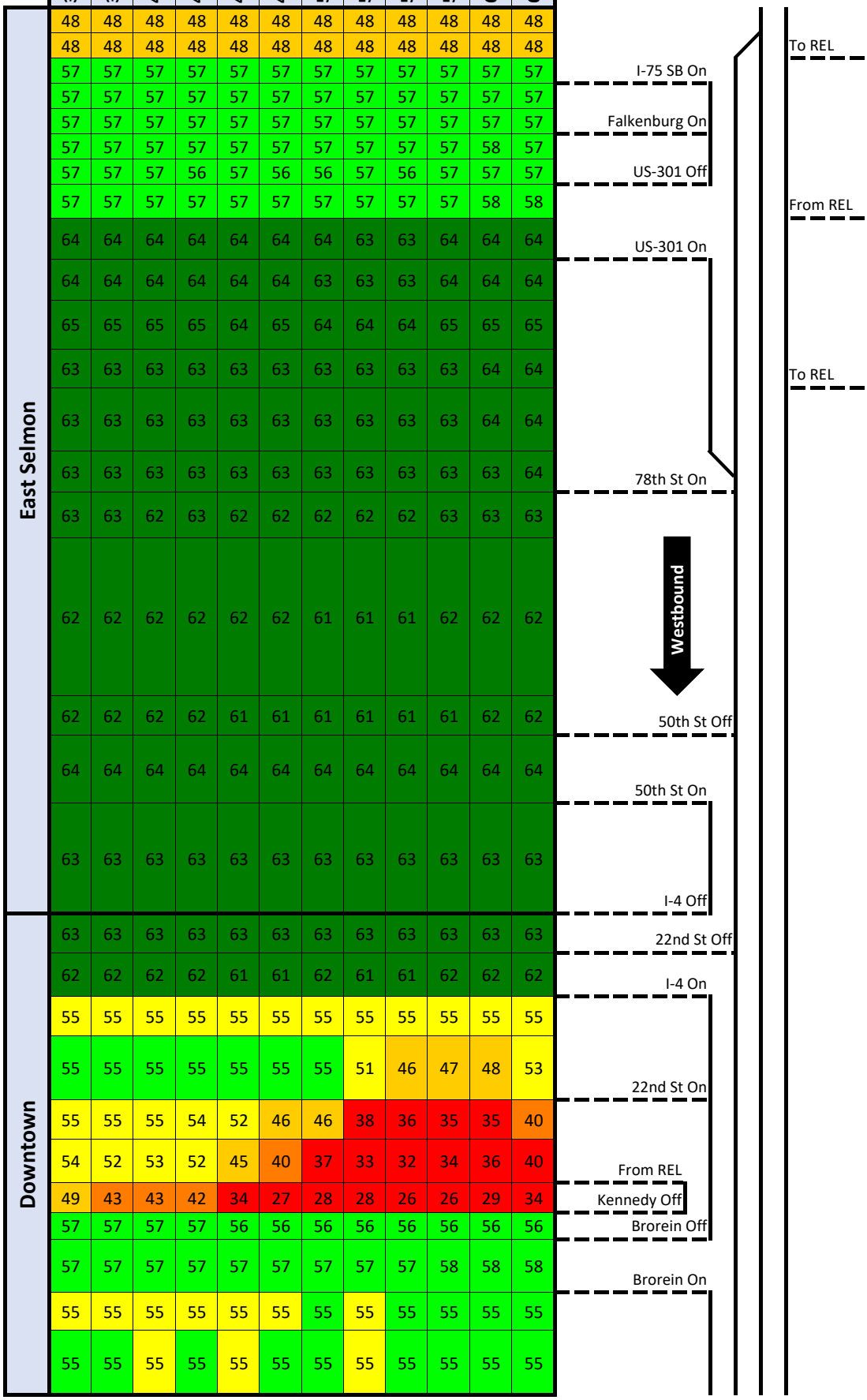
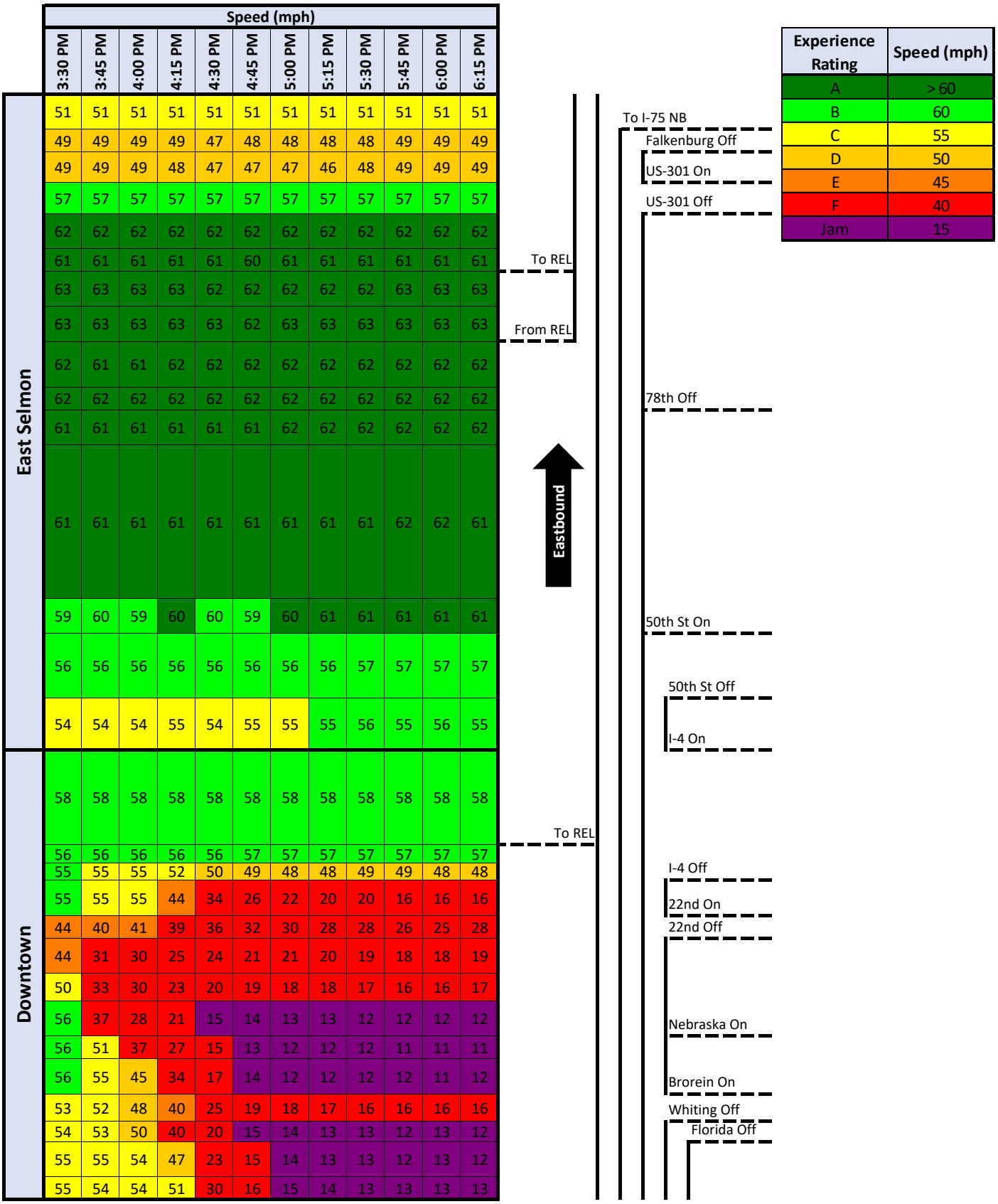


Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Hour (3:30-6:30 PM)

2046 Build Alt. 1



Eastbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2046 Build Alt. 1

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	49	49	49	49	49	49	48	49	48	49	49	49
	59	59	58	57	57	56	54	55	55	56	57	57
	54	55	51	44	44	40	29	31	31	36	44	46
	60	60	60	60	60	60	60	59	57	60	60	60
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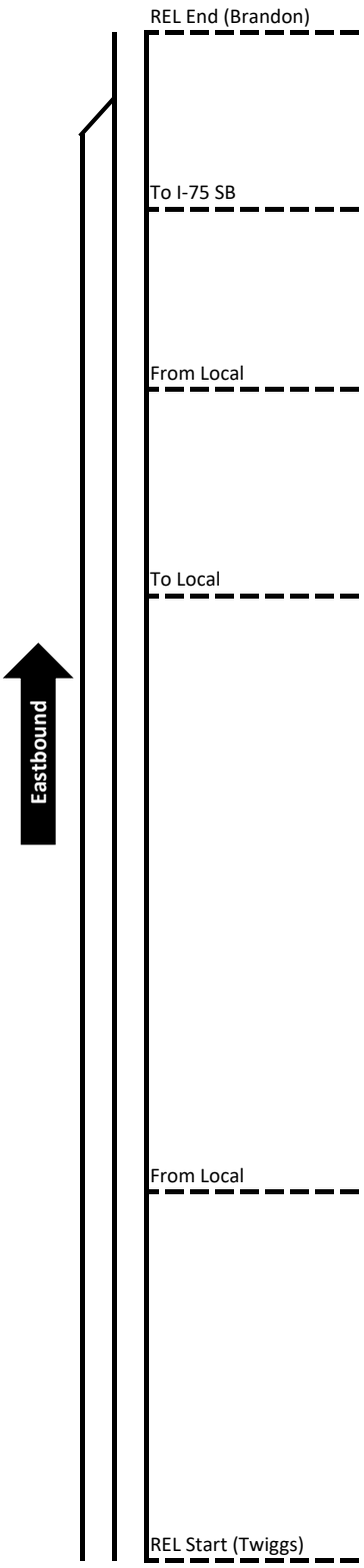
	60	59	59	59	59	59	58	59	59	59	59	59
	60	60	59	59	59	59	59	59	59	59	59	60
Downtown	59	59	59	59	58	58	58	58	58	59	59	59
	57	57	56	56	56	56	56	56	56	56	56	57
	36	37	37	36	37	37	37	37	37	36	37	37

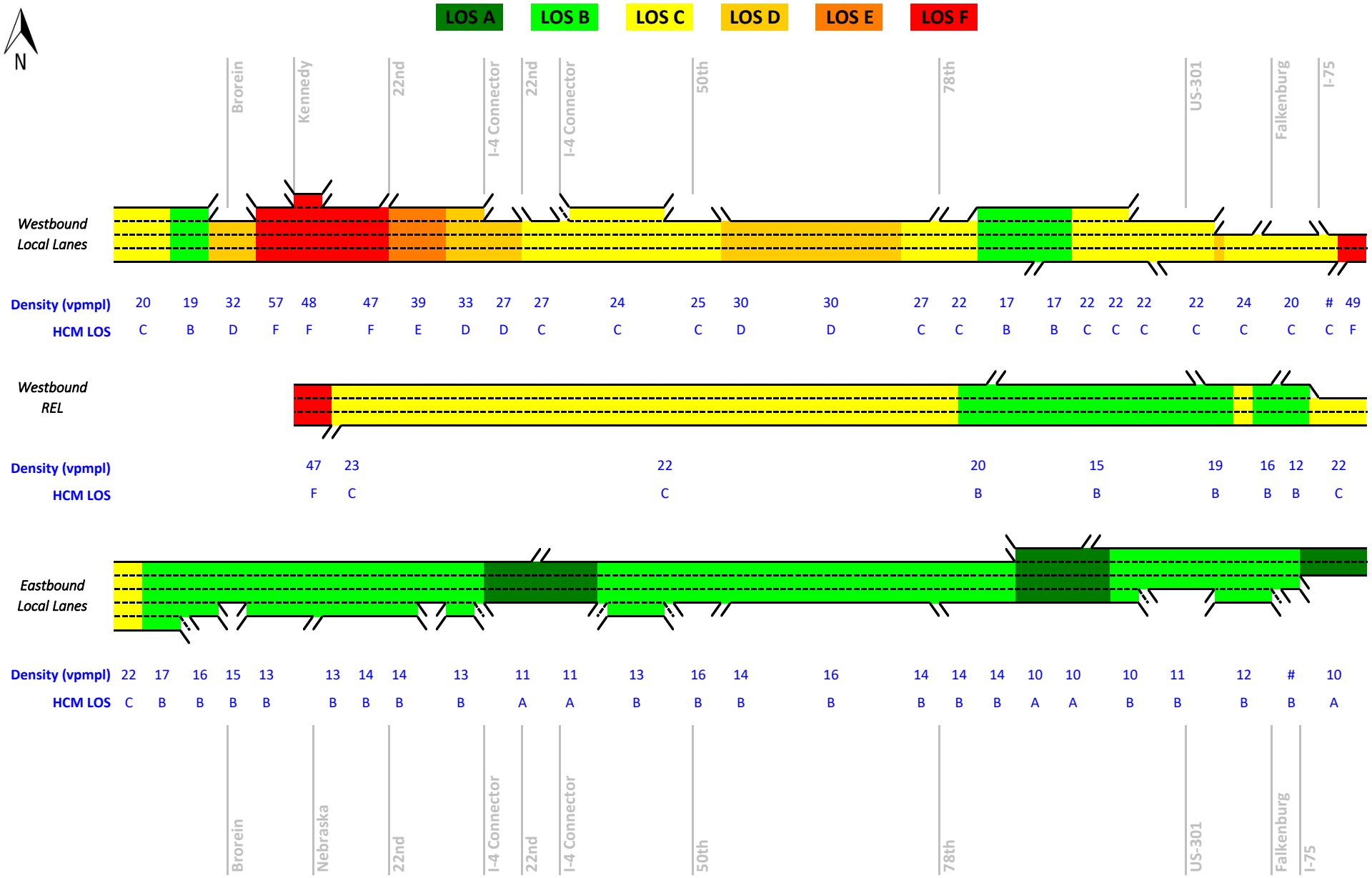


Travel Times by Segment, Local Lanes
PM Peak Hour (4:30-5:30 PM)

From	To	2046 No-Build Travel Time (min)	2046 Build Alt. 1 Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	0.9	0.9	0	-7%
US-301	78th St	1.8	1.7	0	-3%
78th St	50th St	2.0	1.9	0	-5%
50th St	I-4 Connector	1.5	1.4	0	-1%
I-4 Connector	20th St	0.7	0.7	0	0%
20th St	Channelside Dr	0.8	0.9	0	13%
Channelside Dr	Kennedy Blvd	0.6	0.8	0	40%
Kennedy Blvd	Jefferson St	0.3	0.3	0	0%
Jefferson St	Florida Ave	0.3	0.3	0	0%
Total		**8.8**	**8.9**	**0**	**1%**
Eastbound					
Florida Ave	Jefferson St	2.6	0.9	-2	-64%
Jefferson St	Kennedy Blvd	2.9	1.1	-2	-62%
Kennedy Blvd	Channelside Dr	3.7	2.4	-1	-35%
Channelside Dr	20th St	2.1	1.9	0	-9%
20th St	I-4 Connector	0.9	1.0	0	12%
I-4 Connector	50th St	2.2	1.6	-1	-27%
50th St	78th St	2.3	2.0	0	-15%
78th St	US-301	1.8	1.8	0	0%
US-301	Falkenburg Rd	1.0	1.0	0	-7%
Total		**19.4**	**13.6**	**-6**	**-30%**

Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

2046 Build Alt. 2



Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	128.7	64.4	F
Upstream of REL Ramp 3 Off	Diverge	1,519	2	97.0	48.5	F
Upstream of C-D Road Off	Diverge	844	2	48.6	24.3	C
C-D Road Off to Falkenburg Rd	Basic Freeway	2,519	2	40.5	20.3	C
Downstream of Falkenburg Rd On	Merge	1,506	2	56.5	23.7	C
Falkenburg Rd to C-D Road On	Basic Freeway	139	2	55.4	27.7	D
Downstream of C-D Road On	Merge	1,487	3	66.1	22.0	C
C-D Road On to REL On	Basic Freeway	606	3	63.0	21.0	C
Downstream of REL On	Merge	997	3	74.5	21.8	C
Downstream of US-301 On	Merge	1,188	4	89.3	22.3	C
US-301 to REL Off	Basic Freeway	923	4	88.5	22.1	C
Upstream of REL Off	Diverge	1,478	4	66.3	16.6	B
REL to 78th St (4 lanes)	Basic Freeway	2,442	4	66.3	16.6	B
REL to 78th St (3 lanes)	Basic Freeway	1,592	3	66.4	22.1	C
Downstream of 78th St On	Merge	1,770	3	90.6	26.7	C
78th St to 50th St	Basic Freeway	6,087	3	91.2	30.4	D
Upstream of 50th St Off	Diverge	1,592	3	90.0	30.0	D
Between 50th St Ramps	Basic Freeway	2,619	3	75.2	25.1	C
50th St to I-4	Weave	4,285	4	97.3	24.3	C
Upstream of 22nd Off	Diverge	1,552	3	81.8	27.3	C
22nd St Off to I-4 On	Basic Freeway	1,699	3	81.4	27.1	D
Downstream of I-4 On	Merge	1,503	4	131.3	32.8	D
I-4 On to 22nd St On	Basic Freeway	2,487	4	157.4	39.3	E
Downstream of 22nd St On	Merge	1,507	4	212.8	47.2	F
22nd St to REL Ramp 1 On	Basic Freeway	1,684	4	195.7	48.9	F
REL Ramp 1 On to Kennedy Blvd Off	Weave	1,147	5	238.2	47.6	F
Upstream of Brorein St Off	Diverge	1,029	4	227.4	56.8	F
Between Brorein St Ramps	Basic Freeway	2,061	3	97.2	32.4	D
Downstream of Brorein St On	Merge	1,460	4	83.2	18.7	B
Selmon Continue West	Basic Freeway	2,495	4	79.0	19.8	C

Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
From Brandon (2 lanes)	Basic Freeway	3,102	2	43.6	21.8	C
From Brandon (3 lanes)	Basic Freeway	1,429	3	35.2	11.7	B
Downstream of LL On (at I-75)	Merge	1,498	3	55.3	16.1	B
LL On to LL Off	Basic Freeway	911	3	55.9	18.6	C
Upstream of LL Off (at US-301)	Diverge	1,591	3	56.1	18.7	B
LL Off to LL On	Basic Freeway	8,473	3	46.3	15.4	B
Downstream of LL On (at US-301)	Merge	1,526	3	67.6	19.7	B
LL On to LL Off	Basic Freeway	25,347	3	65.0	21.7	C
Upstream of LL Off (at Kennedy Blvd)	Diverge	1,263	3	83.2	23.5	C
To Twiggs St	Basic Freeway	1,408	4	188.2	47.1	F

Eastbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

2046 Build Alt. 2

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 SB	Basic Freeway	1,229	2	20	10	A
Upstream of I-75 NB Off	Diverge	526	3	32	11	B
US-301 to Falkenburg Rd	Weave	1,310	4	49	12	B
Between US-301 Ramps	Basic Freeway	2,836	3	34	11	B
Upstream of US-301 Off	Diverge	1,483	4	40	10	B
REL to US-301	Basic Freeway	293	4	40	10	A
Upstream of REL Off	Basic Freeway	1,808	4	40	10	A
Downstream of REL On	Basic Freeway	1,502	4	40	10	A
78th St to REL (3 lanes)	Basic Freeway	1,956	3	41	14	B
78th St to REL (3 lanes)	Basic Freeway	875	3	41	14	B
Upstream of 78th St Off	Diverge	1,495	3	47	14	B
50th St to 78th St	Basic Freeway	6,583	3	47	16	B
Downstream of 50th St On	Merge	1,497	3	47	14	B
Between 50th St Ramps	Basic Freeway	2,766	3	48	16	B
I-4 to 50th St	Weave	2,226	4	56	13	B
REL Off to I-4 On	Basic Freeway	4,056	3	32	11	A
Upstream of REL Off (3 lanes)	Basic Freeway	1,500	3	32	11	A
Upstream of REL Off (3 lanes)	Basic Freeway	586	3	32	11	A
22nd St On to I-4 Off	Weave	1,541	4	51	13	B
Between 22nd St Ramps	Basic Freeway	862	3	50	17	B
Upstream of 22nd St Off	Diverge	1,505	4	57	14	B
Nebraska Ave to 22nd St	Basic Freeway	1,179	4	57	14	B
Downstream of Nebraska Ave On	Merge	1,512	4	57	13	B
Brorein St to Nebraska Ave	Basic Freeway	341	4	50	12	B
Downstream of Brorein St On	Merge	1,531	4	50	13	B
Whiting St to Brorein St	Basic Freeway	1,180	3	45	15	B
Upstream of Whiting St Off	Diverge	818	4	64	16	B
Upstream of Florida Ave Off	Diverge	1,706	5	87	17	B
From Selmon West	Basic Freeway	2,487	4	89	22	C

Westbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	5,100	3,774	-1,326	26%	19.9
REL Ramp 3 to C-D Road Off	3,630	2,685	-945	26%	16.8
C-D Road Off to Falkenburg Rd	2,670	2,259	-411	15%	8.3
Falkenburg Rd to C-D Road On	3,470	2,979	-491	14%	8.7
C-D Road On to REL On	4,760	4,013	-747	16%	11.3
REL On to US-301 On	5,360	4,595	-765	14%	10.8
US-301 to REL Off	6,130	5,342	-788	13%	10.4
REL to 78th St	4,910	4,145	-765	16%	11.4
78th St to 50th St	5,860	5,102	-758	13%	10.2
Between 50th St Ramps	5,450	4,740	-710	13%	9.9
50th St to I-4	6,620	5,838	-782	12%	9.9
I-4 Off to 22nd St Off	5,490	4,855	-635	12%	8.8
22nd St Off to I-4 On	5,010	4,428	-582	12%	8.5
I-4 On to 22nd St On	7,330	6,124	-1,206	16%	14.7
22nd St to REL Ramp 1 On	8,190	6,862	-1,328	16%	15.3
REL Ramp 1 On to Kennedy Blvd	9,150	7,646	-1,504	16%	16.4
Kennedy Blvd to Brorein St	6,940	5,777	-1,163	17%	14.6
Between Brorein St Ramps	4,770	3,997	-773	16%	11.7
Selmon Continue West	5,330	4,317	-1,013	19%	14.6
Reversible Express Lanes					
From Brandon	2,370	2,355	-15	1%	0.3
LL On (at I-75) to LL Off (at US-301)	3,840	3,421	-419	11%	7.0
LL Off (at US-301) to LL On (at US-301)	3,240	2,840	-400	12%	7.3
LL On (at US-301) to LL Off (at Kennedy Blvd)	4,460	4,039	-421	0.1	6.5
LL Off (at Kennedy Blvd) to Twiggs St	3,500	3,165	-335	0.1	5.8
NETWORK TOTAL	**123,580**	**105,296**	**-18,284**	**15%**	

Eastbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 SB	1,120	1,067	-53	5%	1.6
Falkenburg Rd to I-75	1,750	1,671	-79	5%	1.9
US-301 to Falkenburg Rd	2,640	2,525	-115	4%	2.3
Between US-301 Ramps	2,070	1,971	-99	5%	2.2
REL Off to US-301	2,680	2,547	-133	5%	2.6
Between REL Ramps	2,680	2,580	-100	4%	2.0
78th St to REL	2,680	2,592	-88	3%	1.7
50th St to 78th St	3,050	2,962	-88	3%	1.6
Between 50th St Ramps	2,870	2,800	-70	2%	1.3
I-4 to 50th St	3,330	3,229	-101	3%	1.8
REL Off to I-4 On	1,990	1,895	-95	5%	2.1
I-4 Off to REL Off	1,990	1,894	-96	5%	2.2
22nd St On to I-4 Off	3,110	2,946	-164	5%	3.0
Between 22nd St Ramps	2,990	2,844	-146	5%	2.7
Nebraska Ave to 22nd St	3,450	3,301	-149	4%	2.6
Brorein St to Nebraska Ave	2,940	2,696	-244	8%	4.6
Whiting St to Brorein St	2,530	2,514	-16	1%	0.3
Upstream of Whiting St Off	3,660	3,590	-70	2%	1.2
From Selmon West	4,820	4,800	-20	0%	0.3
NETWORK TOTAL	**52,350**	**50,422**	**-1,928**	**4%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2046 Build Alt. 2

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
East Selmon	32	29	29	30	29	29	29	29	30	29	29	29
	39	39	39	39	39	39	39	39	39	39	39	39
	55	55	55	56	55	55	55	55	55	55	55	55
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	62	62	61	61	61	60	60	60	60	60	60	61
Downtown	62	61	60	60	60	60	59	59	56	57	53	57
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	55	55	54	54	54	54	54	43	38	32	24	31
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	49	46	44	43	42	40	41	42	42	42	42	43
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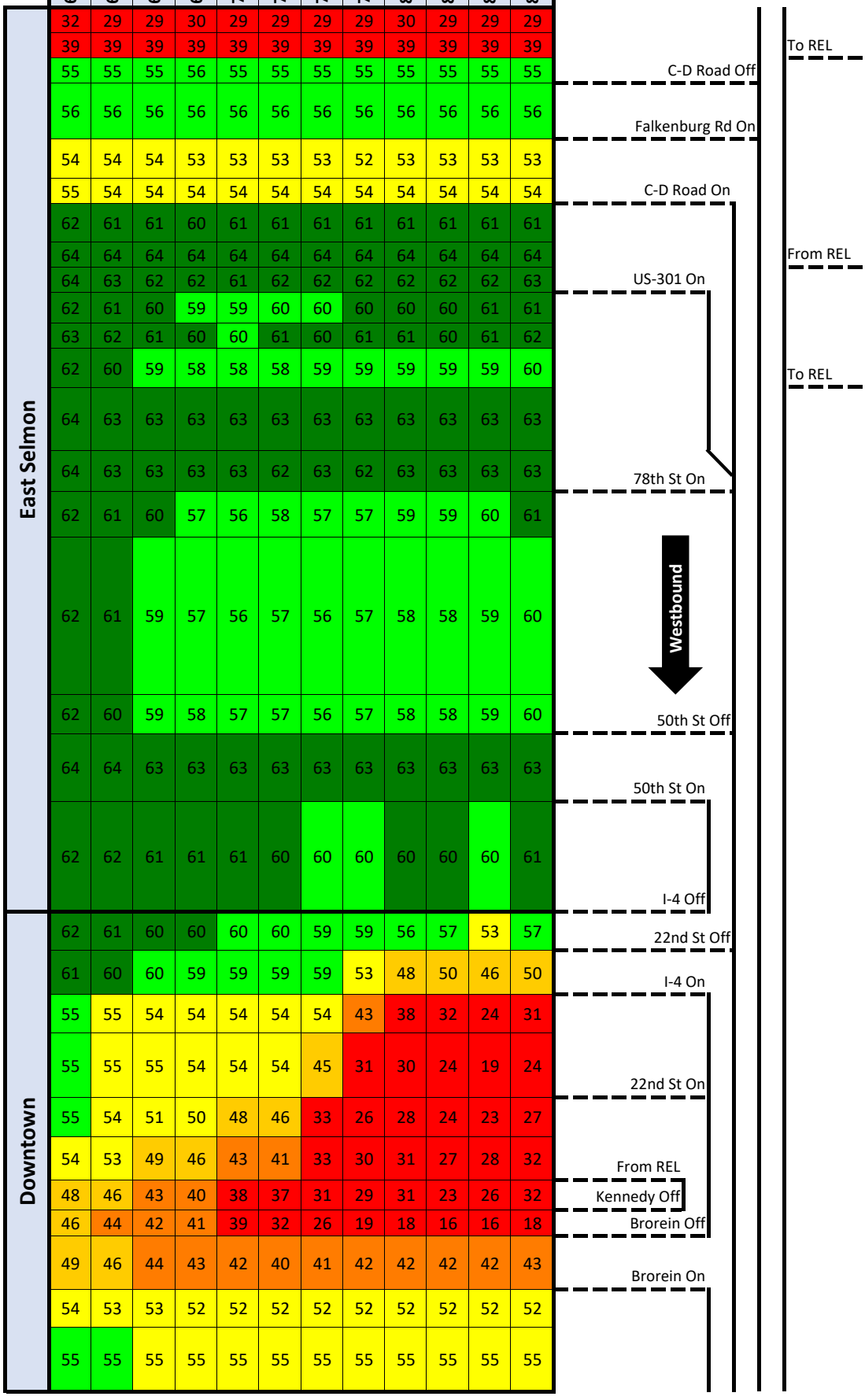
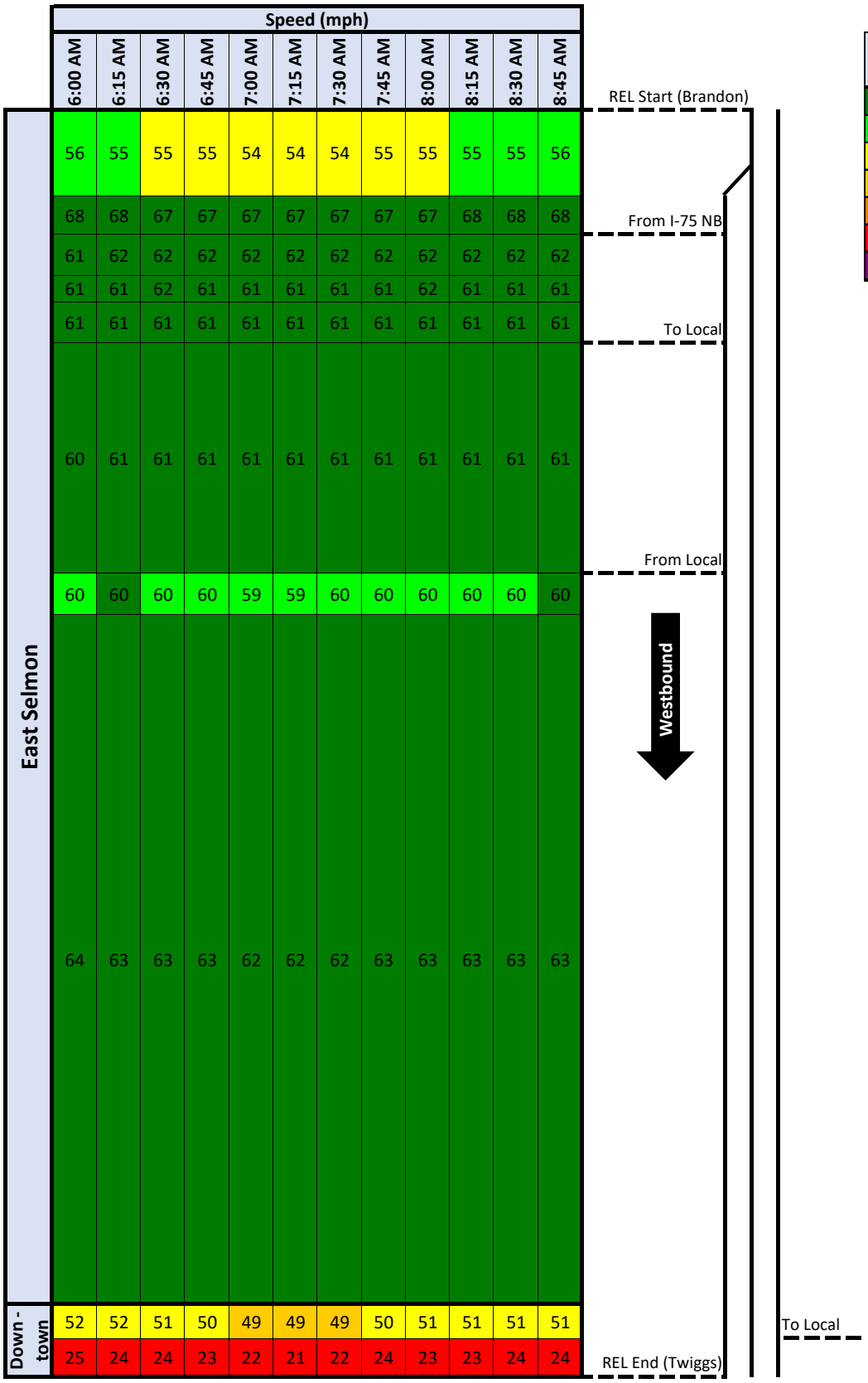


Westbound Speed-Contour Plot, Reversible Express Lanes *2046 Build Alt. 2*

From VISSIM Model

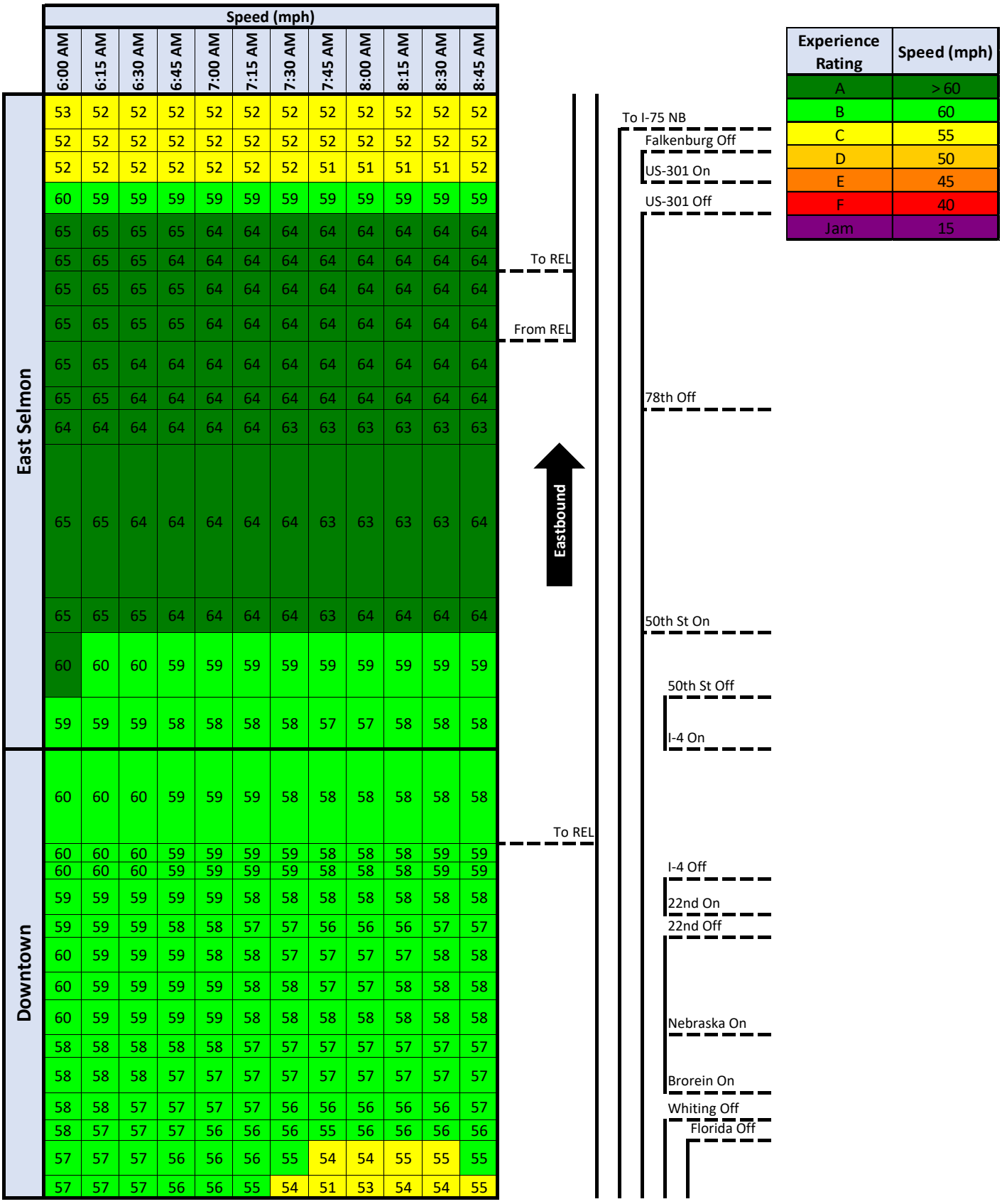
AM Peak Period (6:00-9:00 AM)



Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2046 Build Alt. 2

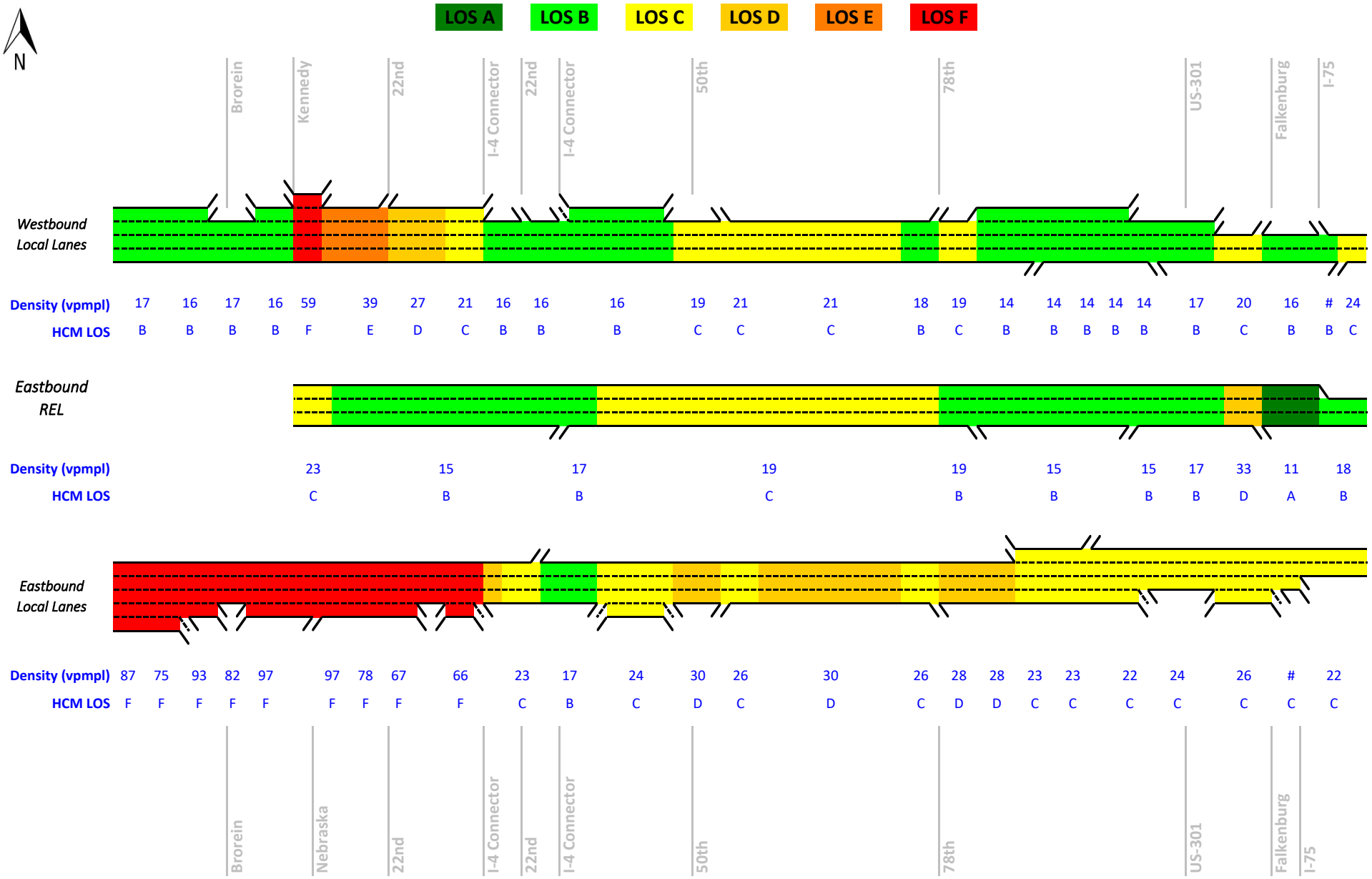


Travel Times by Segment, Local Lanes
AM Peak Hour (7:00-8:00 AM)

From	To	2046 No-Build Travel Time (min)	2046 Build Alt. 2 Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	4.2	0.9	-3	-79%
US-301	78th St	4.1	1.8	-2	-56%
78th St	50th St	2.2	2.0	0	-6%
50th St	I-4 Connector	1.5	1.5	0	1%
I-4 Connector	20th St	0.7	0.8	0	13%
20th St	Channelside Dr	0.9	1.2	0	37%
Channelside Dr	Kennedy Blvd	0.6	0.9	0	54%
Kennedy Blvd	Jefferson St	0.3	0.5	0	50%
Jefferson St	Florida Ave	0.3	0.4	0	40%
Total		**14.6**	**9.8**	**-5**	**-33%**
Eastbound					
Florida Ave	Jefferson St	0.3	0.3	0	0%
Jefferson St	Kennedy Blvd	0.3	0.3	0	0%
Kennedy Blvd	Channelside Dr	0.6	0.5	0	-3%
Channelside Dr	20th St	0.7	0.7	0	0%
20th St	I-4 Connector	0.7	0.7	0	0%
I-4 Connector	50th St	1.6	1.6	0	-2%
50th St	78th St	2.0	1.9	0	-2%
78th St	US-301	1.7	1.7	0	-1%
US-301	Falkenburg Rd	0.9	0.9	0	-2%
Total		**8.7**	**8.6**	**0**	**-1%**

Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2046 Build Alt. 2



Westbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	42.7	21.4	C
Upstream of REL Ramp 3 Off	Basic Freeway	1,519	2	48.1	24.0	C
Upstream of C-D Road Off	Diverge	844	2	36.8	18.4	B
C-D Road Off to Falkenburg Rd	Basic Freeway	2,519	2	31.5	15.7	B
Downstream of Falkenburg Rd On	Merge	1,506	2	48.0	20.1	C
Falkenburg Rd to C-D Road On	Basic Freeway	139	2	47.0	23.5	C
Downstream of C-D Road On	Merge	1,487	3	50.4	16.8	B
C-D Road On to REL On	Basic Freeway	606	3	48.6	16.2	B
Downstream of REL On	Basic Freeway	997	3	48.7	14.2	B
Downstream of US-301 On	Merge	1,188	4	55.2	13.8	B
US-301 to REL Off	Basic Freeway	923	4	55.1	13.8	B
Upstream of REL Off	Basic Freeway	1,478	4	55.8	13.9	B
REL to 78th St (4 lanes)	Basic Freeway	2,442	4	55.9	14.0	B
REL to 78th St (3 lanes)	Basic Freeway	1,592	3	55.7	18.6	C
Downstream of 78th St On	Merge	1,770	3	61.7	18.0	B
78th St to 50th St	Basic Freeway	6,087	3	62.7	20.9	C
Upstream of 50th St Off	Diverge	1,592	3	62.6	20.9	C
Between 50th St Ramps	Basic Freeway	2,619	3	56.4	18.8	C
50th St to I-4	Weave	4,285	4	63.6	15.9	B
Upstream of 22nd Off	Diverge	1,552	3	49.0	16.3	B
22nd St Off to I-4 On	Basic Freeway	1,699	3	46.6	15.5	B
Downstream of I-4 On	Merge	1,503	4	84.8	21.2	C
I-4 On to 22nd St On	Basic Freeway	2,487	4	106.2	26.5	D
Downstream of 22nd St On	Merge	1,507	4	168.3	38.6	E
22nd St to REL Ramp 1 On	Basic Freeway	1,684	4	175.5	43.9	E
REL Ramp 1 On to Kennedy Blvd Off	Diverge	1,147	5	293.3	58.7	F
Upstream of Brorein St Off	Diverge	1,029	4	63.6	15.9	B
Between Brorein St Ramps	Basic Freeway	2,061	3	51.3	17.1	B
Downstream of Brorein St On	Merge	1,460	4	67.6	15.7	B
Selmon Continue West	Basic Freeway	2,495	4	68.0	17.0	B

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 SB	Basic Freeway	1,229	2	45	22	C
Upstream of I-75 NB Off	Diverge	526	3	81	27	C
US-301 to Falkenburg Rd	Weave	1,310	4	105	26	C
Between US-301 Ramps	Basic Freeway	2,836	3	73	24	C
Upstream of US-301 Off	Diverge	1,483	4	90	22	C
REL to US-301	Basic Freeway	293	4	90	23	C
Upstream of REL Off	Diverge	1,808	4	93	23	C
Downstream of REL On	Merge	1,502	4	93	23	C
78th St to REL (3 lanes)	Basic Freeway	1,956	3	84	28	D
78th St to REL (3 lanes)	Basic Freeway	875	3	83	28	D
Upstream of 78th St Off	Diverge	1,495	3	88	26	C
50th St to 78th St	Basic Freeway	6,583	3	89	30	D
Downstream of 50th St On	Merge	1,497	3	90	26	C
Between 50th St Ramps	Basic Freeway	2,766	3	89	30	D
I-4 to 50th St	Weave	2,226	4	105	24	C
REL Off to I-4 On	Basic Freeway	4,056	3	52	17	B
Upstream of REL Off (3 lanes)	Diverge	1,500	3	70	23	C
Upstream of REL Off (3 lanes)	Basic Freeway	586	3	81	27	D
22nd St On to I-4 Off	Weave	1,541	4	264	66	F
Between 22nd St Ramps	Basic Freeway	862	3	167	56	F
Upstream of 22nd St Off	Diverge	1,505	4	268	67	F
Nebraska Ave to 22nd St	Basic Freeway	1,179	4	312	78	F
Downstream of Nebraska Ave On	Merge	1,512	4	442	97	F
Brorein St to Nebraska Ave	Basic Freeway	341	4	396	99	F
Downstream of Brorein St On	Merge	1,531	4	387	97	F
Whiting St to Brorein St	Basic Freeway	1,180	3	246	82	F
Upstream of Whiting St Off	Diverge	818	4	371	93	F
Upstream of Florida Ave Off	Diverge	1,706	5	375	75	F
From Selmon West	Basic Freeway	2,487	4	350	87	F

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
To Brandon (2 lanes)	Basic Freeway	3,106	2	36	18	B
To Brandon (3 lanes)	Basic Freeway	2,283	3	32	11	A
Upstream of LL Off (at I-75)	Diverge	1,497	3	99	33	D
LL On to LL Off	Basic Freeway	2,493	3	51	17	B
Downstream of LL On (at US-301)	Merge	1,491	3	51	15	B
LL Off to LL On	Basic Freeway	6,279	3	46	15	B
Upstream of LL Off (at US-301)	Diverge	1,540	3	58	19	B
LL On to LL Off	Basic Freeway	15,162	3	58	19	C
Downstream of LL On (at I-4)	Merge	1,572	3	59	17	B
Twiggs St to LL On	Basic Freeway	9,696	3	44	15	B
From Twiggs St	Basic Freeway	1,547	3	68	23	C

Westbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	2,100	2,056	-44	2%	1.0
REL Ramp 3 to C-D Road Off	2,100	2,048	-52	2%	1.1
C-D Road Off to Falkenburg Rd	1,570	1,757	187	12%	4.6
Falkenburg Rd to C-D Road On	2,480	2,576	96	4%	1.9
C-D Road On to REL On	3,160	3,141	-19	1%	0.3
REL On to US-301 On	3,160	3,129	-31	1%	0.5
US-301 to REL Off	3,560	3,524	-36	1%	0.6
REL to 78th St	3,560	3,504	-56	2%	0.9
78th St to 50th St	3,890	3,840	-50	1%	0.8
Between 50th St Ramps	3,650	3,598	-52	1%	0.9
50th St to I-4	4,110	4,001	-109	3%	1.7
I-4 Off to 22nd St Off	3,180	3,070	-110	3%	2.0
22nd St Off to I-4 On	2,920	2,815	-105	4%	2.0
I-4 On to 22nd St On	4,760	4,598	-162	3%	2.4
22nd St to REL Ramp 1 On	5,590	5,308	-282	5%	3.8
REL Ramp 1 On to Kennedy Blvd	5,590	5,240	-350	6%	4.8
Kennedy Blvd to Brorein St	3,810	3,564	-246	6%	4.1
Between Brorein St Ramps	3,140	2,947	-193	6%	3.5
Selmon Continue West	4,340	3,740	-600	14%	9.4
NETWORK TOTAL	**66,670**	**64,459**	**-2,211**	**3%**	

Eastbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 SB	2,580	2,291	-289	11%	5.9
Falkenburg Rd to I-75	4,320	3,883	-437	10%	6.8
US-301 to Falkenburg Rd	5,550	4,947	-603	11%	8.3
Between US-301 Ramps	4,720	4,129	-591	13%	8.9
REL Off to US-301	6,300	5,465	-835	13%	10.9
Between REL Ramps	6,620	5,816	-804	12%	10.2
78th St to REL	5,890	5,159	-731	12%	9.8
50th St to 78th St	6,210	5,396	-814	13%	10.7
Between 50th St Ramps	5,670	5,013	-657	12%	9.0
I-4 to 50th St	6,640	5,719	-921	14%	11.7
REL Off to I-4 On	3,920	3,018	-902	23%	15.3
I-4 Off to REL Off	5,180	3,976	-1,204	23%	17.8
22nd St On to I-4 Off	7,860	5,826	-2,034	26%	24.6
Between 22nd St Ramps	7,290	5,337	-1,953	27%	24.6
Nebraska Ave to 22nd St	8,030	5,918	-2,112	26%	25.3
Brorein St to Nebraska Ave	7,260	5,149	-2,111	29%	26.8
Whiting St to Brorein St	6,040	4,855	-1,185	20%	16.1
Upstream of Whiting St Off	7,060	5,618	-1,442	20%	18.1
From Selmon West	7,270	5,925	-1,345	18%	16.6
Reversible Express Lanes					
To Brandon	2,060	1,743	-317	15%	7.3
LL On (at US-301) to LL Off (at I-75)	3,460	3,049	-411	12%	7.2
LL Off (at US-301) to LL On (at US-301)	3,140	2,754	-386	12%	7.1
LL On (at I-4) to LL Off (at US-301)	3,870	3,439	-431	11%	7.1
Twiggs St to LL On (at I-4)	2,610	2,454	-156	6%	3.1
NETWORK TOTAL	**129,550**	**106,882**	**-22,668**	**17%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2046 Build Alt. 2

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	48	48	48	48	48	48	48	48	48	48	48	48
	43	43	43	43	43	43	43	43	43	43	43	43
	56	56	56	56	56	56	56	56	55	56	56	56
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	64	64	64	64	64	64	64	64	64	64	64	64
	63	63	63	63	63	63	63	63	63	63	63	63
Downtown	63	63	63	63	63	63	63	63	63	63	63	63
	62	62	62	62	61	61	61	61	61	61	61	62
	55	55	55	55	55	55	55	54	50	50	51	54
	55	55	55	55	55	54	50	45	42	44	49	51
	55	55	54	54	52	45	41	33	31	35	39	45
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	52	46	45	43	35	28	24	21	22	25	27	35
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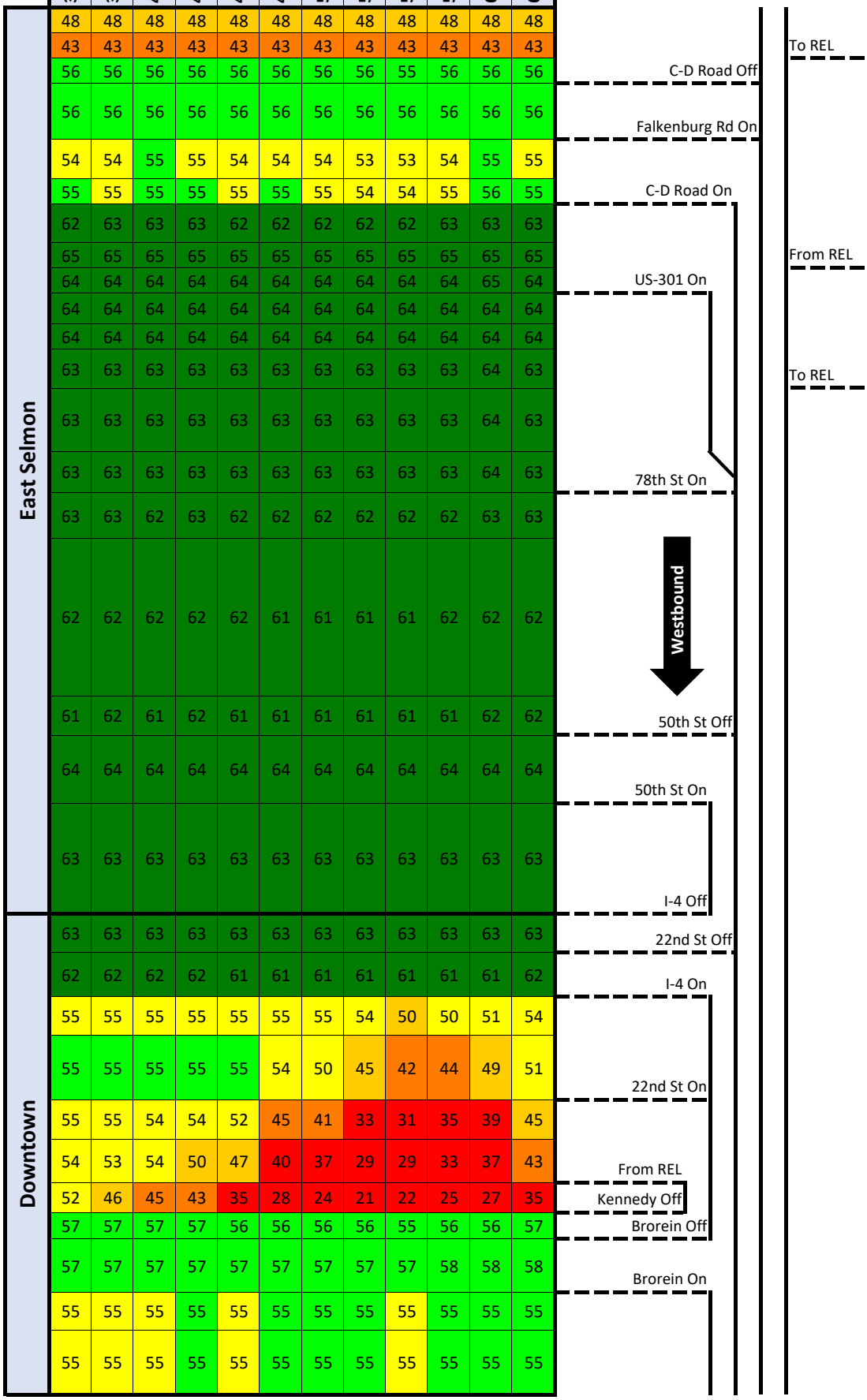
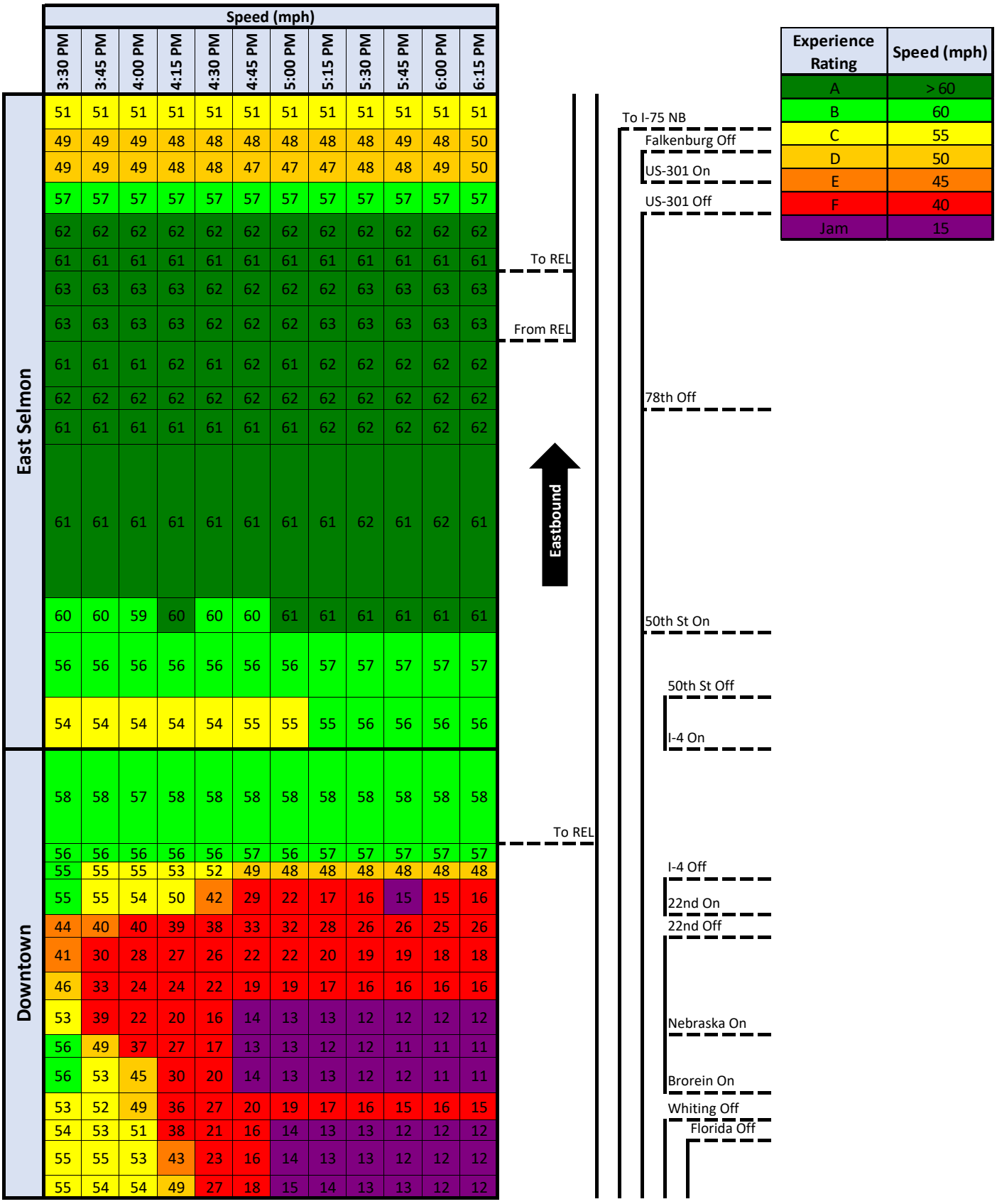


Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Hour (3:30-6:30 PM)

2046 Build Alt. 2



Eastbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2046 Build Alt. 2

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	49	49	49	49	49	49	49	48	48	49	49	49
	59	59	58	57	56	56	54	54	54	55	56	57
	54	54	50	46	41	40	27	28	27	36	43	45
	60	60	60	60	60	60	59	59	56	60	60	60
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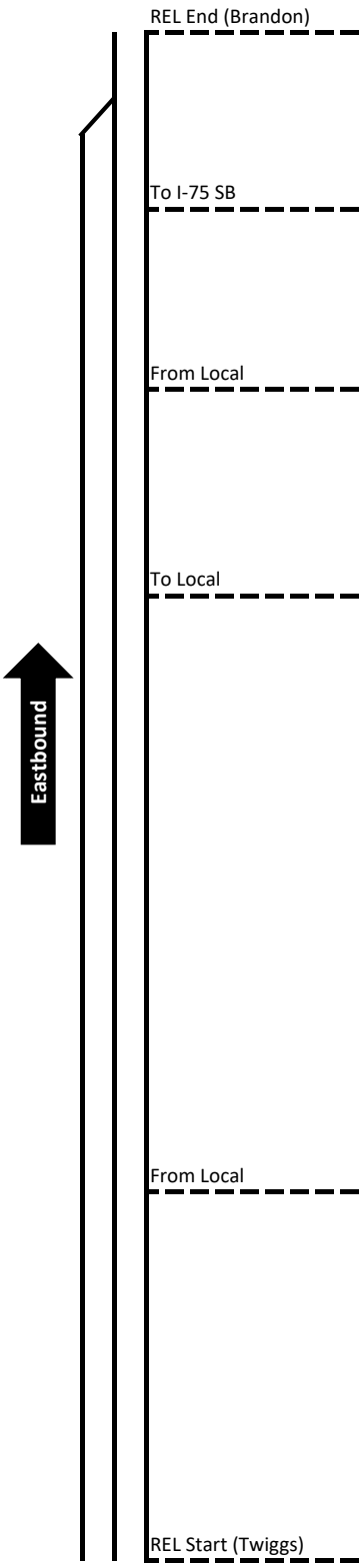
Downtown	59	59	59	59	58	58	58	58	58	59	59	59
	57	57	56	56	56	56	56	56	56	56	56	57
	36	37	37	36	37	37	37	36	37	36	37	37

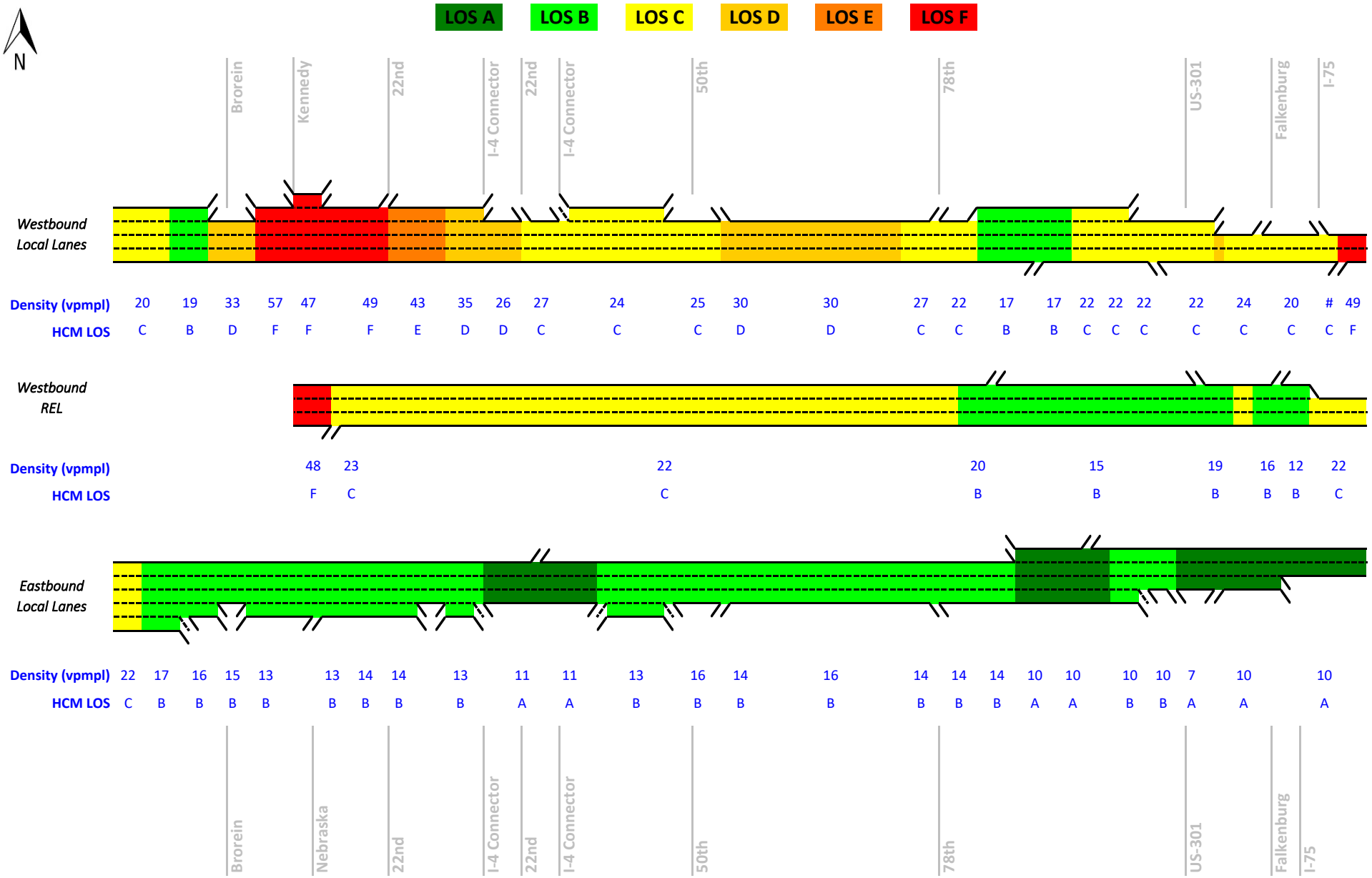


Travel Times by Segment, Local Lanes
PM Peak Hour (4:30-5:30 PM)

From	To	2046 No-Build Travel Time (min)	2046 Build Alt. 2 Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	0.9	0.9	0	-7%
US-301	78th St	1.8	1.7	0	-3%
78th St	50th St	2.0	1.9	0	-5%
50th St	I-4 Connector	1.5	1.4	0	-1%
I-4 Connector	20th St	0.7	0.7	0	3%
20th St	Channelside Dr	0.8	1.1	0	35%
Channelside Dr	Kennedy Blvd	0.6	0.9	0	49%
Kennedy Blvd	Jefferson St	0.3	0.3	0	0%
Jefferson St	Florida Ave	0.3	0.3	0	0%
Total		**8.8**	**9.1**	**0**	**4%**
Eastbound					
Florida Ave	Jefferson St	2.6	0.9	-2	-65%
Jefferson St	Kennedy Blvd	2.9	1.1	-2	-63%
Kennedy Blvd	Channelside Dr	3.7	2.3	-1	-37%
Channelside Dr	20th St	2.1	1.8	0	-11%
20th St	I-4 Connector	0.9	0.9	0	8%
I-4 Connector	50th St	2.2	1.6	-1	-27%
50th St	78th St	2.3	2.0	0	-15%
78th St	US-301	1.8	1.8	0	0%
US-301	Falkenburg Rd	1.0	1.0	0	-7%
Total		**19.4**	**13.4**	**-6**	**-31%**

Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

2046 Build Alt. 3



Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	128.7	64.4	F
Upstream of REL Ramp 3 Off	Diverge	1,519	2	97.0	48.5	F
Upstream of C-D Road Off	Diverge	844	2	48.6	24.3	C
C-D Road Off to Falkenburg Rd	Basic Freeway	2,519	2	40.5	20.3	C
Downstream of Falkenburg Rd On	Merge	1,506	2	56.6	23.7	C
Falkenburg Rd to C-D Road On	Basic Freeway	139	2	55.3	27.7	D
Downstream of C-D Road On	Merge	1,487	3	66.1	22.0	C
C-D Road On to REL On	Basic Freeway	606	3	63.0	21.0	C
Downstream of REL On	Merge	997	3	74.5	21.8	C
Downstream of US-301 On	Merge	1,188	4	89.8	22.5	C
US-301 to REL Off	Basic Freeway	923	4	89.2	22.3	C
Upstream of REL Off	Diverge	1,478	4	66.7	16.7	B
REL to 78th St (4 lanes)	Basic Freeway	2,442	4	66.8	16.7	B
REL to 78th St (3 lanes)	Basic Freeway	1,592	3	66.5	22.2	C
Downstream of 78th St On	Merge	1,770	3	90.8	26.7	C
78th St to 50th St	Basic Freeway	6,087	3	91.4	30.5	D
Upstream of 50th St Off	Diverge	1,592	3	88.7	29.6	D
Between 50th St Ramps	Basic Freeway	2,619	3	75.2	25.1	C
50th St to I-4	Weave	4,285	4	97.4	24.3	C
Upstream of 22nd Off	Diverge	1,552	3	81.7	27.2	C
22nd St Off to I-4 On	Basic Freeway	1,699	3	78.4	26.1	D
Downstream of I-4 On	Merge	1,503	4	139.3	34.8	D
I-4 On to 22nd St On	Basic Freeway	2,487	4	173.4	43.3	E
Downstream of 22nd St On	Merge	1,507	4	221.5	48.6	F
22nd St to REL Ramp 1 On	Basic Freeway	1,684	4	195.4	48.8	F
REL Ramp 1 On to Kennedy Blvd Off	Weave	1,147	5	233.4	46.7	F
Upstream of Brorein St Off	Diverge	1,029	4	226.4	56.6	F
Between Brorein St Ramps	Basic Freeway	2,061	3	97.7	32.6	D
Downstream of Brorein St On	Merge	1,460	4	83.5	18.7	B
Selmon Continue West	Basic Freeway	2,495	4	79.2	19.8	C

Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
From Brandon (2 lanes)	Basic Freeway	3,102	2	43.6	21.8	C
From Brandon (3 lanes)	Basic Freeway	1,429	3	35.2	11.7	B
Downstream of LL On (at I-75)	Merge	1,498	3	55.3	16.1	B
LL On to LL Off	Basic Freeway	911	3	55.9	18.6	C
Upstream of LL Off (at US-301)	Diverge	1,591	3	56.1	18.7	B
LL Off to LL On	Basic Freeway	8,473	3	46.3	15.4	B
Downstream of LL On (at US-301)	Merge	1,526	3	67.6	19.7	B
LL On to LL Off	Basic Freeway	25,347	3	65.0	21.7	C
Upstream of LL Off (at Kennedy Blvd)	Diverge	1,263	3	83.2	23.5	C
To Twiggs St	Basic Freeway	1,408	4	191.9	48.0	F

Eastbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 SB	Basic Freeway	2,257	2	20	10	A
US-301 On to I-75 NB Off	Weave	1,852	3	33	10	A
Falkenburg Rd to US-301 On	Basic Freeway	1,718	3	21	7	A
Upstream of Falkenburg Rd Off	Diverge	1,115	3	31	10	B
Upstream of US-301 Off	Diverge	1,483	4	40	10	B
REL to US-301	Basic Freeway	293	4	40	10	A
Upstream of REL Off	Basic Freeway	1,808	4	40	10	A
Downstream of REL On	Basic Freeway	1,502	4	40	10	A
78th St to REL (3 lanes)	Basic Freeway	1,956	3	41	14	B
78th St to REL (3 lanes)	Basic Freeway	875	3	41	14	B
Upstream of 78th St Off	Diverge	1,495	3	47	14	B
50th St to 78th St	Basic Freeway	6,583	3	47	16	B
Downstream of 50th St On	Merge	1,497	3	47	14	B
Between 50th St Ramps	Basic Freeway	2,766	3	48	16	B
I-4 to 50th St	Weave	2,226	4	56	13	B
REL Off to I-4 On	Basic Freeway	4,056	3	32	11	A
Upstream of REL Off (3 lanes)	Basic Freeway	1,500	3	32	11	A
Upstream of REL Off (3 lanes)	Basic Freeway	586	3	32	11	A
22nd St On to I-4 Off	Weave	1,541	4	51	13	B
Between 22nd St Ramps	Basic Freeway	862	3	50	17	B
Upstream of 22nd St Off	Diverge	1,505	4	57	14	B
Nebraska Ave to 22nd St	Basic Freeway	1,179	4	57	14	B
Downstream of Nebraska Ave On	Merge	1,512	4	57	13	B
Brorein St to Nebraska Ave	Basic Freeway	341	4	50	12	B
Downstream of Brorein St On	Merge	1,531	4	51	13	B
Whiting St to Brorein St	Basic Freeway	1,180	3	45	15	B
Upstream of Whiting St Off	Diverge	818	4	64	16	B
Upstream of Florida Ave Off	Diverge	1,706	5	87	17	B
From Selmon West	Basic Freeway	2,487	4	90	22	C

Westbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	5,100	3,774	-1,326	26%	19.9
REL Ramp 3 to C-D Road Off	3,630	2,685	-945	26%	16.8
C-D Road Off to Falkenburg Rd	2,670	2,259	-411	15%	8.3
Falkenburg Rd to C-D Road On	3,470	2,979	-491	14%	8.6
C-D Road On to REL On	4,760	4,013	-747	16%	11.3
REL On to US-301 On	5,360	4,595	-765	14%	10.8
US-301 to REL Off	6,130	5,373	-757	12%	10.0
REL to 78th St	4,910	4,148	-762	16%	11.3
78th St to 50th St	5,860	5,104	-756	13%	10.2
Between 50th St Ramps	5,450	4,742	-708	13%	9.9
50th St to I-4	6,620	5,837	-783	12%	9.9
I-4 Off to 22nd St Off	5,490	4,854	-636	12%	8.8
22nd St Off to I-4 On	5,010	4,428	-582	12%	8.5
I-4 On to 22nd St On	7,330	6,144	-1,186	16%	14.5
22nd St to REL Ramp 1 On	8,190	6,889	-1,301	16%	15.0
REL Ramp 1 On to Kennedy Blvd	9,150	7,679	-1,471	16%	16.0
Kennedy Blvd to Brorein St	6,940	5,800	-1,140	16%	14.3
Between Brorein St Ramps	4,770	4,002	-768	16%	11.6
Selmon Continue West	5,330	4,328	-1,002	19%	14.4
Reversible Express Lanes					
From Brandon	2,370	2,355	-15	1%	0.3
LL On (at I-75) to LL Off (at US-301)	3,840	3,421	-419	11%	7.0
LL Off (at US-301) to LL On (at US-301)	3,240	2,840	-400	12%	7.3
LL On (at US-301) to LL Off (at Kennedy Blvd)	4,460	4,039	-421	0.1	6.5
LL Off (at Kennedy Blvd) to Twiggs St	3,500	3,166	-334	0.1	5.8
NETWORK TOTAL	**123,580**	**105,455**	**-18,125**	**15%**	

Eastbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 SB	1,120	1,069	-51	5%	1.5
US-301 On to I-75 NB Off	1,750	1,698	-52	3%	1.3
Falkenburg Rd Off to US-301 On	1,180	1,228	48	4%	1.4
US-301 Off to Falkenburg Rd Off	2,070	1,974	-96	5%	2.1
REL Off to US-301	2,680	2,546	-134	5%	2.6
Between REL Ramps	2,680	2,580	-100	4%	1.9
78th St to REL	2,680	2,592	-88	3%	1.7
50th St to 78th St	3,050	2,964	-86	3%	1.6
Between 50th St Ramps	2,870	2,800	-70	2%	1.3
I-4 to 50th St	3,330	3,230	-100	3%	1.7
REL Off to I-4 On	1,990	1,896	-94	5%	2.1
I-4 Off to REL Off	1,990	1,895	-95	5%	2.2
22nd St On to I-4 Off	3,110	2,947	-163	5%	3.0
Between 22nd St Ramps	2,990	2,844	-146	5%	2.7
Nebraska Ave to 22nd St	3,450	3,302	-148	4%	2.6
Brorein St to Nebraska Ave	2,940	2,698	-242	8%	4.6
Whiting St to Brorein St	2,530	2,514	-16	1%	0.3
Upstream of Whiting St Off	3,660	3,590	-70	2%	1.2
From Selmon West	4,820	4,800	-20	0%	0.3
NETWORK TOTAL	**50,890**	**49,166**	**-1,724**	**3%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2046 Build Alt. 3

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
East Selmon	32	29	29	30	29	29	29	29	30	29	29	29
	39	39	39	39	39	39	39	39	39	39	39	39
	55	55	55	56	55	55	55	55	55	55	55	55
	56	56	56	56	56	56	56	56	56	56	56	56
	54	54	54	53	53	52	53	52	53	53	53	53
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	64	64	63	63	63	63	63	63	63	63	63	63
	62	62	61	60	60	60	60	60	60	60	60	61
Downtown	62	61	61	60	60	59	59	59	60	59	60	60
	61	61	60	59	59	59	59	56	54	52	50	55
	55	55	54	54	54	53	50	41	36	33	24	28
	55	55	55	54	52	50	42	29	26	18	17	20
	55	53	51	49	44	42	33	28	27	21	23	24
	54	53	50	46	40	39	34	32	31	26	27	30
	48	46	43	40	38	37	32	30	29	25	24	31
	46	44	41	41	39	32	26	19	17	16	16	17
	49	46	44	42	42	40	41	42	42	42	42	44
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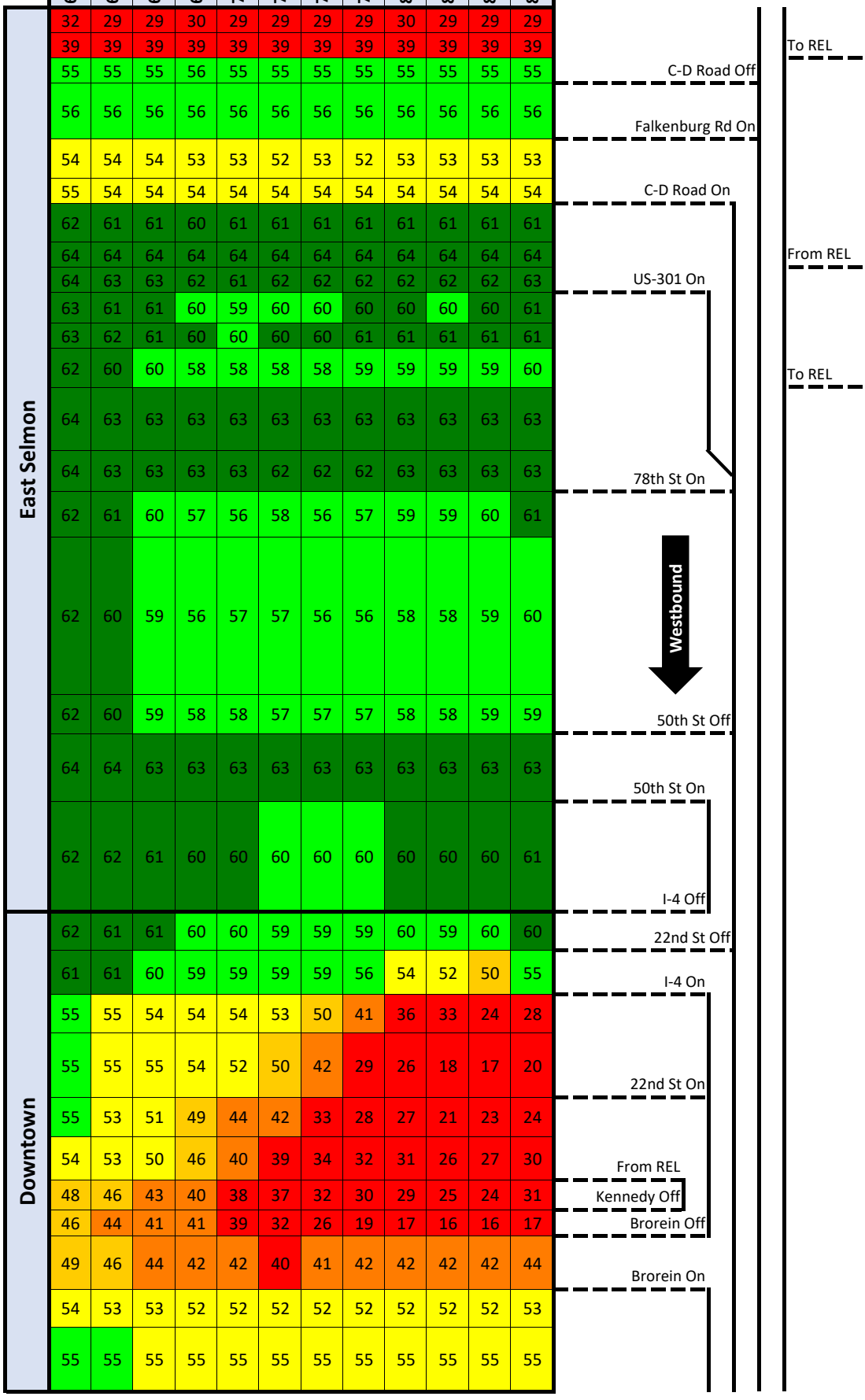
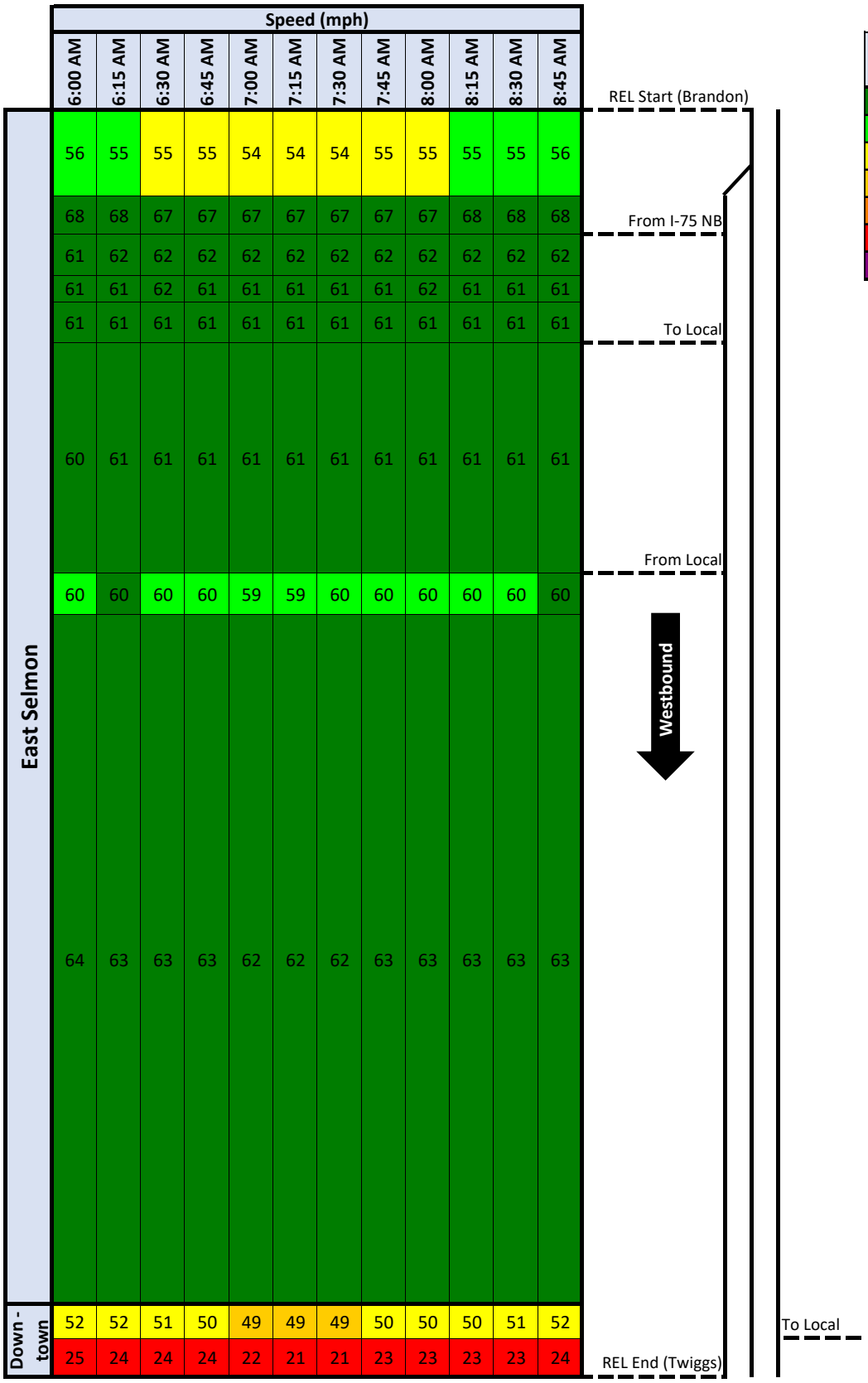


Westbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2046 Build Alt. 3



Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2046 Build Alt. 3

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
East Selmon	52	52	52	52	52	52	52	52	52	52	52	52
	52	52	52	52	52	52	52	52	52	52	52	52
	60	60	60	60	60	59	60	59	59	59	60	60
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	60	60	60	59	59	59	59	59	59	59	59	59
	59	59	59	58	58	58	58	57	57	58	58	58
Downtown	60	60	60	59	59	59	58	58	58	58	58	59
	60	60	60	59	59	59	59	58	58	58	59	59
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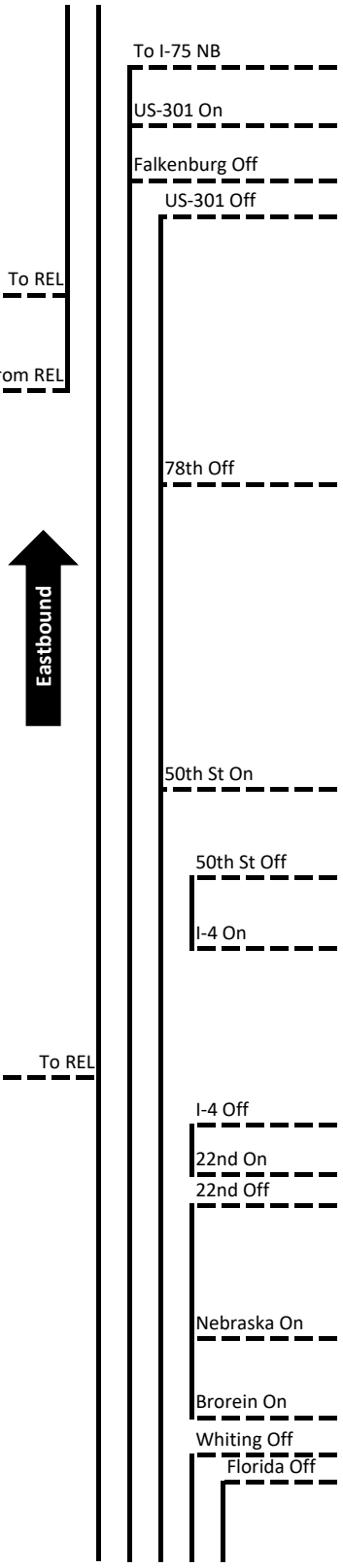
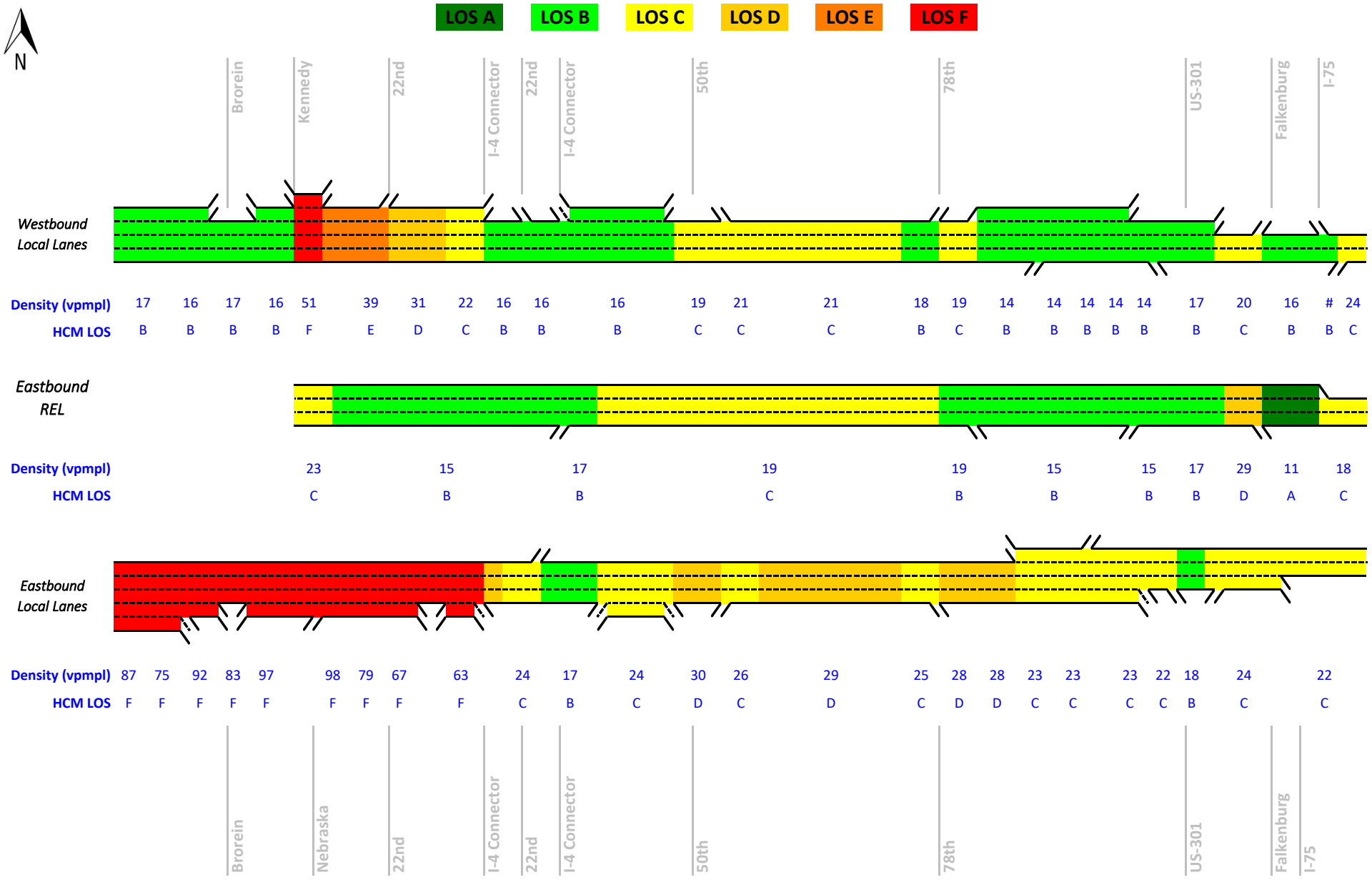


Travel Times by Segment, Local Lanes
AM Peak Hour (7:00-8:00 AM)

From	To	2046 No-Build Travel Time (min)	2046 Build Alt. 3 Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	4.2	0.9	-3	-79%
US-301	78th St	4.1	1.8	-2	-56%
78th St	50th St	2.2	2.0	0	-6%
50th St	I-4 Connector	1.5	1.5	0	1%
I-4 Connector	20th St	0.7	0.8	0	15%
20th St	Channelside Dr	0.9	1.2	0	45%
Channelside Dr	Kennedy Blvd	0.6	0.9	0	51%
Kennedy Blvd	Jefferson St	0.3	0.5	0	50%
Jefferson St	Florida Ave	0.3	0.4	0	40%
Total		**14.6**	**9.9**	**-5**	**-32%**
Eastbound					
Florida Ave	Jefferson St	0.3	0.3	0	0%
Jefferson St	Kennedy Blvd	0.3	0.3	0	0%
Kennedy Blvd	Channelside Dr	0.6	0.5	0	-3%
Channelside Dr	20th St	0.7	0.7	0	0%
20th St	I-4 Connector	0.7	0.7	0	0%
I-4 Connector	50th St	1.6	1.6	0	-2%
50th St	78th St	2.0	1.9	0	-2%
78th St	US-301	1.7	1.7	0	-1%
US-301	Falkenburg Rd	0.9	0.9	0	-2%
Total		**8.7**	**8.6**	**0**	**-1%**

Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2046 Build Alt. 3



Westbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	42.7	21.4	C
Upstream of REL Ramp 3 Off	Basic Freeway	1,519	2	48.1	24.0	C
Upstream of C-D Road Off	Diverge	844	2	36.8	18.4	B
C-D Road Off to Falkenburg Rd	Basic Freeway	2,519	2	31.5	15.7	B
Downstream of Falkenburg Rd On	Merge	1,506	2	48.1	20.1	C
Falkenburg Rd to C-D Road On	Basic Freeway	139	2	47.1	23.6	C
Downstream of C-D Road On	Merge	1,487	3	50.4	16.8	B
C-D Road On to REL On	Basic Freeway	606	3	48.6	16.2	B
Downstream of REL On	Basic Freeway	997	3	48.7	14.2	B
Downstream of US-301 On	Merge	1,188	4	55.4	13.8	B
US-301 to REL Off	Basic Freeway	923	4	55.2	13.8	B
Upstream of REL Off	Basic Freeway	1,478	4	55.9	14.0	B
REL to 78th St (4 lanes)	Basic Freeway	2,442	4	56.1	14.0	B
REL to 78th St (3 lanes)	Basic Freeway	1,592	3	55.7	18.6	C
Downstream of 78th St On	Merge	1,770	3	61.6	18.0	B
78th St to 50th St	Basic Freeway	6,087	3	62.7	20.9	C
Upstream of 50th St Off	Diverge	1,592	3	62.5	20.8	C
Between 50th St Ramps	Basic Freeway	2,619	3	56.4	18.8	C
50th St to I-4	Weave	4,285	4	63.6	15.9	B
Upstream of 22nd Off	Diverge	1,552	3	49.0	16.3	B
22nd St Off to I-4 On	Basic Freeway	1,699	3	46.7	15.6	B
Downstream of I-4 On	Merge	1,503	4	89.6	22.4	C
I-4 On to 22nd St On	Basic Freeway	2,487	4	124.4	31.1	D
Downstream of 22nd St On	Merge	1,507	4	173.9	39.2	E
22nd St to REL Ramp 1 On	Basic Freeway	1,684	4	163.9	41.0	E
REL Ramp 1 On to Kennedy Blvd Off	Diverge	1,147	5	255.5	51.1	F
Upstream of Brorein St Off	Diverge	1,029	4	64.2	16.1	B
Between Brorein St Ramps	Basic Freeway	2,061	3	51.8	17.3	B
Downstream of Brorein St On	Merge	1,460	4	68.2	15.9	B
Selmon Continue West	Basic Freeway	2,495	4	68.5	17.1	B

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 SB	Basic Freeway	2,257	2	45	22	C
US-301 On to I-75 NB Off	Weave	1,852	3	81	24	C
Falkenburg Rd to US-301 On	Basic Freeway	1,718	3	53	18	B
Upstream of Falkenburg Rd Off	Diverge	1,115	3	67	22	C
Upstream of US-301 Off	Diverge	1,483	4	91	23	C
REL to US-301	Basic Freeway	293	4	90	22	C
Upstream of REL Off	Diverge	1,808	4	93	23	C
Downstream of REL On	Merge	1,502	4	93	23	C
78th St to REL (3 lanes)	Basic Freeway	1,956	3	84	28	D
78th St to REL (3 lanes)	Basic Freeway	875	3	83	28	D
Upstream of 78th St Off	Diverge	1,495	3	87	25	C
50th St to 78th St	Basic Freeway	6,583	3	88	29	D
Downstream of 50th St On	Merge	1,497	3	90	26	C
Between 50th St Ramps	Basic Freeway	2,766	3	89	30	D
I-4 to 50th St	Weave	2,226	4	104	24	C
REL Off to I-4 On	Basic Freeway	4,056	3	52	17	B
Upstream of REL Off (3 lanes)	Diverge	1,500	3	71	24	C
Upstream of REL Off (3 lanes)	Basic Freeway	586	3	80	27	D
22nd St On to I-4 Off	Weave	1,541	4	252	63	F
Between 22nd St Ramps	Basic Freeway	862	3	167	56	F
Upstream of 22nd St Off	Diverge	1,505	4	270	67	F
Nebraska Ave to 22nd St	Basic Freeway	1,179	4	314	79	F
Downstream of Nebraska Ave On	Merge	1,512	4	444	98	F
Brorein St to Nebraska Ave	Basic Freeway	341	4	398	99	F
Downstream of Brorein St On	Merge	1,531	4	389	97	F
Whiting St to Brorein St	Basic Freeway	1,180	3	248	83	F
Upstream of Whiting St Off	Diverge	818	4	370	92	F
Upstream of Florida Ave Off	Diverge	1,706	5	373	75	F
From Selmon West	Basic Freeway	2,487	4	347	87	F

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
To Brandon (2 lanes)	Basic Freeway	3,106	2	36	18	C
To Brandon (3 lanes)	Basic Freeway	2,283	3	32	11	A
Upstream of LL Off (at I-75)	Diverge	1,497	3	86	29	D
LL On to LL Off	Basic Freeway	2,493	3	51	17	B
Downstream of LL On (at US-301)	Merge	1,491	3	51	15	B
LL Off to LL On	Basic Freeway	6,279	3	46	15	B
Upstream of LL Off (at US-301)	Diverge	1,540	3	58	19	B
LL On to LL Off	Basic Freeway	15,162	3	58	19	C
Downstream of LL On (at I-4)	Merge	1,572	3	59	17	B
Twiggs St to LL On	Basic Freeway	9,696	3	44	15	B
From Twiggs St	Basic Freeway	1,547	3	68	23	C

Westbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	2,100	2,056	-44	2%	1.0
REL Ramp 3 to C-D Road Off	2,100	2,048	-52	2%	1.1
C-D Road Off to Falkenburg Rd	1,570	1,757	187	12%	4.6
Falkenburg Rd to C-D Road On	2,480	2,579	99	4%	2.0
C-D Road On to REL On	3,160	3,141	-19	1%	0.3
REL On to US-301 On	3,160	3,128	-32	1%	0.6
US-301 to REL Off	3,560	3,537	-23	1%	0.4
REL to 78th St	3,560	3,506	-54	2%	0.9
78th St to 50th St	3,890	3,840	-50	1%	0.8
Between 50th St Ramps	3,650	3,599	-51	1%	0.8
50th St to I-4	4,110	4,002	-108	3%	1.7
I-4 Off to 22nd St Off	3,180	3,070	-110	3%	2.0
22nd St Off to I-4 On	2,920	2,818	-102	4%	1.9
I-4 On to 22nd St On	4,760	4,612	-148	3%	2.2
22nd St to REL Ramp 1 On	5,590	5,361	-229	4%	3.1
REL Ramp 1 On to Kennedy Blvd	5,590	5,306	-284	5%	3.9
Kennedy Blvd to Brorein St	3,810	3,599	-211	6%	3.5
Between Brorein St Ramps	3,140	2,971	-169	5%	3.1
Selmon Continue West	4,340	3,767	-573	13%	9.0
NETWORK TOTAL	**66,670**	**64,699**	**-1,971**	**3%**	

Eastbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

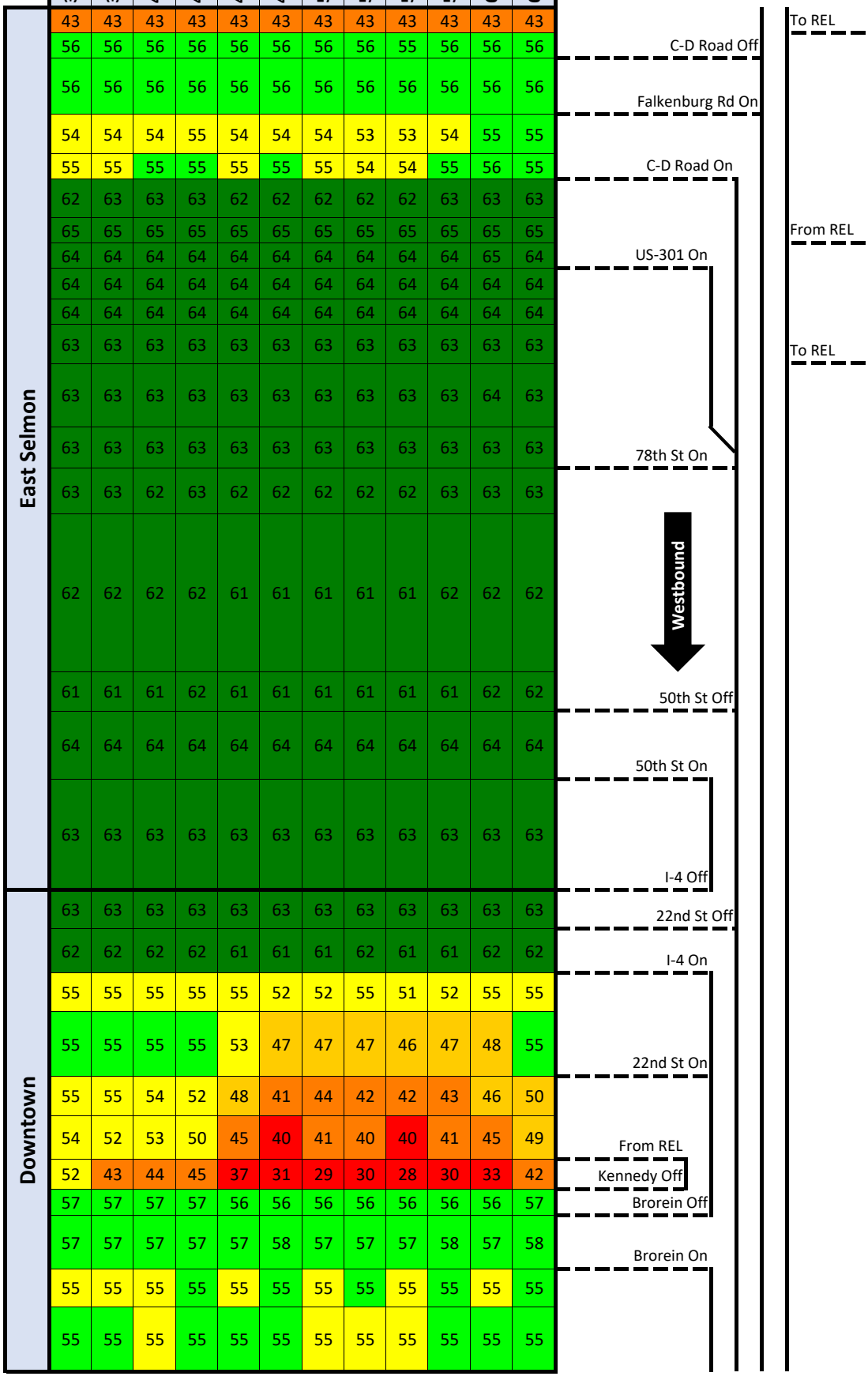
Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 SB	2,580	2,286	-294	11%	6.0
US-301 On to I-75 NB Off	4,320	3,876	-444	10%	6.9
Falkenburg Rd Off to US-301 On	3,490	3,042	-448	13%	7.8
US-301 Off to Falkenburg Rd Off	4,720	4,133	-587	12%	8.8
REL Off to US-301	6,300	5,463	-837	13%	10.9
Between REL Ramps	6,620	5,814	-806	12%	10.2
78th St to REL	5,890	5,154	-736	13%	9.9
50th St to 78th St	6,210	5,387	-823	13%	10.8
Between 50th St Ramps	5,670	5,004	-666	12%	9.1
I-4 to 50th St	6,640	5,715	-925	14%	11.8
REL Off to I-4 On	3,920	3,019	-901	23%	15.3
I-4 Off to REL Off	5,180	3,982	-1,198	23%	17.7
22nd St On to I-4 Off	7,860	5,840	-2,020	26%	24.4
Between 22nd St Ramps	7,290	5,349	-1,941	27%	24.4
Nebraska Ave to 22nd St	8,030	5,919	-2,111	26%	25.3
Brorein St to Nebraska Ave	7,260	5,142	-2,118	29%	26.9
Whiting St to Brorein St	6,040	4,840	-1,200	20%	16.3
Upstream of Whiting St Off	7,060	5,616	-1,444	20%	18.1
From Selmon West	7,270	5,958	-1,312	18%	16.1
Reversible Express Lanes					
To Brandon	2,060	1,749	-311	15%	7.1
LL On (at US-301) to LL Off (at I-75)	3,460	3,045	-415	12%	7.3
LL Off (at US-301) to LL On (at US-301)	3,140	2,751	-389	12%	7.2
LL On (at I-4) to LL Off (at US-301)	3,870	3,436	-434	11%	7.2
Twiggs St to LL On (at I-4)	2,610	2,452	-158	6%	3.1
NETWORK TOTAL	**127,490**	**104,972**	**-22,518**	**18%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2046 Build Alt. 3

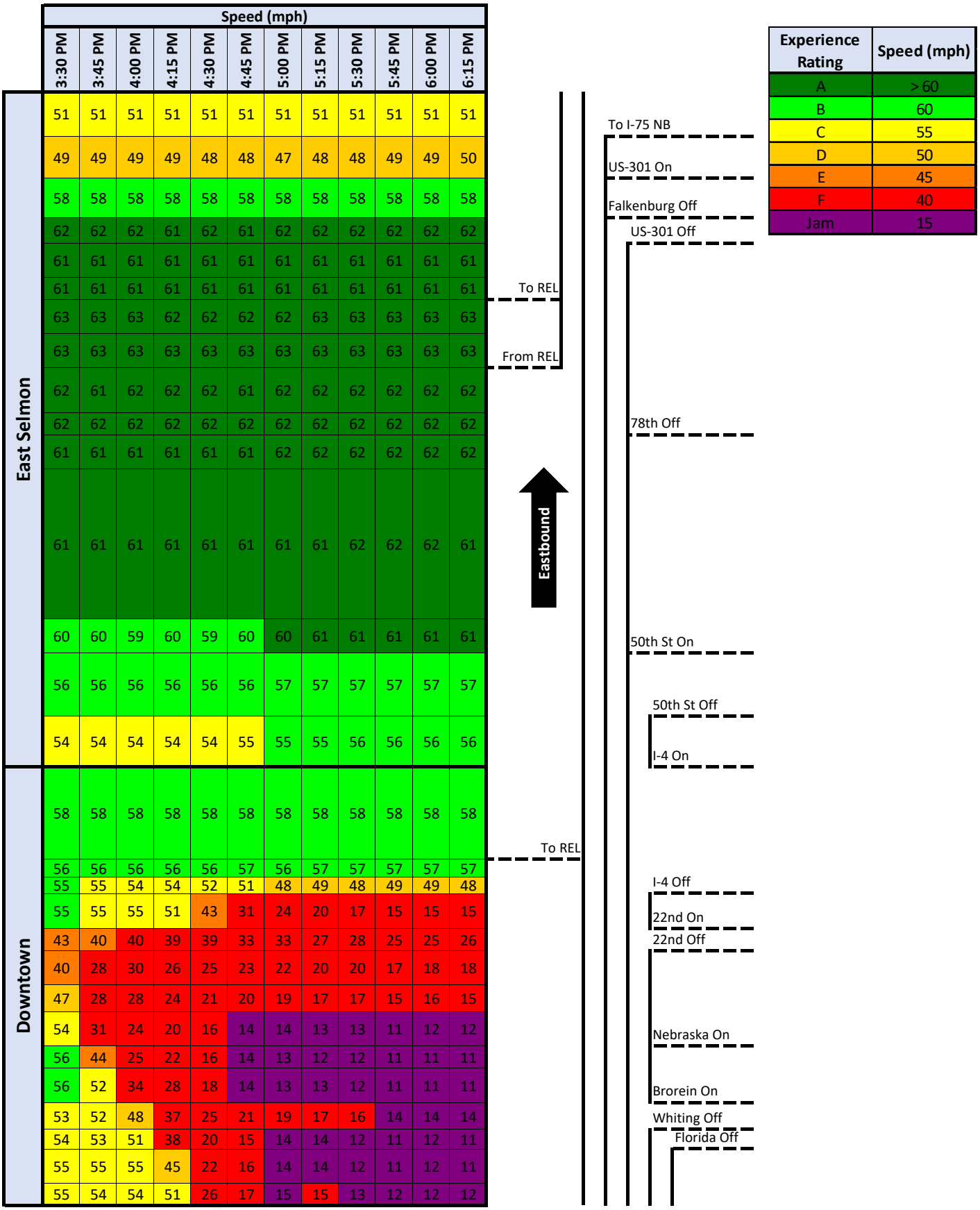
Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	43	43	43	43	43	43	43	43	43	43	43	43
	56	56	56	56	56	56	56	56	55	56	56	56
	56	56	56	56	56	56	56	56	56	56	56	56
	54	54	54	55	54	54	54	53	53	54	55	55
	55	55	55	55	55	55	55	54	54	55	56	55
	62	63	63	63	62	62	62	62	62	63	63	63
	65	65	65	65	65	65	65	65	65	65	65	65
	64	64	64	64	64	64	64	64	64	64	65	64
	64	64	64	64	64	64	64	64	64	64	64	64
	64	64	64	64	64	64	64	64	64	64	64	64
	63	63	63	63	63	63	63	63	63	63	63	63
	63	63	63	63	63	63	63	63	63	63	64	63
	63	63	63	63	63	63	63	63	63	63	63	63
	63	63	62	63	62	62	62	62	62	63	63	63
	62	62	62	62	61	61	61	61	61	62	62	62
	61	61	61	62	61	61	61	61	61	61	62	62
	64	64	64	64	64	64	64	64	64	64	64	64
	63	63	63	63	63	63	63	63	63	63	63	63
Downtown	63	63	63	63	63	63	63	63	63	63	63	63
	62	62	62	62	61	61	61	62	61	61	62	62
	55	55	55	55	55	52	52	55	51	52	55	55
	55	55	55	55	53	47	47	47	46	47	48	55
	55	55	54	52	48	41	44	42	42	43	46	50
	54	52	53	50	45	40	41	40	40	41	45	49
	52	43	44	45	37	31	29	30	28	30	33	42
	57	57	57	57	56	56	56	56	56	56	56	57
	57	57	57	57	57	58	57	57	57	58	57	58
	55	55	55	55	55	55	55	55	55	55	55	55
	55	55	55	55	55	55	55	55	55	55	55	55



Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Hour (3:30-6:30 PM)

2046 Build Alt. 3

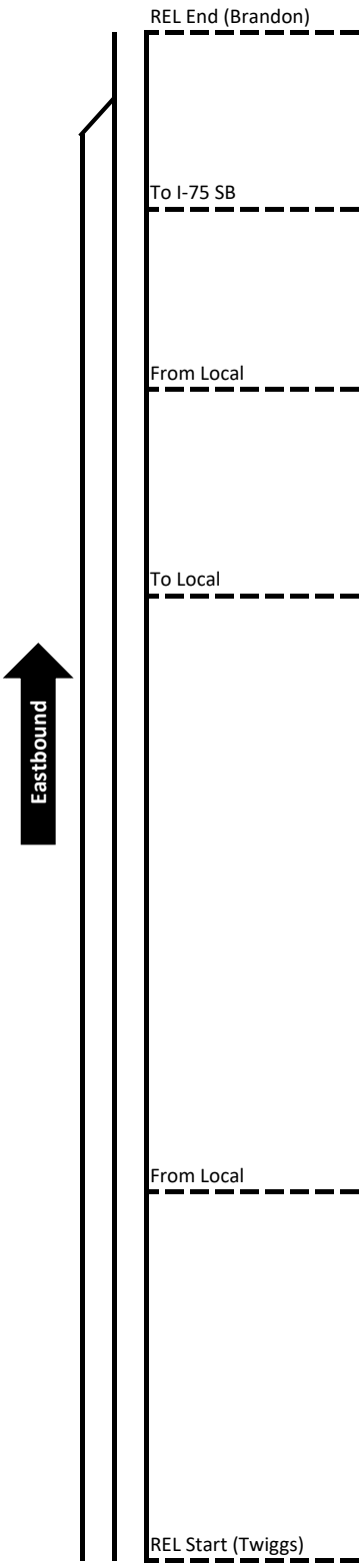


Eastbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2046 Build Alt. 3

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	49	49	49	49	49	49	49	49	48	49	49	49
	59	58	57	57	56	56	55	55	54	56	57	57
	53	54	51	46	42	41	33	33	29	39	43	46
	60	60	60	60	60	60	60	60	60	60	60	60
	60	60	60	60	60	60	59	59	60	60	60	60
	60	60	60	60	60	60	60	60	60	60	60	60
	60	59	59	59	59	59	59	59	58	59	59	59
	60	60	59	59	59	59	59	59	59	59	60	60
	59	59	59	59	58	58	58	58	58	59	59	59
Downtown	57	57	56	56	56	56	56	56	56	56	56	57
	36	37	37	36	37	37	37	37	37	37	37	37



Travel Times by Segment, Local Lanes
PM Peak Hour (4:30-5:30 PM)

From	To	2046 No-Build Travel Time (min)	2046 Build Alt. 3 Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	0.9	0.9	0	-7%
US-301	78th St	1.8	1.7	0	-3%
78th St	50th St	2.0	1.9	0	-5%
50th St	I-4 Connector	1.5	1.4	0	-1%
I-4 Connector	20th St	0.7	0.7	0	5%
20th St	Channelside Dr	0.8	1.2	0	50%
Channelside Dr	Kennedy Blvd	0.6	0.8	0	40%
Kennedy Blvd	Jefferson St	0.3	0.3	0	0%
Jefferson St	Florida Ave	0.3	0.3	0	0%
Total		**8.8**	**9.2**	**0**	**5%**
Eastbound					
Florida Ave	Jefferson St	2.6	0.9	-2	-65%
Jefferson St	Kennedy Blvd	2.9	1.1	-2	-63%
Kennedy Blvd	Channelside Dr	3.7	2.3	-1	-37%
Channelside Dr	20th St	2.1	1.9	0	-10%
20th St	I-4 Connector	0.9	0.9	0	6%
I-4 Connector	50th St	2.2	1.6	-1	-27%
50th St	78th St	2.3	2.0	0	-15%
78th St	US-301	1.8	1.8	0	0%
US-301	Falkenburg Rd	1.0	0.9	0	-8%
Total		**19.4**	**13.4**	**-6**	**-31%**

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2046 Build Alt. 1

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	5,100	3,748	-1,352	-27%	5,100	3,748	-1,352	-27%	20.3									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	630	604	-26	-4%	630	604	-26	-4%	1.0									
	SB I-75 to WB Selmon Expressway	Westbound	On-Ramp	1,290	1,295	5	0%	1,290	1,295	5	0%	0.1									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	1,120	1,070	-50	-4%	1,120	1,070	-50	-4%	1.5									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	330	317	-13	-4%	890	852	-38	-4%	1.3	Signal	39.5	D	19	B	15	B	45.6	191.3
			Right	560	535	-25	-4%						Signal	7.2	A					10.0	121.4
		Northbound	Left	410	413	3	1%	1,830	1,817	-13	-1%	0.3	Signal	16.8	B	11	B			17.3	264.8
			Thru	1,420	1,404	-16	-1%						Signal	9.2	A					43.5	421.3
		Southbound	Thru	775	786	11	1%	1,165	1,169	4	0%	0.1	Signal	24.9	C	18	B			64.0	340.1
			Right	390	383	-7	-2%						Signal	3.9	A					3.2	188.1
	US-301 and EB Selmon Expressway	Eastbound	Left	165	165	0	0%	610	596	-14	-2%	0.6	Signal	60.0	E	17	B	46	D	62.5	304.4
			Right	445	431	-14	-3%						Signal	1.1	A					0.0	0.0
		Northbound	Thru	2,400	2,294	-106	-4%	2,710	2,590	-120	-4%	2.3	Signal	81.6	F	77	E			916.5	2,408.7
			Right	310	296	-14	-5%						Signal	41.4	D					3.6	190.5
		Southbound	Left	260	261	1	0%	1,515	1,491	-24	-2%	0.6	Signal	8.3	A	3	A			7.1	274.0
			Thru	1,255	1,230	-25	-2%						Signal	2.0	A					5.2	70.6
	US-301 and WB Selmon Expressway	Westbound	Left	130	108	-22	-17%	960	795	-165	-17%	5.6	Signal	62.2	E	11	B	16	B	43.5	364.8
			Right	830	687	-143	-17%						Signal	3.2	A					0.3	64.3
		Northbound	Left	595	560	-35	-6%	2,565	2,456	-109	-4%	2.2	Signal	25.6	C	6	A			92.2	295.1
			Thru	1,970	1,896	-74	-4%						Signal	0.8	A					0.0	0.0
		Southbound	Thru	1,385	1,385	0	0%	1,560	1,554	-6	0%	0.2	Signal	38.7	D	35	C			111.6	445.1
			Right	175	169	-6	-3%						Signal	3.8	A					1.9	96.9
	78th St and EB Selmon Expressway	Westbound	Left	95	91	-4	-4%	370	361	-9	-2%	0.5	Stop	18.7	C	5	A	1	A	13.0	135.9
			Right	275	270	-5	-2%						Stop	0.8	A					0.0	0.0
		Northbound	Thru	1,710	1,689	-21	-1%	1,710	1,689	-21	-1%	0.5	Stop	0.9	A	1	A			0.0	0.0
		Southbound	Thru	605	626	21	3%	605	626	21	3%	0.8	Stop	0.2	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	325	325	0	0%	325	325	0	0%	0.0									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	625	609	-16	-3%	625	609	-16	-3%	0.6									
	50th St and Selmon Expressway	Eastbound	Left	195	179	-16	-8%	460	430	-30	-7%	1.4	Signal	57.0	E	55	D	57	E	59.9	300.7
			Right	265	251	-14	-5%						Signal	53.3	D					52.8	209.4
		Westbound	Left	35	36	1	3%	410	366	-44	-11%	2.2	Signal	71.4	E	18	B			10.4	88.1
			Right	375	330	-45	-12%						Signal	12.0	B					0.0	0.0
		Northbound	Left	920	840	-80	-9%	2,105	1,980	-125	-6%	2.8	Signal	114.0	F	82	F			902.4	2,721.4
			Thru	1,150	1,107	-43	-4%						Signal	59.3	E					291.3	1,358.4
			Right	35	33	-2	-6%						Signal	44.2	D					0.0	6.2
		Southbound	Left	145	146	1	1%	1,745	1,724	-21	-1%	0.5	Signal	57.7	E	37	D			17.1	313.0
			Thru	1,350	1,332	-18	-1%						Signal	38.8	D					110.3	745.3
			Right	250	246	-4	-2%						Signal	13.8	B					13.0	229.5

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2046 Build Alt. 1

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	1,340	1,354	14	1%	1,340	1,354	14	1%	0.4									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	1,130	955	-175	-15%	1,130	955	-175	-15%	5.4									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	480	422	-58	-12%	480	422	-58	-12%	2.7									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	220	170	-50	-23%	220	170	-50	-23%	3.6									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	2,320	1,777	-543	-23%	2,320	1,777	-543	-23%	12.0									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	1,120	1,053	-67	-6%	1,120	1,053	-67	-6%	2.0									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	265	256	-9	-3%	460	443	-17	-4%	0.8	Stop	51.7	F	34	D	18	C	60.0	400.6
Downtown			Right	195	187	-8	-4%						Stop	9.5	A					11.2	147.2
Downtown		Westbound	Left	185	157	-28	-15%	700	592	-108	-15%	4.2	Stop	40.7	E	22	C			27.6	186.6
Downtown			Right	515	435	-80	-16%						Stop	15.3	C					51.4	335.1
Downtown		Northbound	Left	245	243	-2	-1%	1,795	1,782	-13	-1%	0.3	Stop	41.1	E	16	C			32.8	343.4
Downtown			Thru	1,540	1,528	-12	-1%						Stop	11.3	B					32.8	343.4
Downtown			Right	10	11	1	10%						Stop	51.9	F					2.8	40.0
Downtown		Southbound	Left	110	109	-1	-1%	1,515	1,504	-11	-1%	0.3	Stop	21.7	C	16	C			42.4	212.5
Downtown			Thru	790	787	-3	0%						Stop	21.1	C					42.4	212.5
Downtown			Right	615	608	-7	-1%						Stop	8.4	A					7.8	266.5
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	510	449	-61	-12%	510	449	-61	-12%	2.8									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	2,210	1,882	-328	-15%	2,210	1,882	-328	-15%	7.3									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	410	378	-32	-8%	410	378	-32	-8%	1.6									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	2,170	1,799	-371	-17%	2,170	1,799	-371	-17%	8.3									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	1,130	1,111	-19	-2%	1,130	1,111	-19	-2%	0.6									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	1,160	1,166	6	1%	1,160	1,166	6	1%	0.2									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	560	325	-235	-42%	560	325	-235	-42%	11.2									
	Reversible Express Lanes																				
East Selmon	NB I-75 to REL	Westbound	On-Ramp	1,470	1,073	-397	-27%	1,470	1,073	-397	-27%	11.1									
East Selmon	WB REL to LL @ US-301	Westbound	Off-Ramp	600	597	-3	-1%	600	597	-3	-1%	0.1									
East Selmon	WB LL to REL @ US-301	Westbound	On-Ramp	1,220	1,176	-44	-4%	1,220	1,176	-44	-4%	1.3									
Downtown	WB REL to LL @ Kennedy	Westbound	Off-Ramp	960	843	-117	-12%	960	843	-117	-12%	3.9									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	0	0	0	-	575	538	-37	-6%	1.6	Signal	-	-	66	E	39	D	46.8	355.0
Downtown			Thru	175	165	-10	-6%						Signal	67.3	E					46.8	355.0
Downtown			Right	400	373	-27	-7%						Signal	65.7	E					53.9	369.3
Downtown		Westbound	Left	120	108	-12	-10%	955	914	-41	-4%	1.3	Signal	63.0	E	55	E			271.4	877.2
Downtown			Thru	835	806	-29	-3%						Signal	54.3	D					271.4	877.2
Downtown			Right	0	0	0	-						Signal	-	-					291.2	901.6
Downtown		Northbound	Left	295	277	-18	-6%	380	359	-21	-6%	1.1	Signal	82.1	F	65	E			102.7	323.2
Downtown			Thru	0	0	0	-						Signal	-	-					102.7	323.2
Downtown			Right	85	82	-3	-4%						Signal	5.5	A					131.3	358.6
Downtown		Southbound	Left	265	244	-21	-8%	3,500	3,202	-298	-9%	5.1	Signal	42.5	D	28	C			259.1	1,157.1
Downtown			Thru	1,955	1,798	-157	-8%						Signal	40.8	D					259.1	1,157.1
Downtown			Right	1,280	1,160	-120	-9%						Signal	4.2	A					158.4	1,012.9
	NETWORK TOTAL							**59,190**	**54,011**	**-5,179**	**-9%**										

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (4:30-5:30 PM)

2046 Build Alt. 1

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	2,100	2,054	-46	-2%	2,100	2,054	-46	-2%	1.0									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	1,740	1,587	-153	-9%	1,740	1,587	-153	-9%	3.8									
	SB I-75 to WB Selmon Expressway	Westbound	On-Ramp	680	672	-8	-1%	680	672	-8	-1%	0.3									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	2,580	2,288	-292	-11%	2,580	2,288	-292	-11%	5.9									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	490	427	-63	-13%	1,230	1,074	-156	-13%	4.6	Signal	40.3	D	22	C	22	C	57.4	245.7
			Right	740	647	-93	-13%						Signal	10.2	B					15.8	149.2
		Northbound	Left	410	455	45	11%	1,345	1,382	37	3%	1.0	Signal	39.1	D	19	B			22.9	328.9
			Thru	935	927	-8	-1%						Signal	9.5	A					28.0	296.6
		Southbound	Thru	1,485	1,491	6	0%	1,940	1,944	4	0%	0.1	Signal	29.2	C	24	C			183.6	942.1
			Right	455	453	-2	0%						Signal	6.8	A					11.3	275.5
	US-301 and EB Selmon Expressway	Eastbound	Left	230	211	-19	-8%	1,580	1,401	-179	-11%	4.6	Signal	58.1	E	11	B	14	B	79.7	339.0
			Right	1,350	1,190	-160	-12%						Signal	2.9	A					0.1	26.9
		Northbound	Thru	1,390	1,353	-37	-3%	1,815	1,768	-47	-3%	1.1	Signal	41.7	D	33	C			117.8	479.2
			Right	425	415	-10	-2%						Signal	5.3	A					11.1	231.1
		Southbound	Left	405	399	-6	-1%	2,420	2,428	8	0%	0.2	Signal	7.2	A	3	A			10.4	295.6
			Thru	2,015	2,029	14	1%						Signal	1.8	A					7.6	75.2
	US-301 and WB Selmon Expressway	Westbound	Left	180	175	-5	-3%	530	511	-19	-4%	0.8	Signal	80.0	E	34	C	28	C	122.7	725.6
			Right	350	336	-14	-4%						Signal	10.1	B					11.7	324.2
		Northbound	Left	250	243	-7	-3%	1,620	1,568	-52	-3%	1.3	Signal	56.9	E	10	A			83.7	258.5
			Thru	1,370	1,325	-45	-3%						Signal	0.9	A					0.0	0.0
		Southbound	Thru	2,240	2,259	19	1%	2,390	2,409	19	1%	0.4	Signal	40.9	D	39	D			300.8	1,127.1
			Right	150	150	0	0%						Signal	3.7	A					0.5	75.6
	78th St and EB Selmon Expressway	Westbound	Left	215	157	-58	-27%	320	243	-77	-24%	4.6	Stop	18.0	C	12	B	2	A	17.6	170.8
			Right	105	86	-19	-18%						Stop	0.6	A					0.0	0.0
		Northbound	Thru	1,070	1,069	-1	0%	1,070	1,069	-1	0%	0.0	Stop	0.4	A	0	A			0.0	0.0
		Southbound	Thru	1,050	999	-51	-5%	1,050	999	-51	-5%	1.6	Stop	0.3	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	240	232	-8	-3%	240	232	-8	-3%	0.5									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	90	87	-3	-3%	90	87	-3	-3%	0.3									
	50th St and Selmon Expressway	Eastbound	Left	190	144	-46	-24%	970	733	-237	-24%	8.1	Signal	35.7	D	41	D	256	F	29.6	219.2
			Right	780	589	-191	-24%						Signal	42.8	D					90.1	363.3
		Westbound	Left	45	44	-1	-2%	240	238	-2	-1%	0.1	Signal	65.4	E	18	B			14.8	106.9
			Right	195	194	-1	-1%						Signal	7.6	A					0.0	0.0
		Northbound	Left	345	335	-10	-3%	1,425	1,400	-25	-2%	0.7	Signal	171.9	F	190	F			77.7	396.4
			Thru	1,010	996	-14	-1%						Signal	198.5	F					1,863.0	2,965.2
			Right	70	69	-1	-1%						Signal	159.7	F					1.0	68.4
		Southbound	Left	470	305	-165	-35%	1,610	1,371	-239	-15%	6.2	Signal	1,184.3	F	478	F			2,909.1	3,073.1
			Thru	1,025	993	-32	-3%						Signal	285.5	F					2,908.2	3,072.1
			Right	115	73	-42	-37%						Signal	143.8	F					0.4	54.4

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (4:30-5:30 PM)

2046 Build Alt. 1

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	2,720	2,717	-3	0%	2,720	2,717	-3	0%	0.1									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	930	907	-23	-2%	930	907	-23	-2%	0.8									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	260	259	-1	0%	260	259	-1	0%	0.1									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	65	65	0	0%	65	65	0	0%	0.0									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	1,840	1,809	-31	-2%	1,840	1,809	-31	-2%	0.7									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	2,680	1,819	-861	-32%	2,680	1,819	-861	-32%	18.2									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	660	515	-145	-22%	740	572	-168	-23%	6.6	Stop	170.7	F	168	F	60	F	236.0	1,094.4
Downtown			Right	80	57	-23	-29%						Stop	145.6	F					3.6	84.6
Downtown		Westbound	Left	70	73	3	4%	325	324	-1	0%	0.1	Stop	88.2	F	27	D			18.5	135.3
Downtown			Right	255	251	-4	-2%						Stop	9.7	A					19.2	175.2
Downtown		Northbound	Left	285	281	-4	-1%	1,235	1,209	26	2%	0.7	Stop	57.5	F	28	D			40.1	347.2
Downtown			Thru	870	867	-3	0%						Stop	15.7	C					40.1	347.2
Downtown			Right	80	61	-19	-24%						Stop	70.3	F					17.4	154.6
Downtown		Southbound	Left	510	496	-14	-3%	2,695	2,681	-14	-1%	0.3	Stop	68.2	F	55	F			203.6	951.9
Downtown			Thru	1,640	1,640	0	0%						Stop	57.6	F					203.6	951.9
Downtown			Right	545	545	0	0%						Stop	34.3	D					28.1	669.9
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	770	551	-219	-28%	770	551	-219	-28%	8.5									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	1,780	1,717	-63	-4%	1,780	1,717	-63	-4%	1.5									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	1,220	625	-595	-49%	1,220	625	-595	-49%	19.6									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	670	638	-32	-5%	670	638	-32	-5%	1.3									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	1,020	800	-220	-22%	1,020	800	-220	-22%	7.3									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	210	173	-37	-18%	210	173	-37	-18%	2.7									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	1,200	793	-407	-34%	1,200	793	-407	-34%	12.9									
	Reversible Express Lanes																				
East Selmon	EB REL to I-75 SB	Eastbound	Off-Ramp	1,400	1,274	-126	-9%	1,400	1,274	-126	-9%	3.4									
East Selmon	EB LL to REL @ US-301	Eastbound	On-Ramp	320	292	-28	-9%	320	292	-28	-9%	1.6									
East Selmon	EB REL to LL @ US-301	Eastbound	Off-Ramp	730	659	-71	-10%	730	659	-71	-10%	2.7									
Downtown	EB LL to REL @ I-4	Eastbound	On-Ramp	1,260	997	-263	-21%	1,260	997	-263	-21%	7.8									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	540	419	-121	-22%	1,605	1,251	-354	-22%	9.4	Signal	234.5	F	239	F	105	F	2,682.6	2,873.5
Downtown			Thru	720	573	-147	-20%						Signal	232.5	F					2,682.6	2,873.5
Downtown			Right	345	259	-86	-25%						Signal	258.6	F					2,697.0	2,887.9
Downtown		Westbound	Left	175	162	-13	-7%	860	815	-45	-5%	1.6	Signal	77.2	E	55	D			231.6	836.2
Downtown			Thru	430	406	-24	-6%						Signal	55.6	E					231.6	836.2
Downtown			Right	255	247	-8	-3%						Signal	39.3	D					252.3	860.6
Downtown		Northbound	Left	30	33	3	10%	2,090	2,048	-42	-2%	0.9	Signal	42.5	D	44	D			266.6	919.4
Downtown			Thru	1,815	1,779	-36	-2%						Signal	43.6	D					266.6	919.4
Downtown			Right	245	236	-9	-4%						Signal	42.6	D					294.9	954.7
Downtown		Southbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-			0.0	0.0
Downtown			Thru	0	0	0	-						Signal	-	-					0.0	0.0
Downtown			Right	0	0	0	-						Signal	-	-					0.0	0.0
	NETWORK TOTAL							**57,610**	**52,453**	**-5,157**	**-9%**										

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2046 Build Alt. 2

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	5,100	3,773	-1,327	-26%	5,100	3,773	-1,327	-26%	19.9									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	630	602	-28	-4%	630	602	-28	-4%	1.1									
	WB Selmon Expressway to CD	Westbound	Off-Ramp	960	420	-540	-56%	960	420	-540	-56%	20.6									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	1,120	1,069	-51	-5%	1,120	1,069	-51	-5%	1.5									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	330	317	-13	-4%	890	852	-38	-4%	1.3	Signal	39.2	D	19	B	15	B	45.5	189.6
			Right	560	535	-25	-4%						Signal	7.3	A					10.1	107.4
		Northbound	Left	410	361	-49	-12%	1,830	1,818	-12	-1%	0.3	Signal	16.1	B	10	B			13.6	245.7
			Thru	1,420	1,457	37	3%						Signal	8.9	A					42.9	455.7
		Southbound	Thru	775	827	52	7%	1,165	1,172	7	1%	0.2	Signal	23.8	C	18	B			64.4	361.8
			Right	390	345	-45	-12%						Signal	3.3	A					1.6	120.9
	CD (SB I-75) to WB Selmon Expressway	Westbound	On-Ramp	1,290	1,037	-253	-20%	1,290	1,037	-253	-20%	7.4									
	US-301 and EB Selmon Expressway	Eastbound	Left	165	164	-1	-1%	610	596	-14	-2%	0.6	Signal	59.1	E	17	B	38	D	61.0	292.7
			Right	445	432	-13	-3%						Signal	1.1	A					0.0	0.0
		Northbound	Thru	2,400	2,300	-100	-4%	2,710	2,597	-113	-4%	2.2	Signal	67.5	E	63	E			695.7	2,300.6
			Right	310	297	-13	-4%						Signal	30.4	C					3.8	204.0
		Southbound	Left	260	262	2	1%	1,515	1,482	-33	-2%	0.9	Signal	8.3	A	3	A			7.0	247.2
			Thru	1,255	1,220	-35	-3%						Signal	1.9	A					4.7	60.8
	US-301 and WB Selmon Expressway	Westbound	Left	130	92	-38	-29%	960	682	-278	-29%	9.7	Signal	60.5	E	10	B	16	B	35.6	180.8
			Right	830	590	-240	-29%						Signal	2.4	A					0.0	0.0
		Northbound	Left	595	561	-34	-6%	2,565	2,463	-102	-4%	2.0	Signal	25.2	C	6	A			91.0	276.6
			Thru	1,970	1,902	-68	-3%						Signal	0.8	A					0.0	2.4
		Southbound	Thru	1,385	1,394	9	1%	1,560	1,563	3	0%	0.1	Signal	38.1	D	34	C			110.8	466.7
			Right	175	169	-6	-3%						Signal	4.1	A					2.2	103.4
	78th St and EB Selmon Expressway	Westbound	Left	95	91	-4	-4%	370	361	-9	-2%	0.5	Stop	18.5	C	5	A	1	A	13.3	134.6
			Right	275	270	-5	-2%						Stop	0.8	A					0.0	0.0
		Northbound	Thru	1,710	1,689	-21	-1%	1,710	1,689	-21	-1%	0.5	Stop	0.9	A	1	A			0.0	0.0
		Southbound	Thru	605	626	21	3%	605	626	21	3%	0.8	Stop	0.1	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	325	325	0	0%	325	325	0	0%	0.0									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	625	609	-16	-3%	625	609	-16	-3%	0.6									
	50th St and Selmon Expressway	Eastbound	Left	195	179	-16	-8%	460	431	-29	-6%	1.4	Signal	57.3	E	55	D	58	E	59.6	308.5
			Right	265	252	-13	-5%						Signal	52.9	D					50.8	208.8
		Westbound	Left	35	35	0	0%	410	368	-42	-10%	2.1	Signal	72.3	E	18	B			10.7	85.0
			Right	375	333	-42	-11%						Signal	12.6	B					0.0	9.9
		Northbound	Left	920	854	-66	-7%	2,105	2,001	-104	-5%	2.3	Signal	117.6	F	85	F			1,097.4	2,933.8
			Thru	1,150	1,114	-36	-3%						Signal	61.1	E					515.6	2,483.0
			Right	35	33	-2	-6%						Signal	46.0	D					0.0	5.2
		Southbound	Left	145	147	2	1%	1,745	1,722	-23	-1%	0.6	Signal	59.0	E	37	D			16.3	259.2
			Thru	1,350	1,330	-20	-1%						Signal	38.7	D					117.7	703.3
			Right	250	245	-5	-2%						Signal	14.1	B					13.0	221.1

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2046 Build Alt. 2

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	1,340	1,354	14	1%	1,340	1,354	14	1%	0.4									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	1,130	961	-169	-15%	1,130	961	-169	-15%	5.2									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	480	425	-55	-11%	480	425	-55	-11%	2.6									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	220	170	-50	-23%	220	170	-50	-23%	3.6									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	2,320	1,760	-560	-24%	2,320	1,760	-560	-24%	12.4									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	1,120	1,054	-66	-6%	1,120	1,054	-66	-6%	2.0									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	265	256	-9	-3%	460	443	-17	-4%	0.8	Stop	51.4	F	34	D	20	C	59.3	413.5
			Right	195	187	-8	-4%						Stop	9.4	A					11.3	150.3
		Westbound	Left	185	158	-27	-15%	700	596	-104	-15%	4.1	Stop	41.5	E	22	C			29.0	191.5
			Right	515	438	-77	-15%						Stop	15.4	C					51.9	365.1
		Northbound	Left	245	241	-4	-2%	1,795	1,781	-14	-1%	0.3	Stop	46.7	E	16	C			32.3	336.2
			Thru	1,540	1,529	-11	-1%						Stop	11.2	B					32.3	336.2
			Right	10	11	1	10%						Stop	51.9	F					2.8	40.0
		Southbound	Left	110	109	-1	-1%	1,515	1,500	-15	-1%	0.4	Stop	22.4	C	18	C			42.4	216.1
			Thru	790	787	-3	0%						Stop	21.1	C					42.4	216.1
			Right	615	604	-11	-2%						Stop	14.4	B					8.3	284.2
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	510	450	-60	-12%	510	450	-60	-12%	2.7									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	2,210	1,873	-337	-15%	2,210	1,873	-337	-15%	7.5									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	410	378	-32	-8%	410	378	-32	-8%	1.6									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	2,170	1,796	-374	-17%	2,170	1,796	-374	-17%	8.4									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	1,130	1,111	-19	-2%	1,130	1,111	-19	-2%	0.6									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	1,160	1,168	8	1%	1,160	1,168	8	1%	0.2									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	560	326	-234	-42%	560	326	-234	-42%	11.1									
	Reversible Express Lanes																				
East Selmon	NB I-75 to REL	Westbound	On-Ramp	1,470	1,081	-389	-26%	1,470	1,081	-389	-26%	10.9									
East Selmon	WB REL to LL @ US-301	Westbound	Off-Ramp	600	597	-3	-1%	600	597	-3	-1%	0.1									
East Selmon	WB LL to REL @ US-301	Westbound	On-Ramp	1,220	1,186	-34	-3%	1,220	1,186	-34	-3%	1.0									
Downtown	WB REL to LL @ Kennedy	Westbound	Off-Ramp	960	847	-113	-12%	960	847	-113	-12%	3.8									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	0	0	0	-	575	537	-38	-7%	1.6	Signal	-	-	66	E	39	D	46.5	353.7
			Thru	175	165	-10	-6%						Signal	65.5	E					46.5	353.7
			Right	400	372	-28	-7%						Signal	65.7	E					53.6	368.0
		Westbound	Left	120	107	-13	-11%	955	912	-43	-5%	1.4	Signal	61.4	E	54	D			269.2	873.7
			Thru	835	805	-30	-4%						Signal	52.8	D					269.2	873.7
			Right	0	0	0	-						Signal	-	-					288.9	898.2
		Northbound	Left	295	277	-18	-6%	380	359	-21	-6%	1.1	Signal	80.3	F	63	E			98.5	313.6
			Thru	0	0	0	-						Signal	-	-					98.5	313.6
			Right	85	82	-3	-4%						Signal	5.5	A					127.1	348.9
		Southbound	Left	265	244	-21	-8%	3,500	3,219	-281	-8%	4.8	Signal	42.6	D	27	C			258.0	1,218.4
			Thru	1,955	1,809	-146	-7%						Signal	40.6	D					258.0	1,218.4
			Right	1,280	1,166	-114	-9%						Signal	4.0	A					156.8	1,074.3
	NETWORK TOTAL							**60,150**	**54,142**	**-6,008**	**-10%**										

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (4:30-5:30 PM)

2046 Build Alt. 2

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	2,100	2,054	-46	-2%	2,100	2,054	-46	-2%	1.0									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	1,740	1,590	-150	-9%	1,740	1,590	-150	-9%	3.7									
	WB Selmon Expressway to CD	Westbound	Off-Ramp	530	286	-244	-46%	530	286	-244	-46%	12.1									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	2,580	2,297	-283	-11%	2,580	2,297	-283	-11%	5.7									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	490	426	-64	-13%	1,230	1,071	-159	-13%	4.7	Signal	40.5	D	22	C	22	C	59.1	246.0
			Right	740	645	-95	-13%						Signal	10.0	B					15.1	140.1
		Northbound	Left	410	408	-2	0%	1,345	1,385	40	3%	1.1	Signal	37.8	D	18	B			19.4	303.5
			Thru	935	977	42	4%						Signal	9.5	A					28.4	279.9
		Southbound	Thru	1,485	1,541	56	4%	1,940	1,946	6	0%	0.1	Signal	29.8	C	25	C			192.3	1,008.7
			Right	455	405	-50	-11%						Signal	6.1	A					6.8	267.0
	CD (SB I-75) to WB Selmon Expressway	Westbound	On-Ramp	680	565	-115	-17%	680	565	-115	-17%	4.6									
	US-301 and EB Selmon Expressway	Eastbound	Left	230	212	-18	-8%	1,580	1,409	-171	-11%	4.4	Signal	56.1	E	11	B	14	B	75.5	332.5
			Right	1,350	1,197	-153	-11%						Signal	3.0	A					1.0	179.7
		Northbound	Thru	1,390	1,354	-36	-3%	1,815	1,769	-46	-3%	1.1	Signal	39.7	D	32	C			112.9	449.6
			Right	425	415	-10	-2%						Signal	5.1	A					9.5	211.3
		Southbound	Left	405	398	-7	-2%	2,420	2,382	-38	-2%	0.8	Signal	7.1	A	3	A			9.6	275.8
			Thru	2,015	1,984	-31	-2%						Signal	1.8	A					6.4	63.7
	US-301 and WB Selmon Expressway	Westbound	Left	180	135	-45	-25%	530	393	-137	-26%	6.4	Signal	67.6	E	24	C	25	C	57.9	261.9
			Right	350	258	-92	-26%						Signal	1.4	A					0.0	0.0
		Northbound	Left	250	242	-8	-3%	1,620	1,564	-56	-3%	1.4	Signal	53.2	D	9	A			77.3	255.4
			Thru	1,370	1,322	-48	-4%						Signal	0.8	A					0.0	0.0
		Southbound	Thru	2,240	2,251	11	0%	2,390	2,401	11	0%	0.2	Signal	37.8	D	36	D			257.1	1,031.5
			Right	150	150	0	0%						Signal	2.8	A					0.3	57.1
	78th St and EB Selmon Expressway	Westbound	Left	215	156	-59	-27%	320	243	-77	-24%	4.6	Stop	17.8	C	12	B	2	A	17.8	143.0
			Right	105	87	-18	-17%						Stop	0.6	A					0.0	0.0
		Northbound	Thru	1,070	1,069	-1	0%	1,070	1,069	-1	0%	0.0	Stop	0.4	A	0	A			0.0	0.0
		Southbound	Thru	1,050	999	-51	-5%	1,050	999	-51	-5%	1.6	Stop	0.3	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	240	233	-7	-3%	240	233	-7	-3%	0.5									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	90	87	-3	-3%	90	87	-3	-3%	0.3									
	50th St and Selmon Expressway	Eastbound	Left	190	143	-47	-25%	970	730	-240	-25%	8.2	Signal	34.6	C	41	D	254	F	28.1	218.9
			Right	780	587	-193	-25%						Signal	43.1	D					90.9	376.1
		Westbound	Left	45	46	1	2%	240	239	-1	0%	0.1	Signal	65.2	E	19	B			14.8	116.2
			Right	195	193	-2	-1%						Signal	7.7	A					0.0	0.0
		Northbound	Left	345	332	-13	-4%	1,425	1,394	-31	-2%	0.8	Signal	167.2	F	185	F			79.0	376.1
			Thru	1,010	994	-16	-2%						Signal	192.3	F					1,788.2	2,973.6
			Right	70	68	-2	-3%						Signal	154.9	F					0.7	61.4
		Southbound	Left	470	305	-165	-35%	1,610	1,374	-236	-15%	6.1	Signal	1,182.5	F	479	F			2,925.8	3,078.3
			Thru	1,025	995	-30	-3%						Signal	288.3	F					2,924.8	3,077.6
			Right	115	74	-41	-36%						Signal	147.7	F					0.3	53.1

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (4:30-5:30 PM)

2046 Build Alt. 2

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	2,720	2,717	-3	0%	2,720	2,717	-3	0%	0.1									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	930	914	-16	-2%	930	914	-16	-2%	0.5									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	260	258	-2	-1%	260	258	-2	-1%	0.1									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	65	65	0	0%	65	65	0	0%	0.0									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	1,840	1,801	-39	-2%	1,840	1,801	-39	-2%	0.9									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	2,680	1,820	-860	-32%	2,680	1,820	-860	-32%	18.1									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	660	515	-145	-22%	740	572	-168	-23%	6.6	Stop	166.4	F	164	F	73	F	186.7	833.4
			Right	80	57	-23	-29%						Stop	142.1	F					3.9	101.4
		Westbound	Left	70	73	3	4%	325	323	-2	-1%	0.1	Stop	88.2	F	27	D			18.8	134.3
			Right	255	250	-5	-2%						Stop	9.7	A					19.0	182.8
		Northbound	Left	285	278	-7	-2%	1,235	1,207	-28	-2%	0.8	Stop	68.2	F	30	D			37.5	336.9
			Thru	870	868	-2	0%						Stop	15.5	C					37.5	336.9
			Right	80	61	-19	-24%						Stop	70.9	F					17.4	154.5
		Southbound	Left	510	483	-27	-5%	2,695	2,634	-61	-2%	1.2	Stop	106.1	F	78	F			270.7	1,080.7
			Thru	1,640	1,625	-15	-1%						Stop	69.2	F					270.7	1,080.7
			Right	545	526	-19	-3%						Stop	81.3	F					107.1	823.2
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	770	549	-221	-29%	770	549	-221	-29%	8.6									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	1,780	1,682	-98	-6%	1,780	1,682	-98	-6%	2.4									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	1,220	623	-597	-49%	1,220	623	-597	-49%	19.7									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	670	628	-42	-6%	670	628	-42	-6%	1.6									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	1,020	807	-213	-21%	1,020	807	-213	-21%	7.0									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	210	173	-37	-18%	210	173	-37	-18%	2.7									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	1,200	787	-413	-34%	1,200	787	-413	-34%	13.1									
	Reversible Express Lanes																				
East Selmon	EB REL to I-75 SB	Eastbound	Off-Ramp	1,400	1,269	-131	-9%	1,400	1,269	-131	-9%	3.6									
East Selmon	EB LL to REL @ US-301	Eastbound	On-Ramp	320	292	-28	-9%	320	292	-28	-9%	1.6									
East Selmon	EB REL to LL @ US-301	Eastbound	Off-Ramp	730	657	-73	-10%	730	657	-73	-10%	2.8									
Downtown	EB LL to REL @ I-4	Eastbound	On-Ramp	1,260	996	-264	-21%	1,260	996	-264	-21%	7.9									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	540	421	-119	-22%	1,605	1,242	-363	-23%	9.6	Signal	235.3	F	239	F	104	F	2,677.4	2,867.4
			Thru	720	566	-154	-21%						Signal	234.0	F					2,677.4	2,867.4
			Right	345	255	-90	-26%						Signal	258.1	F					2,691.8	2,881.8
		Westbound	Left	175	164	-11	-6%	860	820	-40	-5%	1.4	Signal	71.8	E	51	D			231.6	783.3
			Thru	430	408	-22	-5%						Signal	51.5	D					231.6	783.3
			Right	255	248	-7	-3%						Signal	35.6	D					252.2	807.7
		Northbound	Left	30	33	3	10%	2,090	2,048	-42	-2%	0.9	Signal	42.6	D	44	D			267.2	909.9
			Thru	1,815	1,779	-36	-2%						Signal	43.8	D					267.2	909.9
			Right	245	236	-9	-4%						Signal	42.6	D					295.7	945.2
		Southbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-			0.0	0.0
			Thru	0	0	0	-						Signal	-	-					0.0	0.0
			Right	0	0	0	-						Signal	-	-					0.0	0.0
	NETWORK TOTAL							**58,140**	**52,364**	**-5,776**	**-10%**										

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2046 Build Alt. 3

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	5,100	3,773	-1,327	-26%	5,100	3,773	-1,327	-26%	19.9									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	630	604	-26	-4%	630	604	-26	-4%	1.0									
	WB Selmon Expressway to CD	Westbound	Off-Ramp	960	420	-540	-56%	960	420	-540	-56%	20.6									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	1,120	1,071	-49	-4%	1,120	1,071	-49	-4%	1.5									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	330	269	-61	-18%	890	718	-172	-19%	6.1	Signal	39.2	D	20	B	13	B	41.1	183.7
			Right	560	449	-111	-20%						Signal	7.9	A					8.5	99.6
		Northbound	Left	410	362	-48	-12%	1,830	1,818	-12	-1%	0.3	Signal	14.4	B	9	A			10.8	205.7
			Thru	1,420	1,456	36	3%						Signal	7.9	A					35.9	400.8
		Southbound	Thru	775	827	52	7%	1,165	1,171	6	1%	0.2	Signal	21.7	C	16	B			57.3	359.3
			Right	390	344	-46	-12%						Signal	3.3	A					1.8	136.1
	CD (SB I-75) to WB Selmon Expressway	Westbound	On-Ramp	1,290	1,037	-253	-20%	1,290	1,037	-253	-20%	7.4									
	US-301 and EB Selmon Expressway	Eastbound	Left	165	165	0	0%	610	597	-13	-2%	0.5	Signal	60.1	E	17	B	49	D	63.6	295.6
			Right	445	432	-13	-3%						Signal	1.1	A					0.0	4.9
		Northbound	Thru	2,400	2,336	-64	-3%	2,710	2,587	-123	-5%	2.4	Signal	85.5	F	82	F			935.7	2,414.0
			Right	310	251	-59	-19%						Signal	45.3	D					2.2	180.7
		Southbound	Left	260	222	-38	-15%	1,515	1,457	-58	-4%	1.5	Signal	8.4	A	3	A			5.8	209.1
			Thru	1,255	1,235	-20	-2%						Signal	1.9	A					4.9	69.2
	US-301 and WB Selmon Expressway	Westbound	Left	130	93	-37	-28%	960	683	-277	-29%	9.7	Signal	61.9	E	10	B	16	B	37.8	179.1
			Right	830	590	-240	-29%						Signal	2.4	A					0.0	0.0
		Northbound	Left	595	571	-24	-4%	2,565	2,493	-72	-3%	1.4	Signal	24.9	C	6	A			95.0	308.1
			Thru	1,970	1,922	-48	-2%						Signal	0.8	A					0.2	27.1
		Southbound	Thru	1,385	1,367	-18	-1%	1,560	1,556	-4	0%	0.1	Signal	38.0	D	34	C			112.5	473.6
			Right	175	189	14	8%						Signal	4.1	A					2.3	110.4
	78th St and EB Selmon Expressway	Westbound	Left	95	91	-4	-4%	370	361	-9	-2%	0.5	Stop	18.8	C	5	A	1	A	14.0	141.9
			Right	275	270	-5	-2%						Stop	0.8	A					0.0	0.0
		Northbound	Thru	1,710	1,689	-21	-1%	1,710	1,689	-21	-1%	0.5	Stop	0.9	A	1	A			0.0	0.0
		Southbound	Thru	605	626	21	3%	605	626	21	3%	0.8	Stop	0.2	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	325	325	0	0%	325	325	0	0%	0.0									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	625	609	-16	-3%	625	609	-16	-3%	0.6									
	50th St and Selmon Expressway	Eastbound	Left	195	180	-15	-8%	460	433	-27	-6%	1.3	Signal	56.6	E	54	D	54	D	58.4	298.5
			Right	265	253	-12	-5%						Signal	53.0	D					51.9	208.2
		Westbound	Left	35	36	1	3%	410	368	-42	-10%	2.1	Signal	71.4	E	18	B			10.9	91.5
			Right	375	332	-43	-11%						Signal	12.5	B					0.0	0.0
		Northbound	Left	920	851	-69	-8%	2,105	1,998	-107	-5%	2.4	Signal	106.8	F	76	E			970.0	2,825.5
			Thru	1,150	1,114	-36	-3%						Signal	53.0	D					395.6	2,057.6
			Right	35	33	-2	-6%						Signal	36.1	D					0.0	14.5
		Southbound	Left	145	146	1	1%	1,745	1,711	-34	-2%	0.8	Signal	58.4	E	37	D			16.4	244.3
			Thru	1,350	1,320	-30	-2%						Signal	38.7	D					111.8	656.7
			Right	250	245	-5	-2%						Signal	13.8	B					13.9	262.4

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2046 Build Alt. 3

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	1,340	1,354	14	1%	1,340	1,354	14	1%	0.4									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	1,130	961	-169	-15%	1,130	961	-169	-15%	5.2									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	480	425	-55	-11%	480	425	-55	-11%	2.6									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	220	171	-49	-22%	220	171	-49	-22%	3.5									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	2,320	1,776	-544	-23%	2,320	1,776	-544	-23%	12.0									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	1,120	1,054	-66	-6%	1,120	1,054	-66	-6%	2.0									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	265	256	-9	-3%	460	443	-17	-4%	0.8	Stop	51.7	F	34	D	19	C	60.3	409.2
			Right	195	187	-8	-4%						Stop	9.4	A					11.2	141.7
		Westbound	Left	185	159	-26	-14%	700	597	-103	-15%	4.0	Stop	41.4	E	23	C			28.8	202.4
			Right	515	438	-77	-15%						Stop	15.7	C					54.3	350.2
		Northbound	Left	245	243	-2	-1%	1,795	1,783	-12	-1%	0.3	Stop	40.6	E	16	C			32.2	334.2
			Thru	1,540	1,529	-11	-1%						Stop	11.3	B					32.2	334.2
			Right	10	11	1	10%						Stop	51.9	F					2.8	40.0
		Southbound	Left	110	109	-1	-1%	1,515	1,505	-10	-1%	0.3	Stop	21.8	C	16	C			42.5	215.9
			Thru	790	787	-3	0%						Stop	21.2	C					42.5	215.9
			Right	615	609	-6	-1%						Stop	8.2	A					7.8	266.5
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	510	448	-62	-12%	510	448	-62	-12%	2.8									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	2,210	1,892	-318	-14%	2,210	1,892	-318	-14%	7.0									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	410	382	-28	-7%	410	382	-28	-7%	1.4									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	2,170	1,810	-360	-17%	2,170	1,810	-360	-17%	8.1									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	1,130	1,111	-19	-2%	1,130	1,111	-19	-2%	0.6									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	1,160	1,167	7	1%	1,160	1,167	7	1%	0.2									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	560	331	-229	-41%	560	331	-229	-41%	10.8									
	Reversible Express Lanes																				
East Selmon	NB I-75 to REL	Westbound	On-Ramp	1,470	1,081	-389	-26%	1,470	1,081	-389	-26%	10.9									
East Selmon	WB REL to LL @ US-301	Westbound	Off-Ramp	600	597	-3	-1%	600	597	-3	-1%	0.1									
East Selmon	WB LL to REL @ US-301	Westbound	On-Ramp	1,220	1,187	-33	-3%	1,220	1,187	-33	-3%	1.0									
Downtown	WB REL to LL @ Kennedy	Westbound	Off-Ramp	960	847	-113	-12%	960	847	-113	-12%	3.8									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	0	0	0	-	575	537	-38	-7%	1.6	Signal	-	-	66	E	40	D	45.7	349.7
			Thru	175	165	-10	-6%						Signal	67.6	E					45.7	349.7
			Right	400	372	-28	-7%						Signal	64.9	E					52.8	364.0
		Westbound	Left	120	108	-12	-10%	955	909	-46	-5%	1.5	Signal	62.3	E	55	D			283.4	897.9
			Thru	835	801	-34	-4%						Signal	53.9	D					283.4	897.9
			Right	0	0	0	-						Signal	-	-					303.2	922.3
		Northbound	Left	295	275	-20	-7%	380	357	-23	-6%	1.2	Signal	85.2	F	67	E			110.1	337.4
			Thru	0	0	0	-						Signal	-	-					110.1	337.4
			Right	85	82	-3	-4%						Signal	5.5	A					138.9	372.7
		Southbound	Left	265	245	-20	-8%	3,500	3,227	-273	-8%	4.7	Signal	42.7	D	28	C			276.7	1,424.3
			Thru	1,955	1,813	-142	-7%						Signal	40.8	D					276.7	1,424.3
			Right	1,280	1,169	-111	-9%						Signal	4.7	A					173.4	1,280.1
	NETWORK TOTAL							**60,150**	**54,057**	**-6,093**	**-10%**										

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (4:30-5:30 PM)

2046 Build Alt. 3

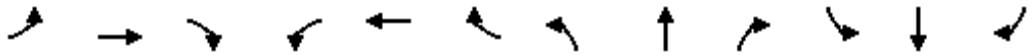
	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	2,100	2,054	-46	-2%	2,100	2,054	-46	-2%	1.0									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	1,740	1,587	-153	-9%	1,740	1,587	-153	-9%	3.8									
	WB Selmon Expressway to CD	Westbound	Off-Ramp	530	286	-244	-46%	530	286	-244	-46%	12.1									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	2,580	2,289	-291	-11%	2,580	2,289	-291	-11%	5.9									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	490	411	-79	-16%	1,230	1,035	-195	-16%	5.8	Signal	40.1	D	22	C	22	C	59.1	247.2
			Right	740	624	-116	-16%						Signal	9.9	A					16.1	154.1
		Northbound	Left	410	411	1	0%	1,345	1,384	39	3%	1.1	Signal	37.0	D	17	B			19.0	269.6
			Thru	935	973	38	4%						Signal	8.9	A					25.7	287.2
		Southbound	Thru	1,485	1,537	52	4%	1,940	1,942	2	0%	0.0	Signal	29.3	C	24	C			201.3	1,022.7
			Right	455	405	-50	-11%						Signal	6.1	A					6.7	268.6
	CD (SB I-75) to WB Selmon Expressway	Westbound	On-Ramp	680	565	-115	-17%	680	565	-115	-17%	4.6									
	US-301 and EB Selmon Expressway	Eastbound	Left	230	211	-19	-8%	1,580	1,407	-173	-11%	4.5	Signal	55.2	E	11	B	14	B	77.3	360.2
			Right	1,350	1,196	-154	-11%						Signal	3.0	A					0.8	144.7
		Northbound	Thru	1,390	1,368	-22	-2%	1,815	1,769	-46	-3%	1.1	Signal	39.8	D	32	C			114.3	467.5
			Right	425	401	-24	-6%						Signal	4.8	A					8.5	208.1
		Southbound	Left	405	384	-21	-5%	2,420	2,375	-45	-2%	0.9	Signal	7.4	A	3	A			11.5	282.0
			Thru	2,015	1,991	-24	-1%						Signal	1.8	A					6.5	64.3
	US-301 and WB Selmon Expressway	Westbound	Left	180	135	-45	-25%	530	393	-137	-26%	6.4	Signal	67.6	E	24	C	25	C	57.9	261.9
			Right	350	258	-92	-26%						Signal	1.4	A					0.0	0.0
		Northbound	Left	250	248	-2	-1%	1,620	1,577	-43	-3%	1.1	Signal	53.6	D	9	A			80.6	263.3
			Thru	1,370	1,329	-41	-3%						Signal	0.8	A					0.0	0.0
		Southbound	Thru	2,240	2,244	4	0%	2,390	2,401	11	0%	0.2	Signal	38.0	D	36	D			262.5	1,052.8
			Right	150	157	7	5%						Signal	3.0	A					0.4	58.8
	78th St and EB Selmon Expressway	Westbound	Left	215	157	-58	-27%	320	243	-77	-24%	4.6	Stop	17.6	C	12	B	2	A	17.5	152.0
			Right	105	86	-19	-18%						Stop	0.6	A					0.0	0.0
		Northbound	Thru	1,070	1,069	-1	0%	1,070	1,069	-1	0%	0.0	Stop	0.4	A	0	A			0.0	0.0
		Southbound	Thru	1,050	1,002	-48	-5%	1,050	1,002	-48	-5%	1.5	Stop	0.3	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	240	233	-7	-3%	240	233	-7	-3%	0.5									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	90	87	-3	-3%	90	87	-3	-3%	0.3									
	50th St and Selmon Expressway	Eastbound	Left	190	143	-47	-25%	970	733	-237	-24%	8.1	Signal	35.0	C	41	D	263	F	29.1	206.5
			Right	780	590	-190	-24%						Signal	42.8	D					90.0	351.5
		Westbound	Left	45	46	1	2%	240	239	-1	0%	0.1	Signal	64.3	E	19	B			14.9	115.5
			Right	195	193	-2	-1%						Signal	7.8	A					0.0	0.0
		Northbound	Left	345	331	-14	-4%	1,425	1,384	-41	-3%	1.1	Signal	188.5	F	207	F			175.0	659.7
			Thru	1,010	985	-25	-2%						Signal	214.8	F					1,847.0	2,927.7
			Right	70	68	-2	-3%						Signal	177.2	F					0.8	57.0
		Southbound	Left	470	306	-164	-35%	1,610	1,392	-218	-14%	5.6	Signal	1,175.6	F	477	F			2,923.6	3,077.1
			Thru	1,025	1,012	-13	-1%						Signal	290.1	F					2,922.6	3,076.2
			Right	115	74	-41	-36%						Signal	147.5	F					0.5	72.0

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (4:30-5:30 PM)

2046 Build Alt. 3

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay						Queue	
														Movement		Approach		Intersection		Movement
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	2,720	2,717	-3	0%	2,720	2,717	-3	0%	0.1									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	930	914	-16	-2%	930	914	-16	-2%	0.5									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	260	258	-2	-1%	260	258	-2	-1%	0.1									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	65	65	0	0%	65	65	0	0%	0.0									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	1,840	1,800	-40	-2%	1,840	1,800	-40	-2%	0.9									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	2,680	1,833	-847	-32%	2,680	1,833	-847	-32%	17.8									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	660	517	-143	-22%	740	575	-165	-22%	6.4	Stop	169.0	F	167	F	73	F	540.6	1,346.8
			Right	80	58	-22	-28%						Stop	144.4	F					3.9	87.5
		Westbound	Left	70	73	3	4%	325	323	-2	-1%	0.1	Stop	88.7	F	27	D			18.8	134.7
			Right	255	250	-5	-2%						Stop	9.5	A					18.2	170.6
		Northbound	Left	285	278	-7	-2%	1,235	1,207	-28	-2%	0.8	Stop	70.0	F	31	D			38.6	334.5
			Thru	870	868	-2	0%						Stop	15.6	C					38.6	334.5
			Right	80	61	-19	-24%						Stop	69.6	F					17.4	154.6
		Southbound	Left	510	475	-35	-7%	2,695	2,596	-99	-4%	1.9	Stop	101.4	F	77	F			398.6	1,180.8
			Thru	1,640	1,605	-35	-2%						Stop	69.1	F					398.6	1,180.8
			Right	545	516	-29	-5%						Stop	77.9	F					241.1	917.4
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	770	549	-221	-29%	770	549	-221	-29%	8.6									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	1,780	1,716	-64	-4%	1,780	1,716	-64	-4%	1.5									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	1,220	656	-564	-46%	1,220	656	-564	-46%	18.4									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	670	639	-31	-5%	670	639	-31	-5%	1.2									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	1,020	809	-211	-21%	1,020	809	-211	-21%	7.0									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	210	175	-35	-17%	210	175	-35	-17%	2.5									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	1,200	796	-404	-34%	1,200	796	-404	-34%	12.8									
	Reversible Express Lanes																				
East Selmon	EB REL to I-75 SB	Eastbound	Off-Ramp	1,400	1,275	-125	-9%	1,400	1,275	-125	-9%	3.4									
East Selmon	EB LL to REL @ US-301	Eastbound	On-Ramp	320	293	-27	-8%	320	293	-27	-8%	1.5									
East Selmon	EB REL to LL @ US-301	Eastbound	Off-Ramp	730	658	-72	-10%	730	658	-72	-10%	2.7									
Downtown	EB LL to REL @ I-4	Eastbound	On-Ramp	1,260	995	-265	-21%	1,260	995	-265	-21%	7.9									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	540	418	-122	-23%	1,605	1,248	-357	-22%	9.5	Signal	233.5	F	238	F	104	F	2,683.2	2,877.5
			Thru	720	571	-149	-21%						Signal	232.7	F					2,683.2	2,877.5
			Right	345	259	-86	-25%						Signal	257.1	F					2,697.6	2,891.9
		Westbound	Left	175	164	-11	-6%	860	823	-37	-4%	1.3	Signal	67.4	E	49	D			193.1	672.5
			Thru	430	410	-20	-5%						Signal	50.1	D					193.1	672.5
			Right	255	249	-6	-2%						Signal	34.8	C					213.6	697.0
		Northbound	Left	30	33	3	10%	2,090	2,048	-42	-2%	0.9	Signal	42.8	D	44	D			265.7	913.0
			Thru	1,815	1,779	-36	-2%						Signal	43.7	D					265.7	913.0
			Right	245	236	-9	-4%						Signal	42.6	D					294.2	948.3
		Southbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-			0.0	0.0
			Thru	0	0	0	-						Signal	-	-					0.0	0.0
			Right	0	0	0	-						Signal	-	-					0.0	0.0
	NETWORK TOTAL							**58,140**	**52,414**	**-5,726**	**-10%**										

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	2420	700	295	2120	0	0	0	0
Future Volume (vph)	0	0	0	0	2420	700	295	2120	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	1.00	1.00	1.00	1.00
Frt					0.966							
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6190	0	1770	5085	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	6190	0	1770	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)							22					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		273			600			296			353	
Travel Time (s)		6.2			13.6			6.7			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	2630	761	321	2304	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	3391	0	321	2304	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2		1	2				
Detector Template							Left					
Leading Detector (ft)					100		20	100				
Trailing Detector (ft)					0		0	0				
Detector 1 Position(ft)					0		0	0				
Detector 1 Size(ft)					6		20	6				
Detector 1 Type					Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0		0.0	0.0				
Detector 1 Queue (s)					0.0		0.0	0.0				
Detector 1 Delay (s)					0.0		0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Detector Phase					2		4	4				
Switch Phase												
Minimum Initial (s)					10.0		10.0	10.0				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)					29.8		36.1	36.1				
Total Split (s)					76.0		64.0	64.0				
Total Split (%)					54.3%		45.7%	45.7%				
Maximum Green (s)					70.2		57.9	57.9				
Yellow Time (s)					3.7		3.7	3.7				
All-Red Time (s)					2.1		2.4	2.4				
Lost Time Adjust (s)					0.0		0.0	0.0				
Total Lost Time (s)					5.8		6.1	6.1				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					3.0		3.0	3.0				
Recall Mode					C-Max		None	None				
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		23.0	23.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					70.2		57.9	57.9				
Actuated g/C Ratio					0.50		0.41	0.41				
v/c Ratio					1.09		0.43	1.10				
Control Delay					58.4		29.0	87.0				
Queue Delay					3.2		15.3	3.1				
Total Delay					61.6		44.3	90.0				
LOS					E		D	F				
Approach Delay					61.6			84.4				
Approach LOS					E			F				

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 38 (27%), Referenced to phase 2:WBT and 6:, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.10			
Intersection Signal Delay: 71.6		Intersection LOS: E	
Intersection Capacity Utilization 97.7%		ICU Level of Service F	
Analysis Period (min) 15			

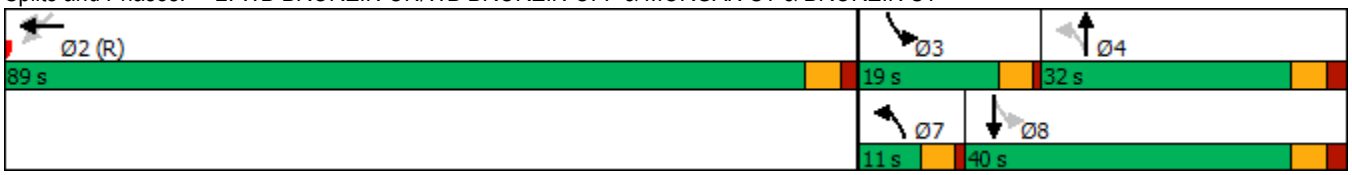
Splits and Phases: 1: FLORIDA AVE & BROREIN ST

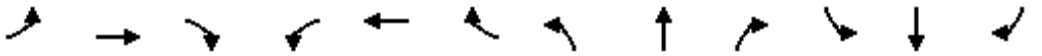
Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations										
Traffic Volume (vph)	155	2145	165	225	140	285	260	180	1190	980
Future Volume (vph)	155	2145	165	225	140	285	260	180	1190	980
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0			0		0	100	
Storage Lanes	0		1			1		0	1	
Taper Length (ft)	0		0			0				
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Frt				0.943			0.939		0.850	0.850
Flt Protected		0.997	0.950			0.950				
Satd. Flow (prot)	0	3529	1770	1757	0	1770	1749	0	2787	1583
Flt Permitted		0.997	0.154			0.131				
Satd. Flow (perm)	0	3529	287	1757	0	244	1749	0	2787	1583
Right Turn on Red					Yes					Yes
Satd. Flow (RTOR)				91						186
Link Speed (mph)		30		30			30			
Link Distance (ft)		591		494			379			
Travel Time (s)		13.4		11.2			8.6			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	168	2332	179	245	152	310	283	196	1293	1065
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	2500	179	397	0	310	479	0	1293	1065
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Left	Left	Right	Left	Left	Right	R NA	Right
Median Width(ft)		12		12			12			
Link Offset(ft)		0		0			0			
Crosswalk Width(ft)		16		16			16			
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		15		9	15		9	9	9
Number of Detectors	1	2	1	2		1	2		1	1
Detector Template	Left		Left			Left			Right	Right
Leading Detector (ft)	20	100	20	100		20	100		20	20
Trailing Detector (ft)	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel										
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94		94			94			
Detector 2 Size(ft)		6		6			6			
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			
Detector 2 Channel										
Detector 2 Extend (s)		0.0		0.0			0.0			
Turn Type	Perm	NA	pm+pt	NA		pm+pt	NA		Perm	Free
Protected Phases		2	7	4		3	8			
Permitted Phases	2		4			8			2	Free

Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Detector Phase	2	2	7	4		3	8		2	
Switch Phase										
Minimum Initial (s)	10.0	10.0	5.0	10.0		5.0	10.0		10.0	
Minimum Split (s)	24.7	24.7	9.5	32.0		9.5	32.0		24.7	
Total Split (s)	89.0	89.0	11.0	32.0		19.0	40.0		89.0	
Total Split (%)	63.6%	63.6%	7.9%	22.9%		13.6%	28.6%		63.6%	
Maximum Green (s)	83.3	83.3	6.5	26.0		14.5	34.0		83.3	
Yellow Time (s)	3.7	3.7	3.5	3.7		3.5	3.7		3.7	
All-Red Time (s)	2.0	2.0	1.0	2.3		1.0	2.3		2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.7	4.5	6.0		4.5	6.0		5.7	
Lead/Lag			Lead	Lag		Lead	Lag			
Lead-Lag Optimize?			Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	None	Max		None	Max		C-Max	
Walk Time (s)	7.0	7.0		7.0			7.0		7.0	
Flash Dont Walk (s)	12.0	12.0		19.0			19.0		12.0	
Pedestrian Calls (#/hr)	0	0		0			0		0	
Act Effct Green (s)		83.3	34.0	26.0		46.5	34.0		83.3	140.0
Actuated g/C Ratio		0.60	0.24	0.19		0.33	0.24		0.60	1.00
v/c Ratio		1.19	1.30	0.99		1.30	1.13		0.78	0.67
Control Delay		103.2	210.8	86.6		193.5	131.5		25.7	2.3
Queue Delay		0.6	0.0	0.0		0.0	0.0		5.3	0.0
Total Delay		103.7	210.8	86.6		193.5	131.5		31.0	2.3
LOS		F	F	F		F	F		C	A
Approach Delay		103.7		125.2			155.8			
Approach LOS		F		F			F			

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 14 (10%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.30			
Intersection Signal Delay: 79.8		Intersection LOS: E	
Intersection Capacity Utilization 159.8%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: WB BROREIN ON/WB BROREIN OFF & MORGAN ST & BROREIN ST



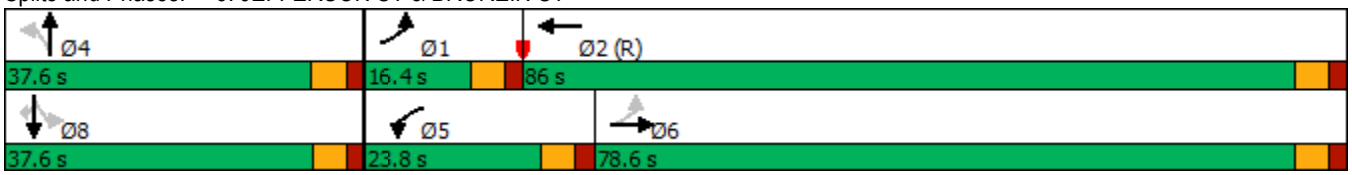


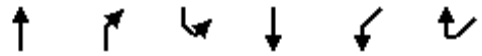
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	245	15	125	1810	205	20	245	15	15	15	470
Future Volume (vph)	165	245	15	125	1810	205	20	245	15	15	15	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	80		0	115		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			0		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.991			0.985			0.991				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1846	0	1770	3486	0	1770	3507	0	1770	1863	1583
Flt Permitted	0.053			0.950			0.747			0.506		
Satd. Flow (perm)	99	1846	0	1770	3486	0	1391	3507	0	943	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			14			4				147
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		591			202			322			162	
Travel Time (s)		13.4			4.6			7.3			3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	179	266	16	136	1967	223	22	266	16	16	16	511
Shared Lane Traffic (%)												
Lane Group Flow (vph)	179	282	0	136	2190	0	22	282	0	16	16	511
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left			Left			Left			Left		Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6						4			8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6		5	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	15.5	23.7		10.5	23.7		23.7	23.7		23.5	23.5	23.5
Total Split (s)	16.4	78.6		23.8	86.0		37.6	37.6		37.6	37.6	37.6
Total Split (%)	11.7%	56.1%		17.0%	61.4%		26.9%	26.9%		26.9%	26.9%	26.9%
Maximum Green (s)	10.9	72.9		18.3	80.3		31.9	31.9		32.1	32.1	32.1
Yellow Time (s)	3.5	3.7		3.5	3.7		3.7	3.7		3.5	3.5	3.5
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.5	5.7		5.5	5.7		5.7	5.7		5.5	5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Max		None	C-Max		None	None		None	None	None
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)	87.0	75.9		15.3	80.3		31.9	31.9		32.1	32.1	32.1
Actuated g/C Ratio	0.62	0.54		0.11	0.57		0.23	0.23		0.23	0.23	0.23
v/c Ratio	0.94	0.28		0.71	1.09		0.07	0.35		0.07	0.04	1.07
Control Delay	37.0	25.7		79.5	79.7		43.3	46.2		43.6	42.4	98.3
Queue Delay	0.0	0.0		0.0	3.9		0.0	0.0		0.0	0.0	10.3
Total Delay	37.0	25.7		79.5	83.7		43.3	46.2		43.6	42.4	108.6
LOS	D	C		E	F		D	D		D	D	F
Approach Delay		30.1			83.4			46.0			104.7	
Approach LOS		C			F			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 4 (3%), Referenced to phase 2:WBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 76.7		Intersection LOS: E	
Intersection Capacity Utilization 108.1%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 3: JEFFERSON ST & BROREIN ST





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	370	245	165	500	0	0
Future Volume (vph)	370	245	165	500	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	115		0	0
Storage Lanes		1	1		0	0
Taper Length (ft)			25		0	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	162			583	231	
Travel Time (s)	3.7			13.3	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	402	266	179	543	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	402	266	179	543	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.3%		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												
Traffic Volume (vph)	0	0	0	380	4120	485	345	520	0	0	160	50
Future Volume (vph)	0	0	0	380	4120	485	345	520	0	0	160	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.984						0.964	
Flt Protected				0.950				0.980				
Satd. Flow (prot)	0	0	0	1770	6305	0	0	3468	0	0	3412	0
Flt Permitted				0.950				0.724				
Satd. Flow (perm)	0	0	0	1770	6305	0	0	2562	0	0	3412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					45						4	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			319			716			284	
Travel Time (s)		13.1			7.3			16.3			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	413	4478	527	375	565	0	0	174	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	413	5005	0	0	940	0	0	228	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left			Left					
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					4		5	2			6	
Permitted Phases				4			2					
Detector Phase				4	4		5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0		5.0	10.0			10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				25.7	25.7		9.5	25.9			25.9	
Total Split (s)				100.0	100.0		10.0	40.0			30.0	
Total Split (%)				71.4%	71.4%		7.1%	28.6%			21.4%	
Maximum Green (s)				94.3	94.3		5.5	34.1			24.1	
Yellow Time (s)				3.7	3.7		3.5	3.7			3.7	
All-Red Time (s)				2.0	2.0		1.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0			0.0			0.0	
Total Lost Time (s)				5.7	5.7			5.9			5.9	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Recall Mode				Max	Max		None	C-Max			C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)				94.3	94.3			34.1			34.1	
Actuated g/C Ratio				0.67	0.67			0.24			0.24	
v/c Ratio				0.35	1.17			1.51			0.27	
Control Delay				8.8	100.7			272.9			43.2	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				8.8	100.7			272.9			43.2	
LOS				A	F			F			D	
Approach Delay					93.7			272.9			43.2	
Approach LOS					F			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 12 (9%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.51			
Intersection Signal Delay: 117.5		Intersection LOS: F	
Intersection Capacity Utilization 115.1%		ICU Level of Service H	
Analysis Period (min) 15			

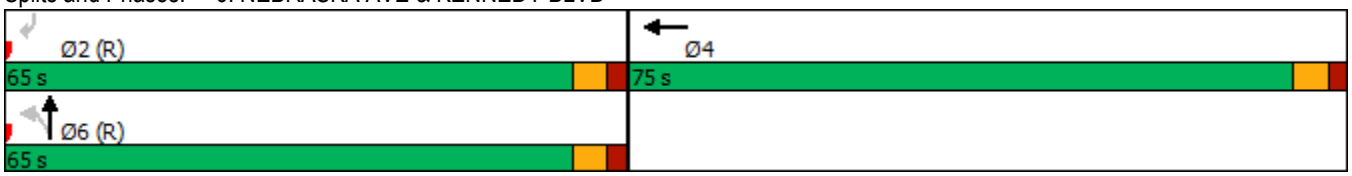
Splits and Phases: 5: JEFFERSON ST & KENNEDY BLVD

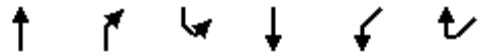
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1550	460	40	520	0	0	0	335
Future Volume (vph)	0	0	0	0	1550	460	40	520	0	0	0	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88
Frt					0.966							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4912	0	1770	1863	0	0	0	2787
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	4912	0	1770	1863	0	0	0	2787
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					75		22					22
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		847			465			292			201	
Travel Time (s)		19.3			10.6			6.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1685	500	43	565	0	0	0	364
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2185	0	43	565	0	0	0	364
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				Perm
Protected Phases					4			6				
Permitted Phases							6					2
Minimum Split (s)					29.8		24.9	24.9				10.9
Total Split (s)					75.0		65.0	65.0				65.0
Total Split (%)					53.6%		46.4%	46.4%				46.4%
Maximum Green (s)					69.2		59.1	59.1				59.1
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.1		2.2	2.2				2.2
Lost Time Adjust (s)					0.0		0.0	0.0				0.0
Total Lost Time (s)					5.8		5.9	5.9				5.9
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		12.0	12.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					69.2		59.1	59.1				59.1
Actuated g/C Ratio					0.49		0.42	0.42				0.42
v/c Ratio					0.89		0.06	0.72				0.31
Control Delay					36.2		14.3	39.9				22.6
Queue Delay					0.0		0.0	38.3				0.0
Total Delay					36.2		14.3	78.2				22.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					D		B	E				C
Approach Delay					36.2			73.7			22.6	
Approach LOS					D			E			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 116 (83%), Referenced to phase 2:SBR and 6:NBTL, Start of Green			
Natural Cycle: 70			
Control Type: Pretimed			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 41.9		Intersection LOS: D	
Intersection Capacity Utilization 77.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: NEBRASKA AVE & KENNEDY BLVD





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	640	340	170	335	0	0
Future Volume (vph)	640	340	170	335	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	130		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		0	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt	0.953					
Flt Protected			0.950			
Satd. Flow (prot)	1775	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1775	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			390	272	
Travel Time (s)	4.6			8.9	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	696	370	185	364	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1066	0	185	364	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

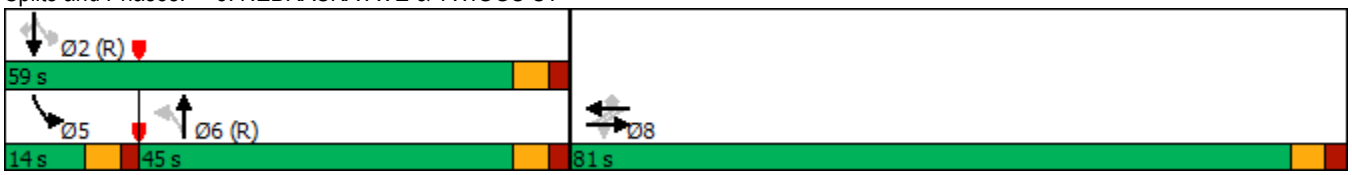
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	295	40	250	1445	715	105	440	95	185	215	65
Future Volume (vph)	5	295	40	250	1445	715	105	440	95	185	215	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	150		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	0			0			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.983				0.850		0.973				0.850
Flt Protected		0.999			0.993		0.950			0.950		
Satd. Flow (prot)	0	3476	0	0	3514	1583	1770	1812	0	1770	3539	1583
Flt Permitted		0.821			0.792		0.606			0.089		
Satd. Flow (perm)	0	2856	0	0	2803	1583	1129	1812	0	166	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16				284		8				24
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			652			390			257	
Travel Time (s)		17.7			14.8			8.9			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	321	43	272	1571	777	114	478	103	201	234	71
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	369	0	0	1843	777	114	581	0	201	234	71
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left			Left		Right	Left			Left		Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm
Protected Phases		8			8			6		5	2	
Permitted Phases	8			8		8	6			2		2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8		8	8	8	6	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		5.0	10.0	10.0
Minimum Split (s)	29.1	29.1		29.1	29.1	29.1	28.0	28.0		10.7	28.0	28.0
Total Split (s)	81.0	81.0		81.0	81.0	81.0	45.0	45.0		14.0	59.0	59.0
Total Split (%)	57.9%	57.9%		57.9%	57.9%	57.9%	32.1%	32.1%		10.0%	42.1%	42.1%
Maximum Green (s)	74.9	74.9		74.9	74.9	74.9	39.0	39.0		8.3	53.0	53.0
Yellow Time (s)	3.7	3.7		3.7	3.7	3.7	3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.4		2.4	2.4	2.4	2.3	2.3		2.0	2.3	2.3
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.1			6.1	6.1	6.0	6.0		5.7	6.0	6.0
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		2.0	3.0	3.0
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Dont Walk (s)	16.0	16.0		16.0	16.0	16.0	15.0	15.0			15.0	15.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	0
Act Effct Green (s)		74.9			74.9	74.9	39.0	39.0		53.3	53.0	53.0
Actuated g/C Ratio		0.54			0.54	0.54	0.28	0.28		0.38	0.38	0.38
v/c Ratio		0.24			1.23	0.79	0.36	1.14		1.27	0.17	0.12
Control Delay		17.0			124.2	4.7	35.1	113.7		192.1	29.4	19.8
Queue Delay		0.0			0.2	1.5	0.0	0.0		0.0	0.0	0.0
Total Delay		17.0			124.4	6.2	35.1	113.7		192.1	29.4	19.8
LOS		B			F	A	D	F		F	C	B
Approach Delay		17.0			89.3			100.8			92.7	
Approach LOS		B			F			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 129 (92%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.27			
Intersection Signal Delay: 85.3		Intersection LOS: F	
Intersection Capacity Utilization 115.9%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 8: NEBRASKA AVE & TWIGGS ST



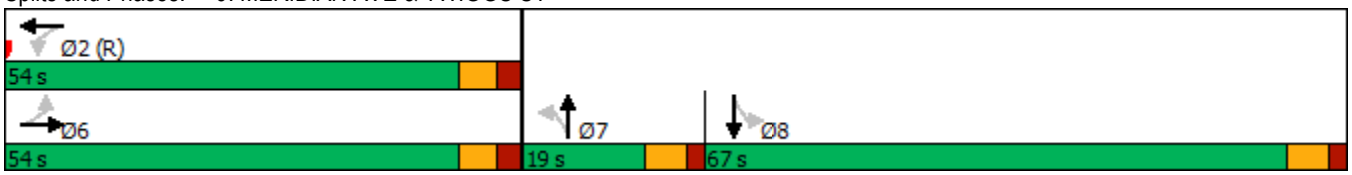
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	175	400	120	835	0	295	0	85	265	1955	1280
Future Volume (vph)	0	175	400	120	835	0	295	0	85	265	1955	1280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	1.00
Frt		0.896						0.967				0.850
Flt Protected					0.994			0.963			0.994	
Satd. Flow (prot)	0	3171	0	0	3518	0	0	4736	0	0	5055	1583
Flt Permitted					0.650			0.940			0.804	
Satd. Flow (perm)	0	3171	0	0	2300	0	0	4622	0	0	4089	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		189						79				445
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			772			501			413	
Travel Time (s)		14.8			17.5			11.4			9.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	190	435	130	908	0	321	0	92	288	2125	1391
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	625	0	0	1038	0	0	413	0	0	2413	1391
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left			Left			Left			Left		Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	Free
Protected Phases		6			2			7			8	
Permitted Phases	6			2			7			8		Free
Detector Phase	6	6		2	2		7	7		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	45.8	45.8		16.8	16.8		11.4	11.4		16.4	16.4	
Total Split (s)	54.0	54.0		54.0	54.0		19.0	19.0		67.0	67.0	
Total Split (%)	38.6%	38.6%		38.6%	38.6%		13.6%	13.6%		47.9%	47.9%	
Maximum Green (s)	47.2	47.2		47.2	47.2		12.6	12.6		60.6	60.6	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	2.8	2.8		2.8	2.8		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.8			6.8			6.4			6.4	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0										
Flash Dont Walk (s)	32.0	32.0										
Pedestrian Calls (#/hr)	0	0										
Act Effct Green (s)		47.2			47.2			12.5			60.7	140.0
Actuated g/C Ratio		0.34			0.34			0.09			0.43	1.00
v/c Ratio		0.52			1.34			2.57dl			1.36	0.88
Control Delay		16.6			198.6			68.0			199.4	7.7
Queue Delay		0.0			2.4			0.2			0.0	6.8
Total Delay		16.6			201.0			68.2			199.4	14.5
LOS		B			F			E			F	B
Approach Delay		16.6			201.0			68.2			131.8	
Approach LOS		B			F			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 28 (20%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.36			
Intersection Signal Delay: 127.3		Intersection LOS: F	
Intersection Capacity Utilization 125.8%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 9: MERIDIAN AVE & TWIGGS ST

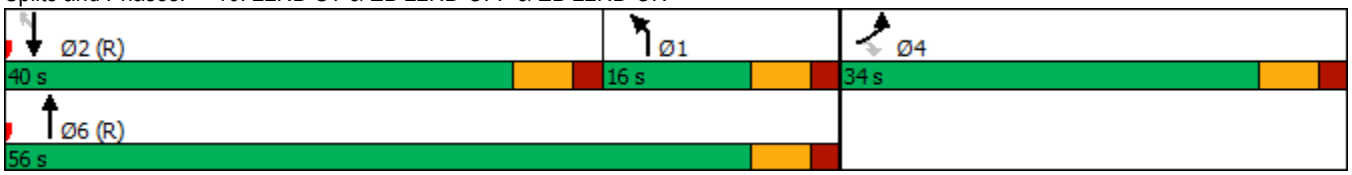


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Lane Configurations									
Traffic Volume (vph)	265	195	10	1785	975	0	110	0	0
Future Volume (vph)	265	195	10	1785	975	0	110	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt		0.850					0.850		
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	5085	5085	0	1583	0	0
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	5085	5085	0	1583	0	0
Right Turn on Red		Yes					Yes		
Satd. Flow (RTOR)		212					120		
Link Speed (mph)	30			30	30			30	
Link Distance (ft)	404			536	498			405	
Travel Time (s)	9.2			12.2	11.3			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	288	212	11	1940	1060	0	120	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	288	212	11	1940	1060	0	120	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right	Right	Left	Right
Median Width(ft)	12			12	12			0	
Link Offset(ft)	0			0	0			0	
Crosswalk Width(ft)	16			16	16			16	
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9	9	15	9
Number of Detectors	1	1	1	2	2		1		
Detector Template	Left	Right	Left				Right		
Leading Detector (ft)	20	20	20	100	100		20		
Trailing Detector (ft)	0	0	0	0	0		0		
Detector 1 Position(ft)	0	0	0	0	0		0		
Detector 1 Size(ft)	20	20	20	6	6		20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Detector 2 Position(ft)				94	94				
Detector 2 Size(ft)				6	6				
Detector 2 Type				Cl+Ex	Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)				0.0	0.0				
Turn Type	Prot	Perm	Prot	NA	NA		Perm		
Protected Phases	4		1	6	2				
Permitted Phases		4					2		
Detector Phase	4	4	1	6	2		2		
Switch Phase									
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0		10.0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Minimum Split (s)	24.0	24.0	16.0	24.0	24.0		24.0		
Total Split (s)	34.0	34.0	16.0	56.0	40.0		40.0		
Total Split (%)	37.8%	37.8%	17.8%	62.2%	44.4%		44.4%		
Maximum Green (s)	28.0	28.0	10.0	50.0	34.0		34.0		
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0		
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0		
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0		
Lead/Lag			Lag		Lead		Lead		
Lead-Lag Optimize?									
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		
Recall Mode	None	None	None	C-Max	C-Max		C-Max		
Act Effct Green (s)	20.0	20.0	6.7	58.0	54.8		54.8		
Actuated g/C Ratio	0.22	0.22	0.07	0.64	0.61		0.61		
v/c Ratio	0.73	0.41	0.08	0.59	0.34		0.12		
Control Delay	43.3	6.3	38.9	10.9	3.4		0.6		
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		
Total Delay	43.3	6.3	38.9	10.9	3.4		0.6		
LOS	D	A	D	B	A		A		
Approach Delay	27.6			11.1	3.1				
Approach LOS	C			B	A				

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 89 (99%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 10.7		Intersection LOS: B	
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 10: 22ND ST & EB 22ND OFF & EB 22ND ON

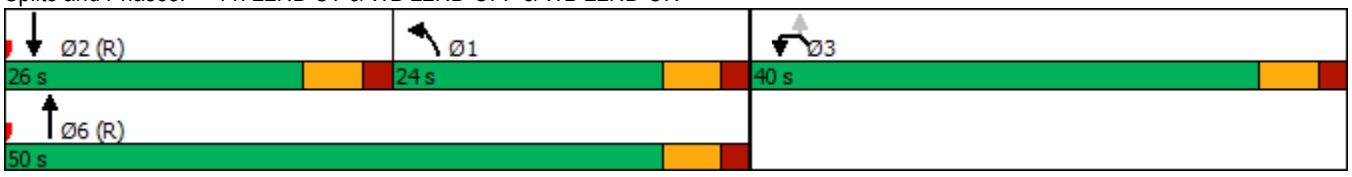


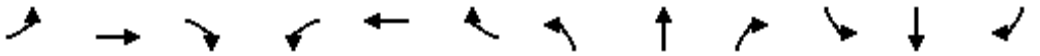
Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations											
Traffic Volume (vph)	0	0	245	1805	0	0	900	0	185	0	515
Future Volume (vph)	0	0	245	1805	0	0	900	0	185	0	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00	1.00	1.00	1.00
Frt											0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Flt Permitted			0.950						0.950		
Satd. Flow (perm)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)											109
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	264			498			271			329	
Travel Time (s)	6.0			11.3			6.2			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	266	1962	0	0	978	0	201	0	560
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	266	1962	0	0	978	0	201	0	560
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			12	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors			1	2			2		1		1
Detector Template			Left						Left		Right
Leading Detector (ft)			20	100			100		20		20
Trailing Detector (ft)			0	0			0		0		0
Detector 1 Position(ft)			0	0			0		0		0
Detector 1 Size(ft)			20	6			6		20		20
Detector 1 Type			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Queue (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Delay (s)			0.0	0.0			0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type			Prot	NA			NA		Prot		Perm
Protected Phases			1	6			2		3		
Permitted Phases											3
Detector Phase			1	6			2		3		3
Switch Phase											
Minimum Initial (s)			5.0	10.0			10.0		10.0		10.0

Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Minimum Split (s)			16.8	24.8			24.8		16.8		16.8
Total Split (s)			24.0	50.0			26.0		40.0		40.0
Total Split (%)			26.7%	55.6%			28.9%		44.4%		44.4%
Maximum Green (s)			18.0	44.0			20.0		34.0		34.0
Yellow Time (s)			4.0	4.0			4.0		4.0		4.0
All-Red Time (s)			2.0	2.0			2.0		2.0		2.0
Lost Time Adjust (s)			0.0	0.0			0.0		0.0		0.0
Total Lost Time (s)			6.0	6.0			6.0		6.0		6.0
Lead/Lag			Lag				Lead				
Lead-Lag Optimize?											
Vehicle Extension (s)			3.0	3.0			3.0		3.0		3.0
Recall Mode			None	C-Max			C-Max		None		None
Act Effct Green (s)			18.0	47.2			23.2		30.8		30.8
Actuated g/C Ratio			0.20	0.52			0.26		0.34		0.34
v/c Ratio			0.75	0.74			0.59		0.33		0.92
Control Delay			39.3	12.0			31.8		22.8		43.6
Queue Delay			0.0	0.1			0.0		0.0		0.0
Total Delay			39.3	12.0			31.8		22.8		43.6
LOS			D	B			C		C		D
Approach Delay				15.3			31.8			38.1	
Approach LOS				B			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.92			
Intersection Signal Delay: 23.7		Intersection LOS: C	
Intersection Capacity Utilization 76.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 11: 22ND ST & WB 22ND OFF & WB 22ND ON



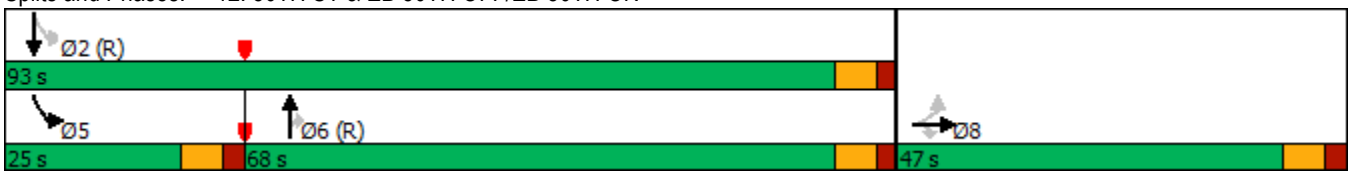


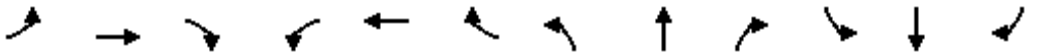
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	0	265	0	0	0	0	2070	35	145	1385	0
Future Volume (vph)	195	0	265	0	0	0	0	2070	35	145	1385	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	0		0
Storage Lanes	0		2	0		0	1		1	1		0
Taper Length (ft)	0			0			25			0		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	2787	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.045		
Satd. Flow (perm)	0	1770	2787	0	0	0	0	6408	1583	84	5085	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)									83			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		549			603			383			284	
Travel Time (s)		12.5			13.7			8.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	212	0	288	0	0	0	0	2250	38	158	1505	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	212	288	0	0	0	0	2250	38	158	1505	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left		Right						Right	Left		
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8						6	2		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8	8					6	6	5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	5.0	10.0	
Minimum Split (s)	46.9	46.9	46.9					16.5	16.5	11.7	23.5	
Total Split (s)	47.0	47.0	47.0					68.0	68.0	25.0	93.0	
Total Split (%)	33.6%	33.6%	33.6%					48.6%	48.6%	17.9%	66.4%	
Maximum Green (s)	40.1	40.1	40.1					61.5	61.5	18.3	86.5	
Yellow Time (s)	4.4	4.4	4.4					4.4	4.4	4.4	4.4	
All-Red Time (s)	2.5	2.5	2.5					2.1	2.1	2.3	2.1	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.9	6.9					6.5	6.5	6.7	6.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0					3.0	3.0	2.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Dont Walk (s)	33.0	33.0	33.0								10.0	
Pedestrian Calls (#/hr)	0	0	0								0	
Act Effct Green (s)		25.6	25.6					82.8	82.8	100.8	101.0	
Actuated g/C Ratio		0.18	0.18					0.59	0.59	0.72	0.72	
v/c Ratio		0.66	0.57					0.59	0.04	0.80	0.41	
Control Delay		62.1	55.6					20.4	0.1	71.4	12.1	
Queue Delay		7.1	0.0					0.1	0.0	1.5	0.8	
Total Delay		69.1	55.6					20.5	0.1	72.9	12.9	
LOS		E	E					C	A	E	B	
Approach Delay		61.3						20.1			18.6	
Approach LOS		E						C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 116 (83%), Referenced to phase 2:SBTL and 6:NBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 24.2		Intersection LOS: C	
Intersection Capacity Utilization 73.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 12: 50TH ST & EB 50TH OFF/EB 50TH ON



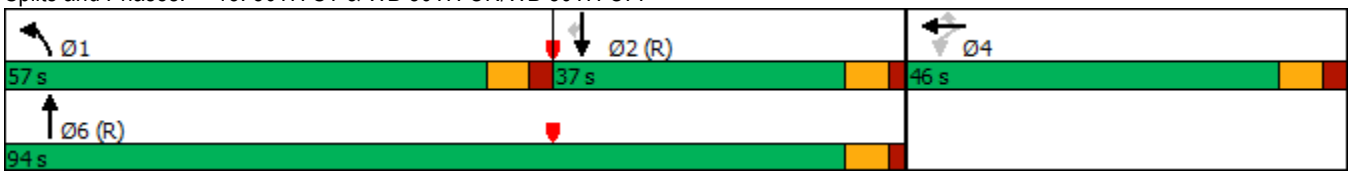


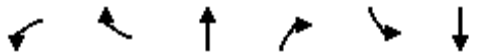
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	35	0	375	920	1345	0	0	1495	250
Future Volume (vph)	0	0	0	35	0	375	920	1345	0	0	1495	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	140		0
Storage Lanes	0		0	0		1	2		0	1		1
Taper Length (ft)	0			0			0			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	3433	3539	0	0	6408	1583
Flt Permitted					0.950		0.950					
Satd. Flow (perm)	0	0	0	0	1770	1583	3433	3539	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						79						209
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		457			359			284			339	
Travel Time (s)		10.4			8.2			6.5			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	38	0	408	1000	1462	0	0	1625	272
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	38	408	1000	1462	0	0	1625	272
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left		Right	Left					Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4						2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				4	4	4	1	6			2	2
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	10.0
Minimum Split (s)				46.0	46.0	46.0	11.8	23.4			23.4	23.4
Total Split (s)				46.0	46.0	46.0	57.0	94.0			37.0	37.0
Total Split (%)				32.9%	32.9%	32.9%	40.7%	67.1%			26.4%	26.4%
Maximum Green (s)				38.8	38.8	38.8	50.2	87.6			30.6	30.6
Yellow Time (s)				4.4	4.4	4.4	4.4	4.4			4.4	4.4
All-Red Time (s)				2.8	2.8	2.8	2.4	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.2	7.2	6.8	6.4			6.4	6.4
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	2.0	3.0			3.0	3.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)								7.0				
Flash Dont Walk (s)								10.0				
Pedestrian Calls (#/hr)								0				
Act Effct Green (s)					34.8	34.8	45.1	91.6			39.7	39.7
Actuated g/C Ratio					0.25	0.25	0.32	0.65			0.28	0.28
v/c Ratio					0.09	0.90	0.90	0.63			0.90	0.45
Control Delay					38.8	64.2	53.4	8.9			55.9	14.5
Queue Delay					0.1	0.0	40.7	0.2			0.1	0.0
Total Delay					38.9	64.2	94.1	9.1			56.0	14.5
LOS					D	E	F	A			E	B
Approach Delay					62.0			43.6			50.0	
Approach LOS					E			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 125			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 47.9		Intersection LOS: D	
Intersection Capacity Utilization 73.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 13: 50TH ST & WB 50TH ON/WB 50TH OFF



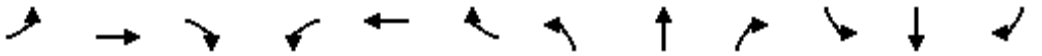


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	95	0	1710	0	0	605
Future Volume (vph)	95	0	1710	0	0	605
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	3539	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	3539	0	0	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	292		343			439
Travel Time (s)	6.6		7.8			10.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	103	0	1859	0	0	658
Shared Lane Traffic (%)						
Lane Group Flow (vph)	103	0	1859	0	0	658
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2			2
Detector Template	Left		Thru			Thru
Leading Detector (ft)	20		100			100
Trailing Detector (ft)	0		0			0
Detector 1 Position(ft)	0		0			0
Detector 1 Size(ft)	20		6			6
Detector 1 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0			0.0
Detector 1 Queue (s)	0.0		0.0			0.0
Detector 1 Delay (s)	0.0		0.0			0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Detector Phase	8		2			6
Switch Phase						
Minimum Initial (s)	5.0		15.0			15.0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Split (s)	24.8		24.8			24.8
Total Split (s)	27.0		98.0			98.0
Total Split (%)	21.6%		78.4%			78.4%
Maximum Green (s)	20.2		91.2			91.2
Yellow Time (s)	4.8		4.8			4.8
All-Red Time (s)	2.0		2.0			2.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.8		6.8			6.8
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0			3.0
Recall Mode	None		C-Max			C-Max
Walk Time (s)	7.0					
Flash Dont Walk (s)	11.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	12.6		98.8			98.8
Actuated g/C Ratio	0.10		0.79			0.79
v/c Ratio	0.58		0.66			0.24
Control Delay	65.9		7.6			2.5
Queue Delay	0.0		0.0			0.0
Total Delay	65.9		7.6			2.5
LOS	E		A			A
Approach Delay	65.9		7.6			2.5
Approach LOS	E		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 62 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 8.6		Intersection LOS: A	
Intersection Capacity Utilization 63.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 14: 78TH ST & EB 78TH OFF

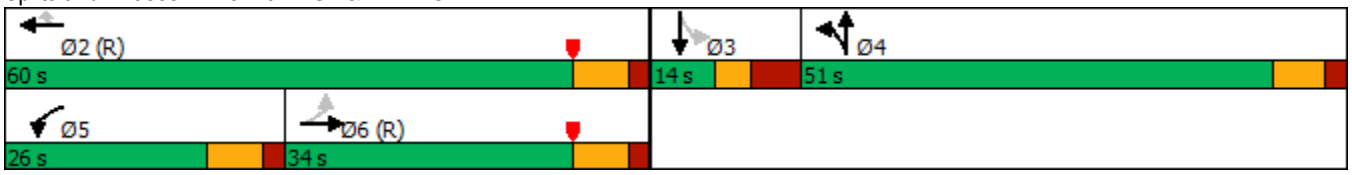


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	480	405	195	1395	10	785	5	570	5	5	5
Future Volume (vph)	5	480	405	195	1395	10	785	5	570	5	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	0		315	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			0			0			0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.955	
Flt Protected	0.950			0.950			0.950	0.953			0.984	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1681	1686	1583	0	1750	0
Flt Permitted	0.111			0.950			0.950	0.953				
Satd. Flow (perm)	207	3539	1583	1770	3539	1583	1681	1686	1583	0	1779	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			440			106			455		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		887			638			788			238	
Travel Time (s)		20.2			14.5			17.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	522	440	212	1516	11	853	5	620	5	5	5
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	5	522	440	212	1516	11	426	432	620	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		25			25			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left		Right	Left		Right	Left		Right	Left		
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Free	Prot	NA	Perm	Split	NA	Free	Perm	NA	
Protected Phases		6		5	2		4	4			3	
Permitted Phases	6		Free			2			Free	3		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6		5	2	2	4	4		3	3	
Switch Phase												
Minimum Initial (s)	15.0	15.0		5.0	15.0	15.0	6.0	6.0		6.0	6.0	
Minimum Split (s)	25.2	25.2		12.2	26.2	26.2	13.1	13.1		14.0	14.0	
Total Split (s)	34.0	34.0		26.0	60.0	60.0	51.0	51.0		14.0	14.0	
Total Split (%)	27.2%	27.2%		20.8%	48.0%	48.0%	40.8%	40.8%		11.2%	11.2%	
Maximum Green (s)	26.8	26.8		18.8	52.8	52.8	43.9	43.9		6.0	6.0	
Yellow Time (s)	5.2	5.2		5.2	5.2	5.2	4.8	4.8		3.4	3.4	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.3	2.3		4.6	4.6	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	7.2	7.2		7.2	7.2	7.2	7.1	7.1			8.0	
Lead/Lag	Lag	Lag		Lead			Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	40.8	40.8	125.0	18.1	66.1	66.1	39.0	39.0	125.0		6.0	
Actuated g/C Ratio	0.33	0.33	1.00	0.14	0.53	0.53	0.31	0.31	1.00		0.05	
v/c Ratio	0.07	0.45	0.28	0.83	0.81	0.01	0.81	0.82	0.39		0.17	
Control Delay	42.4	37.9	0.4	77.5	30.9	0.0	44.5	45.2	0.6		48.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	42.4	37.9	0.4	77.5	30.9	0.0	44.5	45.2	0.6		48.9	
LOS	D	D	A	E	C	A	D	D	A		D	
Approach Delay		20.9			36.4			26.3			48.9	
Approach LOS		C			D			C			D	

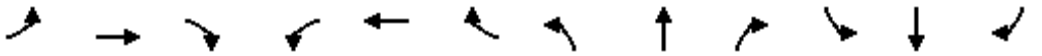
Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 29.3		Intersection LOS: C	
Intersection Capacity Utilization 97.5%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 15: 78TH ST & ADAMO DR



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1035	20	305	1600	0	0
Future Volume (vph)	1035	20	305	1600	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			0		0	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	1.00
Frt		0.850				
Flt Protected				0.992		
Satd. Flow (prot)	5085	1583	0	5045	0	0
Flt Permitted				0.992		
Satd. Flow (perm)	5085	1583	0	5045	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	638			376	435	
Travel Time (s)	14.5			8.5	9.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1125	22	332	1739	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1125	22	0	2071	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	25			25	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		



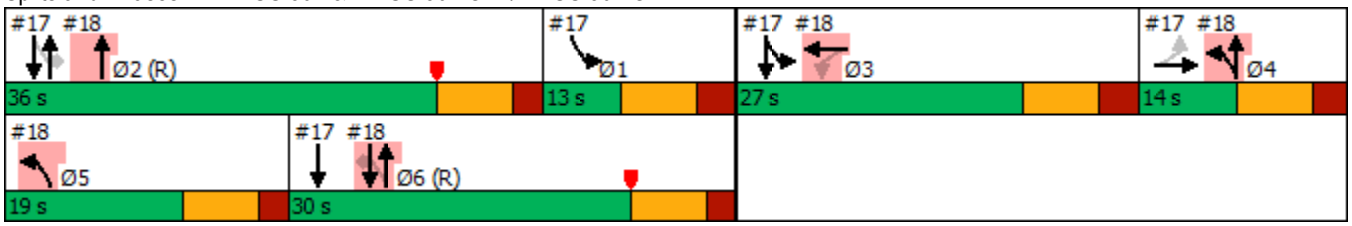
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	0	445	0	0	0	0	2400	310	260	1255	0
Future Volume (vph)	165	0	445	0	0	0	0	2400	310	260	1255	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	315		500	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	0			0			25			0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.138		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	257	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			416						337			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		739			677			1414			381	
Travel Time (s)		16.8			15.4			32.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	179	0	484	0	0	0	0	2609	337	283	1364	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	179	484	0	0	0	0	2609	337	283	1364	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0			30			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left		Right						Right	Left		
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Free					NA	Perm	D.P+P	NA	
Protected Phases		4						2		1 3	6 3 2	
Permitted Phases	4		Free						2	2		

Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4						2	2	1 3	6 3 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0						15.0	15.0			
Minimum Split (s)	12.5	12.5						22.1	22.1			
Total Split (s)	14.0	14.0						36.0	36.0			
Total Split (%)	15.6%	15.6%						40.0%	40.0%			
Maximum Green (s)	6.5	6.5						28.9	28.9			
Yellow Time (s)	5.1	5.1						5.1	5.1			
All-Red Time (s)	2.4	2.4						2.0	2.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		7.5						7.1	7.1			
Lead/Lag	Lag	Lag						Lead	Lead			
Lead-Lag Optimize?	Yes	Yes						Yes	Yes			
Vehicle Extension (s)	4.0	4.0						3.0	3.0			
Recall Mode	None	None						C-Max	C-Max			
Act Effct Green (s)		6.5	90.0					28.9	28.9	60.4	68.9	
Actuated g/C Ratio		0.07	1.00					0.32	0.32	0.67	0.77	
v/c Ratio		1.41	0.31					1.27	0.46	0.40	0.35	
Control Delay		258.4	0.5					153.7	4.9	5.4	1.0	
Queue Delay		0.0	0.0					0.0	0.0	0.0	0.1	
Total Delay		258.4	0.5					153.8	4.9	5.4	1.1	
LOS		F	A					F	A	A	A	
Approach Delay		70.1						136.8			1.8	
Approach LOS		E						F			A	

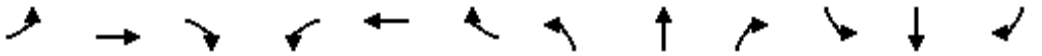
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.41			
Intersection Signal Delay: 86.1		Intersection LOS: F	
Intersection Capacity Utilization 78.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 17: US 301 & EB US 301 OFF/EB US 301 ON



Lane Group	Ø1	Ø3	Ø5	Ø6
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	15.0
Minimum Split (s)	12.8	12.8	12.1	22.1
Total Split (s)	13.0	27.0	19.0	30.0
Total Split (%)	14%	30%	21%	33%
Maximum Green (s)	5.2	19.2	11.9	22.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.7	2.7	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	4.0	3.0
Recall Mode	None	None	None	C-Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary



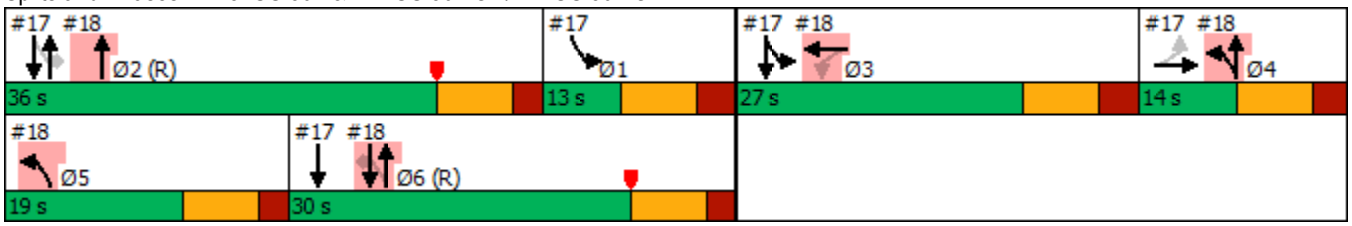
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	130	0	830	595	1970	0	0	1385	175
Future Volume (vph)	0	0	0	130	0	830	595	1970	0	0	1385	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	300		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	0			0			0			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.175					
Satd. Flow (perm)	0	0	0	0	1770	1583	326	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						416						235
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			711			381			795	
Travel Time (s)		13.2			16.2			8.7			18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	141	0	902	647	2141	0	0	1505	190
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	141	902	647	2141	0	0	1505	190
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			20			30	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left		Right	Left					Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Free	D.P+P	NA			NA	Perm
Protected Phases					3		5 4	2 4 6			6	
Permitted Phases				3		Free	6					6

Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				3	3		5 4	2 4 6			6	6
Switch Phase												
Minimum Initial (s)				5.0	5.0						15.0	15.0
Minimum Split (s)				12.8	12.8						22.1	22.1
Total Split (s)				27.0	27.0						30.0	30.0
Total Split (%)				30.0%	30.0%						33.3%	33.3%
Maximum Green (s)				19.2	19.2						22.9	22.9
Yellow Time (s)				5.1	5.1						5.1	5.1
All-Red Time (s)				2.7	2.7						2.0	2.0
Lost Time Adjust (s)					0.0						0.0	0.0
Total Lost Time (s)					7.8						7.1	7.1
Lead/Lag				Lead	Lead						Lag	Lag
Lead-Lag Optimize?				Yes	Yes						Yes	Yes
Vehicle Extension (s)				4.0	4.0						3.0	3.0
Recall Mode				None	None						C-Max	C-Max
Act Effct Green (s)					19.2	90.0	48.8	55.9			22.9	22.9
Actuated g/C Ratio					0.21	1.00	0.54	0.62			0.25	0.25
v/c Ratio					0.37	0.57	1.09	0.68			0.92	0.33
Control Delay					33.7	1.5	86.5	6.2			43.5	3.4
Queue Delay					0.0	0.0	2.2	0.2			0.0	0.0
Total Delay					33.7	1.5	88.7	6.4			43.5	3.4
LOS					C	A	F	A			D	A
Approach Delay					5.8			25.5			39.0	
Approach LOS					A			C			D	

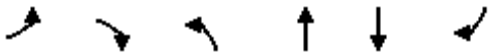
Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.41			
Intersection Signal Delay: 25.9		Intersection LOS: C	
Intersection Capacity Utilization 78.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 18: US 301 & WB US 301 ON/WB US 301 OFF



Lane Group	Ø1	Ø2	Ø4	Ø5
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	15.0	5.0	5.0
Minimum Split (s)	12.8	22.1	12.5	12.1
Total Split (s)	13.0	36.0	14.0	19.0
Total Split (%)	14%	40%	16%	21%
Maximum Green (s)	5.2	28.9	6.5	11.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.7	2.0	2.4	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0	4.0	4.0
Recall Mode	None	C-Max	None	None
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

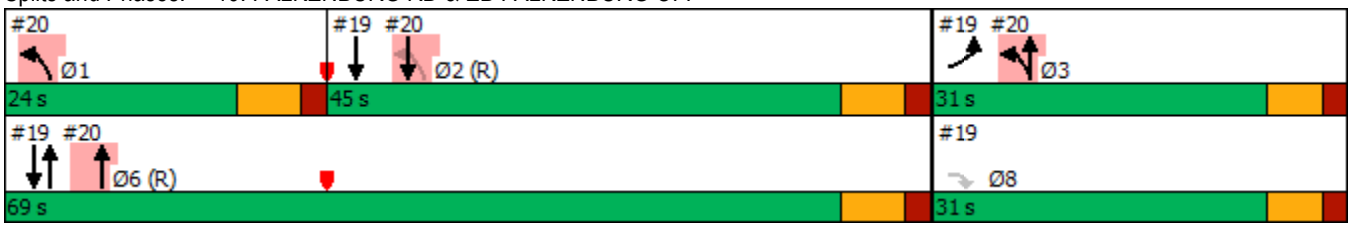


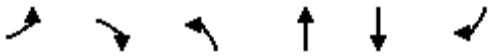
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Lane Configurations								
Traffic Volume (vph)	330	560	0	1830	775	0		
Future Volume (vph)	330	560	0	1830	775	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	0.97	0.88	1.00	0.91	0.91	1.00		
Frt		0.850						
Flt Protected	0.950							
Satd. Flow (prot)	3433	2787	0	5085	5085	0		
Flt Permitted	0.950							
Satd. Flow (perm)	3433	2787	0	5085	5085	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		326						
Link Speed (mph)	30			30	30			
Link Distance (ft)	519			688	550			
Travel Time (s)	11.8			15.6	12.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	359	609	0	1989	842	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	359	609	0	1989	842	0		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	24			30	30			
Link Offset(ft)	0			0	0			
Crosswalk Width(ft)	16			16	16			
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	9	15			9		
Number of Detectors	1	1		2	2			
Detector Template	Left	Right						
Leading Detector (ft)	20	20		100	100			
Trailing Detector (ft)	0	0		0	0			
Detector 1 Position(ft)	0	0		0	0			
Detector 1 Size(ft)	20	20		6	6			
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			
Detector 2 Position(ft)				94	94			
Detector 2 Size(ft)				6	6			
Detector 2 Type				Cl+Ex	Cl+Ex			
Detector 2 Channel								
Detector 2 Extend (s)				0.0	0.0			
Turn Type	Prot	Perm		NA	NA			
Protected Phases	3			6	2 6		1	2
Permitted Phases		8						
Detector Phase	3	8		6	2 6			
Switch Phase								
Minimum Initial (s)	6.0	6.0		15.0			5.0	15.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Minimum Split (s)	22.5	22.5		22.5			11.8	22.5
Total Split (s)	31.0	31.0		69.0			24.0	45.0
Total Split (%)	31.0%	31.0%		69.0%			24%	45%
Maximum Green (s)	24.9	24.9		62.2			17.2	38.2
Yellow Time (s)	4.1	4.1		4.8			4.8	4.8
All-Red Time (s)	2.0	2.0		2.0			2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0				
Total Lost Time (s)	6.1	6.1		6.8				
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)	3.5	3.5		4.0			6.0	4.0
Recall Mode	None	None		C-Max			Min	C-Max
Act Effct Green (s)	24.9	24.9		62.2	62.2			
Actuated g/C Ratio	0.25	0.25		0.62	0.62			
v/c Ratio	0.42	0.65		0.63	0.27			
Control Delay	33.3	18.7		12.9	4.3			
Queue Delay	0.0	0.0		0.0	0.0			
Total Delay	33.3	18.7		12.9	4.3			
LOS	C	B		B	A			
Approach Delay	24.1			12.9	4.3			
Approach LOS	C			B	A			

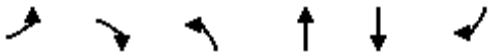
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 19: FALKENBURG RD & EB FALKENBURG OFF





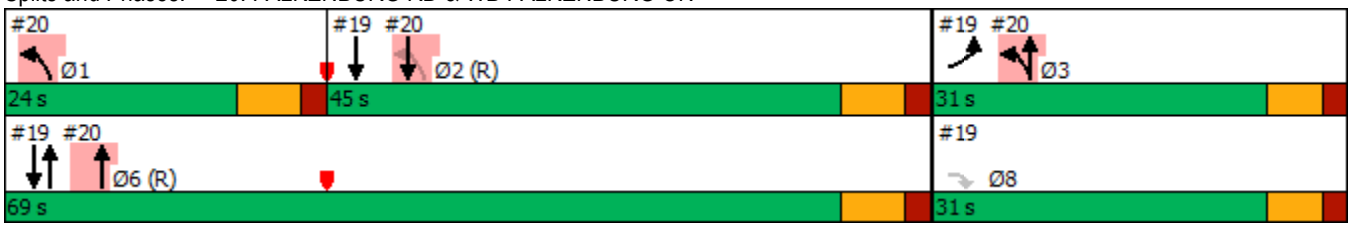
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	0	0	410	1750	775	390				
Future Volume (vph)	0	0	410	1750	775	390				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00				
Frt						0.850				
Flt Protected			0.950							
Satd. Flow (prot)	0	0	1770	3539	3539	1583				
Flt Permitted			0.246							
Satd. Flow (perm)	0	0	458	3539	3539	1583				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)						379				
Link Speed (mph)	30			30	30					
Link Distance (ft)	492			550	852					
Travel Time (s)	11.2			12.5	19.4					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				
Adj. Flow (vph)	0	0	446	1902	842	424				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	446	1902	842	424				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			30	30					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Turning Speed (mph)	15	9	15			9				
Number of Detectors			1	2	2	1				
Detector Template			Left			Right				
Leading Detector (ft)			20	100	100	20				
Trailing Detector (ft)			0	0	0	0				
Detector 1 Position(ft)			0	0	0	0				
Detector 1 Size(ft)			20	6	6	20				
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel										
Detector 1 Extend (s)			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94					
Detector 2 Size(ft)				6	6					
Detector 2 Type				Cl+Ex	Cl+Ex					
Detector 2 Channel										
Detector 2 Extend (s)				0.0	0.0					
Turn Type			D.P+P	NA	NA	Free				
Protected Phases			1 3	6 3	2		1	3	6	8
Permitted Phases			2			Free				
Detector Phase			1 3	6 3	2					
Switch Phase										
Minimum Initial (s)					15.0		5.0	6.0	15.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Minimum Split (s)					22.5		11.8	22.5	22.5	22.5
Total Split (s)					45.0		24.0	31.0	69.0	31.0
Total Split (%)					45.0%		24%	31%	69%	31%
Maximum Green (s)					38.2		17.2	24.9	62.2	24.9
Yellow Time (s)					4.8		4.8	4.1	4.8	4.1
All-Red Time (s)					2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)					0.0					
Total Lost Time (s)					6.8					
Lead/Lag					Lag		Lead			
Lead-Lag Optimize?					Yes		Yes			
Vehicle Extension (s)					4.0		6.0	3.5	4.0	3.5
Recall Mode					C-Max		Min	None	C-Max	None
Act Effct Green (s)			86.4	100.0	43.6	100.0				
Actuated g/C Ratio			0.86	1.00	0.44	1.00				
v/c Ratio			0.47	0.54	0.55	0.27				
Control Delay			17.8	1.8	22.8	0.4				
Queue Delay			0.0	0.0	0.0	0.0				
Total Delay			17.8	1.8	22.8	0.4				
LOS			B	A	C	A				
Approach Delay				4.8	15.3					
Approach LOS				A	B					

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 8.5		Intersection LOS: A	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 20: FALKENBURG RD & WB FALKENBURG ON



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	370	0	0	1295	245	885
Future Volume (vph)	370	0	0	1295	245	885
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.88
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3539	0	0	3539	1770	2787
Flt Permitted					0.950	
Satd. Flow (perm)	3539	0	0	3539	1770	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						798
Link Speed (mph)	30			30	30	
Link Distance (ft)	390			343	501	
Travel Time (s)	8.9			7.8	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	402	0	0	1408	266	962
Shared Lane Traffic (%)						
Lane Group Flow (vph)	402	0	0	1408	266	962
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2			2	1	1
Detector Template					Left	Right
Leading Detector (ft)	100			100	20	20
Trailing Detector (ft)	0			0	0	0
Detector 1 Position(ft)	0			0	0	0
Detector 1 Size(ft)	6			6	20	20
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Prot
Protected Phases	2			6	8	8
Permitted Phases						
Detector Phase	2			6	8	8
Switch Phase						
Minimum Initial (s)	5.0			5.0	5.0	5.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	23.7			23.7	23.7	23.7
Total Split (s)	87.0			87.0	53.0	53.0
Total Split (%)	62.1%			62.1%	37.9%	37.9%
Maximum Green (s)	82.5			82.5	48.5	48.5
Yellow Time (s)	3.5			3.5	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	4.5			4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)	7.0			7.0	7.0	7.0
Flash Dont Walk (s)	11.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	102.2			102.2	28.8	28.8
Actuated g/C Ratio	0.73			0.73	0.21	0.21
v/c Ratio	0.16			0.55	0.73	0.80
Control Delay	6.6			10.3	63.2	13.9
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	6.6			10.3	63.2	13.9
LOS	A			B	E	B
Approach Delay	6.6			10.3	24.5	
Approach LOS	A			B	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 15.6		Intersection LOS: B	
Intersection Capacity Utilization 56.9%		ICU Level of Service B	
Analysis Period (min) 15			

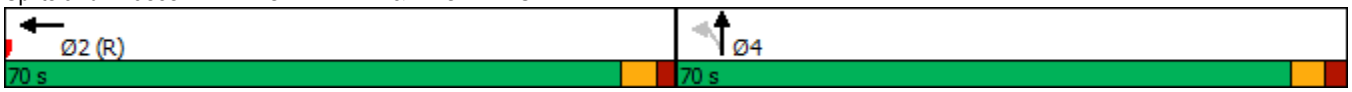
Splits and Phases: 21: EB WHITING OFF & WHITING ST

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1725	175	195	1450	0	0	0	0
Future Volume (vph)	0	0	0	0	1725	175	195	1450	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	1.00	1.00	1.00	1.00
Frt					0.986							
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6318	0	1770	5085	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	6318	0	1770	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					9		22					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		273			600			296			353	
Travel Time (s)		6.2			13.6			6.7			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1875	190	212	1576	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2065	0	212	1576	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2		1	2				
Detector Template					Thru		Left	Thru				
Leading Detector (ft)					100		20	100				
Trailing Detector (ft)					0		0	0				
Detector 1 Position(ft)					0		0	0				
Detector 1 Size(ft)					6		20	6				
Detector 1 Type					Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0		0.0	0.0				
Detector 1 Queue (s)					0.0		0.0	0.0				
Detector 1 Delay (s)					0.0		0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Detector Phase					2		4	4				
Switch Phase												
Minimum Initial (s)					10.0		10.0	10.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)					29.8		36.1	36.1				
Total Split (s)					70.0		70.0	70.0				
Total Split (%)					50.0%		50.0%	50.0%				
Maximum Green (s)					64.2		63.9	63.9				
Yellow Time (s)					3.7		3.7	3.7				
All-Red Time (s)					2.1		2.4	2.4				
Lost Time Adjust (s)					0.0		0.0	0.0				
Total Lost Time (s)					5.8		6.1	6.1				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					3.0		3.0	3.0				
Recall Mode					C-Max		None	None				
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		23.0	23.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					68.5		59.6	59.6				
Actuated g/C Ratio					0.49		0.43	0.43				
v/c Ratio					0.67		0.28	0.73				
Control Delay					1.6		22.2	34.4				
Queue Delay					0.6		1.4	2.3				
Total Delay					2.2		23.6	36.7				
LOS					A		C	D				
Approach Delay					2.2			35.1				
Approach LOS					A			D				

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 28 (20%), Referenced to phase 2:WBT and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 17.5		Intersection LOS: B	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: FLORIDA AVE & BROREIN ST

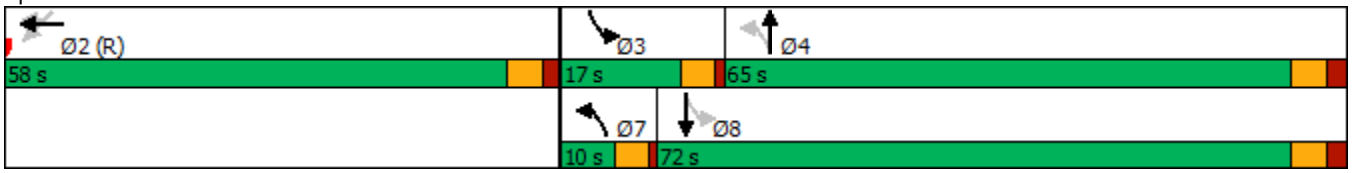


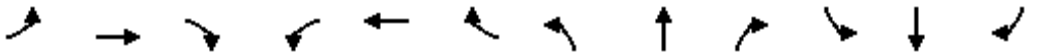
Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations										
Traffic Volume (vph)	35	1830	160	55	545	155	335	805	305	365
Future Volume (vph)	35	1830	160	55	545	155	335	805	305	365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0			0		0	100	
Storage Lanes	0		1			1		0	1	
Taper Length (ft)	25		25			25				
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Frt				0.864			0.894		0.850	0.850
Flt Protected		0.999	0.950			0.950				
Satd. Flow (prot)	0	3536	1770	1609	0	1770	1665	0	2787	1583
Flt Permitted		0.999	0.066			0.135				
Satd. Flow (perm)	0	3536	123	1609	0	251	1665	0	2787	1583
Right Turn on Red					Yes					Yes
Satd. Flow (RTOR)				439						270
Link Speed (mph)		30		30			30			
Link Distance (ft)		591		494			379			
Travel Time (s)		13.4		11.2			8.6			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	1989	174	60	592	168	364	875	332	397
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	2027	174	652	0	168	1239	0	332	397
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Left	Left	Right	Left	Left	Right	R NA	Right
Median Width(ft)		12		12			12			
Link Offset(ft)		0		0			0			
Crosswalk Width(ft)		16		16			16			
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		15		9	15		9	9	9
Number of Detectors	1	2	1	2		1	2		1	1
Detector Template	Left	Thru	Left	Thru		Left	Thru		Right	Right
Leading Detector (ft)	20	100	20	100		20	100		20	20
Trailing Detector (ft)	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel										
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94		94			94			
Detector 2 Size(ft)		6		6			6			
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			
Detector 2 Channel										
Detector 2 Extend (s)		0.0		0.0			0.0			
Turn Type	Perm	NA	pm+pt	NA		pm+pt	NA		Perm	Free
Protected Phases		2	7	4		3	8			
Permitted Phases	2		4			8			2	Free

Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Detector Phase	2	2	7	4		3	8		2	
Switch Phase										
Minimum Initial (s)	10.0	10.0	5.0	10.0		5.0	10.0		10.0	
Minimum Split (s)	24.7	24.7	9.5	32.0		9.5	32.0		24.7	
Total Split (s)	58.0	58.0	10.0	65.0		17.0	72.0		58.0	
Total Split (%)	41.4%	41.4%	7.1%	46.4%		12.1%	51.4%		41.4%	
Maximum Green (s)	52.3	52.3	5.5	59.0		12.5	66.0		52.3	
Yellow Time (s)	3.7	3.7	3.5	3.7		3.5	3.7		3.7	
All-Red Time (s)	2.0	2.0	1.0	2.3		1.0	2.3		2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.7	4.5	6.0		4.5	6.0		5.7	
Lead/Lag			Lead	Lag		Lead	Lag			
Lead-Lag Optimize?			Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	None	Max		None	Max		C-Max	
Walk Time (s)	7.0	7.0		7.0			7.0		7.0	
Flash Dont Walk (s)	12.0	12.0		19.0			19.0		12.0	
Pedestrian Calls (#/hr)	0	0		0			0		0	
Act Effct Green (s)		52.3	67.3	60.3		77.2	66.0		52.3	140.0
Actuated g/C Ratio		0.37	0.48	0.43		0.55	0.47		0.37	1.00
v/c Ratio		1.54	1.41	0.69		0.65	1.58		0.32	0.25
Control Delay		265.0	251.0	14.1		27.5	296.0		32.3	0.4
Queue Delay		0.1	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		265.1	251.0	14.1		27.5	296.0		32.3	0.4
LOS		F	F	B		C	F		C	A
Approach Delay		265.1		64.0			263.9			
Approach LOS		F		E			F			

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 16 (11%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.58			
Intersection Signal Delay: 194.9		Intersection LOS: F	
Intersection Capacity Utilization 156.5%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: WB BROREIN ON/WB BROREIN OFF & MORGAN ST & BROREIN ST



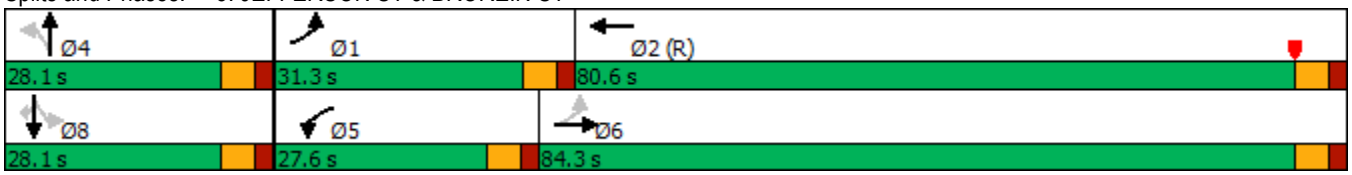


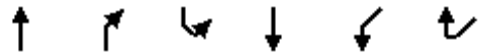
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	375	310	15	155	1575	180	115	520	25	15	145	175
Future Volume (vph)	375	310	15	155	1575	180	115	520	25	15	145	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	80		0	115		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.993			0.985			0.993				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1850	0	1770	3486	0	1770	3514	0	1770	1863	1583
Flt Permitted	0.050			0.950			0.492			0.179		
Satd. Flow (perm)	93	1850	0	1770	3486	0	916	3514	0	333	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			13			3				190
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		591			202			322			162	
Travel Time (s)		13.4			4.6			7.3			3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	408	337	16	168	1712	196	125	565	27	16	158	190
Shared Lane Traffic (%)												
Lane Group Flow (vph)	408	353	0	168	1908	0	125	592	0	16	158	190
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6						4			8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6		5	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	10.5	23.7		10.5	23.7		23.7	23.7		23.7	23.7	23.7
Total Split (s)	31.3	84.3		27.6	80.6		28.1	28.1		28.1	28.1	28.1
Total Split (%)	22.4%	60.2%		19.7%	57.6%		20.1%	20.1%		20.1%	20.1%	20.1%
Maximum Green (s)	25.8	78.6		22.1	74.9		22.4	22.4		22.4	22.4	22.4
Yellow Time (s)	3.5	3.7		3.5	3.7		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.5	5.7		5.5	5.7		5.7	5.7		5.7	5.7	5.7
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	2.0		2.0	2.0		3.0	3.0	3.0
Recall Mode	None	Max		None	C-Max		None	None		None	None	None
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)	105.9	82.8		17.9	74.9		22.4	22.4		22.4	22.4	22.4
Actuated g/C Ratio	0.76	0.59		0.13	0.54		0.16	0.16		0.16	0.16	0.16
v/c Ratio	1.08	0.32		0.74	1.02		0.86	1.05		0.30	0.53	0.46
Control Delay	103.3	14.1		78.0	58.1		101.2	106.9		68.5	61.2	10.7
Queue Delay	0.0	0.0		0.0	33.2		0.0	0.0		0.0	0.0	0.4
Total Delay	103.3	14.1		78.0	91.2		101.2	106.9		68.5	61.2	11.1
LOS	F	B		E	F		F	F		E	E	B
Approach Delay		61.9			90.2			105.9			35.4	
Approach LOS		E			F			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 55 (39%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 82.5		Intersection LOS: F	
Intersection Capacity Utilization 112.4%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 3: JEFFERSON ST & BROREIN ST





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	550	525	695	335	0	0
Future Volume (vph)	550	525	695	335	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	115		0	0
Storage Lanes		1	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	162			583	231	
Travel Time (s)	3.7			13.3	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	598	571	755	364	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	598	571	755	364	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

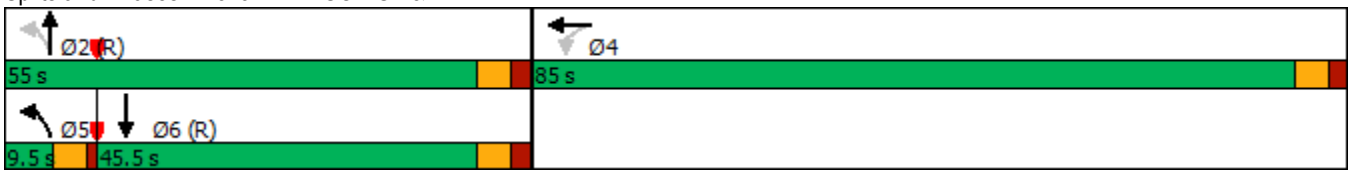
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		

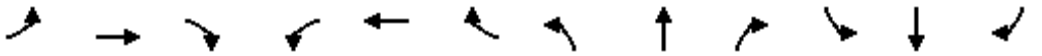
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	605	2505	400	260	980	0	0	175	55
Future Volume (vph)	0	0	0	605	2505	400	260	980	0	0	175	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.979						0.964	
Flt Protected				0.950				0.990				
Satd. Flow (prot)	0	0	0	1770	6273	0	0	3504	0	0	3412	0
Flt Permitted				0.950				0.792				
Satd. Flow (perm)	0	0	0	1770	6273	0	0	2803	0	0	3412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					17						19	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			319			716			284	
Travel Time (s)		13.1			7.3			16.3			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	658	2723	435	283	1065	0	0	190	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	658	3158	0	0	1348	0	0	250	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					4		5	2			6	
Permitted Phases				4			2					
Detector Phase				4	4		5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0		5.0	10.0			10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				25.7	25.7		9.5	25.9			25.9	
Total Split (s)				85.0	85.0		9.5	55.0			45.5	
Total Split (%)				60.7%	60.7%		6.8%	39.3%			32.5%	
Maximum Green (s)				79.3	79.3		5.0	49.1			39.6	
Yellow Time (s)				3.7	3.7		3.5	3.7			3.7	
All-Red Time (s)				2.0	2.0		1.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0			0.0			0.0	
Total Lost Time (s)				5.7	5.7			5.9			5.9	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Recall Mode				Max	Max		None	C-Max			C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)				79.3	79.3			49.1			49.1	
Actuated g/C Ratio				0.57	0.57			0.35			0.35	
v/c Ratio				0.66	0.89			1.37			0.21	
Control Delay				19.0	21.8			209.6			29.8	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				19.0	21.8			209.6			29.8	
LOS				B	C			F			C	
Approach Delay					21.3			209.6			29.8	
Approach LOS					C			F			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 78 (56%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.37			
Intersection Signal Delay: 68.6		Intersection LOS: E	
Intersection Capacity Utilization 100.5%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 5: JEFFERSON ST & KENNEDY BLVD



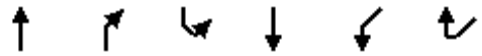


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1070	290	85	655	0	0	0	200
Future Volume (vph)	0	0	0	0	1070	290	85	655	0	0	0	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88
Frt					0.968							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4923	0	1770	1863	0	0	0	2787
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	4923	0	1770	1863	0	0	0	2787
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					56		22					27
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		847			465			292			201	
Travel Time (s)		19.3			10.6			6.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1163	315	92	712	0	0	0	217
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1478	0	92	712	0	0	0	217
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				Perm
Protected Phases					4			6				
Permitted Phases							6					2
Minimum Split (s)					29.8		24.9	24.9				26.9
Total Split (s)					58.0		82.0	82.0				82.0
Total Split (%)					41.4%		58.6%	58.6%				58.6%
Maximum Green (s)					52.2		76.1	76.1				76.1
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.1		2.2	2.2				2.2
Lost Time Adjust (s)					0.0		0.0	0.0				0.0
Total Lost Time (s)					5.8		5.9	5.9				5.9
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				7.0
Flash Dont Walk (s)					17.0		12.0	12.0				14.0
Pedestrian Calls (#/hr)					0		0	0				0
Act Effct Green (s)					52.2		76.1	76.1				76.1
Actuated g/C Ratio					0.37		0.54	0.54				0.54
v/c Ratio					0.79		0.09	0.70				0.14
Control Delay					41.2		11.9	28.4				10.5
Queue Delay					0.0		0.0	1.5				0.0
Total Delay					41.2		11.9	29.9				10.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					D		B	C				B
Approach Delay					41.2			27.8			10.5	
Approach LOS					D			C			B	

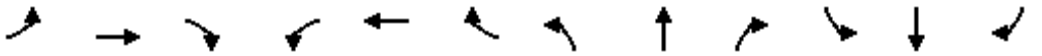
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 48 (34%), Referenced to phase 2:SBR and 6:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 34.2		Intersection LOS: C	
Intersection Capacity Utilization 71.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 6: NEBRASKA AVE & KENNEDY BLVD



Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	745	200	570	200	0	0
Future Volume (vph)	745	200	570	200	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	130		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt	0.971					
Flt Protected			0.950			
Satd. Flow (prot)	1809	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1809	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			390	272	
Travel Time (s)	4.6			8.9	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	810	217	620	217	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1027	0	620	217	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	89.6%	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												
Traffic Volume (vph)	60	1115	285	45	320	95	65	525	155	435	440	35
Future Volume (vph)	60	1115	285	45	320	95	65	525	155	435	440	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	150		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.971				0.850		0.966				0.850
Flt Protected		0.998			0.994		0.950			0.950		
Satd. Flow (prot)	0	3430	0	0	3518	1583	1770	1799	0	1770	3539	1583
Flt Permitted		0.893			0.523		0.479			0.079		
Satd. Flow (perm)	0	3069	0	0	1851	1583	892	1799	0	147	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25				103		11				38
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			652			390			257	
Travel Time (s)		17.7			14.8			8.9			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	1212	310	49	348	103	71	571	168	473	478	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1587	0	0	397	103	71	739	0	473	478	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm
Protected Phases		8			8			6		5	2	
Permitted Phases	8			8		8	6			2		2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8		8	8	8	6	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		5.0	10.0	10.0
Minimum Split (s)	29.1	29.1		29.1	29.1	29.1	28.0	28.0		10.7	28.0	28.0
Total Split (s)	61.0	61.0		61.0	61.0	61.0	51.0	51.0		28.0	79.0	79.0
Total Split (%)	43.6%	43.6%		43.6%	43.6%	43.6%	36.4%	36.4%		20.0%	56.4%	56.4%
Maximum Green (s)	54.9	54.9		54.9	54.9	54.9	45.0	45.0		22.3	73.0	73.0
Yellow Time (s)	3.7	3.7		3.7	3.7	3.7	3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.4		2.4	2.4	2.4	2.3	2.3		2.0	2.3	2.3
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.1			6.1	6.1	6.0	6.0		5.7	6.0	6.0
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		2.0	3.0	3.0
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Dont Walk (s)	16.0	16.0		16.0	16.0	16.0	15.0	15.0			15.0	15.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	0
Act Effct Green (s)		54.9			54.9	54.9	45.0	45.0		73.3	73.0	73.0
Actuated g/C Ratio		0.39			0.39	0.39	0.32	0.32		0.52	0.52	0.52
v/c Ratio		1.30			0.92dl	0.15	0.25	1.26		1.41	0.26	0.05
Control Delay		177.7			36.5	5.3	28.3	161.7		235.9	19.0	4.9
Queue Delay		0.0			0.0	0.0	0.0	0.2		0.0	0.0	0.0
Total Delay		177.7			36.5	5.3	28.3	161.9		235.9	19.0	4.9
LOS		F			D	A	C	F		F	B	A
Approach Delay		177.7			30.0			150.2			122.2	
Approach LOS		F			C			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 79 (56%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.41			
Intersection Signal Delay: 138.8		Intersection LOS: F	
Intersection Capacity Utilization 132.9%		ICU Level of Service H	
Analysis Period (min) 15			
dl Defacto Left Lane. Recode with 1 though lane as a left lane.			

Splits and Phases: 8: NEBRASKA AVE & TWIGGS ST

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	540	720	345	175	430	255	30	1815	245	0	0	0
Future Volume (vph)	540	720	345	175	430	255	30	1815	245	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	1.00
Frt		0.968			0.956			0.982				
Flt Protected		0.983			0.990			0.999				
Satd. Flow (prot)	0	3368	0	0	3350	0	0	4989	0	0	5085	1863
Flt Permitted		0.505			0.510			0.950				
Satd. Flow (perm)	0	1730	0	0	1726	0	0	4744	0	0	5085	1863
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		38			60			16				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			772			501			413	
Travel Time (s)		14.8			17.5			11.4			9.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	587	783	375	190	467	277	33	1973	266	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1745	0	0	934	0	0	2272	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA				Free
Protected Phases	1	6			2			4			8	
Permitted Phases	6			2			4			8		Free
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	11.0	45.8		16.8	16.8		26.4	26.4		16.4	16.4	
Total Split (s)	11.0	81.0		70.0	70.0		43.0	43.0		16.4	16.4	
Total Split (%)	7.8%	57.7%		49.9%	49.9%		30.6%	30.6%		11.7%	11.7%	
Maximum Green (s)	5.0	74.2		63.2	63.2		36.6	36.6		10.0	10.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	2.0	2.8		2.8	2.8		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.8			6.8			6.4			6.4	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)		7.0					7.0	7.0				
Flash Dont Walk (s)		32.0					13.0	13.0				
Pedestrian Calls (#/hr)		0					0	0				
Act Effct Green (s)		74.2			63.2			53.0				
Actuated g/C Ratio		0.53			0.45			0.38				
v/c Ratio		2.47dl			2.24dl			1.26				
Control Delay		378.9			117.1			159.7				
Queue Delay		0.0			0.0			0.0				
Total Delay		378.9			117.1			159.7				
LOS		F			F			F				
Approach Delay		378.9			117.1			159.7				
Approach LOS		F			F			F				

Intersection Summary			
Area Type:	Other		
Cycle Length: 140.4			
Actuated Cycle Length: 140.4			
Offset: 136 (97%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.78			
Intersection Signal Delay: 228.9		Intersection LOS: F	
Intersection Capacity Utilization 129.6%		ICU Level of Service H	
Analysis Period (min) 15			

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

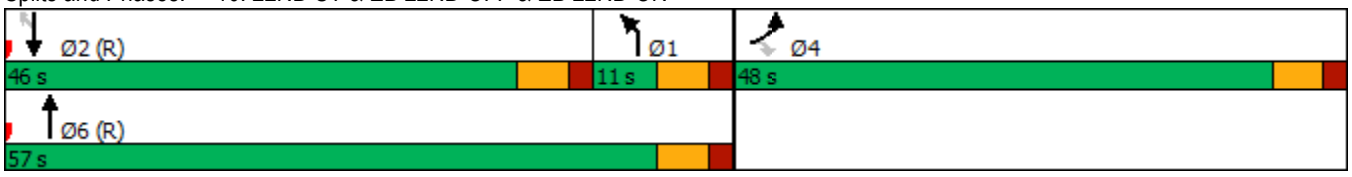
Splits and Phases: 9: MERIDIAN AVE & TWIGGS ST

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Lane Configurations									
Traffic Volume (vph)	660	80	80	1155	1710	0	510	0	0
Future Volume (vph)	660	80	80	1155	1710	0	510	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt		0.850					0.850		
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	5085	5085	0	1583	0	0
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	5085	5085	0	1583	0	0
Right Turn on Red		Yes					Yes		
Satd. Flow (RTOR)		94					496		
Link Speed (mph)	30			30	30			30	
Link Distance (ft)	404			536	498			405	
Travel Time (s)	9.2			12.2	11.3			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	717	87	87	1255	1859	0	554	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	717	87	87	1255	1859	0	554	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right	Right	Left	Right
Median Width(ft)	12			12	12			0	
Link Offset(ft)	0			0	0			0	
Crosswalk Width(ft)	16			16	16			16	
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9	9	15	9
Number of Detectors	1	1	1	2	2		1		
Detector Template	Left	Right	Left	Thru	Thru		Right		
Leading Detector (ft)	20	20	20	100	100		20		
Trailing Detector (ft)	0	0	0	0	0		0		
Detector 1 Position(ft)	0	0	0	0	0		0		
Detector 1 Size(ft)	20	20	20	6	6		20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Detector 2 Position(ft)				94	94				
Detector 2 Size(ft)				6	6				
Detector 2 Type				Cl+Ex	Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)				0.0	0.0				
Turn Type	Prot	Perm	Prot	NA	NA		Perm		
Protected Phases	4		1	6	2				
Permitted Phases		4					2		
Detector Phase	4	4	1	6	2		2		
Switch Phase									
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0		10.0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Minimum Split (s)	22.5	22.5	11.0	22.5	22.5		22.5		
Total Split (s)	48.0	48.0	11.0	57.0	46.0		46.0		
Total Split (%)	45.7%	45.7%	10.5%	54.3%	43.8%		43.8%		
Maximum Green (s)	42.0	42.0	5.0	51.0	40.0		40.0		
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0		
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0		
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0		
Lead/Lag			Lag		Lead		Lead		
Lead-Lag Optimize?			Yes		Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		
Recall Mode	None	None	None	C-Max	C-Max		C-Max		
Act Effct Green (s)	42.0	42.0	5.0	51.0	40.0		40.0		
Actuated g/C Ratio	0.40	0.40	0.05	0.49	0.38		0.38		
v/c Ratio	1.01	0.13	1.04	0.51	0.96		0.61		
Control Delay	69.5	4.2	158.8	19.3	17.3		3.8		
Queue Delay	0.0	0.0	0.0	0.0	0.3		3.3		
Total Delay	69.5	4.2	158.8	19.3	17.6		7.1		
LOS	E	A	F	B	B		A		
Approach Delay	62.4			28.4	15.2				
Approach LOS	E			C	B				

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 14 (13%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.04			
Intersection Signal Delay: 27.4		Intersection LOS: C	
Intersection Capacity Utilization 89.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 10: 22ND ST & EB 22ND OFF & EB 22ND ON

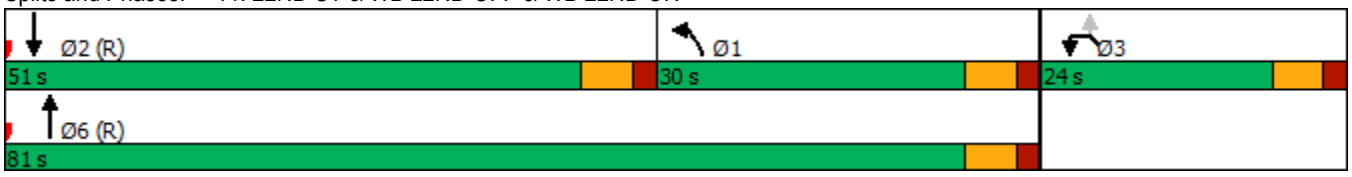


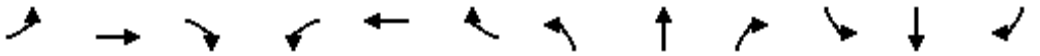
Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations											
Traffic Volume (vph)	0	0	285	1530	0	0	2150	0	70	0	255
Future Volume (vph)	0	0	285	1530	0	0	2150	0	70	0	255
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00	1.00	1.00	1.00
Frt											0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Flt Permitted			0.950						0.950		
Satd. Flow (perm)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)											94
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	264			498			271			329	
Travel Time (s)	6.0			11.3			6.2			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	310	1663	0	0	2337	0	76	0	277
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	310	1663	0	0	2337	0	76	0	277
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			12	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors			1	2			2		1		1
Detector Template			Left	Thru			Thru		Left		Right
Leading Detector (ft)			20	100			100		20		20
Trailing Detector (ft)			0	0			0		0		0
Detector 1 Position(ft)			0	0			0		0		0
Detector 1 Size(ft)			20	6			6		20		20
Detector 1 Type			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Queue (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Delay (s)			0.0	0.0			0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type			Prot	NA			NA		Prot		Perm
Protected Phases			1	6			2		3		
Permitted Phases											3
Detector Phase			1	6			2		3		3
Switch Phase											
Minimum Initial (s)			5.0	10.0			10.0		10.0		10.0

Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Minimum Split (s)			11.8	22.5			22.5		22.5		22.5
Total Split (s)			30.0	81.0			51.0		24.0		24.0
Total Split (%)			28.6%	77.1%			48.6%		22.9%		22.9%
Maximum Green (s)			24.0	75.0			45.0		18.0		18.0
Yellow Time (s)			4.0	4.0			4.0		4.0		4.0
All-Red Time (s)			2.0	2.0			2.0		2.0		2.0
Lost Time Adjust (s)			0.0	0.0			0.0		0.0		0.0
Total Lost Time (s)			6.0	6.0			6.0		6.0		6.0
Lead/Lag			Lag				Lead				
Lead-Lag Optimize?											
Vehicle Extension (s)			3.0	3.0			3.0		3.0		3.0
Recall Mode			None	C-Max			C-Max		None		None
Act Effct Green (s)			24.0	77.0			47.0		16.0		16.0
Actuated g/C Ratio			0.23	0.73			0.45		0.15		0.15
v/c Ratio			0.77	0.45			0.81		0.28		0.87
Control Delay			45.6	3.6			28.5		41.3		54.2
Queue Delay			0.0	0.0			0.5		0.0		0.0
Total Delay			45.6	3.6			29.1		41.3		54.2
LOS			D	A			C		D		D
Approach Delay				10.2			29.1			51.4	
Approach LOS				B			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 105			
Actuated Cycle Length: 105			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 22.8		Intersection LOS: C	
Intersection Capacity Utilization 64.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 11: 22ND ST & WB 22ND OFF & WB 22ND ON





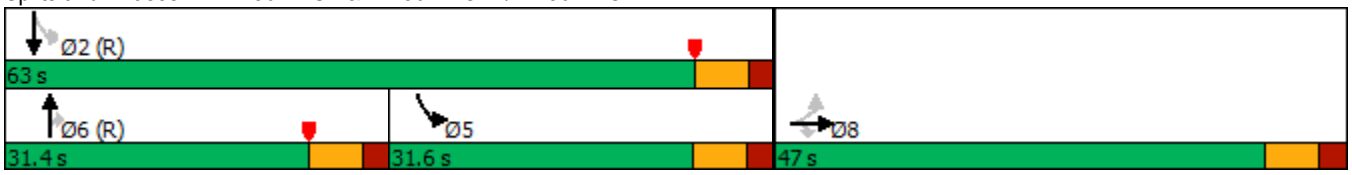
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	0	780	0	0	0	0	1355	70	470	1575	0
Future Volume (vph)	190	0	780	0	0	0	0	1355	70	470	1575	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	0		0
Storage Lanes	0		2	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	2787	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.123		
Satd. Flow (perm)	0	1770	2787	0	0	0	0	6408	1583	229	5085	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)									105			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		549			603			383			284	
Travel Time (s)		12.5			13.7			8.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	207	0	848	0	0	0	0	1473	76	511	1712	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	207	848	0	0	0	0	1473	76	511	1712	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8						6	2		

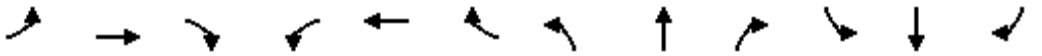
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8	8					6	6	5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	5.0	10.0	
Minimum Split (s)	46.9	46.9	46.9					16.5	16.5	11.7	23.5	
Total Split (s)	47.0	47.0	47.0					31.4	31.4	31.6	63.0	
Total Split (%)	42.7%	42.7%	42.7%					28.5%	28.5%	28.7%	57.3%	
Maximum Green (s)	40.1	40.1	40.1					24.9	24.9	24.9	56.5	
Yellow Time (s)	4.4	4.4	4.4					4.4	4.4	4.4	4.4	
All-Red Time (s)	2.5	2.5	2.5					2.1	2.1	2.3	2.1	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.9	6.9					6.5	6.5	6.7	6.5	
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0					3.0	3.0	2.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		39.3	39.3					25.7	25.7	57.1	57.3	
Actuated g/C Ratio		0.36	0.36					0.23	0.23	0.52	0.52	
v/c Ratio		0.33	0.85					0.98	0.17	1.09	0.65	
Control Delay		27.3	42.3					62.2	3.9	88.1	4.0	
Queue Delay		0.0	0.0					1.0	0.0	4.2	0.0	
Total Delay		27.3	42.3					63.1	3.9	92.3	4.0	
LOS		C	D					E	A	F	A	
Approach Delay		39.3						60.2			24.3	
Approach LOS		D						E			C	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 84 (76%), Referenced to phase 2:SBTL and 6:NBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 39.1 Intersection LOS: D
Intersection Capacity Utilization 73.0% ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 12: 50TH ST & EB 50TH OFF/EB 50TH ON



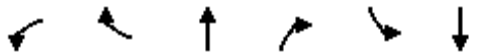


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	45	0	195	345	1200	0	0	2000	115
Future Volume (vph)	0	0	0	45	0	195	345	1200	0	0	2000	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	140		0
Storage Lanes	0		0	0		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	3433	3539	0	0	6408	1583
Flt Permitted					0.950		0.950					
Satd. Flow (perm)	0	0	0	0	1770	1583	3433	3539	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						101						125
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		457			359			284			339	
Travel Time (s)		10.4			8.2			6.5			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	49	0	212	375	1304	0	0	2174	125
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	49	212	375	1304	0	0	2174	125
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4						2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				4	4	4	1	6			2	2
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	10.0
Minimum Split (s)				17.2	17.2	17.2	11.8	16.4			16.4	16.4
Total Split (s)				28.0	28.0	28.0	26.0	82.0			56.0	56.0
Total Split (%)				25.5%	25.5%	25.5%	23.6%	74.5%			50.9%	50.9%
Maximum Green (s)				20.8	20.8	20.8	19.2	75.6			49.6	49.6
Yellow Time (s)				4.4	4.4	4.4	4.4	4.4			4.4	4.4
All-Red Time (s)				2.8	2.8	2.8	2.4	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.2	7.2	6.8	6.4			6.4	6.4
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	2.0	3.0			3.0	3.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)					14.8	14.8	16.0	81.6			58.8	58.8
Actuated g/C Ratio					0.13	0.13	0.15	0.74			0.53	0.53
v/c Ratio					0.21	0.71	0.75	0.50			0.63	0.14
Control Delay					42.5	35.9	66.9	6.3			20.1	3.4
Queue Delay					0.0	0.0	0.2	2.5			0.1	0.0
Total Delay					42.5	35.9	67.2	8.7			20.3	3.4
LOS					D	D	E	A			C	A
Approach Delay					37.2			21.8			19.4	
Approach LOS					D			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 21.4		Intersection LOS: C	
Intersection Capacity Utilization 73.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 13: 50TH ST & WB 50TH ON/WB 50TH OFF



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	215	0	1070	0	0	1050
Future Volume (vph)	215	0	1070	0	0	1050
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	3539	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	3539	0	0	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	292		343			439
Travel Time (s)	6.6		7.8			10.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	234	0	1163	0	0	1141
Shared Lane Traffic (%)						
Lane Group Flow (vph)	234	0	1163	0	0	1141
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2			2
Detector Template	Left		Thru			Thru
Leading Detector (ft)	20		100			100
Trailing Detector (ft)	0		0			0
Detector 1 Position(ft)	0		0			0
Detector 1 Size(ft)	20		6			6
Detector 1 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0			0.0
Detector 1 Queue (s)	0.0		0.0			0.0
Detector 1 Delay (s)	0.0		0.0			0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Detector Phase	8		2			6
Switch Phase						
Minimum Initial (s)	5.0		15.0			15.0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Split (s)	24.8		24.8			24.8
Total Split (s)	51.0		94.0			94.0
Total Split (%)	35.2%		64.8%			64.8%
Maximum Green (s)	44.2		87.2			87.2
Yellow Time (s)	4.8		4.8			4.8
All-Red Time (s)	2.0		2.0			2.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.8		6.8			6.8
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0			3.0
Recall Mode	None		C-Max			C-Max
Walk Time (s)	7.0					
Flash Dont Walk (s)	11.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	24.7		106.7			106.7
Actuated g/C Ratio	0.17		0.74			0.74
v/c Ratio	0.78		0.45			0.44
Control Delay	74.5		8.7			4.2
Queue Delay	0.0		0.0			0.0
Total Delay	74.5		8.7			4.2
LOS	E		A			A
Approach Delay	74.5		8.7			4.2
Approach LOS	E		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 145			
Actuated Cycle Length: 145			
Offset: 72 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 12.8		Intersection LOS: B	
Intersection Capacity Utilization 52.8%		ICU Level of Service A	
Analysis Period (min) 15			

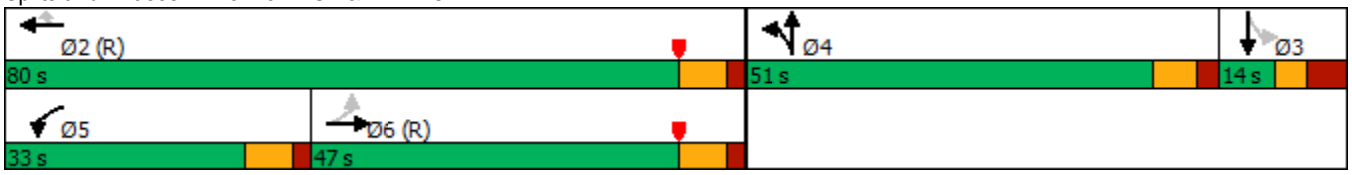
Splits and Phases: 14: 78TH ST & EB 78TH OFF

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1345	530	515	880	5	565	5	515	10	5	5
Future Volume (vph)	10	1345	530	515	880	5	565	5	515	10	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	0		315	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.968	
Flt Protected	0.950			0.950			0.950	0.953			0.974	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1681	1686	1583	0	1756	0
Flt Permitted	0.299			0.950			0.950	0.953			0.693	
Satd. Flow (perm)	557	3539	1583	1770	3539	1583	1681	1686	1583	0	1250	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			405			91			490		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		887			638			788			238	
Travel Time (s)		20.2			14.5			17.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1462	576	560	957	5	614	5	560	11	5	5
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	11	1462	576	560	957	5	307	312	560	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		25			25			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Free	Prot	NA	Perm	Split	NA	Free	Perm	NA	
Protected Phases		6		5	2		4	4			3	
Permitted Phases	6		Free			2			Free	3		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6		5	2	2	4	4		3	3	
Switch Phase												
Minimum Initial (s)	15.0	15.0		5.0	15.0	15.0	6.0	6.0		6.0	6.0	
Minimum Split (s)	25.2	25.2		12.2	26.2	26.2	13.1	13.1		14.0	14.0	
Total Split (s)	47.0	47.0		33.0	80.0	80.0	51.0	51.0		14.0	14.0	
Total Split (%)	32.4%	32.4%		22.8%	55.2%	55.2%	35.2%	35.2%		9.7%	9.7%	
Maximum Green (s)	39.8	39.8		25.8	72.8	72.8	43.9	43.9		6.0	6.0	
Yellow Time (s)	5.2	5.2		5.2	5.2	5.2	4.8	4.8		3.4	3.4	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.3	2.3		4.6	4.6	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	7.2	7.2		7.2	7.2	7.2	7.1	7.1			8.0	
Lead/Lag	Lag	Lag		Lead			Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	39.8	39.8	145.0	40.3	87.3	87.3	34.2	34.2	145.0		6.8	
Actuated g/C Ratio	0.27	0.27	1.00	0.28	0.60	0.60	0.24	0.24	1.00		0.05	
v/c Ratio	0.07	1.51	0.36	1.14	0.45	0.01	0.78	0.78	0.35		0.33	
Control Delay	40.8	269.5	0.6	130.6	18.9	0.0	56.0	56.8	0.8		69.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	40.8	269.5	0.6	130.6	18.9	0.0	56.0	56.8	0.8		69.3	
LOS	D	F	A	F	B	A	E	E	A		E	
Approach Delay		192.7			59.9			30.0			69.3	
Approach LOS		F			E			C			E	

Intersection Summary	
Area Type:	Other
Cycle Length: 145	
Actuated Cycle Length: 145	
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.51	
Intersection Signal Delay: 109.6	Intersection LOS: F
Intersection Capacity Utilization 106.1%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 15: 78TH ST & ADAMO DR



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1855	15	225	1400	0	0
Future Volume (vph)	1855	15	225	1400	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	1.00
Frt		0.850				
Flt Protected				0.993		
Satd. Flow (prot)	5085	1583	0	5050	0	0
Flt Permitted				0.993		
Satd. Flow (perm)	5085	1583	0	5050	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	638			376	435	
Travel Time (s)	14.5			8.5	9.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2016	16	245	1522	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2016	16	0	1767	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	25			25	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 74.1%		ICU Level of Service D	
Analysis Period (min) 15			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	230	0	1350	0	0	0	0	1390	425	405	2015	0
Future Volume (vph)	230	0	1350	0	0	0	0	1390	425	405	2015	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	315		500	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.089		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	166	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			282						462			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		739			677			1414			381	
Travel Time (s)		16.8			15.4			32.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	0	1467	0	0	0	0	1511	462	440	2190	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	250	1467	0	0	0	0	1511	462	440	2190	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0			30			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Free					NA	Perm	D.P+P	NA	
Protected Phases		4						2		1 3	6 3 2	
Permitted Phases	4		Free						2	2		

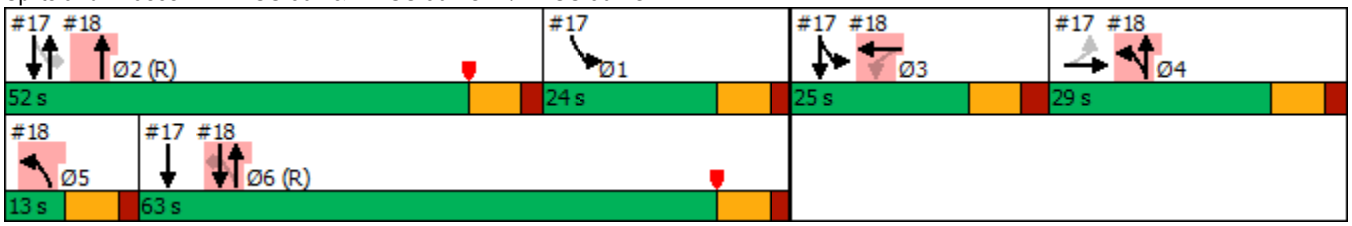
Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4						2	2	1 3	6 3 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0						15.0	15.0			
Minimum Split (s)	12.5	12.5						22.1	22.1			
Total Split (s)	29.0	29.0						52.0	52.0			
Total Split (%)	22.3%	22.3%						40.0%	40.0%			
Maximum Green (s)	21.5	21.5						44.9	44.9			
Yellow Time (s)	5.1	5.1						5.1	5.1			
All-Red Time (s)	2.4	2.4						2.0	2.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		7.5						7.1	7.1			
Lead/Lag	Lag	Lag						Lead	Lead			
Lead-Lag Optimize?	Yes	Yes						Yes	Yes			
Vehicle Extension (s)	4.0	4.0						3.0	3.0			
Recall Mode	None	None						C-Max	C-Max			
Act Effct Green (s)		21.5	130.0					44.9	44.9	86.8	93.9	
Actuated g/C Ratio		0.17	1.00					0.35	0.35	0.67	0.72	
v/c Ratio		0.86	0.93					0.68	0.54	0.70	0.60	
Control Delay		79.3	12.0					38.4	5.3	19.8	2.2	
Queue Delay		0.0	0.0					0.0	0.0	55.0	0.2	
Total Delay		79.3	12.0					38.4	5.3	74.8	2.4	
LOS		E	B					D	A	E	A	
Approach Delay		21.8						30.6			14.5	
Approach LOS		C						C			B	

Intersection Summary

Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow
Natural Cycle: 100
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 21.5 Intersection LOS: C
Intersection Capacity Utilization 79.6% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 17: US 301 & EB US 301 OFF/EB US 301 ON



Lane Group	Ø1	Ø3	Ø5	Ø6
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	15.0
Minimum Split (s)	12.1	12.8	12.1	22.1
Total Split (s)	24.0	25.0	13.0	63.0
Total Split (%)	18%	19%	10%	48%
Maximum Green (s)	16.9	17.2	5.9	55.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.7	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	4.0	3.0
Recall Mode	None	None	None	C-Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

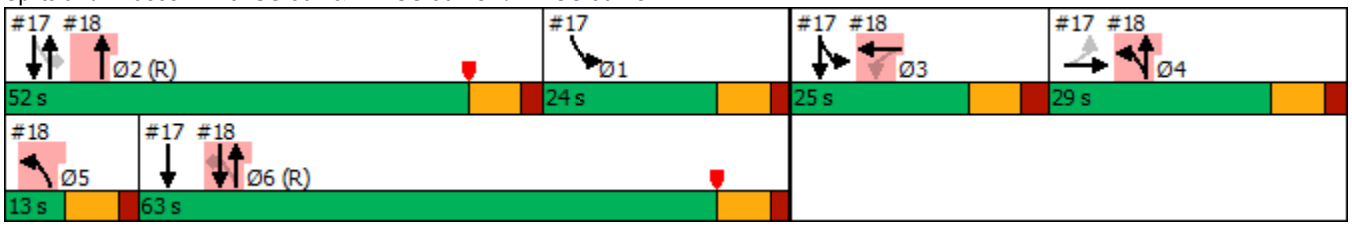
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	180	0	350	250	1370	0	0	2240	150
Future Volume (vph)	0	0	0	180	0	350	250	1370	0	0	2240	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	300		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.072					
Satd. Flow (perm)	0	0	0	0	1770	1583	134	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						282						163
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			711			381			795	
Travel Time (s)		13.2			16.2			8.7			18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	196	0	380	272	1489	0	0	2435	163
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	196	380	272	1489	0	0	2435	163
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			20			30	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Free	D.P+P	NA			NA	Perm
Protected Phases					3		5 4	2 4 6			6	
Permitted Phases				3		Free	6					6

Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				3	3		5 4	2 4 6			6	6
Switch Phase												
Minimum Initial (s)				5.0	5.0						15.0	15.0
Minimum Split (s)				12.8	12.8						22.1	22.1
Total Split (s)				25.0	25.0						63.0	63.0
Total Split (%)				19.2%	19.2%						48.5%	48.5%
Maximum Green (s)				17.2	17.2						55.9	55.9
Yellow Time (s)				5.1	5.1						5.1	5.1
All-Red Time (s)				2.7	2.7						2.0	2.0
Lost Time Adjust (s)					0.0						0.0	0.0
Total Lost Time (s)					7.8						7.1	7.1
Lead/Lag				Lead	Lead						Lag	Lag
Lead-Lag Optimize?				Yes	Yes						Yes	Yes
Vehicle Extension (s)				4.0	4.0						3.0	3.0
Recall Mode				None	None						C-Max	C-Max
Act Effct Green (s)					17.2	130.0	90.8	97.9			55.9	55.9
Actuated g/C Ratio					0.13	1.00	0.70	0.75			0.43	0.43
v/c Ratio					0.84	0.24	0.51	0.39			0.88	0.21
Control Delay					83.9	0.4	59.5	0.9			38.9	3.9
Queue Delay					0.0	0.0	1.7	0.1			1.4	0.0
Total Delay					83.9	0.4	61.2	1.0			40.3	3.9
LOS					F	A	E	A			D	A
Approach Delay					28.8			10.3			38.0	
Approach LOS					C			B			D	

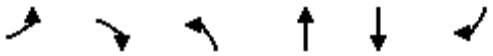
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 27.1		Intersection LOS: C	
Intersection Capacity Utilization 79.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 18: US 301 & WB US 301 ON/WB US 301 OFF

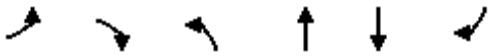


Lane Group	Ø1	Ø2	Ø4	Ø5
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	15.0	5.0	5.0
Minimum Split (s)	12.1	22.1	12.5	12.1
Total Split (s)	24.0	52.0	29.0	13.0
Total Split (%)	18%	40%	22%	10%
Maximum Green (s)	16.9	44.9	21.5	5.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.4	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0	4.0	4.0
Recall Mode	None	C-Max	None	None
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary



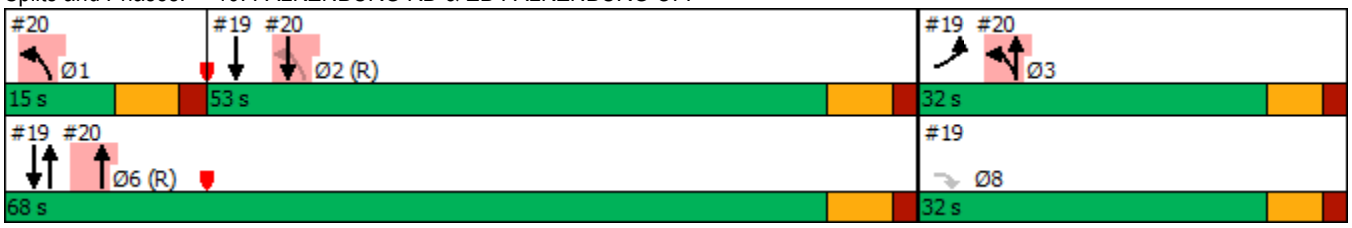
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Lane Configurations								
Traffic Volume (vph)	490	740	0	1390	1485	0		
Future Volume (vph)	490	740	0	1390	1485	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	0.97	0.88	1.00	0.91	0.91	1.00		
Frt		0.850						
Flt Protected	0.950							
Satd. Flow (prot)	3433	2787	0	5085	5085	0		
Flt Permitted	0.950							
Satd. Flow (perm)	3433	2787	0	5085	5085	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		54						
Link Speed (mph)	30			30	30			
Link Distance (ft)	519			688	550			
Travel Time (s)	11.8			15.6	12.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	533	804	0	1511	1614	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	533	804	0	1511	1614	0		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	24			30	30			
Link Offset(ft)	0			0	0			
Crosswalk Width(ft)	16			16	16			
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	9	15			9		
Number of Detectors	1	1		2	2			
Detector Template	Left	Right		Thru	Thru			
Leading Detector (ft)	20	20		100	100			
Trailing Detector (ft)	0	0		0	0			
Detector 1 Position(ft)	0	0		0	0			
Detector 1 Size(ft)	20	20		6	6			
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			
Detector 2 Position(ft)				94	94			
Detector 2 Size(ft)				6	6			
Detector 2 Type				Cl+Ex	Cl+Ex			
Detector 2 Channel								
Detector 2 Extend (s)				0.0	0.0			
Turn Type	Prot	Perm		NA	NA			
Protected Phases	3			6	2 6		1	2
Permitted Phases		8						
Detector Phase	3	8		6	2 6			
Switch Phase								
Minimum Initial (s)	6.0	6.0		15.0			5.0	15.0

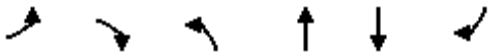


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Minimum Split (s)	22.5	22.5		22.5			11.8	22.5
Total Split (s)	32.0	32.0		68.0			15.0	53.0
Total Split (%)	32.0%	32.0%		68.0%			15%	53%
Maximum Green (s)	25.9	25.9		61.2			8.2	46.2
Yellow Time (s)	4.1	4.1		4.8			4.8	4.8
All-Red Time (s)	2.0	2.0		2.0			2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0				
Total Lost Time (s)	6.1	6.1		6.8				
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)	3.5	3.5		4.0			6.0	4.0
Recall Mode	None	None		C-Max			None	C-Max
Act Effct Green (s)	25.9	25.9		61.2	61.2			
Actuated g/C Ratio	0.26	0.26		0.61	0.61			
v/c Ratio	0.60	1.06		0.49	0.52			
Control Delay	35.8	83.1		11.4	8.7			
Queue Delay	0.0	0.0		0.0	0.1			
Total Delay	35.8	83.1		11.4	8.8			
LOS	D	F		B	A			
Approach Delay	64.3			11.4	8.8			
Approach LOS	E			B	A			

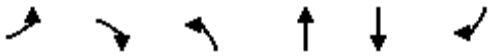
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 26.3		Intersection LOS: C	
Intersection Capacity Utilization 77.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 19: FALKENBURG RD & EB FALKENBURG OFF





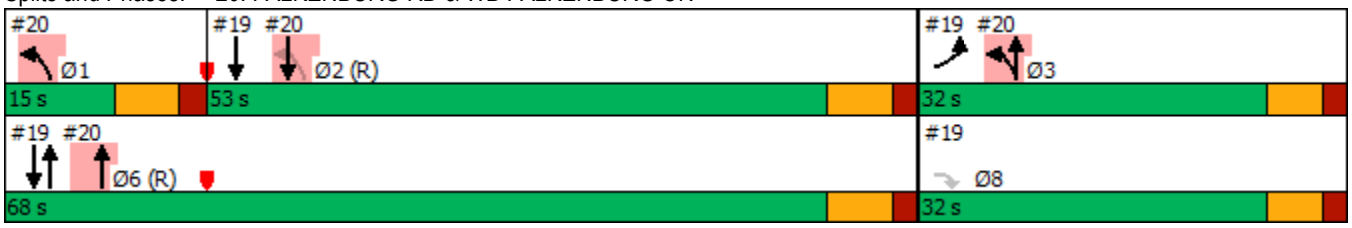
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	0	0	455	1425	1485	455				
Future Volume (vph)	0	0	455	1425	1485	455				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00				
Frt						0.850				
Flt Protected			0.950							
Satd. Flow (prot)	0	0	1770	3539	3539	1583				
Flt Permitted			0.087							
Satd. Flow (perm)	0	0	162	3539	3539	1583				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)						231				
Link Speed (mph)	30			30	30					
Link Distance (ft)	492			550	852					
Travel Time (s)	11.2			12.5	19.4					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				
Adj. Flow (vph)	0	0	495	1549	1614	495				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	495	1549	1614	495				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			30	30					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Turning Speed (mph)	15	9	15			9				
Number of Detectors			1	2	2	1				
Detector Template			Left	Thru	Thru	Right				
Leading Detector (ft)			20	100	100	20				
Trailing Detector (ft)			0	0	0	0				
Detector 1 Position(ft)			0	0	0	0				
Detector 1 Size(ft)			20	6	6	20				
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel										
Detector 1 Extend (s)			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94					
Detector 2 Size(ft)				6	6					
Detector 2 Type				Cl+Ex	Cl+Ex					
Detector 2 Channel										
Detector 2 Extend (s)				0.0	0.0					
Turn Type			D.P+P	NA	NA	Free				
Protected Phases			1 3	6 3	2		1	3	6	8
Permitted Phases			2			Free				
Detector Phase			1 3	6 3	2					
Switch Phase										
Minimum Initial (s)					15.0		5.0	6.0	15.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Minimum Split (s)					22.5		11.8	22.5	22.5	22.5
Total Split (s)					53.0		15.0	32.0	68.0	32.0
Total Split (%)					53.0%		15%	32%	68%	32%
Maximum Green (s)					46.2		8.2	25.9	61.2	25.9
Yellow Time (s)					4.8		4.8	4.1	4.8	4.1
All-Red Time (s)					2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)					0.0					
Total Lost Time (s)					6.8					
Lead/Lag					Lag		Lead			
Lead-Lag Optimize?					Yes		Yes			
Vehicle Extension (s)					4.0		6.0	3.5	4.0	3.5
Recall Mode					C-Max		None	None	C-Max	None
Act Effct Green (s)			86.4	100.0	46.2	100.0				
Actuated g/C Ratio			0.86	1.00	0.46	1.00				
v/c Ratio			0.63	0.44	0.99	0.31				
Control Delay			29.4	0.7	46.9	0.5				
Queue Delay			0.0	0.0	0.0	0.0				
Total Delay			29.4	0.7	46.9	0.5				
LOS			C	A	D	A				
Approach Delay				7.6	36.0					
Approach LOS				A	D					

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 22.0		Intersection LOS: C	
Intersection Capacity Utilization 77.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 20: FALKENBURG RD & WB FALKENBURG ON

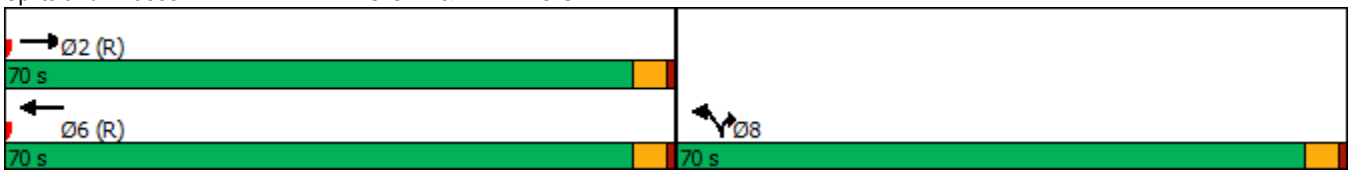


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	870	0	0	665	275	745
Future Volume (vph)	870	0	0	665	275	745
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.88
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3539	0	0	3539	1770	2787
Flt Permitted					0.950	
Satd. Flow (perm)	3539	0	0	3539	1770	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						130
Link Speed (mph)	30			30	30	
Link Distance (ft)	390			343	501	
Travel Time (s)	8.9			7.8	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	946	0	0	723	299	810
Shared Lane Traffic (%)						
Lane Group Flow (vph)	946	0	0	723	299	810
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (ft)	100			100	20	20
Trailing Detector (ft)	0			0	0	0
Detector 1 Position(ft)	0			0	0	0
Detector 1 Size(ft)	6			6	20	20
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Prot
Protected Phases	2			6	8	8
Permitted Phases						
Detector Phase	2			6	8	8
Switch Phase						
Minimum Initial (s)	5.0			5.0	5.0	5.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	23.7			23.7	23.7	23.7
Total Split (s)	70.0			70.0	70.0	70.0
Total Split (%)	50.0%			50.0%	50.0%	50.0%
Maximum Green (s)	65.5			65.5	65.5	65.5
Yellow Time (s)	3.5			3.5	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	4.5			4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)	7.0			7.0	7.0	7.0
Flash Dont Walk (s)	11.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	86.3			86.3	44.7	44.7
Actuated g/C Ratio	0.62			0.62	0.32	0.32
v/c Ratio	0.43			0.33	0.53	0.83
Control Delay	15.9			14.5	41.5	43.9
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	15.9			14.5	41.5	43.9
LOS	B			B	D	D
Approach Delay	15.9			14.5	43.3	
Approach LOS	B			B	D	

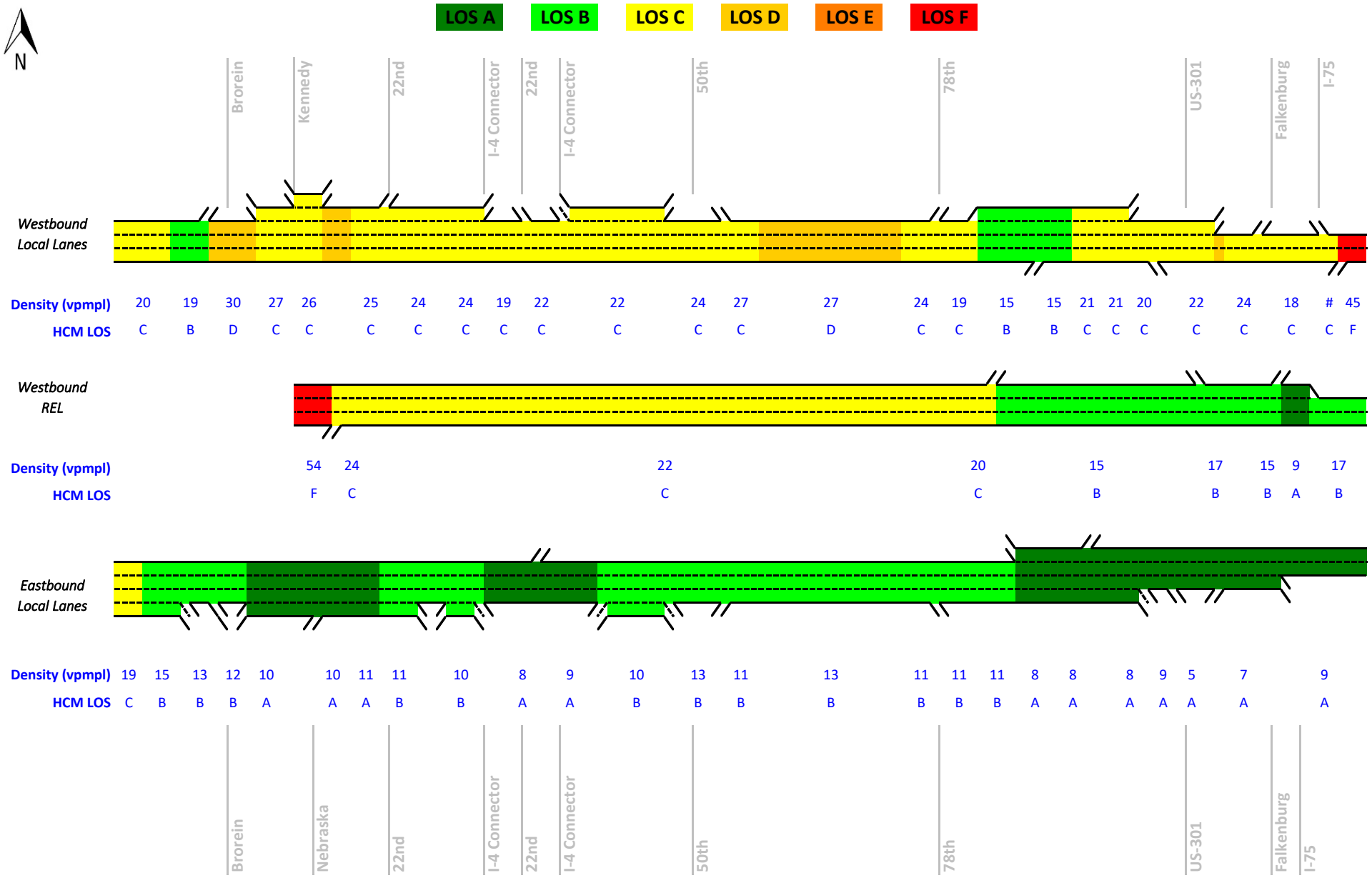
Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 26.5		Intersection LOS: C	
Intersection Capacity Utilization 57.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 21: EB WHITING OFF & WHITING ST



Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

2036 Build Alt. 3



Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	98.2	49.1	F
Upstream of REL Ramp 3 Off	Diverge	1,519	2	90.8	45.4	F
Upstream of C-D Road Off	Diverge	844	2	42.3	21.1	C
C-D Road Off to Falkenburg Rd	Basic Freeway	2,519	2	36.9	18.5	C
Downstream of Falkenburg Rd On	Merge	1,506	2	56.8	23.8	C
Falkenburg Rd to C-D Road On	Basic Freeway	139	2	55.3	27.6	D
Downstream of C-D Road On	Merge	1,487	3	65.7	21.9	C
C-D Road On to REL On	Basic Freeway	606	3	62.7	20.9	C
Downstream of REL On	Merge	997	3	69.7	20.4	C
Downstream of US-301 On	Merge	1,188	4	83.8	21.0	C
US-301 to REL Off	Basic Freeway	923	4	84.3	21.1	C
Upstream of REL Off	Diverge	1,478	4	58.4	14.6	B
REL to 78th St (4 lanes)	Basic Freeway	2,442	4	58.4	14.6	B
REL to 78th St (3 lanes)	Basic Freeway	1,592	3	58.3	19.4	C
Downstream of 78th St On	Merge	1,770	3	80.3	23.5	C
78th St to 50th St	Basic Freeway	6,087	3	82.0	27.3	D
Upstream of 50th St Off	Diverge	1,592	3	81.3	27.1	C
Between 50th St Ramps	Basic Freeway	2,619	3	72.4	24.1	C
50th St to I-4	Weave	4,285	4	87.9	22.0	C
Upstream of 22nd Off	Diverge	1,552	3	64.6	21.5	C
22nd St Off to I-4 On	Basic Freeway	1,699	3	57.5	19.2	C
Downstream of I-4 On	Merge	1,503	4	95.4	23.8	C
I-4 On to 22nd St On	Basic Freeway	2,487	4	95.2	23.8	C
Downstream of 22nd St On	Merge	1,507	4	107.6	25.0	C
22nd St to REL Ramp 1 On	Basic Freeway	1,684	4	107.8	26.9	D
REL Ramp 1 On to Kennedy Blvd Off	Weave	1,147	5	128.0	25.6	C
Upstream of Brorein St Off	Diverge	1,029	4	107.9	27.0	C
Between Brorein St Ramps	Basic Freeway	2,061	3	89.6	29.9	D
Downstream of Brorein St On	Merge	1,460	4	82.8	18.8	B
Selmon Continue West	Basic Freeway	2,495	4	80.1	20.0	C

Westbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
From Brandon (2 lanes)	Basic Freeway	3,102	2	34.5	17.3	B
From Brandon (3 lanes)	Basic Freeway	1,429	3	28.0	9.3	A
Downstream of LL On (at I-75)	Merge	1,498	3	49.7	14.5	B
LL On to LL Off	Basic Freeway	911	3	50.0	16.7	B
Upstream of LL Off (at US-301)	Diverge	1,591	3	50.4	16.8	B
LL Off to LL On	Basic Freeway	8,473	3	44.7	14.9	B
Downstream of LL On (at US-301)	Merge	1,526	3	69.1	20.2	C
LL On to LL Off	Basic Freeway	25,347	3	66.4	22.1	C
Upstream of LL Off (at Kennedy Blvd)	Diverge	1,263	3	85.4	24.1	C
To Twiggs St	Basic Freeway	1,408	4	214.7	53.7	F

Eastbound Peak Hour Level of Service by Segment
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 SB	Basic Freeway	2,257	2	17	9	A
US-301 On to I-75 NB Off	Weave	1,852	3	24	7	A
Falkenburg Rd to US-301 On	Basic Freeway	1,718	3	16	5	A
Upstream of Falkenburg Rd Off	Diverge	1,115	3	26	9	A
Upstream of US-301 Off	Diverge	1,483	4	33	8	A
REL to US-301	Basic Freeway	293	4	33	8	A
Upstream of REL Off	Basic Freeway	1,808	4	33	8	A
Downstream of REL On	Basic Freeway	1,502	4	33	8	A
78th St to REL (3 lanes)	Basic Freeway	1,956	3	33	11	B
78th St to REL (3 lanes)	Basic Freeway	875	3	33	11	B
Upstream of 78th St Off	Diverge	1,495	3	38	11	B
50th St to 78th St	Basic Freeway	6,583	3	38	13	B
Downstream of 50th St On	Merge	1,497	3	38	11	B
Between 50th St Ramps	Basic Freeway	2,766	3	39	13	B
I-4 to 50th St	Weave	2,226	4	45	10	B
REL Off to I-4 On	Basic Freeway	4,056	3	26	9	A
Upstream of REL Off (3 lanes)	Basic Freeway	1,500	3	25	8	A
Upstream of REL Off (3 lanes)	Basic Freeway	586	3	26	9	A
22nd St On to I-4 Off	Weave	1,541	4	41	10	B
Between 22nd St Ramps	Basic Freeway	862	3	40	13	B
Upstream of 22nd St Off	Diverge	1,505	4	44	11	B
Nebraska Ave to 22nd St	Basic Freeway	1,179	4	44	11	A
Downstream of Nebraska Ave On	Merge	1,512	4	44	10	A
Brorein St to Nebraska Ave	Basic Freeway	341	4	38	10	A
Downstream of Brorein St On	Merge	1,531	4	39	10	A
Whiting St to Brorein St	Basic Freeway	1,180	3	35	12	B
Upstream of Whiting St Off	Diverge	818	4	54	13	B
Upstream of Florida Ave Off	Diverge	1,706	5	76	15	B
From Selmon West	Basic Freeway	2,487	4	77	19	C

Westbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	3,520	3,514	-6	0%	0.1
REL Ramp 3 to C-D Road Off	2,340	2,353	13	1%	0.3
C-D Road Off to Falkenburg Rd	1,880	2,067	187	10%	4.2
Falkenburg Rd to C-D Road On	2,810	2,976	166	6%	3.1
C-D Road On to REL On	3,980	3,993	13	0%	0.2
REL On to US-301 On	4,360	4,351	-9	0%	0.1
US-301 to REL Off	5,250	5,064	-186	4%	2.6
REL to 78th St	3,780	3,678	-102	3%	1.7
78th St to 50th St	4,880	4,788	-92	2%	1.3
Between 50th St Ramps	4,640	4,569	-71	2%	1.0
50th St to I-4	5,470	5,366	-104	2%	1.4
I-4 Off to 22nd St Off	4,020	3,936	-84	2%	1.3
22nd St Off to I-4 On	3,510	3,421	-89	3%	1.5
I-4 On to 22nd St On	5,440	5,235	-205	4%	2.8
22nd St to REL Ramp 1 On	6,070	5,860	-210	3%	2.7
REL Ramp 1 On to Kennedy Blvd	6,530	6,225	-305	5%	3.8
Kennedy Blvd to Brorein St	5,270	5,040	-230	4%	3.2
Between Brorein St Ramps	4,170	3,987	-183	4%	2.9
Selmon Continue West	4,660	4,376	-284	6%	4.2
Reversible Express Lanes					
From Brandon	1,910	1,886	-24	1%	0.5
LL On (at I-75) to LL Off (at US-301)	3,090	3,068	-22	1%	0.4
LL Off (at US-301) to LL On (at US-301)	2,710	2,720	10	0%	0.2
LL On (at US-301) to LL Off (at Kennedy Blvd)	4,180	4,121	-59	0.0	0.9
LL Off (at Kennedy Blvd) to Twiggs St	3,720	3,696	-24	0.0	0.4
NETWORK TOTAL	**98,190**	**96,290**	**-1,900**	**2%**	

Eastbound GEH Statistics
AM Peak Hour (7:00-8:00 AM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 SB	380	910	530	139%	20.9
US-301 On to I-75 NB Off	1,330	1,261	-69	5%	1.9
Falkenburg Rd Off to US-301 On	970	929	-41	4%	1.3
US-301 Off to Falkenburg Rd Off	1,730	1,672	-58	3%	1.4
REL Off to US-301	2,200	2,106	-94	4%	2.0
Between REL Ramps	2,200	2,130	-70	3%	1.5
78th St to REL	2,200	2,140	-60	3%	1.3
50th St to 78th St	2,470	2,420	-50	2%	1.0
Between 50th St Ramps	2,330	2,289	-41	2%	0.9
I-4 to 50th St	2,700	2,641	-59	2%	1.1
REL Off to I-4 On	1,560	1,504	-56	4%	1.4
I-4 Off to REL Off	1,560	1,504	-56	4%	1.4
22nd St On to I-4 Off	2,490	2,388	-102	4%	2.1
Between 22nd St Ramps	2,380	2,289	-91	4%	1.9
Nebraska Ave to 22nd St	2,660	2,561	-99	4%	1.9
Brorein St to Nebraska Ave	2,280	2,119	-161	7%	3.4
Whiting St to Brorein St	2,010	1,997	-13	1%	0.3
Upstream of Whiting St Off	3,060	3,003	-57	2%	1.0
From Selmon West	4,210	4,193	-17	0%	0.3
NETWORK TOTAL	**40,720**	**40,055**	**-665**	**2%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2036 Build Alt. 3

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
East Selmon	46	44	43	38	32	33	40	46	46	47	44	45
	41	40	40	39	39	39	39	40	41	41	40	40
	56	56	56	56	56	56	56	56	56	56	56	56
	56	56	56	56	56	56	56	56	56	56	56	56
	56	54	54	53	52	52	52	54	55	55	53	54
	56	55	54	54	54	54	54	54	55	55	55	55
	62	61	61	60	60	61	61	61	62	61	61	61
	65	64	64	63	64	64	64	64	64	64	64	64
	64	63	63	62	62	62	63	63	63	63	63	63
	63	61	61	60	60	60	60	61	61	61	61	61
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	62	60	59	58	58	59	59	59	60	59	59	60
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	64	64	63	63	63	63	63	63	63	64	64	63
	63	62	62	61	61	61	61	61	61	61	62	62
Downtown	63	62	62	61	61	61	61	61	61	61	61	62
	62	61	61	61	61	61	60	60	61	61	61	61
	55	55	55	55	55	55	55	55	55	55	55	55
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	57	56	55	55	55	55	54	54	55	55	55	55
	57	56	55	55	55	55	54	54	55	55	55	55
	53	52	51	50	49	48	49	49	50	50	51	51
	53	51	49	48	47	46	46	47	49	48	49	50
	52	50	48	46	45	44	44	46	47	46	47	48
	54	54	53	53	53	52	53	53	53	53	53	53
	56	55	55	55	55	55	55	55	55	55	55	55

To REL
C-D Road Off
Falkenburg Rd On
C-D Road On
From REL
US-301 On
To REL
78th St On
Westbound
50th St Off
50th St On
I-4 Off
22nd St Off
I-4 On
22nd St On
From REL
Kennedy Off
Brorein Off
Brorein On

Westbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2036 Build Alt. 3

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
REL Start (Brandon)												
East Selmon	56	56	55	55	54	54	55	55	55	55	56	56
	69	68	68	68	67	67	67	68	68	68	68	68
From I-75 NB												
	61	61	62	62	62	62	62	62	62	62	62	61
	61	61	61	61	61	61	61	62	62	62	61	61
	60	61	61	61	61	61	61	61	62	62	61	61
To Local												
	60	61	61	61	61	61	61	61	62	62	61	60
From Local												
	60	60	60	59	59	59	59	60	60	60	60	60
	64	63	63	62	62	62	62	63	63	63	63	63
Down - town	53	52	51	50	50	49	49	50	51	51	51	51
	25	24	23	22	22	21	20	22	22	24	22	23
REL End (Twiggs)												

Westbound

To Local

Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
AM Peak Period (6:00-9:00 AM)

2036 Build Alt. 3

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	6:00 AM	6:15 AM	6:30 AM	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM
East Selmon	53	53	53	52	52	52	52	52	52	52	52	52
	52	52	52	52	52	52	52	52	52	52	52	52
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Downtown	60	60	60	59	59	59	59	59	59	59	59	59
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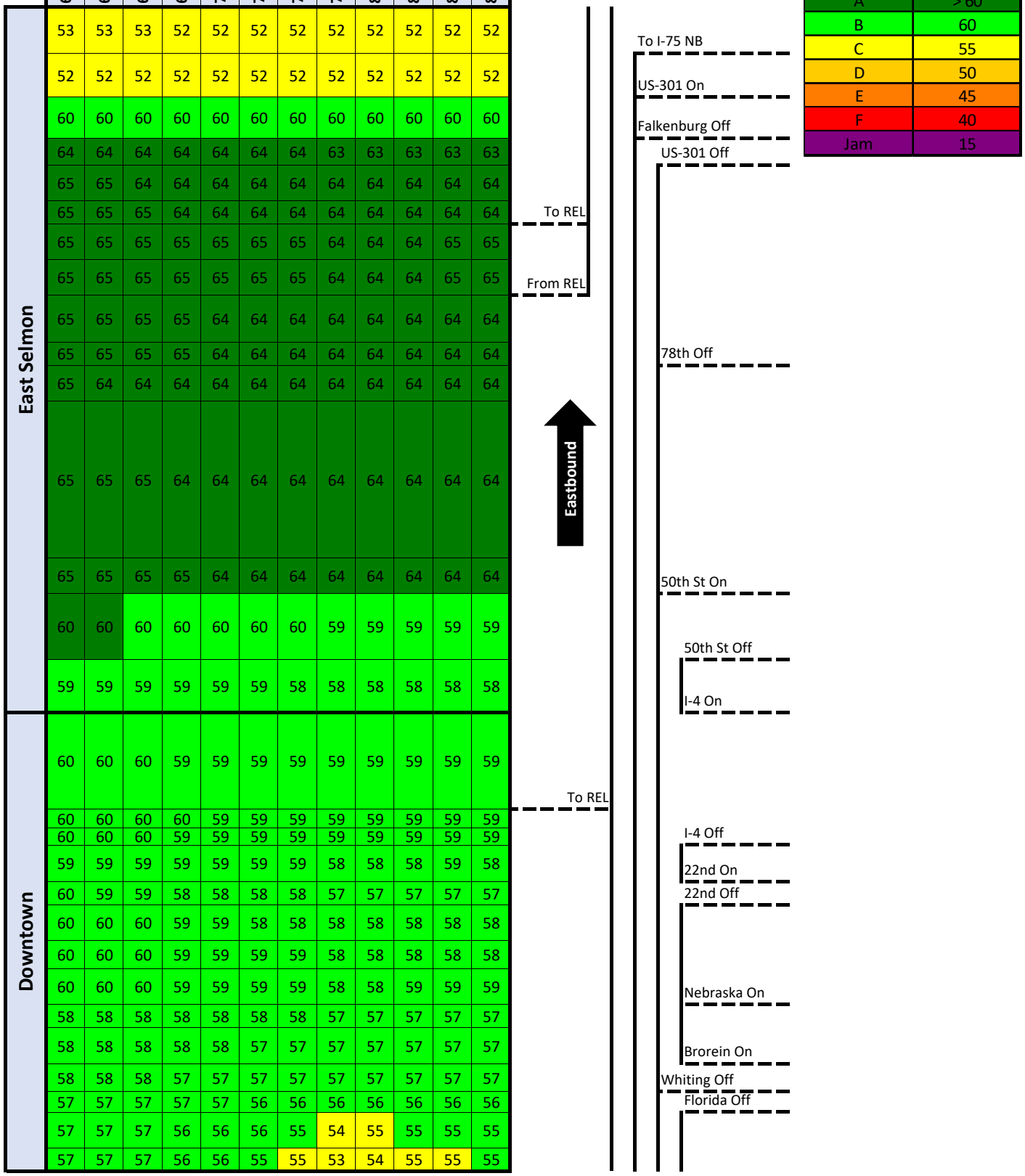
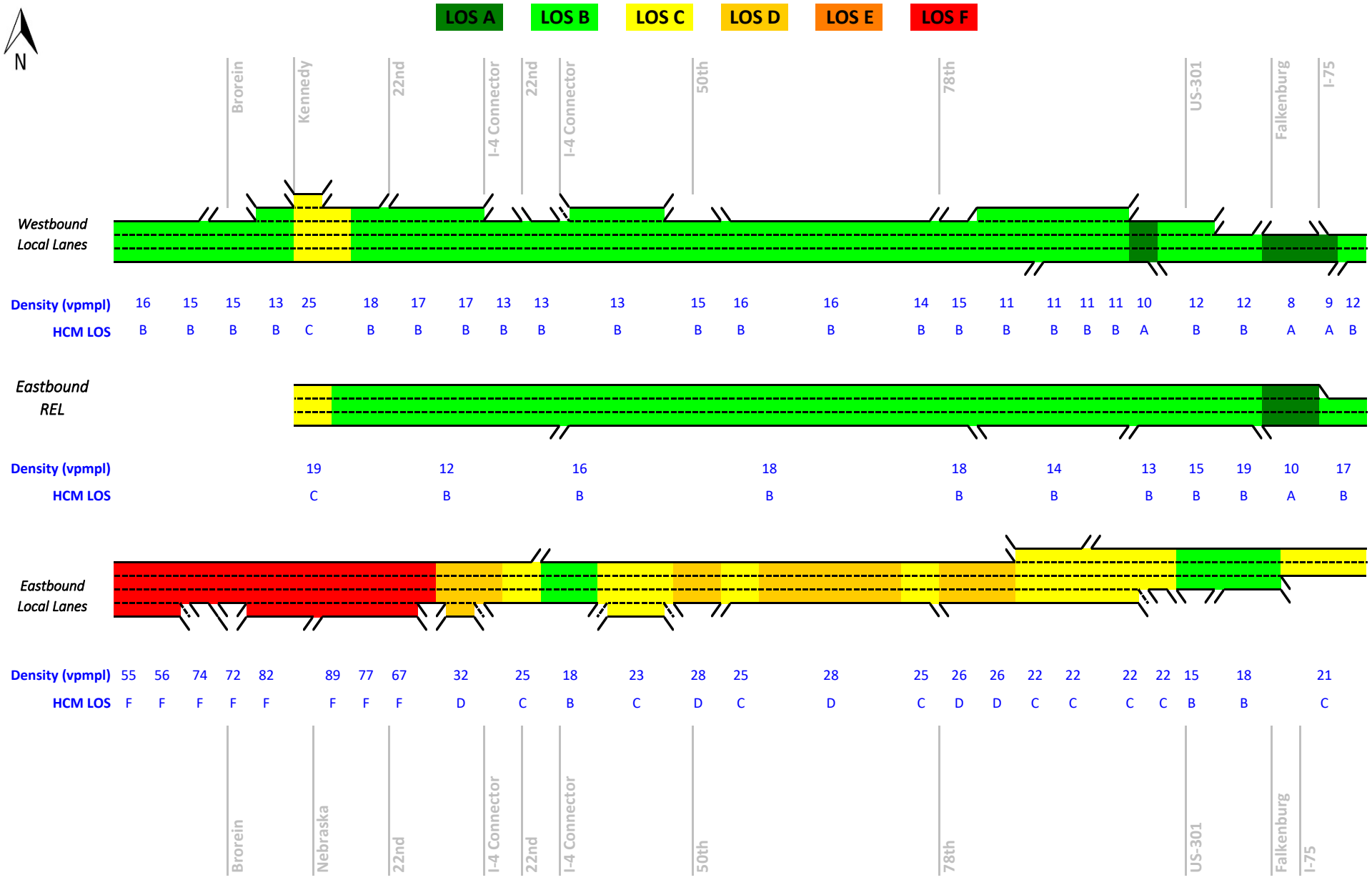


Travel Times by Segment, Local Lanes
AM Peak Hour (7:00-8:00 AM)

From	To	2036 No-Build Travel Time (min)	2036 Build Alt. 3 Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	4.7	0.9	-4	-81%
US-301	78th St	3.9	1.8	-2	-55%
78th St	50th St	2.3	2.0	0	-13%
50th St	I-4 Connector	1.5	1.5	0	-3%
I-4 Connector	20th St	0.7	0.7	0	-9%
20th St	Channelside Dr	1.1	0.8	0	-27%
Channelside Dr	Kennedy Blvd	0.6	0.6	0	3%
Kennedy Blvd	Jefferson St	0.3	0.4	0	28%
Jefferson St	Florida Ave	0.3	0.3	0	27%
Total		**15.3**	**8.8**	**-7**	**-43%**
Eastbound					
Florida Ave	Jefferson St	0.3	0.3	0	0%
Jefferson St	Kennedy Blvd	0.3	0.3	0	0%
Kennedy Blvd	Channelside Dr	0.5	0.5	0	0%
Channelside Dr	20th St	0.7	0.7	0	0%
20th St	I-4 Connector	0.7	0.6	0	-3%
I-4 Connector	50th St	1.6	1.5	0	-3%
50th St	78th St	2.0	1.9	0	-3%
78th St	US-301	1.7	1.7	0	-1%
US-301	Falkenburg Rd	0.9	0.9	0	-2%
Total		**8.7**	**8.5**	**0**	**-2%**

Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2036 Build Alt. 3



Westbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
From I-75 NB	Basic Freeway	5,165	2	21.3	10.7	A
Upstream of REL Ramp 3 Off	Basic Freeway	1,519	2	23.9	12.0	B
Upstream of C-D Road Off	Diverge	844	2	18.3	9.2	A
C-D Road Off to Falkenburg Rd	Basic Freeway	2,519	2	16.1	8.1	A
Downstream of Falkenburg Rd On	Merge	1,506	2	28.9	12.1	B
Falkenburg Rd to C-D Road On	Basic Freeway	139	2	28.6	14.3	B
Downstream of C-D Road On	Merge	1,487	3	36.5	12.2	B
C-D Road On to REL On	Basic Freeway	606	3	35.6	11.9	B
Downstream of REL On	Basic Freeway	997	3	35.6	10.4	A
Downstream of US-301 On	Merge	1,188	4	44.2	11.0	B
US-301 to REL Off	Basic Freeway	923	4	44.1	11.0	B
Upstream of REL Off	Basic Freeway	1,478	4	44.3	11.1	B
REL to 78th St (4 lanes)	Basic Freeway	2,442	4	44.5	11.1	B
REL to 78th St (3 lanes)	Basic Freeway	1,592	3	44.1	14.7	B
Downstream of 78th St On	Merge	1,770	3	48.4	14.1	B
78th St to 50th St	Basic Freeway	6,087	3	49.1	16.4	B
Upstream of 50th St Off	Diverge	1,592	3	49.0	16.3	B
Between 50th St Ramps	Basic Freeway	2,619	3	45.3	15.1	B
50th St to I-4	Weave	4,285	4	50.3	12.6	B
Upstream of 22nd Off	Diverge	1,552	3	39.3	13.1	B
22nd St Off to I-4 On	Basic Freeway	1,699	3	38.3	12.8	B
Downstream of I-4 On	Merge	1,503	4	67.3	16.8	B
I-4 On to 22nd St On	Basic Freeway	2,487	4	67.0	16.8	B
Downstream of 22nd St On	Merge	1,507	4	78.3	18.2	B
22nd St to REL Ramp 1 On	Basic Freeway	1,684	4	81.5	20.4	C
REL Ramp 1 On to Kennedy Blvd Off	Diverge	1,147	5	126.6	25.3	C
Upstream of Brorein St Off	Diverge	1,029	4	53.8	13.5	B
Between Brorein St Ramps	Basic Freeway	2,061	3	44.3	14.8	B
Downstream of Brorein St On	Merge	1,460	4	62.8	14.6	B
Selmon Continue West	Basic Freeway	2,495	4	62.9	15.7	B

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2036 Build Alt. 3

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Local Lanes						
To I-75 SB	Basic Freeway	2,257	2	42	21	C
US-301 On to I-75 NB Off	Weave	1,852	3	62	18	B
Falkenburg Rd to US-301 On	Basic Freeway	1,718	3	45	15	B
Upstream of Falkenburg Rd Off	Diverge	1,115	3	65	22	C
Upstream of US-301 Off	Diverge	1,483	4	88	22	C
REL to US-301	Basic Freeway	293	4	86	21	C
Upstream of REL Off	Basic Freeway	1,808	4	89	22	C
Downstream of REL On	Basic Freeway	1,502	4	88	22	C
78th St to REL (3 lanes)	Basic Freeway	1,956	3	79	26	D
78th St to REL (3 lanes)	Basic Freeway	875	3	78	26	D
Upstream of 78th St Off	Diverge	1,495	3	84	25	C
50th St to 78th St	Basic Freeway	6,583	3	85	28	D
Downstream of 50th St On	Merge	1,497	3	86	25	C
Between 50th St Ramps	Basic Freeway	2,766	3	83	28	D
I-4 to 50th St	Weave	2,226	4	100	23	C
REL Off to I-4 On	Basic Freeway	4,056	3	53	18	B
Upstream of REL Off (3 lanes)	Basic Freeway	1,500	3	74	25	C
Upstream of REL Off (3 lanes)	Basic Freeway	586	3	78	26	D
22nd St On to I-4 Off	Weave	1,541	4	129	32	D
Between 22nd St Ramps	Basic Freeway	862	3	139	46	F
Upstream of 22nd St Off	Diverge	1,505	4	268	67	F
Nebraska Ave to 22nd St	Basic Freeway	1,179	4	309	77	F
Downstream of Nebraska Ave On	Merge	1,512	4	404	89	F
Brorein St to Nebraska Ave	Basic Freeway	341	4	344	86	F
Downstream of Brorein St On	Merge	1,531	4	327	82	F
Whiting St to Brorein St	Basic Freeway	1,180	3	217	72	F
Upstream of Whiting St Off	Diverge	818	4	297	74	F
Upstream of Florida Ave Off	Diverge	1,706	5	281	56	F
From Selmon West	Basic Freeway	2,487	4	221	55	F

Eastbound Peak Hour Level of Service by Segment
PM Peak Hour (4:30-5:30 PM)

2036 Build Alt. 3

Location on Selmon Eastbound	Type	Length (ft)	No. of Lanes	Density (vpm)	Density (vpmpl)	HCM Level of Service
Reversible Express Lanes						
To Brandon (2 lanes)	Basic Freeway	3,106	2	34	17	B
To Brandon (3 lanes)	Basic Freeway	2,283	3	29	10	A
Upstream of LL Off (at I-75)	Diverge	1,497	3	57	19	B
LL On to LL Off	Basic Freeway	2,493	3	46	15	B
Downstream of LL On (at US-301)	Merge	1,491	3	46	13	B
LL Off to LL On	Basic Freeway	6,279	3	42	14	B
Upstream of LL Off (at US-301)	Diverge	1,540	3	54	18	B
LL On to LL Off	Basic Freeway	15,162	3	54	18	B
Downstream of LL On (at I-4)	Merge	1,572	3	54	16	B
Twiggs St to LL On	Basic Freeway	9,696	3	36	12	B
From Twiggs St	Basic Freeway	1,547	3	56	19	C

Westbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Westbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
I-75 to REL Ramp 3 Off	1,070	1,048	-22	2%	0.7
REL Ramp 3 to C-D Road Off	1,070	1,042	-28	3%	0.8
C-D Road Off to Falkenburg Rd	740	921	181	24%	6.3
Falkenburg Rd to C-D Road On	1,570	1,667	97	6%	2.4
C-D Road On to REL On	2,340	2,316	-24	1%	0.5
REL On to US-301 On	2,340	2,310	-30	1%	0.6
US-301 to REL Off	3,010	2,848	-162	5%	3.0
REL to 78th St	3,010	2,815	-195	6%	3.6
78th St to 50th St	3,280	3,084	-196	6%	3.5
Between 50th St Ramps	3,100	2,909	-191	6%	3.5
50th St to I-4	3,410	3,199	-211	6%	3.7
I-4 Off to 22nd St Off	2,650	2,486	-164	6%	3.2
22nd St Off to I-4 On	2,480	2,331	-149	6%	3.0
I-4 On to 22nd St On	3,900	3,735	-165	4%	2.7
22nd St to REL Ramp 1 On	4,550	4,370	-180	4%	2.7
REL Ramp 1 On to Kennedy Blvd	4,550	4,328	-222	5%	3.3
Kennedy Blvd to Brorein St	3,240	3,082	-158	5%	2.8
Between Brorein St Ramps	2,690	2,556	-134	5%	2.6
Selmon Continue West	3,940	3,464	-476	12%	7.8
NETWORK TOTAL	**52,940**	**50,510**	**-2,430**	**5%**	

Eastbound GEH Statistics
PM Peak Hour (4:30-5:30 PM)

Location on Selmon Eastbound	Input Volume (vph)	Model Volume (vph)	Difference	Percent Difference	GEH
Local Lanes					
To I-75 SB	1,150	2,165	1,015	88%	24.9
US-301 On to I-75 NB Off	3,440	3,141	-299	9%	5.2
Falkenburg Rd Off to US-301 On	2,760	2,599	-161	6%	3.1
US-301 Off to Falkenburg Rd Off	4,190	3,923	-267	6%	4.2
REL Off to US-301	5,640	5,222	-418	7%	5.7
Between REL Ramps	5,920	5,544	-376	6%	5.0
78th St to REL	5,190	4,875	-315	6%	4.4
50th St to 78th St	5,560	5,208	-352	6%	4.8
Between 50th St Ramps	5,010	4,719	-291	6%	4.2
I-4 to 50th St	5,950	5,512	-438	7%	5.8
REL Off to I-4 On	3,480	3,056	-424	12%	7.4
I-4 Off to REL Off	4,750	4,158	-592	12%	8.9
22nd St On to I-4 Off	7,040	6,011	-1,029	15%	12.7
Between 22nd St Ramps	6,510	5,522	-988	15%	12.7
Nebraska Ave to 22nd St	6,810	5,842	-968	14%	12.2
Brorein St to Nebraska Ave	6,230	5,197	-1,033	17%	13.7
Whiting St to Brorein St	5,160	4,860	-300	6%	4.2
Upstream of Whiting St Off	6,090	5,708	-382	6%	5.0
From Selmon West	6,230	6,057	-173	3%	2.2
Reversible Express Lanes					
To Brandon	1,840	1,645	-195	11%	4.7
LL On (at US-301) to LL Off (at I-75)	3,030	2,751	-279	9%	5.2
LL Off (at US-301) to LL On (at US-301)	2,750	2,490	-260	9%	5.1
LL On (at I-4) to LL Off (at US-301)	3,480	3,175	-305	9%	5.3
Twiggs St to LL On (at I-4)	2,210	2,055	-155	7%	3.3
NETWORK TOTAL	**110,420**	**101,435**	**-8,985**	**8%**	

Westbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2036 Build Alt. 3

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	49	49	49	49	49	49	49	49	49	49	49	49
	44	44	44	44	44	44	44	44	44	44	44	44
	57	57	57	57	57	57	57	57	57	57	57	57
	57	57	57	57	57	57	57	57	57	57	57	57
	58	58	58	58	58	58	58	58	58	58	59	59
	58	58	58	58	58	58	58	58	58	58	59	59
	64	64	64	64	63	63	63	63	64	64	64	64
	65	65	65	65	65	65	65	65	65	65	65	65
	65	65	65	65	65	65	65	65	65	65	65	65
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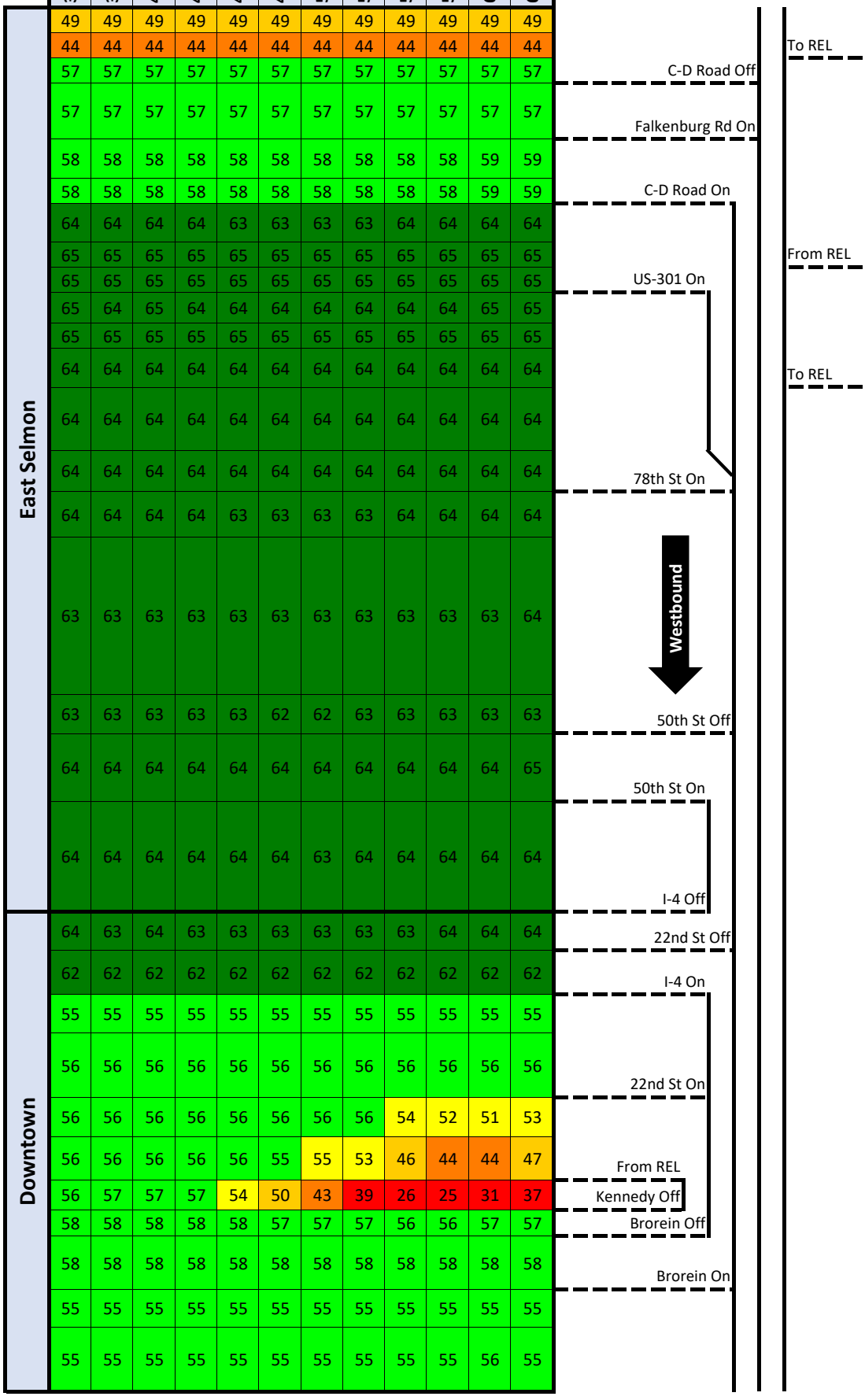
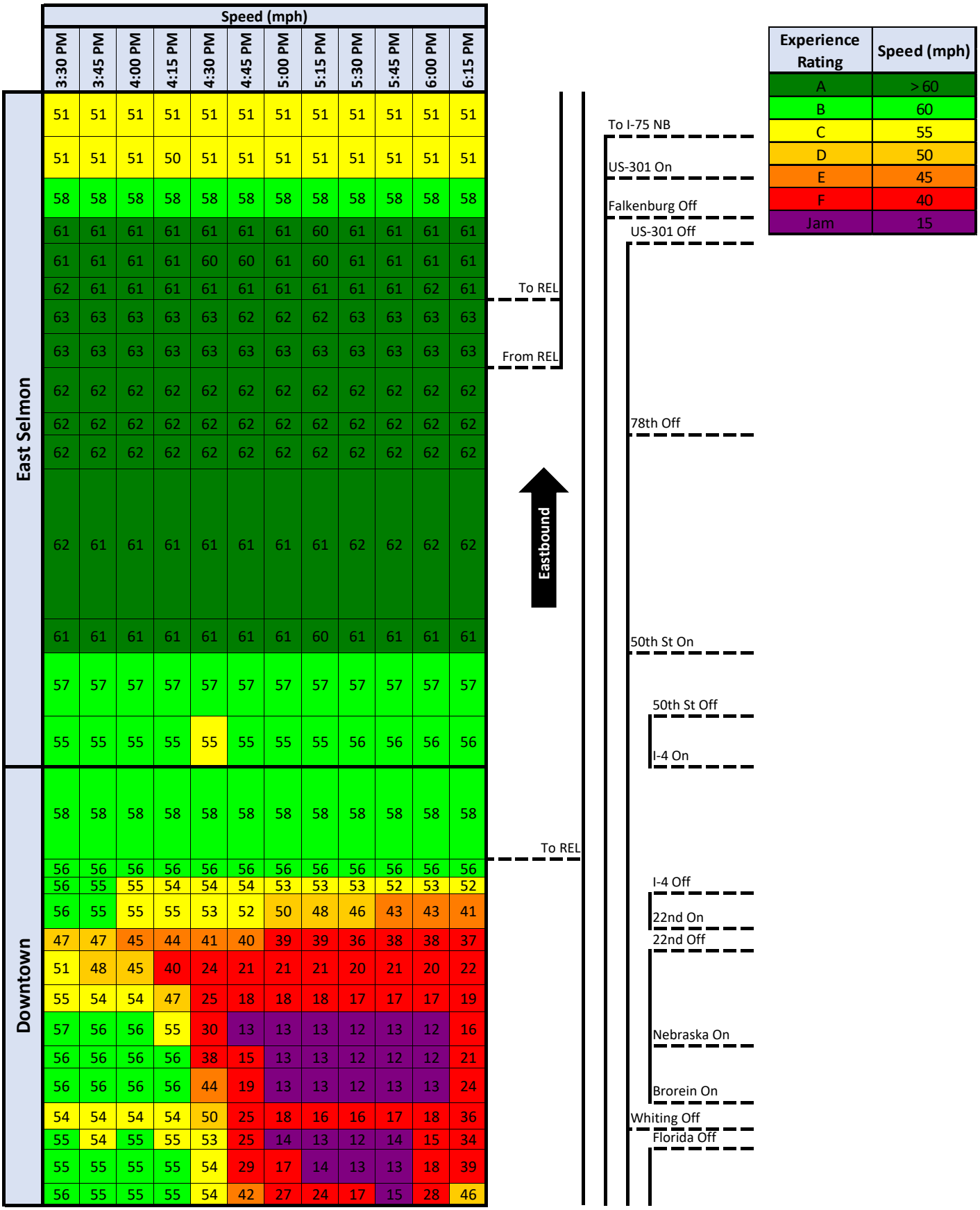
	63	63	63	63	63	62	62	63	63	63	63	63
	64	64	64	64	64	64	64	64	64	64	64	65
	64	64	64	64	64	64	63	64	64	64	64	64
Downtown	64	63	64	63	63	63	63	63	63	64	64	64
	62	62	62	62	62	62	62	62	62	62	62	62
	55	55	55	55	55	55	55	55	55	55	55	55
	56	56	56	56	56	56	56	56	56	56	56	56
	56	56	56	56	56	56	56	56	54	52	51	53
	56	56	56	56	56	55	55	53	46	44	44	47
	56	57	57	57	54	50	43	39	26	25	31	37
	58	58	58	58	58	57	57	57	56	56	57	57
	58	58	58	58	58	58	58	58	58	58	58	58
	55	55	55	55	55	55	55	55	55	55	55	55
	55	55	55	55	55	55	55	55	55	55	56	55



Eastbound Speed-Contour Plot, Local Lanes
From VISSIM Model
PM Peak Hour (3:30-6:30 PM)

2036 Build Alt. 3

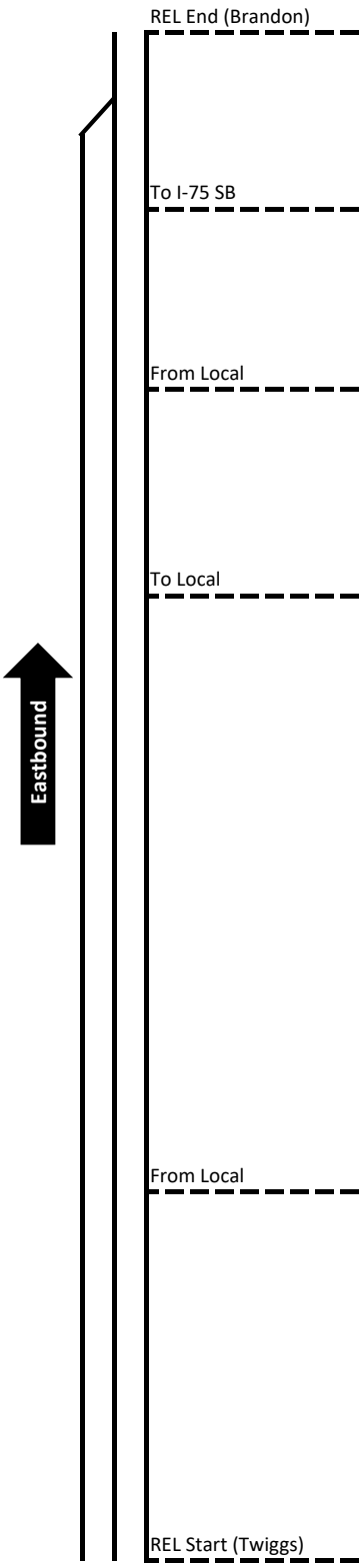


Eastbound Speed-Contour Plot, Reversible Express Lanes
From VISSIM Model
PM Peak Period (3:30-6:30 PM)

2036 Build Alt. 3

Experience Rating	Speed (mph)
A	> 60
B	60
C	55
D	50
E	45
F	40
Jam	15

	Speed (mph)											
	3:30 PM	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	6:15 PM
East Selmon	49	49	49	49	49	49	49	49	49	49	49	49
	59	59	58	58	58	58	56	57	57	58	58	58
	57	56	55	53	50	52	45	46	46	50	54	53
	60	60	60	60	60	60	60	60	60	60	60	60
	60	60	60	60	60	60	60	60	60	60	60	60
	60	60	60	60	60	60	60	60	60	60	60	60
	60	60	59	59	59	59	59	58	59	59	59	59
	60	60	60	59	59	59	59	59	59	59	60	60
Downtown	60	60	59	59	59	59	58	58	59	59	59	59
	57	57	57	56	57	56	56	56	56	57	57	57
	37	37	37	37	37	37	37	37	37	37	37	37



Travel Times by Segment, Local Lanes
PM Peak Hour (4:30-5:30 PM)

From	To	2036 No-Build Travel Time (min)	2036 Build Alt. 3 Travel Time (min)	Difference (min)	Percent Difference
Westbound					
Falkenburg Rd	US-301	0.9	0.8	0	-4%
US-301	78th St	1.8	1.7	0	-3%
78th St	50th St	2.0	1.9	0	-5%
50th St	I-4 Connector	1.5	1.4	0	-2%
I-4 Connector	20th St	0.7	0.6	0	-3%
20th St	Channelside Dr	0.8	0.8	0	-4%
Channelside Dr	Kennedy Blvd	0.6	0.6	0	6%
Kennedy Blvd	Jefferson St	0.3	0.3	0	0%
Jefferson St	Florida Ave	0.3	0.3	0	0%
Total		**8.6**	**8.4**	**0**	**-3%**
Eastbound					
Florida Ave	Jefferson St	0.7	0.7	0	7%
Jefferson St	Kennedy Blvd	1.2	0.9	0	-20%
Kennedy Blvd	Channelside Dr	1.6	2.1	0	27%
Channelside Dr	20th St	1.7	1.7	0	3%
20th St	I-4 Connector	1.2	0.7	0	-39%
I-4 Connector	50th St	3.5	1.6	-2	-55%
50th St	78th St	2.4	2.0	0	-18%
78th St	US-301	1.8	1.8	0	-1%
US-301	Falkenburg Rd	1.0	0.9	0	-3%
Total		**15.0**	**12.5**	**-3**	**-17%**

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2036 Build Alt. 3

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	3,520	3,545	25	1%	3,520	3,545	25	1%	0.4									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	380	345	-35	-9%	380	345	-35	-9%	1.8									
	WB Selmon Expressway to CD	Westbound	Off-Ramp	460	281	-179	-39%	460	281	-179	-39%	9.3									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	950	912	-38	-4%	950	912	-38	-4%	1.2									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	235	217	-18	-8%	760	719	-41	-5%	1.5	Signal	40.4	D	18	B	15	B	34.2	158.3
			Right	525	502	-23	-4%						Signal	8.1	A					9.7	103.6
		Northbound	Left	635	620	-15	-2%	1,805	1,783	-22	-1%	0.5	Signal	16.6	B	10	A			22.4	401.1
			Thru	1,170	1,163	-7	-1%						Signal	6.2	A					19.9	294.6
		Southbound	Thru	700	716	16	2%	995	997	2	0%	0.1	Signal	27.7	C	21	C			64.7	332.5
			Right	295	281	-14	-5%						Signal	5.1	A					3.8	110.4
	CD (SB I-75) to WB Selmon Expressway	Westbound	On-Ramp	1,170	1,017	-153	-13%	1,170	1,017	-153	-13%	4.6									
	US-301 and EB Selmon Expressway	Eastbound	Left	155	157	2	1%	470	456	-14	-3%	0.7	Signal	51.0	D	18	B	133	F	49.4	253.9
			Right	315	299	-16	-5%						Signal	0.8	A					0.0	0.0
		Northbound	Thru	2,580	1,974	-606	-23%	2,775	2,120	-655	-24%	13.2	Signal	246.0	F	240	F			2,857.7	3,017.7
			Right	195	146	-49	-25%						Signal	159.9	F					0.4	65.4
		Southbound	Left	165	174	9	5%	1,350	1,353	3	0%	0.1	Signal	5.6	A	2	A			1.5	150.2
			Thru	1,185	1,179	-6	-1%						Signal	2.0	A					5.3	75.8
	US-301 and WB Selmon Expressway	Westbound	Left	85	79	-6	-7%	460	440	-20	-4%	0.9	Signal	53.9	D	11	B	16	B	26.3	156.9
			Right	375	361	-14	-4%						Signal	1.7	A					0.0	0.0
		Northbound	Left	775	583	-192	-25%	2,735	2,126	-609	-22%	12.4	Signal	24.0	C	7	A			92.6	287.7
			Thru	1,960	1,543	-417	-21%						Signal	0.9	A					0.3	39.1
		Southbound	Thru	1,265	1,271	6	0%	1,380	1,384	4	0%	0.1	Signal	34.8	C	32	C			96.4	413.0
			Right	115	113	-2	-2%						Signal	3.7	A					1.3	91.9
	78th St and EB Selmon Expressway	Westbound	Left	65	65	0	0%	270	269	-1	0%	0.1	Stop	15.8	C	4	A	1	A	8.0	106.9
			Right	205	204	-1	0%						Stop	0.7	A					0.0	0.0
		Northbound	Thru	1,595	1,572	-23	-1%	1,595	1,572	-23	-1%	0.6	Stop	0.8	A	1	A			0.0	0.0
		Southbound	Thru	500	509	9	2%	500	509	9	2%	0.4	Stop	0.1	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	500	502	2	0%	500	502	2	0%	0.1									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	600	584	-16	-3%	600	584	-16	-3%	0.7									
	50th St and Selmon Expressway	Eastbound	Left	165	154	-11	-7%	370	348	-22	-6%	1.2	Signal	76.6	E	74	E	33	C	73.6	354.7
			Right	205	194	-11	-5%						Signal	71.5	E					57.1	208.1
		Westbound	Left	30	32	2	7%	240	235	-5	-2%	0.3	Signal	81.2	F	20	B			12.4	103.4
			Right	210	203	-7	-3%						Signal	9.9	A					0.0	0.0
		Northbound	Left	665	637	-28	-4%	1,935	1,901	-34	-2%	0.8	Signal	70.1	E	34	C			130.8	1,300.5
			Thru	1,230	1,227	-3	0%						Signal	15.8	B					75.5	746.4
			Right	40	37	-3	-8%						Signal	6.2	A					0.0	2.6
		Southbound	Left	100	103	3	3%	1,415	1,395	-20	-1%	0.5	Signal	50.2	D	23	C			9.0	162.5
			Thru	1,150	1,131	-19	-2%						Signal	22.6	C					47.6	347.8
			Right	165	161	-4	-2%						Signal	8.1	A					4.7	154.2

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
AM Peak Hour (7:00-8:00 AM)

2036 Build Alt. 3

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	1,140	1,154	14	1%	1,140	1,154	14	1%	0.4									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	1,450	1,413	-37	-3%	1,450	1,413	-37	-3%	1.0									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	510	521	11	2%	510	521	11	2%	0.5									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	215	206	-9	-4%	215	206	-9	-4%	0.6									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	1,930	1,804	-126	-7%	1,930	1,804	-126	-7%	2.9									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	930	885	-45	-5%	930	885	-45	-5%	1.5									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	125	113	-12	-10%	280	266	-14	-5%	0.8	Stop	56.9	F	29	D	23	C	27.3	175.7
			Right	155	153	-2	-1%						Stop	8.2	A					9.0	142.5
		Westbound	Left	135	134	-1	-1%	725	731	6	1%	0.2	Stop	44.7	E	26	D			21.0	157.1
			Right	590	597	7	1%						Stop	21.8	C					113.6	577.0
		Northbound	Left	390	386	-4	-1%	1,795	1,784	-11	-1%	0.3	Stop	41.8	E	19	C			21.3	300.0
			Thru	1,390	1,384	-6	0%						Stop	12.6	B					21.3	300.0
			Right	15	14	-1	-7%						Stop	51.1	F					3.6	50.2
		Southbound	Left	95	99	4	4%	1,100	1,112	12	1%	0.4	Stop	30.6	D	25	C			63.2	255.1
			Thru	765	773	8	1%						Stop	30.5	D					63.2	255.1
			Right	240	240	0	0%						Stop	4.3	A					4.4	144.9
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	380	341	-39	-10%	380	341	-39	-10%	2.1									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	1,260	1,218	-42	-3%	1,260	1,218	-42	-3%	1.2									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	270	258	-12	-4%	270	258	-12	-4%	0.7									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	1,100	1,073	-27	-2%	1,100	1,073	-27	-2%	0.8									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	1,050	1,035	-15	-1%	1,050	1,035	-15	-1%	0.5									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	1,150	1,154	4	0%	1,150	1,154	4	0%	0.1									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	490	389	-101	-21%	490	389	-101	-21%	4.8									
	Reversible Express Lanes																				
East Selmon	NB I-75 to REL	Westbound	On-Ramp	1,180	1,188	8	1%	1,180	1,188	8	1%	0.2									
East Selmon	WB REL to LL @ US-301	Westbound	Off-Ramp	380	372	-8	-2%	380	372	-8	-2%	0.4									
East Selmon	WB LL to REL @ US-301	Westbound	On-Ramp	1,470	1,376	-94	-6%	1,470	1,376	-94	-6%	2.5									
Downtown	WB REL to LL @ Kennedy	Westbound	Off-Ramp	460	402	-58	-13%	460	402	-58	-13%	2.8									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	0	0	0	-	400	368	-32	-8%	1.6	Signal	-	-	93	F	39	D	34.2	270.3
			Thru	175	165	-10	-6%						Signal	97.2	F					34.2	270.3
			Right	225	203	-22	-10%						Signal	89.8	F					40.4	284.6
		Westbound	Left	160	145	-15	-9%	835	770	-65	-8%	2.3	Signal	81.8	F	70	E			314.7	853.2
			Thru	675	625	-50	-7%						Signal	67.3	E					314.7	853.2
			Right	0	0	0	-						Signal	-	-					335.5	877.6
		Northbound	Left	220	214	-6	-3%	300	293	-7	-2%	0.4	Signal	68.9	E	52	D			61.0	243.0
			Thru	0	0	0	-						Signal	-	-					61.0	243.0
			Right	80	79	-1	-1%						Signal	5.4	A					86.9	277.9
		Southbound	Left	280	286	6	2%	3,720	3,771	51	1%	0.8	Signal	40.2	D	26	C			350.7	1,478.1
			Thru	2,075	2,119	44	2%						Signal	37.8	D					350.7	1,478.1
			Right	1,365	1,366	1	0%						Signal	5.6	A					246.5	1,333.9
	NETWORK TOTAL							**51,155**	**48,677**	**-2,478**	**-5%**										

Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (4:30-5:30 PM)

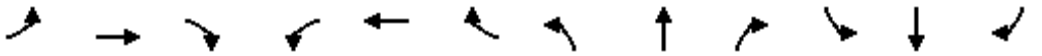
2036 Build Alt. 3

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes																				
East Selmon	NB I-75 to WB Selmon Expressway	Westbound	On-Ramp	1,070	1,045	-25	-2%	1,070	1,045	-25	-2%	0.8									
	EB Selmon to I-75 NB	Eastbound	Off-Ramp	1,150	970	-180	-16%	1,150	970	-180	-16%	5.5									
	WB Selmon Expressway to CD	Westbound	Off-Ramp	330	118	-212	-64%	330	118	-212	-64%	14.2									
	EB Selmon to I-75 SB	Eastbound	Off-Ramp	2,290	2,170	-120	-5%	2,290	2,170	-120	-5%	2.5									
	Falkenburg Rd and Selmon Expressway	Eastbound	Left	670	601	-69	-10%	1,430	1,283	-147	-10%	4.0	Signal	38.9	D	23	C	22	C	81.4	301.0
			Right	760	682	-78	-10%						Signal	9.8	A					18.3	153.1
		Northbound	Left	450	414	-36	-8%	1,260	1,232	-28	-2%	0.8	Signal	34.8	C	19	B			26.8	319.3
			Thru	810	818	8	1%						Signal	10.8	B					27.8	260.8
		Southbound	Thru	1,350	1,378	28	2%	1,730	1,739	9	1%	0.2	Signal	27.2	C	23	C			157.1	822.4
			Right	380	361	-19	-5%						Signal	5.2	A					5.9	183.3
	CD (SB I-75) to WB Selmon Expressway	Westbound	On-Ramp	770	651	-119	-15%	770	651	-119	-15%	4.5									
	US-301 and EB Selmon Expressway	Eastbound	Left	220	210	-10	-5%	1,450	1,359	-91	-6%	2.4	Signal	61.4	E	12	B	127	F	85.1	369.4
			Right	1,230	1,149	-81	-7%						Signal	2.8	A					0.0	17.3
		Northbound	Thru	1,565	1,251	-314	-20%	1,780	1,424	-356	-20%	8.9	Signal	408.4	F	390	F			2,538.7	3,009.6
			Right	215	173	-42	-20%						Signal	257.2	F					2.4	141.9
		Southbound	Left	465	324	-141	-30%	2,530	1,865	-665	-26%	14.2	Signal	47.9	D	10	A			94.7	313.1
			Thru	2,065	1,541	-524	-25%						Signal	1.7	A					6.1	78.7
	US-301 and WB Selmon Expressway	Westbound	Left	155	108	-47	-30%	330	230	-100	-30%	6.0	Signal	68.7	E	33	C	132	F	48.2	238.4
			Right	175	122	-53	-30%						Signal	1.0	A					0.0	0.0
		Northbound	Left	515	408	-107	-21%	1,785	1,461	-324	-18%	8.0	Signal	25.5	C	8	A			59.2	281.5
			Thru	1,270	1,053	-217	-17%						Signal	1.5	A					2.9	63.2
		Southbound	Thru	2,375	1,761	-614	-26%	2,530	1,887	-643	-25%	13.7	Signal	246.7	F	240	F			2,086.1	2,255.4
			Right	155	126	-29	-19%						Signal	141.6	F					2.8	112.6
	78th St and EB Selmon Expressway	Westbound	Left	250	231	-19	-8%	370	337	-33	-9%	1.8	Stop	18.4	C	13	B	2	A	32.4	224.2
			Right	120	106	-14	-12%						Stop	0.7	A					0.0	6.9
		Northbound	Thru	830	829	-1	0%	830	829	-1	0%	0.0	Stop	0.3	A	0	A			0.0	0.0
		Southbound	Thru	865	932	67	8%	865	932	67	8%	2.2	Stop	0.3	A	0	A			0.0	0.0
	Adamo Dr to WB Selmon Expressway	Westbound	On-Ramp	240	225	-15	-6%	240	225	-15	-6%	1.0									
	78th St to WB Selmon Expressway	Westbound	On-Ramp	30	27	-3	-10%	30	27	-3	-10%	0.6									
	50th St and Selmon Expressway	Eastbound	Left	195	174	-21	-11%	940	810	-130	-14%	4.4	Signal	31.1	C	38	D	108	F	25.9	196.8
			Right	745	636	-109	-15%						Signal	39.9	D					93.3	351.5
		Westbound	Left	40	36	-4	-10%	180	168	-12	-7%	0.9	Signal	58.4	E	17	B			8.8	79.7
			Right	140	132	-8	-6%						Signal	5.8	A					0.0	0.0
		Northbound	Left	200	192	-8	-4%	1,305	1,272	-33	-3%	0.9	Signal	114.5	F	133	F			17.0	136.0
			Thru	1,055	1,031	-24	-2%						Signal	137.6	F					1,130.0	2,141.9
			Right	50	49	-1	-2%						Signal	112.6	F					1.9	77.1
		Southbound	Left	500	438	-62	-12%	2,055	1,945	-110	-5%	2.5	Signal	402.9	F	129	F			1,148.7	1,817.6
			Thru	1,445	1,405	-40	-3%						Signal	51.6	D					1,088.8	1,817.2
			Right	110	102	-8	-7%						Signal	16.1	B					0.2	45.1

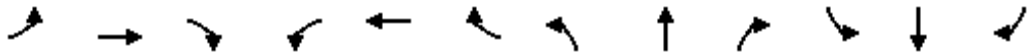
Ramp Terminal GEH Statistics, Delay/LOS, and Queue Length
PM Peak Hour (4:30-5:30 PM)

2036 Build Alt. 3

	Intersection	Approach	Movement	Turning Movement				Approach					Levels of Service and Delay							Queue	
														Movement		Approach		Intersection		Movement	
				Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Counted Volumes	Modeled Volumes	Volume Difference	Percent Difference	Approach GEH	Control	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Average (ft)	Max (ft)
	Local Lanes (continued)																				
Downtown	EB I-4 to EB Selmon Expressway	Eastbound	On-Ramp	2,470	2,473	3	0%	2,470	2,473	3	0%	0.1									
Downtown	WB Selmon Expressway to WB I-4	Westbound	Off-Ramp	760	704	-56	-7%	760	704	-56	-7%	2.1									
Downtown	WB Selmon Expressway to 22nd St	Westbound	Off-Ramp	170	158	-12	-7%	170	158	-12	-7%	0.9									
Downtown	WB I-4 to 22nd St	Westbound	Off-Ramp	55	53	-2	-4%	55	53	-2	-4%	0.3									
Downtown	WB I-4 to WB Selmon Expressway	Westbound	On-Ramp	1,420	1,405	-15	-1%	1,420	1,405	-15	-1%	0.4									
Downtown	EB Selmon Expressway to EB I-4	Eastbound	Off-Ramp	2,290	1,859	-431	-19%	2,290	1,859	-431	-19%	9.5									
Downtown	22nd St and Selmon Expressway	Eastbound	Left	265	231	-34	-13%	300	261	-39	-13%	2.3	Stop	132.5	F	129	F	25	C	58.5	344.8
			Right	35	30	-5	-14%						Stop	98.9	F					1.7	73.9
		Westbound	Left	50	48	-2	-4%	225	211	-14	-6%	0.9	Stop	59.5	F	19	C			9.8	84.2
			Right	175	163	-12	-7%						Stop	7.7	A					9.6	133.9
		Northbound	Left	210	211	1	0%	1,280	1,274	-6	0%	0.2	Stop	35.9	E	15	C			14.5	202.4
			Thru	995	988	-7	-1%						Stop	8.6	A					14.5	202.4
			Right	75	75	0	0%						Stop	47.6	E					18.8	131.7
		Southbound	Left	455	444	-11	-2%	2,525	2,511	-14	-1%	0.3	Stop	26.4	D	20	C			67.8	455.7
			Thru	1,630	1,631	1	0%						Stop	21.9	C					67.8	455.7
			Right	440	436	-4	-1%						Stop	3.7	A					3.3	184.6
Downtown	Nebraska Ave to EB Selmon Expressway	Eastbound	On-Ramp	580	497	-83	-14%	580	497	-83	-14%	3.6									
Downtown	WB Selmon Expressway to Kennedy Ave	Westbound	Off-Ramp	1,310	1,241	-69	-5%	1,310	1,241	-69	-5%	1.9									
Downtown	Jefferson St to EB Selmon Expressway	Eastbound	On-Ramp	1,070	751	-319	-30%	1,070	751	-319	-30%	10.6									
Downtown	WB Selmon Expressway to Brorein St	Westbound	Off-Ramp	550	536	-14	-3%	550	536	-14	-3%	0.6									
Downtown	EB Selmon Expressway to Whiting St	Eastbound	Off-Ramp	930	860	-70	-8%	930	860	-70	-8%	2.3									
Downtown	EB Selmon Expressway to Florida Ave	Eastbound	Off-Ramp	140	136	-4	-3%	140	136	-4	-3%	0.3									
Downtown	Brorein St to WB Selmon Expressway	Westbound	On-Ramp	1,250	916	-334	-27%	1,250	916	-334	-27%	10.1									
	Reversible Express Lanes																				
East Selmon	EB REL to I-75 SB	Eastbound	Off-Ramp	1,190	1,088	-102	-9%	1,190	1,088	-102	-9%	3.0									
East Selmon	EB LL to REL @ US-301	Eastbound	On-Ramp	280	266	-14	-5%	280	266	-14	-5%	0.8									
East Selmon	EB REL to LL @ US-301	Eastbound	Off-Ramp	730	673	-57	-8%	730	673	-57	-8%	2.2									
Downtown	EB LL to REL @ I-4	Eastbound	On-Ramp	1,270	1,137	-133	-10%	1,270	1,137	-133	-10%	3.8									
Downtown	Twiggs St and Meridian Ave	Eastbound	Left	570	419	-151	-26%	1,545	1,143	-402	-26%	11.0	Signal	230.8	F	236	F	100	F	2,116.1	2,845.2
			Thru	680	512	-168	-25%						Signal	229.2	F					2,116.1	2,845.2
			Right	295	212	-83	-28%						Signal	260.9	F					2,129.4	2,859.5
		Westbound	Left	195	189	-6	-3%	680	672	-8	-1%	0.3	Signal	53.0	D	32	C			124.3	566.3
			Thru	375	372	-3	-1%						Signal	26.1	C					124.3	566.3
			Right	110	111	1	1%						Signal	15.9	B					142.3	590.7
		Northbound	Left	35	38	3	9%	1,765	1,731	-34	-2%	0.8	Signal	36.4	D	37	D			174.0	652.7
			Thru	1,530	1,499	-31	-2%						Signal	37.6	D					174.0	652.7
			Right	200	194	-6	-3%						Signal	35.9	D					201.1	688.1
		Southbound	Left	0	0	0	-	0	0	0	-	-	Signal	-	-	-	-			0.0	0.0
			Thru	0	0	0	-						Signal	-	-					0.0	0.0
			Right	0	0	0	-						Signal	-	-					0.0	0.0
	NETWORK TOTAL							**52,035**	**46,535**	**-5,500**	**-11%**										



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1745	570	335	2140	0	0	0	0
Future Volume (vph)	0	0	0	0	1745	570	335	2140	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	1.00	1.00	1.00	1.00
Frt					0.963							
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6171	0	1770	5085	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	6171	0	1770	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)							22					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		273			600			296			353	
Travel Time (s)		6.2			13.6			6.7			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1897	620	364	2326	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2517	0	364	2326	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2		1	2				
Detector Template							Left					
Leading Detector (ft)					100		20	100				
Trailing Detector (ft)					0		0	0				
Detector 1 Position(ft)					0		0	0				
Detector 1 Size(ft)					6		20	6				
Detector 1 Type					Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0		0.0	0.0				
Detector 1 Queue (s)					0.0		0.0	0.0				
Detector 1 Delay (s)					0.0		0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Detector Phase					2		4	4				
Switch Phase												
Minimum Initial (s)					10.0		10.0	10.0				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)					29.8		36.1	36.1				
Total Split (s)					76.0		64.0	64.0				
Total Split (%)					54.3%		45.7%	45.7%				
Maximum Green (s)					70.2		57.9	57.9				
Yellow Time (s)					3.7		3.7	3.7				
All-Red Time (s)					2.1		2.4	2.4				
Lost Time Adjust (s)					0.0		0.0	0.0				
Total Lost Time (s)					5.8		6.1	6.1				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					3.0		3.0	3.0				
Recall Mode					C-Max		None	None				
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		23.0	23.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					70.2		57.9	57.9				
Actuated g/C Ratio					0.50		0.41	0.41				
v/c Ratio					0.81		0.49	1.11				
Control Delay					11.1		29.9	90.7				
Queue Delay					1.3		33.9	1.2				
Total Delay					12.4		63.8	91.8				
LOS					B		E	F				
Approach Delay					12.4			88.0				
Approach LOS					B			F				

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 38 (27%), Referenced to phase 2:WBT and 6:, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.11			
Intersection Signal Delay: 51.5		Intersection LOS: D	
Intersection Capacity Utilization 86.1%		ICU Level of Service E	
Analysis Period (min) 15			

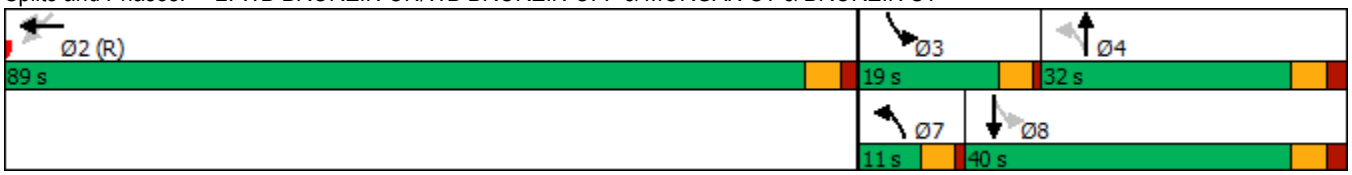
Splits and Phases: 1: FLORIDA AVE & BROREIN ST

Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations										
Traffic Volume (vph)	130	2080	170	210	120	255	230	170	385	715
Future Volume (vph)	130	2080	170	210	120	255	230	170	385	715
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0			0		0	100	
Storage Lanes	0		1			1		0	1	
Taper Length (ft)	0		0			0				
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Frt				0.946			0.936		0.850	0.850
Flt Protected		0.997	0.950			0.950				
Satd. Flow (prot)	0	3529	1770	1762	0	1770	1744	0	2787	1583
Flt Permitted		0.997	0.154			0.131				
Satd. Flow (perm)	0	3529	287	1762	0	244	1744	0	2787	1583
Right Turn on Red					Yes					Yes
Satd. Flow (RTOR)				91						420
Link Speed (mph)		30		30			30			
Link Distance (ft)		591		494			379			
Travel Time (s)		13.4		11.2			8.6			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	2261	185	228	130	277	250	185	418	777
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	2402	185	358	0	277	435	0	418	777
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Left	Left	Right	Left	Left	Right	R NA	Right
Median Width(ft)		12		12			12			
Link Offset(ft)		0		0			0			
Crosswalk Width(ft)		16		16			16			
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		15		9	15		9	9	9
Number of Detectors	1	2	1	2		1	2		1	1
Detector Template	Left		Left			Left			Right	Right
Leading Detector (ft)	20	100	20	100		20	100		20	20
Trailing Detector (ft)	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel										
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94		94			94			
Detector 2 Size(ft)		6		6			6			
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			
Detector 2 Channel										
Detector 2 Extend (s)		0.0		0.0			0.0			
Turn Type	Perm	NA	pm+pt	NA		pm+pt	NA		Perm	Free
Protected Phases		2	7	4		3	8			
Permitted Phases	2		4			8			2	Free

Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Detector Phase	2	2	7	4		3	8		2	
Switch Phase										
Minimum Initial (s)	10.0	10.0	5.0	10.0		5.0	10.0		10.0	
Minimum Split (s)	24.7	24.7	9.5	32.0		9.5	32.0		24.7	
Total Split (s)	89.0	89.0	11.0	32.0		19.0	40.0		89.0	
Total Split (%)	63.6%	63.6%	7.9%	22.9%		13.6%	28.6%		63.6%	
Maximum Green (s)	83.3	83.3	6.5	26.0		14.5	34.0		83.3	
Yellow Time (s)	3.7	3.7	3.5	3.7		3.5	3.7		3.7	
All-Red Time (s)	2.0	2.0	1.0	2.3		1.0	2.3		2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.7	4.5	6.0		4.5	6.0		5.7	
Lead/Lag			Lead	Lag		Lead	Lag			
Lead-Lag Optimize?			Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	None	Max		None	Max		C-Max	
Walk Time (s)	7.0	7.0		7.0			7.0		7.0	
Flash Dont Walk (s)	12.0	12.0		19.0			19.0		12.0	
Pedestrian Calls (#/hr)	0	0		0			0		0	
Act Effct Green (s)		83.3	34.0	26.0		46.5	34.0		83.3	140.0
Actuated g/C Ratio		0.60	0.24	0.19		0.33	0.24		0.60	1.00
v/c Ratio		1.14	1.34	0.89		1.16	1.03		0.25	0.49
Control Delay		81.5	227.0	66.1		142.9	102.5		14.0	1.1
Queue Delay		0.1	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		81.6	227.0	66.1		142.9	102.5		14.0	1.1
LOS		F	F	E		F	F		B	A
Approach Delay		81.6		121.0			118.2			
Approach LOS		F		F			F			

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 14 (10%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.34			
Intersection Signal Delay: 72.7		Intersection LOS: E	
Intersection Capacity Utilization 125.5%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: WB BROREIN ON/WB BROREIN OFF & MORGAN ST & BROREIN ST

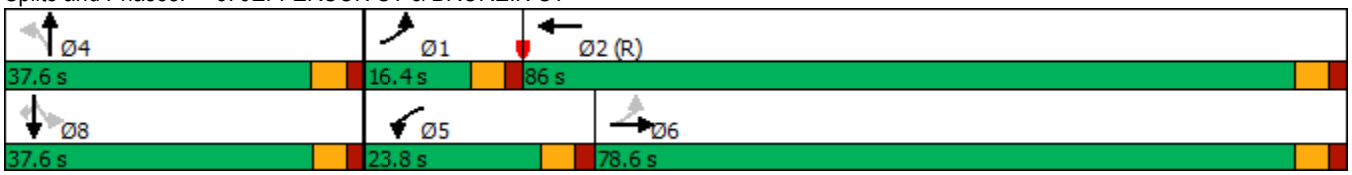


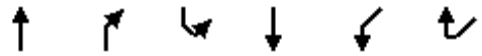
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	220	15	105	1760	205	20	210	10	10	10	430
Future Volume (vph)	140	220	15	105	1760	205	20	210	10	10	10	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	80		0	115		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			0		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.991			0.984			0.993				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1846	0	1770	3483	0	1770	3514	0	1770	1863	1583
Flt Permitted	0.052			0.950			0.750			0.557		
Satd. Flow (perm)	97	1846	0	1770	3483	0	1397	3514	0	1038	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			15			3				149
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		591			202			322			162	
Travel Time (s)		13.4			4.6			7.3			3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	152	239	16	114	1913	223	22	228	11	11	11	467
Shared Lane Traffic (%)												
Lane Group Flow (vph)	152	255	0	114	2136	0	22	239	0	11	11	467
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left			Left			Left			Left		Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6						4			8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6		5	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	15.5	23.7		10.5	23.7		23.7	23.7		23.5	23.5	23.5
Total Split (s)	16.4	78.6		23.8	86.0		37.6	37.6		37.6	37.6	37.6
Total Split (%)	11.7%	56.1%		17.0%	61.4%		26.9%	26.9%		26.9%	26.9%	26.9%
Maximum Green (s)	10.9	72.9		18.3	80.3		31.9	31.9		32.1	32.1	32.1
Yellow Time (s)	3.5	3.7		3.5	3.7		3.7	3.7		3.5	3.5	3.5
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.5	5.7		5.5	5.7		5.7	5.7		5.5	5.5	5.5
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	2.0	2.0		3.0	2.0		2.0	2.0		2.0	2.0	2.0
Recall Mode	None	Max		None	C-Max		None	None		None	None	None
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)	87.6	77.3		14.0	81.3		31.8	31.8		32.0	32.0	32.0
Actuated g/C Ratio	0.63	0.55		0.10	0.58		0.23	0.23		0.23	0.23	0.23
v/c Ratio	0.84	0.25		0.64	1.05		0.07	0.30		0.05	0.03	0.98
Control Delay	28.3	24.0		76.8	64.9		43.3	45.5		42.9	42.2	73.3
Queue Delay	0.0	0.0		0.0	19.9		0.0	0.0		0.0	0.0	6.9
Total Delay	28.3	24.0		76.8	84.7		43.3	45.5		42.9	42.2	80.3
LOS	C	C		E	F		D	D		D	D	F
Approach Delay		25.6			84.3			45.3			78.6	
Approach LOS		C			F			D			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 4 (3%), Referenced to phase 2:WBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 73.5		Intersection LOS: E	
Intersection Capacity Utilization 104.2%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 3: JEFFERSON ST & BROREIN ST





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	345	210	60	450	0	0
Future Volume (vph)	345	210	60	450	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	115		0	0
Storage Lanes		1	1		0	0
Taper Length (ft)			25		0	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	162			583	231	
Travel Time (s)	3.7			13.3	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	375	228	65	489	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	375	228	65	489	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
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			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	270	3845	315	235	535	0	0	170	55
Future Volume (vph)	0	0	0	270	3845	315	235	535	0	0	170	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.989						0.963	
Flt Protected				0.950				0.985				
Satd. Flow (prot)	0	0	0	1770	6337	0	0	3486	0	0	3408	0
Flt Permitted				0.950				0.742				
Satd. Flow (perm)	0	0	0	1770	6337	0	0	2626	0	0	3408	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					28						11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			319			716			284	
Travel Time (s)		13.1			7.3			16.3			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	293	4179	342	255	582	0	0	185	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	293	4521	0	0	837	0	0	245	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left			Left					
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					4		5	2			6	
Permitted Phases				4			2					
Detector Phase				4	4		5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0		5.0	10.0			10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				25.7	25.7		9.5	25.9			25.9	
Total Split (s)				100.0	100.0		10.0	40.0			30.0	
Total Split (%)				71.4%	71.4%		7.1%	28.6%			21.4%	
Maximum Green (s)				94.3	94.3		5.5	34.1			24.1	
Yellow Time (s)				3.7	3.7		3.5	3.7			3.7	
All-Red Time (s)				2.0	2.0		1.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0			0.0			0.0	
Total Lost Time (s)				5.7	5.7			5.9			5.9	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Recall Mode				Max	Max		None	C-Max			C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)				94.3	94.3			34.1			34.1	
Actuated g/C Ratio				0.67	0.67			0.24			0.24	
v/c Ratio				0.25	1.06			1.31			0.29	
Control Delay				8.5	50.2			192.1			42.2	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				8.5	50.2			192.1			42.2	
LOS				A	D			F			D	
Approach Delay					47.6			192.1			42.2	
Approach LOS					D			F			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 12 (9%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.31			
Intersection Signal Delay: 67.9		Intersection LOS: E	
Intersection Capacity Utilization 105.5%		ICU Level of Service G	
Analysis Period (min) 15			

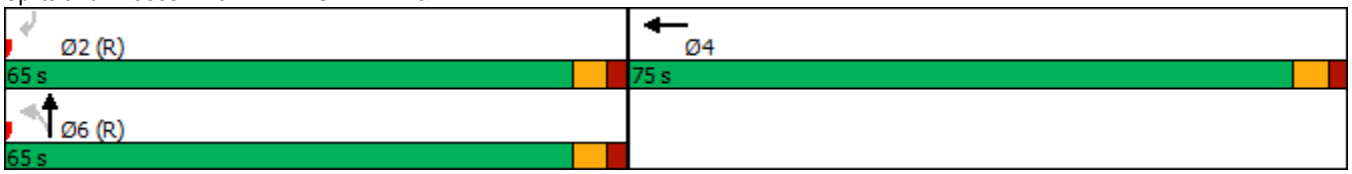
Splits and Phases: 5: JEFFERSON ST & KENNEDY BLVD

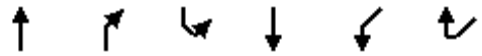
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1560	490	25	410	0	0	0	515
Future Volume (vph)	0	0	0	0	1560	490	25	410	0	0	0	515
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88
Frt					0.964							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4902	0	1770	1863	0	0	0	2787
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	4902	0	1770	1863	0	0	0	2787
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					80		22					22
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		847			465			292			201	
Travel Time (s)		19.3			10.6			6.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1696	533	27	446	0	0	0	560
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	2229	0	27	446	0	0	0	560
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				Perm
Protected Phases					4			6				
Permitted Phases							6					2
Minimum Split (s)					29.8		24.9	24.9				10.9
Total Split (s)					75.0		65.0	65.0				65.0
Total Split (%)					53.6%		46.4%	46.4%				46.4%
Maximum Green (s)					69.2		59.1	59.1				59.1
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.1		2.2	2.2				2.2
Lost Time Adjust (s)					0.0		0.0	0.0				0.0
Total Lost Time (s)					5.8		5.9	5.9				5.9
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		12.0	12.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					69.2		59.1	59.1				59.1
Actuated g/C Ratio					0.49		0.42	0.42				0.42
v/c Ratio					0.90		0.04	0.57				0.47
Control Delay					37.6		10.6	34.2				33.2
Queue Delay					0.0		0.0	7.2				0.0
Total Delay					37.6		10.6	41.4				33.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					D		B	D				C
Approach Delay					37.6			39.7			33.2	
Approach LOS					D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 116 (83%), Referenced to phase 2:SBR and 6:NBTL, Start of Green			
Natural Cycle: 60			
Control Type: Pretimed			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 37.2		Intersection LOS: D	
Intersection Capacity Utilization 82.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 6: NEBRASKA AVE & KENNEDY BLVD





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	625	275	105	515	0	0
Future Volume (vph)	625	275	105	515	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	130		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		0	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt	0.959					
Flt Protected			0.950			
Satd. Flow (prot)	1786	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1786	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			390	272	
Travel Time (s)	4.6			8.9	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	679	299	114	560	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	978	0	114	560	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

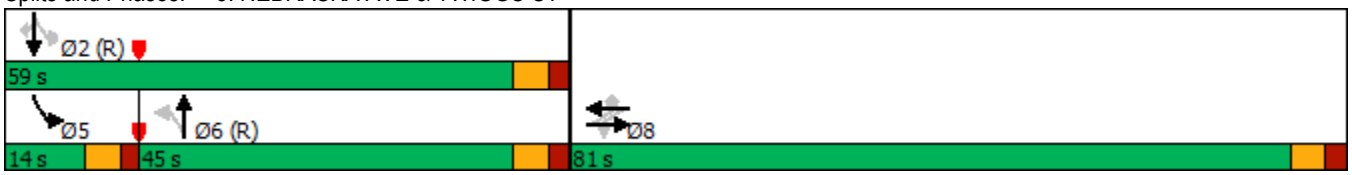
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		

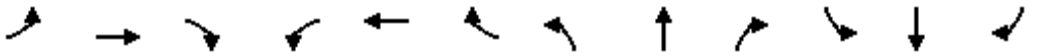
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	150	10	445	1100	715	105	430	90	160	165	60
Future Volume (vph)	5	150	10	445	1100	715	105	430	90	160	165	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	150		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	0			0			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.991				0.850		0.974				0.850
Flt Protected		0.999			0.986		0.950			0.950		
Satd. Flow (prot)	0	3504	0	0	3490	1583	1770	1814	0	1770	3539	1583
Flt Permitted		0.880			0.790		0.639			0.089		
Satd. Flow (perm)	0	3086	0	0	2796	1583	1190	1814	0	166	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				289		7				54
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			652			390			257	
Travel Time (s)		17.7			14.8			8.9			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	163	11	484	1196	777	114	467	98	174	179	65
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	179	0	0	1680	777	114	565	0	174	179	65
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left			Left		Right	Left			Left		Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm
Protected Phases		8			8			6		5	2	
Permitted Phases	8			8		8	6			2		2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8		8	8	8	6	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		5.0	10.0	10.0
Minimum Split (s)	29.1	29.1		29.1	29.1	29.1	28.0	28.0		10.7	28.0	28.0
Total Split (s)	81.0	81.0		81.0	81.0	81.0	45.0	45.0		14.0	59.0	59.0
Total Split (%)	57.9%	57.9%		57.9%	57.9%	57.9%	32.1%	32.1%		10.0%	42.1%	42.1%
Maximum Green (s)	74.9	74.9		74.9	74.9	74.9	39.0	39.0		8.3	53.0	53.0
Yellow Time (s)	3.7	3.7		3.7	3.7	3.7	3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.4		2.4	2.4	2.4	2.3	2.3		2.0	2.3	2.3
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.1			6.1	6.1	6.0	6.0		5.7	6.0	6.0
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		2.0	3.0	3.0
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Dont Walk (s)	16.0	16.0		16.0	16.0	16.0	15.0	15.0			15.0	15.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	0
Act Effct Green (s)		74.9			74.9	74.9	39.0	39.0		53.3	53.0	53.0
Actuated g/C Ratio		0.54			0.54	0.54	0.28	0.28		0.38	0.38	0.38
v/c Ratio		0.11			1.12	0.79	0.34	1.11		1.10	0.13	0.10
Control Delay		15.6			80.8	7.6	34.4	105.2		133.4	28.8	9.4
Queue Delay		0.0			0.2	1.3	0.0	0.0		0.0	0.0	0.0
Total Delay		15.6			81.0	8.9	34.4	105.2		133.4	28.8	9.4
LOS		B			F	A	C	F		F	C	A
Approach Delay		15.6			58.2			93.3			69.4	
Approach LOS		B			E			F			E	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 129 (92%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.12			
Intersection Signal Delay: 63.8		Intersection LOS: E	
Intersection Capacity Utilization 108.5%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 8: NEBRASKA AVE & TWIGGS ST





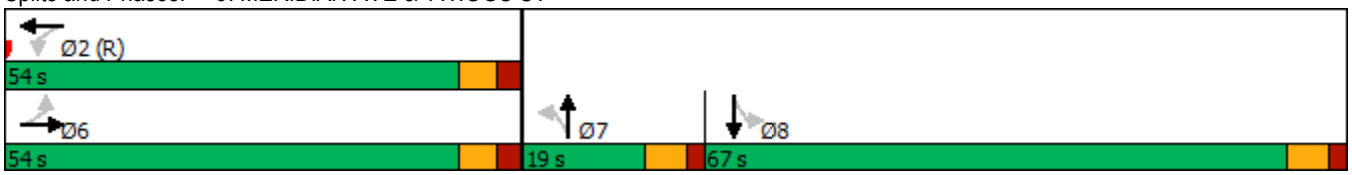
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	175	225	160	675	0	220	0	80	280	2075	1365
Future Volume (vph)	0	175	225	160	675	0	220	0	80	280	2075	1365
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	1.00
Frt		0.916						0.960				0.850
Flt Protected					0.991			0.965			0.994	
Satd. Flow (prot)	0	3242	0	0	3507	0	0	4711	0	0	5055	1583
Flt Permitted					0.705			0.935			0.824	
Satd. Flow (perm)	0	3242	0	0	2495	0	0	4565	0	0	4190	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		188						79				448
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			772			501			413	
Travel Time (s)		14.8			17.5			11.4			9.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	190	245	174	734	0	239	0	87	304	2255	1484
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	435	0	0	908	0	0	326	0	0	2559	1484
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left			Left			Left			Left		Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type		NA		Perm	NA		Perm	NA		Perm	NA	Free
Protected Phases		6			2			7			8	
Permitted Phases	6			2			7			8		Free
Detector Phase	6	6		2	2		7	7		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		5.0	5.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	45.8	45.8		16.8	16.8		11.4	11.4		16.4	16.4	
Total Split (s)	54.0	54.0		54.0	54.0		19.0	19.0		67.0	67.0	
Total Split (%)	38.6%	38.6%		38.6%	38.6%		13.6%	13.6%		47.9%	47.9%	
Maximum Green (s)	47.2	47.2		47.2	47.2		12.6	12.6		60.6	60.6	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	2.8	2.8		2.8	2.8		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.8			6.8			6.4			6.4	
Lead/Lag							Lead	Lead		Lag	Lag	
Lead-Lag Optimize?							Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)	7.0	7.0										
Flash Dont Walk (s)	32.0	32.0										
Pedestrian Calls (#/hr)	0	0										
Act Effct Green (s)		47.2			47.2			11.8			61.4	140.0
Actuated g/C Ratio		0.34			0.34			0.08			0.44	1.00
v/c Ratio		0.36			1.08			1.91dl			1.39	0.94
Control Delay		12.7			98.5			56.4			212.3	13.2
Queue Delay		0.0			10.0			0.1			0.0	17.1
Total Delay		12.7			108.5			56.5			212.3	30.3
LOS		B			F			E			F	C
Approach Delay		12.7			108.5			56.5			145.5	
Approach LOS		B			F			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 28 (20%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.39			
Intersection Signal Delay: 124.4		Intersection LOS: F	
Intersection Capacity Utilization 115.3%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 9: MERIDIAN AVE & TWIGGS ST

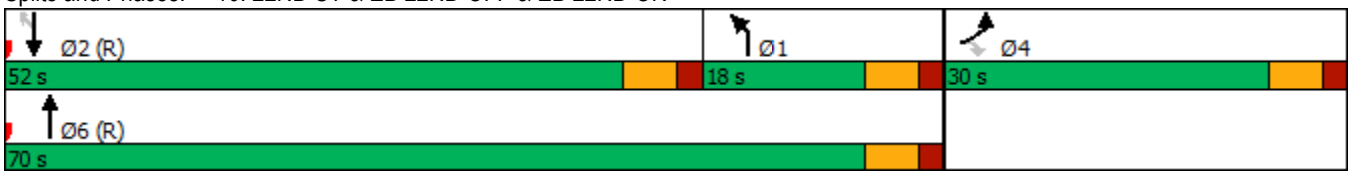


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Lane Configurations									
Traffic Volume (vph)	125	155	15	1780	900	0	95	0	0
Future Volume (vph)	125	155	15	1780	900	0	95	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt		0.850					0.850		
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	5085	5085	0	1583	0	0
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	5085	5085	0	1583	0	0
Right Turn on Red		Yes					Yes		
Satd. Flow (RTOR)		168					103		
Link Speed (mph)	30			30	30			30	
Link Distance (ft)	404			536	498			405	
Travel Time (s)	9.2			12.2	11.3			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	136	168	16	1935	978	0	103	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	136	168	16	1935	978	0	103	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right	Right	Left	Right
Median Width(ft)	12			12	12			0	
Link Offset(ft)	0			0	0			0	
Crosswalk Width(ft)	16			16	16			16	
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9	9	15	9
Number of Detectors	1	1	1	2	2		1		
Detector Template	Left	Right	Left				Right		
Leading Detector (ft)	20	20	20	100	100		20		
Trailing Detector (ft)	0	0	0	0	0		0		
Detector 1 Position(ft)	0	0	0	0	0		0		
Detector 1 Size(ft)	20	20	20	6	6		20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Detector 2 Position(ft)				94	94				
Detector 2 Size(ft)				6	6				
Detector 2 Type				Cl+Ex	Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)				0.0	0.0				
Turn Type	Prot	Perm	Prot	NA	NA		Perm		
Protected Phases	4		1	6	2				
Permitted Phases		4					2		
Detector Phase	4	4	1	6	2		2		
Switch Phase									
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0		10.0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Minimum Split (s)	24.0	24.0	16.0	24.0	24.0		24.0		
Total Split (s)	30.0	30.0	18.0	70.0	52.0		52.0		
Total Split (%)	30.0%	30.0%	18.0%	70.0%	52.0%		52.0%		
Maximum Green (s)	24.0	24.0	12.0	64.0	46.0		46.0		
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0		
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0		
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0		
Lead/Lag			Lag		Lead		Lead		
Lead-Lag Optimize?									
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		
Recall Mode	None	None	None	C-Max	C-Max		C-Max		
Act Effct Green (s)	13.4	13.4	8.3	74.6	67.4		67.4		
Actuated g/C Ratio	0.13	0.13	0.08	0.75	0.67		0.67		
v/c Ratio	0.58	0.47	0.11	0.51	0.29		0.09		
Control Delay	49.9	10.5	42.1	6.1	2.9		0.3		
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0		
Total Delay	49.9	10.5	42.1	6.1	2.9		0.3		
LOS	D	B	D	A	A		A		
Approach Delay	28.2			6.4	2.6				
Approach LOS	C			A	A				

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 10 (10%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 7.1		Intersection LOS: A	
Intersection Capacity Utilization 52.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: 22ND ST & EB 22ND OFF & EB 22ND ON

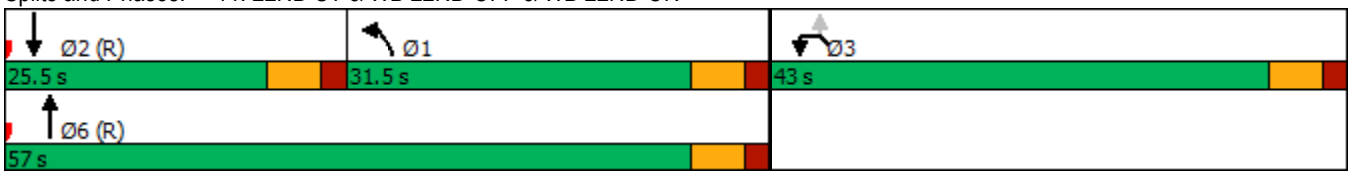


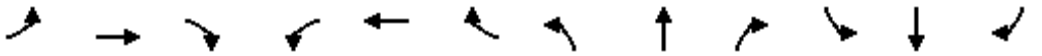
Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations											
Traffic Volume (vph)	0	0	390	1515	0	0	860	0	135	0	590
Future Volume (vph)	0	0	390	1515	0	0	860	0	135	0	590
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00	1.00	1.00	1.00
Frt											0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Flt Permitted			0.950						0.950		
Satd. Flow (perm)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)											98
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	264			498			271			329	
Travel Time (s)	6.0			11.3			6.2			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	424	1647	0	0	935	0	147	0	641
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	424	1647	0	0	935	0	147	0	641
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			12	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors			1	2			2		1		1
Detector Template			Left						Left		Right
Leading Detector (ft)			20	100			100		20		20
Trailing Detector (ft)			0	0			0		0		0
Detector 1 Position(ft)			0	0			0		0		0
Detector 1 Size(ft)			20	6			6		20		20
Detector 1 Type			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Queue (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Delay (s)			0.0	0.0			0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type			Prot	NA			NA		Prot		Perm
Protected Phases			1	6			2		3		
Permitted Phases											3
Detector Phase			1	6			2		3		3
Switch Phase											
Minimum Initial (s)			5.0	10.0			10.0		10.0		10.0

Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Minimum Split (s)			16.8	24.8			24.8		16.8		16.8
Total Split (s)			31.5	57.0			25.5		43.0		43.0
Total Split (%)			31.5%	57.0%			25.5%		43.0%		43.0%
Maximum Green (s)			25.5	51.0			19.5		37.0		37.0
Yellow Time (s)			4.0	4.0			4.0		4.0		4.0
All-Red Time (s)			2.0	2.0			2.0		2.0		2.0
Lost Time Adjust (s)			0.0	0.0			0.0		0.0		0.0
Total Lost Time (s)			6.0	6.0			6.0		6.0		6.0
Lead/Lag			Lag				Lead				
Lead-Lag Optimize?											
Vehicle Extension (s)			3.0	3.0			3.0		3.0		3.0
Recall Mode			None	C-Max			C-Max		None		None
Act Effct Green (s)			25.5	51.0			19.5		37.0		37.0
Actuated g/C Ratio			0.26	0.51			0.20		0.37		0.37
v/c Ratio			0.94	0.64			0.75		0.22		0.99
Control Delay			60.8	14.3			42.3		22.8		61.2
Queue Delay			0.0	0.1			0.0		0.0		0.0
Total Delay			60.8	14.4			42.3		22.8		61.2
LOS			E	B			D		C		E
Approach Delay				23.9			42.3			54.0	
Approach LOS				C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 34.7		Intersection LOS: C	
Intersection Capacity Utilization 75.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 11: 22ND ST & WB 22ND OFF & WB 22ND ON



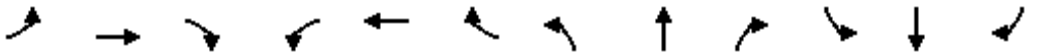


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	0	205	0	0	0	0	1895	40	100	1180	0
Future Volume (vph)	165	0	205	0	0	0	0	1895	40	100	1180	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	0		0
Storage Lanes	0		2	0		0	1		1	1		0
Taper Length (ft)	0			0			25			0		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	2787	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.057		
Satd. Flow (perm)	0	1770	2787	0	0	0	0	6408	1583	106	5085	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)									83			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		549			603			383			284	
Travel Time (s)		12.5			13.7			8.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	179	0	223	0	0	0	0	2060	43	109	1283	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	179	223	0	0	0	0	2060	43	109	1283	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left		Right						Right	Left		
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8						6	2		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8	8					6	6	5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	5.0	10.0	
Minimum Split (s)	46.9	46.9	46.9					16.5	16.5	11.7	23.5	
Total Split (s)	47.0	47.0	47.0					68.0	68.0	25.0	93.0	
Total Split (%)	33.6%	33.6%	33.6%					48.6%	48.6%	17.9%	66.4%	
Maximum Green (s)	40.1	40.1	40.1					61.5	61.5	18.3	86.5	
Yellow Time (s)	4.4	4.4	4.4					4.4	4.4	4.4	4.4	
All-Red Time (s)	2.5	2.5	2.5					2.1	2.1	2.3	2.1	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.9	6.9					6.5	6.5	6.7	6.5	
Lead/Lag								Lag	Lag	Lead		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0					3.0	3.0	2.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Walk Time (s)	7.0	7.0	7.0								7.0	
Flash Dont Walk (s)	33.0	33.0	33.0								10.0	
Pedestrian Calls (#/hr)	0	0	0								0	
Act Effct Green (s)		22.3	22.3					89.5	89.5	104.1	104.3	
Actuated g/C Ratio		0.16	0.16					0.64	0.64	0.74	0.74	
v/c Ratio		0.63	0.50					0.50	0.04	0.63	0.34	
Control Delay		64.4	56.6					15.0	0.3	65.3	2.2	
Queue Delay		2.3	0.0					0.2	0.0	0.0	0.1	
Total Delay		66.6	56.6					15.1	0.3	65.3	2.2	
LOS		E	E					B	A	E	A	
Approach Delay		61.1						14.8			7.2	
Approach LOS		E						B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 116 (83%), Referenced to phase 2:SBTL and 6:NBT, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 12: 50TH ST & EB 50TH OFF/EB 50TH ON

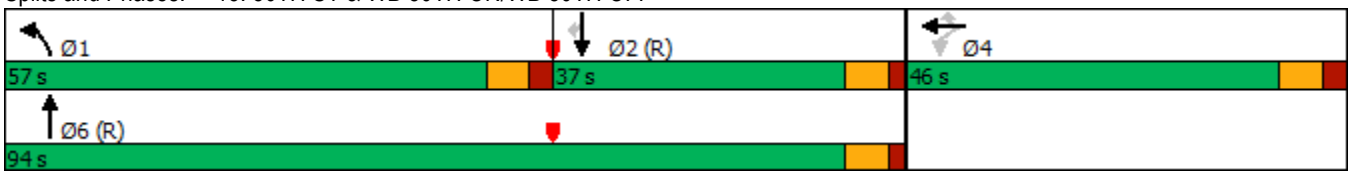


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	30	0	210	665	1395	0	0	1250	165
Future Volume (vph)	0	0	0	30	0	210	665	1395	0	0	1250	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	140		0
Storage Lanes	0		0	0		1	2		0	1		1
Taper Length (ft)	0			0			0			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	3433	3539	0	0	6408	1583
Flt Permitted					0.950		0.950					
Satd. Flow (perm)	0	0	0	0	1770	1583	3433	3539	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						79						164
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		457			359			284			339	
Travel Time (s)		10.4			8.2			6.5			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	33	0	228	723	1516	0	0	1359	179
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	33	228	723	1516	0	0	1359	179
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left		Right	Left					Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4						2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				4	4	4	1	6			2	2
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	10.0
Minimum Split (s)				46.0	46.0	46.0	11.8	23.4			23.4	23.4
Total Split (s)				46.0	46.0	46.0	57.0	94.0			37.0	37.0
Total Split (%)				32.9%	32.9%	32.9%	40.7%	67.1%			26.4%	26.4%
Maximum Green (s)				38.8	38.8	38.8	50.2	87.6			30.6	30.6
Yellow Time (s)				4.4	4.4	4.4	4.4	4.4			4.4	4.4
All-Red Time (s)				2.8	2.8	2.8	2.4	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.2	7.2	6.8	6.4			6.4	6.4
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	2.0	3.0			3.0	3.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Walk Time (s)								7.0				
Flash Dont Walk (s)								10.0				
Pedestrian Calls (#/hr)								0				
Act Effct Green (s)					20.3	20.3	34.6	106.1			64.6	64.6
Actuated g/C Ratio					0.14	0.14	0.25	0.76			0.46	0.46
v/c Ratio					0.13	0.77	0.85	0.57			0.46	0.22
Control Delay					49.8	53.3	81.7	6.5			28.2	6.1
Queue Delay					0.0	0.0	3.3	0.2			0.0	0.0
Total Delay					49.8	53.3	84.9	6.7			28.2	6.1
LOS					D	D	F	A			C	A
Approach Delay					52.9			31.9			25.6	
Approach LOS					D			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 105			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 30.9		Intersection LOS: C	
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 13: 50TH ST & WB 50TH ON/WB 50TH OFF

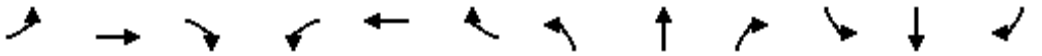


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	65	0	1595	0	0	500
Future Volume (vph)	65	0	1595	0	0	500
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	3539	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	3539	0	0	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	292		343			439
Travel Time (s)	6.6		7.8			10.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	71	0	1734	0	0	543
Shared Lane Traffic (%)						
Lane Group Flow (vph)	71	0	1734	0	0	543
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2			2
Detector Template	Left		Thru			Thru
Leading Detector (ft)	20		100			100
Trailing Detector (ft)	0		0			0
Detector 1 Position(ft)	0		0			0
Detector 1 Size(ft)	20		6			6
Detector 1 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0			0.0
Detector 1 Queue (s)	0.0		0.0			0.0
Detector 1 Delay (s)	0.0		0.0			0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Detector Phase	8		2			6
Switch Phase						
Minimum Initial (s)	5.0		15.0			15.0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Split (s)	24.8		24.8			24.8
Total Split (s)	27.0		98.0			98.0
Total Split (%)	21.6%		78.4%			78.4%
Maximum Green (s)	20.2		91.2			91.2
Yellow Time (s)	4.8		4.8			4.8
All-Red Time (s)	2.0		2.0			2.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.8		6.8			6.8
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0			3.0
Recall Mode	None		C-Max			C-Max
Walk Time (s)	7.0					
Flash Dont Walk (s)	11.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	10.4		105.0			105.0
Actuated g/C Ratio	0.08		0.84			0.84
v/c Ratio	0.49		0.58			0.18
Control Delay	65.1		5.3			1.8
Queue Delay	0.0		0.0			0.0
Total Delay	65.1		5.3			1.8
LOS	E		A			A
Approach Delay	65.1		5.3			1.8
Approach LOS	E		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 62 (50%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 6.3		Intersection LOS: A	
Intersection Capacity Utilization 59.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 14: 78TH ST & EB 78TH OFF

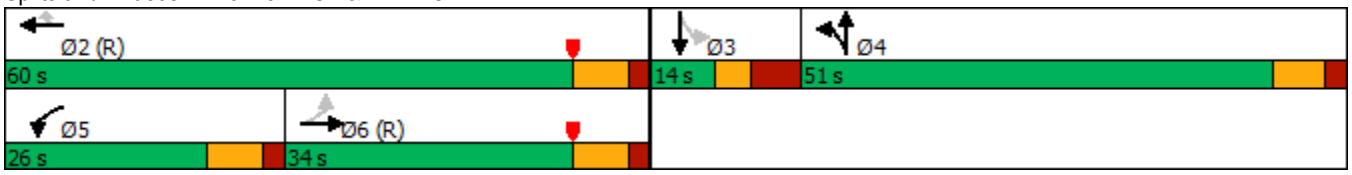


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	470	325	160	1280	10	735	5	460	5	5	5
Future Volume (vph)	5	470	325	160	1280	10	735	5	460	5	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	0		315	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			0			0			0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.955	
Flt Protected	0.950			0.950			0.950	0.953			0.984	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1681	1686	1583	0	1750	0
Flt Permitted	0.132			0.950			0.950	0.953				
Satd. Flow (perm)	246	3539	1583	1770	3539	1583	1681	1686	1583	0	1779	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			353			106			391		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		887			638			788			238	
Travel Time (s)		20.2			14.5			17.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	511	353	174	1391	11	799	5	500	5	5	5
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	5	511	353	174	1391	11	399	405	500	0	15	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		25			25			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left		Right	Left		Right	Left		Right	Left		
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Free	Prot	NA	Perm	Split	NA	Free	Perm	NA	
Protected Phases		6		5	2		4	4			3	
Permitted Phases	6		Free			2			Free	3		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6		5	2	2	4	4		3	3	
Switch Phase												
Minimum Initial (s)	15.0	15.0		5.0	15.0	15.0	6.0	6.0		6.0	6.0	
Minimum Split (s)	25.2	25.2		12.2	26.2	26.2	13.1	13.1		14.0	14.0	
Total Split (s)	34.0	34.0		26.0	60.0	60.0	51.0	51.0		14.0	14.0	
Total Split (%)	27.2%	27.2%		20.8%	48.0%	48.0%	40.8%	40.8%		11.2%	11.2%	
Maximum Green (s)	26.8	26.8		18.8	52.8	52.8	43.9	43.9		6.0	6.0	
Yellow Time (s)	5.2	5.2		5.2	5.2	5.2	4.8	4.8		3.4	3.4	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.3	2.3		4.6	4.6	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	7.2	7.2		7.2	7.2	7.2	7.1	7.1			8.0	
Lead/Lag	Lag	Lag		Lead			Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		3.0	3.0	
Recall Mode	C-Max	C-Max		None	C-Max	C-Max	None	None		None	None	
Act Effct Green (s)	43.8	43.8	125.0	16.2	67.2	67.2	37.9	37.9	125.0		6.0	
Actuated g/C Ratio	0.35	0.35	1.00	0.13	0.54	0.54	0.30	0.30	1.00		0.05	
v/c Ratio	0.06	0.41	0.22	0.76	0.73	0.01	0.78	0.79	0.32		0.17	
Control Delay	40.4	35.8	0.3	73.0	27.6	0.0	45.2	45.8	0.5		48.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	40.4	35.8	0.3	73.0	27.6	0.0	45.2	45.8	0.5		48.9	
LOS	D	D	A	E	C	A	D	D	A		D	
Approach Delay		21.4			32.4			28.2			48.9	
Approach LOS		C			C			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 125			
Actuated Cycle Length: 125			
Offset: 0 (0%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 28.5		Intersection LOS: C	
Intersection Capacity Utilization 93.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 15: 78TH ST & ADAMO DR



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	915	20	480	1450	0	0
Future Volume (vph)	915	20	480	1450	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			0		0	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	1.00
Frt		0.850				
Flt Protected				0.988		
Satd. Flow (prot)	5085	1583	0	5024	0	0
Flt Permitted				0.988		
Satd. Flow (perm)	5085	1583	0	5024	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	638			376	435	
Travel Time (s)	14.5			8.5	9.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	995	22	522	1576	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	995	22	0	2098	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	25			25	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	62.1%	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												
Traffic Volume (vph)	155	0	315	0	0	0	0	2580	195	165	1185	0
Future Volume (vph)	155	0	315	0	0	0	0	2580	195	165	1185	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	315		500	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	0			0			25			0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.073		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	136	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			312						212			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		739			677			1414			381	
Travel Time (s)		16.8			15.4			32.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	168	0	342	0	0	0	0	2804	212	179	1288	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	168	342	0	0	0	0	2804	212	179	1288	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0			30			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left		Right						Right	Left		
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Free					NA	Perm	D.P+P	NA	
Protected Phases		4						2		1 3	6 3 2	
Permitted Phases	4		Free						2	2		

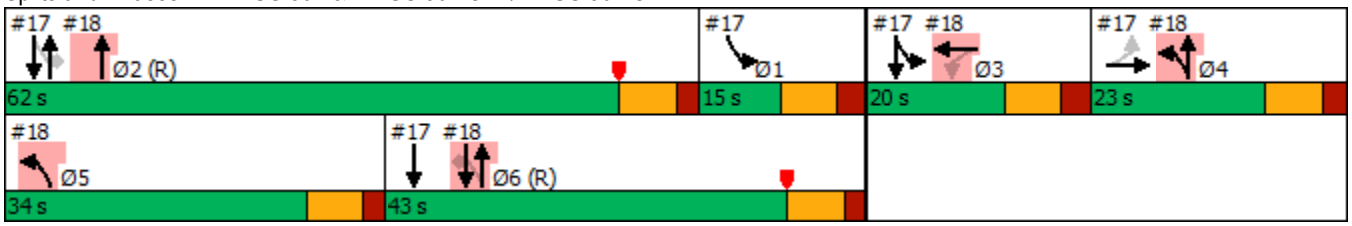
Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4						2	2	1 3	6 3 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0						15.0	15.0			
Minimum Split (s)	12.5	12.5						22.1	22.1			
Total Split (s)	23.0	23.0						62.0	62.0			
Total Split (%)	19.2%	19.2%						51.7%	51.7%			
Maximum Green (s)	15.5	15.5						54.9	54.9			
Yellow Time (s)	5.1	5.1						5.1	5.1			
All-Red Time (s)	2.4	2.4						2.0	2.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		7.5						7.1	7.1			
Lead/Lag	Lag	Lag						Lead	Lead			
Lead-Lag Optimize?	Yes	Yes						Yes	Yes			
Vehicle Extension (s)	4.0	4.0						3.0	3.0			
Recall Mode	None	None						C-Max	C-Max			
Act Effct Green (s)		15.5	120.0					54.9	54.9	81.4	89.9	
Actuated g/C Ratio		0.13	1.00					0.46	0.46	0.68	0.75	
v/c Ratio		0.74	0.22					0.96	0.25	0.39	0.34	
Control Delay		70.0	0.3					40.9	3.3	12.0	1.9	
Queue Delay		0.0	0.0					7.0	0.0	0.0	0.1	
Total Delay		70.0	0.3					47.9	3.3	12.0	2.0	
LOS		E	A					D	A	B	A	
Approach Delay		23.3						44.7			3.2	
Approach LOS		C						D			A	

Intersection Summary

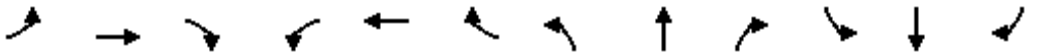
Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.06
Intersection Signal Delay: 30.4 Intersection LOS: C
Intersection Capacity Utilization 82.4% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 17: US 301 & EB US 301 OFF/EB US 301 ON



Lane Group	Ø1	Ø3	Ø5	Ø6
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	15.0
Minimum Split (s)	12.8	12.8	12.1	22.1
Total Split (s)	15.0	20.0	34.0	43.0
Total Split (%)	13%	17%	28%	36%
Maximum Green (s)	7.2	12.2	26.9	35.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.7	2.7	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	4.0	3.0
Recall Mode	None	None	None	C-Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary



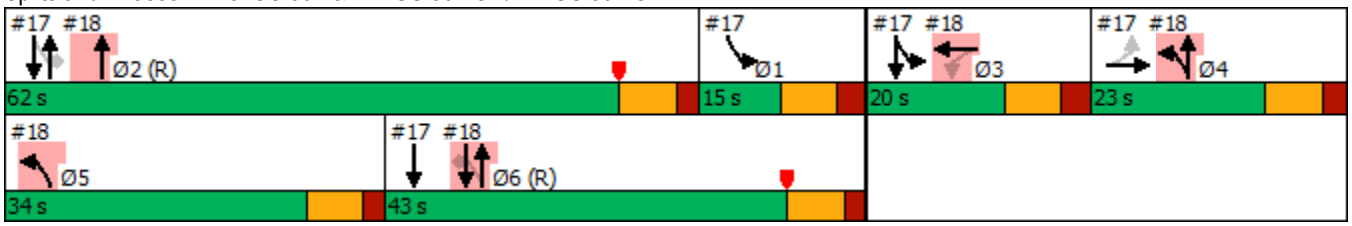
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	85	0	375	775	1960	0	0	1265	115
Future Volume (vph)	0	0	0	85	0	375	775	1960	0	0	1265	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	300		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	0			0			0			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.111					
Satd. Flow (perm)	0	0	0	0	1770	1583	207	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						312						176
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			711			381			795	
Travel Time (s)		13.2			16.2			8.7			18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	92	0	408	842	2130	0	0	1375	125
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	92	408	842	2130	0	0	1375	125
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			20			30	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left		Right	Left					Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Free	D.P+P	NA			NA	Perm
Protected Phases					3		5 4	2 4 6			6	
Permitted Phases				3		Free	6					6

Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				3	3		5 4	2 4 6			6	6
Switch Phase												
Minimum Initial (s)				5.0	5.0						15.0	15.0
Minimum Split (s)				12.8	12.8						22.1	22.1
Total Split (s)				20.0	20.0						43.0	43.0
Total Split (%)				16.7%	16.7%						35.8%	35.8%
Maximum Green (s)				12.2	12.2						35.9	35.9
Yellow Time (s)				5.1	5.1						5.1	5.1
All-Red Time (s)				2.7	2.7						2.0	2.0
Lost Time Adjust (s)					0.0						0.0	0.0
Total Lost Time (s)					7.8						7.1	7.1
Lead/Lag				Lead	Lead						Lag	Lag
Lead-Lag Optimize?				Yes	Yes						Yes	Yes
Vehicle Extension (s)				4.0	4.0						3.0	3.0
Recall Mode				None	None						C-Max	C-Max
Act Effct Green (s)					12.2	120.0	85.8	92.9			35.9	35.9
Actuated g/C Ratio					0.10	1.00	0.72	0.77			0.30	0.30
v/c Ratio					0.51	0.26	1.06	0.54			0.72	0.21
Control Delay					62.0	0.4	72.6	0.2			40.1	2.1
Queue Delay					0.0	0.0	17.5	0.2			0.0	0.0
Total Delay					62.0	0.4	90.2	0.4			40.1	2.1
LOS					E	A	F	A			D	A
Approach Delay					11.7			25.8			36.9	
Approach LOS					B			C			D	

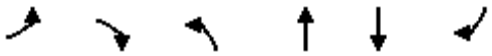
Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBSB and 6:SBT, Start of Yellow			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.06			
Intersection Signal Delay: 27.7		Intersection LOS: C	
Intersection Capacity Utilization 82.4%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 18: US 301 & WB US 301 ON/WB US 301 OFF



Lane Group	Ø1	Ø2	Ø4	Ø5
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	15.0	5.0	5.0
Minimum Split (s)	12.8	22.1	12.5	12.1
Total Split (s)	15.0	62.0	23.0	34.0
Total Split (%)	13%	52%	19%	28%
Maximum Green (s)	7.2	54.9	15.5	26.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.7	2.0	2.4	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0	4.0	4.0
Recall Mode	None	C-Max	None	None
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary

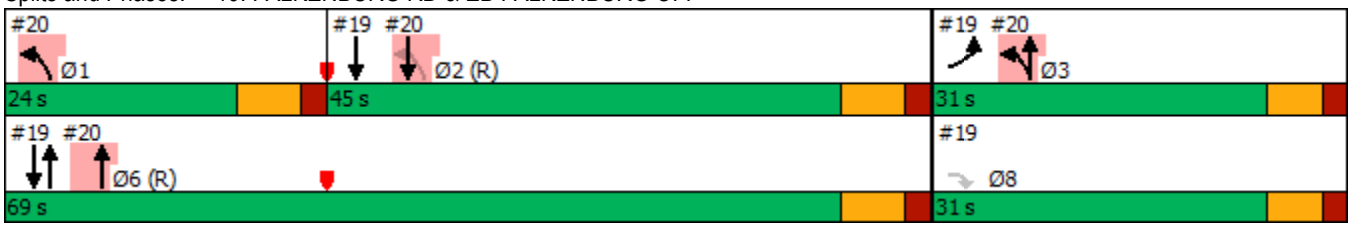


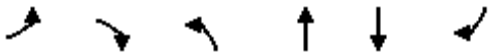
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Lane Configurations								
Traffic Volume (vph)	235	525	0	1805	700	0		
Future Volume (vph)	235	525	0	1805	700	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	0.97	0.88	1.00	0.91	0.91	1.00		
Frt		0.850						
Flt Protected	0.950							
Satd. Flow (prot)	3433	2787	0	5085	5085	0		
Flt Permitted	0.950							
Satd. Flow (perm)	3433	2787	0	5085	5085	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		388						
Link Speed (mph)	30			30	30			
Link Distance (ft)	519			688	550			
Travel Time (s)	11.8			15.6	12.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	255	571	0	1962	761	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	255	571	0	1962	761	0		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	24			30	30			
Link Offset(ft)	0			0	0			
Crosswalk Width(ft)	16			16	16			
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	9	15			9		
Number of Detectors	1	1		2	2			
Detector Template	Left	Right						
Leading Detector (ft)	20	20		100	100			
Trailing Detector (ft)	0	0		0	0			
Detector 1 Position(ft)	0	0		0	0			
Detector 1 Size(ft)	20	20		6	6			
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			
Detector 2 Position(ft)				94	94			
Detector 2 Size(ft)				6	6			
Detector 2 Type				Cl+Ex	Cl+Ex			
Detector 2 Channel								
Detector 2 Extend (s)				0.0	0.0			
Turn Type	Prot	Perm		NA	NA			
Protected Phases	3			6	2 6		1	2
Permitted Phases		8						
Detector Phase	3	8		6	2 6			
Switch Phase								
Minimum Initial (s)	6.0	6.0		15.0			5.0	15.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Minimum Split (s)	22.5	22.5		22.5			11.8	22.5
Total Split (s)	31.0	31.0		69.0			24.0	45.0
Total Split (%)	31.0%	31.0%		69.0%			24%	45%
Maximum Green (s)	24.9	24.9		62.2			17.2	38.2
Yellow Time (s)	4.1	4.1		4.8			4.8	4.8
All-Red Time (s)	2.0	2.0		2.0			2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0				
Total Lost Time (s)	6.1	6.1		6.8				
Lead/Lag							Lead	Lag
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)	3.5	3.5		4.0			6.0	4.0
Recall Mode	None	None		C-Max			Min	C-Max
Act Effct Green (s)	24.9	24.9		62.2	62.2			
Actuated g/C Ratio	0.25	0.25		0.62	0.62			
v/c Ratio	0.30	0.58		0.62	0.24			
Control Delay	31.6	12.7		12.7	4.2			
Queue Delay	0.0	0.0		0.0	0.0			
Total Delay	31.6	12.7		12.7	4.2			
LOS	C	B		B	A			
Approach Delay	18.5			12.7	4.2			
Approach LOS	B			B	A			

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 12.3		Intersection LOS: B	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 19: FALKENBURG RD & EB FALKENBURG OFF



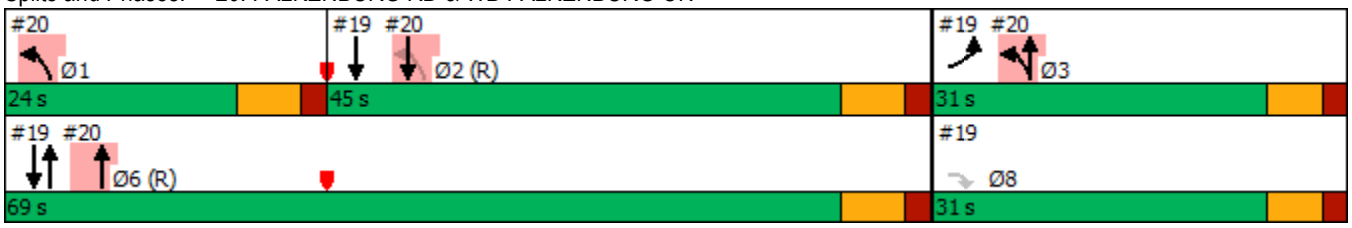


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	0	0	635	1405	700	295				
Future Volume (vph)	0	0	635	1405	700	295				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00				
Frt						0.850				
Flt Protected			0.950							
Satd. Flow (prot)	0	0	1770	3539	3539	1583				
Flt Permitted			0.270							
Satd. Flow (perm)	0	0	503	3539	3539	1583				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)						317				
Link Speed (mph)	30			30	30					
Link Distance (ft)	492			550	852					
Travel Time (s)	11.2			12.5	19.4					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				
Adj. Flow (vph)	0	0	690	1527	761	321				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	690	1527	761	321				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			30	30					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Turning Speed (mph)	15	9	15			9				
Number of Detectors			1	2	2	1				
Detector Template			Left			Right				
Leading Detector (ft)			20	100	100	20				
Trailing Detector (ft)			0	0	0	0				
Detector 1 Position(ft)			0	0	0	0				
Detector 1 Size(ft)			20	6	6	20				
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel										
Detector 1 Extend (s)			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94					
Detector 2 Size(ft)				6	6					
Detector 2 Type				Cl+Ex	Cl+Ex					
Detector 2 Channel										
Detector 2 Extend (s)				0.0	0.0					
Turn Type			D.P+P	NA	NA	Free				
Protected Phases			1 3	6 3	2		1	3	6	8
Permitted Phases			2			Free				
Detector Phase			1 3	6 3	2					
Switch Phase										
Minimum Initial (s)					15.0		5.0	6.0	15.0	6.0

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Minimum Split (s)					22.5		11.8	22.5	22.5	22.5
Total Split (s)					45.0		24.0	31.0	69.0	31.0
Total Split (%)					45.0%		24%	31%	69%	31%
Maximum Green (s)					38.2		17.2	24.9	62.2	24.9
Yellow Time (s)					4.8		4.8	4.1	4.8	4.1
All-Red Time (s)					2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)					0.0					
Total Lost Time (s)					6.8					
Lead/Lag					Lag		Lead			
Lead-Lag Optimize?					Yes		Yes			
Vehicle Extension (s)					4.0		6.0	3.5	4.0	3.5
Recall Mode					C-Max		Min	None	C-Max	None
Act Effct Green (s)			86.4	100.0	40.2	100.0				
Actuated g/C Ratio			0.86	1.00	0.40	1.00				
v/c Ratio			0.68	0.43	0.54	0.20				
Control Delay			26.6	0.3	24.9	0.3				
Queue Delay			0.7	0.0	0.0	0.0				
Total Delay			27.3	0.3	24.9	0.3				
LOS			C	A	C	A				
Approach Delay				8.7	17.6					
Approach LOS				A	B					

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBSB, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 11.6		Intersection LOS: B	
Intersection Capacity Utilization 65.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 20: FALKENBURG RD & WB FALKENBURG ON

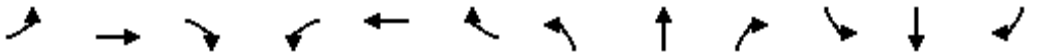


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	195	0	0	1150	250	800
Future Volume (vph)	195	0	0	1150	250	800
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.88
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3539	0	0	3539	1770	2787
Flt Permitted					0.950	
Satd. Flow (perm)	3539	0	0	3539	1770	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						870
Link Speed (mph)	30			30	30	
Link Distance (ft)	390			343	501	
Travel Time (s)	8.9			7.8	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	212	0	0	1250	272	870
Shared Lane Traffic (%)						
Lane Group Flow (vph)	212	0	0	1250	272	870
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2			2	1	1
Detector Template					Left	Right
Leading Detector (ft)	100			100	20	20
Trailing Detector (ft)	0			0	0	0
Detector 1 Position(ft)	0			0	0	0
Detector 1 Size(ft)	6			6	20	20
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Prot
Protected Phases	2			6	8	8
Permitted Phases						
Detector Phase	2			6	8	8
Switch Phase						
Minimum Initial (s)	5.0			5.0	5.0	5.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	23.7			23.7	23.7	23.7
Total Split (s)	87.0			87.0	53.0	53.0
Total Split (%)	62.1%			62.1%	37.9%	37.9%
Maximum Green (s)	82.5			82.5	48.5	48.5
Yellow Time (s)	3.5			3.5	3.5	3.5
All-Red Time (s)	1.0			1.0	1.0	1.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	4.5			4.5	4.5	4.5
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	C-Max			C-Max	None	None
Walk Time (s)	7.0			7.0	7.0	7.0
Flash Dont Walk (s)	11.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	101.9			101.9	29.1	29.1
Actuated g/C Ratio	0.73			0.73	0.21	0.21
v/c Ratio	0.08			0.49	0.74	0.69
Control Delay	6.4			9.6	63.5	5.6
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	6.4			9.6	63.5	5.6
LOS	A			A	E	A
Approach Delay	6.4			9.6	19.4	
Approach LOS	A			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 0 (0%), Referenced to phase 2:EBT and 6:WBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 13.6		Intersection LOS: B	
Intersection Capacity Utilization 53.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 21: EB WHITING OFF & WHITING ST

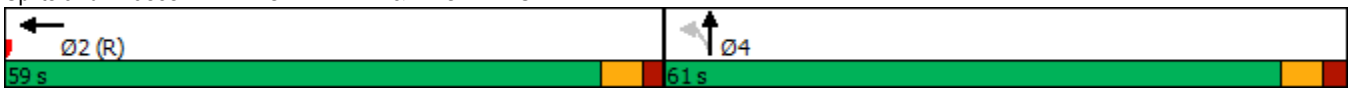


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1530	185	160	1410	0	0	0	0
Future Volume (vph)	0	0	0	0	1530	185	160	1410	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	1.00	0.91	1.00	1.00	1.00	1.00
Frt					0.984							
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	6305	0	1770	5085	0	0	0	0
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	6305	0	1770	5085	0	0	0	0
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					11		25					
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		273			600			296			353	
Travel Time (s)		6.2			13.6			6.7			8.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1663	201	174	1533	0	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1864	0	174	1533	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors					2		1	2				
Detector Template					Thru		Left	Thru				
Leading Detector (ft)					100		20	100				
Trailing Detector (ft)					0		0	0				
Detector 1 Position(ft)					0		0	0				
Detector 1 Size(ft)					6		20	6				
Detector 1 Type					Cl+Ex		Cl+Ex	Cl+Ex				
Detector 1 Channel												
Detector 1 Extend (s)					0.0		0.0	0.0				
Detector 1 Queue (s)					0.0		0.0	0.0				
Detector 1 Delay (s)					0.0		0.0	0.0				
Detector 2 Position(ft)					94			94				
Detector 2 Size(ft)					6			6				
Detector 2 Type					Cl+Ex			Cl+Ex				
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0				
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Detector Phase					2		4	4				
Switch Phase												
Minimum Initial (s)					10.0		10.0	10.0				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)					29.8		36.1	36.1				
Total Split (s)					59.0		61.0	61.0				
Total Split (%)					49.2%		50.8%	50.8%				
Maximum Green (s)					53.2		54.9	54.9				
Yellow Time (s)					3.7		3.7	3.7				
All-Red Time (s)					2.1		2.4	2.4				
Lost Time Adjust (s)					0.0		0.0	0.0				
Total Lost Time (s)					5.8		6.1	6.1				
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)					3.0		3.0	3.0				
Recall Mode					C-Max		None	None				
Walk Time (s)					7.0		7.0	7.0				
Flash Dont Walk (s)					17.0		23.0	23.0				
Pedestrian Calls (#/hr)					0		0	0				
Act Effct Green (s)					57.3		50.8	50.8				
Actuated g/C Ratio					0.48		0.42	0.42				
v/c Ratio					0.62		0.23	0.71				
Control Delay					4.5		18.2	28.3				
Queue Delay					0.0		0.8	1.2				
Total Delay					4.5		19.1	29.6				
LOS					A		B	C				
Approach Delay					4.5			28.5				
Approach LOS					A			C				

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 4 (3%), Referenced to phase 2:WBT and 6:, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 16.0		Intersection LOS: B	
Intersection Capacity Utilization 62.4%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: FLORIDA AVE & BROREIN ST

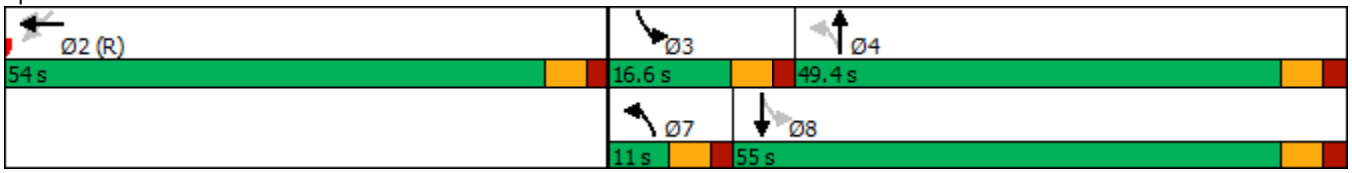


Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Lane Configurations										
Traffic Volume (vph)	50	1830	220	65	520	160	155	740	175	375
Future Volume (vph)	50	1830	220	65	520	160	155	740	175	375
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0			0		0	100	
Storage Lanes	0		1			1		0	1	
Taper Length (ft)	25		25			25				
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	0.88	1.00
Frt				0.867			0.876		0.850	0.850
Flt Protected		0.999	0.950			0.950				
Satd. Flow (prot)	0	3536	1770	1615	0	1770	1632	0	2787	1583
Flt Permitted		0.999	0.091			0.082				
Satd. Flow (perm)	0	3536	170	1615	0	153	1632	0	2787	1583
Right Turn on Red					Yes					Yes
Satd. Flow (RTOR)				374						408
Link Speed (mph)		30		30			30			
Link Distance (ft)		591		494			379			
Travel Time (s)		13.4		11.2			8.6			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	1989	239	71	565	174	168	804	190	408
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	2043	239	636	0	174	972	0	190	408
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	L NA	Left	Left	Right	Left	Left	Right	R NA	Right
Median Width(ft)		12		12			12			
Link Offset(ft)		0		0			0			
Crosswalk Width(ft)		16		16			16			
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		15		9	15		9	9	9
Number of Detectors	1	2	1	2		1	2		1	1
Detector Template	Left	Thru	Left	Thru		Left	Thru		Right	Right
Leading Detector (ft)	20	100	20	100		20	100		20	20
Trailing Detector (ft)	0	0	0	0		0	0		0	0
Detector 1 Position(ft)	0	0	0	0		0	0		0	0
Detector 1 Size(ft)	20	6	20	6		20	6		20	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel										
Detector 1 Extend (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0
Detector 2 Position(ft)		94		94			94			
Detector 2 Size(ft)		6		6			6			
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			
Detector 2 Channel										
Detector 2 Extend (s)		0.0		0.0			0.0			
Turn Type	Perm	NA	pm+pt	NA		pm+pt	NA		Perm	Free
Protected Phases		2	7	4		3	8			
Permitted Phases	2		4			8			2	Free

Lane Group	WBL	WBT	NBL	NBT	NBR2	SBL	SBT	SBR	SWR	SWR2
Detector Phase	2	2	7	4		3	8		2	
Switch Phase										
Minimum Initial (s)	10.0	10.0	5.0	10.0		5.0	10.0		10.0	
Minimum Split (s)	24.7	24.7	10.7	32.0		10.7	32.0		24.7	
Total Split (s)	54.0	54.0	11.0	49.4		16.6	55.0		54.0	
Total Split (%)	45.0%	45.0%	9.2%	41.2%		13.8%	45.8%		45.0%	
Maximum Green (s)	48.3	48.3	5.3	43.4		10.9	49.0		48.3	
Yellow Time (s)	3.7	3.7	3.7	3.7		3.7	3.7		3.7	
All-Red Time (s)	2.0	2.0	2.0	2.3		2.0	2.3		2.0	
Lost Time Adjust (s)		0.0	0.0	0.0		0.0	0.0		0.0	
Total Lost Time (s)		5.7	5.7	6.0		5.7	6.0		5.7	
Lead/Lag			Lead	Lag		Lead	Lag			
Lead-Lag Optimize?			Yes	Yes		Yes	Yes			
Vehicle Extension (s)	3.0	3.0	3.0	3.0		3.0	3.0		3.0	
Recall Mode	C-Max	C-Max	None	Max		None	Max		C-Max	
Walk Time (s)	7.0	7.0		7.0			7.0		7.0	
Flash Dont Walk (s)	12.0	12.0		19.0			19.0		12.0	
Pedestrian Calls (#/hr)	0	0		0			0		0	
Act Effct Green (s)		48.3	49.4	43.8		59.8	49.0		48.3	120.0
Actuated g/C Ratio		0.40	0.41	0.36		0.50	0.41		0.40	1.00
v/c Ratio		1.44	1.71	0.77		0.80	1.46		0.17	0.26
Control Delay		215.5	366.1	20.5		51.0	244.6		23.5	0.4
Queue Delay		0.0	0.0	0.0		0.0	0.0		0.0	0.0
Total Delay		215.5	366.1	20.5		51.0	244.6		23.5	0.4
LOS		F	F	C		D	F		C	A
Approach Delay		215.5		114.9			215.2			
Approach LOS		F		F			F			

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 108 (90%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.71			
Intersection Signal Delay: 169.9		Intersection LOS: F	
Intersection Capacity Utilization 145.6%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: WB BROREIN ON/WB BROREIN OFF & MORGAN ST & BROREIN ST

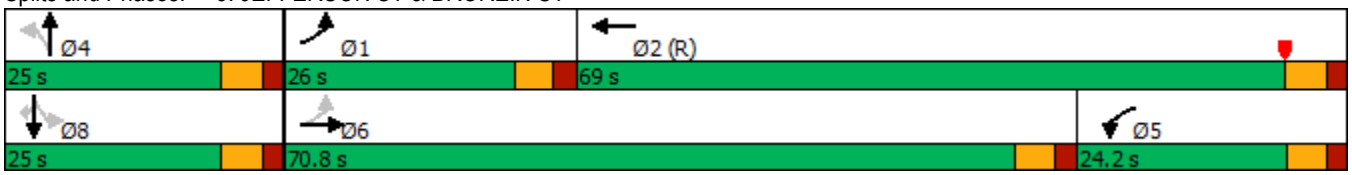


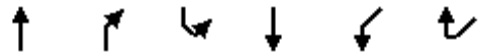
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	345	320	15	140	1690	155	45	520	25	15	135	145
Future Volume (vph)	345	320	15	140	1690	155	45	520	25	15	135	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200		0	80		0	115		0	0		0
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.993			0.987			0.993				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1850	0	1770	3493	0	1770	3514	0	1770	1863	1583
Flt Permitted	0.090			0.950			0.552			0.207		
Satd. Flow (perm)	168	1850	0	1770	3493	0	1028	3514	0	386	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3			12			3				158
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		591			202			322			162	
Travel Time (s)		13.4			4.6			7.3			3.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	375	348	16	152	1837	168	49	565	27	16	147	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	375	364	0	152	2005	0	49	592	0	16	147	158
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Prot	NA		Perm	NA		Perm	NA	Perm
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6						4			8		8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	1	6		5	2		4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	10.0		5.0	10.0		10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	10.5	23.7		10.5	23.7		23.7	23.7		23.7	23.7	23.7
Total Split (s)	26.0	70.8		24.2	69.0		25.0	25.0		25.0	25.0	25.0
Total Split (%)	21.7%	59.0%		20.2%	57.5%		20.8%	20.8%		20.8%	20.8%	20.8%
Maximum Green (s)	20.5	65.1		18.7	63.3		19.3	19.3		19.3	19.3	19.3
Yellow Time (s)	3.5	3.7		3.5	3.7		3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	5.5	5.7		5.5	5.7		5.7	5.7		5.7	5.7	5.7
Lead/Lag	Lead	Lead		Lag	Lag							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	2.0		2.0	2.0		3.0	3.0	3.0
Recall Mode	None	Max		None	C-Max		None	None		None	None	None
Walk Time (s)		7.0			7.0		7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		11.0			11.0		11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0			0		0	0		0	0	0
Act Effct Green (s)	65.3	65.1		18.7	63.3		19.3	19.3		19.3	19.3	19.3
Actuated g/C Ratio	0.54	0.54		0.16	0.53		0.16	0.16		0.16	0.16	0.16
v/c Ratio	1.03	0.36		0.55	1.08		0.30	1.04		0.26	0.49	0.41
Control Delay	82.7	7.0		55.3	76.4		50.0	98.3		56.0	52.2	10.2
Queue Delay	0.0	0.0		0.0	7.8		0.0	0.0		0.0	0.0	0.2
Total Delay	82.7	7.0		55.3	84.3		50.0	98.3		56.0	52.2	10.4
LOS	F	A		E	F		D	F		E	D	B
Approach Delay		45.4			82.2			94.6			31.8	
Approach LOS		D			F			F			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 24 (20%), Referenced to phase 2:WBT, Start of Yellow			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 73.0		Intersection LOS: E	
Intersection Capacity Utilization 113.1%		ICU Level of Service H	
Analysis Period (min) 15			

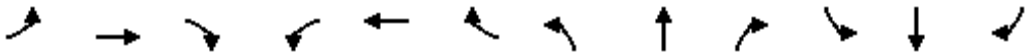
Splits and Phases: 3: JEFFERSON ST & BROREIN ST





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	585	435	635	295	0	0
Future Volume (vph)	585	435	635	295	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	115		0	0
Storage Lanes		1	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt		0.850				
Flt Protected			0.950			
Satd. Flow (prot)	1863	1583	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1863	1583	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	162			583	231	
Travel Time (s)	3.7			13.3	5.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	636	473	690	321	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	636	473	690	321	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
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		

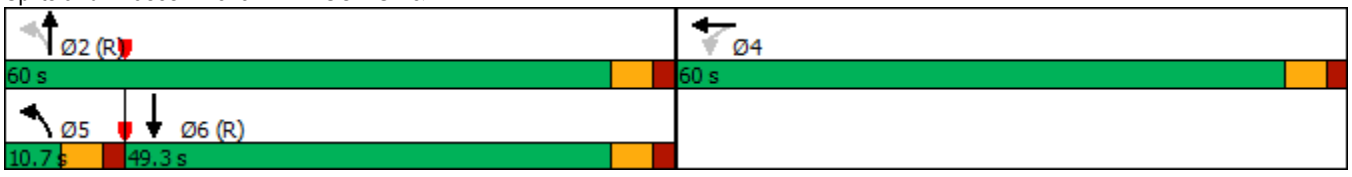


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	395	2340	380	230	920	0	0	160	50
Future Volume (vph)	0	0	0	395	2340	380	230	920	0	0	160	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.86	0.86	0.95	0.95	1.00	1.00	0.95	0.95
Frt					0.979						0.964	
Flt Protected				0.950				0.990				
Satd. Flow (prot)	0	0	0	1770	6273	0	0	3504	0	0	3412	0
Flt Permitted				0.950				0.814				
Satd. Flow (perm)	0	0	0	1770	6273	0	0	2881	0	0	3412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					45						38	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		576			319			716			284	
Travel Time (s)		13.1			7.3			16.3			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	429	2543	413	250	1000	0	0	174	54
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	429	2956	0	0	1250	0	0	228	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2		1	2			2	
Detector Template				Left	Thru		Left	Thru			Thru	
Leading Detector (ft)				20	100		20	100			100	
Trailing Detector (ft)				0	0		0	0			0	
Detector 1 Position(ft)				0	0		0	0			0	
Detector 1 Size(ft)				20	6		20	6			6	
Detector 1 Type				Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Queue (s)				0.0	0.0		0.0	0.0			0.0	
Detector 1 Delay (s)				0.0	0.0		0.0	0.0			0.0	
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA		pm+pt	NA			NA	
Protected Phases					4		5	2			6	
Permitted Phases				4			2					
Detector Phase				4	4		5	2			6	
Switch Phase												
Minimum Initial (s)				10.0	10.0		5.0	10.0			10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)				25.7	25.7		10.7	25.9			25.9	
Total Split (s)				60.0	60.0		10.7	60.0			49.3	
Total Split (%)				50.0%	50.0%		8.9%	50.0%			41.1%	
Maximum Green (s)				54.3	54.3		5.0	54.1			43.4	
Yellow Time (s)				3.7	3.7		3.7	3.7			3.7	
All-Red Time (s)				2.0	2.0		2.0	2.2			2.2	
Lost Time Adjust (s)				0.0	0.0			0.0			0.0	
Total Lost Time (s)				5.7	5.7			5.9			5.9	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				3.0	3.0		3.0	3.0			3.0	
Recall Mode				Max	Max		None	C-Max			C-Max	
Walk Time (s)				7.0	7.0			7.0			7.0	
Flash Dont Walk (s)				13.0	13.0			13.0			13.0	
Pedestrian Calls (#/hr)				0	0			0			0	
Act Effct Green (s)				54.3	54.3			54.1			54.1	
Actuated g/C Ratio				0.45	0.45			0.45			0.45	
v/c Ratio				0.54	1.03			0.96			0.15	
Control Delay				18.0	48.1			50.0			16.3	
Queue Delay				0.0	0.0			0.0			0.0	
Total Delay				18.0	48.1			50.0			16.3	
LOS				B	D			D			B	
Approach Delay					44.3			50.0			16.3	
Approach LOS					D			D			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 48 (40%), Referenced to phase 2:NBTL and 6:SBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay: 44.5		Intersection LOS: D	
Intersection Capacity Utilization 95.3%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 5: JEFFERSON ST & KENNEDY BLVD

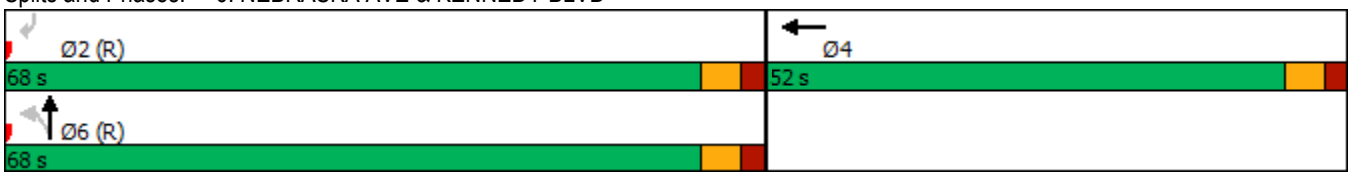


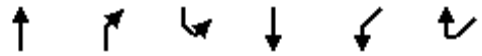
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1255	235	125	655	0	0	0	185
Future Volume (vph)	0	0	0	0	1255	235	125	655	0	0	0	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.88
Frt					0.976							0.850
Flt Protected							0.950					
Satd. Flow (prot)	0	0	0	0	4963	0	1770	1863	0	0	0	2787
Flt Permitted							0.950					
Satd. Flow (perm)	0	0	0	0	4963	0	1770	1863	0	0	0	2787
Right Turn on Red			Yes			Yes	Yes		Yes			Yes
Satd. Flow (RTOR)					37		25					25
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		847			465			292			201	
Travel Time (s)		19.3			10.6			6.6			4.6	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	1364	255	136	712	0	0	0	201
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	1619	0	136	712	0	0	0	201
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type					NA		Perm	NA				Perm
Protected Phases					4			6				
Permitted Phases							6					2
Minimum Split (s)					29.8		24.9	24.9				26.9
Total Split (s)					52.0		68.0	68.0				68.0
Total Split (%)					43.3%		56.7%	56.7%				56.7%
Maximum Green (s)					46.2		62.1	62.1				62.1
Yellow Time (s)					3.7		3.7	3.7				3.7
All-Red Time (s)					2.1		2.2	2.2				2.2
Lost Time Adjust (s)					0.0		0.0	0.0				0.0
Total Lost Time (s)					5.8		5.9	5.9				5.9
Lead/Lag												
Lead-Lag Optimize?												
Walk Time (s)					7.0		7.0	7.0				7.0
Flash Dont Walk (s)					17.0		12.0	12.0				14.0
Pedestrian Calls (#/hr)					0		0	0				0
Act Effct Green (s)					46.2		62.1	62.1				62.1
Actuated g/C Ratio					0.38		0.52	0.52				0.52
v/c Ratio					0.84		0.15	0.74				0.14
Control Delay					37.5		12.7	28.4				6.5
Queue Delay					0.0		0.0	0.7				0.0
Total Delay					37.5		12.7	29.1				6.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS					D		B	C				A
Approach Delay					37.5			26.5			6.5	
Approach LOS					D			C			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 12 (10%), Referenced to phase 2:SBR and 6:NBTL, Start of Green			
Natural Cycle: 65			
Control Type: Pretimed			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 31.7		Intersection LOS: C	
Intersection Capacity Utilization 73.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: NEBRASKA AVE & KENNEDY BLVD





Lane Group	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (vph)	725	165	415	185	0	0
Future Volume (vph)	725	165	415	185	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	130		0	0
Storage Lanes		0	1		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frt	0.975					
Flt Protected			0.950			
Satd. Flow (prot)	1816	0	1770	3539	0	0
Flt Permitted			0.950			
Satd. Flow (perm)	1816	0	1770	3539	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	201			390	272	
Travel Time (s)	4.6			8.9	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	788	179	451	201	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	967	0	451	201	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			12	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

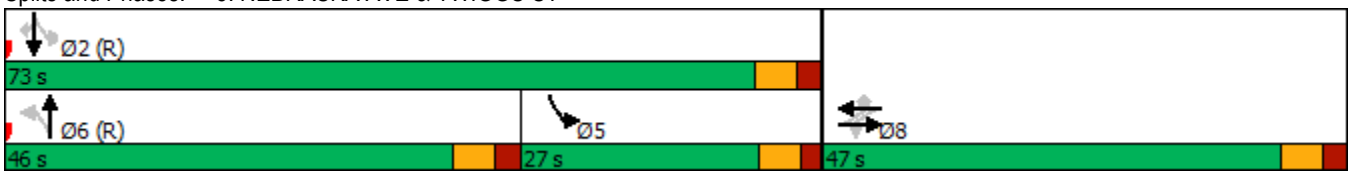
Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	925	235	35	285	90	55	535	135	485	330	35
Future Volume (vph)	55	925	235	35	285	90	55	535	135	485	330	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	130		0	150		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt		0.971				0.850		0.970				0.850
Flt Protected		0.998			0.995		0.950			0.950		
Satd. Flow (prot)	0	3430	0	0	3522	1583	1770	1807	0	1770	3539	1583
Flt Permitted		0.907			0.556		0.534			0.087		
Satd. Flow (perm)	0	3117	0	0	1968	1583	995	1807	0	162	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26				98		11				38
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		777			652			390			257	
Travel Time (s)		17.7			14.8			8.9			5.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	60	1005	255	38	310	98	60	582	147	527	359	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1320	0	0	348	98	60	729	0	527	359	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2		1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100		20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		pm+pt	NA	Perm
Protected Phases		8			8			6		5	2	
Permitted Phases	8			8		8	6			2		2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8		8	8	8	6	6		5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0	10.0	10.0	10.0		5.0	10.0	10.0
Minimum Split (s)	29.1	29.1		29.1	29.1	29.1	28.0	28.0		10.7	28.0	28.0
Total Split (s)	47.0	47.0		47.0	47.0	47.0	46.0	46.0		27.0	73.0	73.0
Total Split (%)	39.2%	39.2%		39.2%	39.2%	39.2%	38.3%	38.3%		22.5%	60.8%	60.8%
Maximum Green (s)	40.9	40.9		40.9	40.9	40.9	40.0	40.0		21.3	67.0	67.0
Yellow Time (s)	3.7	3.7		3.7	3.7	3.7	3.7	3.7		3.7	3.7	3.7
All-Red Time (s)	2.4	2.4		2.4	2.4	2.4	2.3	2.3		2.0	2.3	2.3
Lost Time Adjust (s)		0.0			0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)		6.1			6.1	6.1	6.0	6.0		5.7	6.0	6.0
Lead/Lag							Lead	Lead		Lag		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		2.0	3.0	3.0
Recall Mode	Max	Max		Max	Max	Max	C-Max	C-Max		None	C-Max	C-Max
Walk Time (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0			7.0	7.0
Flash Dont Walk (s)	16.0	16.0		16.0	16.0	16.0	15.0	15.0			15.0	15.0
Pedestrian Calls (#/hr)	0	0		0	0	0	0	0			0	0
Act Effct Green (s)		40.9			40.9	40.9	40.0	40.0		67.3	67.0	67.0
Actuated g/C Ratio		0.34			0.34	0.34	0.33	0.33		0.56	0.56	0.56
v/c Ratio		1.22			0.52	0.16	0.18	1.20		1.40	0.18	0.04
Control Delay		143.7			23.3	5.1	19.6	127.4		230.7	13.3	3.8
Queue Delay		0.0			0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay		143.7			23.3	5.1	19.6	127.4		230.7	13.3	3.8
LOS		F			C	A	B	F		F	B	A
Approach Delay		143.7			19.3			119.2			136.9	
Approach LOS		F			B			F			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 38 (32%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.40			
Intersection Signal Delay: 120.4		Intersection LOS: F	
Intersection Capacity Utilization 126.7%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 8: NEBRASKA AVE & TWIGGS ST



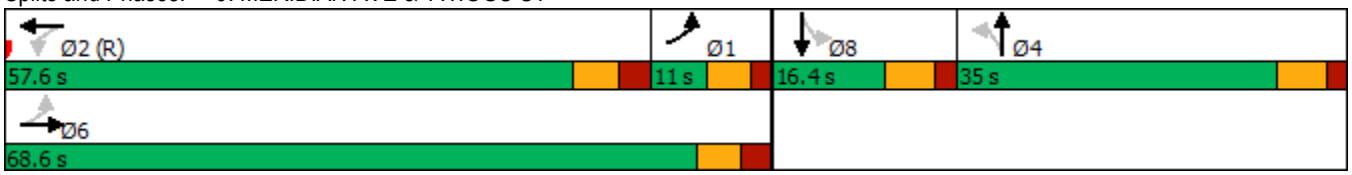
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	570	680	295	195	375	110	35	1530	200	0	0	0
Future Volume (vph)	570	680	295	195	375	110	35	1530	200	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.91	1.00
Frt		0.971			0.976			0.983				
Flt Protected		0.982			0.986			0.999				
Satd. Flow (prot)	0	3375	0	0	3406	0	0	4994	0	0	5085	1863
Flt Permitted		0.554			0.544			0.950				
Satd. Flow (perm)	0	1904	0	0	1879	0	0	4749	0	0	5085	1863
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			23			18				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		652			772			501			413	
Travel Time (s)		14.8			17.5			11.4			9.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	620	739	321	212	408	120	38	1663	217	0	0	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1680	0	0	740	0	0	1918	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	1
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100		20	100		20	100		20	100	20
Trailing Detector (ft)	0	0		0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA		Perm	NA				Free
Protected Phases	1	6			2			4			8	
Permitted Phases	6			2			4			8		Free
Detector Phase	1	6		2	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	5.0	10.0		10.0	10.0		10.0	10.0		10.0	10.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Split (s)	11.0	45.8		16.8	16.8		26.4	26.4		16.4	16.4	
Total Split (s)	11.0	68.6		57.6	57.6		35.0	35.0		16.4	16.4	
Total Split (%)	9.2%	57.2%		48.0%	48.0%		29.2%	29.2%		13.7%	13.7%	
Maximum Green (s)	5.0	61.8		50.8	50.8		28.6	28.6		10.0	10.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.4	4.4		4.4	4.4	
All-Red Time (s)	2.0	2.8		2.8	2.8		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		6.8			6.8			6.4			6.4	
Lead/Lag	Lag			Lead	Lead							
Lead-Lag Optimize?	Yes			Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max		C-Max	C-Max		None	None		None	None	
Walk Time (s)		7.0					7.0	7.0				
Flash Dont Walk (s)		32.0					13.0	13.0				
Pedestrian Calls (#/hr)		0					0	0				
Act Effct Green (s)		61.8			50.8			45.0				
Actuated g/C Ratio		0.52			0.42			0.38				
v/c Ratio		1.83dl			2.83dl			1.07				
Control Delay		289.4			49.1			79.0				
Queue Delay		0.0			0.0			0.0				
Total Delay		289.4			49.1			79.0				
LOS		F			D			E				
Approach Delay		289.4			49.1			79.0				
Approach LOS		F			D			E				

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 104 (87%), Referenced to phase 2:WBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.60			
Intersection Signal Delay: 155.4		Intersection LOS: F	
Intersection Capacity Utilization 115.7%		ICU Level of Service H	
Analysis Period (min) 15			

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

Splits and Phases: 9: MERIDIAN AVE & TWIGGS ST

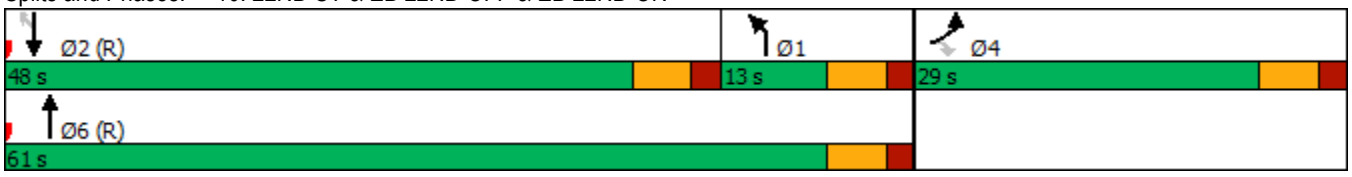


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Lane Configurations									
Traffic Volume (vph)	265	35	75	1205	1680	0	455	0	0
Future Volume (vph)	265	35	75	1205	1680	0	455	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	0.91	1.00	1.00	1.00	1.00
Frt		0.850					0.850		
Flt Protected	0.950		0.950						
Satd. Flow (prot)	1770	1583	1770	5085	5085	0	1583	0	0
Flt Permitted	0.950		0.950						
Satd. Flow (perm)	1770	1583	1770	5085	5085	0	1583	0	0
Right Turn on Red		Yes					Yes		
Satd. Flow (RTOR)		109					495		
Link Speed (mph)	30			30	30			30	
Link Distance (ft)	404			536	498			405	
Travel Time (s)	9.2			12.2	11.3			9.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	288	38	82	1310	1826	0	495	0	0
Shared Lane Traffic (%)									
Lane Group Flow (vph)	288	38	82	1310	1826	0	495	0	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right	Right	Left	Right
Median Width(ft)	12			12	12			0	
Link Offset(ft)	0			0	0			0	
Crosswalk Width(ft)	16			16	16			16	
Two way Left Turn Lane									
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9	9	15	9
Number of Detectors	1	1	1	2	2		1		
Detector Template	Left	Right	Left	Thru	Thru		Right		
Leading Detector (ft)	20	20	20	100	100		20		
Trailing Detector (ft)	0	0	0	0	0		0		
Detector 1 Position(ft)	0	0	0	0	0		0		
Detector 1 Size(ft)	20	20	20	6	6		20		
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex		
Detector 1 Channel									
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Detector 2 Position(ft)				94	94				
Detector 2 Size(ft)				6	6				
Detector 2 Type				Cl+Ex	Cl+Ex				
Detector 2 Channel									
Detector 2 Extend (s)				0.0	0.0				
Turn Type	Prot	Perm	Prot	NA	NA		Perm		
Protected Phases	4		1	6	2				
Permitted Phases		4					2		
Detector Phase	4	4	1	6	2		2		
Switch Phase									
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0		10.0		

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	SBR2	SEL	SER
Minimum Split (s)	22.5	22.5	11.0	22.5	22.5		22.5		
Total Split (s)	29.0	29.0	13.0	61.0	48.0		48.0		
Total Split (%)	32.2%	32.2%	14.4%	67.8%	53.3%		53.3%		
Maximum Green (s)	23.0	23.0	7.0	55.0	42.0		42.0		
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0		
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0		
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0		
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0		6.0		
Lead/Lag			Lag		Lead		Lead		
Lead-Lag Optimize?			Yes		Yes		Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0		
Recall Mode	None	None	None	C-Max	C-Max		C-Max		
Act Effct Green (s)	19.0	19.0	6.8	59.0	48.6		48.6		
Actuated g/C Ratio	0.21	0.21	0.08	0.66	0.54		0.54		
v/c Ratio	0.77	0.09	0.62	0.39	0.66		0.46		
Control Delay	47.3	0.4	60.9	8.1	1.4		1.0		
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.5		
Total Delay	47.3	0.4	60.9	8.1	1.4		1.5		
LOS	D	A	E	A	A		A		
Approach Delay	41.9			11.2	1.4				
Approach LOS	D			B	A				

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 8 (9%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 8.0		Intersection LOS: A	
Intersection Capacity Utilization 66.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 10: 22ND ST & EB 22ND OFF & EB 22ND ON

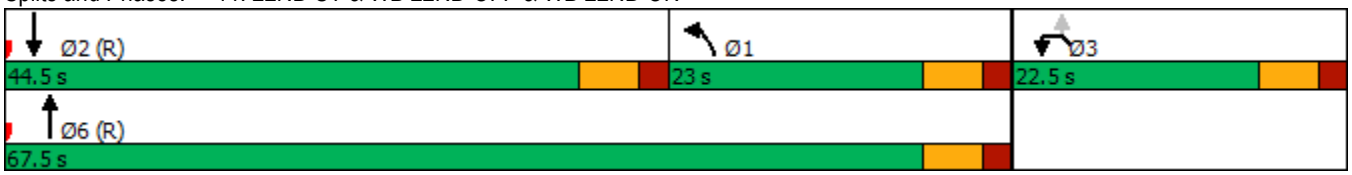


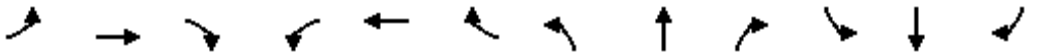
Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Lane Configurations											
Traffic Volume (vph)	0	0	210	1260	0	0	2085	0	50	0	175
Future Volume (vph)	0	0	210	1260	0	0	2085	0	50	0	175
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00	1.00	1.00	1.00
Frt											0.850
Flt Protected			0.950						0.950		
Satd. Flow (prot)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Flt Permitted			0.950						0.950		
Satd. Flow (perm)	0	0	1770	5085	0	0	6408	0	1770	0	1583
Right Turn on Red					Yes			Yes			Yes
Satd. Flow (RTOR)											109
Link Speed (mph)	30			30			30			30	
Link Distance (ft)	264			498			271			329	
Travel Time (s)	6.0			11.3			6.2			7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	228	1370	0	0	2266	0	54	0	190
Shared Lane Traffic (%)											
Lane Group Flow (vph)	0	0	228	1370	0	0	2266	0	54	0	190
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0			12			12			12	
Link Offset(ft)	0			0			0			0	
Crosswalk Width(ft)	16			16			16			16	
Two way Left Turn Lane											
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15		9	15		9	15	15	9
Number of Detectors			1	2			2		1		1
Detector Template			Left	Thru			Thru		Left		Right
Leading Detector (ft)			20	100			100		20		20
Trailing Detector (ft)			0	0			0		0		0
Detector 1 Position(ft)			0	0			0		0		0
Detector 1 Size(ft)			20	6			6		20		20
Detector 1 Type			Cl+Ex	Cl+Ex			Cl+Ex		Cl+Ex		Cl+Ex
Detector 1 Channel											
Detector 1 Extend (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Queue (s)			0.0	0.0			0.0		0.0		0.0
Detector 1 Delay (s)			0.0	0.0			0.0		0.0		0.0
Detector 2 Position(ft)				94			94				
Detector 2 Size(ft)				6			6				
Detector 2 Type				Cl+Ex			Cl+Ex				
Detector 2 Channel											
Detector 2 Extend (s)				0.0			0.0				
Turn Type			Prot	NA			NA		Prot		Perm
Protected Phases			1	6			2		3		
Permitted Phases											3
Detector Phase			1	6			2		3		3
Switch Phase											
Minimum Initial (s)			5.0	10.0			10.0		10.0		10.0

Lane Group	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	NWL2	NWL	NWR
Minimum Split (s)			11.8	22.5			22.5		22.5		22.5
Total Split (s)			23.0	67.5			44.5		22.5		22.5
Total Split (%)			25.6%	75.0%			49.4%		25.0%		25.0%
Maximum Green (s)			17.0	61.5			38.5		16.5		16.5
Yellow Time (s)			4.0	4.0			4.0		4.0		4.0
All-Red Time (s)			2.0	2.0			2.0		2.0		2.0
Lost Time Adjust (s)			0.0	0.0			0.0		0.0		0.0
Total Lost Time (s)			6.0	6.0			6.0		6.0		6.0
Lead/Lag			Lag				Lead				
Lead-Lag Optimize?											
Vehicle Extension (s)			3.0	3.0			3.0		3.0		3.0
Recall Mode			None	C-Max			C-Max		None		None
Act Effct Green (s)			17.0	66.1			43.1		11.9		11.9
Actuated g/C Ratio			0.19	0.73			0.48		0.13		0.13
v/c Ratio			0.68	0.37			0.74		0.23		0.62
Control Delay			41.5	3.1			21.2		36.3		25.7
Queue Delay			0.0	0.0			0.0		0.0		0.0
Total Delay			41.5	3.1			21.2		36.3		25.7
LOS			D	A			C		D		C
Approach Delay				8.6			21.2			28.1	
Approach LOS				A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBT, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 16.7		Intersection LOS: B	
Intersection Capacity Utilization 58.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 11: 22ND ST & WB 22ND OFF & WB 22ND ON



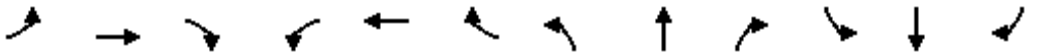


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	0	745	0	0	0	0	1250	50	500	1485	0
Future Volume (vph)	195	0	745	0	0	0	0	1250	50	500	1485	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	200		200	0		0
Storage Lanes	0		2	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	2787	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.109		
Satd. Flow (perm)	0	1770	2787	0	0	0	0	6408	1583	203	5085	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)									105			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		549			603			383			284	
Travel Time (s)		12.5			13.7			8.7			6.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	212	0	810	0	0	0	0	1359	54	543	1614	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	212	810	0	0	0	0	1359	54	543	1614	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Perm					NA	Perm	pm+pt	NA	
Protected Phases		8						6		5	2	
Permitted Phases	8		8						6	2		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	8	8	8					6	6	5	2	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0					10.0	10.0	5.0	10.0	
Minimum Split (s)	16.9	16.9	16.9					16.5	16.5	11.7	23.5	
Total Split (s)	40.0	40.0	40.0					40.0	40.0	30.0	70.0	
Total Split (%)	36.4%	36.4%	36.4%					36.4%	36.4%	27.3%	63.6%	
Maximum Green (s)	33.1	33.1	33.1					33.5	33.5	23.3	63.5	
Yellow Time (s)	4.4	4.4	4.4					4.4	4.4	4.4	4.4	
All-Red Time (s)	2.5	2.5	2.5					2.1	2.1	2.3	2.1	
Lost Time Adjust (s)		0.0	0.0					0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.9	6.9					6.5	6.5	6.7	6.5	
Lead/Lag								Lead	Lead	Lag		
Lead-Lag Optimize?								Yes	Yes	Yes		
Vehicle Extension (s)	5.0	5.0	5.0					3.0	3.0	2.0	3.0	
Recall Mode	None	None	None					C-Max	C-Max	None	C-Max	
Act Effct Green (s)		33.1	33.1					33.5	33.5	63.3	63.5	
Actuated g/C Ratio		0.30	0.30					0.30	0.30	0.58	0.58	
v/c Ratio		0.40	0.97					0.70	0.10	1.21	0.55	
Control Delay		33.3	62.5					36.0	0.6	140.3	4.6	
Queue Delay		0.0	0.0					0.0	0.0	0.5	0.0	
Total Delay		33.3	62.5					36.1	0.6	140.7	4.6	
LOS		C	E					D	A	F	A	
Approach Delay		56.5						34.7			38.9	
Approach LOS		E						C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of Yellow, Master Intersection			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.21			
Intersection Signal Delay: 41.5		Intersection LOS: D	
Intersection Capacity Utilization 73.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 12: 50TH ST & EB 50TH OFF/EB 50TH ON



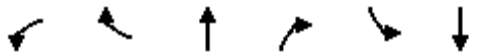
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	40	0	140	200	1245	0	0	1945	110
Future Volume (vph)	0	0	0	40	0	140	200	1245	0	0	1945	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	140		0
Storage Lanes	0		0	0		1	2		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	3433	3539	0	0	6408	1583
Flt Permitted					0.950		0.950					
Satd. Flow (perm)	0	0	0	0	1770	1583	3433	3539	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						109						120
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		457			359			284			339	
Travel Time (s)		10.4			8.2			6.5			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	43	0	152	217	1353	0	0	2114	120
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	43	152	217	1353	0	0	2114	120
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		1	6			2	
Permitted Phases				4		4						2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				4	4	4	1	6			2	2
Switch Phase												
Minimum Initial (s)				10.0	10.0	10.0	5.0	10.0			10.0	10.0
Minimum Split (s)				17.2	17.2	17.2	11.8	16.4			16.4	16.4
Total Split (s)				18.0	18.0	18.0	17.0	92.0			75.0	75.0
Total Split (%)				16.4%	16.4%	16.4%	15.5%	83.6%			68.2%	68.2%
Maximum Green (s)				10.8	10.8	10.8	10.2	85.6			68.6	68.6
Yellow Time (s)				4.4	4.4	4.4	4.4	4.4			4.4	4.4
All-Red Time (s)				2.8	2.8	2.8	2.4	2.0			2.0	2.0
Lost Time Adjust (s)					0.0	0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)					7.2	7.2	6.8	6.4			6.4	6.4
Lead/Lag							Lead				Lag	Lag
Lead-Lag Optimize?							Yes				Yes	Yes
Vehicle Extension (s)				4.0	4.0	4.0	2.0	3.0			3.0	3.0
Recall Mode				None	None	None	None	C-Max			C-Max	C-Max
Act Effct Green (s)					10.3	10.3	9.9	86.1			69.4	69.4
Actuated g/C Ratio					0.09	0.09	0.09	0.78			0.63	0.63
v/c Ratio					0.26	0.62	0.71	0.49			0.52	0.12
Control Delay					50.5	27.6	75.6	6.7			11.8	1.8
Queue Delay					0.0	0.0	0.0	1.3			0.1	0.0
Total Delay					50.5	27.6	75.6	8.0			11.9	1.8
LOS					D	C	E	A			B	A
Approach Delay					32.6			17.3			11.4	
Approach LOS					C			B			B	

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 31 (28%), Referenced to phase 2:SBT and 6:NBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 14.7 Intersection LOS: B
Intersection Capacity Utilization 73.4% ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 13: 50TH ST & WB 50TH ON/WB 50TH OFF

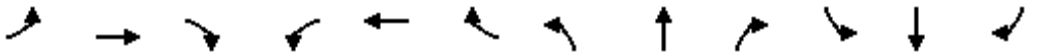


Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	250	0	830	0	0	865
Future Volume (vph)	250	0	830	0	0	865
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	3539	0	0	3539
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	3539	0	0	3539
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)						
Link Speed (mph)	30		30			30
Link Distance (ft)	292		343			439
Travel Time (s)	6.6		7.8			10.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	272	0	902	0	0	940
Shared Lane Traffic (%)						
Lane Group Flow (vph)	272	0	902	0	0	940
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane			Yes			Yes
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2			2
Detector Template	Left		Thru			Thru
Leading Detector (ft)	20		100			100
Trailing Detector (ft)	0		0			0
Detector 1 Position(ft)	0		0			0
Detector 1 Size(ft)	20		6			6
Detector 1 Type	Cl+Ex		Cl+Ex			Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0			0.0
Detector 1 Queue (s)	0.0		0.0			0.0
Detector 1 Delay (s)	0.0		0.0			0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA			NA
Protected Phases	8		2			6
Permitted Phases						
Detector Phase	8		2			6
Switch Phase						
Minimum Initial (s)	5.0		15.0			15.0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Split (s)	24.8		24.8			24.8
Total Split (s)	50.0		70.0			70.0
Total Split (%)	41.7%		58.3%			58.3%
Maximum Green (s)	43.2		63.2			63.2
Yellow Time (s)	4.8		4.8			4.8
All-Red Time (s)	2.0		2.0			2.0
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	6.8		6.8			6.8
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		3.0			3.0
Recall Mode	None		C-Max			C-Max
Walk Time (s)	7.0					
Flash Dont Walk (s)	11.0					
Pedestrian Calls (#/hr)	0					
Act Effct Green (s)	24.1		82.3			82.3
Actuated g/C Ratio	0.20		0.69			0.69
v/c Ratio	0.77		0.37			0.39
Control Delay	59.2		9.1			9.3
Queue Delay	0.0		0.0			0.0
Total Delay	59.2		9.1			9.3
LOS	E		A			A
Approach Delay	59.2		9.1			9.3
Approach LOS	E		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 15.6		Intersection LOS: B	
Intersection Capacity Utilization 49.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 14: 78TH ST & EB 78TH OFF

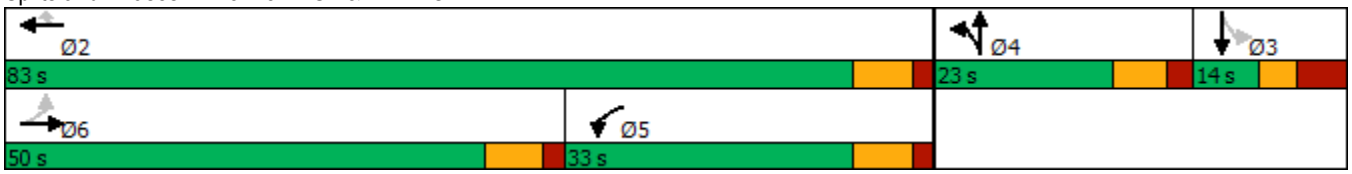


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1300	530	410	885	5	455	5	460	10	5	5
Future Volume (vph)	10	1300	530	410	885	5	455	5	460	10	5	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		520	0		315	0		0	0		0
Storage Lanes	1		1	1		1	1		1	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850		0.968	
Flt Protected	0.950			0.950			0.950	0.953			0.974	
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	1681	1686	1583	0	1756	0
Flt Permitted	0.238			0.950			0.950	0.953				
Satd. Flow (perm)	443	3539	1583	1770	3539	1583	1681	1686	1583	0	1803	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			506			110			500		5	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		887			638			788			238	
Travel Time (s)		20.2			14.5			17.9			5.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1413	576	446	962	5	495	5	500	11	5	5
Shared Lane Traffic (%)							50%					
Lane Group Flow (vph)	11	1413	576	446	962	5	247	253	500	0	21	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		25			25			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA	Free	Prot	NA	Perm	Split	NA	Free	Perm	NA	
Protected Phases		6		5	2		4	4			3	
Permitted Phases	6		Free			2			Free	3		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	6	6		5	2	2	4	4		3	3	
Switch Phase												
Minimum Initial (s)	15.0	15.0		5.0	15.0	15.0	6.0	6.0		6.0	6.0	
Minimum Split (s)	25.2	25.2		12.2	26.2	26.2	13.1	13.1		14.0	14.0	
Total Split (s)	50.0	50.0		33.0	83.0	83.0	23.0	23.0		14.0	14.0	
Total Split (%)	41.7%	41.7%		27.5%	69.2%	69.2%	19.2%	19.2%		11.7%	11.7%	
Maximum Green (s)	42.8	42.8		25.8	75.8	75.8	15.9	15.9		6.0	6.0	
Yellow Time (s)	5.2	5.2		5.2	5.2	5.2	4.8	4.8		3.4	3.4	
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.3	2.3		4.6	4.6	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0			0.0	
Total Lost Time (s)	7.2	7.2		7.2	7.2	7.2	7.1	7.1			8.0	
Lead/Lag	Lead	Lead		Lag			Lead	Lead		Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes		Yes	Yes	
Vehicle Extension (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		3.0	3.0	
Recall Mode	Max	Max		None	Max	Max	None	None		None	None	
Act Effct Green (s)	43.0	43.0	111.6	25.9	76.1	76.1	16.0	16.0	111.6		6.0	
Actuated g/C Ratio	0.39	0.39	1.00	0.23	0.68	0.68	0.14	0.14	1.00		0.05	
v/c Ratio	0.06	1.04	0.36	1.09	0.40	0.00	1.03	1.05	0.32		0.21	
Control Delay	26.0	69.2	0.6	111.4	9.1	0.0	113.9	119.5	0.5		49.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	
Total Delay	26.0	69.2	0.6	111.4	9.1	0.0	113.9	119.5	0.5		49.1	
LOS	C	E	A	F	A	A	F	F	A		D	
Approach Delay		49.3			41.4			58.6			49.1	
Approach LOS		D			D			E			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 111.6			
Natural Cycle: 150			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 1.09			
Intersection Signal Delay: 48.9		Intersection LOS: D	
Intersection Capacity Utilization 96.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 15: 78TH ST & ADAMO DR



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1755	15	225	1300	0	0
Future Volume (vph)	1755	15	225	1300	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		200	0		0	0
Storage Lanes		1	0		0	0
Taper Length (ft)			25		25	
Lane Util. Factor	0.91	1.00	0.91	0.91	1.00	1.00
Frt		0.850				
Flt Protected				0.993		
Satd. Flow (prot)	5085	1583	0	5050	0	0
Flt Permitted				0.993		
Satd. Flow (perm)	5085	1583	0	5050	0	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	638			376	435	
Travel Time (s)	14.5			8.5	9.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1908	16	245	1413	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	1908	16	0	1658	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	25			25	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

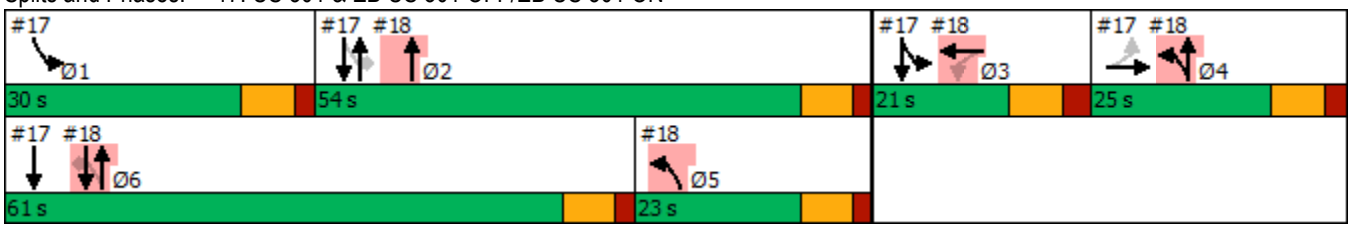
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	0	1230	0	0	0	0	1565	215	465	2065	0
Future Volume (vph)	220	0	1230	0	0	0	0	1565	215	465	2065	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	315		500	0		0
Storage Lanes	0		1	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	1.00	1.00	0.91	1.00
Frt			0.850						0.850			
Flt Protected		0.950								0.950		
Satd. Flow (prot)	0	1770	1583	0	0	0	0	6408	1583	1770	5085	0
Flt Permitted		0.950								0.083		
Satd. Flow (perm)	0	1770	1583	0	0	0	0	6408	1583	155	5085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			282						234			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		739			677			1414			381	
Travel Time (s)		16.8			15.4			32.1			8.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	239	0	1337	0	0	0	0	1701	234	505	2245	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	239	1337	0	0	0	0	1701	234	505	2245	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Right	Right	Left	Left	Right
Median Width(ft)		0			0			30			20	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1					2	1	1	2	
Detector Template	Left	Thru	Right					Thru	Right	Left	Thru	
Leading Detector (ft)	20	100	20					100	20	20	100	
Trailing Detector (ft)	0	0	0					0	0	0	0	
Detector 1 Position(ft)	0	0	0					0	0	0	0	
Detector 1 Size(ft)	20	6	20					6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex					Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94						94			94	
Detector 2 Size(ft)		6						6			6	
Detector 2 Type		Cl+Ex						Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0						0.0			0.0	
Turn Type	Perm	NA	Free					NA	Perm	D.P+P	NA	
Protected Phases		4						2		1 3	6 3 2	
Permitted Phases	4		Free						2	2		

Lane Group	Ø1	Ø3	Ø5	Ø6
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	3	5	6
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	4	4						2	2	1 3	6 3 2	
Switch Phase												
Minimum Initial (s)	5.0	5.0						15.0	15.0			
Minimum Split (s)	12.5	12.5						22.1	22.1			
Total Split (s)	25.0	25.0						54.0	54.0			
Total Split (%)	19.2%	19.2%						41.5%	41.5%			
Maximum Green (s)	17.5	17.5						46.9	46.9			
Yellow Time (s)	5.1	5.1						5.1	5.1			
All-Red Time (s)	2.4	2.4						2.0	2.0			
Lost Time Adjust (s)		0.0						0.0	0.0			
Total Lost Time (s)		7.5						7.1	7.1			
Lead/Lag	Lag	Lag						Lag	Lag			
Lead-Lag Optimize?	Yes	Yes						Yes	Yes			
Vehicle Extension (s)	4.0	4.0						3.0	3.0			
Recall Mode	None	None						Max	Max			
Act Effct Green (s)		17.5	130.0					48.0	48.0	83.7	97.9	
Actuated g/C Ratio		0.13	1.00					0.37	0.37	0.64	0.75	
v/c Ratio		1.00	0.84					0.72	0.32	0.93	0.59	
Control Delay		115.2	5.7					37.5	4.7	51.5	2.5	
Queue Delay		16.1	0.0					0.6	0.0	2.6	1.6	
Total Delay		131.3	5.7					38.1	4.7	54.1	4.1	
LOS		F	A					D	A	D	A	
Approach Delay		24.8						34.0			13.3	
Approach LOS		C						C			B	

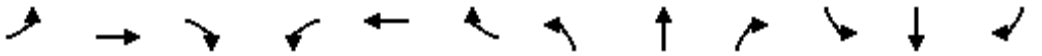
Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Natural Cycle: 150			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 1.08			
Intersection Signal Delay: 22.6		Intersection LOS: C	
Intersection Capacity Utilization 88.0%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 17: US 301 & EB US 301 OFF/EB US 301 ON



Lane Group	Ø1	Ø3	Ø5	Ø6
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	5.0	5.0	15.0
Minimum Split (s)	12.1	12.8	12.1	22.1
Total Split (s)	30.0	21.0	23.0	61.0
Total Split (%)	23%	16%	18%	47%
Maximum Green (s)	22.9	13.2	15.9	53.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.7	2.0	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	4.0	4.0	3.0
Recall Mode	None	None	None	Max
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	155	0	175	515	1270	0	0	2375	155
Future Volume (vph)	0	0	0	155	0	175	515	1270	0	0	2375	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		0	300		0
Storage Lanes	0		0	0		1	1		0	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	1.00	1.00	0.86	1.00
Frt						0.850						0.850
Flt Protected					0.950		0.950					
Satd. Flow (prot)	0	0	0	0	1770	1583	1770	5085	0	0	6408	1583
Flt Permitted					0.950		0.074					
Satd. Flow (perm)	0	0	0	0	1770	1583	138	5085	0	0	6408	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						282						163
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		579			711			381			795	
Travel Time (s)		13.2			16.2			8.7			18.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	168	0	190	560	1380	0	0	2582	168
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	168	190	560	1380	0	0	2582	168
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			20			30	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors				1	2	1	1	2			2	1
Detector Template				Left	Thru	Right	Left	Thru			Thru	Right
Leading Detector (ft)				20	100	20	20	100			100	20
Trailing Detector (ft)				0	0	0	0	0			0	0
Detector 1 Position(ft)				0	0	0	0	0			0	0
Detector 1 Size(ft)				20	6	20	20	6			6	20
Detector 1 Type				Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex			Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Queue (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 1 Delay (s)				0.0	0.0	0.0	0.0	0.0			0.0	0.0
Detector 2 Position(ft)					94			94			94	
Detector 2 Size(ft)					6			6			6	
Detector 2 Type					Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)					0.0			0.0			0.0	
Turn Type				Perm	NA	Free	D.P+P	NA			NA	Perm
Protected Phases					3		5 4	2 4 6			6	
Permitted Phases				3		Free	6					6

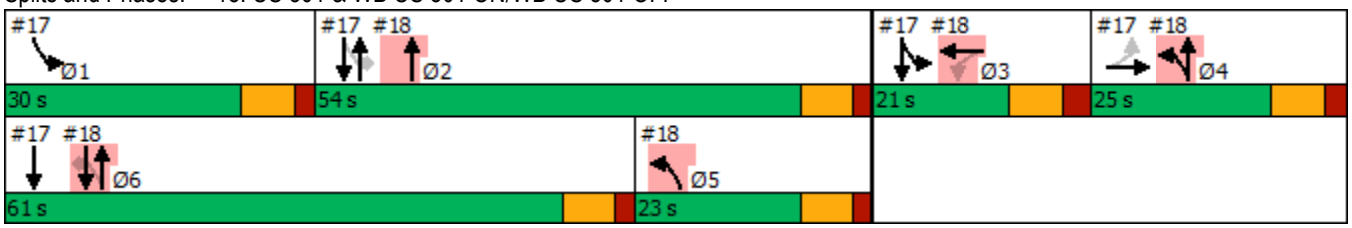
Lane Group	Ø1	Ø2	Ø4	Ø5
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Peak Hour Factor				
Adj. Flow (vph)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Enter Blocked Intersection				
Lane Alignment				
Median Width(ft)				
Link Offset(ft)				
Crosswalk Width(ft)				
Two way Left Turn Lane				
Headway Factor				
Turning Speed (mph)				
Number of Detectors				
Detector Template				
Leading Detector (ft)				
Trailing Detector (ft)				
Detector 1 Position(ft)				
Detector 1 Size(ft)				
Detector 1 Type				
Detector 1 Channel				
Detector 1 Extend (s)				
Detector 1 Queue (s)				
Detector 1 Delay (s)				
Detector 2 Position(ft)				
Detector 2 Size(ft)				
Detector 2 Type				
Detector 2 Channel				
Detector 2 Extend (s)				
Turn Type				
Protected Phases	1	2	4	5
Permitted Phases				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase				3	3		5 4	2 4 6			6	6
Switch Phase												
Minimum Initial (s)				5.0	5.0						15.0	15.0
Minimum Split (s)				12.8	12.8						22.1	22.1
Total Split (s)				21.0	21.0						61.0	61.0
Total Split (%)				16.2%	16.2%						46.9%	46.9%
Maximum Green (s)				13.2	13.2						53.9	53.9
Yellow Time (s)				5.1	5.1						5.1	5.1
All-Red Time (s)				2.7	2.7						2.0	2.0
Lost Time Adjust (s)					0.0						0.0	0.0
Total Lost Time (s)					7.8						7.1	7.1
Lead/Lag				Lead	Lead						Lead	Lead
Lead-Lag Optimize?				Yes	Yes						Yes	Yes
Vehicle Extension (s)				4.0	4.0						3.0	3.0
Recall Mode				None	None						Max	Max
Act Effct Green (s)					13.2	130.0	87.7	101.9			53.9	53.9
Actuated g/C Ratio					0.10	1.00	0.67	0.78			0.41	0.41
v/c Ratio					0.94	0.12	1.08	0.35			0.97	0.22
Control Delay					110.7	0.2	87.1	1.6			49.5	4.5
Queue Delay					0.0	0.0	0.0	0.3			3.9	0.0
Total Delay					110.7	0.2	87.1	1.9			53.4	4.5
LOS					F	A	F	A			D	A
Approach Delay					52.0			26.5			50.4	
Approach LOS					D			C			D	

Intersection Summary

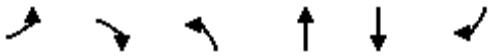
Area Type: Other
Cycle Length: 130
Actuated Cycle Length: 130
Natural Cycle: 150
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 1.08
Intersection Signal Delay: 41.3 Intersection LOS: D
Intersection Capacity Utilization 88.0% ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 18: US 301 & WB US 301 ON/WB US 301 OFF

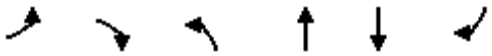


Lane Group	Ø1	Ø2	Ø4	Ø5
Detector Phase				
Switch Phase				
Minimum Initial (s)	5.0	15.0	5.0	5.0
Minimum Split (s)	12.1	22.1	12.5	12.1
Total Split (s)	30.0	54.0	25.0	23.0
Total Split (%)	23%	42%	19%	18%
Maximum Green (s)	22.9	46.9	17.5	15.9
Yellow Time (s)	5.1	5.1	5.1	5.1
All-Red Time (s)	2.0	2.0	2.4	2.0
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes
Vehicle Extension (s)	4.0	3.0	4.0	4.0
Recall Mode	None	Max	None	None
Act Effct Green (s)				
Actuated g/C Ratio				
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				

Intersection Summary



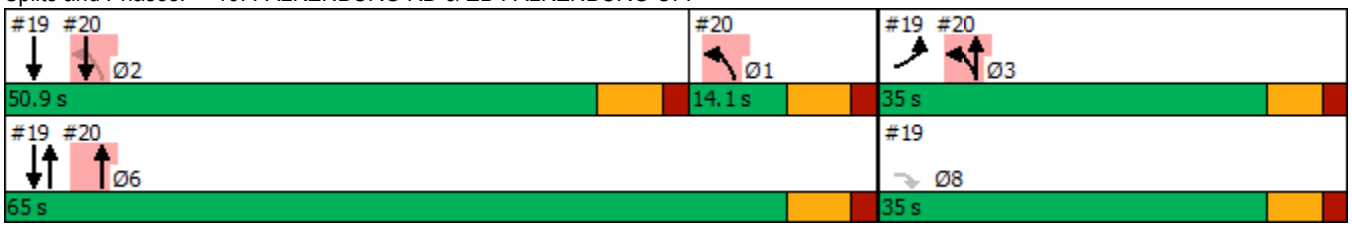
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Lane Configurations								
Traffic Volume (vph)	670	760	0	1260	1350	0		
Future Volume (vph)	670	760	0	1260	1350	0		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900		
Lane Util. Factor	0.97	0.88	1.00	0.91	0.91	1.00		
Frt		0.850						
Flt Protected	0.950							
Satd. Flow (prot)	3433	2787	0	5085	5085	0		
Flt Permitted	0.950							
Satd. Flow (perm)	3433	2787	0	5085	5085	0		
Right Turn on Red		Yes				Yes		
Satd. Flow (RTOR)		64						
Link Speed (mph)	30			30	30			
Link Distance (ft)	519			688	550			
Travel Time (s)	11.8			15.6	12.5			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92		
Adj. Flow (vph)	728	826	0	1370	1467	0		
Shared Lane Traffic (%)								
Lane Group Flow (vph)	728	826	0	1370	1467	0		
Enter Blocked Intersection	No	No	No	No	No	No		
Lane Alignment	Left	Right	Left	Left	Left	Right		
Median Width(ft)	24			30	30			
Link Offset(ft)	0			0	0			
Crosswalk Width(ft)	16			16	16			
Two way Left Turn Lane								
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00		
Turning Speed (mph)	15	9	15			9		
Number of Detectors	1	1		2	2			
Detector Template	Left	Right		Thru	Thru			
Leading Detector (ft)	20	20		100	100			
Trailing Detector (ft)	0	0		0	0			
Detector 1 Position(ft)	0	0		0	0			
Detector 1 Size(ft)	20	20		6	6			
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex			
Detector 1 Channel								
Detector 1 Extend (s)	0.0	0.0		0.0	0.0			
Detector 1 Queue (s)	0.0	0.0		0.0	0.0			
Detector 1 Delay (s)	0.0	0.0		0.0	0.0			
Detector 2 Position(ft)				94	94			
Detector 2 Size(ft)				6	6			
Detector 2 Type				Cl+Ex	Cl+Ex			
Detector 2 Channel								
Detector 2 Extend (s)				0.0	0.0			
Turn Type	Prot	Perm		NA	NA			
Protected Phases	3			6	2 6		1	2
Permitted Phases		8						
Detector Phase	3	8		6	2 6			
Switch Phase								
Minimum Initial (s)	6.0	6.0		15.0			5.0	15.0

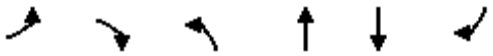


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø2
Minimum Split (s)	22.5	22.5		22.5			11.8	22.5
Total Split (s)	35.0	35.0		65.0			14.1	50.9
Total Split (%)	35.0%	35.0%		65.0%			14%	51%
Maximum Green (s)	28.9	28.9		58.2			7.3	44.1
Yellow Time (s)	4.1	4.1		4.8			4.8	4.8
All-Red Time (s)	2.0	2.0		2.0			2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0				
Total Lost Time (s)	6.1	6.1		6.8				
Lead/Lag							Lag	Lead
Lead-Lag Optimize?							Yes	Yes
Vehicle Extension (s)	3.5	3.5		4.0			6.0	4.0
Recall Mode	None	None		Max			None	Max
Act Effct Green (s)	28.9	28.9		58.2	58.2			
Actuated g/C Ratio	0.29	0.29		0.58	0.58			
v/c Ratio	0.73	0.97		0.46	0.50			
Control Delay	37.3	58.1		12.6	0.2			
Queue Delay	0.0	0.0		0.0	0.0			
Total Delay	37.3	58.1		12.6	0.2			
LOS	D	E		B	A			
Approach Delay	48.4			12.6	0.2			
Approach LOS	D			B	A			

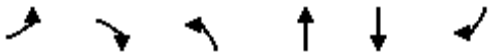
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 21.1		Intersection LOS: C	
Intersection Capacity Utilization 73.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 19: FALKENBURG RD & EB FALKENBURG OFF





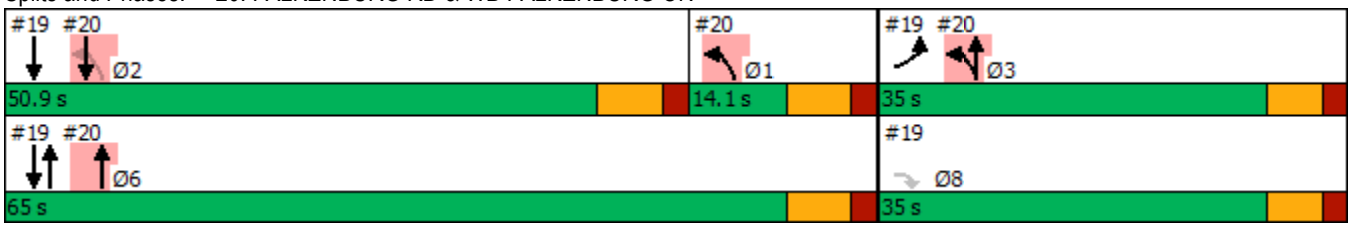
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Lane Configurations										
Traffic Volume (vph)	0	0	450	1480	1350	380				
Future Volume (vph)	0	0	450	1480	1350	380				
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900				
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00				
Frt						0.850				
Flt Protected			0.950							
Satd. Flow (prot)	0	0	1770	3539	3539	1583				
Flt Permitted			0.091							
Satd. Flow (perm)	0	0	170	3539	3539	1583				
Right Turn on Red		Yes				Yes				
Satd. Flow (RTOR)						212				
Link Speed (mph)	30			30	30					
Link Distance (ft)	492			550	852					
Travel Time (s)	11.2			12.5	19.4					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92				
Adj. Flow (vph)	0	0	489	1609	1467	413				
Shared Lane Traffic (%)										
Lane Group Flow (vph)	0	0	489	1609	1467	413				
Enter Blocked Intersection	No	No	No	No	No	No				
Lane Alignment	Left	Right	Left	Left	Left	Right				
Median Width(ft)	0			30	30					
Link Offset(ft)	0			0	0					
Crosswalk Width(ft)	16			16	16					
Two way Left Turn Lane										
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00				
Turning Speed (mph)	15	9	15			9				
Number of Detectors			1	2	2	1				
Detector Template			Left	Thru	Thru	Right				
Leading Detector (ft)			20	100	100	20				
Trailing Detector (ft)			0	0	0	0				
Detector 1 Position(ft)			0	0	0	0				
Detector 1 Size(ft)			20	6	6	20				
Detector 1 Type			Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex				
Detector 1 Channel										
Detector 1 Extend (s)			0.0	0.0	0.0	0.0				
Detector 1 Queue (s)			0.0	0.0	0.0	0.0				
Detector 1 Delay (s)			0.0	0.0	0.0	0.0				
Detector 2 Position(ft)				94	94					
Detector 2 Size(ft)				6	6					
Detector 2 Type				Cl+Ex	Cl+Ex					
Detector 2 Channel										
Detector 2 Extend (s)				0.0	0.0					
Turn Type			D.P+P	NA	NA	Free				
Protected Phases			1 3	6 3	2		1	3	6	8
Permitted Phases			2			Free				
Detector Phase			1 3	6 3	2					
Switch Phase										
Minimum Initial (s)					15.0		5.0	6.0	15.0	6.0



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR	Ø1	Ø3	Ø6	Ø8
Minimum Split (s)					22.5		11.8	22.5	22.5	22.5
Total Split (s)					50.9		14.1	35.0	65.0	35.0
Total Split (%)					50.9%		14%	35%	65%	35%
Maximum Green (s)					44.1		7.3	28.9	58.2	28.9
Yellow Time (s)					4.8		4.8	4.1	4.8	4.1
All-Red Time (s)					2.0		2.0	2.0	2.0	2.0
Lost Time Adjust (s)					0.0					
Total Lost Time (s)					6.8					
Lead/Lag					Lead		Lag			
Lead-Lag Optimize?					Yes		Yes			
Vehicle Extension (s)					4.0		6.0	3.5	4.0	3.5
Recall Mode					Max		None	None	Max	None
Act Effct Green (s)			86.4	100.0	44.1	100.0				
Actuated g/C Ratio			0.86	1.00	0.44	1.00				
v/c Ratio			0.59	0.45	0.94	0.26				
Control Delay			21.1	0.7	39.9	0.4				
Queue Delay			0.3	0.0	0.0	0.0				
Total Delay			21.3	0.7	39.9	0.4				
LOS			C	A	D	A				
Approach Delay				5.5	31.2					
Approach LOS				A	C					

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.97			
Intersection Signal Delay: 17.6		Intersection LOS: B	
Intersection Capacity Utilization 73.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 20: FALKENBURG RD & WB FALKENBURG ON



Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	770	0	0	695	235	695
Future Volume (vph)	770	0	0	695	235	695
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	0.88
Frt						0.850
Flt Protected					0.950	
Satd. Flow (prot)	3539	0	0	3539	1770	2787
Flt Permitted					0.950	
Satd. Flow (perm)	3539	0	0	3539	1770	2787
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)						107
Link Speed (mph)	30			30	30	
Link Distance (ft)	390			343	501	
Travel Time (s)	8.9			7.8	11.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	837	0	0	755	255	755
Shared Lane Traffic (%)						
Lane Group Flow (vph)	837	0	0	755	255	755
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Number of Detectors	2			2	1	1
Detector Template	Thru			Thru	Left	Right
Leading Detector (ft)	100			100	20	20
Trailing Detector (ft)	0			0	0	0
Detector 1 Position(ft)	0			0	0	0
Detector 1 Size(ft)	6			6	20	20
Detector 1 Type	Cl+Ex			Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0			0.0	0.0	0.0
Detector 1 Queue (s)	0.0			0.0	0.0	0.0
Detector 1 Delay (s)	0.0			0.0	0.0	0.0
Detector 2 Position(ft)	94			94		
Detector 2 Size(ft)	6			6		
Detector 2 Type	Cl+Ex			Cl+Ex		
Detector 2 Channel						
Detector 2 Extend (s)	0.0			0.0		
Turn Type	NA			NA	Prot	Prot
Protected Phases	2			6	8	8
Permitted Phases						
Detector Phase	2			6	8	8
Switch Phase						
Minimum Initial (s)	5.0			5.0	5.0	5.0

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Minimum Split (s)	23.7			23.7	23.7	23.7
Total Split (s)	29.0			29.0	31.0	31.0
Total Split (%)	48.3%			48.3%	51.7%	51.7%
Maximum Green (s)	23.3			23.3	25.3	25.3
Yellow Time (s)	3.7			3.7	3.7	3.7
All-Red Time (s)	2.0			2.0	2.0	2.0
Lost Time Adjust (s)	0.0			0.0	0.0	0.0
Total Lost Time (s)	5.7			5.7	5.7	5.7
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Recall Mode	Max			Max	None	None
Walk Time (s)	7.0			7.0	7.0	7.0
Flash Dont Walk (s)	11.0			11.0	11.0	11.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	23.5			23.5	18.5	18.5
Actuated g/C Ratio	0.44			0.44	0.35	0.35
v/c Ratio	0.54			0.49	0.42	0.73
Control Delay	13.6			13.0	15.2	17.3
Queue Delay	0.0			0.0	0.0	0.0
Total Delay	13.6			13.0	15.2	17.3
LOS	B			B	B	B
Approach Delay	13.6			13.0	16.8	
Approach LOS	B			B	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 53.5			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 14.7		Intersection LOS: B	
Intersection Capacity Utilization 55.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 21: EB WHITING OFF & WHITING ST