

Florida Department of Transportation



Interchange Operational Analysis Report (IOAR)

for Interstate 4 (I-4) at SR 559

Polk County, Florida

Florida Department of Transportation (FDOT) District One

Financial Project Number (FPID): 447436-2-52-01

FINAL REPORT

March 30, 2023

Interchange Operational Analysis Report (IOAR)**I-4 at SR 559 Interchange**

FPID: 447436-2-52-01

Florida Department of Transportation
Determination of Safety, Operational and Engineering Acceptability

Acceptance of this document indicates successful completion of the review and determination of safety, operational and engineering acceptability of the Interchange Access Request. Approval of the access request is contingent upon compliance with applicable Federal requirements, specifically the National Environmental Policy Act (NEPA) or Department's Project Development and Environment (PD&E) Procedures. Completion of the NEPA/PD&E process is considered approval of the project location design concept described in the environmental document.

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PROFESSIONAL ENGINEER CERTIFICATE

I hereby certify that I am a registered professional engineer in the State of Florida practicing with Stantec Consulting Services Inc. ("Stantec"), authorized under the provisions of Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes, Certificate of Authorization (CA) No. 27013, by the State of Florida Department of Business & Professional Regulation, Board of Professional Engineers, and that I have prepared or approved the evaluation, findings, opinions, conclusions, or technical advice hereby reported for:

Project: Interstate 4 (I-4) at State Road 559 (SR 559) Interchange, Interchange Operational Analysis Report

Location: Polk County, FL

Financial Project ID Number: 447436-2-52-01

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

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**SYSTEMS IMPLEMENTATION OFFICE
QUALITY CONTROL CERTIFICATION FOR INTERCHANGE ACCESS
REQUEST SUBMITTAL**

Submittal Date: Final Submittal – 04/26/2023

FM Number: 447436-2-52-01

Project Title: Interstate 4 (I-4) at State Road 559 (SR 559) Interchange

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Document Type: MLOU IJR IMR IOAR OTHER_____

Status of Document (Only complete documents will be submitted for review; however, depending on the complexity of the project, interim reviews may be submitted as agreed upon in the MLOU)

Quality Control (QC) Statement

This document has been prepared following FDOT Procedure Topic No. 525-030-160 (New or Modified Interchanges) and complies with the FHWA two policy requirements. Appropriate District level quality control reviews have been conducted and all comments and issues have been resolved to their satisfaction. A record of all comments and responses provided during QC review is available in the project file or Electronic Review Comments (ERC) system.

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EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) District One is completing an Interchange Operational Analysis Report (IOAR) for the improvement of the Interstate 4 (I-4) interchange at State Road 559 (SR 559) in Polk County. This IOAR has been developed in accordance with FDOT Policy No. 000-525-015: Approval of New or Modified Access to Limited Access Highways on the State Highway System (SHS), the Interchange Access Request User's Guide (2022) and the FDOT's 2019 Project Traffic Forecasting Handbook (Procedure No. 525-030-120).

The I-4 and SR 559 interchange is located in Auburndale, in North-Central Polk County, Florida. The interchange is a diamond configuration with single-lane ramps in all four quadrants and two unsignalized ramp terminal intersections. In this region, I-4 is a six-lane, limited access Strategic Intermodal System (SIS) facility that is classified as an urban principal arterial-interstate west of SR 559 and as a rural principal arterial-interstate east of SR 559. SR 559 is an urban minor arterial that has a four-lane section south of I-4; it becomes a two-lane roadway north of the Interstate. The I-4 westbound exit ramp provides separate left and right turn lanes while the I-4 eastbound exit ramp has one shared left/right lane; both exit ramps are stop-controlled.

FDOT District One has identified operational and safety deficiencies associated with the current interchange traffic control. Operational review of the I-4 Westbound at SR 559 ramp terminal intersection has shown conflicts between northbound left and southbound right turning vehicles entering the I-4 westbound on-ramp and between I-4 westbound off-ramp left and SR 559 north/south through vehicles. The westbound off ramp left turn queues have been observed to extend beyond the existing turn lane, blocking right turn vehicles from entering the right turn lane. The westbound left turn experiences excessive delay during the peak hours and instances of queued vehicles extending back to the I-4 mainline. The eastbound off ramp volumes are similar to the westbound, however the majority of turning movements are right turns. Although right turns are made with less interference than left turns, the eastbound exit ramp is a single lane ramp that flares at SR 559 to provide approximately 30 feet of storage each for left and right turns and a queue of two left turn vehicles blocks right turn access. Additionally, sight distance for eastbound exit ramp vehicles looking north is limited due to the existing concrete barrier wall on the SR 559 bridge. Signalization at both locations has been proposed to alleviate the identified traffic operations and safety deficiencies.

The request for approval of this revised access point, and the analyses and evaluations that were conducted to support this request, satisfy FHWA's two policy point requirements as described in the following section of this executive summary. Therefore, the Build Alternative is recommended for implementation at the I-4 and SR 559 interchange.

**FHWA Policy Point 1**

An operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, and ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. The analysis should, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access (Title 23, Code of Federal Regulations (CFR), paragraphs 625.2(a), 655.603(d) and 771.111(f)). The crossroads and the local street network, to at least the first major intersection on either side of the proposed change in access, should be included in this analysis to the extent necessary to fully evaluate the safety and operational impacts that the proposed change in access and other transportation improvements may have on the local street network (23 CFR 625.2(a) and 655.603(d)). Requests for a proposed change in access should include a description and assessment of the impacts and ability of the proposed changes to safely and efficiently collect, distribute, and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network (23 CFR 625.2(a) and 655.603(d)). Each request should also include a conceptual plan of the type and location of the signs proposed to support each design alternative (23 U.S.C. 109(d) and 23 CFR 655.603(d)).

Satisfaction of FHWA Policy Point 1

The operational analysis documented in this IOAR included the I-4 ramp merge/diverge areas, the I-4 at SR 559 ramp terminal intersections, and the SR 559 arterial. The analysis demonstrates that both of the I-4 ramp terminal intersections at SR 559 are anticipated to experience excessive delays and to operate at LOS F during the design year 2036 under the no-build condition. Moreover, the 95th percentile off-ramp left turn queues are expected to extend beyond the available off-ramp storage as in the existing conditions. The proposed improvement to install a traffic signal at the ramp terminal intersections provides significant benefits to the operations of the interchange by improving delays and managing the queues for the exit ramp left turn movements. In addition, the traffic signal installation has potential safety benefits to address the existing sight distance deficiencies identified at the I-4 Eastbound ramp intersection. The operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility, the adjacent interchanges, or on the local street network based on both the current and the planned future traffic projections.

FHWA Policy Point 2

The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" may be considered on a case-by-case basis for applications requiring special access, such as managed lanes (e.g., transit or high occupancy vehicle and high occupancy toll lanes) or park and ride lots. The proposed access will be designed to meet or exceed current standards (23 CFR 625.2(a), 625.4(a)(2), and 655.603(d)). In rare instances where all basic movements are not provided by the proposed design, the report should include a full-interchange option with a comparison of the operational and safety analyses to the partial-interchange option. The report should also include the mitigation proposed to compensate for the missing movements, including wayfinding signage,



impacts on local intersections, mitigation of driver expectation leading to wrong-way movements on ramps, etc. The report should describe whether future provision of a full interchange is precluded by the proposed design.

Satisfaction of FHWA Policy Point 2

The existing I-4 and SR 559 interchange is a diamond interchange that connects to a public road (SR 559) and provides for all traffic movements. The recommended I-4 and SR 559 interchange improvements maintain the diamond interchange configuration and continue to provide for all traffic movements to and from SR 559. The proposed access connects to a public road only and will provide for all traffic movements. Therefore, the Build Alternative is recommended for implementation at the I-4 and SR 559 interchange.

Recommendation

It is recommended that the Build Alternative be constructed to improve the safety and operational conditions at the I-4 and SR 559 interchange. It is also recommended that the intersections of SR 559 at the I-4 Eastbound and Westbound ramps and SR 559 and CR 559A (C. Fred Jones Boulevard) be continuously monitored for improvements to ensure that there are no detrimental impacts to the interstate facility. Lastly, it is recommended that the District continues to evaluate ultimate improvements for the I-4 freeway segment in this area as part of the I-4 Master Plan study in order to adequately prioritize improvements necessary to achieve acceptable operations at the interchange.



1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) proposes signalization of the ramp terminal intersections at the Interstate 4 (I-4) and State Road 559 (SR 559) interchange in Polk County. This Interchange Operational Analysis Report (IOAR) is being conducted to provide documentation of the safety, operational and engineering analysis of the proposed improvements. This IOAR has been prepared in accordance with FDOT Procedure Nos. 525-030-160-I (New or Modified Interchanges) and 525-030-120-k (Project Traffic Forecasting).

1.1 Project Location and Description

The I-4 and SR 559 interchange is located in Auburndale, in North-Central Polk County, Florida. The interchange is a diamond configuration with single-lane ramps in all four quadrants and two unsignalized ramp terminal intersections. In this region, I-4 is a six-lane, limited access Strategic Intermodal System (SIS) facility that is classified as an urban principal arterial-interstate west of SR 559 and as a rural principal arterial-interstate east of SR 559. SR 559 is an urban minor arterial that has a four-lane section south of I-4; it becomes a two-lane roadway north of the Interstate. The I-4 westbound exit ramp provides separate left and right turn lanes while the I-4 eastbound exit ramp has one shared left/right lane; both exit ramps are stop-controlled. The project location and surrounding area is depicted in **Figure 1**.

1.2 Background

The I-4 and SR 559 interchange was originally evaluated as part of the *Interstate 4 (State Road 400) from West of Memorial Boulevard (SR 546) to the Polk/Osceola County Line Project Development and Environment (PD&E) Study* (Jun. 1998, Rev. Aug. 1998 - Financial Project Number (FPN) 201210). This PD&E Study evaluated the impacts of widening 29.5 miles of I-4 from four to ten lanes (six general purpose lanes + four special use lanes) with sufficient right-of-way for a future rail corridor within the median. The I-4 PD&E recommendations for this interchange were based on 2020 design year traffic and included widening the I-4 eastbound off ramp to two lanes and signalizing both ramp terminals.

Subsequent to the 1998 PD&E Study, I-4 was widened from four to six lanes in 2005 without modifying the SR 559 structure. The *Interchange Operational Analysis Report for I-4 at S.R. 559 (October 2011, Financial Management (FM) No. 201214-3)* was completed to document impacts due to the impending SR 559 bridge reconstruction necessary to accommodate the ultimate I-4 concept. The 2011 IOAR recommendations included signalization of both ramp terminal intersections (when warranted) and dual left turn lanes from the I-4 westbound exit ramp by design year 2035 to meet Level of Service (LOS) standards. In late 2016/early 2017 the interchange was reconstructed to accommodate the future expansion required for the I-4 ultimate concept and the widening of SR 559. The design-build project (FPN 201214-3-52-01) improvements included constructing a new bridge on SR 559 over I-4, expanding SR 559 from two lanes to four lanes north of the newly realigned County Road 559A to the westbound I-4 entrance ramp, shifting the I-4 eastbound lanes to the south to increase the I-4 median width, installing lighting on SR 559, resurfacing the existing roadway and improving roadway drainage.



Figure 1: Project Location Map



The interchange is currently included in the FDOT District One Southwest Connect™ Interstate Program's I-4 Corridor Master Plan. The I-4 and SR 559 interchange operations were evaluated in the Phase 1 Feasibility Study entitled *I-4 Project Development & Environment (PD&E) Study, I-4 from west of SR 570 (Polk Parkway) to west of US 27 (January 2022, FPN 442512-1 & 442512-2)*. Both of the I-4 ramp terminal intersections with SR 559 are operating at LOS E or F under existing unsignalized conditions. Signal warrant studies were completed showing that both ramp terminal intersections meet the warrant criteria for two of the nine Manual on Uniform Traffic Control Devices (MUTCD) signal warrants (August 2022, FPID 420112-2-32-01).

1.3 Purpose and Need

FDOT District One has identified operational and safety deficiencies associated with the current interchange traffic control. Operational review of the I-4 Westbound at SR 559 ramp terminal intersection has shown conflicts between northbound left and southbound right turning vehicles entering the I-4 westbound on-ramp and between I-4 westbound off-ramp left and SR 559 north/south through vehicles. The westbound off ramp left turn queues have been observed to extend beyond the existing turn lane, blocking right turn vehicles from entering the right turn lane. The westbound left turn delay is excessive with an average delay >140 seconds during the peak hours and instances of queued vehicles extending back toward the I-4 mainline have been observed. The eastbound off ramp volumes are similar to the westbound, however the majority of turning movements are right turns. Although right turns are made with less interference than left turns, the eastbound exit ramp is a single lane ramp that flares at SR 559 to provide approximately 30 feet of storage each for left and right turns and a queue of two left turn vehicles blocks right turn access. Additionally, sight distance for eastbound exit ramp vehicles looking north is limited due to the existing concrete barrier wall on the SR 559 bridge. Signalization at both locations has been proposed to alleviate the identified traffic operations and safety deficiencies. The purpose of this IOAR is to evaluate the impact on future traffic operations under signalization at both ramp terminal intersections.



2.0 METHODOLOGY

A methodology statement was prepared in coordination with the FDOT Interstate Program Office. This IOAR was prepared based on guidance provided in the *FDOT Interchange Access Request User's Guide (IARUG, September 2022)* and conforms to the methodology provided in Appendix A.

2.1 Area of Influence

The project traffic analysis Area of Influence (AOI) is comprised of the I-4 at SR 559 interchange, including I-4 one mile east and west of SR 559, SR 559 north and south of the interchange and all four interchange ramps. The study AOI is depicted in **Figure 2** and includes the following intersections: SR 559 and I-4 Westbound Ramp, SR 559 and I-4 Eastbound Ramp and SR 559 and CR 559A (C. Fred Jones Boulevard).

2.2 Analysis Years

The traffic operations analysis years for this study are as follows:

- Existing year 2022
- Opening year 2026
- Design year 2036

2.3 Level of Service (LOS) Criteria

Level of Service (LOS) is a performance measure used to evaluate highway operations. FDOT requirements for LOS targets are defined in procedure No. 000-525-006-c. The LOS criteria for this study was based on FDOT LOS policy for State Highway System (SHS) projects and the Polk Transportation Planning Organization (TPO) LOS criteria as follows.

- I-4 Mainline and Ramps LOS D
- SR 559 Intersections LOS D

2.4 Data Collection

Data collected for this study included traffic counts conducted in July 2022 along SR 559 and the I-4 ramps, and traffic data from FDOT Florida Traffic Online (FTO, 2021). The counts consisted of forty-eight (48) hour volume and/or classification counts along SR 559 and the interchange ramps and four-hour turning movement volume counts at the SR 559 study area intersections. Turning movement counts collected at the U-Turn south of CR 559A (C. Fred Jones Boulevard) are provided for informational purposes and are not evaluated as part of the operational analysis. The data collection locations are depicted in **Figure 3** and the volume data is provided in Appendix B.

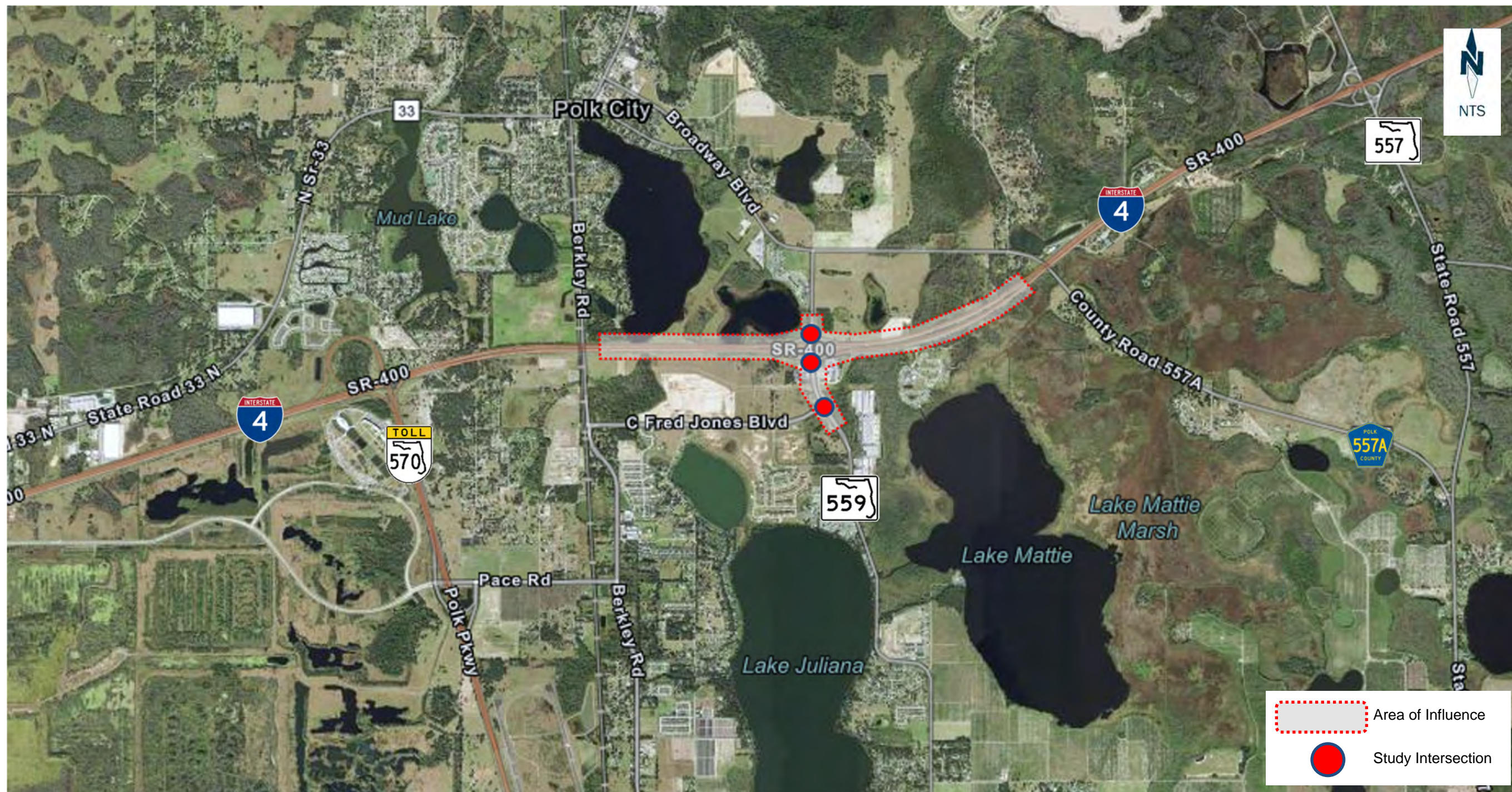


Figure 2: Area of Influence Map



Figure 3: Traffic Count Locations Map



3.0 EXISTING CONDITIONS

The existing conditions analysis provides the existing roadway, interchange and intersection configurations, vehicular traffic volumes and baseline operational characteristics of the project study area. In addition, a historical crash data analysis was performed for the analysis of existing safety conditions.

3.1 Existing Roadway Characteristics

The I-4 at SR 559 interchange is a diamond configuration with single-lane ramps in all four quadrants. Both of the exit ramps are stop-controlled at SR 559. I-4 is a SIS corridor and functionally classified as an urban principal arterial-interstate. I-4 is a six-lane limited access facility that has three 12-foot travel lanes with paved inside and outside shoulders in each direction separated by a varying width vegetative median. In the study area, I-4 has an east-west alignment and a posted speed limit of 70 miles per hour (mph). SR 559 is functionally classified as an urban minor arterial. South of I-4, SR 559 is a four-lane roadway with two 12-foot travel lanes, 4-foot paved outside shoulders (designated as bicycle lanes through the interchange) and sidewalks in each direction separated by a 22-foot curb and vegetation median. The posted speed limit on SR 559 is 45 mph within the study limits of the IOAR (South of CR 559A to North of I-4 WB Ramp). Outside of these limits, the posted speed increases to 55 mph and SR 559 transitions to a two-lane roadway. **Figure 4** depicts the existing lane configurations.

3.2 Existing Traffic Volumes

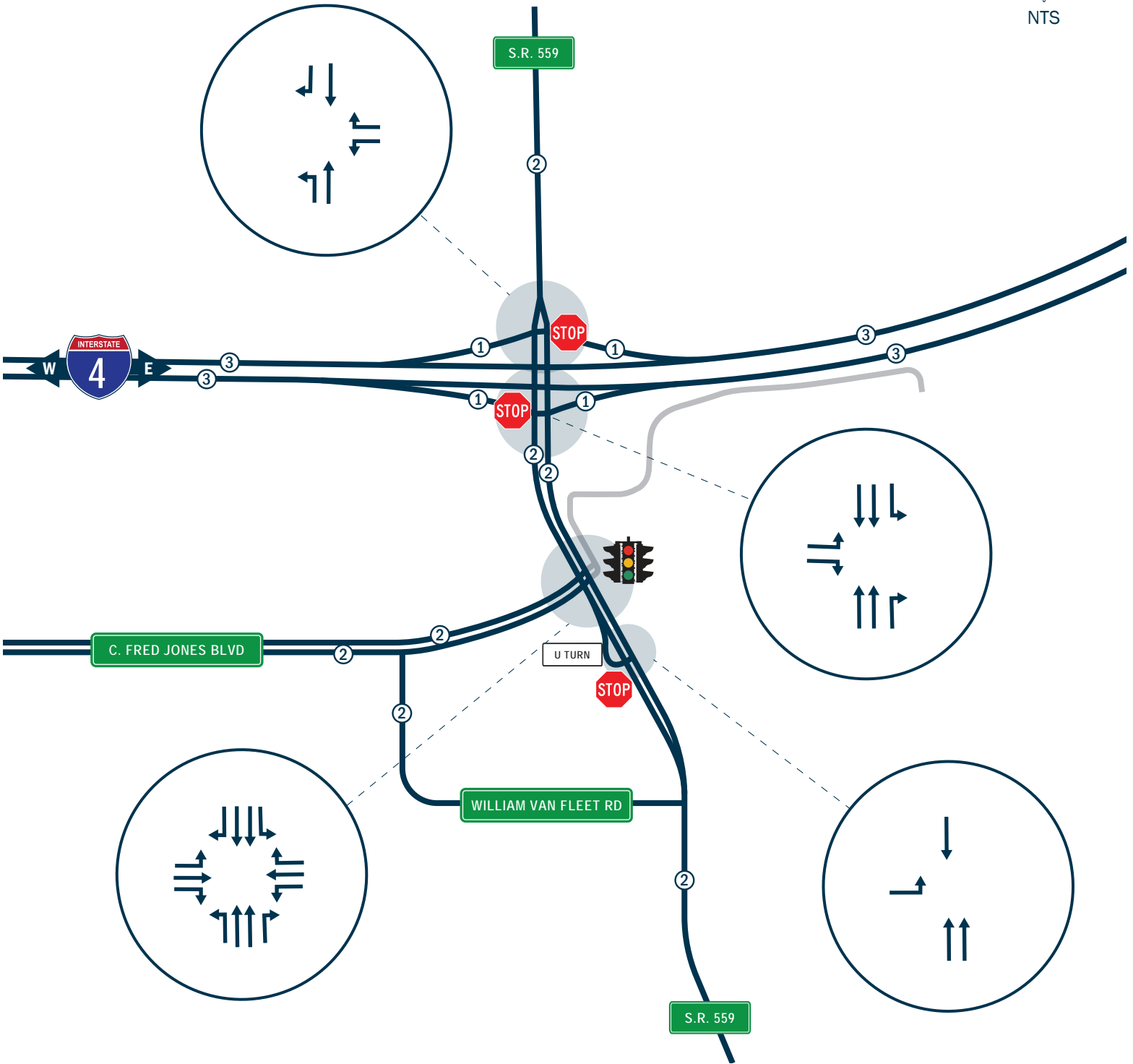
The existing traffic volumes were utilized to conduct existing traffic operational analysis and to develop design traffic for future years. Existing volumes were available from traffic counts conducted in July 2022 for SR 559 and the I-4 entry/exit ramps. Historical data published by FDOT Florida Traffic Online (FTO, 2021) was used for I-4 mainline volumes. The I-4 mainline Annual Average Daily Traffic (AADT) for FTO telemetered traffic monitoring site (TTMS) 169951 west of SR 559 had a 2021 two-way AADT estimate 13% lower than 2020 while four other count stations along I-4 in this area had 2021 AADT either higher or only 5% lower than 2020. A review of the Hourly Continuous Counts for TTMS 169951 showed that data for 2021 included only 4 ½ months (January through mid-May 2021) rather than the full 12-month period. In discussions with the FDOT Transportation Data & Analytics Office, it was determined that the 2021 AADT of 74,000 should be increased. The FTO count site 160112 east of SR 559 had AADT values on average within 5% of count site 169951 over the five years preceding 2020. Therefore the 2021 AADT for site 169951 was adjusted by the same proportion as site 160012, resulting in 2021 AADT of 81,100 (approximately 5% lower than the 2020 AADT of 85,157). The 48-hour volume and classification counts were converted to Annual Average Daily Traffic (AADT) volumes using FDOT 2021 seasonal and axle factors for Polk County (Appendix B). The resulting existing daily traffic volumes are summarized in **Table 1** and depicted in **Figure 5**.

Existing peak hour directional volumes along the I-4 mainline were developed using hourly volume counts from FTO count site 169951. The peak season for Polk County is from March to May, so the average of weekday volumes for the morning and afternoon peak hours for March and April were used.



I-4 at SR 559 Interchange

FPID: 447436-2-52-01 Polk County



LEGEND	
#	NUMBER OF LANES



FIGURE 4: EXISTING LANE GEOMETRY 8



Table 1: Existing Traffic Count Data Summary

Roadway/ Segment	Count Type/Source	Count Date	Average Daily Traffic	Seasonal Factor Adjustment	Weekly Axle Factor Adjustment	2022 Adjusted AADT
I-4 Mainline						
I-4, West of SR 559	FTO Count Station 16-9951	2021	81,100 ^{1,2}	-	-	85,000 ³
I-4, East of SR 559	FTO Count Station 16-0112	2021	80,000 ¹	-	-	84,000 ³
SR 559						
SR 559, North of I-4 WB Ramp	48-Hour Classification	7/19/22-7/21/22	6,548	1.04	-	6,810
SR 559, Between I-4 Ramps	48-Hour Volume	7/19/22-7/21/22	17,878	1.04	0.95	17,663
SR 559, South of I-4 EB Ramp	48-Hour Classification	7/19/22-7/21/22	20,225	1.04	-	21,034
SR 559, South of CR 559A (C. Fred Jones Blvd.)	48-Hour Classification	7/19/22-7/21/22	10,939	1.04	-	11,377
I-4 Ramps at SR 559						
I-4 EB Off-Ramp	48-Hour Volume	7/19/22-7/21/22	6,541	1.04	0.90	6,122
I-4 EB On-Ramp	48-Hour Volume	7/19/22-7/21/22	6,743	1.04	0.90	6,311
I-4 WB Off-Ramp	48-Hour Volume	7/19/22-7/21/22	5,173	1.04	0.90	4,842
I-4 WB On-Ramp	48-Hour Volume	7/19/22-7/21/22	5,401	1.04	0.90	5,055
C. Fred Jones Blvd.						
CR 559A (C. Fred Jones Blvd.), West of SR 559	48-Hour Volume	7/19/22-7/21/22	10,393	1.04	0.95	10,268
Bay Lake Resort Rd., East of SR 559	48-Hour Volume	7/19/22-7/21/22	9,935	1.04	0.95	9,816
Notes: 1. Volume reflects AADT. 2. Per FDOT Transportation Data & Analytics Office, 2021 AADT for FTO site 16-9951 was underestimated; therefore, it was re-computed applying the same proportionality from 2020 to 2021 for adjacent site 16-0112 (I-4 East of SR 559). 3. I-4 Mainline 2022 AADT was estimated by applying trends annual historic growth rate to 2021 AADT (Appendix D includes trends analysis).						



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LEGEND	
#	NUMBER OF LANES
#	EXISTING AADT



FIGURE 5: EXISTING (2022) ANNUAL AVERAGE DAILY TRAFFIC (AADT) **10**



The I-4 peak volumes on the west side of SR 559 were used as the anchor point and were adjusted by the ramp entry and exit volumes to obtain a balanced flow along the mainline. The peak hour volumes along SR 559 were developed using the seasonally adjusted intersection turning movement counts to obtain balanced traffic flow between the study intersections. The resulting existing peak hour roadway and intersection turning movement volumes are depicted in **Figure 6**.

3.3 Existing Traffic Operational Analysis

The existing AM and PM peak hour balanced traffic volumes were utilized to conduct existing traffic operational analysis. Level of service (LOS) for the SR 559 intersections was computed using Highway Capacity Manual, 6th Edition methodologies in the signalized and unsignalized intersection modules of SYNCHRO, Version 11.1 software. The I-4 mainline and ramp segments were evaluated using the freeways module of the Highway Capacity Software (HCS) Version 2022.

3.3.1 Interstate 4 (SR 400) Freeway Analysis

Based on the existing operational analysis, all freeway segments within the study area limits operate at LOS C or better during both peak hours. **Table 2** provides a summary of the existing freeway segments operational analysis; Appendix C contains the HCS outputs.

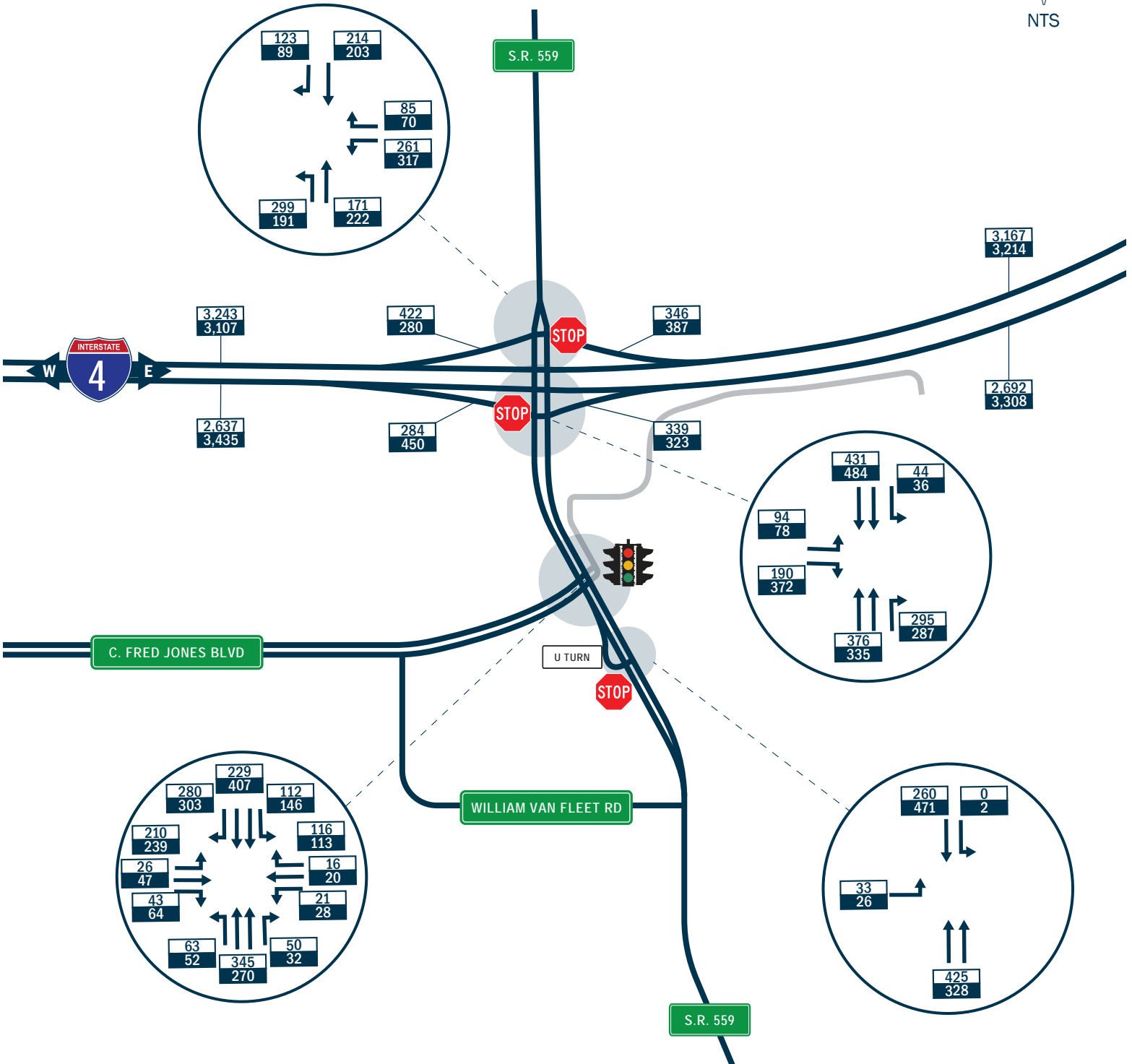
Table 2: Existing Peak Hour Freeway Level of Service Analysis

Freeway Segment	Segment Type	AM Peak Hour		PM Peak Hour	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
I-4 Eastbound					
West of SR 559	Basic	15.2	B	19.9	C
EB Off ramp to SR 559	Diverge	22.6	C	27.5	C
Between off ramp & on ramp	Basic	13.6	B	17.3	B
EB On ramp from SR 559	Merge	19.5	B	22.6	C
East of SR 559	Basic	15.6	B	19.1	C
I-4 Westbound					
East of SR 559	Basic	18.3	C	18.6	C
WB Off ramp to SR 559	Diverge	25.8	C	26.2	C
Between off ramp & on ramp	Basic	16.3	B	16.3	B
WB On ramp from SR 559	Merge	23.7	C	22.6	C
West of SR 559	Basic	18.7	C	18.0	B



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LEGEND

AM	EXISTING PEAK HOUR TRAFFIC VOLUMES
PM	



FIGURE 6: EXISTING PEAK HOUR TRAFFIC VOLUMES **12**



3.3.2 SR 559 Intersections Analysis

LOS for a signalized intersection is determined by the weighted average control delay for the entire intersection with LOS A (≤ 10 sec/veh) representing free flow conditions and LOS F (> 80 sec/veh) representing congestion and failing operations. Similarly, unsignalized intersection LOS for all-way stops is based on the weighted average control delay of the overall intersection or of each approach. For two-way stop-control, the HCM methodology reports average control delay of the major street left turns and each minor street movement. A delay in excess of 50 sec/veh signifies LOS F for unsignalized intersections.

The results of the operational analysis of the SR 559 and I-4 Westbound ramp terminal show that the westbound left turn movement from the exit ramp operates at LOS F. Additionally, the left turn queues exceed the available storage length and block right turn movements causing back-ups along the length of the ramp for short durations during the peak periods.

The critical turning movements at the SR 559 and I-4 Eastbound ramp terminal intersection operate at LOS C or better during both peak hours. The eastbound ramp is a single lane ramp that flares at SR 559 to provide approximately 30 feet of storage each for left and right turns. The vast majority of turns from the eastbound ramp consist of right turn movements and although the right turn is made with less impedance than lefts, a queue in excess of one or two vehicles blocks access for right turns.

The SR 559 and CR 559A (C. Fred Jones Boulevard) currently operates at LOS B during both peak hours. The existing queue storage lengths are sufficient for the queue demands during both peak hours. **Table 3** provides a summary of the existing peak hour intersection operational analysis; Appendix C contains the Synchro outputs.



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Table 3: Existing Peak Hour Intersection Level of Service

Intersection	Control	AM Peak Hour			PM Peak Hour			Existing Storage Length
		Delay (sec/veh)	LOS	95 TH % Queue (ft) ¹	Delay (sec/veh)	LOS	95 TH % Queue (ft) ¹	
SR 559 and I-4 Westbound (Unsignalized) ²	WB Left	>300	F	518	175.6	F	403	360
	WB Right	9.8	A	<25	10.1	B	<25	385
	NB Left	9.0	A	28	8.3	A	<25	590
SR 559 and I-4 Eastbound (Unsignalized) ^{2,3}	EB Left	22.7	C	38	22.3	C	30	30
	EB Right	12.3	B	30	17.7	C	103	30
	SB Left	8.5	A	<25	8.1	A	<25	450
SR 559 and CR 559A (C. Fred Jones Blvd.) (Signalized) ⁴	EB Left	20.1	C	115	21.1	C	153	590
	EB Right	15.5	B	<25	15.7	B	33	300
	WB Left	15.8	B	<25	16.4	B	<25	410
	WB Right	17.4	B	55	17.0	B	60	335
	NB Left	14.1	B	25	15.5	B	25	250
	NB Right	18.3	B	25	20.8	C	<25	250
	SB Left	15.9	B	50	17.5	B	78	430
	SB Right	0	A	0	0	A	0	280
	Overall	18.2	B	-	19.5	B	-	-

Notes: ¹95th percentile queue lengths computed using 25 ft/vehicle
²Unsignalized intersection - delay/LOS reported for major street left and minor street (exit ramp) left and right turn movements
³SR 559 inside Northbound through lane becomes a lane drop just north of the Eastbound Ramp terminal
⁴CR 559A outside Eastbound through lane becomes a lane drop at SR 559



3.4 Historical Crash Analysis

Historical crash data for the roadway segments and intersections within the AOI was analyzed for the five-year period from January 1, 2015 through December 31, 2019. The data was obtained from the FDOT Crash Analysis Reporting (CAR) system database for on-system roadways (I-4 mainline and ramps and SR 559 roadway) and supplemented by FDOT State Safety Office GIS (SSOGis) and the University of Florida GeoPlan Center's Signal Four Analytics tool for the SR 559 study intersections. Additionally, crash data for fatal and serious injury crashes for 2020-2021 was included in the analysis. The analysis years were selected in consultation with FDOT based on location-verified data processed by FDOT prior to the ongoing merge/transition to Signal Four Analytics. The following sections provide detailed analysis of the crash data provided in Appendix B.

3.4.1 Interstate 4 (SR 400) Mainline – MP 17.227 to MP 19.623 (Polk)

There were 223 reported crashes along the interstate within the study area during the five-year period; 50 occurred in 2015, 63 in 2016, 35 in 2017, 34 in 2018 and 41 in 2019. Based on crash severity, of the 223 reported crashes, 143 (64.1%) were property-damage-only crashes, 78 (35 %) were injury-type crashes and two (0.9%) were fatal crashes (**Figure 7**). Rear end (58, 26%), sideswipe (47, 21%) and “other” (102, 46%) crash types had the highest frequencies (**Figure 8**). The harmful events associated with crashes coded as “other” are depicted in **Figure 9**. Approximately 36% of “other” type crashes involved either cable barrier, fence or guardrail. The majority of crashes on I-4 occurred under daylight lighting (135, 61%) and dry roadway surface (154, 69%) conditions (**Figure 10**).

The crash data was reviewed to determine the occurrence of crash types by location along the interstate's area of influence. **Table 4** provides a summary of crash types by location milepost and **Figure 11** illustrates the total crash frequency by location milepost along the I-4 study corridor. The I-4 study corridor was further evaluated to determine if there are existing high crash locations within the area of influence. The actual/ observed crash rates per million vehicle-miles (MVM) of travel for the I-4 segments were calculated using the following equation:

$$\text{Crash Rate} = (1,000,000 \times \text{Total Number of Crashes}) / (365 \times \text{Number of Years} \times \text{AADT} \times \text{Segment Length})$$

The crash data used to compute the actual crash rates along I-4 near SR 559 is summarized in **Table 5**. The statewide average crash rate for a similar rural interstate facility is 0.454 and for urban interstate is 1.002. The I-4 segment between MP 18.227-MP 18.451 (classified as urban interstate) had an actual crash rate of 1.075, slightly above the statewide average of 1.002. The I-4 segments of MP 18.451-18.623 and MP 19.123-MP 19.623 (classified as rural interstate) had actual crash rates of 0.736 and 0.560, respectively, exceeding the statewide average rate of 0.454.

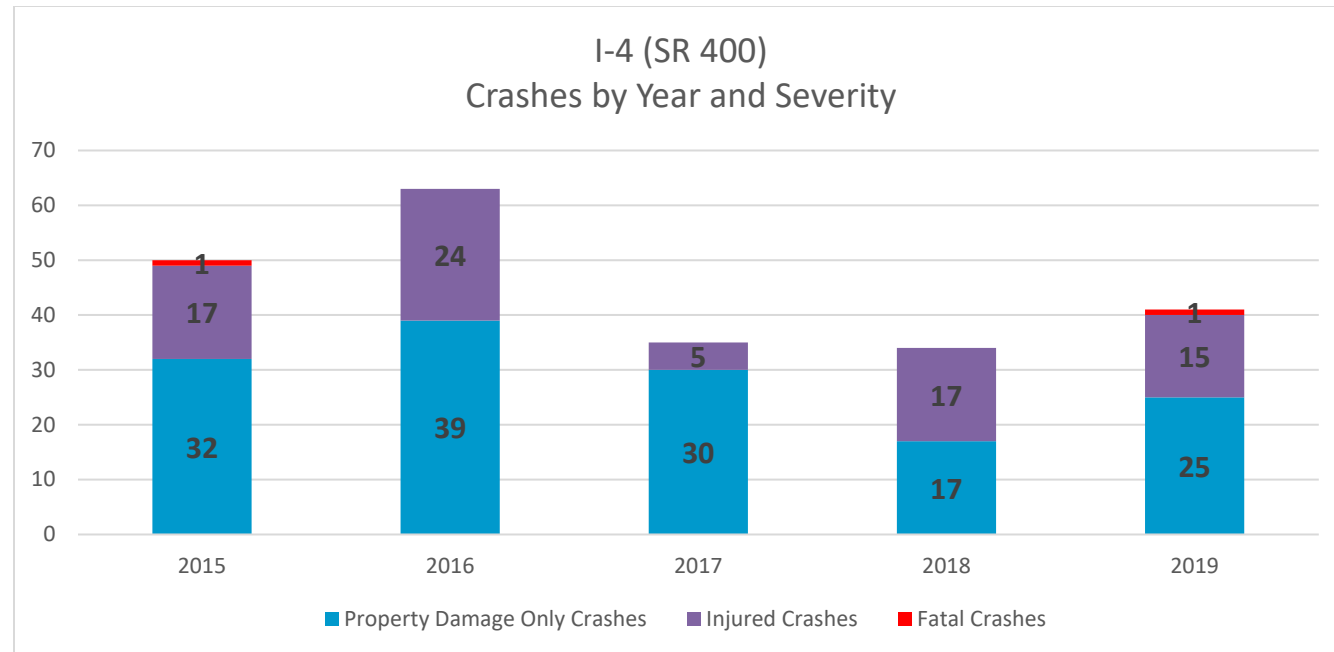


Figure 7: I-4 (SR 400) Crashes by Year and Severity

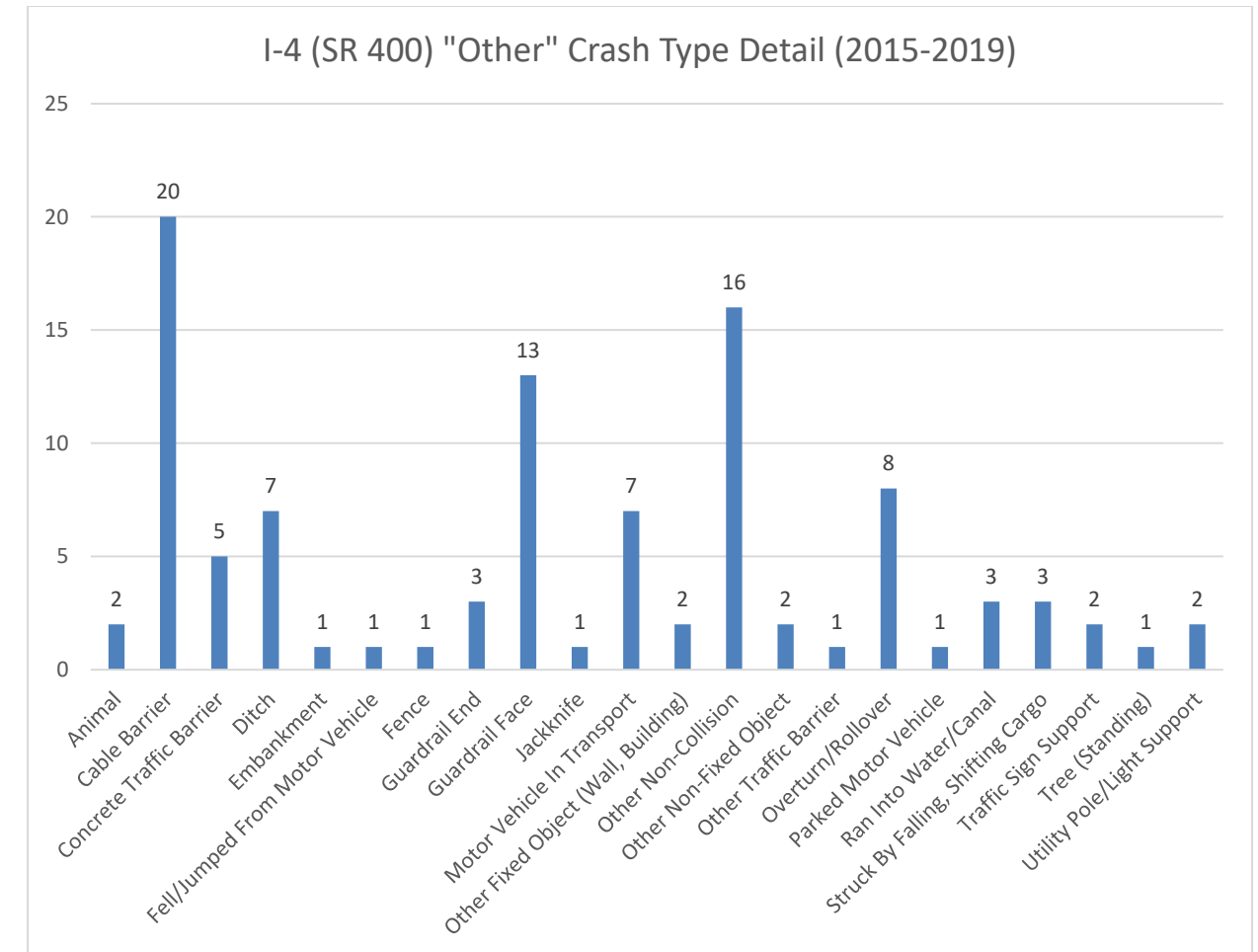


Figure 9: I-4 (SR 400) "Other" Crash Type Detail (2015-2019)

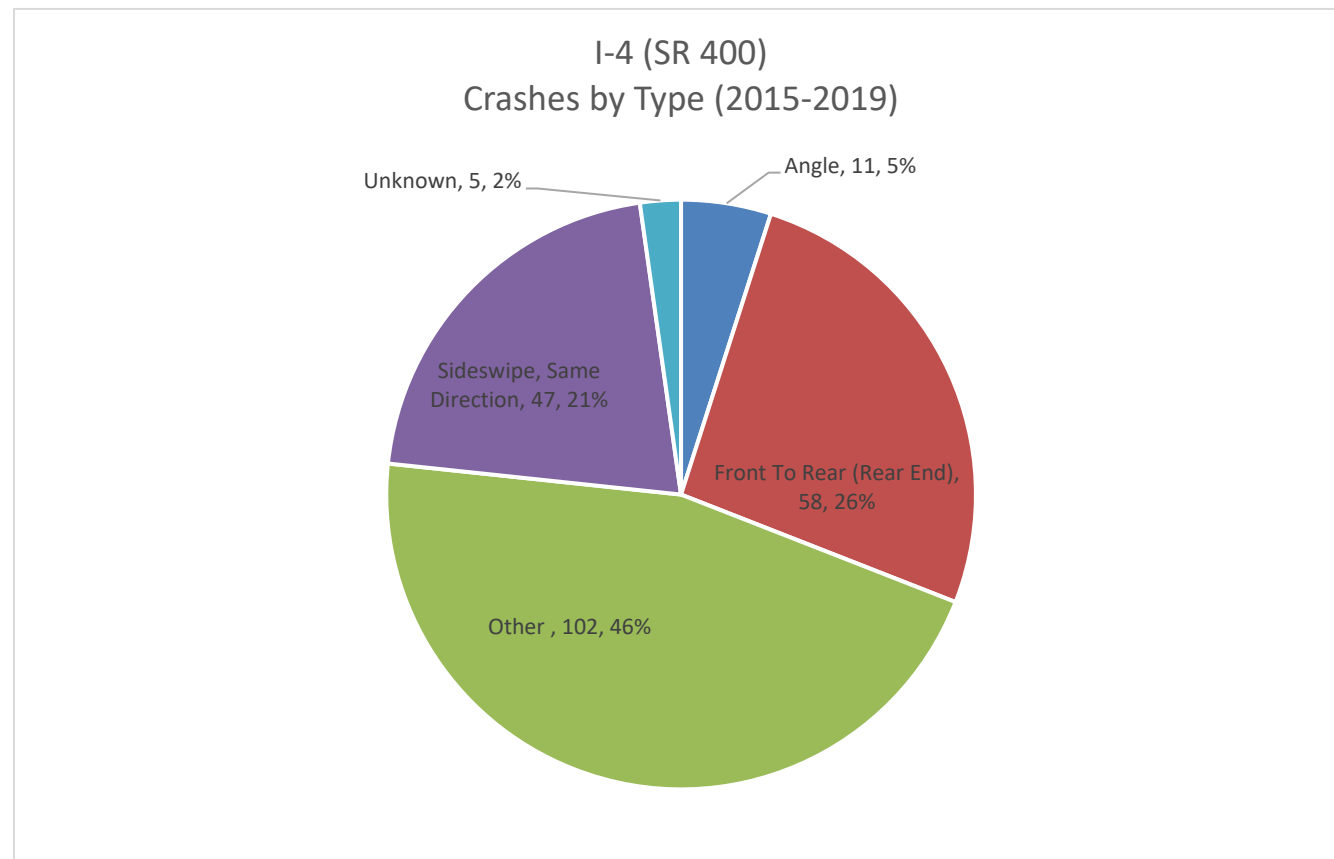


Figure 8: I-4 (SR 400) Crashes by Type

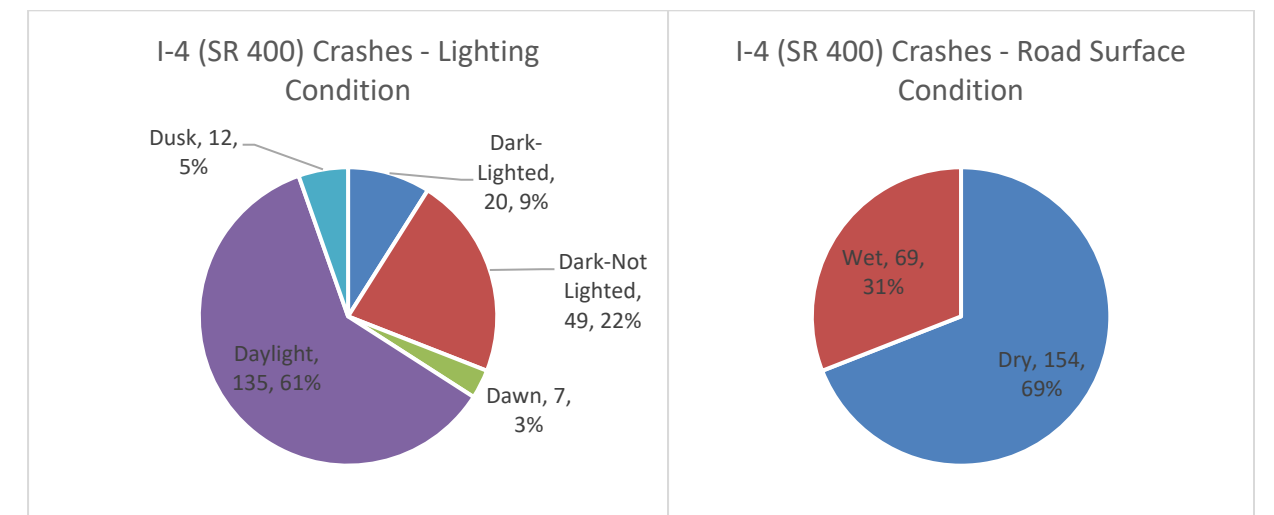


Figure 10: I-4 (SR 400) Crashes Lighting and Road Surface Condition



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Table 4: I-4 (SR 400) Crash Type by Location Milepost

Crash Segment	Crash Type							Total
	from MP	to MP	Angle	Front to Rear (Rear End)	Other	Sideswipe, Same Direction	Unknown	
I-4, ½-mile to one mile west of SR 559	17.227	17.727	4	12	23	10	0	49
I-4, WB on-ramp to ½-mile west	17.727	18.227	3	10	15	5	2	35
I-4 between SR 559 ramps ¹	18.227	18.451	2	15	17	7	1	42
I-4 between SR 559 ramps ²	18.451	18.623	1	4	9	7	0	21
I-4, WB off ramp to ½-mile east	18.623	19.123	0	5	16	8	0	29
I-4, ½-mile to one mile east of SR 559	19.123	19.623	1	12	22	10	2	47
Total			11	58	102	47	5	223
Percentage of Total			5%	26%	46%	21%	2%	100%
Notes: ¹ I-4 near the begin limits of the AOI is classified as urban principal arterial interstate between MP 17.227 and MP 18.451 ² I-4 is classified as rural principal arterial interstate from MP 18.451 to the end of the AOI.								

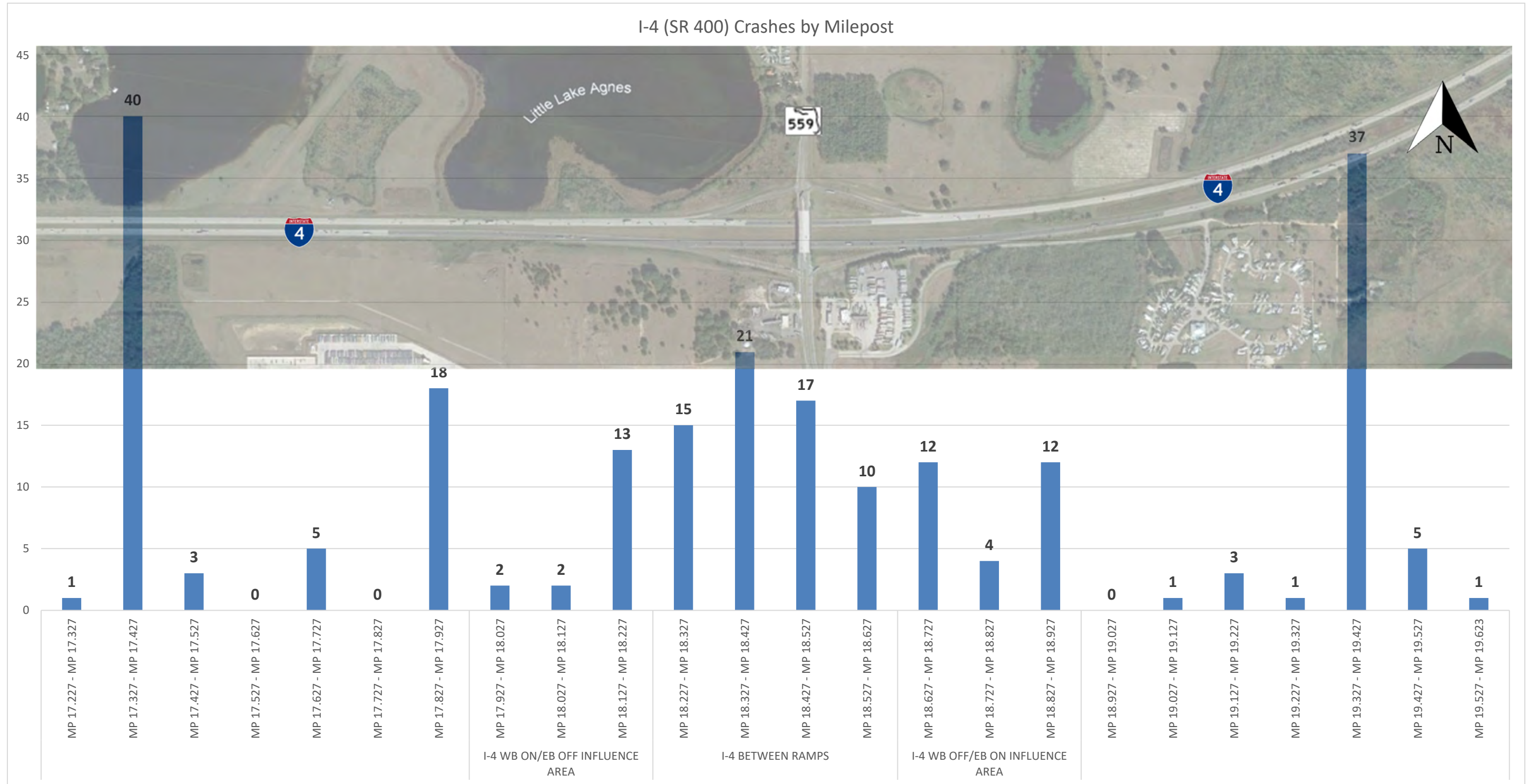


Figure 11: I-4 (SR 400) Crashes by Milepost (2015-2019)



Table 5: I-4 (SR 400) Crash Frequency and Segment Crash Rates

Crash Segment	I-4 (SR 400) Crash Frequency & Rate								Statewide Average Crash Rate
	from MP	to MP	Severity	No. of Crashes	Daily Volume ¹	Segment Length (miles)	No. Crashes per Year	Total Crash Rate ²	
I-4, ½-mile to one mile west of WB on-ramp from SR 559	17.227	17.727	Total	49	97,300	0.50	9.8	0.552	1.002
			FI	19					
			PDO	30					
I-4, WB on-ramp from SR 559 to ½-mile west	17.727	18.227	Total	35	97,300	0.50	7	0.394	1.002
			FI	14					
			PDO	21					
I-4 between SR 559 ramps ³	18.227	18.451	Total	42	97,300	0.22	8.4	1.075	1.002
			FI	12					
			PDO	30					
I-4 between SR 559 ramps ³	18.451	18.623	Total	21	92,000	0.17	4.2	0.736	0.454
			FI	7					
			PDO	14					
I-4, WB off ramp to ½-mile east	18.623	19.123	Total	29	92,000	0.50	5.8	0.345	0.454
			FI	6					
			PDO	23					
I-4, ½-mile to one mile east of WB off ramp to SR 559	19.123	19.623	Total	47	92,000	0.50	9.4	0.560	0.454
			FI	22					
			PDO	25					

Notes: ¹ Source: FDOT Traffic Online, 2021 Historical AADT Report; 5-Year average for 2015-2019
² x.xx denotes segment with actual crash rate that exceeds statewide 2015-2019 5-year average crash rate for a similar facility (Interstate Urban MP 17.227 – MP 18.451, Interstate Rural MP 18.451 – MP 19.623)
³ I-4 MP 18.451 end urban principal arterial interstate classification/begin rural principal arterial interstate classification



3.4.2 SR 559 – MP 7.049 to MP 8.117

There were 86 reported crashes along SR 559 within the study area during the five-year period; 13 occurred in 2015, 20 in 2016, 11 in 2017, 16 in 2018 and 26 in 2019. Based on crash severity, of the 86 reported crashes, 58 (67.4%) were property-damage-only crashes, 28 (32.6%) were injury-type crashes and none were fatal (**Figure 12**). Angle (28, 33%), rear end (17, 20%) and sideswipe (14, 16%) crash types had the highest frequencies (**Figure 13**). Crash types coded as “other” constituted 19% of all crashes; the harmful events associated with these crashes are depicted in **Figure 14**. The majority of crashes on SR 559 occurred under daylight lighting conditions (52, 60%) and dry roadway surface conditions (78, 91%) as shown in **Figure 15**.

The crash data was reviewed to determine the occurrence of crash types by location along SR 559 within the study’s area of influence. **Table 6** provides a summary of the crash types by location milepost and **Figure 16** illustrates the crash frequency by milepost along the SR 559 study corridor. The SR 559 study corridor was further evaluated to determine if there are existing high crash locations within the area of influence. The actual/ observed crash rates per MVM for the SR 559 segments are summarized in **Table 7**. Within the AOI SR 559 is classified as an urban minor arterial; it is a 4-lane divided roadway with a raised median from the south limits to the I-4 overpass where it transitions to a 2-lane undivided roadway. The statewide average crash rate for a similar urban 4-5 lane, 2-way divided with raised median facility is 3.859 and for urban 2-3 lane, 2-way undivided facility is 3.974. The SR 559 segments between the southern limits of the AOI (MP 7.049) and the I-4 Westbound Ramp Terminal (MP 7.685) had actual crash rates ranging from 3.869 to 8.497, exceeding the statewide average rate.

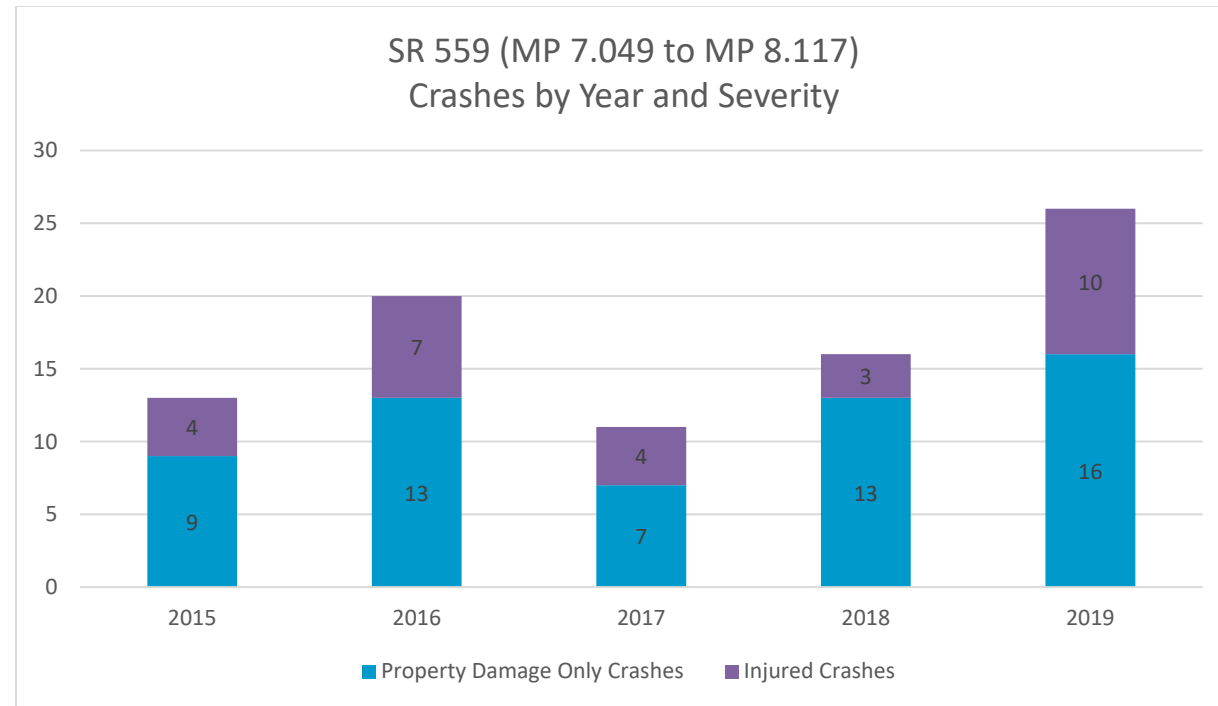


Figure 12: SR 559 Crashes by Year and Severity

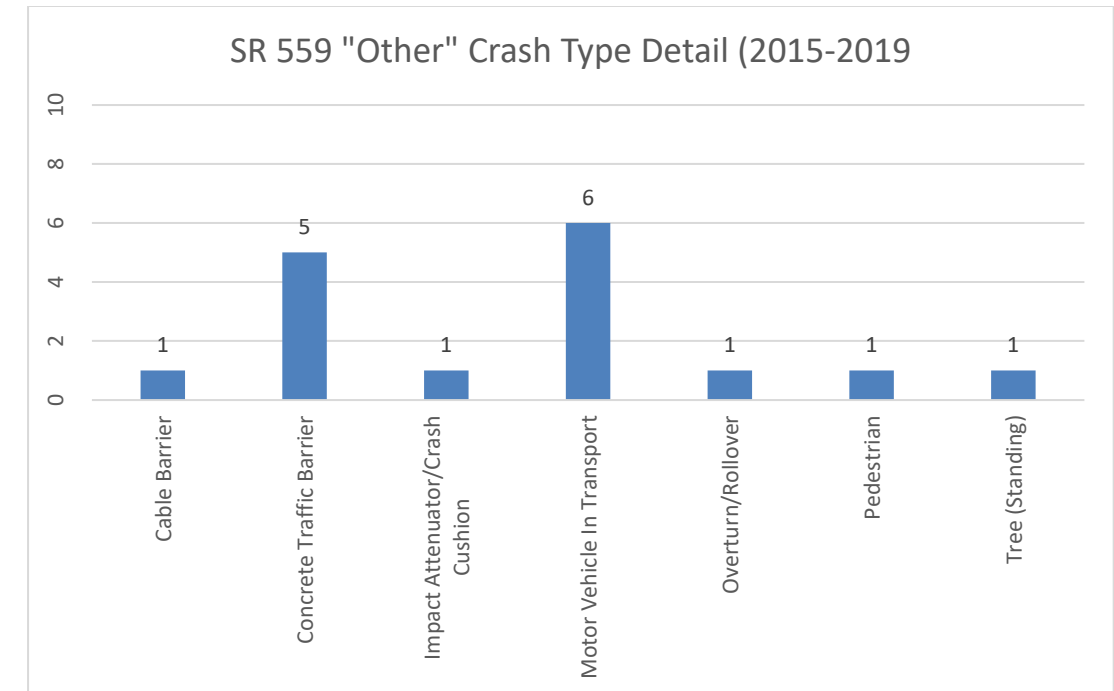


Figure 14: SR 559 "Other" Crash Type Detail (2015-2019)

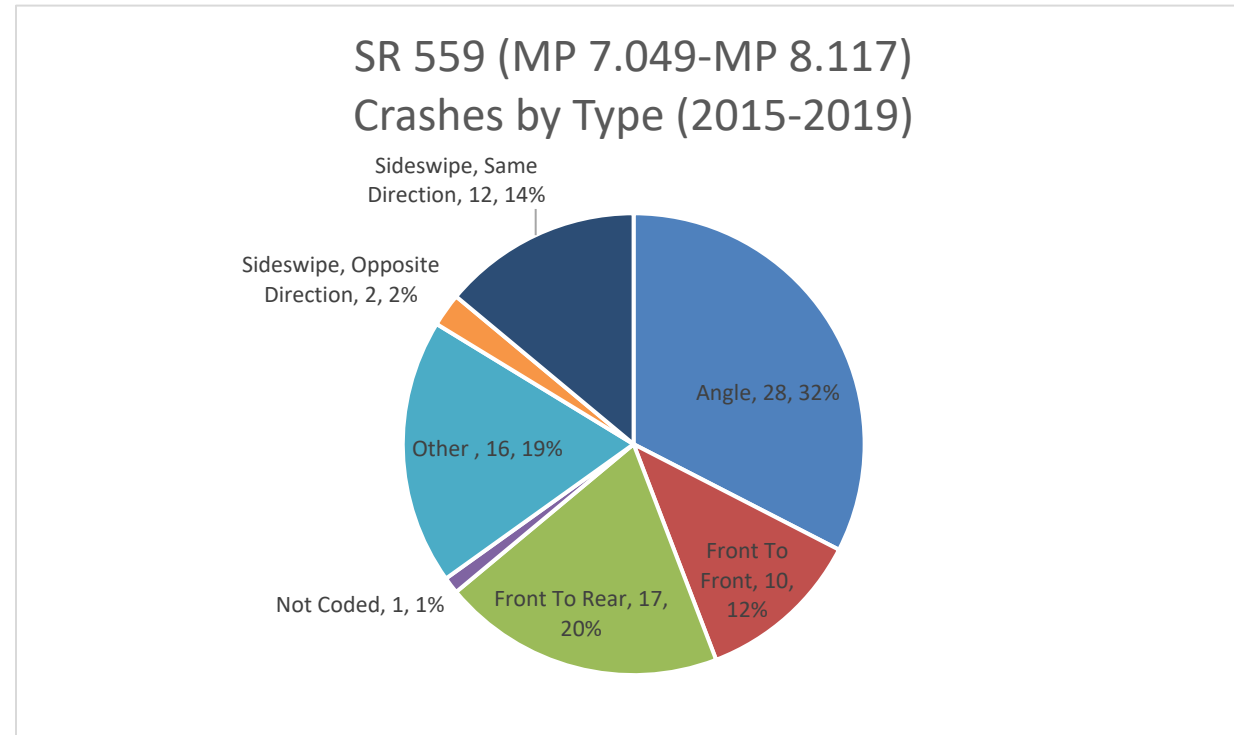


Figure 13: SR 559 Crashes by Type

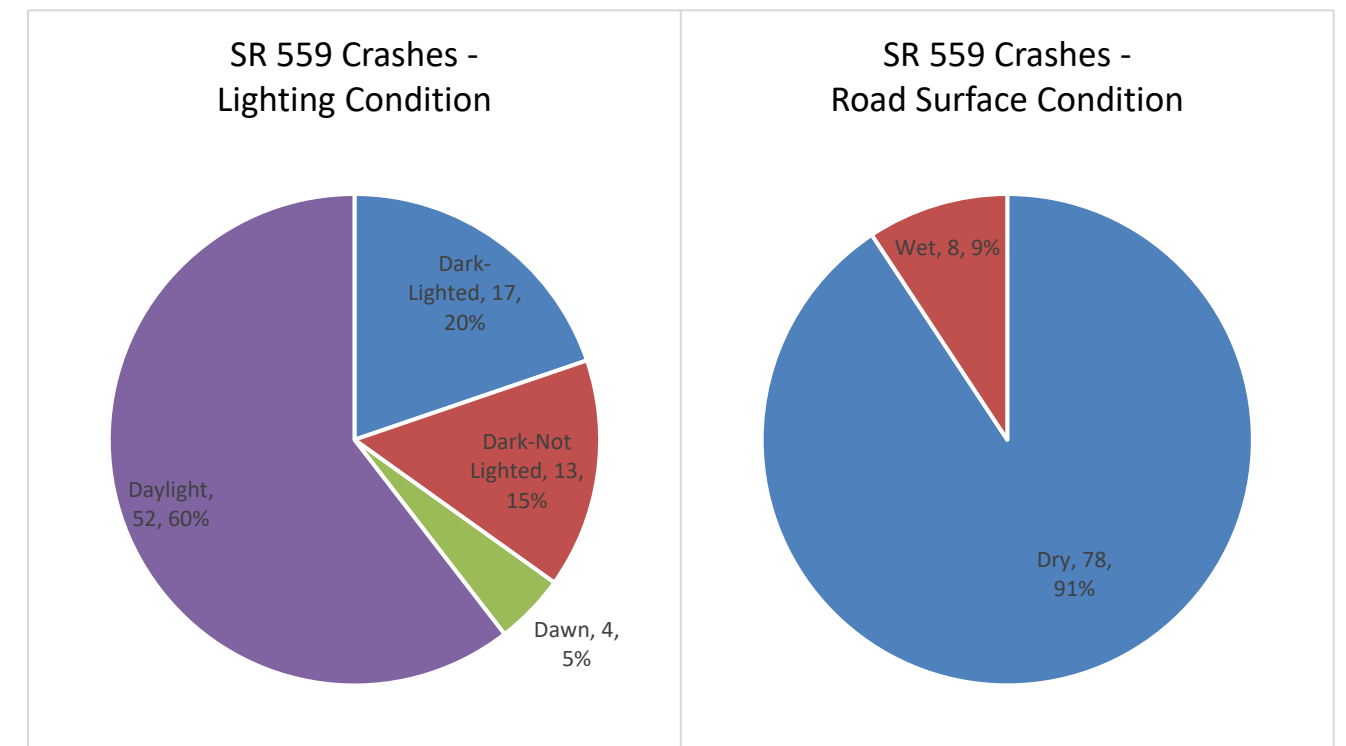


Figure 15: SR 559 Lighting and Road Surface Condition



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Table 6: SR 559 Crash Type by Location Milepost

Crash Segment/ Location	Crash Type									
	from MP	to MP	Angle	Front to Front (Head On)	Front to Rear (Rear End)	Sideswipe, Opposite Direction	Sideswipe, Same Direction	Other	Not Coded	Total
SR 559 south of CR 559A (C. Fred Jones Blvd.)	7.049	7.149	0	0	0	0	0	0	0	0
CR 559A (C. Fred Jones Blvd.) Intersection	7.149	7.249	5	2	2	0	1	1	1	12
SR 559 north of CR 559A (C. Fred Jones Blvd.)	7.249	7.349	0	0	2	0	2	2	0	6
SR 559 south of I-4 EB ramp terminal	7.349	7.449	2	0	0	0	1	3	0	6
I-4 EB ramp terminal at SR 559	7.449	7.549	5	2	10	0	4	3	0	24
SR 559 between I-4 ramp terminals	7.549	7.649	4	1	1	0	1	2	0	9
I-4 WB ramp terminal at SR 559	7.649	7.749	11	4	2	2	3	4	0	26
SR 559 north of I-4 WB ramp terminal	7.749	7.849	0	0	0	0	0	0	0	0
SR 559 south of Le Lynn RV Resort Entrance	7.849	7.949	0	0	0	0	0	1	0	1
Le Lynn RV Resort Entrance	7.949	8.049	1	1	0	0	0	0	0	2
SR 559 north of Le Lynn RV Resort Entrance	8.049	8.117	0	0	0	0	0	0	0	0
Total			28	10	17	2	12	16	1	86
Percentage of Total			33%	12%	20%	2%	14%	19%	1%	100%

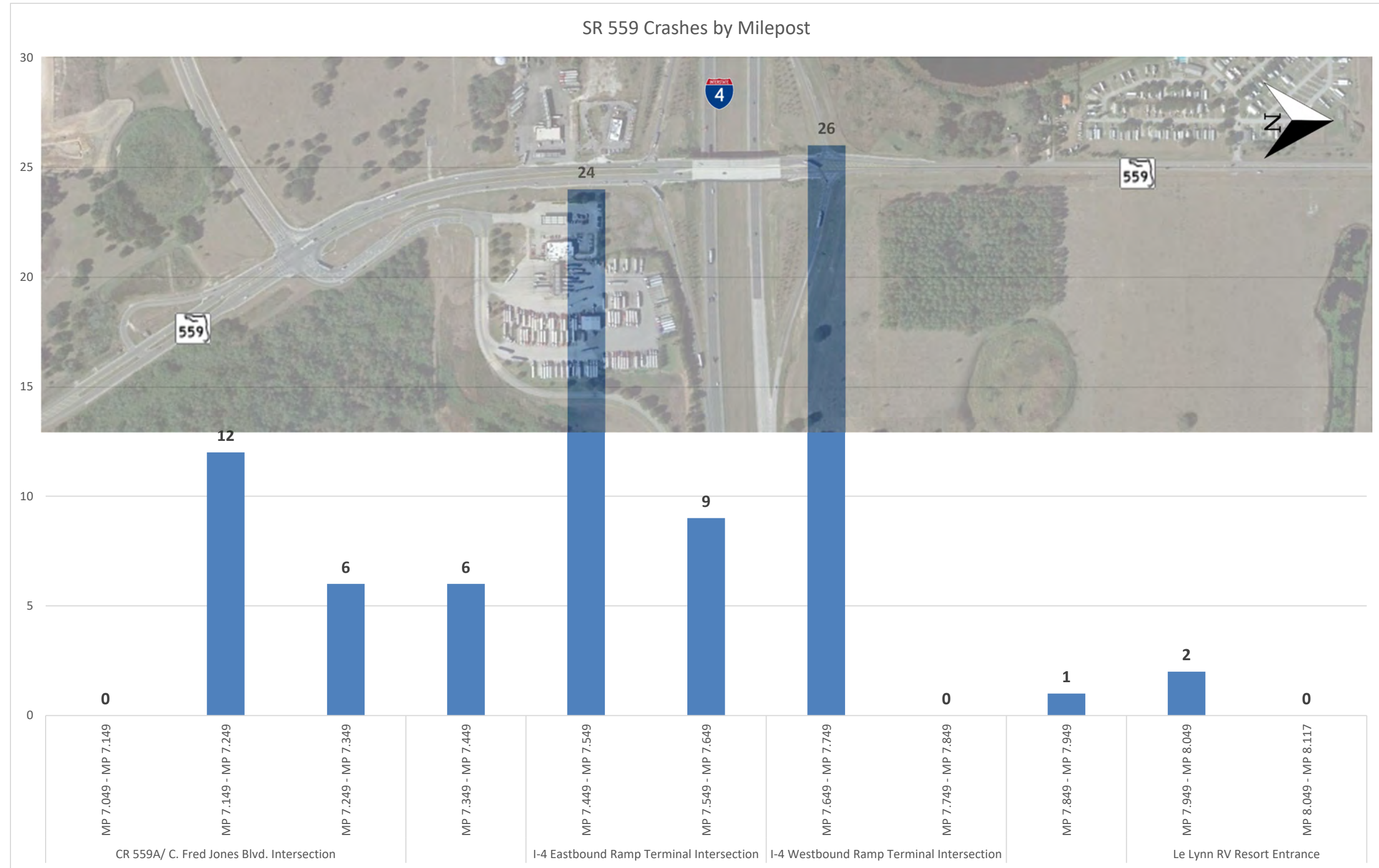


Figure 16: SR 559 Crashes by Milepost (2015-2019)



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Table 7: SR 559 Crash Frequency and Segment Crash Rates

Crash Segment	SR 559 Crash Frequency & Rate								
	from MP	to MP	Severity	No. of Crashes	Daily Volume ¹	Segment Length (miles)	No. Crashes per Year	Total Crash Rate ²	Statewide Average Crash Rate
SR 559 south of CR 559A (C. Fred Jones Blvd.)	7.049	7.235	Total	11	8,200	0.19	2.2	3.869	3.859
			FI	4					
			PDO	7					
SR 559, CR 559A (C. Fred Jones Blvd.) to I-4 EB Ramp	7.235	7.544	Total	37	15,200	0.31	7.4	4.303	3.859
			FI	14					
			PDO	23					
SR 559 between I-4 ramps	7.544	7.685	Total	33	15,200	0.14	6.6	8.497	3.859
			FI	8					
			PDO	25					
SR 559, I-4 WB Ramp to south of Le Lynn RV Resort	7.685	7.927	Total	2	4,800	0.24	0.4	0.951	3.974
			FI	1					
			PDO	1					
SR 559, north of Le Lynn RV Resort Entrance	7.927	8.117	Total	3	4,800	0.19	0.6	1.802	3.974
			FI	1					
			PDO	2					

Notes: ¹ Source: FDOT Traffic Online, 2021 Historical AADT Report; 5-Year average for 2015-2019
² x.xx denotes segment with actual crash rate that exceeds statewide 2015-2019 5-year average crash rate for a similar facility (Urban 4-5Ln 2Way Divided Raised MP 7.049 – MP 7.685, Urban 2-3Ln 2Way Undivided MP 7.685 – MP 8.117)



3.4.3 Interstate 4 (SR 400) Ramps at SR 559

There were 130 reported crashes on the entry and exit ramps at the I-4 and SR 559 interchange during the five-year study period; 18 occurred in 2015, 40 in 2016, 10 in 2017, 33 in 2018 and 29 in 2019. Based on crash severity, of the 130 reported crashes, 89 (68%) were property-damage-only crashes, 41 (32%) were injury-type crashes and none were fatal crashes. Detailed crash statistics including crash types with highest frequency, lighting conditions and roadway surface conditions for each ramp are provided in **Table 8**. **Figure 17** illustrates the crash frequency by milepost along the I-4 ramps.

Table 8: I-4 (SR 400) Ramps at SR 559 Crash Statistics Summary

		Number of Crashes					5-Year Total	%	Mean Crashes per Year	
		2015	2016	2017	2018	2019				
I-4 Westbound On Ramp from SR 559										
MP 0.000 to MP 0.198										
Crash Type	Angle	0	2	1	2	1	6	27%	1.2	
	Front To Front	1	0	1		2	4	18%	0.8	
	Front To Rear	1	0	0	0	0	1	5%	0.2	
	Sideswipe, Opposite Direction	1	1	0	0	0	2	9%	0.4	
	Sideswipe, Same Direction	0	0	0	1	0	1	5%	0.2	
	Subtotal	3	3	2	3	3	14	64%	2.8	
	"Other" Crash Types									
	Cable Barrier	0	1	0	0	1	2	9%	0.4	
	Concrete Traffic Barrier	0	1	0	1	0	2	9%	0.4	
	Guardrail End	0	1	0	0	0	1	5%	0.2	
	Motor Vehicle In Transport	0	0	0	0	1	1	5%	0.2	
	Other Non-Collision	1	0	0	0	0	1	5%	0.2	
	Overturn/Rollover	0	0	0	1	0	1	5%	0.2	
	Other (Subtotal)	1	3	0	2	2	8	36%	1.6	
Total, All Crash Types	4	6	2	5	5	22	100%	4.4		
Crash Severity	Fatal	0	0	0	0	0	0	0%	0	
	Injury	1	1	1	0	2	5	23%	1	
	Property Damage Only	3	5	1	5	3	17	77%	3.4	
Lighting Condition	Daylight	2	2	0	4	3	11	50%	2.2	
	Dawn	0	0	0	0	1	1	5%	0.2	



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Table 8: I-4 (SR 400) Ramps at SR 559 Crash Statistics Summary

		Number of Crashes					5-Year Total	%	Mean Crashes per Year	
		2015	2016	2017	2018	2019				
	Dark-Not Lighted	1	4	1	1	0	7	32%	1.4	
	Dark-Lighted	1	0	1	0	1	3	14%	0.6	
Surface Condition	Dry	3	5	1	5	4	18	82%	3.6	
	Wet	1	1	1	0	1	4	18%	0.8	
I-4 Westbound Off Ramp to SR 559 MP 0.000 to MP 0.206										
Crash Type	Angle	2	4	3	2	1	12	27%	2.4	
	Front To Front	1	0	1		2	4	9%	0.8	
	Front To Rear	2	0	0	1	4	7	16%	1.4	
	Sideswipe, Opposite Direction	1	1	0	0	0	2	4%	0.4	
	Sideswipe, Same Direction	0	2	0	3	2	7	16%	1.4	
	Subtotal	6	7	4	6	9	32	71%	6.4	
	"Other" Crash Types									
	Cable Barrier	0	0	0	0	1	1	2%	0.2	
	Concrete Traffic Barrier	0	0	0	1	0	1	2%	0.2	
	Ditch	0	0	0	0	1	1	2%	0.2	
	Fence	0	1	0	0	0	1	2%	0.2	
	Guardrail Face	0	1	0	0	0	1	2%	0.2	
	Motor Vehicle In Transport	1	0	0	1	1	3	7%	0.6	
	Other Non-Collision	0	2	0	0	1	3	7%	0.6	
	Overturn/Rollover	0	0	0	2		2	4%	0.4	
	Other (Subtotal)	1	4	0	4	4	13	29%	2.6	
	Total, All Crash Types	7	11	4	10	13	45	100%	9	
Crash Severity	Fatal	0	0	0	0	0	0	0%	0	
	Injury	5	2	2	1	3	13	29%	2.6	
	Property Damage Only	2	9	2	9	10	32	71%	6.4	
Lighting Condition	Daylight	3	6	1	6	10	26	58%	5.2	
	Dawn	0	1	0	0	2	3	7%	0.6	
	Dark-Not Lighted	4	1	1	4	0	10	22%	2	
	Dark-Lighted	0	3	2	0	1	6	13%	1.2	
Surface	Dry	6	8	3	8	10	35	78%	7	



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Table 8: I-4 (SR 400) Ramps at SR 559 Crash Statistics Summary

		Number of Crashes					5-Year Total	%	Mean Crashes per Year	
		2015	2016	2017	2018	2019				
Condition	Wet	1	3	1	2	3	10	22%	2	
I-4 Eastbound On Ramp from SR 559 MP 0.000 to MP 0.186										
Crash Type	Angle	1	2	0	2	0	5	23%	1	
	Front To Front	0	1	0	0	1	2	9%	0.4	
	Front To Rear	0	0	0	3	1	4	18%	0.8	
	Sideswipe, Same Direction	0	3	1	2	0	6	27%	1.2	
	Subtotal	1	6	1	7	2	17	77%	3.4	
	"Other" Crash Types									
	Concrete Traffic Barrier	0	1	0	1	0	2	9%	0.4	
	Ditch	0	0	0	0	1	1	5%	0.2	
	Motor Vehicle In Transport	0	0	0	1	0	1	5%	0.2	
	Tree (Standing)	0	0	0	0	1	1	5%	0.2	
	Other (Subtotal)	0	1	0	2	2	5	23%	1	
	Total, All Crash Types	1	7	1	9	4	22	100%	4.4	
Crash Severity	Fatal	0	0	0	0	0	0	0%	0	
	Injury	0	2	0	2	3	7	32%	1.4	
	Property Damage Only	1	5	1	7	1	15	68%	3	
Lighting Condition	Daylight	1	1	1	3	1	7	32%	1.4	
	Dark-Not Lighted	0	2	0	4	1	7	32%	1.4	
	Dark-Lighted	0	4	0	2	2	8	36%	1.6	
Surface Condition	Dry	1	7	1	6	3	18	82%	3.6	
	Wet	0	0	0	3	1	4	18%	0.8	
I-4 Eastbound Off Ramp to SR 559 MP 0.000 to MP 0.192										
Crash Type	Angle	1	3	0	2	1	7	17%	1.4	
	Front To Front	0	1	0	0	1	2	5%	0.4	
	Front To Rear	2	3	3	5	3	16	39%	3.2	
	Sideswipe, Same Direction	3	2	0	1	0	6	15%	1.2	
	Subtotal	6	9	3	8	5	31	76%	6.2	



Table 8: I-4 (SR 400) Ramps at SR 559 Crash Statistics Summary

	Number of Crashes						5-Year Total	%	Mean Crashes per Year
	2015	2016	2017	2018	2019				
	"Other" Crash Types								
	Cable Barrier	0	1	0	0	0	1	2%	0.2
	Concrete Traffic Barrier	0	2	0	1	0	3	7%	0.6
	Ditch	0	2	0	0	0	2	5%	0.4
	Embankment	0	0	0	0	1	1	2%	0.2
	Guardrail End	0	1	0	0	0	1	2%	0.2
	Motor Vehicle In Transport	0	1	0	0	0	1	2%	0.2
	Tree (Standing)	0	0	0	0	1	1	2%	0.2
	Other (Subtotal)	0	7	0	1	2	10	24%	2
	Total, All Crash Types	6	16	3	9	7	41	100%	8.2
Crash Severity	Fatal	0	0	0	0	0	0	0%	0
	Injury	2	7	2	1	4	16	39%	3.2
	Property Damage Only	4	9	1	8	3	25	61%	5
Lighting Condition	Dusk	0	0	0	0	1	1	2%	0.2
	Daylight	4	3	2	7	3	19	46%	3.8
	Dawn	0	2	0	0	0	2	5%	0.4
	Dark-Not Lighted	1	6	0	0	1	8	20%	1.6
	Dark-Lighted	1	5	1	2	2	11	27%	2.2
Surface Condition	Dry	6	15	2	7	5	35	85%	7
	Wet	0	1	1	2	2	6	15%	1.2

3.4.4 SR 559 and I-4 Westbound Ramp Terminal Intersection

There were 29 reported crashes at the SR 559 and I-4 Westbound Ramp intersection during the five-year study period; 6 occurred in 2015, 6 in 2016, 4 in 2017, 5 in 2018 and 8 in 2019. Based on crash severity, of the 29 reported crashes, 21 (72%) were no injury (property-damage-only) crashes and 8 (28%) were injury-type crashes; no fatal crashes were reported. Angle (12, 41%), front-to-front (4, 14%), rear end (3, 10%) and sideswipe (3, 10%) crash types had the highest frequencies. The main contributing causes were failure to yield right-of-way (9, 31%) followed by careless driving (4, 14%). The majority of crashes occurred under daylight lighting conditions (17, 59%) and dry roadway surface conditions (26, 90%). A summary of the crash statistics for the SR 559 and I-4 Westbound Ramp intersection is provided in **Table 9**.



Figure 17: I-4 (SR 400) Ramps Crashes by Milepost (2015-2019)



Table 9: SR 559 and I-4 Westbound Ramp Terminal Crash Statistics Summary

SR 559 and I-4 Westbound Ramp Terminal		Number of Crashes						5-Year Total	%	Mean Crashes per Year
		2015	2016	2017	2018	2019				
Crash Type	Rear End	1	0	0	0	2	3	10%	0.6	
	Front to Front	1	0	1	0	2	4	14%	0.8	
	Angle	2	4	3	2	1	12	41%	2.4	
	Sideswipe (Same Direction)	0	1	0	1	1	3	10%	0.6	
	Sideswipe (Opposite Direction)	1	1	0	0	0	2	7%	0.4	
	Other	1	0	0	2	2	5	17%	1	
	Total	6	6	4	5	8	29	100%	5.8	
Crash Severity	Fatal	0	0	0	0	0	0	0%	0	
	Injury	3	1	2	0	2	8	28%	1.6	
	Property Damage Only	3	5	2	5	6	21	72%	4.2	
Contributing Cause	Failed to Keep in Proper Lane	1	0	0	0	0	1	3%	0.2	
	Failed to Yield Right-of-Way	1	4	0	2	2	9	31%	1.8	
	Followed Too Closely	0	0	0	0	1	1	3%	0.2	
	Improper Passing	0	1	0	0	0	1	3%	0.2	
	Improper Turn	1	0	1	0	1	3	10%	0.6	
	No Contributing Action	0	0	1	2	1	4	14%	0.8	
	Operated Motor Vehicle in Careless Manner	1	1	1	0	1	4	14%	0.8	
	Other Contributing Action	2	0	0	0	0	2	7%	0.4	
	Ran off Roadway	0	0	0	1	0	1	3%	0.2	
	Ran Stop Sign	0	0	1	0	1	2	7%	0.4	
	Swerved or Avoided	0	0	0	0	1	1	3%	0.2	



Table 9: SR 559 and I-4 Westbound Ramp Terminal Crash Statistics Summary

SR 559 and I-4 Westbound Ramp Terminal		Number of Crashes						5-Year Total	%	Mean Crashes per Year
		2015	2016	2017	2018	2019				
Lighting Condition	Daylight	2	4	1	4	6	17	59%	3.4	
	Dawn	0	0	0	0	1	1	3%	0.2	
	Dark-Lighted	0	1	2	0	1	4	14%	0.8	
	Dark-Not Lighted	4	1	1	1	0	7	24%	1.4	
Road Surface Condition	Dry	5	6	3	5	7	26	90%	5.2	
	Wet	1	0	1	0	1	3	10%	0.6	

3.4.5 SR 559 and I-4 Eastbound Ramp Terminal Intersection

There were 35 reported crashes at the SR 559 and I-4 Eastbound Ramp intersection during the five-year study period; 4 occurred in 2015, 10 in 2016, 2 in 2017, 8 in 2018 and 11 in 2019. Based on crash severity, of the 35 reported crashes, 20 (57%) were no injury (property-damage-only) crashes, 8 (23%) were non-incapacitating injury-type crashes and 7 (20%) were serious possible injury crashes. Rear end (11, 31%), angle (9, 26%) and sideswipe (6, 17%) crash types had the highest frequencies. The main contributing causes were careless driving (14, 40%) and failure to yield right-of-way (11, 31%). The majority of crashes occurred under daylight lighting conditions (19, 54%) and dry roadway surface conditions (30, 86%). A summary of the crash statistics for the SR 559 and I-4 Eastbound Ramp Intersection is provided in **Table 10**.

Table 10: SR 559 and I-4 Eastbound Ramp Terminal Crash Statistics Summary

SR 559 and I-4 Eastbound Ramp Terminal		Number of Crashes						5-Year Total	%	Mean Crashes per Year
		2015	2016	2017	2018	2019				
Crash Type	Rear End	0	3	2	3	3	11	31%	2.2	
	Front to Front	1	1	0	0	2	4	11%	0.8	
	Angle	1	3	0	2	3	9	26%	1.8	
	Sideswipe (Same Direction)	2	2	0	2	0	6	17%	1.2	
	Other	0	1	0	1	3	5	14%	1	
	Total	4	10	2	8	11	35	100%	7	
Crash Severity	Fatal	0	0	0	0	0	0	0%	0	
	Injury	2	4	2	1	6	15	43%	3	
	Property	2	6	0	7	5	20	57%	4	



Table 10: SR 559 and I-4 Eastbound Ramp Terminal Crash Statistics Summary

SR 559 and I-4 Eastbound Ramp Terminal		Number of Crashes					5-Year Total	%	Mean Crashes per Year
		2015	2016	2017	2018	2019			
	Damage Only								
Contributing Cause	Failed to Keep in Proper Lane	1	0	0	0	0	1	3%	0.2
	Failed to Yield Right-of-Way	2	3	0	1	5	11	31%	2.2
	No Contributing Action	0	1	0	1	0	2	6%	0.4
	Not Coded	0	1	1	0	0	2	6%	0.4
	Operated Motor Vehicle in Careless Manner	1	4	1	5	3	14	40%	2.8
	Other Contributing Action	0	0	0	1	1	2	6%	0.4
	Ran Stop Sign	0	1	0	0	1	2	6%	0.4
	Swerved or Avoided	0	0	0	0	1	1	3%	0.2
Lighting Condition	Daylight	3	3	1	6	6	19	54%	3.8
	Dawn	1	1	0	0	0	2	6%	0.4
	Dark-Lighted	0	4	1	2	4	11	31%	2.2
	Dark-Not Lighted	0	2	0	0	1	3	9%	0.6
Road Surface Condition	Dry	4	10	2	6	8	30	86%	6
	Wet	0	0	0	2	3	5	14%	1

3.4.6 SR 559 and CR 559A (C. Fred Jones Boulevard) Intersection

There were 21 reported crashes at the SR 559 and CR 559A (C. Fred Jones Boulevard) intersection during the five-year study period; 1 occurred in 2015, 6 in 2016, 4 in 2017, 3 in 2018 and 7 in 2019. Based on crash severity, of the 21 reported crashes, 15 (71%) were no injury (property-damage-only) crashes, 6 (29%) were injury-type crashes and none were fatal. Angle (7, 33%) and rear end (5, 24%) crash types had the highest frequencies. The main contributing causes were careless driving (6, 29%) and failure to yield right-of-way (3, 14%). The majority of crashes occurred under daylight lighting conditions (17, 81%) and dry roadway surface conditions (19, 90%). A summary of the crash statistics for the SR 559 and CR 559A (C. Fred Jones Boulevard) Intersection is provided in **Table 11**.



Table 11: SR 559 and CR 559A (C. Fred Jones Boulevard) Intersection Crash Statistics Summary

SR 559 and CR 559A (C. Fred Jones Boulevard)		Number of Crashes					5-Year Total	%	Mean Crashes per Year
		2015	2016	2017	2018	2019			
Crash Type	Not Coded	0	0	0	0	1	1	5%	0.2
	Rear End	0	1	2	1	1	5	24%	1
	Front to Front	0	0	0	0	2	2	10%	0.4
	Angle	0	3	0	2	2	7	33%	1.4
	Sideswipe (Same Direction)	1	1	1	0	0	3	14%	0.6
	Other	0	1	1	0	1	3	14%	0.6
	Total	1	6	4	3	7	21	100%	4.2
Crash Severity	Fatal	0	0	0	0	0	0	0%	0
	Injury	0	2	0	2	2	6	29%	1.2
	Property Damage Only	1	4	4	1	5	15	71%	3
Contributing Cause	Failed to Keep in Proper Lane		1				1	5%	0.2
	Failed to Yield Right-of-Way	0	1	0	0	2	3	14%	0.6
	Improper Backing	0	0	1	0	0	1	5%	0.2
	Improper Passing	0	0	1	0	0	1	5%	0.2
	Improper Turn	1	0	0	0	0	1	5%	0.2
	No Contributing Action	0	1	1	0	1	3	14%	0.6
	Not Coded	0	1	0	0	0	1	5%	0.2
	Operated Motor Vehicle in Careless Manner	0	2	1	0	3	6	29%	1.2
	Other Contributing Action	0	0	0	2	1	3	14%	0.6
	Ran Red Light	0	0	0	1	0	1	5%	0.2
Lighting Condition	Daylight	1	6	3	2	5	17	81%	3.4
	Dawn	0	0	1	0	0	1	5%	0.2
	Dark-Lighted	0	0	0	1	1	2	10%	0.4
	Dark-Not Lighted	0	0	0	0	1	1	5%	0.2
Road Surface Condition	Dry	0	6	4	3	6	19	90%	3.8
	Wet	1	0	0	0	1	2	10%	0.4



3.4.7 Intersection Crash Rates

The actual/ observed crash rates per million entering vehicles for the study intersections were calculated using the following equation: $\text{Crash Rate} = [(1,000,000 \times \text{Total Number of Crashes}) / (365 \times \text{Number of Years} \times \text{total intersection entering AADT})]$. A summary of the crash rates for the SR 559 intersections is provided in **Table 12**. All three intersections on SR 559 had actual crash rates higher than the statewide averages.

Table 12: SR 559 Intersection Crash Rates

Crash Segment	SR 559 Crash Frequency & Rate				Statewide Average Rate
	No. of Crashes	Daily Volume ¹	No. Crashes per Year	Actual Crash Rate ²	
SR 559 and I-4 Westbound Ramp Terminal	29	14,400	5.8	1.104	0.444
SR 559 and I-4 Eastbound Ramp Terminal	35	16,850	7.0	1.138	0.444
SR 559 and CR 559A (C. Fred Jones Boulevard)	21	15,000	4.2	0.767	0.666

Notes: ¹ Source: FDOT Traffic Online, 2021 Historical AADT Report; 5-Year average for 2015-2019 where available
² x.xx denotes segment with actual crash rate that exceeds statewide 2015-2019 5-year average crash rate for a similar facility (Urban 4-5Ln 2Way Divided Raised)

The signal warrant studies showed the most common causes of crashes at the Eastbound and Westbound ramp terminals were careless driving and failure to yield right of way, respectively. At the eastbound ramp, most of the collisions were rear ends for vehicles making right turns from the off ramp. Vehicles exiting the eastbound ramp do not have adequate sight distance to the north as southbound vehicles are approaching the eastbound ramp terminal. Eastbound right turn vehicles stop abruptly causing the vehicle behind to strike them resulting in rear-end collisions. At the westbound off ramp, the drivers were observed running the stop sign or failing to yield to through traffic when exiting from the off ramp or entering the westbound on ramp, resulting in mostly angle or left-turn collisions.

3.4.8 Fatal Crashes (2015-2019)

During the 5-year period from January 1, 2015 through December 31, 2019 there were two fatal crashes within the study AOI. The fatal crash that occurred on 7/20/2015 was an off-road crash involving an I-4 Westbound vehicle in the inside lane whose driver lost control, rotating across all 3 travels and striking the guardrail on the outside shoulder before continuing past the SR 559 overpass and becoming airborne. The vehicle came to rest on the south side of I-4 after striking the SR 559 concrete bridge support. The crash resulted in 2 incapacitating injuries, 1 non-incapacitating injury and one fatality. The crash occurred under daylight lighting and dry road surface conditions and the contributing causes were careless driving and excessive speed.



The fatal crash that occurred on 12/22/2019 was an off-road crash involving an I-4 Eastbound vehicle in the center lane whose driver began to change lanes to the inside lane, striking another vehicle ahead and lost control of the vehicle. The vehicle then began rotating toward the median, striking the guardrail and finally coming to rest in the center lane. The crash resulted in 5 non-incapacitating injuries, one no-injury and one fatality. The passenger who was not properly restrained in a car seat sustained fatal injuries. The crash occurred under daylight lighting and wet road surface conditions and the contributing causes were improper passing and inattentive driving.

3.4.9 Fatal/ Serious Injury Crashes (2020-2021)

The FDOT CAR system was also screened for fatal and serious injury crashes that occurred in 2020-2021 and have been location verified. During this period, 2 fatal and 6 incapacitating-injury crashes occurred within the AOI. A fatal crash that occurred on 3/4/2021 was a pedestrian crash that involved a northbound SR 559 vehicle traveling in the through lane that struck a pedestrian who was crossing SR 559 from the east side of the roadway to the west at the LeLynn RV Resort entrance intersection. The crash report stated that the pedestrian was crossing in an unmarked crosswalk and failed to yield right of way to the vehicle. The pedestrian sustained fatal injuries. The crash occurred in the middle of the night, under dark-not lighted, clear weather and dry road surface conditions.

The fatal crash that occurred on 10/18/2021 involved a Florida Highway Patrol (FHP) vehicle that was parked in the I-4 westbound paved median shoulder within a road construction work zone. The FHP vehicle drove into the inside lane to go around a portable speed limit sign when it entered the path of a motorcycle traveling in the inside lane causing the motorcyclist to strike the vehicle and subsequently be thrown into the westbound center lane. The motorcyclist was then struck by a westbound semi-tractor trailer and sustained fatal injuries. The contributing causes were failed to yield right of way and careless driving. The crash occurred in an advance warning area in a lane closure work zone, under dark-not lighted, clear weather and dry road surface conditions.

Six serious injury crashes occurred in 2020-2021, of these 5 occurred on the I-4 mainline and one occurred on the I-4 westbound off ramp. The crash information associated with these serious (incapacitating) injury crashes are provided in **Table 13**.



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Table 13: Serious Injury Crashes (2020-2021)

Crash Date	Location	Crash Type	Description	Lighting	Road Surface	Lane Departure Related	Speeding Related
11/1/2020	I-4 WB near MM 44, ~1/4 mile east of SR 559	Same Direction Sideswipe	WB vehicle traveling inside lane lost control and spun out to ditch and overturned on north side of I-4. Contributing cause noted was driving too fast for conditions.	Dark - Not Lighted	Wet	N	Y
4/16/2021	I-4 EB, 1/10 mile west of SR 559	Same Direction Sideswipe	EB vehicle in center lane had tire blowout, lost control, struck another vehicle in outside lane; both vehicles landed in ditch on south side of I-4	Daylight	Dry	Y	N
5/2/2021	I-4 EB near MM 45, east of SR 559	Single Vehicle	EB motorcyclist lost control when changing from center to inside lane. Driver was ejected when trying to correct motorcycle and helmet came off. No contributing action was identified.	Daylight	Dry	Y	N
6/6/2021	I-4 EB near MM 43, west of SR 559	Rear End	EB passenger vehicle in center lane, while passing, struck a semi-tractor trailer in outside lane then traveled across I-4 EB lanes and ran off roadway into the grass median. Careless driving was the contributing action.	Daylight	Dry	Y	N
7/7/2021	I-4 WB near MM 44, ~1/10 mile east of SR 559	Off Road	EB passenger vehicle in center lane lost control of vehicle due to road and weather conditions, then traveled across I-4 EB lanes into the grass median and collided with traffic control sign. Careless driving was the contributing action.	Dawn	Wet	Y	N
7/10/2021	I-4 EB west of SR 559	Single Vehicle	EB passenger vehicle inside lane failed to maintain control, entered center EB median and struck cable barrier. Driver was cited for careless driving and DUI.	Dark - Not Lighted	Dry	Y	N



4.0 Design Traffic Factors

Design traffic factors K, D and T are used to determine future year design hour traffic volumes along the project study area roadways. The design hour factor, K, is the ratio of the AADT that occurs during the design hour for the design year. The Directional Distribution factor, D, is the percentage of the total, two-way design hour traffic traveling in the peak direction. The daily truck volume is determined by the T factor, the percentage of trucks using a roadway in one day. Traffic factors for the I-4 at SR 559 Interchange study area were developed utilizing historical traffic data and current field data collection.

Polk County's 2021 estimated population was 753,520 (U.S. Census Bureau, 2021). Based on population size, the interchange study area is classified as "Other Urbanized Area" per the FDOT 2019 Project Traffic Forecasting Handbook (PTF Handbook). Thus, the Standard K factor of 9.0 for freeways, arterials and highways for "other urbanized areas" was used per the PTF Handbook.

The directional distribution factor (D) is the percentage of the total, two-way design hour traffic traveling in the peak direction. The D factors were computed using two data sources: historical counts from FDOT FTO (2021) count sites and volume/class counts conducted in July 2022 as part of the data collection for this study; a summary is provided in **Table 14** and **Table 15**, respectively.

The I-4 average historical D value from FTO 2021 AADT Report was 52.15% and the average measured D was 52.5%. Thus, the average of the historical and measured D values of 52.3% was used for I-4 in this study. The SR 559 average historical D and the average measured D were both 55%. The average of the historical and measured D values for CR 559A (C. Fred Jones Boulevard) west of SR 559 was 54.5% and east of SR 559 was 53.3%. Thus, an average D of 53.9% was used for CR 559A. The computed D values for this study are within the acceptable range of demand D values as recommended in the PTF Handbook.

The truck factor, T, is the percentage of trucks using a roadway during a 24-hour period. This T includes trucks and buses in FHWA Vehicle Class 4 to Class 13. The design hour truck (DHT) is the percentage of truck traffic expected during the design hour of the design year and is computed by dividing T by two. The T factors used for operational analysis of I-4 mainline and the ramp segments were computed using data from the FDOT FTO 2021 database. **Table 16** provides a summary of the historical T values for this study.

The average T factors from the historical data in the FTO 2021 AADT Reports were reviewed and the highest average T for each roadway segment was selected as the recommended factor. The recommended SR 559 T factor is 21.8% and the DHT is 10.9%. The recommended T factor and DHT values, respectively, for the I-4 ramps are: I-4 EB Off Ramp - 17.6% and 8.8%, I-4 WB On Ramp - 16.8% and 8.4%, I-4 EB On Ramp - 17.5% and 8.7%, I-4 WB Off Ramp - 16.8% and 8.4%. The truck percentages used in the intersection peak hour analysis were based on the existing turning movement count data.

A summary of the design traffic characteristics for this study is provided in **Table 17**.



Table 14: Historical D Factors

Roadway	FTO Site	Location	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Average	Maximum	Minimum
I-4	160112	SR 400/I-4, East of SR 559	51.90	52.80	52.70	52.00	51.10	51.40	51.80	52.10	52.40	53.50	52.17	53.50	51.10
	169951	I-4, 0.6 Mi W of SR-559, Polk Co.	51.90	51.80	52.20	52.20	52.20	51.70	52.40	52.10	52.40	52.40	52.13	52.40	51.70
		Average I-4	51.90	52.30	52.45	52.10	51.65	51.55	52.10	52.10	52.40	52.95	52.15	52.95	51.40
SR 559	160131	SR 559, North of SR 400/I-4	55.80	55.90	55.60	55.70	53.30	54.50	54.50	56.00	53.40	55.30	55.00	56.00	53.30
	160133	SR-559, South of SR 400/I-4	55.80	55.90	55.60	55.70	53.30	54.50	54.50	56.00	53.40	55.30	55.00	56.00	53.30
CR 559A	167779	C. Fred Jones Blvd, West of SR 559	-	-	-	-	-	-	-	-	-	55.30	55.30	55.30	55.30
Bay Lake Resort Road	167777	Bay Lk. Resort Rd, Between SR 559 and Truck Stop	-	-	-	-	-	-	-	-	-	55.30	55.30	55.30	55.30

Table 15: Measured D Factors

Roadway	Location	Count Date	Source / Count Type	PM Peak Hour	Total Volume	NB/EB	SB/WB	Measured D
I-4	I-4, 0.6 Mi W of SR-559, Polk Co.	2021	Hourly Continuous Counts*	4:00-5:00 PM	6,259	3,286	2973	52.5%
SR 559	SR 559 north of I-4 WB Ramp	7/19/2022	48-Hour Classification	5:00-6:00 PM	505	246	259	51.3%
SR 559	SR 559 between I-4 Ramps	7/19/2022	48-Hour Volume	5:00-6:00 PM	1,130	531	599	53.0%
SR 559	SR 559 south of I-4 EB Ramp	7/19/2022	48-Hour Classification	5:00-6:00 PM	1,341	582	759	56.6%
SR 559	SR 559 south of CR 559A	7/19/2022	48-Hour Classification	5:00-6:00 PM	800	350	450	56.3%
SR 559	SR 559 south of U-Turn	7/19/2022	48-Hour Volume	5:00-6:00 PM	823	347	476	57.8%
<i>SR 559 Average</i>								<i>55.0%</i>
CR 559A	C. Fred Jones Blvd, West of SR 559	7/19/2022	48-Hour Volume	5:00-6:00 PM	816	378	438	53.7%
Bay Lake Resort Road	Bay Lk. Resort Rd, east of SR 559 NB	7/19/2022	48-Hour Volume	5:00-6:00 PM	520	253	267	51.3%

*Average of Peak Season March/April Weekday Hourly Counts



Table 16: Historical T Factors

Roadway	FTO Site	Location	2006	2007	2008	2009	2010	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Average	Maximum	Minimum
I-4	160112	SR 400/I-4, East of SR 559	19.50	13.90	18.60	18.30	16.60	16.00	14.10	14.60	16.00	15.20	14.50	16.20	15.30	15.30	15.30	18.90	16.14	19.50
	169951	I-4, 0.6 Mi W of SR-559, Polk Co.	-	-	-	-	-	-	11.20	11.00	10.50	10.10	9.40	9.40	10.30	11.20	13.80	13.30	11.02	13.80
		<i>Average I-4</i>	-	-	-	-	-	-	-	12.65	12.80	13.25	12.65	11.95	12.80	12.80	13.25	14.55	16.10	13.58
I-4 Ramps	167051	SR 400/I-4 EB, off-ramp to SR 559	16.70	13.70	29.80	29.80	29.80	15.00	13.10	14.40	14.40	14.30	12.60	14.90	13.10	13.50	18.20	18.90	17.64	29.80
	167052	SR 400/I-4 WB, on-ramp from SR 559	16.70	13.70	25.10	25.10	25.10	15.00	13.10	14.40	14.40	14.30	12.60	14.90	13.10	13.50	18.20	18.90	16.76	25.10
	167053	SR 400/I-4 EB, on-ramp from SR 559	16.70	13.70	28.90	28.90	28.90	15.00	13.10	14.40	14.40	14.30	12.60	14.90	13.10	13.50	18.20	18.90	17.47	28.90
	167054	SR 400/I-4 WB, off-ramp to SR 559	16.70	13.70	25.50	25.50	25.50	15.00	13.10	14.40	14.40	14.30	12.60	14.90	13.10	13.50	18.20	18.90	16.83	25.50
SR 559	160131	SR 559, North of SR 400/I-4	15.80	13.90	14.20	14.50	14.50	14.40	12.50	12.50	12.50	14.00	17.10	14.00	13.90	15.50	13.80	14.00	14.19	17.10
	160133	SR-559, South of SR 400/I-4	28.70	22.40	29.40	25.00	25.00	25.00	22.80	22.80	22.80	10.80	24.30	19.70	16.20	19.30	17.30	17.60	21.82	29.40
		<i>Average SR 559</i>	22.25	18.15	21.80	19.75	19.75	19.70	17.65	17.65	17.65	12.40	20.70	16.85	15.05	17.40	15.55	15.80	18.01	22.25

Table 17: Design Traffic Factors

Roadway	K Factor	D Factor	T Factor	DHT
I-4	9.0	52.3%	16.1%	8.1%
SR 559	9.0	55.0%	21.8	10.9%
I-4 EB Off Ramp	9.0	52.3%	17.6%	8.8%
I-4 WB On Ramp	9.0	52.3%	16.7%	8.4%
I-4 EB On Ramp	9.0	52.3%	17.4%	8.7%
I-4 WB Off Ramp	9.0	52.3%	16.8%	8.4%



5.0 FUTURE CONDITIONS

5.1 Future Year Traffic Forecast

The development of future traffic was based on procedures identified in the FDOT 2019 Project Traffic Forecasting Handbook. This includes evaluating growth rates based on three sources: travel demand model, historical traffic trends and population projections. The selected growth rate is used to develop future design year AADTs and Design Hourly Volumes (DHVs) for the project study area roadways and intersections. Design traffic projections were developed for Opening Year (2026) and Design Year (2036). The operational analysis of future year volumes utilizes one set of volumes for both the No-Build and Build alternatives as the signalization of the ramp terminals at the SR 559 interchange is not expected to produce significant changes in travel patterns.

5.1.1 Travel Demand Model

The travel demand forecasting for Florida is standardized in the Florida Standard Urban Transportation Model Structure (FSUTMS). The District One Regional Planning Model (D1RPM v2.0) is the travel demand model utilized in Polk County. The D1RPM has been calibrated and validated for a base year of 2015 with a horizon year of 2045. A sub-area validation was completed that included model network refinements for the SR 559 interchange area. The validation procedure including any refinements to the model TAZs, model roadway network and/or model parameters and the validation statistics are detailed in the travel demand modeling memo in Appendix D.

To determine whether the model is suitable for performing the future conditions analysis, the model output data is compared to growth trend projections for reasonableness. Trends analysis was completed using historical traffic counts, population estimates, and base/future year model volumes as growth indicators for the project.

5.1.1.1 Travel Demand Model Growth

D1RPM model runs were completed for a 2015 base year and 2045 horizon year utilizing the cost feasible scenario. Model growth rates were computed for the study area roadway segments by comparing existing AADTs to base and future year AADT outputs from the model runs. The resulting growth rates are presented in **Table 18**. The D1RPM model plots are included in Appendix D.

5.1.2 Historical Traffic Trends

Historical traffic data was obtained from the FDOT 2021 Florida Traffic Online database to evaluate traffic growth. Linear regression analysis was performed using data from the historical AADT reports for traffic count stations located within the project area. The years selected for the trends analysis were based on data yielding an R^2 value greater than or equal to 75%. The study area average trend growth rate was 7.1%. The historical growth rates are summarized in **Table 19**. The trends worksheets are included in Appendix D.



Table 18: Model Growth Rates

Roadway	Segment	2022 Existing AADT	2015 Model Base Year AADT	2045 Model Future Year AADT	Growth Rate	
					Existing to Model Future Year	Model Base to Model Future Year
I-4	I-4, West of SR 559	85,000	75,000	177,000	4.7%	4.5%
	I-4, East of SR 559	84,000	79,500	186,000	5.3%	4.5%
SR 559	North of I-4 WB Ramp	6,810	5,800	17,500	6.8%	6.7%
	Between I-4 Ramps	17,663	9,800	31,000	3.3%	7.2%
	South of I-4 EB Ramp	21,034	14,000	30,500	2.0%	3.9%
	South of CR 559A (C. Fred Jones Blvd.)	11,377	11,000	15,000	1.4%	1.2%
CR 559A (C. Fred Jones Blvd.)	West of SR 559	10,268	2,400	11,500	0.5%	12.6%
	Bay Lake Resort Rd., East of SR 559	9,816	2,100	11,000	0.5%	14.1%
I-4 EB Off-Ramp & I-4 WB On-Ramp	-	11,177	6,500	19,100	3.1%	6.5%
I-4 EB On-Ramp & I-4 WB Off-Ramp	-	11,153	11,000	29,000	7.0%	5.5%
Area-wide		267,938	217,100	527,600	4.2%	4.8%



Table 19: Traffic Growth Trend Analysis

FTO Count Site	Location	2021 AADT	2036 AADT	Trend R ²	Growth Rate
16-0112	SR 400/I-4, East of SR 559	80,000	154,000	89.84%	4.85%
16-9951	I-4, 0.6 Mile W of SR 559, Polk Co.	74,000	164,000	91.35%	4.53%
160131	SR 559, North Of SR 400/I-4	6,900	10,600	87.32%	8.57%
160133	SR-559, South of SR 400/I-4	21,500	35,900	84.13%	10.57%
Average (for R ² ≥75%):					7.13%

5.1.3 Population Growth

The population estimates and projections for the study area were also reviewed to determine growth trends. According to the University of Florida Bureau of Economic and Business Research (BEBR) Florida Population Studies, Volume 55, Bulletin 192 (February 2022), the low, medium and high population projections for Polk County in year 2050 are 808,000, 1,056,200, and 1,304,400, respectively. These projections result in an average of 0.27%, 1.42%, and 2.56% linear growth per year, respectively. The existing population estimate along with projected growth is illustrated in **Figure 18**; data is included in Appendix D.

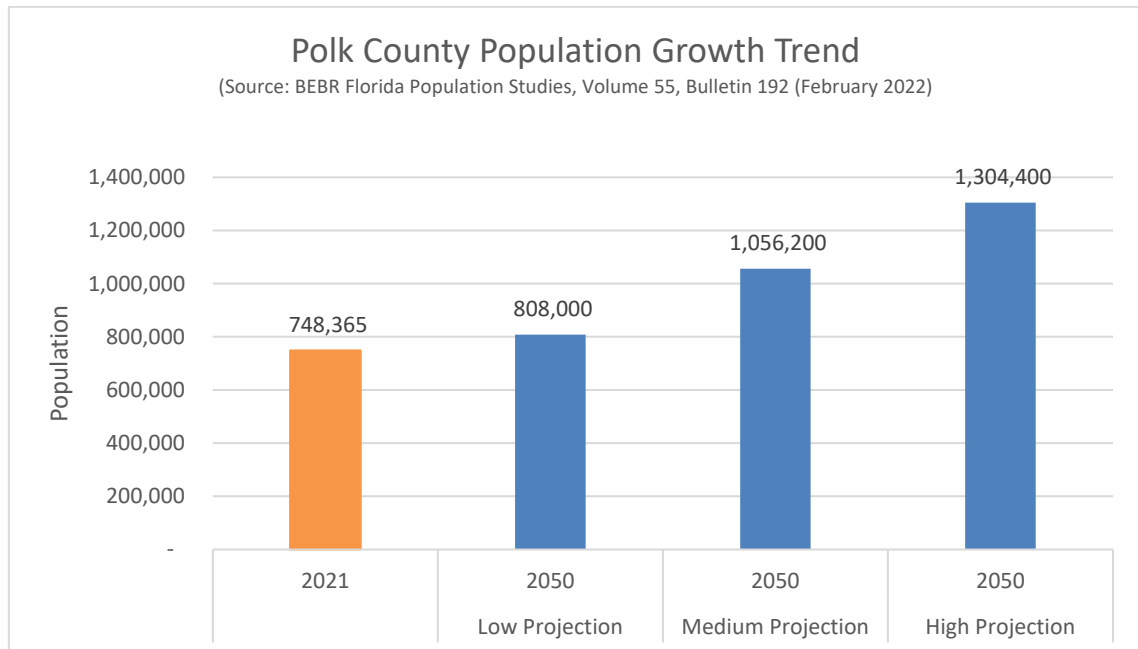


Figure 18: Polk County Population Growth Trend



5.1.4 Growth Rate Summary

The growth rate based on the travel demand model volumes was 4.2% to 4.8%, the historical traffic average growth was 7.1% and the population growth trend yielded an average growth rate of 1.4%. The historical traffic trends analysis growth rate of 7.1% represents a higher-than-average growth rate while the population growth represents a lower rate. Based on a review of the various sources and in consultation with the District modeling staff, it was determined that the model growth is reasonable for this sub-area. Therefore, it is recommended to use the existing to future model year growth rates as previously shown in **Table 18** for this project. In addition, a maximum growth rate of 5.0% is recommended for the I-4 ramp segments. The resulting design year 2036 AADTs using the selected growth rates are summarized in **Table 20** and depicted in **Figure 19**.

Table 20: Future Design Year 2036 AADTs

Roadway	Segment	2022 Existing AADT	Growth Rate	Year 2036 Future AADT
I-4	I-4, West of SR 559	85,000	4.7%	141,000
	I-4, East of SR 559	84,000	5.1%*	144,000*
SR 559	North of I-4 WB Ramp	6,810	6.8%	13,500
	Between I-4 Ramps	17,663	3.3%	26,000
	South of I-4 EB Ramp	21,034	2.0%	27,000
	South of CR 559A (C. Fred Jones Blvd.)	11,377	1.4%	13,500
CR 559A (C. Fred Jones Blvd.)	West of SR 559	10,268	0.5%	11,000
	Bay Lake Resort Rd., East of SR 559	9,816	0.5%	10,500
I-4 EB Off-Ramp & WB On-Ramp	South Side of I-4	11,177	3.1%	16,000
	North Side of I-4	11,153	5.0%	19,000

*The AADT along I-4 on the east side of the interchange was determined by balancing the volumes; the resulting growth rate is comparable to the model computed growth.



I-4 at SR 559 Interchange

FPID: 447436-2-52-01 Polk County



LEGEND	
	NUMBER OF LANES
	FUTURE AADT

* Signals proposed in the Future Year Build Alternative to replace existing stop control

FIGURE 19: FUTURE (2036) ANNUAL AVERAGE DAILY TRAFFIC (AADT)





5.2 Future Year Design Hour Volumes

Directional design hour volumes (DDHVs) were developed based on the procedures in the FDOT 2019 Project Traffic Forecasting Handbook. The model developed AADTs along with the previously determined design traffic factors (K and D) were used as a basis to develop future peak hour volumes along the I-4 mainline and SR 559 corridor. Furthermore, AADT, K and D data was used as inputs in the FDOT Turns5-V14 program to develop an initial estimate of peak hour intersection turning movement volumes. The outputs from Turns5 were further evaluated for reasonableness. In some cases, the Turns5 volumes did not reflect growth between design hour turning movement estimates for 2022 and the future years. These intersection volumes were manually adjusted to show growth from opening year to the design year. Additionally, traffic volumes were further refined to produce balanced traffic flows along I-4 and SR 559. The resulting balanced traffic volumes for the AM and PM peak hours for opening and design years are shown in **Figure 20** and **Figure 21**. The Turns5 worksheets are included in Appendix E.

5.3 Future No-Build Traffic Operational Analysis

The peak hour traffic operations under No-Build conditions were evaluated for opening and design years. The analyses assumed no changes in geometry or traffic control at the existing ramp terminals or at the study intersection to the south at SR 559 and CR 559A (C. Fred Jones Boulevard).

5.3.1 Opening Year 2026 No-Build Freeway Analysis

Based on the future 2026 no-build operational analysis, all freeway segments within the study area limits are projected to operate at LOS D or better during both peak hours. **Table 21** provides a summary of the future 2026 no-build freeway segments operational analysis; Appendix F contains the HCS outputs.

5.3.2 Opening Year 2026 No-Build Intersections Analysis

The results of the future 2026 no-build operational analysis of the SR 559 and I-4 Westbound ramp terminal show that the westbound left turn movement from the exit ramp operates at LOS F during both peak hours. Additionally, the projected left turn queues exceed the available storage length and are expected to continue blocking right turn movements.

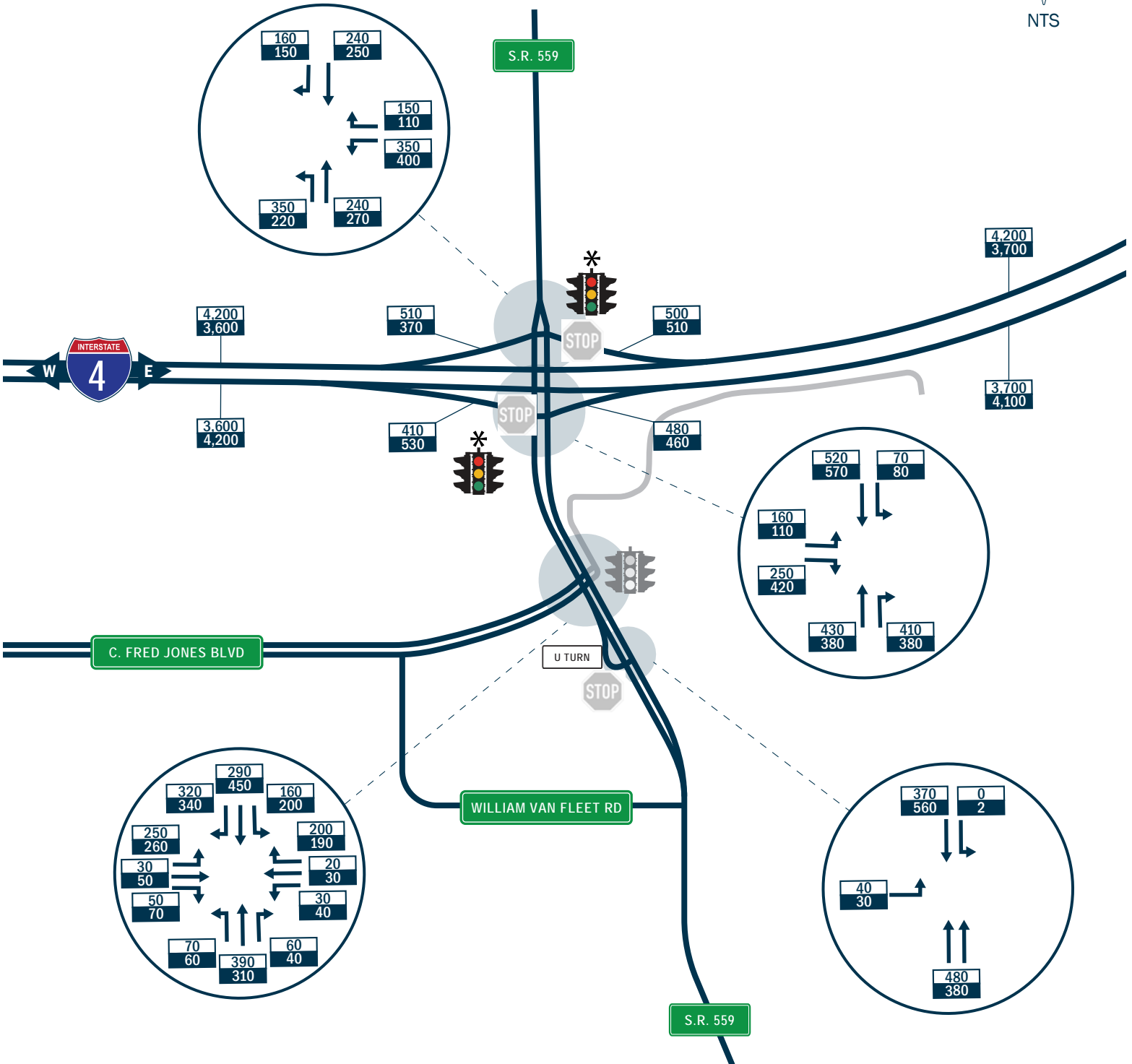
The eastbound left turn movement from the exit ramp at the SR 559 and I-4 Eastbound ramp terminal intersection is projected to operate at LOS E during both peak hours with left and right turn queues exceeding the available storage length.

The SR 559 and CR 559A (C. Fred Jones Boulevard) is projected to operate at an overall LOS C during both peak hours. The existing queue storage lengths are sufficient for the projected queues during both peak hours. **Table 22** provides a summary of the opening year 2026 no-build intersection operational analysis; Appendix F contains the Synchro outputs.



I-4 at SR 559 Interchange

FPID: 447436-2-52-01 Polk County



LEGEND

AM	FUTURE PEAK HOUR TRAFFIC VOLUMES
PM	

* Signals proposed in the Future Year Build Alternative to replace existing stop control

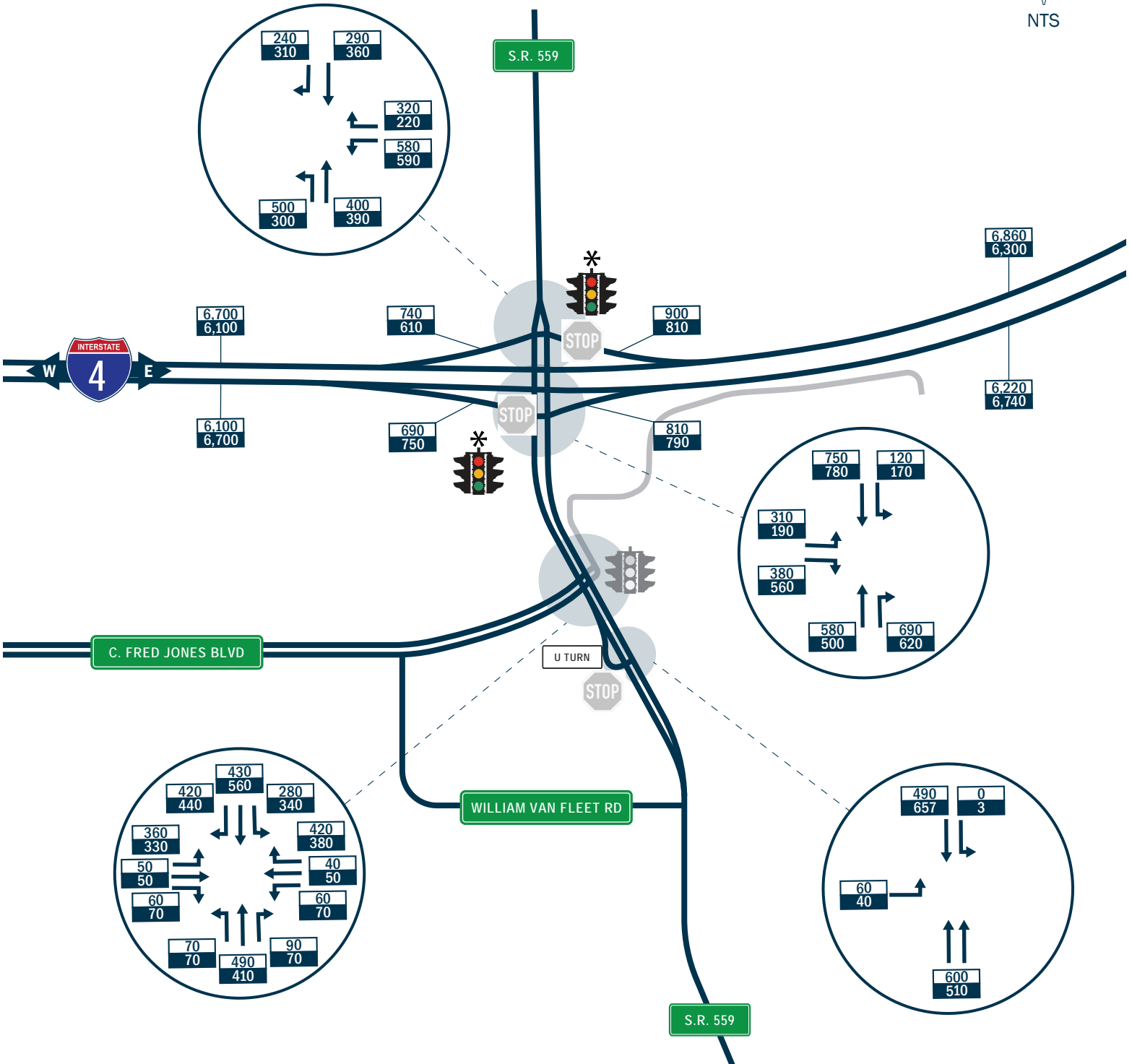


FIGURE 20: 2026 FUTURE PEAK HOUR TRAFFIC VOLUMES **46**



I-4 at SR 559 Interchange

FPID: 447436-2-52-01 Polk County



LEGEND

AM	FUTURE PEAK HOUR TRAFFIC VOLUMES
PM	

* Signals proposed in the Future Year Build Alternative to replace existing stop control



FIGURE 21: 2036 FUTURE PEAK HOUR TRAFFIC VOLUMES **47**



Table 21: Opening Year 2026 No-Build Peak Hour Freeway Level of Service Analysis

Freeway Segment	Segment Type	AM Peak Hour		PM Peak Hour	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
I-4 Eastbound					
West of SR 559	Basic	20.7	C	24.6	C
EB Off ramp to SR 559	Diverge	28.1	D	31.5	D
Between off ramp & on ramp	Basic	18.3	C	21.1	C
EB On ramp from SR 559	Merge	24.8	C	27.1	C
East of SR 559	Basic	21.1	C	24.1	C
I-4 Westbound					
East of SR 559	Basic	24.6	C	21.3	C
WB Off ramp to SR 559	Diverge	31.4	D	28.9	D
Between off ramp & on ramp	Basic	21.3	C	18.3	C
WB On ramp from SR 559	Merge	28.8	D	25.0	C
West of SR 559	Basic	24.7	C	20.4	C
Note: Merge/diverge area densities listed are for the ramp segments					

Table 22: Opening Year 2026 No-Build Peak Hour Intersection Level of Service

Intersection	Lane Group	AM Peak Hour			PM Peak Hour			Existing Storage Length
		Delay (sec/veh)	LOS	95 th % Queue (ft) ¹	Delay (sec/veh)	LOS	95 th % Queue (ft) ¹	
SR 559 and I-4 Westbound (Unsignalized) ²	WB Left	>300	F	850	>300	F	800	360
	WB Right	10.9	B	25	10.8	B	25	385
	NB Left	9.2	A	50	8.6	A	25	590
SR 559 and I-4 Eastbound (Unsignalized) ^{2,3}	EB Left	49.5	E	125	36	E	75	30
	EB Right	14	B	50	20	C	125	30
	SB Left	8.7	A	25	8.3	A	25	450
SR 559 and CR 559A (C. Fred Jones Blvd.) (Signalized) ⁴	EB Left	22.9	C	175	22.6	C	175	590
	EB Right	16.5	B	25	16.2	B	50	300
	WB Left	17	B	25	17.1	B	25	410
	WB Right	20.4	C	125	19	B	125	335
	NB Left	15.3	B	50	16	B	50	250
	NB Right	21.8	C	50	23.1	C	25	250
	SB Left	18.3	B	100	19	B	125	430
	SB Right	0	A	0	0	A	0	280
Overall		20.8	C	-	20.7	C	-	-
Notes: 1. 95 th percentile queue lengths computed using 25 ft/vehicle and rounded up to the nearest 25 ft 2. Unsignalized intersection - delay/LOS reported for major street left and minor street (exit ramp) left and right turn movements 3. SR 559 inside Northbound through lane becomes a lane drop just north of the Eastbound Ramp terminal 4. CR 559A outside Eastbound through lane becomes a lane drop at SR 559								



5.3.3 Design Year 2036 No-Build Freeway Analysis

Based on the future 2036 no-build operational analysis, the majority of the freeway mainline and ramp segments within the study area limits are projected to operate at LOS F during both peak hours. **Table 23** provides a summary of the future 2036 no-build freeway segments operational analysis; Appendix F contains the HCS outputs.

Table 23: Design Year 2036 No-Build Peak Hour Freeway Level of Service Analysis

Freeway Segment	Segment Type	AM Peak Hour		PM Peak Hour	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
I-4 Eastbound					
West of SR 559	Basic	49.4	F	50.1	F
EB Off ramp to SR 559	Diverge	40.7	F	46.6	F
Between off ramp & on ramp	Basic	64.7	F	66.4	F
EB On ramp from SR 559	Merge	39.1	F	42.7	F
East of SR 559	Basic	35.0	F	35.0	F
I-4 Westbound					
East of SR 559	Basic	40.4	F	40.4	F
WB Off ramp to SR 559	Diverge	40.2	F	40.1	F
Between off ramp & on ramp	Basic	29.9	D	30.7	D
WB On ramp from SR 559	Merge	38.1	F	37.4	E
West of SR 559	Basic	38.1	F	37.6	F
Note: Merge/diverge area densities listed are for the ramp segments					

5.3.4 Design Year 2036 No-Build Intersections Analysis

The results of the future 2036 no-build operational analysis of the SR 559 and I-4 Westbound ramp terminal show that the westbound left turn movement from the exit ramp operates at LOS F. Additionally, the projected left turn queues exceed the existing westbound off-ramp length of ~1,600 feet and are expected to back up to the I-4 mainline. The eastbound left turn movement from the exit ramp at the SR 559 and I-4 Eastbound ramp terminal intersection is projected to operate at LOS F during both peak hours with left and right turn queues exceeding the available storage length.

The SR 559 and CR 559A (C. Fred Jones Boulevard) is projected to operate at an overall LOS D during both peak hours. The projected westbound right turn queue during the AM peak hour exceeds the existing queue storage length. **Table 24** provides a summary of the design year 2036 no-build intersection operational analysis; Appendix F contains the Synchro outputs.



Table 24: Design Year 2036 No-Build Peak Hour Intersection Level of Service

Intersection	Lane Group	AM Peak Hour			PM Peak Hour			Existing Storage Length
		Delay (sec/veh)	LOS	95 TH % Queue (ft) ¹	Delay (sec/veh)	LOS	95 TH % Queue (ft) ¹	
SR 559 and I-4 Westbound (Unsignalized) ²	WB Left	>300	F	1,850	>300	F	1,700	360
	WB Right	17.5	C	100	14.1	B	50	385
	NB Left	10.6	B	75	9.5	A	50	590
SR 559 and I-4 Eastbound (Unsignalized) ^{2,3}	EB Left	>300	F	775	>300	F	425	30
	EB Right	27.5	D	175	74.9	F	425	30
	SB Left	9.7	A	25	9.1	A	25	450
SR 559 and CR 559A (C. Fred Jones Blvd.) (Signalized) ⁴	EB Left	58.4	E	450	35.7	D	325	590
	EB Right	17.5	B	50	16.2	B	50	300
	WB Left	18.9	B	50	17.6	B	50	410
	WB Right	42	D	425	27	C	300	335
	NB Left	21.7	C	50	23.1	C	50	250
	NB Right	31.2	C	100	31.9	C	75	250
	SB Left	97.2	F	300	124	F	425	430
	SB Right	0	A	0	0	A	0	280
	Overall	43.7	D	-	42.8	D	-	-

Notes: 1. 95th percentile queue lengths computed using 25 ft/vehicle and rounded up to the nearest 25 ft
2. Unsignalized intersection - delay/LOS reported for major street left and minor street (exit ramp) left and right turn movements
3. SR 559 inside Northbound through lane becomes a lane drop just north of the Eastbound Ramp terminal
4. CR 559A outside Eastbound through lane becomes a lane drop at SR 559

5.4 Future Build Traffic Operational Analysis

The peak hour traffic operations under Build conditions were evaluated for opening and design years. The freeway analyses assumed no changes in geometry on the I-4 mainline for opening year 2026. For design year 2036, I-4 was assumed to be widened to four lanes in each direction. The Polk Transportation Planning Organization's (TPO) adopted 2045 Long Range Transportation Plan (LRTP), *Momentum 2045*, lists the I-4 widening to ten lanes (express lanes) as a high priority, cost-feasible project in the Tier 2 and Tier 3 phases (2026-2045). Additionally, the *I-4 (SR 400) from West of SR 570 (Polk Parkway) to West of US 27 Interchange PD&E Study (Phase 1)* identified the need for widening I-4 to eight lanes by 2031. The intersection operational analyses assumed signalization of both ramp terminals. In addition, Synchro's network signal timing optimization was utilized to determine future year cycle lengths and offsplits. The optimization timing plan resulted in the SR 559 and CR 559A (C. Fred Jones Boulevard) intersection set to actuated-uncoordinated, as it is in existing conditions.



5.4.1 Opening Year 2026 Build Freeway Analysis

The freeway operational analysis for opening year 2026 under build conditions is the same as the no-build 2026 analysis previously shown in **Table 21**, as there are no volume or geometric changes to impact I-4 operations.

5.4.2 Opening Year 2026 Build Intersections Analysis

The results of the future 2026 build operational analysis of the SR 559 and I-4 Westbound ramp terminal show that the overall intersection operates at LOS B during both peak hours with all movements at LOS D or better. The SR 559 and I-4 Eastbound ramp terminal intersection operates at overall LOS B and LOS C during the AM and PM peak hours, respectively, with all movements at LOS D or better. The SR 559 and CR 559A (C. Fred Jones Boulevard) is projected to operate at LOS C during both peak hours. Additionally, the projected left turn queues at all three study intersections during both peak hours are expected to be accommodated by the available queue storage lengths. **Table 25** provides a summary of the opening year 2026 build intersection operational analysis; Appendix F contains the Synchro outputs.

Table 25: Opening Year 2026 Build Peak Hour Intersection Level of Service

Intersection	Lane Group	AM Peak Hour			PM Peak Hour			Existing Storage Length
		Delay (sec/veh)	LOS	95 TH % Queue (ft) ¹	Delay (sec/veh)	LOS	95 TH % Queue (ft) ¹	
SR 559 and I-4 Westbound (Signalized)	WB Left	46.3	D	350	42.9	D	400	360 ⁴
	WB Right	0	A	0	0	A	0	385
	NB Left	9.0	A	75	2.9	A	25	590
	Overall	18.8	B	-	18.2	B	-	-
SR 559 and I-4 Eastbound (Signalized) ²	EB Left/Right	34.9	C	350	37.4	D	475	30 ⁴
	SB Left	1.2	A	25	25.1	C	75	450
	Overall	13.7	B	-	26.0	C	-	-
SR 559 and CR 559A (C. Fred Jones Blvd.) (Signalized) ³	EB Left	22.2	C	175	21.8	C	175	590
	EB Right	16.0	B	25	15.7	B	50	300
	WB Left	16.4	B	25	16.5	B	25	410
	WB Right	19.8	B	125	18.4	B	100	335
	NB Left	15.4	B	50	16.1	B	50	250
	NB Right	21.0	C	50	22.1	C	25	250
	SB Left	18.8	B	100	20.1	C	125	430
	SB Right	0	A	0	0	A	0	280
Overall	20.4	C	-	20.4	C	-	-	

Notes: 1. 95th percentile queue lengths computed using 25 ft/vehicle and rounded up to the nearest 25 ft
2. SR 559 inside Northbound through lane becomes a lane drop just north of the Eastbound Ramp terminal
3. CR 559A outside Eastbound through lane becomes a lane drop at SR 559
4. The full length of the off-ramp segment serves as storage; for the WB ramp an additional 700 feet is available and for the EB ramp, an additional 970 feet.



5.4.3 Design Year 2036 Build Freeway Analysis

Based on the future 2036 build operational analysis, all freeway segments within the study area limits are projected to operate at LOS D or better during both peak hours except for the Eastbound off ramp during the PM peak and the Westbound off ramp during both peak hours. **Table 26** provides a summary of the design year 2036 build freeway segments operational analysis; Appendix F contains the HCS outputs.

A ramp capacity analysis was conducted for the study ramp segments as shown in **Table 27**. Ramp capacities for 1-lane ramps from Exhibit 14-12 of the HCM (6th Edition) were adjusted for ramp truck percentage and peak hour factor and used in the capacity analysis. Under the design year 2036 Build conditions, all the ramp segments have demand (volume) over capacity ratios of less than 0.50.

Table 26: Design Year 2036 Build Peak Hour Freeway Level of Service Analysis

Freeway Segment	Segment Type	AM Peak Hour		PM Peak Hour	
		Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
I-4 Eastbound					
West of SR 559	Basic	27.6	D	31.7	D
EB Off ramp to SR 559	Diverge	34.1	D	37.0	E
Between off ramp & on ramp	Basic	23.6	C	26.6	D
EB On ramp from SR 559	Merge	30.3	D	32.1	D
East of SR 559	Basic	28.3	D	32.0	D
I-4 Westbound					
East of SR 559	Basic	32.9	D	28.8	D
WB Off ramp to SR 559	Diverge	38.5	E	35.6	E
Between off ramp & on ramp	Basic	26.7	D	24.0	C
WB On ramp from SR 559	Merge	32.9	D	30.1	D
West of SR 559	Basic	31.7	D	27.6	D
Note: Merge/diverge area densities listed are for the ramp segments					

Table 27: Design Year 2036 Build Ramp Capacity Analysis

Freeway Ramp Segments	Capacity (pc/h)	AM Peak		PM Peak	
		Ramp Volume	v/c	Ramp Volume	v/c
I-4 EB Off ramp to SR 559	1,820	690	0.38	750	0.41
I-4 WB On ramp from SR 559	1,825	740	0.40	610	0.33
I-4 WB Off ramp to SR 559	1,825	900	0.49	810	0.44
I-4 EB On ramp from SR 559	1,820	810	0.44	790	0.43



5.4.4 Design Year 2036 Build Intersections Analysis

The results of the future 2036 build operational analysis of the SR 559 and I-4 Westbound ramp terminal show that the overall intersection operates at LOS D and LOS B, during the AM and PM peak hours, respectively. The westbound left turn movement is LOS F during the AM peak hour with a 95th percentile queue length of 975 feet. The projected 2036 westbound left turn volume requires dual left turn lanes. However, at this time there is no funding allocated for construction of additional improvements beyond those evaluated in this IOAR. The westbound ramp queue can be accommodated in the full length of the ramp (1,600 feet from stop bar to painted exit gore + 200 taper). The installation of the traffic signals at the interchange is anticipated to provide operational benefits as shown in the preceding analyses, with a significant reduction in delays and left turn queues. The District traffic operations should continue to monitor the interchange operations to ensure that there are no detrimental impacts to the I-4 mainline.

The SR 559 and I-4 Eastbound ramp terminal intersection operates at overall LOS B and LOS A, during the AM and PM peak hours, respectively, with all movements at LOS D or better. The projected left turn queues at the eastbound ramp are expected to be accommodated by the available full ramp length (1,200 feet from stop bar to painted exit gore + 200 taper).

The SR 559 and CR 559A (C. Fred Jones Boulevard) is projected to operate at overall LOS D during both peak hours. **Table 28** provides a summary of the design year 2036 build intersection operational analysis; Appendix F contains the Synchro outputs.

Table 28: Design Year 2036 Build Peak Hour Intersection Level of Service

Intersection	Lane Group	AM Peak Hour			PM Peak Hour			Existing Storage Length
		Delay (sec/veh)	LOS	95 TH % Queue (ft) ¹	Delay (sec/veh)	LOS	95 TH % Queue (ft) ¹	
SR 559 and I-4 Westbound (Signalized)	WB Left	112.8	F	975	53.2	D	600	360 ⁴
	WB Right	0	A	0	0	A	0	385
	NB Left	0	A	0	0	A	0	590
	Overall	37.0	D	-	18.8	B	-	-
SR 559 and I-4 Eastbound (Signalized) ²	EB Left/ Right	43.9	D	750	53.2	D	750	30 ⁴
	SB Left	0	A	0	24.0	C	125	450
	Overall	29.5	C	-	29.9	C	-	-



Table 28: Design Year 2036 Build Peak Hour Intersection Level of Service (Continued)

Intersection	Lane Group	AM Peak Hour			PM Peak Hour			Existing Storage Length
		Delay (sec/veh)	LOS	95 TH % Queue (ft) ¹	Delay (sec/veh)	LOS	95 TH % Queue (ft) ¹	
SR 559 and CR 559A (C. Fred Jones Blvd.) (Signalized) ³	EB Left	45.9	D	400	35.7	D	325	590
	EB Right	15.8	B	50	16.2	B	50	300
	WB Left	17.0	B	50	17.6	B	50	410
	WB Right	33.1	C	375	27.0	C	300	335
	NB Left	32.7	C	75	23.1	C	50	250
	NB Right	30.7	C	100	31.9	C	75	250
	SB Left	89.3	F	300	124.0	F	425	430
	SB Right	0	A	0	0	A	0	280
	Overall	41.1	D	-	42.8	D	-	-

Notes: 1. 95th percentile queue lengths computed using 25 ft/vehicle and rounded up to the nearest 25 ft
 2. SR 559 inside Northbound through lane becomes a lane drop just north of the Eastbound Ramp terminal
 3. CR 559A outside Eastbound through lane becomes a lane drop at SR 559
 4. The full length of the off-ramp segment serves as storage; for the WB ramp an additional 700 feet is available and for the EB ramp, an additional 970 feet.

5.5 Future Safety Analysis

The safety impacts due to the proposed build alternative were evaluated for the I-4 and SR 559 ramp terminal intersections. The future safety analysis was based on applying a crash modification factor (CMF) to the observed crash history. The CMF was obtained from Table 14-7 of the Highway Safety Manual (HSM, 1st Ed. 2010). The CMF for converting an intersection from stop control to signal control is 0.56, resulting in a potential 44% reduction of all crash types and severities. With the build alternative, the estimated crash frequency is 3.3 crashes/year at the Westbound ramp terminal, and 3.9 crashes/year at the Eastbound ramp terminal. The results of the ramp terminal intersections CMF analysis are summarized in **Table 29**.

Table 29: Build Alternative Crash Frequency Analysis

Intersection	5-Year Observed Crashes (2015-2019)	Annual Observed Crashes	CMF ¹	Std. Error ¹	Annual Estimated Crashes	95% Confidence Interval (C.I.) ²
SR 559 and I-4 WB	29	5.8	0.56	0.03	3.3	2.91 to 3.59
SR 559 and I-4 EB	35	7	0.56	0.03	3.9	3.51 to 4.33

Notes: 1. CMF and Std. Error values from HSM Table 14-7
 2. 95% C.I. = $CMF \pm (SE * 1.96)$, where SE=Standard Error, 1.96=Statistical Multiplier for given C.I.



In addition to the preceding CMF analysis, a qualitative safety analysis is provided for the I-4 ramp terminal intersections. Signalization of both ramp terminals provides a protected green phase for left turn movements exiting from the off-ramps. The signal assigns right-of-way to the intersection rather than relying on the exit ramp drivers to identify an appropriate gap in traffic, reducing the number of conflicts at the intersections. Additionally, at the Eastbound ramp terminal, the existing exit ramp configuration provides a channelized right turn with a large right turn radius and a wide entry angle for right turning vehicles. The proposed build alternative design concept includes the following countermeasures to improve sight distance for the Eastbound approach: removal of the striped channelized island, adjustment of the stop bar position and additional pavement markings around the radius to help delineate right turns. The pavement marking delineation provides a tighter radius that is conducive to slower vehicle approach speeds. It also reduces the entry angle which along with the proposed stop bar location positions right turning vehicles nearly perpendicular to the conflicting southbound through vehicle flow, reducing the need for drivers to use an excessive head turn to check for upstream oncoming traffic. In addition, the future year operational analysis assumed that right turns on red are restricted for the Eastbound right turn movements. This operation addresses sight distance issues by assigning right-of-way to eastbound vehicles during the eastbound approach green phase, eliminating the need for eastbound vehicles to identify appropriate gaps in the southbound traffic.



6.0 Funding Plan and Schedule

The funding for the proposed improvements in this IOAR is available through FDOT's State Transportation Improvement Program (STIP) projects. District Dedicated Revenue funds programmed include \$1.27M for construction in fiscal year 2024 through outside consultant/contractors and \$41,240 for in-house construction support. The Long Range Estimates (LRE) for the proposed improvements are provided in Appendix G.



7.0 Conclusions and Recommendations

The proposed improvements include installation of traffic signals at the existing stop-controlled ramp terminal intersections at the I-4 and SR 559 interchange. This IOAR was prepared to document the traffic operations and safety analysis of the proposed modifications. The IOAR addresses the following policy points included in the Federal Highway Administration's (FHWA) *Policy on Access to the Interstate System*.

7.1 FHWA Policy Point 1

An operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility (which includes mainline lanes, existing, new, or modified ramps, and ramp intersections with crossroad) or on the local street network based on both the current and the planned future traffic projections. The analysis should, particularly in urbanized areas, include at least the first adjacent existing or proposed interchange on either side of the proposed change in access (Title 23, Code of Federal Regulations (CFR), paragraphs 625.2(a), 655.603(d) and 771.111(f)). The crossroads and the local street network, to at least the first major intersection on either side of the proposed change in access, should be included in this analysis to the extent necessary to fully evaluate the safety and operational impacts that the proposed change in access and other transportation improvements may have on the local street network (23 CFR 625.2(a) and 655.603(d)). Requests for a proposed change in access should include a description and assessment of the impacts and ability of the proposed changes to safely and efficiently collect, distribute, and accommodate traffic on the Interstate facility, ramps, intersection of ramps with crossroad, and local street network (23 CFR 625.2(a) and 655.603(d)). Each request should also include a conceptual plan of the type and location of the signs proposed to support each design alternative (23 U.S.C. 109(d) and 23 CFR 655.603(d)).

The operational analysis documented in this IOAR included the I-4 ramp merge/diverge areas, the I-4 at SR 559 ramp terminal intersections, and the SR 559 arterial. The analysis demonstrates that both of the I-4 ramp terminal intersections at SR 559 are anticipated to experience excessive delays and to operate at LOS F during the design year 2036 under the no-build condition. Moreover, the 95th percentile off-ramp left turn queues are expected to extend beyond the available off-ramp storage as in the existing conditions. The proposed improvement to install a traffic signal at the ramp terminal intersections provides significant benefits to the operations of the interchange by improving delays and managing the queues for the exit ramp left turn movements. In addition, the traffic signal installation has potential safety benefits to address the existing sight distance deficiencies identified at the I-4 Eastbound ramp intersection. The operational and safety analysis has concluded that the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility, the adjacent interchanges, or on the local street network based on both the current and the planned future traffic projections.



7.2 FHWA Policy Point 2

The proposed access connects to a public road only and will provide for all traffic movements. Less than "full interchanges" may be considered on a case-by-case basis for applications requiring special access, such as managed lanes (e.g., transit or high occupancy vehicle and high occupancy toll lanes) or park and ride lots. The proposed access will be designed to meet or exceed current standards (23 CFR 625.2(a), 625.4(a)(2), and 655.603(d)). In rare instances where all basic movements are not provided by the proposed design, the report should include a full-interchange option with a comparison of the operational and safety analyses to the partial-interchange option. The report should also include the mitigation proposed to compensate for the missing movements, including wayfinding signage, impacts on local intersections, mitigation of driver expectation leading to wrong-way movements on ramps, etc. The report should describe whether future provision of a full interchange is precluded by the proposed design.

The existing I-4 and SR 559 interchange is a diamond interchange that connects to a public road (SR 559) and provides for all traffic movements. The recommended I-4 and SR 559 interchange improvements maintain the diamond interchange configuration and continue to provide for all traffic movements to and from SR 559. The proposed access connects to a public road only and will provide for all traffic movements. Therefore, the Build Alternative is recommended for implementation at the I-4 and SR 559 interchange.

7.3 Recommendation

It is recommended that the Build Alternative be constructed to improve the safety and operational conditions at the I-4 and SR 559 interchange. It is also recommended that the intersections of SR 559 at the I-4 Eastbound and Westbound ramps and SR 559 and CR 559A (C. Fred Jones Boulevard) be continuously monitored for improvements to ensure that there are no detrimental impacts to the interstate facility. Lastly, it is recommended that the District continues to evaluate ultimate improvements for the I-4 freeway segment in this area as part of the I-4 Master Plan study in order to adequately prioritize improvements necessary to achieve acceptable operations at the interchange. The conceptual signing plan for the Build Alternative is provided in Appendix H.



APPENDICES



I-4 at SR 559 Interchange
FPID 447436-2-52-01 Polk County



Appendix A
Methodology Statement



Florida Department of Transportation Interchange Access Request Methodology Statement

Type of Request: IJR IMR IOAR SIMR
 Type of Process: Programmatic Non-Programmatic

Interstate 4 (I-4) at State Road (SR) 559 Interchange – Operational Improvements
Polk County, FL, FDOT District One

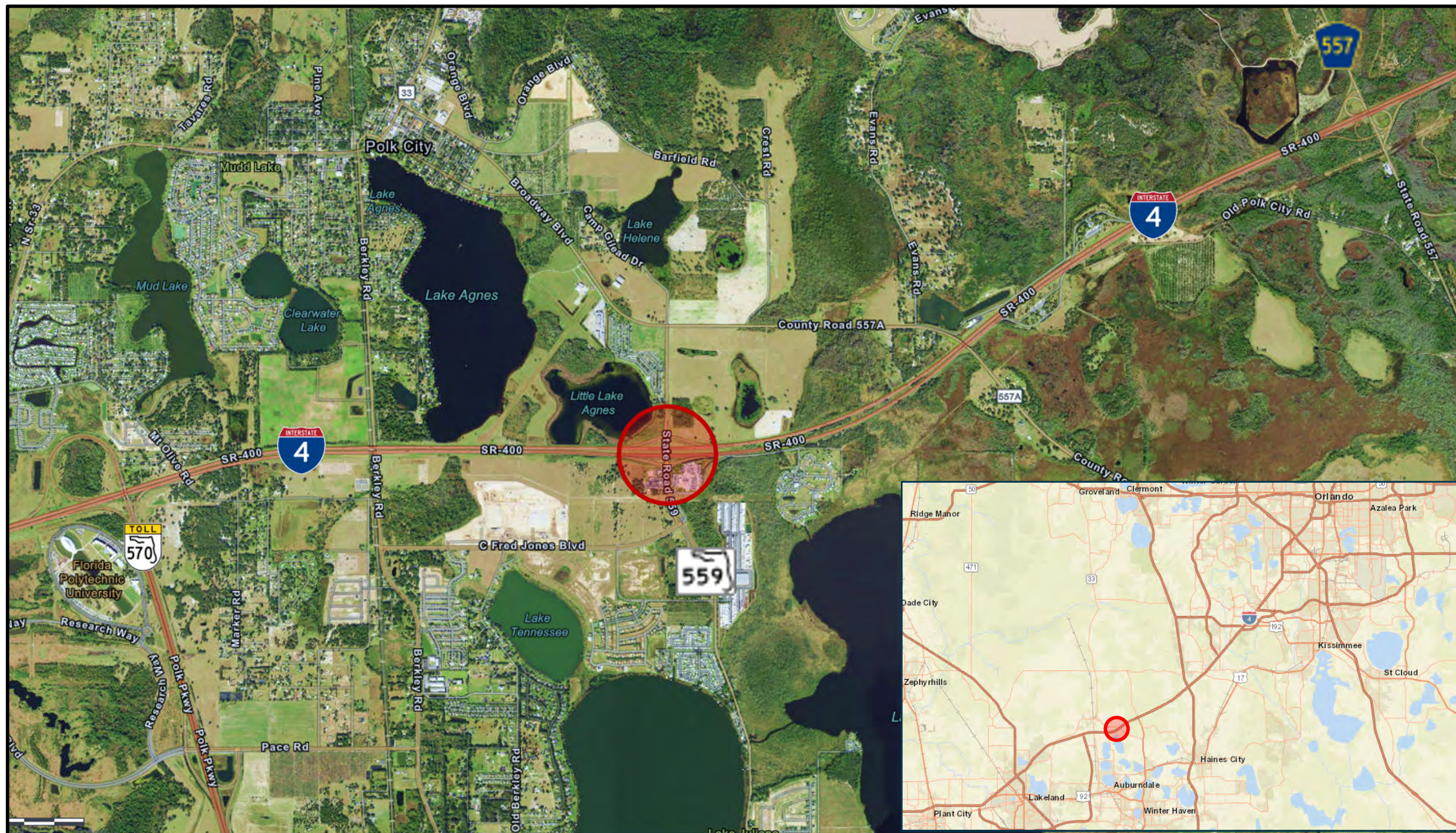
Date: June 17, 2022

1. Project Description

The I-4 at SR 559 interchange is located near Auburndale in Polk County, Florida (Figure 1). I-4 is a six-lane limited access facility with a posted speed limit of 70 miles per hour (mph). In the vicinity of the interchange, I-4 is classified primarily as a rural principal arterial interstate except for the segment west of SR 559 to SR 33. SR 559 is an urban minor arterial with a four-lane divided section posted at 45 mph south of I-4 and two-lane undivided section with posted speed of 55 mph north of I-4. SR 559 connects to I-4 with four single-lane ramps forming a diamond interchange; both the I-4 eastbound and westbound exit ramps are stop-controlled at the terminals. The westbound off ramp provides 350' exclusive left and right turn lanes. Adjacent interchanges include the SR 557 interchange approximately 3.9 miles to the northeast and the SR 570 (Polk Parkway) interchange 2.75 miles to the west.

Improvements at the I-4 and SR 559 interchange were completed in early 2017 and included a new SR 559 bridge over I-4 to accommodate the future expansion of I-4 and the two-lane to four-lane widening of SR 559 from CR 559A (C. Fred Jones Boulevard) to north of the I-4 westbound ramp. The I-4 eastbound lanes were shifted south to accommodate future expansion of I-4 in the median.

FDOT has identified this interchange for additional improvements as part of the adjacent I-4 resurfacing project to the north. The intent of the I-4 /SR 559 interchange modifications is to address traffic operational and safety issues related to Westbound exit ramp traffic queues and Eastbound exit ramp sight distance through signalization and ramp widening. The proposed improvements add signals at both of the ramp terminals north and south of I-4 and widen a portion of the eastbound off ramp to provide separate left and right turn lanes and an emergency stopping shoulder.



	I-4 at SR 559 IOAR		PROJECT LOCATION MAP	FIGURE 1
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I-4 at SR 559 IOAR



The signalization of the interchange was analyzed in an IOAR technical memorandum prepared for District 1 in October 2011 and concluded that the installation of the signals would not impact interchange operations based on 2035 projected queues. However, a traffic signal warrant study completed in April 2022 for the I-4 Westbound Ramp terminal intersection indicated that queuing is an issue at the off ramp. The I-4 Westbound Ramp terminal intersection signal warrant analysis also recommended a traffic signal be installed based on existing traffic volumes and delay criteria meeting Manual on Uniform Traffic Control Devices (MUTCD) traffic signal warrants 1 and 2. FDOT is currently conducting a signal warrant study for the I-4 Eastbound ramp terminal intersection as field observations also noted periodic issues with queuing on the single-lane eastbound I-4 off ramp, and sight distance issues. The purpose of this IOAR is to evaluate the future traffic operations at the I-4 and SR 559 interchange under future signalized conditions at both ramp terminal intersections.

2. Area of Influence

The FDOT Interchange Access Request User's Guide defines the analysis area of influence (AOI) as the area that is anticipated to experience significant changes in traffic operating characteristics as the result of the access proposal. The I-4 and SR 559 AOI is as follows:

Along cross street:

- SR 559 at I-4 WB ramp terminal intersection
- SR 559 at I-4 EB ramp terminal intersection
- SR 559 at CR 559A (C. Fred Jones Boulevard) intersection

Along I-4:

- I-4 WB on-ramp from SR 559
- I-4 EB off-ramp to SR 559
- I-4 EB on-ramp from SR 559
- I-4 WB off-ramp to SR 559
- I-4 freeway segment one mile east of SR 559
- I-4 freeway segment one mile west of SR 559

3. Analysis Years

Traffic Operational Analysis

- Existing Year 2022
- Opening Year 2026
- Design Year 2036



4. Alternatives

The No-Build and Build Alternatives will be analyzed in the IOAR document to demonstrate improved operations that satisfy LOS targets through the Design Year of 2034. The alternatives being compared will be as follows:

- No-Build: The “do nothing” scenario is used as a baseline where no updates are made to the current configuration.
- Build Alternative: installation of traffic signals at the ramp terminals

5. Data Collection

Forty-eight (48) hour bi-directional volume counts:

- SR 559 between I-4 WB and I-4 EB ramp terminal
- SR 559 south of U-Turn south of CR 559A
- I-4 WB on ramp
- I-4 WB off ramp
- I-4 EB on ramp
- I-4 EB off ramp
- CR 559A/(C. Fred Jones Boulevard) west of SR 559
- Baylake Resort Road east of SR 559

Forty-eight (48) hour bi-directional classification counts:

- SR 559 north of I-4 WB ramp terminal
- SR 559 south of I-4 EB ramp terminal
- SR 559 south of CR 559A

Four-hour turning movement volume counts:

- SR 559 and I-4 WB ramp terminal intersection
- SR 559 and I-4 EB ramp terminal intersection
- SR 559 and CR 559A (C. Fred Jones Boulevard) intersection

Data will be collected from current traffic counts, FDOT Traffic Online and/ or other studies completed in the study area.

*The SR 559 and U-Turn south of CR 559A intersection counts will be for informational purposes.

6. Travel Demand Forecasting

A. Selected Travel Demand Model(s)

The District One Regional Planning Model (D1RPM) v2.0 will be used as a basis for this analysis.



B. Project Traffic Forecast Development Methodology

Growth rates computed from the travel demand model will be reviewed for reasonableness and will be compared to historical growth rates computed from historical trends analysis of available traffic counts and population growth rates derived from the Bureau of Economic and Business Research (BEBR) population projections, where applicable.

The developed growth rates will be applied to the existing year 2022 Annual Average Daily Traffic (AADT) to develop design year 2034 AADTs. Design Year design-hour turning movement volumes will be developed for two peak hours (i.e., AM and PM). Standard K and D factors will be applied to the Design Year AADTs to estimate Directional Design Hour Volumes (DDHVs). Future intersection turning movement volumes will be developed using the procedures described in NCHRP 765 (the update to NCHRP 255). This method is consistent with the acceptable tools described in FDOT's Project Traffic Forecasting Handbook (2019). The 2024 opening year peak hour volumes will be interpolated from the existing year and design year peak hour volumes.

C. Validation Methodology

The sub area model will be validated by FDOT Systems Planning for the base year 2015 conditions using base year 2015 ZDATA. The advantage of using the base year 2015 for model validation is that it represents the official MPO-approved model and will be refined for the AOI. The base year 2015 model validation involves reviewing the model network where adjustments will be performed as necessary so that the model traffic projections match the base year traffic volumes within the sub-area model AOI. AADT volumes from the model will be compared to base year traffic data, traffic volumes from FTO database and any available data from other sources. The results of this evaluation will serve as the basis for determining the necessity and scale of the sub-area model validation. The sub-area validation procedure will meet the requirements of the FSUTMS Model Update Task Force. This procedure is consistent with Section 3.8.2 of 2019 Project Traffic Forecasting Handbook (Tables 3-1 and 3-2) and the FSUTMS-Cube Framework Phase II Model Calibration and Validation Standards dated October 2, 2008.

Following the model validation guidelines, adjustments will be made to the network parameters (facility type, speed, capacity, centroid connectors, etc.) to achieve acceptable validation standards. Any adjustments made to the model network, zonal structure changes, and model parameters will be documented in the IOAR and applied to all future year models.



D. Adjustment Procedures

The D1RPM v2.0 will be used to develop the base year (2015) and horizon year (2045) forecasts. Traffic growth rates will be developed based on the results of the travel demand model and will be compared to historical traffic growth rates and projected land use growth rates for reasonableness. Design Year forecast volumes will be developed using approved FDOT forecasting methods.

E. Traffic Factors

Traffic factors will be developed utilizing recommended ranges identified in the Project Traffic Forecasting Handbook and Procedure No. 525-030-120.

7. Traffic Operational Analysis

Traffic Analysis Software Used

Software		System Component					
Name	Version	Freeway				Crossroad	
		Basic Segment	Weaving	Ramp Merge	Ramp Diverge	Arterials	Intersections
HCS/HCM	6th Ed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Synchro	11.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Corsim		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vissim		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Synchro, Version 11.0, will be used for the evaluation of alternatives and the development of preliminary signal timing plans. Intersection and movement vehicular delays, queues, and Level of Service will be used as Measures of Effectiveness (MOEs). A target LOS of D will be utilized in the study. Highway Capacity Manual (HCM), 6th Edition, results will be generated from Synchro. Highway Capacity Software (HCS), Version 7 or later, will be used for the analyses of freeway mainline and ramp merge/diverge operations.

8. Anticipated Design Exceptions and Variations

There are no design exceptions or variations anticipated, but any that may arise will be processed in accordance with FHWA and FDOT standards.

9. Conceptual Signing Plan

A conceptual signing plan will be included within the access request.



10. Access Management Plan

The access management plan within the area of influence will not be changed by the proposed improvement to the interchange.

11. FHWA Policy Points

The two FHWA Policy points summarized here, will be addressed in the IOAR:

- FHWA Policy Point #1: An operational and safety analysis has concluded the proposed change in access does not have a significant adverse impact on the safety and operation of the Interstate facility, or on the local street network based on both the current and the planned future traffic projections.
- FHWA Policy Point #2: The proposed access connects to a public road only and will provide for all traffic movements.

Further detail for the two points is outlined in the FDOT Interchange Access Request User's Guide. These two points serve as the primary decision criteria to be satisfied in justifying the modifications to the access of the interstate system.



I-4 at SR 559 Interchange
FPID 447436-2-52-01 Polk County



Appendix B

Traffic Data Collection

B-1: Traffic Counts

B-2: FDOT 2021 FTO Traffic Factors

B-3: Signal Timing Plans

B-4: Crash Data

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 19, 2022
 Stop Date : July 19, 2022
 County : Polk
 Location : I-4 WB On Ramp

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

19-Jul-22 Eastbound Volume for Lane 1												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

24 Hour Total : 0
 AM Peak Hour begins : 0:00 AM Peak Volume : 0 AM Peak Hour Factor : #DIV/0!
 PM Peak Hour begins : 12:00 PM Peak Volume : 0 PM Peak Hour Factor : #DIV/0!

19-Jul-22 Westbound Volume for Lane 2												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	2	0	6	12	19	67	74	120	86	55	76	108
30	0	0	5	7	31	55	92	136	102	69	96	97
45	1	0	13	9	40	75	94	137	75	81	89	70
00	3	1	5	11	39	66	75	90	101	79	82	68
Hr Total	6	1	29	39	129	263	335	483	364	284	343	343

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	72	74	74	73	74	80	83	31	50	31	26	21
30	71	70	56	63	79	65	66	52	45	46	36	25
45	81	70	83	69	82	86	56	23	40	47	15	30
00	66	72	53	90	89	75	45	42	24	37	22	37
Hr Total	290	286	266	295	324	306	250	148	159	161	99	113

24 Hour Total : 5,316
 AM Peak Hour begins : 7:00 AM Peak Volume : 483 AM Peak Hour Factor : 0.88
 PM Peak Hour begins : 16:15 PM Peak Volume : 330 PM Peak Hour Factor : 0.93

19-Jul-22 Total Volume for All Lanes												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	2	0	6	12	19	67	74	120	86	55	76	108
30	0	0	5	7	31	55	92	136	102	69	96	97
45	1	0	13	9	40	75	94	137	75	81	89	70
00	3	1	5	11	39	66	75	90	101	79	82	68
Hr Total	6	1	29	39	129	263	335	483	364	284	343	343

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	72	74	74	73	74	80	83	31	50	31	26	21
30	71	70	56	63	79	65	66	52	45	46	36	25
45	81	70	83	69	82	86	56	23	40	47	15	30
00	66	72	53	90	89	75	45	42	24	37	22	37
Hr Total	290	286	266	295	324	306	250	148	159	161	99	113

24 Hour Total : 5,316
 AM Peak Hour begins : 7:00 AM Peak Volume : 483 AM Peak Hour Factor : 0.88
 PM Peak Hour begins : 16:15 PM Peak Volume : 330 PM Peak Hour Factor : 0.93

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 20, 2022
 Stop Date : July 20, 2022
 County : Polk
 Location : I-4 WB On Ramp

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

21-Jul-22 Eastbound Volume for Lane 1												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

24 Hour Total : 0
 AM Peak Hour begins : 0:00 AM Peak Volume : 0 AM Peak Hour Factor : #DIV/0!
 PM Peak Hour begins : 12:00 PM Peak Volume : 0 PM Peak Hour Factor : #DIV/0!

21-Jul-22 Westbound Volume for Lane 2												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	3	6	9	22	28	60	71	118	86	81	85	70
30	2	9	8	21	31	65	85	127	94	90	88	74
45	3	6	18	21	32	75	100	132	85	89	81	78
00	5	2	17	28	54	59	73	101	82	82	91	79
Hr Total	13	23	52	92	145	259	329	478	347	342	345	301

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	79	71	86	83	102	63	71	52	29	32	31	23
30	70	81	69	64	63	74	74	72	43	35	21	21
45	69	85	90	75	73	71	82	55	26	33	17	20
00	73	66	80	68	85	86	52	31	32	34	21	27
Hr Total	291	303	325	290	323	294	279	210	130	134	90	91

24 Hour Total : 5,486
 AM Peak Hour begins : 7:00 AM Peak Volume : 478 AM Peak Hour Factor : 0.91
 PM Peak Hour begins : 14:00 PM Peak Volume : 325 PM Peak Hour Factor : 0.90

21-Jul-22 Total Volume for All Lanes												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	3	6	9	22	28	60	71	118	86	81	85	70
30	2	9	8	21	31	65	85	127	94	90	88	74
45	3	6	18	21	32	75	100	132	85	89	81	78
00	5	2	17	28	54	59	73	101	82	82	91	79
Hr Total	13	23	52	92	145	259	329	478	347	342	345	301

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	79	71	86	83	102	63	71	52	29	32	31	23
30	70	81	69	64	63	74	74	72	43	35	21	21
45	69	85	90	75	73	71	82	55	26	33	17	20
00	73	66	80	68	85	86	52	31	32	34	21	27
Hr Total	291	303	325	290	323	294	279	210	130	134	90	91

24 Hour Total : 5,486
 AM Peak Hour begins : 7:00 AM Peak Volume : 478 AM Peak Hour Factor : 0.91
 PM Peak Hour begins : 14:00 PM Peak Volume : 325 PM Peak Hour Factor : 0.90

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 19, 2022
 Stop Date : July 19, 2022
 County : Polk
 Location : I-4 EB On Ramp

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

19-Jul-22 Eastbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	24	19	10	11	29	22	63	77	86	76	82	85
30	18	14	27	16	33	40	76	86	78	110	113	87
45	33	28	11	23	21	35	92	99	79	79	87	126
00	24	12	10	26	23	51	87	68	89	104	70	111
Hr Total	99	73	58	76	106	148	318	330	332	369	352	409

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	127	107	68	109	98	128	82	73	63	19	29	32
30	76	101	42	165	114	168	135	73	57	21	33	33
45	124	75	64	127	106	181	106	68	51	15	35	24
00	99	156	89	92	165	103	87	50	25	25	25	28
Hr Total	426	439	263	493	483	580	410	264	196	80	122	117

24 Hour Total : 6,543
 AM Peak Hour begins : 11:00 AM Peak Volume : 409 AM Peak Hour Factor : 0.81
 PM Peak Hour begins : 16:45 PM Peak Volume : 642 PM Peak Hour Factor : 0.89

19-Jul-22 Westbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

24 Hour Total : 0
 AM Peak Hour begins : AM Peak Volume : 0 AM Peak Hour Factor :
 PM Peak Hour begins : PM Peak Volume : 0 PM Peak Hour Factor :

19-Jul-22 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	24	19	10	11	29	22	63	77	86	76	82	85
30	18	14	27	16	33	40	76	86	78	110	113	87
45	33	28	11	23	21	35	92	99	79	79	87	126
00	24	12	10	26	23	51	87	68	89	104	70	111
Hr Total	99	73	58	76	106	148	318	330	332	369	352	409

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	127	107	68	109	98	128	82	73	63	19	29	32
30	76	101	42	165	114	168	135	73	57	21	33	33
45	124	75	64	127	106	181	106	68	51	15	35	24
00	99	156	89	92	165	103	87	50	25	25	25	28
Hr Total	426	439	263	493	483	580	410	264	196	80	122	117

24 Hour Total : 6,543
 AM Peak Hour begins : 11:00 AM Peak Volume : 409 AM Peak Hour Factor : 0.81
 PM Peak Hour begins : 16:45 PM Peak Volume : 642 PM Peak Hour Factor : 0.89

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 20, 2022
 Stop Date : July 20, 2022
 County : Polk
 Location : I-4 EB On Ramp

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

21-Jul-22 Eastbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	24	19	10	11	29	22	63	77	86	76	82	63
30	18	14	27	16	33	40	76	86	78	110	113	74
45	33	28	11	23	21	35	92	99	79	79	87	130
00	24	12	10	26	23	51	87	68	89	104	70	147
Hr Total	99	73	58	76	106	148	318	330	332	369	352	414

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	146	135	108	90	95	141	104	78	57	60	40	21
30	126	123	137	103	125	173	81	74	51	49	51	23
45	108	116	141	98	123	144	84	42	57	37	42	34
00	97	86	156	114	142	107	109	63	63	50	29	35
Hr Total	477	460	542	405	485	565	378	257	228	196	162	113

24 Hour Total : 6,943
 AM Peak Hour begins : 11:00 AM Peak Volume : 414 AM Peak Hour Factor : 0.70
 PM Peak Hour begins : 16:45 PM Peak Volume : 600 PM Peak Hour Factor : 0.87

21-Jul-22 Westbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

24 Hour Total : 0
 AM Peak Hour begins : AM Peak Volume : 0 AM Peak Hour Factor :
 PM Peak Hour begins : PM Peak Volume : 0 PM Peak Hour Factor :

21-Jul-22 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	24	19	10	11	29	22	63	77	86	76	82	63
30	18	14	27	16	33	40	76	86	78	110	113	74
45	33	28	11	23	21	35	92	99	79	79	87	130
00	24	12	10	26	23	51	87	68	89	104	70	147
Hr Total	99	73	58	76	106	148	318	330	332	369	352	414

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	146	135	108	90	95	141	104	78	57	60	40	21
30	126	123	137	103	125	173	81	74	51	49	51	23
45	108	116	141	98	123	144	84	42	57	37	42	34
00	97	86	156	114	142	107	109	63	63	50	29	35
Hr Total	477	460	542	405	485	565	378	257	228	196	162	113

24 Hour Total : 6,943
 AM Peak Hour begins : 11:00 AM Peak Volume : 414 AM Peak Hour Factor : 0.70
 PM Peak Hour begins : 16:45 PM Peak Volume : 600 PM Peak Hour Factor : 0.87

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 19, 2022
 Stop Date : July 19, 2022
 County : Polk
 Location : I-4 EB Off Ramp

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

19-Jul-22 Eastbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	19	21	14	23	49	121	150	91	69	91	85	108
30	24	25	23	24	43	105	158	90	81	79	82	82
45	21	15	12	32	71	94	139	94	81	79	109	98
00	31	24	23	26	52	126	93	82	89	93	70	89
Hr Total	95	85	72	105	215	446	540	357	320	342	346	377

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	91	94	110	74	73	76	120	69	32	43	29	29
30	96	91	99	100	67	75	86	49	44	36	26	28
45	83	101	67	105	85	135	99	47	55	28	26	26
00	86	79	82	74	58	70	55	61	49	37	29	24
Hr Total	356	365	358	353	283	356	360	226	180	144	110	107

24 Hour Total : 6,498
 AM Peak Hour begins : 5:45 AM Peak Volume : 573 AM Peak Hour Factor : 0.91
 PM Peak Hour begins : 17:30 PM Peak Volume : 411 PM Peak Hour Factor : 0.76

19-Jul-22 Westbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

24 Hour Total : 0
 AM Peak Hour begins : AM Peak Volume : 0 AM Peak Hour Factor :
 PM Peak Hour begins : PM Peak Volume : 0 PM Peak Hour Factor :

19-Jul-22 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	19	21	14	23	49	121	150	91	69	91	85	108
30	24	25	23	24	43	105	158	90	81	79	82	82
45	21	15	12	32	71	94	139	94	81	79	109	98
00	31	24	23	26	52	126	93	82	89	93	70	89
Hr Total	95	85	72	105	215	446	540	357	320	342	346	377

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	91	94	110	74	73	76	120	69	32	43	29	29
30	96	91	99	100	67	75	86	49	44	36	26	28
45	83	101	67	105	85	135	99	47	55	28	26	26
00	86	79	82	74	58	70	55	61	49	37	29	24
Hr Total	356	365	358	353	283	356	360	226	180	144	110	107

24 Hour Total : 6,498
 AM Peak Hour begins : 5:45 AM Peak Volume : 573 AM Peak Hour Factor : 0.91
 PM Peak Hour begins : 17:30 PM Peak Volume : 411 PM Peak Hour Factor : 0.76

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 20, 2022
 Stop Date : July 20, 2022
 County : Polk
 Location : I-4 EB Off Ramp

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

21-Jul-22 Eastbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	16	18	12	20	46	108	164	118	100	91	81	71
30	20	21	20	20	37	111	109	106	68	80	79	102
45	18	13	10	29	56	106	108	112	93	74	78	68
00	26	20	20	23	76	139	98	115	104	92	91	96
Hr Total	80	72	62	92	215	464	479	451	365	337	329	337

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	100	92	66	85	81	87	107	59	52	50	34	34
30	87	118	76	77	103	87	97	73	39	42	30	33
45	75	82	79	102	95	110	70	59	44	33	31	31
00	81	71	70	90	92	87	61	71	51	44	34	28
Hr Total	343	363	291	354	371	371	335	262	186	169	129	126

24 Hour Total : 6,583
 AM Peak Hour begins : 5:15 AM Peak Volume : 520 AM Peak Hour Factor : 0.79
 PM Peak Hour begins : 17:30 PM Peak Volume : 401 PM Peak Hour Factor : 0.91

21-Jul-22 Westbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

24 Hour Total : 0
 AM Peak Hour begins : AM Peak Volume : 0 AM Peak Hour Factor :
 PM Peak Hour begins : PM Peak Volume : 0 PM Peak Hour Factor :

21-Jul-22 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	16	18	12	20	46	108	164	118	100	91	81	71
30	20	21	20	20	37	111	109	106	68	80	79	102
45	18	13	10	29	56	106	108	112	93	74	78	68
00	26	20	20	23	76	139	98	115	104	92	91	96
Hr Total	80	72	62	92	215	464	479	451	365	337	329	337

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	100	92	66	85	81	87	107	59	52	50	34	34
30	87	118	76	77	103	87	97	73	39	42	30	33
45	75	82	79	102	95	110	70	59	44	33	31	31
00	81	71	70	90	92	87	61	71	51	44	34	28
Hr Total	343	363	291	354	371	371	335	262	186	169	129	126

24 Hour Total : 6,583
 AM Peak Hour begins : 5:15 AM Peak Volume : 520 AM Peak Hour Factor : 0.79
 PM Peak Hour begins : 17:30 PM Peak Volume : 401 PM Peak Hour Factor : 0.91

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 19, 2022
 Stop Date : July 19, 2022
 County : Polk
 Location : SR 559 between I-4 Ramps

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

19-Jul-22 Northbound Volume for Lane 1												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	20	12	15	14	18	82	91	161	116	83	130	218
30	8	19	8	16	37	71	114	182	138	135	165	165
45	12	9	18	12	59	85	118	169	113	137	176	130
00	20	3	13	10	45	67	88	133	139	119	135	125
Hr Total	60	43	54	52	159	305	411	645	506	474	606	638

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	150	127	115	100	111	125	164	59	69	79	75	45
30	149	90	127	106	133	114	106	70	69	111	61	48
45	188	115	114	119	117	137	100	58	60	72	34	51
00	105	132	102	123	141	129	88	57	46	73	48	61
Hr Total	592	464	458	448	502	505	458	244	244	335	218	205

24 Hour Total : 8,626
 AM Peak Hour begins : 10:15
 PM Peak Hour begins : 12:00

AM Peak Volume : 694
 PM Peak Volume : 592
 AM Peak Hour Factor : 0.80
 PM Peak Hour Factor : 0.79

19-Jul-22 Southbound Volume for Lane 2												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	11	17	5	10	14	53	86	167	100	97	129	129
30	14	10	3	3	8	71	111	153	100	127	98	98
45	16	3	12	15	22	60	144	138	111	125	120	121
00	24	12	4	9	21	95	152	87	117	104	151	117
Hr Total	65	42	24	37	65	279	493	545	428	453	498	465

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	127	96	152	101	131	139	183	112	109	106	121	69
30	141	124	145	107	131	162	171	106	104	95	60	65
45	151	110	132	124	164	138	133	94	84	94	74	65
00	157	158	78	134	135	154	134	89	89	92	94	61
Hr Total	576	488	507	466	561	593	621	401	386	387	349	260

24 Hour Total : 8,989
 AM Peak Hour begins : 6:30
 PM Peak Hour begins : 17:30

AM Peak Volume : 616
 PM Peak Volume : 646
 AM Peak Hour Factor : 0.92
 PM Peak Hour Factor : 0.88

19-Jul-22 Total Volume for All Lanes												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	31	29	20	24	32	135	177	328	216	180	259	347
30	22	29	11	19	45	142	225	335	238	262	263	263
45	28	12	30	27	81	145	262	307	224	262	296	251
00	44	15	17	19	66	162	240	220	256	223	286	242
Hr Total	125	85	78	89	224	584	904	1,190	934	927	1,104	1,103

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	277	223	267	201	242	264	347	171	178	185	196	114
30	290	214	272	213	264	276	277	176	173	206	121	113
45	339	225	246	243	281	275	233	152	144	166	108	116
00	262	290	180	257	276	283	222	146	135	165	142	122
Hr Total	1,168	952	965	914	1,063	1,098	1,079	645	630	722	567	465

24 Hour Total : 17,615
 AM Peak Hour begins : 6:45
 PM Peak Hour begins : 17:30

AM Peak Volume : 1,210
 PM Peak Volume : 1,182
 AM Peak Hour Factor : 0.90
 PM Peak Hour Factor : 0.85

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 20, 2022
 Stop Date : July 20, 2022
 County : Polk
 Location : SR 559 between I-4 Ramps

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

21-Jul-22 Northbound Volume for Lane 1												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	43	34	20	35	37	87	91	147	119	121	142	132
30	32	40	23	48	28	88	108	173	124	140	119	127
45	29	32	39	25	43	85	135	179	116	130	120	117
00	34	33	39	32	58	72	100	140	114	122	117	117
Hr Total	138	139	121	140	166	332	434	639	473	513	498	493

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	132	122	141	138	146	116	161	79	51	69	60	28
30	118	138	132	141	115	142	149	98	76	42	30	18
45	109	166	169	142	138	143	129	74	54	44	24	16
00	125	127	137	120	145	154	89	64	59	47	22	17
Hr Total	484	553	579	541	544	555	528	315	240	202	136	79

24 Hour Total : 8,842
 AM Peak Hour begins : 7:00
 PM Peak Hour begins : 17:30

AM Peak Volume : 639
 PM Peak Volume : 607
 AM Peak Hour Factor : 0.89
 PM Peak Hour Factor : 0.94

21-Jul-22 Southbound Volume for Lane 2												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	72	41	17	39	24	69	84	150	116	116	106	140
30	45	33	40	45	46	49	97	152	93	115	125	114
45	53	37	24	30	36	73	118	144	90	123	153	109
00	30	26	45	36	50	64	147	117	114	135	126	144
Hr Total	200	137	126	150	156	255	446	563	413	489	510	507

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	174	130	119	147	136	142	168	108	97	133	50	22
30	126	141	142	144	142	146	167	110	102	69	41	15
45	128	118	151	159	157	151	150	94	80	63	30	20
00	141	111	143	172	148	163	125	102	78	61	12	18
Hr Total	569	500	555	622	583	602	610	414	357	326	133	75

24 Hour Total : 9,298
 AM Peak Hour begins : 6:45
 PM Peak Hour begins : 17:30

AM Peak Volume : 593
 PM Peak Volume : 649
 AM Peak Hour Factor : 0.98
 PM Peak Hour Factor : 0.97

21-Jul-22 Total Volume for All Lanes												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	115	75	37	74	61	156	175	297	235	237	248	272
30	77	73	63	93	74	137	205	325	217	255	244	241
45	82	69	63	55	79	158	253	323	206	253	273	226
00	64	59	84	68	108	136	247	257	228	257	243	261
Hr Total	338	276	247	290	322	587	880	1,202	886	1,002	1,008	1,000

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	306	252	260	285	282	258	329	187	148	202	110	50
30	244	279	274	285	257	288	316	208	178	111	71	33
45	237	284	320	301	295	294	279	168	134	107	54	36
00	266	238	280	292	293	317	214	166	137	108	34	35
Hr Total	1,053	1,053	1,134	1,163	1,127	1,157	1,138	729	597	528	269	154

24 Hour Total : 18,140
 AM Peak Hour begins : 7:00
 PM Peak Hour begins : 17:30

AM Peak Volume : 1,202
 PM Peak Volume : 1,256
 AM Peak Hour Factor : 0.93
 PM Peak Hour Factor : 0.95

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 19, 2022
 Stop Date : July 19, 2022
 County : Polk
 Location : I-4 WB Off Ramp

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

19-Jul-22 Eastbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

24 Hour Total : 0
 AM Peak Hour begins : 0:00 AM Peak Volume : 0 AM Peak Hour Factor : #DIV/0!
 PM Peak Hour begins : 12:00 PM Peak Volume : 0 PM Peak Hour Factor : #DIV/0!

19-Jul-22 Westbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	6	5	9	4	10	45	82	49	80	77	65	72
30	8	5	11	6	21	60	75	35	68	69	72	76
45	5	6	8	5	17	66	81	112	81	100	63	66
00	3	10	6	14	29	70	75	75	63	71	63	89
Hr Total	22	26	34	29	77	241	313	271	292	317	263	303

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	64	80	87	80	102	132	100	70	60	9	3	3
30	81	74	77	89	87	101	99	74	55	3	3	0
45	62	85	92	91	108	97	101	67	21	8	3	0
00	81	80	92	99	106	98	103	61	40	2	0	1
Hr Total	288	319	348	359	403	428	403	272	176	22	9	4

24 Hour Total : 5,219
 AM Peak Hour begins : 7:30 AM Peak Volume : 335 AM Peak Hour Factor : 0.75
 PM Peak Hour begins : 16:30 PM Peak Volume : 447 PM Peak Hour Factor : 0.85

19-Jul-22 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	6	5	9	4	10	45	82	49	80	77	65	72
30	8	5	11	6	21	60	75	35	68	69	72	76
45	5	6	8	5	17	66	81	112	81	100	63	66
00	3	10	6	14	29	70	75	75	63	71	63	89
Hr Total	22	26	34	29	77	241	313	271	292	317	263	303

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	64	80	87	80	102	132	100	70	60	9	3	3
30	81	74	77	89	87	101	99	74	55	3	3	0
45	62	85	92	91	108	97	101	67	21	8	3	0
00	81	80	92	99	106	98	103	61	40	2	0	1
Hr Total	288	319	348	359	403	428	403	272	176	22	9	4

24 Hour Total : 5,219
 AM Peak Hour begins : 7:30 AM Peak Volume : 335 AM Peak Hour Factor : 0.75
 PM Peak Hour begins : 16:30 PM Peak Volume : 447 PM Peak Hour Factor : 0.85

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 20, 2022
 Stop Date : July 20, 2022
 County : Polk
 Location : I-4 WB Off Ramp

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

21-Jul-22		Eastbound Volume for Lane 1											
End Time	00	01	02	03	04	05	06	07	08	09	10	11	
15	0	0	0	0	0	0	0	0	0	0	0	0	
30	0	0	0	0	0	0	0	0	0	0	0	0	
45	0	0	0	0	0	0	0	0	0	0	0	0	
00	0	0	0	0	0	0	0	0	0	0	0	0	
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0	

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0
45	0	0	0	0	0	0	0	0	0	0	0	0
00	0	0	0	0	0	0	0	0	0	0	0	0
Hr Total	0	0	0	0	0	0	0	0	0	0	0	0

24 Hour Total : 0
 AM Peak Hour begins : 0:00 AM Peak Volume : 0 AM Peak Hour Factor : #DIV/0!
 PM Peak Hour begins : 12:00 PM Peak Volume : 0 PM Peak Hour Factor : #DIV/0!

21-Jul-22		Westbound Volume for Lane 2											
End Time	00	01	02	03	04	05	06	07	08	09	10	11	
15	4	7	11	6	11	44	77	52	76	69	66	71	
30	6	7	15	5	22	59	72	30	65	68	73	75	
45	6	5	7	5	18	61	78	94	80	97	58	63	
00	8	9	7	12	26	68	71	75	62	68	63	89	
Hr Total	24	28	40	28	77	232	298	251	283	302	260	298	

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	65	79	86	78	100	138	98	71	60	8	3	2
30	78	72	75	86	86	94	96	73	55	3	3	0
45	63	81	93	93	112	100	99	65	21	8	3	0
00	78	79	90	98	106	100	102	62	41	2	0	1
Hr Total	284	311	344	355	404	432	395	271	177	21	9	3

24 Hour Total : 5,127
 AM Peak Hour begins : 7:30 AM Peak Volume : 310 AM Peak Hour Factor : 0.82
 PM Peak Hour begins : 16:30 PM Peak Volume : 450 PM Peak Hour Factor : 0.82

21-Jul-22		Total Volume for All Lanes											
End Time	00	01	02	03	04	05	06	07	08	09	10	11	
15	4	7	11	6	11	44	77	52	76	69	66	71	
30	6	7	15	5	22	59	72	30	65	68	73	75	
45	6	5	7	5	18	61	78	94	80	97	58	63	
00	8	9	7	12	26	68	71	75	62	68	63	89	
Hr Total	24	28	40	28	77	232	298	251	283	302	260	298	

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	65	79	86	78	100	138	98	71	60	8	3	2
30	78	72	75	86	86	94	96	73	55	3	3	0
45	63	81	93	93	112	100	99	65	21	8	3	0
00	78	79	90	98	106	100	102	62	41	2	0	1
Hr Total	284	311	344	355	404	432	395	271	177	21	9	3

24 Hour Total : 5,127
 AM Peak Hour begins : 7:30 AM Peak Volume : 310 AM Peak Hour Factor : 0.82
 PM Peak Hour begins : 16:30 PM Peak Volume : 450 PM Peak Hour Factor : 0.82

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 19, 2022
 Stop Date : July 19, 2022
 County : Polk
 Location : CR 559A west of SR 559

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

19-Jul-22 Eastbound Volume for Lane 1

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	12	9	18	19	25	153	91	102	69	53	62	97
30	15	19	14	15	33	81	95	67	55	70	76	57
45	12	14	13	21	96	69	90	81	59	69	55	74
00	22	8	11	18	42	79	79	60	61	54	51	80
Hr Total	61	50	56	73	196	382	355	310	244	246	244	308

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	72	51	69	81	72	67	196	42	38	40	41	22
30	86	41	79	73	54	68	98	37	35	43	14	14
45	67	52	47	63	64	160	71	31	43	31	26	27
00	59	50	67	68	46	87	45	39	25	30	37	21
Hr Total	284	194	262	285	236	382	410	149	141	144	118	84

24 Hour Total : 5,214
 AM Peak Hour begins : 5:00 AM Peak Volume : 382 AM Peak Hour Factor : 0.62
 PM Peak Hour begins : 17:30 PM Peak Volume : 541 PM Peak Hour Factor : 0.69

19-Jul-22 Westbound Volume for Lane 2

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	13	17	5	13	8	18	59	130	45	60	63	66
30	14	47	10	9	9	33	65	133	59	58	58	67
45	7	13	4	12	8	31	96	77	64	66	70	67
00	11	9	3	11	13	38	105	40	48	65	52	63
Hr Total	45	86	22	45	38	120	325	380	216	249	243	263

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	68	42	76	57	77	82	146	58	59	52	50	38
30	69	61	71	63	64	89	138	64	49	41	35	26
45	82	63	75	79	74	120	65	45	45	39	35	27
00	86	80	37	60	68	121	66	59	40	41	37	27
Hr Total	305	246	259	259	283	412	415	226	193	173	157	118

24 Hour Total : 5,078
 AM Peak Hour begins : 6:30 AM Peak Volume : 464 AM Peak Hour Factor : 0.87
 PM Peak Hour begins : 17:30 PM Peak Volume : 525 PM Peak Hour Factor : 0.90

19-Jul-22 Total Volume for All Lanes

End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	25	26	23	32	33	171	150	232	114	113	125	163
30	29	66	24	24	42	114	160	200	114	128	134	124
45	19	27	17	33	104	100	186	158	123	135	125	141
00	33	17	14	29	55	117	184	100	109	119	103	143
Hr Total	106	136	78	118	234	502	680	690	460	495	487	571

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	140	93	145	138	149	149	342	100	97	92	91	60
30	155	102	150	136	118	157	236	101	84	84	49	40
45	149	115	122	142	138	280	136	76	88	70	61	54
00	145	130	104	128	114	208	111	98	65	71	74	48
Hr Total	589	440	521	544	519	794	825	375	334	317	275	202

24 Hour Total : 10,292
 AM Peak Hour begins : 6:30 AM Peak Volume : 802 AM Peak Hour Factor : 0.86
 PM Peak Hour begins : 17:30 PM Peak Volume : 1,066 PM Peak Hour Factor : 0.78

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 20, 2022
 Stop Date : July 20, 2022
 County : Polk
 Location : CR 559A west of SR 559

Start Time 00:00
 Stop Time 24:00

VHB Project #: 63381.01

21-Jul-22 Eastbound Volume for Lane 1												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	18	18	10	21	31	136	79	83	65	51	69	86
30	15	18	13	21	31	70	72	89	45	60	63	102
45	17	22	21	23	69	55	79	101	66	58	48	59
00	10	16	10	14	62	96	85	84	62	71	72	78
Hr Total	60	74	54	79	193	357	315	357	238	240	252	325

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	61	50	36	74	80	70	191	40	44	52	39	24
30	51	65	52	74	82	76	88	57	32	32	24	13
45	90	56	91	62	63	136	60	47	31	24	16	30
00	64	65	73	52	75	90	57	43	39	17	15	22
Hr Total	266	236	252	262	300	372	396	187	146	125	94	89

24 Hour Total : 5,269
 AM Peak Hour begins : 6:45
 PM Peak Hour begins : 17:30

AM Peak Volume : 358
 PM Peak Volume : 505
 AM Peak Hour Factor : 0.89
 PM Peak Hour Factor : 0.66

21-Jul-22 Westbound Volume for Lane 2												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	33	10	18	17	17	18	47	123	49	55	42	72
30	22	14	17	15	35	20	68	123	53	68	50	54
45	17	19	15	4	24	28	93	78	57	68	65	67
00	10	10	12	32	32	40	110	66	58	47	72	59
Hr Total	82	53	62	68	108	106	318	390	217	238	229	252

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	67	62	61	70	73	99	133	73	49	57	32	22
30	56	53	61	69	79	110	120	54	52	54	47	18
45	97	57	70	64	76	116	81	50	56	45	22	20
00	69	74	82	86	89	136	65	64	42	32	21	16
Hr Total	289	246	274	289	317	461	399	241	199	188	122	76

24 Hour Total : 5,224
 AM Peak Hour begins : 6:30
 PM Peak Hour begins : 17:30

AM Peak Volume : 449
 PM Peak Volume : 505
 AM Peak Hour Factor : 0.91
 PM Peak Hour Factor : 0.93

21-Jul-22 Total Volume for All Lanes												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	51	28	28	38	48	154	126	206	114	106	111	158
30	37	32	30	36	66	90	140	212	98	128	113	156
45	34	41	36	27	93	83	172	179	123	126	113	126
00	20	26	22	46	94	136	195	150	120	118	144	137
Hr Total	142	127	116	147	301	463	633	747	455	478	481	577

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	128	112	97	144	153	169	324	113	93	109	71	46
30	107	118	113	143	161	186	208	111	84	86	71	31
45	187	113	161	126	139	252	141	97	87	69	38	50
00	133	139	155	138	164	226	122	107	81	49	36	38
Hr Total	555	482	526	551	617	833	795	428	345	313	216	165

24 Hour Total : 10,493
 AM Peak Hour begins : 6:45
 PM Peak Hour begins : 17:30

AM Peak Volume : 792
 PM Peak Volume : 1,010
 AM Peak Hour Factor : 0.93
 PM Peak Hour Factor : 0.78

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 19, 2022
 Stop Date : July 19, 2022
 County : Polk
 Location : SR 559 south of U-Turn

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

19-Jul-22 Northbound Volume for Lane 1												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	6	5	6	14	20	54	109	130	84	74	61	86
30	5	7	12	10	24	63	94	117	82	69	67	63
45	4	3	7	16	27	66	109	101	84	81	67	63
00	4	6	8	12	35	78	90	83	69	68	59	66
Hr Total	19	21	33	52	106	261	402	431	319	292	254	278

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	80	75	70	58	69	78	82	36	39	25	21	14
30	69	60	78	57	71	86	87	50	35	46	20	16
45	81	80	84	84	74	85	48	42	28	28	10	16
00	62	85	62	85	81	83	54	31	30	28	17	11
Hr Total	292	300	294	284	295	332	271	159	132	127	68	57

24 Hour Total : 5,079
 AM Peak Hour begins : 6:30
 PM Peak Hour begins : 17:30

AM Peak Volume : 446
 PM Peak Volume : 337
 AM Peak Hour Factor : 0.86
 PM Peak Hour Factor : 0.97

19-Jul-22 Southbound Volume for Lane 2												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	10	10	3	2	2	37	21	71	58	54	72	59
30	5	5	3	3	9	20	39	59	67	49	52	63
45	16	4	6	6	17	26	74	91	72	61	57	58
00	8	13	7	3	8	31	78	79	80	49	67	80
Hr Total	39	32	19	14	36	114	212	300	277	213	248	260

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	70	65	81	73	95	126	113	98	68	34	27	26
30	91	74	82	103	115	124	108	69	49	32	30	27
45	67	53	56	100	101	129	108	79	45	40	39	13
00	89	73	66	101	126	98	102	56	56	38	31	27
Hr Total	317	265	285	377	437	477	431	302	218	144	127	93

24 Hour Total : 5,237
 AM Peak Hour begins : 7:00
 PM Peak Hour begins : 16:45

AM Peak Volume : 300
 PM Peak Volume : 505
 AM Peak Hour Factor : 0.82
 PM Peak Hour Factor : 0.98

19-Jul-22 Total Volume for All Lanes												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	16	15	9	16	22	91	130	201	142	128	133	145
30	10	12	15	13	33	83	133	176	149	118	119	126
45	20	7	13	22	44	92	183	192	156	142	124	121
00	12	19	15	15	43	109	168	162	149	117	126	146
Hr Total	58	53	52	66	142	375	614	731	596	505	502	538

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	150	140	151	131	164	204	195	134	107	59	48	40
30	160	134	160	160	186	210	195	119	84	78	50	43
45	148	133	140	184	175	214	156	121	73	68	49	29
00	151	158	128	186	207	181	156	87	86	66	48	38
Hr Total	609	565	579	661	732	809	702	461	350	271	195	150

24 Hour Total : 10,316
 AM Peak Hour begins : 6:45
 PM Peak Hour begins : 16:45

AM Peak Volume : 737
 PM Peak Volume : 835
 AM Peak Hour Factor : 0.92
 PM Peak Hour Factor : 0.98

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 20, 2022
 Stop Date : July 20, 2022
 County : Polk
 Location : SR 559 south of U-Turn

Start Time : 00:00
 Stop Time : 24:00

VHB Project #: 63381.01

21-Jul-22 Northbound Volume for Lane 1												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	10	9	4	12	27	52	102	110	105	71	64	70
30	7	3	7	12	25	53	103	125	93	75	65	71
45	6	5	7	9	27	72	119	123	95	75	84	64
00	4	7	6	22	40	73	94	83	74	69	56	81
Hr Total	27	24	24	55	119	250	418	441	367	290	269	286

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	78	89	69	81	81	72	81	58	32	35	24	23
30	68	82	65	86	87	108	80	57	47	27	20	19
45	65	71	73	100	74	77	66	33	30	18	18	22
00	64	61	95	102	116	105	54	46	29	29	18	20
Hr Total	275	303	302	369	358	362	281	194	138	109	80	84

24 Hour Total : 5,425
 AM Peak Hour begins : 6:45
 PM Peak Hour begins : 16:45

AM Peak Volume : 452
 PM Peak Volume : 373
 AM Peak Hour Factor : 0.90
 PM Peak Hour Factor : 0.80

21-Jul-22 Southbound Volume for Lane 2												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	20	15	9	11	8	45	31	58	71	57	59	58
30	18	4	9	3	6	16	46	52	60	55	85	65
45	14	10	4	7	13	26	65	93	54	73	88	57
00	13	6	10	8	14	24	98	81	71	74	61	71
Hr Total	65	35	32	29	41	111	240	284	256	259	293	251

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	79	88	95	97	111	117	121	55	62	64	35	30
30	78	97	60	110	100	118	105	79	69	45	42	29
45	75	73	102	121	104	127	102	84	65	42	36	21
00	80	72	100	128	106	111	100	67	51	39	32	20
Hr Total	312	330	357	456	421	473	428	285	247	190	145	100

24 Hour Total : 5,640
 AM Peak Hour begins : 9:45
 PM Peak Hour begins : 17:15

AM Peak Volume : 306
 PM Peak Volume : 477
 AM Peak Hour Factor : 0.87
 PM Peak Hour Factor : 0.94

21-Jul-22 Total Volume for All Lanes												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	30	24	13	23	35	97	133	168	176	128	123	128
30	25	7	16	15	31	69	149	177	153	130	150	136
45	20	15	11	16	40	98	184	216	149	148	172	121
00	17	13	16	30	54	97	192	164	145	143	117	152
Hr Total	92	59	56	84	160	361	658	725	623	549	562	537

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	157	177	164	178	192	189	202	113	94	99	59	53
30	146	179	125	196	187	226	185	136	116	72	62	48
45	140	144	175	221	178	204	168	117	95	60	54	43
00	144	133	195	230	222	216	154	113	80	68	50	40
Hr Total	587	633	659	825	779	835	709	479	385	299	225	184

24 Hour Total : 11,065
 AM Peak Hour begins : 6:45
 PM Peak Hour begins : 17:15

AM Peak Volume : 753
 PM Peak Volume : 848
 AM Peak Hour Factor : 0.87
 PM Peak Hour Factor : 0.94

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 19, 2022 Start Time 00:00
 Stop Date : July 19, 2022 Stop Time 24:00
 County : Polk
 Location : Baylake Resort Road east of SR 559 NB

VHB Project #: 63381.01

19-Jul-22 Northbound Volume for Lane 1												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	15	11	18	12	17	40	54	62	67	79	72	57
30	16	16	10	13	24	41	78	79	51	70	70	70
45	33	20	15	13	35	33	72	70	70	60	95	84
00	17	14	15	39	35	35	44	55	49	88	86	105
Hr Total	81	61	58	77	111	149	248	266	237	297	323	316

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	100	93	87	85	65	60	62	53	50	30	42	19
30	89	99	70	59	65	76	66	45	39	36	23	20
45	92	79	80	68	62	57	59	49	40	31	29	19
00	73	115	105	66	56	60	71	30	41	33	17	18
Hr Total	354	386	342	278	248	253	258	177	170	130	111	76

24 Hour Total : 5,007
 AM Peak Hour begins : 9:45 AM Peak Volume : 325 AM Peak Hour Factor : 0.86
 PM Peak Hour begins : 13:00 PM Peak Volume : 386 PM Peak Hour Factor : 0.84

19-Jul-22 Southbound Volume for Lane 2												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	14	20	12	12	24	41	59	68	70	85	76	90
30	15	11	14	16	29	47	82	79	55	73	78	95
45	25	18	11	13	36	37	75	75	75	62	100	65
00	28	15	19	13	39	41	49	59	56	86	69	68
Hr Total	82	64	56	54	128	166	265	281	256	306	323	318

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	101	87	84	57	59	69	48	55	21	46	21	28
30	111	79	74	58	69	66	65	28	46	18	22	20
45	84	64	65	81	88	63	75	58	41	33	22	25
00	88	72	68	51	59	74	58	55	37	21	22	20
Hr Total	384	302	291	247	275	272	246	196	145	118	87	93

24 Hour Total : 4,955
 AM Peak Hour begins : 10:30 AM Peak Volume : 354 AM Peak Hour Factor : 0.89
 PM Peak Hour begins : 12:00 PM Peak Volume : 384 PM Peak Hour Factor : 0.87

19-Jul-22 Total Volume for All Lanes												
End Time	00	01	02	03	04	05	06	07	08	09	10	11
15	29	31	30	24	41	81	113	130	137	164	148	147
30	31	27	24	29	53	88	160	158	106	143	148	165
45	58	38	26	26	71	70	147	145	145	122	195	149
00	45	29	34	52	74	76	93	114	105	174	155	173
Hr Total	163	125	114	131	239	315	513	547	493	603	646	634

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	201	180	171	142	124	129	110	108	71	76	63	47
30	200	178	144	117	134	142	131	73	85	54	45	40
45	176	143	145	149	150	120	134	107	81	64	51	44
00	161	187	173	117	115	134	129	85	78	54	39	38
Hr Total	738	688	633	525	523	525	504	373	315	248	198	169

24 Hour Total : 9,962
 AM Peak Hour begins : 9:45 AM Peak Volume : 665 AM Peak Hour Factor : 0.85
 PM Peak Hour begins : 12:00 PM Peak Volume : 738 PM Peak Hour Factor : 0.92

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

Start Date : July 20, 2022 Start Time 00:00
 Stop Date : July 20, 2022 Stop Time 24:00
 County : Polk
 Location : Baylake Resort Road east of SR 559 NB

VHB Project #: 63381.01

21-Jul-22		Northbound Volume for Lane 1											
End Time	00	01	02	03	04	05	06	07	08	09	10	11	
15	13	11	18	12	17	38	60	60	62	88	89	57	
30	16	16	10	13	24	61	48	67	50	75	70	69	
45	32	20	15	13	34	52	50	70	65	62	65	83	
00	17	14	6	38	40	45	49	59	69	70	85	105	
Hr Total	78	61	49	76	115	196	207	256	246	295	309	314	

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	100	92	84	85	65	60	62	52	50	30	42	18
30	89	99	69	59	64	76	66	44	39	35	24	20
45	91	79	80	67	60	57	59	50	39	31	28	20
00	74	112	105	65	56	60	71	30	42	33	18	18
Hr Total	354	382	338	276	245	253	258	176	170	129	112	76

24 Hour Total : 4,971
 AM Peak Hour begins : 11:00 AM Peak Volume : 314 AM Peak Hour Factor : 0.75
 PM Peak Hour begins : 13:00 PM Peak Volume : 382 PM Peak Hour Factor : 0.85

21-Jul-22		Southbound Volume for Lane 2											
End Time	00	01	02	03	04	05	06	07	08	09	10	11	
15	16	12	17	16	27	36	63	63	58	87	84	79	
30	14	16	4	20	25	60	45	61	60	77	74	83	
45	16	16	12	14	31	59	48	72	60	61	62	60	
00	22	19	10	33	43	48	50	61	74	71	59	73	
Hr Total	68	63	43	83	126	203	206	257	252	296	279	295	

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	80	104	70	65	66	60	51	52	33	41	44	37
30	89	86	65	59	58	62	52	62	37	43	32	31
45	77	78	78	70	81	69	69	62	47	34	35	20
00	74	76	66	64	72	70	53	51	51	34	31	25
Hr Total	320	344	279	258	277	261	225	227	168	152	142	113

24 Hour Total : 4,937
 AM Peak Hour begins : 8:45 AM Peak Volume : 299 AM Peak Hour Factor : 0.86
 PM Peak Hour begins : 12:15 PM Peak Volume : 344 PM Peak Hour Factor : 0.83

21-Jul-22		Total Volume for All Lanes											
End Time	00	01	02	03	04	05	06	07	08	09	10	11	
15	29	23	35	28	44	74	123	123	120	175	173	136	
30	30	32	14	33	49	121	93	128	110	152	144	152	
45	48	36	27	27	65	111	98	142	125	123	127	143	
00	39	33	16	71	83	93	99	120	143	141	144	178	
Hr Total	146	124	92	159	241	399	413	513	498	591	588	609	

End Time	12	13	14	15	16	17	18	19	20	21	22	23
15	180	196	154	150	131	120	113	104	83	71	86	55
30	178	185	134	118	122	138	118	106	76	78	56	51
45	168	157	158	137	141	126	128	112	86	65	63	40
00	148	188	171	129	128	130	124	81	93	67	49	43
Hr Total	674	726	617	534	522	514	483	403	338	281	254	189

24 Hour Total : 9,908
 AM Peak Hour begins : 11:00 AM Peak Volume : 609 AM Peak Hour Factor : 0.86
 PM Peak Hour begins : 13:00 PM Peak Volume : 726 PM Peak Hour Factor : 0.93

TRAFFIC COUNT DATA

VHB PROJECT NO: 63381.01
 LOCATION CODE: 1
 COUNT LOCATION: SR 559 north of I-4 WB Ramp
 EQUIPMENT ID: 356

TYPE OF COUNT: 48 Hour Classification Count

TIME OF COUNT:
 Start Date: 7/19/2022 Start Time: Midnight
 End Date: 7/21/2022 End Time: Midnight

VOLUMES:

		Peak Hour Start Time:	5:30 PM
Average Daily:	6,548	Average Peak Hour:	528
Daily Truck Avg:	1,234	Max Hour Truck Avg:	119
		Peak Hour Truck Avg:	65

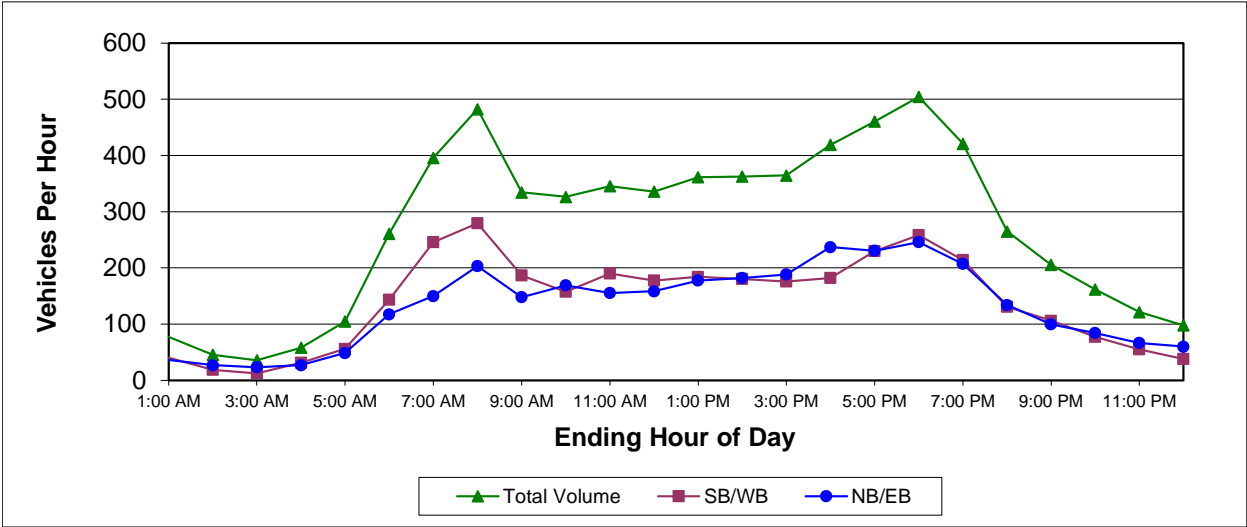
TRAVEL CHARACTERISTICS:

K MEASURED	D MEASURED
K= 8.1%	D= 52.4%
T Max Hour 22.5%	T daily 18.8%
T med (max) 11.7%	T med Daily 10.3%
T heavy (max) 10.8%	T heavy Daily 8.6%
T Peak Hour 12.3%	
T med Peak Hour 8.7%	Axle Factor 0.95
T heavy Peak Hour 3.6%	

HOURLY DISTRIBUTIONS OF TRAFFIC VOLUMES

VHB PROJECT NO: 63381.01
 LOCATION CODE: 1
 COUNT LOCATION: SR 559 north of I-4 WB Ramp
 EQUIPMENT ID: 356

HOUR ENDING AT	HOURLY VOLUME DIRECTION (NB OR EB)	HOURLY VOLUME DIRECTION (SB OR WB)	TOTAL VOLUME BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB OR EB)	DISTRIBUTION PERCENT DIRECTION (SB OR WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	37	41	77	1.15%	1.20%	1.18%
2:00 AM	27	19	46	0.85%	0.55%	0.69%
3:00 AM	24	13	36	0.74%	0.37%	0.55%
4:00 AM	27	31	58	0.85%	0.92%	0.89%
5:00 AM	49	56	105	1.53%	1.66%	1.60%
6:00 AM	118	144	261	3.70%	4.26%	3.99%
7:00 AM	150	246	396	4.72%	7.30%	6.05%
8:00 AM	203	280	483	6.39%	8.29%	7.37%
9:00 AM	148	187	335	4.66%	5.53%	5.11%
10:00 AM	169	158	327	5.32%	4.67%	4.99%
11:00 AM	156	190	346	4.90%	5.64%	5.28%
12:00 PM	159	178	336	4.99%	5.26%	5.13%
1:00 PM	178	184	362	5.59%	5.46%	5.52%
2:00 PM	182	181	363	5.73%	5.35%	5.54%
3:00 PM	189	176	365	5.93%	5.22%	5.57%
4:00 PM	237	182	419	7.46%	5.40%	6.40%
5:00 PM	231	230	461	7.26%	6.82%	7.03%
6:00 PM	246	259	505	7.74%	7.67%	7.70%
7:00 PM	207	214	421	6.52%	6.35%	6.43%
8:00 PM	134	131	265	4.22%	3.89%	4.05%
9:00 PM	100	106	206	3.13%	3.14%	3.14%
10:00 PM	84	78	162	2.64%	2.30%	2.47%
11:00 PM	67	55	122	2.09%	1.63%	1.86%
12:00 AM	60	38	98	1.89%	1.13%	1.50%
TOTALS	3,177	3,372	6,548	100.0%	100.0%	100.0%



ANNUAL VEHICLE CLASSIFICATION REPORT

VHB PROJECT NO: 63381.01
 LOCATION CODE: 1
 COUNT LOCATION: SR 559 north of I-4 WB Ramp
 EQUIPMENT ID: 356

Vehicle Classification	Vehicle Type	Average Daily Statistics	
		Volume	Percentage
Class 1	Motorcycles	110	1.68%
Class 2	Cars	4,446	67.87%
Class 3	Pick-Ups & Vans	759	11.59%
Class 4	Buses	60	0.92%
Class 5	2 Axle, Single Unit Trucks	612	9.34%
Class 6	3 Axle, Single Unit Trucks	149	2.27%
Class 7	4 Axle, Single Unit Trucks	40	0.61%
Class 8	2 Axle Trctr with 1 or 2 Axle Trlr, 3 Axle Trctr with 1 Axle	74	1.13%
Class 9	3 Axle Tractor with 2 Axle Trailer	274	4.18%
Class 10	3 Axle Tractor with 3 Axle Trailer	17	0.26%
Class 11	5 Axle Multi Trailer	1	0.02%
Class 12	6 Axle Multi Trailer	7	0.11%
Class 13	7 or more Axles	2	0.03%
Class 14	Not Used	0	0.00%
Class 15	Other	0	0.00%
TOTALS		6,551	100.00%

TRAFFIC COUNT DATA

VHB PROJECT NO: 63381.01
 LOCATION CODE: 2
 COUNT LOCATION: SR 559 south of I-4 EB Ramp
 EQUIPMENT ID: 319

TYPE OF COUNT: 48 Hour Classification Count

TIME OF COUNT:
 Start Date: 7/27/2022 Start Time: Midnight
 End Date: 7/28/2022 End Time: Midnight

VOLUMES:

		Peak Hour Start Time:	4:45 PM
Average Daily:	20,225	Average Peak Hour:	1,369
Daily Truck Avg:	3,716	Max Hour Truck Avg:	290
		Peak Hour Truck Avg:	159

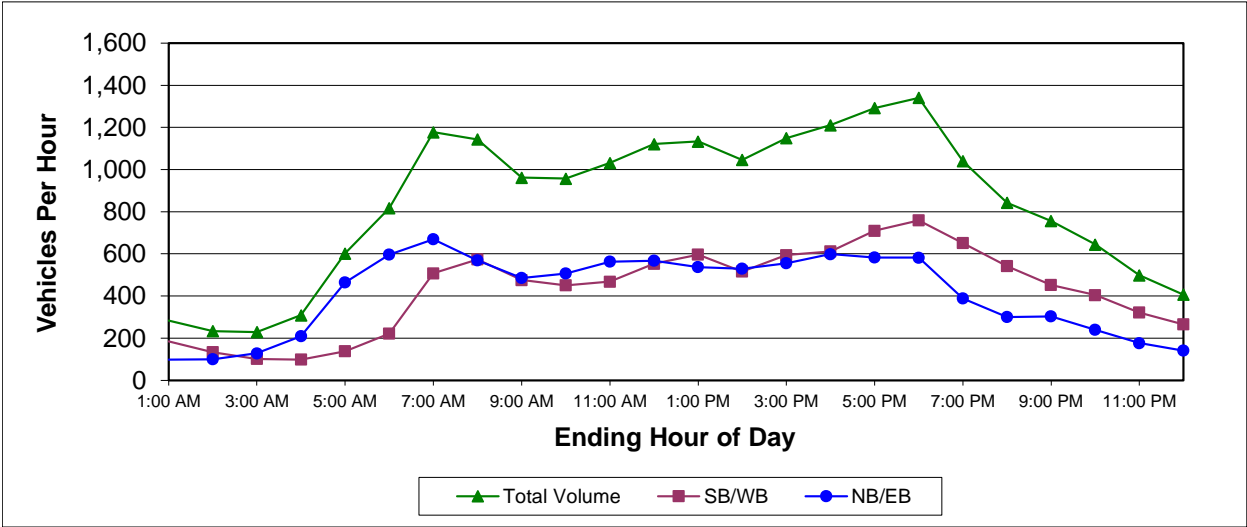
TRAVEL CHARACTERISTICS:

K MEASURED	D MEASURED
K= 6.8%	D= 54.9%
T Max Hour 21.2%	T daily 18.4%
T med (max) 8.5%	T med Daily 7.0%
T heavy (max) 12.6%	T heavy Daily 11.4%
T Peak Hour 11.6%	
T med Peak Hour 5.3%	Axle Factor 0.94
T heavy Peak Hour 6.3%	

HOURLY DISTRIBUTIONS OF TRAFFIC VOLUMES

VHB PROJECT NO: 63381.01
 LOCATION CODE: 2
 COUNT LOCATION: SR 559 south of I-4 EB Ramp
 EQUIPMENT ID: 319

HOUR ENDING AT	HOURLY VOLUME DIRECTION (NB OR EB)	HOURLY VOLUME DIRECTION (SB OR WB)	TOTAL VOLUME BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB OR EB)	DISTRIBUTION PERCENT DIRECTION (SB OR WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	99	185	284	1.00%	1.79%	1.40%
2:00 AM	100	134	234	1.01%	1.29%	1.15%
3:00 AM	128	101	229	1.29%	0.98%	1.13%
4:00 AM	210	99	309	2.12%	0.96%	1.53%
5:00 AM	465	138	602	4.69%	1.33%	2.98%
6:00 AM	596	221	817	6.02%	2.14%	4.04%
7:00 AM	670	508	1,178	6.77%	4.91%	5.82%
8:00 AM	570	574	1,143	5.76%	5.55%	5.65%
9:00 AM	486	476	962	4.91%	4.60%	4.75%
10:00 AM	507	451	957	5.12%	4.36%	4.73%
11:00 AM	564	468	1,032	5.69%	4.53%	5.10%
12:00 PM	568	553	1,121	5.74%	5.35%	5.54%
1:00 PM	538	596	1,134	5.43%	5.77%	5.60%
2:00 PM	530	516	1,046	5.36%	5.00%	5.17%
3:00 PM	556	594	1,150	5.61%	5.75%	5.68%
4:00 PM	599	612	1,211	6.05%	5.93%	5.99%
5:00 PM	583	710	1,292	5.89%	6.87%	6.39%
6:00 PM	582	759	1,341	5.88%	7.34%	6.63%
7:00 PM	388	652	1,040	3.92%	6.31%	5.14%
8:00 PM	301	542	843	3.04%	5.25%	4.17%
9:00 PM	303	453	756	3.06%	4.38%	3.74%
10:00 PM	240	405	644	2.42%	3.92%	3.18%
11:00 PM	177	322	499	1.78%	3.12%	2.46%
12:00 AM	141	266	407	1.42%	2.57%	2.01%
TOTALS	9,896	10,329	20,225	100.0%	100.0%	100.0%



ANNUAL VEHICLE CLASSIFICATION REPORT

VHB PROJECT NO: 63381.01
 LOCATION CODE: 2
 COUNT LOCATION: SR 559 south of I-4 EB Ramp
 EQUIPMENT ID: 319

Vehicle Classification	Vehicle Type	Average Daily Statistics	
		Volume	Percentage
Class 1	Motorcycles	133	0.66%
Class 2	Cars	13,600	67.23%
Class 3	Pick-Ups & Vans	2,777	13.73%
Class 4	Buses	329	1.63%
Class 5	2 Axle, Single Unit Trucks	1,091	5.39%
Class 6	3 Axle, Single Unit Trucks	496	2.45%
Class 7	4 Axle, Single Unit Trucks	52	0.26%
Class 8	2 Axle Trctr with 1 or 2 Axle Trlr, 3 Axle Trctr with 1 Axle	498	2.46%
Class 9	3 Axle Tractor with 2 Axle Trailer	1,014	5.01%
Class 10	3 Axle Tractor with 3 Axle Trailer	60	0.30%
Class 11	5 Axle Multi Trailer	39	0.19%
Class 12	6 Axle Multi Trailer	47	0.23%
Class 13	7 or more Axles	94	0.46%
Class 14	Not Used	0	0.00%
Class 15	Other	0	0.00%
TOTALS		20,230	100.00%

TRAFFIC COUNT DATA

VHB PROJECT NO: 63381.01
 LOCATION CODE: 3
 COUNT LOCATION: SR 559 south of CR 559A
 EQUIPMENT ID: 6

TYPE OF COUNT: 48 Hour Classification Count

TIME OF COUNT:
 Start Date: 7/19/2022 Start Time: Midnight
 End Date: 7/21/2022 End Time: Midnight

VOLUMES:

		Peak Hour Start Time:	5:15 PM
Average Daily:	10,939	Average Peak Hour:	813
Daily Truck Avg:	2,338	Max Hour Truck Avg:	185
		Peak Hour Truck Avg:	117

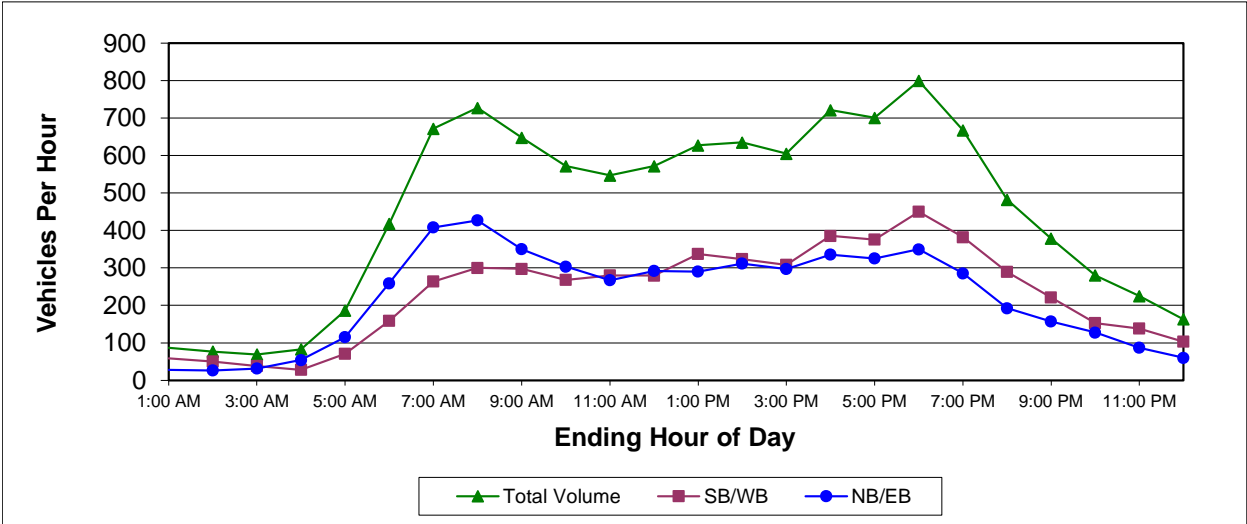
TRAVEL CHARACTERISTICS:

K MEASURED	D MEASURED
K= 7.4%	D= 55.9%
T Max Hour 22.8%	T daily 21.4%
T med (max) 17.0%	T med Daily 16.9%
T heavy (max) 5.7%	T heavy Daily 4.5%
T Peak Hour 14.4%	
T med Peak Hour 11.8%	Axle Factor 0.97
T heavy Peak Hour 2.6%	

HOURLY DISTRIBUTIONS OF TRAFFIC VOLUMES

VHB PROJECT NO: 63381.01
 LOCATION CODE: 3
 COUNT LOCATION: SR 559 south of CR 559A
 EQUIPMENT ID: 6

HOUR ENDING AT	HOURLY VOLUME DIRECTION (NB OR EB)	HOURLY VOLUME DIRECTION (SB OR WB)	TOTAL VOLUME BOTH DIRECTIONS	DISTRIBUTION PERCENT DIRECTION (NB OR EB)	DISTRIBUTION PERCENT DIRECTION (SB OR WB)	TOTAL PERCENT BOTH DIRECTIONS
1:00 AM	28	59	87	0.52%	1.06%	0.80%
2:00 AM	27	51	77	0.49%	0.91%	0.70%
3:00 AM	32	38	70	0.59%	0.68%	0.64%
4:00 AM	54	29	83	1.00%	0.51%	0.75%
5:00 AM	115	71	186	2.14%	1.28%	1.70%
6:00 AM	259	159	418	4.81%	2.85%	3.82%
7:00 AM	408	264	672	7.58%	4.74%	6.14%
8:00 AM	427	300	727	7.94%	5.40%	6.65%
9:00 AM	350	298	648	6.51%	5.35%	5.92%
10:00 AM	304	268	572	5.64%	4.82%	5.22%
11:00 AM	267	280	547	4.96%	5.04%	5.00%
12:00 PM	292	280	572	5.43%	5.03%	5.22%
1:00 PM	290	337	627	5.39%	6.06%	5.73%
2:00 PM	312	324	635	5.79%	5.82%	5.80%
3:00 PM	297	308	605	5.52%	5.54%	5.53%
4:00 PM	336	386	721	6.24%	6.93%	6.59%
5:00 PM	325	376	701	6.04%	6.75%	6.40%
6:00 PM	350	450	800	6.50%	8.09%	7.31%
7:00 PM	286	382	668	5.31%	6.87%	6.10%
8:00 PM	193	290	482	3.58%	5.21%	4.41%
9:00 PM	157	221	378	2.92%	3.98%	3.46%
10:00 PM	128	153	280	2.37%	2.74%	2.56%
11:00 PM	87	138	225	1.62%	2.48%	2.06%
12:00 AM	60	103	163	1.12%	1.85%	1.49%
TOTALS	5,380	5,560	10,939	100.0%	100.0%	100.0%



ANNUAL VEHICLE CLASSIFICATION REPORT

VHB PROJECT NO: 63381.01
 LOCATION CODE: 3
 COUNT LOCATION: SR 559 south of CR 559A
 EQUIPMENT ID: 6

Vehicle Classification	Vehicle Type	Average Daily Statistics	
		Volume	Percentage
Class 1	Motorcycles	176	1.61%
Class 2	Cars	6,916	63.21%
Class 3	Pick-Ups & Vans	1,510	13.80%
Class 4	Buses	197	1.80%
Class 5	2 Axle, Single Unit Trucks	1,652	15.10%
Class 6	3 Axle, Single Unit Trucks	161	1.47%
Class 7	4 Axle, Single Unit Trucks	32	0.29%
Class 8	2 Axle Trctr with 1 or 2 Axle Trlr, 3 Axle Trctr with 1 Axle	120	1.10%
Class 9	3 Axle Tractor with 2 Axle Trailer	129	1.18%
Class 10	3 Axle Tractor with 3 Axle Trailer	10	0.09%
Class 11	5 Axle Multi Trailer	6	0.05%
Class 12	6 Axle Multi Trailer	13	0.12%
Class 13	7 or more Axles	19	0.17%
Class 14	Not Used	0	0.00%
Class 15	Other	0	0.00%
TOTALS		10,941	100.00%

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Polk City Polk City
 Intersection SR 559 & I-4 WB ramp terminal
 Date July 19, 2022

All Vehicles

VHB Project #: 63381.01

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	67	42	0	0	59	26	0	0	0	77	0	16
7:15 AM - 7:30 AM	79	45	0	0	61	38	0	0	0	63	0	21
7:30 AM - 7:45 AM	76	34	0	0	63	35	0	0	0	65	1	31
7:45 AM - 8:00 AM	62	42	0	0	22	20	0	0	0	49	0	16
8:00 AM - 8:15 AM	55	29	0	0	18	22	0	0	0	58	0	10
8:15 AM - 8:30 AM	61	29	0	0	27	26	0	0	0	40	0	10
8:30 AM - 8:45 AM	47	32	0	0	27	14	0	0	0	58	0	8
8:45 AM - 9:00 AM	57	31	0	0	26	26	0	0	0	58	1	9
TOTAL	504	284	0	0	303	207	0	0	0	468	2	121
Peak Hour												
7:00 AM - 8:00 AM	284	163	0	0	205	119	0	0	0	254	1	84

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	43	44	0	0	40	27	0	0	0	63	0	16
4:15 PM - 4:30 PM	51	60	0	0	29	15	0	0	0	80	0	18
4:30 PM - 4:45 PM	48	42	0	0	51	19	0	0	0	84	0	8
4:45 PM - 5:00 PM	46	55	0	0	37	30	0	0	0	77	0	20
5:00 PM - 5:15 PM	46	55	0	0	40	25	0	0	0	72	0	15
5:15 PM - 5:30 PM	42	50	0	0	37	19	0	0	0	94	0	12
5:30 PM - 5:45 PM	45	59	0	0	52	25	0	0	0	70	0	14
5:45 PM - 6:00 PM	54	55	0	0	56	19	0	0	0	67	0	27
TOTAL	375	420	0	0	342	179	0	0	0	607	0	130
Peak Hour												
5:00 PM - 6:00 PM	187	219	0	0	185	88	0	0	0	303	0	68

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Polk

City Polk City

Intersection SR 559

& I-4 WB ramp terminal

Date July 19, 2022

Trucks

VHB Project #: 63381.01

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	13	8	0	0	7	4	0	0	0	9	0	3
7:15 AM - 7:30 AM	16	6	0	0	1	2	0	0	0	8	0	0
7:30 AM - 7:45 AM	13	3	0	0	5	4	0	0	0	7	1	2
7:45 AM - 8:00 AM	8	3	0	0	2	2	0	0	0	6	0	2
8:00 AM - 8:15 AM	6	5	0	0	1	1	0	0	0	8	0	1
8:15 AM - 8:30 AM	14	6	0	0	4	2	0	0	0	7	0	0
8:30 AM - 8:45 AM	4	7	0	0	3	1	0	0	0	9	0	1
8:45 AM - 9:00 AM	13	7	0	0	2	0	0	0	0	10	0	0
TOTAL	87	45	0	0	25	16	0	0	0	64	1	9
Peak Hour												
7:00 AM - 8:00 AM	50	20	0	0	15	12	0	0	0	30	1	7
	18%	12%	0%	0%	7%	10%	0%	0%	0%	12%	100%	8%

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	6	1	0	0	4	1	0	0	0	3	0	1
4:15 PM - 4:30 PM	6	4	0	0	4	3	0	0	0	11	0	0
4:30 PM - 4:45 PM	8	2	0	0	2	0	0	0	0	7	0	1
4:45 PM - 5:00 PM	13	2	0	0	2	0	0	0	0	6	0	3
5:00 PM - 5:15 PM	11	4	0	0	1	2	0	0	0	5	0	2
5:15 PM - 5:30 PM	3	7	0	0	5	1	0	0	0	5	0	2
5:30 PM - 5:45 PM	6	2	0	0	2	0	0	0	0	6	0	2
5:45 PM - 6:00 PM	5	1	0	0	1	2	0	0	0	4	0	0
TOTAL	58	23	0	0	21	9	0	0	0	47	0	11
Peak Hour												
5:00 PM - 6:00 PM	25	14	0	0	9	5	0	0	0	20	0	6
	13%	6%	0%	0%	5%	6%	0%	0%	0%	7%	0%	9%

Pedestrian & Bicycle Summary

Project #: 63381.01

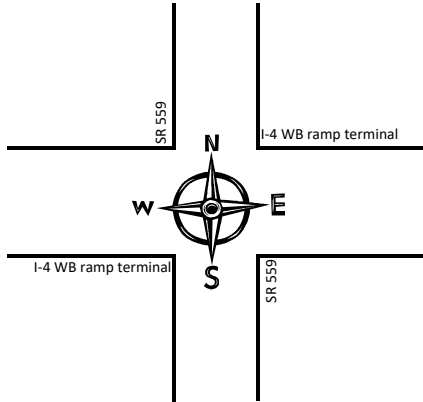
NB/SB: SR 559

Date: 7/19/2022

EB/WB: I-4 WB ramp terminal

		Hour								
		7:00	8:00	11:00	12:00	14:00	15:00	16:00	17:00	
		1	2	3	4	5	6	7	8	
Eastbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0
Westbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0

		Southbound		Northbound	
Hour		Ped ▼	Bike	Ped ▲	Bike
1	7:00	0	0	0	0
2	8:00	0	0	0	0
3	11:00	0	0	0	0
4	12:00	0	0	0	0
5	14:00	0	0	0	0
6	15:00	0	0	0	0
7	16:00	0	0	1	0
8	17:00	0	0	0	0
		0	0	1	0



		Southbound		Northbound		Hour
		Ped ▼	Bike	Ped ▲	Bike	
	1	7:00	0	0	0	0
	2	8:00	0	0	0	0
	3	11:00	0	0	0	0
	4	12:00	0	0	0	0
	5	14:00	0	0	0	0
	6	15:00	0	0	0	0
	7	16:00	0	0	0	0
	8	17:00	0	0	0	0
			0	0	0	0

Eastbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0
Westbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0

7:00	8:00	11:00	12:00	14:00	15:00	16:00	17:00
1	2	3	4	5	6	7	8

1 0

Hour

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Polk
Intersection SR 559
Date July 19, 2022

City Polk City
& I-4 EB ramp terminal

All Vehicles
VHB Project #: 63381.01

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	1	110	75	11	126	0	24	0	42	0	0	0
7:15 AM - 7:30 AM	0	122	68	10	127	0	19	0	56	0	0	0
7:30 AM - 7:45 AM	0	101	76	13	118	0	25	0	51	0	0	0
7:45 AM - 8:00 AM	0	89	61	8	72	0	25	0	35	0	0	0
8:00 AM - 8:15 AM	0	90	63	9	80	0	26	0	41	0	0	0
8:15 AM - 8:30 AM	0	85	61	9	75	0	25	0	48	0	0	0
8:30 AM - 8:45 AM	0	80	59	10	83	0	16	0	51	0	0	0
8:45 AM - 9:00 AM	0	77	64	9	81	0	15	0	51	0	0	0
TOTAL	1	754	527	79	762	0	175	0	375	0	0	0
Peak Hour												
7:00 AM - 8:00 AM	1	422	280	42	443	0	93	0	184	0	0	0

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	79	45	10	104	0	15	0	62	0	0	0
4:15 PM - 4:30 PM	1	90	52	9	110	1	19	0	77	0	0	0
4:30 PM - 4:45 PM	0	82	47	10	132	0	18	0	63	0	0	0
4:45 PM - 5:00 PM	0	85	53	10	113	0	25	0	77	0	0	0
5:00 PM - 5:15 PM	0	87	58	11	121	0	20	0	83	0	0	0
5:15 PM - 5:30 PM	1	77	58	9	130	0	18	0	87	0	0	0
5:30 PM - 5:45 PM	0	94	97	8	121	0	21	0	115	0	0	0
5:45 PM - 6:00 PM	0	97	67	8	135	0	16	0	70	0	0	0
TOTAL	2	691	477	75	966	1	152	0	634	0	0	0
Peak Hour												
5:00 PM - 6:00 PM	1	355	280	36	507	0	75	0	355	0	0	0

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Polk	City	Polk City
Intersection	SR 559	&	I-4 EB ramp terminal
Date	July 19, 2022		
		Trucks	
		VHB Project #:	63381.01

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	19	7	3	13	0	4	0	7	0	0	0
7:15 AM - 7:30 AM	0	17	8	1	9	0	2	0	14	0	0	0
7:30 AM - 7:45 AM	0	15	11	1	10	0	1	0	16	0	0	0
7:45 AM - 8:00 AM	0	10	10	0	9	0	1	0	8	0	0	0
8:00 AM - 8:15 AM	0	8	10	1	7	0	3	0	10	0	0	0
8:15 AM - 8:30 AM	0	16	10	0	13	0	3	0	11	0	0	0
8:30 AM - 8:45 AM	0	13	12	0	10	0	0	0	13	0	0	0
8:45 AM - 9:00 AM	0	17	10	1	12	0	0	0	12	0	0	0
TOTAL	0	115	78	7	83	0	14	0	91	0	0	0
Peak Hour 7:00 AM - 8:00 AM	0	61	36	5	41	0	8	0	45	0	0	0
	0%	14%	13%	12%	9%	0%	9%	0%	24%	0%	0%	0%

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	8	9	0	9	0	0	0	11	0	0	0
4:15 PM - 4:30 PM	0	11	12	0	12	0	0	0	11	0	0	0
4:30 PM - 4:45 PM	0	10	14	1	11	0	0	0	10	0	0	0
4:45 PM - 5:00 PM	0	15	6	1	4	0	1	0	9	0	0	0
5:00 PM - 5:15 PM	0	11	6	0	10	0	0	0	8	0	0	0
5:15 PM - 5:30 PM	0	8	11	0	7	0	3	0	9	0	0	0
5:30 PM - 5:45 PM	0	7	14	0	10	0	0	0	8	0	0	0
5:45 PM - 6:00 PM	0	6	6	0	5	0	1	0	12	0	0	0
TOTAL	0	76	78	2	68	0	5	0	78	0	0	0
Peak Hour 5:00 PM - 6:00 PM	0	32	37	0	32	0	4	0	37	0	0	0
	0%	9%	13%	0%	6%	0%	5%	0%	10%	0%	0%	0%

Pedestrian & Bicycle Summary

Project #: 63381.01

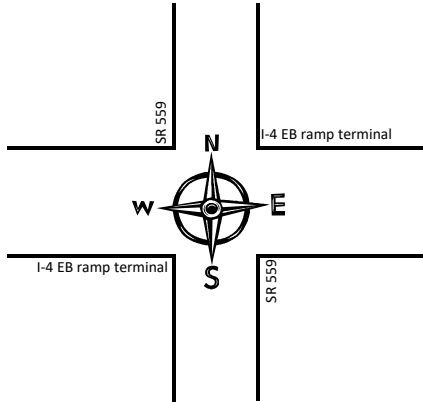
NB/SB: SR 559

Date: 7/19/2022

EB/WB: I-4 EB ramp terminal

		Hour								
		7:00	8:00	11:00	12:00	14:00	15:00	16:00	17:00	
		1	2	3	4	5	6	7	8	
Eastbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0
Westbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0

		Southbound		Northbound	
Hour		Ped	Bike	Ped	Bike
1	7:00	0	0	0	0
2	8:00	0	0	0	0
3	11:00	0	0	0	0
4	12:00	0	0	0	0
5	14:00	0	0	0	0
6	15:00	0	0	0	0
7	16:00	0	0	2	0
8	17:00	0	0	0	0
		0	0	2	0



		Southbound		Northbound			
Hour		Ped	Bike	Ped	Bike		
1	7:00	0	0	0	0		
2	8:00	0	0	0	0		
3	11:00	0	0	0	0		
4	12:00	0	0	0	0		
5	14:00	0	0	0	0		
6	15:00	0	0	0	0		
7	16:00	0	0	0	0		
8	17:00	0	0	0	0		
		0	0	0	0		

Eastbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0
Westbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0

7:00	8:00	11:00	12:00	14:00	15:00	16:00	17:00
1	2	3	4	5	6	7	8

2 0

Hour

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Polk
 Intersection SR 559
 Date July 19, 2022

City Auburndale
 & CR 559A (C. Fred Jones Boulevard)

All Vehicles
 VHB Project #: 63381.01

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	17	83	18	24	61	93	66	9	12	2	3	26
7:15 AM - 7:30 AM	25	93	10	37	53	89	55	4	7	4	5	30
7:30 AM - 7:45 AM	9	86	8	20	65	62	44	10	13	5	4	30
7:45 AM - 8:00 AM	9	76	11	28	66	27	40	2	9	9	3	27
8:00 AM - 8:15 AM	4	73	13	30	54	36	40	15	9	3	2	31
8:15 AM - 8:30 AM	6	72	2	26	58	32	33	5	9	4	8	24
8:30 AM - 8:45 AM	6	67	9	34	66	36	39	8	7	3	3	24
8:45 AM - 9:00 AM	14	58	5	40	68	31	34	6	11	5	2	36
TOTAL	90	608	76	239	491	406	351	59	77	35	30	228
Peak Hour												
7:00 AM - 8:00 AM	60	338	47	109	245	271	205	25	41	20	15	113

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	13	57	8	34	79	51	37	3	12	4	1	24
4:15 PM - 4:30 PM	6	58	7	41	93	45	36	6	13	6	5	32
4:30 PM - 4:45 PM	9	60	7	31	101	59	25	7	6	5	3	32
4:45 PM - 5:00 PM	9	65	10	33	107	56	30	10	10	7	8	28
5:00 PM - 5:15 PM	4	66	11	39	110	50	37	9	13	8	7	28
5:15 PM - 5:30 PM	8	61	11	39	100	73	36	6	10	11	5	24
5:30 PM - 5:45 PM	19	66	5	36	112	86	89	15	20	6	2	32
5:45 PM - 6:00 PM	20	64	4	30	82	91	65	15	17	1	5	23
TOTAL	88	497	63	283	784	511	355	71	101	48	36	223
Peak Hour												
5:00 PM - 6:00 PM	51	257	31	144	404	300	227	45	60	26	19	107

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Polk City Auburndale
 Intersection SR 559 & CR 559A (C. Fred Jones Boulevard)
 Date July 19, 2022 Trucks

VHB Project #: 63381.01

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	6	1	10	3	3	5	3	0	0	0	9
7:15 AM - 7:30 AM	0	4	0	15	2	2	6	0	0	0	2	7
7:30 AM - 7:45 AM	1	5	0	7	6	6	2	2	1	0	1	9
7:45 AM - 8:00 AM	0	2	0	13	4	3	3	0	0	0	0	6
8:00 AM - 8:15 AM	1	4	0	11	5	1	2	3	0	1	0	5
8:15 AM - 8:30 AM	0	0	0	9	5	2	4	3	0	0	1	9
8:30 AM - 8:45 AM	0	5	0	11	2	5	6	2	1	0	1	5
8:45 AM - 9:00 AM	1	3	0	16	6	1	4	3	1	2	1	12
TOTAL	3	29	1	92	33	23	32	16	3	3	6	62
Peak Hour 7:00 AM - 8:00 AM	1	17	1	45	15	14	16	5	1	0	3	31
	2%	5%	2%	41%	6%	5%	8%	20%	2%	0%	20%	27%

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	4	0	10	5	1	3	1	0	0	1	6
4:15 PM - 4:30 PM	0	5	0	15	7	1	4	2	0	0	2	7
4:30 PM - 4:45 PM	0	4	1	14	3	4	3	1	0	0	1	10
4:45 PM - 5:00 PM	0	2	1	11	0	2	2	4	1	3	0	7
5:00 PM - 5:15 PM	0	4	0	9	5	2	4	3	0	1	0	5
5:15 PM - 5:30 PM	0	3	0	14	0	2	2	1	0	0	1	6
5:30 PM - 5:45 PM	0	2	1	11	1	2	4	1	0	0	0	8
5:45 PM - 6:00 PM	0	2	0	10	1	2	2	3	0	0	1	5
TOTAL	0	26	3	94	22	16	24	16	1	4	6	54
Peak Hour 5:00 PM - 6:00 PM	0	11	1	44	7	8	12	8	0	1	2	24
	0%	4%	3%	31%	2%	3%	5%	18%	0%	4%	11%	22%

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Polk

City Auburndale

Intersection SR 559

& CR 559A (C. Fred Jones Boulevard)

Date July 19, 2022

U-Turns & RTOR

VHB Project #: 63381.01

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	0	7	3	0	37	0	0	4	0	0	7
7:15 AM - 7:30 AM	0	0	3	4	0	40	0	0	5	0	0	14
7:30 AM - 7:45 AM	0	0	3	2	0	25	0	0	9	0	0	13
7:45 AM - 8:00 AM	0	0	4	3	0	11	0	0	4	0	0	13
8:00 AM - 8:15 AM	0	0	5	2	0	14	0	0	3	0	0	10
8:15 AM - 8:30 AM	0	0	1	2	0	13	0	0	7	0	0	9
8:30 AM - 8:45 AM	0	0	6	2	0	13	0	0	5	0	0	12
8:45 AM - 9:00 AM	0	0	1	3	0	14	0	0	4	0	0	12
TOTAL	0	0	30	21	0	167	0	0	41	0	0	90
Peak Hour												
7:00 AM - 8:00 AM	0	0	17	12	0	113	0	0	22	0	0	47

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	0	4	7	0	16	0	0	5	0	0	4
4:15 PM - 4:30 PM	0	0	1	5	0	16	0	0	6	0	0	18
4:30 PM - 4:45 PM	0	0	4	1	0	11	0	0	3	0	0	14
4:45 PM - 5:00 PM	0	0	1	5	0	20	0	0	1	0	0	13
5:00 PM - 5:15 PM	0	0	4	7	0	20	0	0	8	0	0	14
5:15 PM - 5:30 PM	0	0	8	4	0	26	0	0	6	0	0	8
5:30 PM - 5:45 PM	0	0	2	4	0	44	0	0	9	0	0	13
5:45 PM - 6:00 PM	0	0	2	7	0	44	0	0	11	0	0	12
TOTAL	0	0	26	40	0	197	0	0	49	0	0	96
Peak Hour												
5:00 PM - 6:00 PM	0	0	16	22	0	134	0	0	34	0	0	47

Pedestrian & Bicycle Summary

Project #: 63381.01

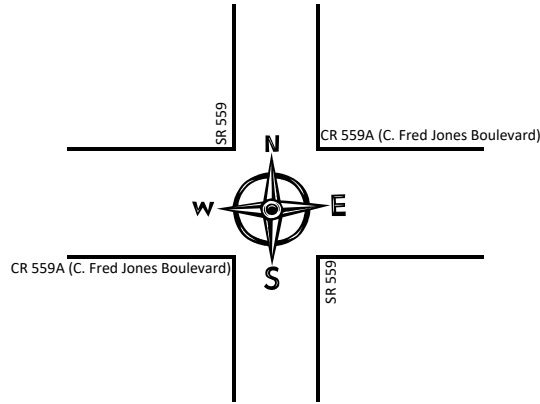
NB/SB: SR 559

Date: 7/19/2022

EB/WB: CR 559A (C. Fred Jones Boulevard)

		Hour								
		7:00	8:00	11:00	12:00	14:00	15:00	16:00	17:00	
		1	2	3	4	5	6	7	8	
Eastbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0
Westbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0

		Southbound		Northbound	
Hour		Ped	Bike	Ped	Bike
1	7:00	0	0	0	0
2	8:00	0	0	0	0
3	11:00	0	0	0	0
4	12:00	0	0	0	0
5	14:00	0	0	0	0
6	15:00	0	0	0	0
7	16:00	0	0	0	0
8	17:00	0	0	0	0
		0	0	0	0



		Southbound		Northbound			
Hour		Ped	Bike	Ped	Bike	Hour	
1	7:00	0	0	0	0	1	7:00
2	8:00	0	0	0	0	2	8:00
3	11:00	0	0	0	0	3	11:00
4	12:00	0	0	0	0	4	12:00
5	14:00	0	0	0	0	5	14:00
6	15:00	0	0	0	0	6	15:00
7	16:00	0	0	0	0	7	16:00
8	17:00	0	0	0	0	8	17:00
		0	0	0	0		

Eastbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0
Westbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0

		7:00	8:00	11:00	12:00	14:00	15:00	16:00	17:00		
		1	2	3	4	5	6	7	8		
0	0									Hour	

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County	Polk	City	Auburndale
Intersection	SR 559	&	U-Turn South of CR 559A (C. Fred Jones Boulevard)
Date	July 19, 2022	All Vehicles	

VHB Project #: 63381.01

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	123	0	0	71	0	5	0	0	0	0	0
7:15 AM - 7:30 AM	0	105	0	0	59	0	9	0	0	0	0	0
7:30 AM - 7:45 AM	0	96	0	0	80	0	7	0	0	0	0	0
7:45 AM - 8:00 AM	0	85	0	0	73	0	11	0	0	0	0	0
8:00 AM - 8:15 AM	0	76	0	0	59	0	8	0	0	0	0	0
8:15 AM - 8:30 AM	0	82	0	0	64	0	10	0	0	0	0	0
8:30 AM - 8:45 AM	0	70	0	0	66	0	10	0	0	0	0	0
8:45 AM - 9:00 AM	0	66	0	0	68	0	11	0	0	0	0	0
TOTAL	0	703	0	0	540	0	71	0	0	0	0	0
Peak Hour												
7:00 AM - 8:00 AM	0	409	0	0	283	0	32	0	0	0	0	0

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	70	0	0	88	0	13	0	0	0	0	0
4:15 PM - 4:30 PM	0	63	0	0	113	0	8	0	0	0	0	0
4:30 PM - 4:45 PM	0	73	0	0	99	0	10	0	0	0	0	0
4:45 PM - 5:00 PM	0	79	0	0	115	0	4	0	0	0	0	0
5:00 PM - 5:15 PM	0	77	0	1	124	0	9	0	0	0	0	0
5:15 PM - 5:30 PM	0	78	0	1	123	0	7	0	0	0	0	0
5:30 PM - 5:45 PM	0	77	0	0	129	0	5	0	0	0	0	0
5:45 PM - 6:00 PM	0	84	0	0	95	0	6	0	0	0	0	0
TOTAL	0	601	0	2	886	0	62	0	0	0	0	0
Peak Hour												
4:45 PM - 5:45 PM	0	311	0	2	491	0	25	0	0	0	0	0

Roadway Count Summary

Vanasse Hangen Brustlin, Inc.

County Polk City Auburndale
 Intersection SR 559 & U-Turn South of CR 559A (C. Fred Jones Boulevard)
 Date July 19, 2022 Trucks

VHB Project #: 63381.01

AM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
7:00 AM - 7:15 AM	0	7	0	0	3	0	0	0	0	0	0	0
7:15 AM - 7:30 AM	0	2	0	0	2	0	1	0	0	0	0	0
7:30 AM - 7:45 AM	0	3	0	0	6	0	2	0	0	0	0	0
7:45 AM - 8:00 AM	0	3	0	0	4	0	1	0	0	0	0	0
8:00 AM - 8:15 AM	0	1	0	0	6	0	2	0	0	0	0	0
8:15 AM - 8:30 AM	0	3	0	0	8	0	1	0	0	0	0	0
8:30 AM - 8:45 AM	0	4	0	0	4	0	1	0	0	0	0	0
8:45 AM - 9:00 AM	0	5	0	0	11	0	3	0	0	0	0	0
TOTAL	0	28	0	0	44	0	11	0	0	0	0	0
Peak Hour 7:00 AM - 8:00 AM	0	15	0	0	15	0	4	0	0	0	0	0
	0%	4%	0%	0%	5%	0%	13%	0%	0%	0%	0%	0%

PM Peak Hour

Time Period	Northbound			Southbound			Eastbound			Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
4:00 PM - 4:15 PM	0	4	0	0	0	0	3	0	0	0	0	0
4:15 PM - 4:30 PM	0	3	0	0	2	0	2	0	0	0	0	0
4:30 PM - 4:45 PM	0	3	0	0	2	0	2	0	0	0	0	0
4:45 PM - 5:00 PM	0	3	0	0	3	0	1	0	0	0	0	0
5:00 PM - 5:15 PM	0	2	0	0	5	0	1	0	0	0	0	0
5:15 PM - 5:30 PM	0	6	0	0	0	0	0	0	0	0	0	0
5:30 PM - 5:45 PM	0	2	0	0	1	0	0	0	0	0	0	0
5:45 PM - 6:00 PM	0	1	0	0	2	0	1	0	0	0	0	0
TOTAL	0	24	0	0	15	0	10	0	0	0	0	0
Peak Hour 4:45 PM - 5:45 PM	0	13	0	0	9	0	2	0	0	0	0	0
	0%	4%	0%	0%	2%	0%	8%	0%	0%	0%	0%	0%

Pedestrian & Bicycle Summary

Project #: 63381.01

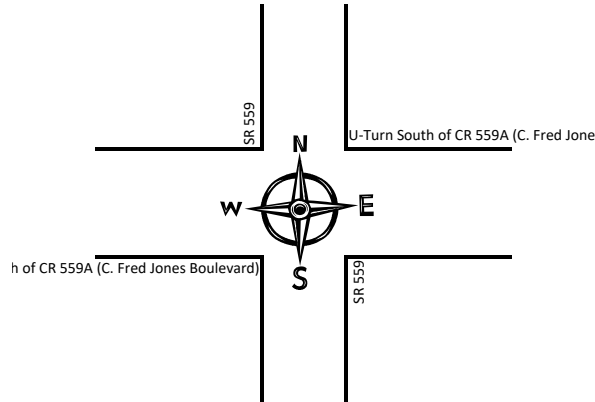
NB/SB: SR 559

Date: 7/19/2022

EB/WB: U-Turn South of CR 559A (C. Fred Jones

		Hour								
		7:00	8:00	11:00	12:00	14:00	15:00	16:00	17:00	
		1	2	3	4	5	6	7	8	
Eastbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0
Westbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0

		Southbound		Northbound	
Hour		Ped	Bike	Ped	Bike
1	7:00	0	0	0	0
2	8:00	0	0	0	0
3	11:00	0	0	0	0
4	12:00	0	0	0	0
5	14:00	0	0	0	0
6	15:00	0	0	0	0
7	16:00	0	0	0	0
8	17:00	0	0	0	0
		0	0	0	0



		Southbound		Northbound		Hour
		Ped	Bike	Ped	Bike	
	1	7:00	0	0	0	0
	2	8:00	0	0	0	0
	3	11:00	0	0	0	0
	4	12:00	0	0	0	0
	5	14:00	0	0	0	0
	6	15:00	0	0	0	0
	7	16:00	0	0	0	0
	8	17:00	0	0	0	0
		0	0	0	0	

Eastbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0
Westbound	Bike	0	0	0	0	0	0	0	0	0
	Ped	0	0	0	0	0	0	0	0	0

7:00	8:00	11:00	12:00	14:00	15:00	16:00	17:00
1	2	3	4	5	6	7	8

0 0

Hour

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1600 POLK COUNTYWIDE

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2021 - 01/02/2021	0.98	1.01
2	01/03/2021 - 01/09/2021	1.03	1.06
3	01/10/2021 - 01/16/2021	1.07	1.10
4	01/17/2021 - 01/23/2021	1.06	1.09
5	01/24/2021 - 01/30/2021	1.05	1.08
6	01/31/2021 - 02/06/2021	1.04	1.07
7	02/07/2021 - 02/13/2021	1.03	1.06
8	02/14/2021 - 02/20/2021	1.02	1.05
9	02/21/2021 - 02/27/2021	1.00	1.03
*10	02/28/2021 - 03/06/2021	0.99	1.02
*11	03/07/2021 - 03/13/2021	0.97	1.00
*12	03/14/2021 - 03/20/2021	0.96	0.99
*13	03/21/2021 - 03/27/2021	0.96	0.99
*14	03/28/2021 - 04/03/2021	0.96	0.99
*15	04/04/2021 - 04/10/2021	0.96	0.99
*16	04/11/2021 - 04/17/2021	0.97	1.00
*17	04/18/2021 - 04/24/2021	0.97	1.00
*18	04/25/2021 - 05/01/2021	0.98	1.01
*19	05/02/2021 - 05/08/2021	0.98	1.01
*20	05/09/2021 - 05/15/2021	0.98	1.01
*21	05/16/2021 - 05/22/2021	0.99	1.02
*22	05/23/2021 - 05/29/2021	0.99	1.02
23	05/30/2021 - 06/05/2021	1.00	1.03
24	06/06/2021 - 06/12/2021	1.00	1.03
25	06/13/2021 - 06/19/2021	1.00	1.03
26	06/20/2021 - 06/26/2021	1.01	1.04
27	06/27/2021 - 07/03/2021	1.02	1.05
28	07/04/2021 - 07/10/2021	1.03	1.06
29	07/11/2021 - 07/17/2021	1.04	1.07
30	07/18/2021 - 07/24/2021	1.04	1.07
31	07/25/2021 - 07/31/2021	1.04	1.07
32	08/01/2021 - 08/07/2021	1.04	1.07
33	08/08/2021 - 08/14/2021	1.05	1.08
34	08/15/2021 - 08/21/2021	1.05	1.08
35	08/22/2021 - 08/28/2021	1.05	1.08
36	08/29/2021 - 09/04/2021	1.04	1.07
37	09/05/2021 - 09/11/2021	1.04	1.07
38	09/12/2021 - 09/18/2021	1.04	1.07
39	09/19/2021 - 09/25/2021	1.02	1.05
40	09/26/2021 - 10/02/2021	1.01	1.04
41	10/03/2021 - 10/09/2021	0.99	1.02
42	10/10/2021 - 10/16/2021	0.98	1.01
43	10/17/2021 - 10/23/2021	0.98	1.01
44	10/24/2021 - 10/30/2021	0.98	1.01
45	10/31/2021 - 11/06/2021	0.98	1.01
46	11/07/2021 - 11/13/2021	0.98	1.01
47	11/14/2021 - 11/20/2021	0.98	1.01
48	11/21/2021 - 11/27/2021	0.98	1.01
49	11/28/2021 - 12/04/2021	0.98	1.01
50	12/05/2021 - 12/11/2021	0.98	1.01
51	12/12/2021 - 12/18/2021	0.98	1.01
52	12/19/2021 - 12/25/2021	1.03	1.06
53	12/26/2021 - 12/31/2021	1.07	1.10

* PEAK SEASON

08-MAR-2022 12:36:23

830UPD

1_1600_PKSEASON.TXT

2021 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 1604 POLK I4

WEEK	DATES	SF	MOCF: 0.97 PSCF
1	01/01/2021 - 01/02/2021	0.00	0.00
2	01/03/2021 - 01/09/2021	0.00	0.00
3	01/10/2021 - 01/16/2021	1.10	1.13
4	01/17/2021 - 01/23/2021	1.08	1.11
5	01/24/2021 - 01/30/2021	1.07	1.10
6	01/31/2021 - 02/06/2021	1.05	1.08
7	02/07/2021 - 02/13/2021	1.04	1.07
8	02/14/2021 - 02/20/2021	1.02	1.05
9	02/21/2021 - 02/27/2021	1.00	1.03
10	02/28/2021 - 03/06/2021	0.99	1.02
*11	03/07/2021 - 03/13/2021	0.97	1.00
*12	03/14/2021 - 03/20/2021	0.95	0.98
*13	03/21/2021 - 03/27/2021	0.96	0.99
*14	03/28/2021 - 04/03/2021	0.96	0.99
*15	04/04/2021 - 04/10/2021	0.97	1.00
*16	04/11/2021 - 04/17/2021	0.97	1.00
*17	04/18/2021 - 04/24/2021	0.97	1.00
*18	04/25/2021 - 05/01/2021	0.98	1.01
*19	05/02/2021 - 05/08/2021	0.98	1.01
*20	05/09/2021 - 05/15/2021	0.98	1.01
*21	05/16/2021 - 05/22/2021	0.98	1.01
*22	05/23/2021 - 05/29/2021	0.99	1.02
*23	05/30/2021 - 06/05/2021	0.99	1.02
24	06/06/2021 - 06/12/2021	0.99	1.02
25	06/13/2021 - 06/19/2021	1.00	1.03
26	06/20/2021 - 06/26/2021	1.00	1.03
27	06/27/2021 - 07/03/2021	1.01	1.04
28	07/04/2021 - 07/10/2021	1.01	1.04
29	07/11/2021 - 07/17/2021	1.01	1.04
30	07/18/2021 - 07/24/2021	1.02	1.05
31	07/25/2021 - 07/31/2021	1.02	1.05
32	08/01/2021 - 08/07/2021	1.02	1.05
33	08/08/2021 - 08/14/2021	1.03	1.06
34	08/15/2021 - 08/21/2021	1.03	1.06
35	08/22/2021 - 08/28/2021	1.03	1.06
36	08/29/2021 - 09/04/2021	1.04	1.07
37	09/05/2021 - 09/11/2021	1.04	1.07
38	09/12/2021 - 09/18/2021	1.05	1.08
39	09/19/2021 - 09/25/2021	1.05	1.08
40	09/26/2021 - 10/02/2021	1.05	1.08
41	10/03/2021 - 10/09/2021	1.06	1.09
42	10/10/2021 - 10/16/2021	1.06	1.09
43	10/17/2021 - 10/23/2021	1.06	1.09
44	10/24/2021 - 10/30/2021	1.07	1.10
45	10/31/2021 - 11/06/2021	1.07	1.10
46	11/07/2021 - 11/13/2021	1.07	1.10
47	11/14/2021 - 11/20/2021	1.08	1.11
48	11/21/2021 - 11/27/2021	1.08	1.11
49	11/28/2021 - 12/04/2021	1.09	1.12
50	12/05/2021 - 12/11/2021	1.09	1.12
51	12/12/2021 - 12/18/2021	1.09	1.12
52	12/19/2021 - 12/25/2021	1.10	1.13
53	12/26/2021 - 12/31/2021	1.10	1.13

* PEAK SEASON

08-MAR-2022 12:36:23

830UPD

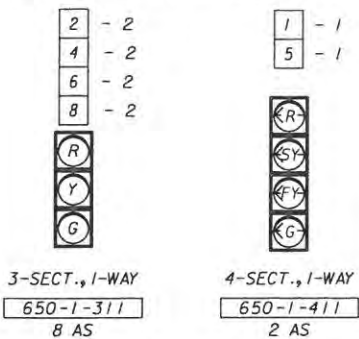
1_1604_PKSEASON.TXT

2021 WEEKLY AXLE FACTOR CATEGORY REPORT - REPORT TYPE: ALL

COUNTY: 16 - POLK

WEEK	DATES	1619 SR659/COMBEE, CR546-SR33	1620 SR544, US92-OLD LUCERNE	1621 SR546, I-4 - CR563	1622 SR559, US92-LK MATTIE
1	01/01/2021 - 01/02/2021	0.92	0.94	0.92	0.95
2	01/03/2021 - 01/09/2021	0.92	0.94	0.92	0.95
3	01/10/2021 - 01/16/2021	0.92	0.93	0.92	0.95
4	01/17/2021 - 01/23/2021	0.92	0.93	0.92	0.95
5	01/24/2021 - 01/30/2021	0.92	0.93	0.92	0.95
6	01/31/2021 - 02/06/2021	0.92	0.93	0.92	0.95
7	02/07/2021 - 02/13/2021	0.92	0.93	0.92	0.95
8	02/14/2021 - 02/20/2021	0.92	0.93	0.92	0.95
9	02/21/2021 - 02/27/2021	0.92	0.93	0.93	0.95
10	02/28/2021 - 03/06/2021	0.92	0.94	0.93	0.95
11	03/07/2021 - 03/13/2021	0.92	0.94	0.94	0.95
12	03/14/2021 - 03/20/2021	0.92	0.94	0.94	0.95
13	03/21/2021 - 03/27/2021	0.92	0.94	0.94	0.95
14	03/28/2021 - 04/03/2021	0.92	0.95	0.94	0.95
15	04/04/2021 - 04/10/2021	0.92	0.95	0.94	0.95
16	04/11/2021 - 04/17/2021	0.92	0.95	0.94	0.95
17	04/18/2021 - 04/24/2021	0.92	0.95	0.94	0.95
18	04/25/2021 - 05/01/2021	0.92	0.94	0.93	0.95
19	05/02/2021 - 05/08/2021	0.92	0.94	0.93	0.95
20	05/09/2021 - 05/15/2021	0.92	0.93	0.92	0.95
21	05/16/2021 - 05/22/2021	0.92	0.93	0.92	0.95
22	05/23/2021 - 05/29/2021	0.92	0.93	0.92	0.95
23	05/30/2021 - 06/05/2021	0.92	0.93	0.92	0.95
24	06/06/2021 - 06/12/2021	0.92	0.93	0.92	0.95
25	06/13/2021 - 06/19/2021	0.92	0.93	0.92	0.95
26	06/20/2021 - 06/26/2021	0.92	0.93	0.92	0.95
27	06/27/2021 - 07/03/2021	0.92	0.94	0.92	0.95
28	07/04/2021 - 07/10/2021	0.92	0.94	0.92	0.95
29	07/11/2021 - 07/17/2021	0.92	0.94	0.92	0.95
30	07/18/2021 - 07/24/2021	0.92	0.94	0.92	0.95
31	07/25/2021 - 07/31/2021	0.92	0.94	0.92	0.95
32	08/01/2021 - 08/07/2021	0.92	0.94	0.91	0.95
33	08/08/2021 - 08/14/2021	0.92	0.94	0.91	0.95
34	08/15/2021 - 08/21/2021	0.92	0.94	0.91	0.95
35	08/22/2021 - 08/28/2021	0.92	0.94	0.91	0.95
36	08/29/2021 - 09/04/2021	0.92	0.94	0.92	0.95
37	09/05/2021 - 09/11/2021	0.92	0.94	0.92	0.95
38	09/12/2021 - 09/18/2021	0.92	0.94	0.92	0.95
39	09/19/2021 - 09/25/2021	0.92	0.94	0.92	0.95
40	09/26/2021 - 10/02/2021	0.92	0.94	0.92	0.95
41	10/03/2021 - 10/09/2021	0.92	0.94	0.92	0.95
42	10/10/2021 - 10/16/2021	0.92	0.94	0.92	0.95
43	10/17/2021 - 10/23/2021	0.92	0.94	0.92	0.95
44	10/24/2021 - 10/30/2021	0.92	0.94	0.92	0.95
45	10/31/2021 - 11/06/2021	0.92	0.94	0.92	0.95
46	11/07/2021 - 11/13/2021	0.92	0.94	0.92	0.95
47	11/14/2021 - 11/20/2021	0.92	0.94	0.92	0.95
48	11/21/2021 - 11/27/2021	0.92	0.94	0.92	0.95
49	11/28/2021 - 12/04/2021	0.92	0.94	0.92	0.95
50	12/05/2021 - 12/11/2021	0.92	0.94	0.92	0.95
51	12/12/2021 - 12/18/2021	0.92	0.94	0.92	0.95
52	12/19/2021 - 12/25/2021	0.92	0.94	0.92	0.95
53	12/26/2021 - 12/31/2021	0.92	0.93	0.92	0.95

SIGNAL HEAD DETAILS

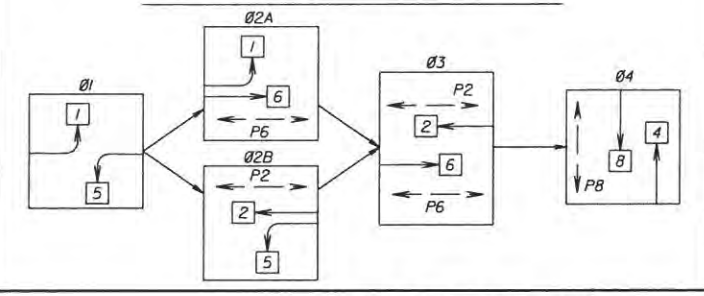


ALL INDICATIONS SHALL BE LED



LEFT TURN YIELD ON FLASHING YELLOW ARROW
FTP-85-13 (36" X 30")
2 EA

MOVEMENT CHART (S.O.P. 7)



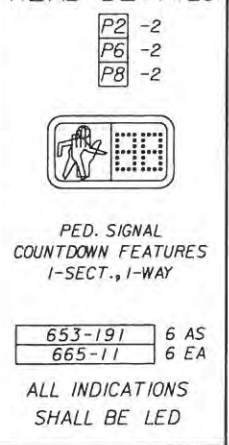
CONTROLLER OPERATION NOTES:

1. MAJOR STREET IS SR 559 (MOVEMENTS 2 & 6). MINOR STREET IS CR 559A (MOVEMENT 8).
2. WHEN SIGNAL IS IN FLASHING MODE, MOVEMENTS 2 AND 6 SHALL FLASH YELLOW, ALL OTHER MOVEMENTS SHALL FLASH RED.
3. THE CONTRACTOR MUST PROGRAM PHASE RESTRICTIONS TO OMIT MOVEMENT 1 AND REDIRECT CALLS FROM MOVEMENT 1 TO MOVEMENT 6, WHEN MOVEMENT 2 IS GREEN.

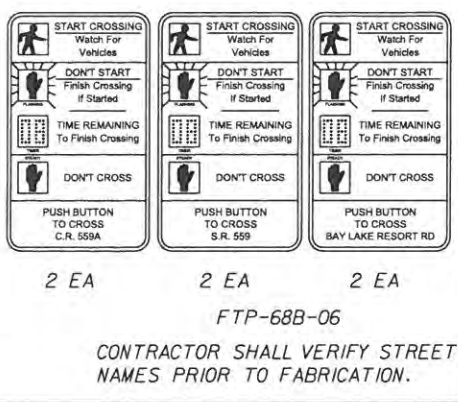
VIDEO DETECTION CHART

CAMERA	MOVEMENT NUMBER	DELAY
CD-1	2 & 5	-
CD-2	8	5
CD-3	1 & 6	-
CD-4	4	5

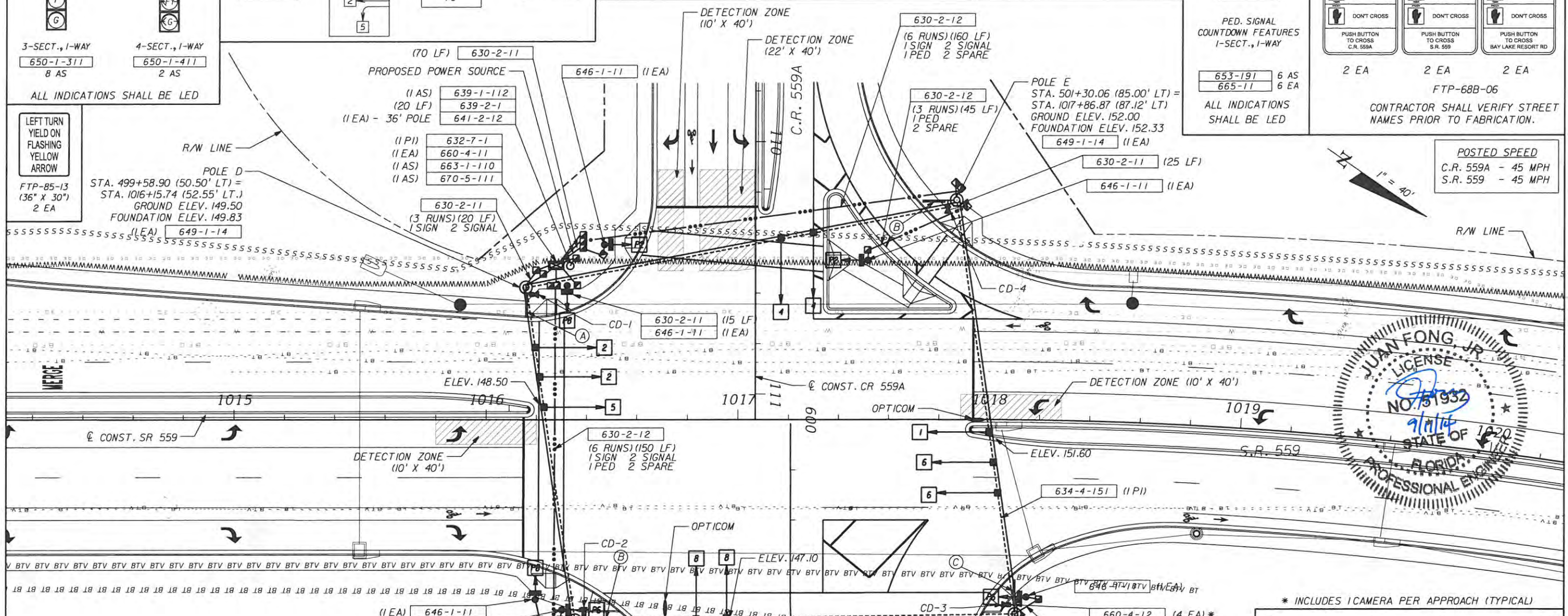
PED SIGNAL HEAD DETAILS



PEDESTRIAN SIGN DETAILS

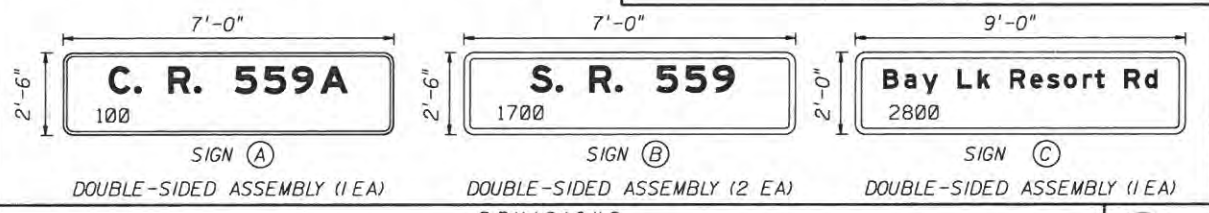


POSTED SPEED
C.R. 559A - 45 MPH
S.R. 559 - 45 MPH



INTERNALLY ILLUMINATED SIGNS (LED)

1. CONTRACTOR SHALL VERIFY BLOCK NUMBERS AND BLOCK NUMBER PLACEMENT PRIOR TO FABRICATION
2. SEE GUIDESIGN WORKSHEET FOR ADDITIONAL DETAILS.



* INCLUDES 1 CAMERA PER APPROACH (TYPICAL)

CONTROLLER TIMINGS							
TIMING FUNCTION	1	2	4	5	6	8	
MINIMUM GREEN	5	10	10	5	10	10	
EXTENSION	3.0	3.0	3.0	3.0	3.0	3.0	
MAXIMUM GREEN 1	20	45	30	20	45	30	
MAXIMUM GREEN 2							
YELLOW CLEARANCE	5.7	5.7	5.8	5.7	5.7	5.8	
ALL RED	2.0	2.0	3.0	2.0	2.0	3.0	
PEDESTRIAN WALK		7			7	7	
PED. CLEARANCE		20			40	27	
RECALL		MIN			MIN		

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Pegasus ENGINEERING
 JUAN FONG, JR., P.E.
 LICENSE # 51932
 PEGASUS ENGINEERING, LLC
 301 WEST STATE ROAD 434, SUITE 309
 WINTER SPRINGS, FLORIDA 32708
 TEL. 407-992-9160
 CERTIFICATE OF AUTHORIZATION NO. 27770

POLK COUNTY TRANSPORTATION DIVISION
 3000 SHEFFIELD ROAD
 WINTER HAVEN, FL 33880

ROAD NO.	PROJECT NO.
655/559A	5400042

SIGNALIZATION PLAN
CR 559A & SR 559 (4-LANE)

SHEET NO. T-6

Crash Number	Location Mile Post	Roadway Id	Crash Date	Crash Year	On Road	Intersecting Road	First Harmful Event	Manner Of Collision	Light Condition	Weather Condition	Surface Condition	Junction	Site Location	Alcohol Drugs Involvement	Number of Fatalities	Number of Injured	Total Crash Damage Amount	Crash Status
878698800	7.226	16160000	3/17/2019	2019	SR 559	FRED JONES BLVD	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Intersection	Influenced By Intersection	Drg		2	500	Q/C Completed - Loc Verified
864435210	7.235	16160000	6/13/2016	2016	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
856212750	7.235	16160000	6/10/2017	2017	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Sideswipe, Same Direction	Dawn	Clear	Dry	Intersection	Influenced By Intersection	No			50	Q/C Completed - Loc Verified
872884840	7.235	16160000	11/16/2018	2018	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection	At Intersection	No	1			Q/C Completed - Loc Verified
876665640	7.235	16160000	2/12/2018	2018	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection	At Intersection	No	1		500	Q/C Completed - Loc Verified
858953660	7.235	16160000	3/25/2019	2019	SR 559	BAY LAKE RESORT DR	Tree (Standing)	Not Coded	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
872885010	7.235	16160000	3/2/2019	2019	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Front To Front	Daylight	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
873004680	7.235	16160000	3/7/2019	2019	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Front To Front	Daylight	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
887533120	7.235	16160000	1/27/2019	2019	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Angle	Daylight	Rain	Wet	Non-Junction	At Intersection	No			300	Q/C Completed - Loc Verified
890125730	7.235	16160000	7/16/2019	2019	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Other (See Narrative)	Dark-Lighted	Clear	Dry	Non-Junction	At Intersection	No			600	Q/C Completed - Loc Verified
893716300	7.235	16160000	10/22/2019	2019	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Angle	Daylight	Cloudy	Dry	Non-Junction	At Intersection	No		2		Q/C Completed - Loc Verified
241364160	7.235	16160000	10/20/2020	2020	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Clear	Dry	Non-Junction	At Intersection	No			400	Q/C Completed - Loc Verified
858962730	7.235	16160000	12/19/2020	2020	SR 559	FRED JONES BLVD	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
858958880	7.24	16160000	2/27/2020	2020	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Intersection-Related	Influenced By Intersection	No			200	Q/C Completed - Loc Verified
856213830	7.248	16160000	8/16/2017	2017	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Intersection-Related	Influenced By Intersection	No			325	Q/C Completed - Loc Verified
878711960	7.254	16160000	9/21/2018	2018	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Intersection-Related	Influenced By Intersection	No			100	Q/C Completed - Loc Verified
869395860	7.273	16160000	5/11/2017	2017	SR 559	FRED JONES BLVD	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Influenced By Intersection	No			400	Q/C Completed - Loc Verified
856201600	7.296	16160000	9/29/2015	2015	SR 400	SR 400	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
869376160	7.307	16160000	2/27/2017	2017	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Driveway Access	No			500	Q/C Completed - Loc Verified
853869910	7.33	16160000	12/8/2016	2016	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Driveway/Alley Access Related	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
852860330	7.344	16160000	5/27/2016	2016	SR 559	SR 400	Pedestrian	Other (See Narrative)	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1		500	Q/C Completed - Loc Verified
856881340	7.394	16160000	4/29/2015	2015	SR 559	BAY LAKE RESORT DR	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
864421340	7.394	16160000	3/8/2016	2016	SR 559	BAY LAKE RESORT DR	Concrete Traffic Barrier	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Influenced By Intersection	No			550	Q/C Completed - Loc Verified
887530420	7.425	16160000	12/29/2018	2018	SR 559	I 4	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Non-Junction	Driveway Access	No			500	Q/C Completed - Loc Verified
893738410	7.44	16160000	4/2/2020	2020	SR 559	FRED JONES BLVD	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Driveway/Alley Access Related	Driveway Access	No			100	Q/C Completed - Loc Verified
860847120	7.441	16160000	10/19/2015	2015	SR 559	BAY LAKE RESORT DR	Impact Attenuator/Crash Cushion	Other (See Narrative)	Daylight	Clear	Dry	Driveway/Alley Access Related	Driveway Access	No				Q/C Completed - Loc Verified
848949530	7.446	16160000	5/5/2015	2015	SR 559	SR 400	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection	Not At Intersection/Rrx/Bridge	No			600	Q/C Completed - Loc Verified
876655400	7.449	16160000	12/18/2017	2017	SR 559	SR 400	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			200	Q/C Completed - Loc Verified
860848990	7.467	16160000	1/29/2016	2016	SR 559	I 4	Motor Vehicle In Transport	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Driveway Access	No	1		500	Q/C Completed - Loc Verified
864425740	7.496	16160000	4/16/2016	2016	SR 559	SR 400	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Dry	Driveway/Alley Access Related	Driveway Access	No				Q/C Completed - Loc Verified
876654400	7.516	16160000	8/6/2018	2018	SR 559	SR 400	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			300	Q/C Completed - Loc Verified
89845450	7.525	16160000	8/28/2020	2020	SR 559	I 4	Utility Pole/Light Support	Other (See Narrative)	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	Alc	1			Q/C Completed - Loc Verified
853361010	7.53	16160000	10/27/2016	2016	SR 559	SR 400	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection	Not At Intersection/Rrx/Bridge	No			800	Q/C Completed - Loc Verified
893720250	7.541	16160000	11/17/2019	2019	SR 559	I 4	Tree (Standing)	Other (See Narrative)	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1		500	Q/C Completed - Loc Verified
851512550	7.544	16160000	1/1/2016	2016	SR 559	I 4	Concrete Traffic Barrier	Other (See Narrative)	Dark-Lighted	Clear	Dry	Intersection	At Intersection	Alc	1			Q/C Completed - Loc Verified
853702280	7.544	16160000	8/7/2016	2016	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Clear	Dry	Non-Junction	At Intersection	No	1			Q/C Completed - Loc Verified
863139820	7.544	16160000	2/20/2016	2016	SR 559	I 4	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Lighted	Clear	Dry	Intersection-Related	At Intersection	No			550	Q/C Completed - Loc Verified
863148830	7.544	16160000	3/23/2016	2016	SR 559	I 4	Motor Vehicle In Transport	Front To Front	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
858947840	7.544	16160000	4/4/2018	2018	SR 559	I 4	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Other (See Narrative)	At Intersection	No				Q/C Completed - Loc Verified
887514140	7.544	16160000	11/8/2018	2018	SR 559	I 4	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Non-Junction	At Intersection	No				Q/C Completed - Loc Verified
893704230	7.544	16160000	9/20/2019	2019	SR 559	I 4	Motor Vehicle In Transport	Front To Front	Dark-Lighted	Clear	Dry	Non-Junction	At Intersection	No	1			Q/C Completed - Loc Verified
241376330	7.544	16160000	11/28/2020	2020	SR 559	I 4	Motor Vehicle In Transport	Front To Front	Dark-Lighted	Clear	Dry	Intersection	At Intersection	No	1		500	Q/C Completed - Loc Verified
893749240	7.544	16160000	2/26/2020	2020	SR 559	I 4	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Non-Junction	At Intersection	No				Q/C Completed - Loc Verified
898417290	7.544	16160000	3/1/2020	2020	SR 559	I 4	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
852567110	7.544	16160000	7/26/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No	2			Q/C Completed - Loc Verified
881689090	7.544	16160000	8/5/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Wet	Intersection-Related	Exit Ramp	No				Q/C Completed - Loc Verified
883691760	7.544	16160000	10/20/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Entrance/Exit Ramp	Exit Ramp	No			500	Q/C Completed - Loc Verified
853712120	7.544	16160000	8/29/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dawn	Clear	Dry	Non-Junction	Exit Ramp	Alc	1			Q/C Completed - Loc Verified
872769410	7.544	16160000	8/27/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Rain	Wet	Non-Junction	Exit Ramp	No	2			Q/C Completed - Loc Verified
883125870	7.544	16160000	8/1/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Exit Ramp	Drg				Q/C Completed - Loc Verified
869380620	7.544	16160000	10/6/2017	2017	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Intersection	Exit Ramp	No	2		850	Q/C Completed - Loc Verified
882268170	7.544	16160000	3/7/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No	1		600	Q/C Completed - Loc Verified
837868760	7.544	16160000	1/3/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Intersection	Exit Ramp	No	4			Q/C Completed - Loc Verified
846252990	7.544	16160000	7/22/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Dry	Entrance/Exit Ramp	Exit Ramp	No			500	Q/C Completed - Loc Verified
846240320	7.544	16160000	3/29/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No			200	Q/C Completed - Loc Verified
853837110	7.544	16160000	1/30/2017	2017	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Clear	Dry	Intersection	Exit Ramp	No	2			Q/C Completed - Loc Verified
878699450	7.544	16160000	6/24/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No				Q/C Completed - Loc Verified
872488710	7.544	16160000	1/14/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No	1		500	Q/C Completed - Loc Verified
882350240	7.544	16160000	12/20/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No	1		300	Q/C Completed - Loc Verified
241367620	7.544	16160000	10/24/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No	4		250	Q/C Completed - Loc Verified
883278190	7.544	16160000	4/5/2020	2020	I 4	SR 559	Curb	Other (See Narrative)	Daylight	Rain	Wet	Intersection	Exit Ramp	Alc	1			Q/C Completed - Loc Verified
883691680	7.544	16160000	9/27/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Cloudy	Wet	Entrance/Exit Ramp	Exit Ramp	No	1		200	Q/C Completed - Loc Verified
898427290	7.544	16160000	6/23/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No				Q/C Completed - Loc Verified
898434950	7.544	16160000	7/2/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Wet	Intersection-Related	Exit Ramp	No			700	Q/C Completed - Loc Verified
876662450	7.553	16160000	3/10/2018	2018	SR 559	I 4	Concrete Traffic Barrier	Other (See Narrative)	Dark-Lighted	Cloudy	Wet	Intersection-Related	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
856201120	7.555	16160000	8/26/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Entrance/Exit Ramp	At Intersection	No			75	Q/C Completed - Loc Verified
834668660	7.582	16160000	3/7/2018	2018	SR 559	SR 400	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
881689440	7.593	16160000	11/23/2019	2019	SR 559	SR 400	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Intersection-Related	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
839219810	7.596	16160000	4/21/2015	2015	SR 559	SR 400	Motor Vehicle In Transport	Front To Front	Dawn	Cloudy	Dry	Non-Junction	Bridge	No	1			Q/C Completed - Loc Verified
871901800	7.596	16160000	3/30/2019	2019	SR 559	I 4	Concrete Traffic Barrier	Other (See Narrative)	Dark-Lighted	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
880320480	7.596	16160000	3/30/2019	2019	SR 559	SR 400	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
881689350	7.596	16160000	11/9/2019	2019	SR 559	SR 400	Motor Vehicle In Transport	Angle	Dark-Lighted	Rain	Wet	Intersection	At Intersection	No	1			Q/C Completed - Loc Verified
883780370	7.596	16160000	9/15/2020	2020	SR 559	SR 400	Motor Vehicle In Transport	Angle	Dark-Lighted	Cloudy	Dry	Intersection</						

883091970	7.685	16160000	8/7/2020	2020	SR 559	SR 400	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Cloudy	Dry	Intersection	At Intersection	No	1		Q/C Completed - Loc Verified
898453380	7.685	16160000	9/3/2020	2020	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection	At Intersection	No	1		Q/C Completed - Loc Verified
883691710	7.685	16160000	10/8/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Entrance/Exit Ramp	Exit Ramp	No		50	Q/C Completed - Loc Verified
890118800	7.685	16160000	7/1/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No		600	Q/C Completed - Loc Verified
851512350	7.685	16160000	11/5/2015	2015	I 4	SR 559	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No			Q/C Completed - Loc Verified
863148210	7.685	16160000	3/23/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection	Exit Ramp	No	1	100	Q/C Completed - Loc Verified
864443630	7.685	16160000	7/17/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No		500	Q/C Completed - Loc Verified
864427720	7.685	16160000	11/19/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection-Related	Exit Ramp	No		500	Q/C Completed - Loc Verified
880352890	7.685	16160000	4/7/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No			Q/C Completed - Loc Verified
890095720	7.685	16160000	3/5/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No		100	Q/C Completed - Loc Verified
845691330	7.685	16160000	1/19/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Cloudy	Dry	Intersection	Exit Ramp	No	1		Q/C Completed - Loc Verified
851528450	7.685	16160000	2/9/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Angle	Daylight	Cloudy	Dry	Intersection	Exit Ramp	No			Q/C Completed - Loc Verified
853903670	7.685	16160000	1/20/2017	2017	I 4	SR 559	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection	Exit Ramp	No			Q/C Completed - Loc Verified
854734290	7.685	16160000	3/30/2017	2017	SR 400	SR 559	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection	Exit Ramp	No	1		Q/C Completed - Loc Verified
241360630	7.685	16160000	10/10/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Intersection	Exit Ramp	No		400	Q/C Completed - Loc Verified
241374700	7.69	16160000	11/13/2020	2020	SR 559	I 4	Ditch	Angle	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No		200	Q/C Completed - Loc Verified
881663490	7.694	16160000	2/26/2020	2020	SR 559	I 4	Motor Vehicle In Transport	Front To Rear	Dusk	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No		500	Q/C Completed - Loc Verified
869397380	7.704	16160000	4/14/2017	2017	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	3		Q/C Completed - Loc Verified
846259230	7.716	16160000	2/20/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Sideswipe, Opposite Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Influenced By Intersection	No		200	Q/C Completed - Loc Verified
898461820	7.761	16160000	9/29/2020	2020	SR 559	I 4	Motor Vehicle In Transport	Sideswipe, Opposite Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No		400	Q/C Completed - Loc Verified
856872040	7.937	16160000	2/7/2015	2015	BROADWAY BLVD	CAMP GILEAD DR	Motor Vehicle In Transport	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			Q/C Completed - Loc Verified
890094240	8.014	16160000	3/23/2019	2019	SR 559	CR 557A	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No		500	Q/C Completed - Loc Verified
890119950	8.014	16160000	6/20/2019	2019	SR 559	CR 557A	Motor Vehicle In Transport	Front To Front	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	3		Q/C Completed - Loc Verified

Crash Number	Location Mile Post	Roadway Id	Crash Date	Crash Year	On Road	Intersecting Road	First Harmful Event	Manner Of Collision	Light Condition	Weather Condition	Surface Condition	Junction	Site Location	Alcohol Drugs Involvement	Number of Fatalities	Number of Injured	Total Crash Damage Amount	Crash Status
848867360	17.287	16320000	8/13/2015	2015	SR 400	MM 43	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No		1		Q/C Completed - Loc Verified
848867380	17.335	16320000	8/13/2015	2015	SR 400	MM 43	Motor Vehicle In Transport	Front To Rear	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No	1	150		Q/C Completed - Loc Verified
851504010	17.382	16320000	1/31/2016	2016	I 4	MILE MARKER #43	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	At Intersection	No	3	500		Q/C Completed - Loc Verified
853410920	17.382	16320000	8/12/2016	2016	SR 400	MM 43	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
863147740	17.382	16320000	6/25/2016	2016	I 4	MILE MARKER #43	Cable Barrier	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1			Q/C Completed - Loc Verified
872771090	17.382	16320000	10/9/2018	2018	SR 400	MM 43	Other Non-Collision	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			200	Q/C Completed - Loc Verified
880708610	17.382	16320000	7/23/2019	2019	SR 400	MM 43	Cable Barrier	Other (See Narrative)	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
881689200	17.382	16320000	9/4/2019	2019	SR 400	SR 33	Motor Vehicle In Transport	Angle	Dusk	Clear	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
241378600	17.382	16320000	1/31/2020	2020	I 4	MILE MARKER #43	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1	600		Q/C Completed - Loc Verified
883093040	17.382	16320000	10/24/2020	2020	I 4	MILE MARKER #43	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
882623500	17.397	16320000	2/5/2020	2020	I 4	MILE MARKER #42	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
854091670	17.41	16320000	6/1/2017	2017	SR 400	MM 43	Cable Barrier	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Influenced By Intersection	No				Q/C Completed - Loc Verified
837423960	17.415	16320000	3/24/2015	2015	SR 400	SR 559	Other Non-Fixed Object	Other (See Narrative)	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			400	Q/C Completed - Loc Verified
837871210	17.415	16320000	1/7/2015	2015	SR 400	SR 559	Animal	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
844893930	17.415	16320000	8/28/2015	2015	I 4	SR 559	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	3			Q/C Completed - Loc Verified
845691930	17.415	16320000	6/29/2015	2015	I 4	SR 559	Guardrail Face	Other (See Narrative)	Dusk	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1			Q/C Completed - Loc Verified
848903340	17.415	16320000	3/27/2015	2015	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
848946550	17.415	16320000	4/15/2015	2015	I 4	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
848950010	17.415	16320000	11/19/2015	2015	SR 400	SR 559	Cable Barrier	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			400	Q/C Completed - Loc Verified
851529190	17.415	16320000	11/7/2015	2015	SR 400	SR 559	Cable Barrier	Other (See Narrative)	Dusk	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
851503930	17.415	16320000	1/6/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
851529370	17.415	16320000	1/22/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No	2			Q/C Completed - Loc Verified
851540790	17.415	16320000	1/31/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	2	500		Q/C Completed - Loc Verified
851541610	17.415	16320000	9/1/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Angle	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
852548730	17.415	16320000	3/16/2016	2016	I 4	SR 559	Guardrail Face	Other (See Narrative)	Daylight	Clear	Dry	Entrance/Exit Ramp	Not At Intersection/Rrx/Bridge	No	2			Q/C Completed - Loc Verified
852906440	17.415	16320000	7/24/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	7			Q/C Completed - Loc Verified
853361000	17.415	16320000	10/21/2016	2016	SR 400	SR 559	Cable Barrier	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			150	Q/C Completed - Loc Verified
853466960	17.415	16320000	9/20/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1			Q/C Completed - Loc Verified
854118890	17.415	16320000	12/11/2016	2016	SR 400	SR 559	Other Non-Fixed Object	Other (See Narrative)	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
863137040	17.415	16320000	3/25/2016	2016	I 4	SR 559	Other Traffic Barrier	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
837412180	17.415	16320000	7/31/2017	2017	SR 400	SR 559	Cable Barrier	Angle	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
855035670	17.415	16320000	7/31/2017	2017	SR 400	SR 559	Cable Barrier	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
855313080	17.415	16320000	9/24/2017	2017	SR 400	SR 559	Cable Barrier	Other (See Narrative)	Dark-Not Lighted	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
869957540	17.415	16320000	8/15/2017	2017	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
854990730	17.415	16320000	1/13/2018	2018	SR 400	SR 559	Ditch	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	2	200		Q/C Completed - Loc Verified
855313320	17.415	16320000	5/23/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1			Q/C Completed - Loc Verified
855743910	17.415	16320000	1/31/2018	2018	I 4	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
871986290	17.415	16320000	8/9/2018	2018	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
872837090	17.415	16320000	7/10/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
880417380	17.415	16320000	11/24/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
881012440	17.415	16320000	10/9/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			850	Q/C Completed - Loc Verified
882200510	17.415	16320000	11/4/2019	2019	I 4	SR 559	Overturn/Rollover	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	2			Q/C Completed - Loc Verified
890117380	17.415	16320000	6/7/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1	600		Q/C Completed - Loc Verified
881842570	17.415	16320000	3/6/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
881842920	17.415	16320000	9/14/2020	2020	SR 400	SR 559	Cable Barrier	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
881940920	17.415	16320000	4/1/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
883092120	17.415	16320000	8/23/2020	2020	SR 400	SR 559	Other Non-Collision	Other (See Narrative)	Dark-Not Lighted	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			100	Q/C Completed - Loc Verified
883147290	17.415	16320000	9/13/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Angle	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
883148800	17.415	16320000	11/10/2020	2020	I 4	SR 559	Cable Barrier	Other (See Narrative)	Dawn	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
883225060	17.415	16320000	6/8/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			200	Q/C Completed - Loc Verified
893739210	17.415	16320000	1/21/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			800	Q/C Completed - Loc Verified
882622280	17.423	16320000	12/23/2019	2019	I 4	CR 655	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	3			Q/C Completed - Loc Verified
852269530	17.428	16320000	5/1/2016	2016	SR 400	CR 557	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1			Q/C Completed - Loc Verified
872651470	17.428	16320000	10/9/2018	2018	I 4	CR 557	Cable Barrier	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	2	200		Q/C Completed - Loc Verified
855204410	17.47	16320000	6/15/2017	2017	I 4	CR 655	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			600	Q/C Completed - Loc Verified
883190460	17.477	16320000	11/1/2020	2020	SR 400	MM 43	Cable Barrier	Other (See Narrative)	Dark-Lighted	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No	2	500		Q/C Completed - Loc Verified
848867430	17.632	16320000	8/22/2015	2015	SR 400	MM 43	Guardrail Face	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			50	Q/C Completed - Loc Verified
848949820	17.678	16320000	8/11/2015	2015	SR 400	SR 570	Motor Vehicle In Transport	Front To Rear	Dawn	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
851513750	17.678	16320000	8/27/2017	2017	I 4	SR 570	Cable Barrier	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
856015990	17.678	16320000	10/26/2017	2017	SR 400	SR 570	Traffic Sign Support	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1			Q/C Completed - Loc Verified
882166370	17.678	16320000	12/23/2019	2019	SR 400	SR 570	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
883225560	17.678	16320000	11/28/2020	2020	I 4	SR 570	Motor Vehicle In Transport	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	2	50		Q/C Completed - Loc Verified
848867240	17.897	16320000	7/1/2015	2015	SR 400	MM 44	Over											

845454240	17.942	16320000	7/9/2015	2015	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	4	Q/C Completed - Loc Verified
854423720	17.97	16320000	7/20/2017	2017	I 4	CR 655	Cargo/Equipment Loss Or Shift	Unknown	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	200	Q/C Completed - Loc Verified
876674640	18.082	16320000	4/14/2018	2018	I 4	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	600	Q/C Completed - Loc Verified
851528380	18.098	16320000	12/13/2015	2015	SR 400	SR 559	Guardrail End	Other (See Narrative)	Dark-Not Lighted	Cloudy	Dry	Entrance/Exit Ramp	Not At Intersection/Rx/Bridge	No	500	Q/C Completed - Loc Verified
851110050	18.131	16320000	12/7/2015	2015	I 4	SR 559	Guardrail Face	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Entrance/Exit Ramp	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
851390070	18.165	16320000	10/28/2015	2015	SR 400	SR 559	Cable Barrier	Other (See Narrative)	Dark-Not Lighted	Cloudy	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
852300740	18.165	16320000	4/4/2016	2016	I 4	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
852301110	18.165	16320000	8/4/2016	2016	I 4	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	500	Q/C Completed - Loc Verified
852548570	18.165	16320000	1/30/2016	2016	I 4	SR 559	Guardrail Face	Unknown	Dark-Lighted	Clear	Dry	Entrance/Exit Ramp	Not At Intersection/Rx/Bridge	Alc	2	Q/C Completed - Loc Verified
853635220	18.165	16320000	10/26/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	650	Q/C Completed - Loc Verified
855204490	18.165	16320000	9/14/2017	2017	SR 400	SR 559	Ran Into Water/Canal	Other (See Narrative)	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
881119400	18.165	16320000	8/1/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	500	Q/C Completed - Loc Verified
881737660	18.165	16320000	7/23/2019	2019	I 4	SR 559	Overturn/Rollover	Other (See Narrative)	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	2	Q/C Completed - Loc Verified
881738230	18.165	16320000	2/19/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	100	Q/C Completed - Loc Verified
882627030	18.165	16320000	5/22/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
883147110	18.165	16320000	7/23/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
853702660	18.215	16320000	11/16/2016	2016	SR 400	SR 559	Cable Barrier	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	400	Q/C Completed - Loc Verified
851503920	18.226	16320000	1/3/2016	2016	I 4	SR 559	Guardrail End	Other (See Narrative)	Dark-Not Lighted	Rain	Wet	Entrance/Exit Ramp	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
852546440	18.226	16320000	7/6/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
882850550	18.226	16320000	9/22/2020	2020	SR 400	SR 559	Struck By Falling, Shifting Ca	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
860848450	18.227	16320000	11/8/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Cloudy	Wet	Entrance/Exit Ramp	Exit Ramp	No	600	Q/C Completed - Loc Verified
863124190	18.234	16320000	1/20/2016	2016	SR 400	SR 559	Concrete Traffic Barrier	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Intersection	At Intersection	No	Q/C Completed - Loc Verified	
852468890	18.234	16320000	2/23/2016	2016	SR 400	SR 559	Ditch	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No	1	Q/C Completed - Loc Verified
863148470	18.234	16320000	4/4/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Other (See Narrative)	Dawn	Cloudy	Dry	Non-Junction	Exit Ramp	No	1	Q/C Completed - Loc Verified
869950480	18.234	16320000	9/1/2017	2017	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Wet	Non-Junction	Exit Ramp	No	Q/C Completed - Loc Verified	
851611280	18.234	16320000	11/2/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Intersection-Related	Exit Ramp	No	Q/C Completed - Loc Verified	
893699660	18.234	16320000	8/31/2019	2019	I 4	SR 559	Embarkment	Other (See Narrative)	Dusk	Clear	Wet	Non-Junction	Exit Ramp	No	Q/C Completed - Loc Verified	
837853070	18.234	16320000	10/30/2015	2015	I 4	SR 559	Parked Motor Vehicle	Sideswipe, Same Direction	Dark-Lighted	Clear	Dry	Other (See Narrative)	Exit Ramp	Alc	100	Q/C Completed - Loc Verified
241387000	18.234	16320000	12/19/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Exit Ramp	Alc	100	Q/C Completed - Loc Verified
882335870	18.234	16320000	6/13/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Intersection-Related	Exit Ramp	No	810	Q/C Completed - Loc Verified
872360290	18.234	16320000	11/23/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Intersection-Related	Exit Ramp	No	25	Q/C Completed - Loc Verified
856883570	18.234	16320000	3/31/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Intersection-Related	Exit Ramp	No	300	Q/C Completed - Loc Verified
883283740	18.263	16320000	11/11/2020	2020	SR 400	SR 559	Overturn/Rollover	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
852125250	18.302	16320000	10/29/2015	2015	I 4	MM 44	Parked Motor Vehicle	Other (See Narrative)	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
883190360	18.302	16320000	9/20/2020	2020	SR 400	MM 44	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
852545350	18.315	16320000	3/29/2016	2016	SR 400	SR 559	Cable Barrier	Other (See Narrative)	Dark-Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
880561510	18.315	16320000	7/24/2019	2019	SR 400	SR 559	Utility Pole/Light Support	Other (See Narrative)	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
851109990	18.32	16320000	11/10/2015	2015	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dawn	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
853467340	18.32	16320000	1/9/2017	2017	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
872232320	18.32	16320000	10/4/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
851560990	18.32	16320000	12/23/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Clear	Dry	Entrance/Exit Ramp	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
852525560	18.359	16320000	3/5/2016	2016	SR 400	MM 44	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
883147100	18.368	16320000	7/23/2020	2020	I 4	SR 559	Cable Barrier	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
852092140	18.388	16320000	2/16/2016	2016	I 4	MM 44	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	4	Q/C Completed - Loc Verified
845312880	18.397	16320000	7/19/2015	2015	SR 400	MM 44	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
848867310	18.397	16320000	7/19/2015	2015	SR 400	MM 44	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	400	Q/C Completed - Loc Verified
852092110	18.397	16320000	2/1/2016	2016	SR 400	MM 44	Concrete Traffic Barrier	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	500	Q/C Completed - Loc Verified
852468850	18.397	16320000	2/13/2016	2016	SR 400	MM 44	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
864440820	18.397	16320000	7/13/2016	2016	I 4	MILE MARKER #44	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Wet	Entrance/Exit Ramp	Not At Intersection/Rx/Bridge	No	300	Q/C Completed - Loc Verified
854091830	18.397	16320000	7/9/2017	2017	SR 400	MILE MARKER #44	Ditch	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
855433610	18.397	16320000	10/13/2017	2017	SR 400	MILE MARKER #44	Other Non-Collision	Other (See Narrative)	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	350	Q/C Completed - Loc Verified
869373930	18.397	16320000	2/10/2017	2017	SR 400	MILE MARKER #44	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
873326990	18.397	16320000	12/17/2017	2017	I 4	MILE MARKER #44	Guardrail Face	Angle	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
871792090	18.397	16320000	7/16/2018	2018	SR 400	MM 44	Motor Vehicle In Transport	Sideswipe, Same Direction	Dusk	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
880761410	18.397	16320000	7/7/2019	2019	SR 400	MILE MARKER #44	Cable Barrier	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	250	Q/C Completed - Loc Verified
882156110	18.397	16320000	12/25/2019	2019	SR 400	MILE MARKER #44	Utility Pole/Light Support	Other (See Narrative)	Dawn	Cloudy	Wet	Entrance/Exit Ramp	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
241372670	18.397	16320000	11/18/2020	2020	I 4	MILE MARKER #44	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	500	Q/C Completed - Loc Verified
881751080	18.397	16320000	8/20/2020	2020	SR 400	MM 44	Motor Vehicle In Transport	Front To Rear	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
881751090	18.397	16320000	8/20/2020	2020	SR 400	MM 44	Motor Vehicle In Transport	Front To Rear	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
882156490	18.397	16320000	7/5/2020	2020	SR 400	MM 44	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	300	Q/C Completed - Loc Verified
882344110	18.397	16320000	7/29/2020	2020	SR 400	MILE MARKER #44	Overturn/Rollover	Other (See Narrative)	Dusk	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
883106470	18.397	16320000	8/10/2020	2020	SR 400	MM 44	Struck By Falling, Shifting Ca	Other (See Narrative)	Dark-Lighted	Cloudy	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
883225360	18.397	16320000	9/1/2020	2020	I 4	MILE MARKER #44	Fence	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	200	Q/C Completed - Loc Verified
898436940	18.397	16320000	6/9/2020	2020	I 4	MM 44	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	500	Q/C Completed - Loc Verified
898441550	18.397	16320000	6/30/2020	2020	I 4	MILE MARKER #44	Guardrail Face	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
898445920	18.397	16320000	7/24/2020	2020	I 4	MILE MARKER #44	Ditch	Other (See Narrative)	Dark-Not Lighted	Clear	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
851554920	18.406	16320000	2/16/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
852860390	18.408	16320000	6/3/2016	2016	SR 400	SR 559	Ditch	Other (See Narrative)	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
845691960	18.412	16320000	7/21/2015	2015	I 4	SR 559	Concrete Traffic Barrier	Other (See Narrative)	Dawn	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	A/D	Q/C Completed - Loc Verified	
848897360	18.415	16320000	3/24/2015	2015	I 4	SR 559	Other Non-Collision	Unknown	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	400	Q/C Completed - Loc Verified
852300910	18.415	16320000	5/21/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
890104340	18.415	16320000	4/5/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Other (See Narrative)	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	Alc	Q/C Completed - Loc Verified	
882850620	18.424	16320000	11/9/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No	Q/C Completed - Loc Verified	
855160970	18.425	16320000	7/31/2017	2017	SR 400	MM 44	Motor Vehicle In Transport	Front To Rear	Daylight	Rain	Wet	Non-Junction	Influenced By Intersection	No	500	Q/C Completed - Loc Verified
852860140	18.434	16320000	3/28/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No	1	Q/C Completed - Loc Verified
880561170	18.434	16320000	3/7/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		

819774180	18.491	16320000	3/29/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No				25	Q/C Completed - Loc Verified
851554880	18.492	16320000	2/15/2016	2016	1 4	MILE MARKER #44	Struck By Falling, Shifting Ca	Other (See Narrative)	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No				500	Q/C Completed - Loc Verified
881411320	18.497	16320000	12/22/2019	2019	1 4	SR 559	Guardrail Face	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No		1	5		Q/C Completed - Loc Verified
872916790	18.5	16320000	4/10/2019	2019	1 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No				450	Q/C Completed - Loc Verified
863134920	18.51	16320000	6/13/2016	2016	1 4	SR 559	Motor Vehicle In Transport	Angle	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
855794500	18.51	16320000	9/1/2017	2017	SR 400	SR 559	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
848655630	18.515	16320000	6/1/2015	2015	SR 400	SR 559	Concrete Traffic Barrier	Other (See Narrative)	Dusk	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				200	Q/C Completed - Loc Verified
852860500	18.515	16320000	9/13/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No		1			Q/C Completed - Loc Verified
851546800	18.515	16320000	3/11/2017	2017	SR 400	SR 559	Other Fixed Object (Wall, Buil	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		2			Q/C Completed - Loc Verified
853702850	18.515	16320000	2/10/2017	2017	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No				200	Q/C Completed - Loc Verified
848867560	18.539	16320000	10/11/2015	2015	SR 400	MM 44	Concrete Traffic Barrier	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No				500	Q/C Completed - Loc Verified
853360810	18.557	16320000	8/27/2016	2016	SR 400	SR 559	Guardrail Face	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				80	Q/C Completed - Loc Verified
856016350	18.567	16320000	1/19/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		1			Q/C Completed - Loc Verified
856016360	18.567	16320000	1/19/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		1		50	Q/C Completed - Loc Verified
871968770	18.579	16320000	5/13/2018	2018	SR 400	CR 557A	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
871968780	18.579	16320000	5/13/2018	2018	SR 400	CR 557A	Motor Vehicle In Transport	Other (See Narrative)	Dark-Not Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
880530500	18.604	16320000	5/14/2019	2019	SR 400	SR 559	Ditch	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No		1			Q/C Completed - Loc Verified
884040390	18.612	16320000	12/6/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Entrance/Exit Ramp	Entrance Ramp	No				Q/C Completed - Loc Verified
854473270	18.612	16320000	5/11/2017	2017	1 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Entrance/Exit Ramp	Entrance Ramp	No			550	Q/C Completed - Loc Verified
853702540	18.615	16320000	10/15/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
882507830	18.623	16320000	2/4/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Lighted	Clear	Dry	Non-Junction	Entrance/Exit Ramp	Exit Ramp	No			500	Q/C Completed - Loc Verified
851498720	18.623	16320000	10/5/2015	2015	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Non-Junction	Entrance/Exit Ramp	Exit Ramp	No		1	200	Q/C Completed - Loc Verified
852301120	18.665	16320000	8/4/2016	2016	1 4	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				50	Q/C Completed - Loc Verified
852906560	18.665	16320000	8/31/2016	2016	1 4	SR 559	Other Non-Collision	Other (See Narrative)	Dark-Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No		3		500	Q/C Completed - Loc Verified
853519120	18.665	16320000	6/29/2016	2016	SR 400	SR 559	Guardrail Face	Other (See Narrative)	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				200	Q/C Completed - Loc Verified
853519460	18.665	16320000	10/1/2016	2016	SR 400	SR 559	Fence	Other (See Narrative)	Dawn	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No				800	Q/C Completed - Loc Verified
871966040	18.665	16320000	8/6/2018	2018	SR 400	SR 559	Overturn/Rollover	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		2			Q/C Completed - Loc Verified
871968630	18.665	16320000	4/4/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
872355230	18.665	16320000	7/30/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
872453860	18.665	16320000	1/28/2019	2019	SR 400	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				500	Q/C Completed - Loc Verified
872522980	18.665	16320000	4/14/2019	2019	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dawn	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
880197140	18.665	16320000	7/26/2019	2019	1 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
881738260	18.665	16320000	3/2/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Unknown	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
882946570	18.665	16320000	8/12/2020	2020	1 4	SR 559	Other Non-Fixed Object	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		1		500	Q/C Completed - Loc Verified
883225520	18.665	16320000	11/1/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Other (See Narrative)	Dark-Not Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No		2			Q/C Completed - Loc Verified
884040330	18.665	16320000	11/11/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				500	Q/C Completed - Loc Verified
844888460	18.699	16320000	5/13/2015	2015	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		1		500	Q/C Completed - Loc Verified
848655850	18.715	16320000	7/20/2015	2015	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No				550	Q/C Completed - Loc Verified
848925830	18.765	16320000	7/5/2015	2015	1 4	SR 559	Guardrail Face	Other (See Narrative)	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No		1			Q/C Completed - Loc Verified
852546330	18.794	16320000	6/13/2016	2016	1 4	SR 559	Cable Barrier	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				200	Q/C Completed - Loc Verified
872785770	18.794	16320000	6/14/2019	2019	1 4	SR 559	Ran Into Water/Canal	Other (See Narrative)	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
855313370	18.815	16320000	6/22/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
854091440	18.897	16320000	2/22/2017	2017	SR 400	MM 44	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
845513600	18.915	16320000	4/7/2015	2015	1 4	SR 559	Animal	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No				500	Q/C Completed - Loc Verified
848897880	18.915	16320000	11/10/2015	2015	1 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No				800	Q/C Completed - Loc Verified
851528660	18.915	16320000	6/3/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		1			Q/C Completed - Loc Verified
852300930	18.915	16320000	6/3/2016	2016	1 4	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
854255350	18.915	16320000	5/3/2017	2017	SR 400	SR 559	Struck By Falling, Shifting Ca	Other (See Narrative)	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
854255650	18.915	16320000	7/17/2017	2017	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
872355590	18.915	16320000	11/26/2018	2018	SR 400	SR 559	Guardrail Face	Other (See Narrative)	Dark-Not Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
872768750	18.915	16320000	9/16/2018	2018	1 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		1		450	Q/C Completed - Loc Verified
872837130	18.915	16320000	7/21/2019	2019	1 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dusk	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				500	Q/C Completed - Loc Verified
872896230	18.915	16320000	7/6/2019	2019	1 4	SR 559	Traffic Sign Support	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				900	Q/C Completed - Loc Verified
881663170	18.915	16320000	11/6/2019	2019	1 4	SR 559	Motor Vehicle In Transport	Other (See Narrative)	Dusk	Cloudy	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				800	Q/C Completed - Loc Verified
848921060	18.915	16320000	12/16/2020	2020	SR 400	SR 559	Traffic Sign Support	Other (See Narrative)	Dark-Not Lighted	Cloudy	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				300	Q/C Completed - Loc Verified
882200830	18.915	16320000	2/10/2020	2020	1 4	SR 559	Tree (Standing)	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
882343970	18.915	16320000	6/12/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No				500	Q/C Completed - Loc Verified
882622780	18.915	16320000	10/31/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		2			Q/C Completed - Loc Verified
882623970	18.915	16320000	9/12/2020	2020	1 4	SR 559	Traffic Sign Support	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				500	Q/C Completed - Loc Verified
872895910	19.079	16320000	1/19/2019	2019	1 4	CR 557A	Motor Vehicle In Transport	Other (See Narrative)	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
848897890	19.165	16320000	11/10/2015	2015	1 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		1			Q/C Completed - Loc Verified
881302340	19.165	16320000	8/23/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No		2		50	Q/C Completed - Loc Verified
882308920	19.165	16320000	12/8/2019	2019	1 4	SR 559	Guardrail Face	Other (See Narrative)	Dark-Not Lighted	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		1		500	Q/C Completed - Loc Verified
882031340	19.316	16320000	8/30/2019	2019	SR 400	MILE MARKER #45	Motor Vehicle In Transport	Sideswipe, Same Direction	Dusk	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No		4			Q/C Completed - Loc Verified
852092100	19.411	16320000	1/22/2016	2016	SR 400	MILE MARKER #45	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No				500	Q/C Completed - Loc Verified
853027890	19.411	16320000	10/9/2016	2016	SR 400	MM 45	Overturn/Rollover	Other (See Narrative)	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No					Q/C Completed - Loc Verified
854255050	19.411	16320000	12/20/2016	2016	1 4	MILE MARKER #45	Other Non-Collision	Other (See Narrative)	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No		1		250	Q/C Completed - Loc Verified
855161070	19.411	16320000	8/27/2017	2017	SR 400	MM 45	Overturn/Rollover	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rx/Bridge	No				500	Q/C Completed - Loc Verified
855965960	19.411	16320000	9/17/2017	2017	SR 400	MM 45	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rx/Bridge	No				500	Q/C Completed - Loc Verified

853360800	19.415	16320000	8/23/2016	2016	SR 400	SR 559	Ditch	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No		700	Q/C Completed - Loc Verified
853360970	19.415	16320000	10/8/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dusk	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			Q/C Completed - Loc Verified
854255230	19.415	16320000	3/27/2017	2017	SR 400	SR 559	Other Non-Collision	Other (See Narrative)	Dark-Lighted	Clear	Dry	Entrance/Exit Ramp	Not At Intersection/Rrx/Bridge	No		500	Q/C Completed - Loc Verified
855312890	19.415	16320000	5/30/2017	2017	SR 400	SR 559	Overturn/Rollover	Other (See Narrative)	Daylight	Clear	Dry	Entrance/Exit Ramp	Not At Intersection/Rrx/Bridge	No	1		Q/C Completed - Loc Verified
855313100	19.415	16320000	9/30/2017	2017	SR 400	SR 559	Guardrail Face	Other (See Narrative)	Dark-Not Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			Q/C Completed - Loc Verified
855743620	19.415	16320000	10/4/2017	2017	I 4	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			Q/C Completed - Loc Verified
855743630	19.415	16320000	10/8/2017	2017	I 4	SR 559	Ran Into Water/Canal	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	5		Q/C Completed - Loc Verified
855313440	19.415	16320000	11/5/2018	2018	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			Q/C Completed - Loc Verified
871792050	19.415	16320000	6/29/2018	2018	I 4	SR 559	Tree (Standing)	Other (See Narrative)	Dark-Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	Drg	1		Q/C Completed - Loc Verified
872169840	19.415	16320000	8/25/2018	2018	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1		Q/C Completed - Loc Verified
880113280	19.415	16320000	5/2/2019	2019	I 4	SR 559	Jackknife	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			Q/C Completed - Loc Verified
880360630	19.415	16320000	4/4/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No		200	Q/C Completed - Loc Verified
880561430	19.415	16320000	6/23/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1	300	Q/C Completed - Loc Verified
881302370	19.415	16320000	8/27/2019	2019	SR 400	SR 559	Other Fixed Object (Wall, Buil	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No		125	Q/C Completed - Loc Verified
881412170	19.415	16320000	6/9/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No	1	500	Q/C Completed - Loc Verified
881412270	19.415	16320000	7/15/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1		Q/C Completed - Loc Verified
881662970	19.415	16320000	9/11/2019	2019	I 4	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1	500	Q/C Completed - Loc Verified
882538410	19.415	16320000	12/21/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			Q/C Completed - Loc Verified
881426750	19.415	16320000	1/30/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			Q/C Completed - Loc Verified
882343960	19.415	16320000	6/6/2020	2020	I 4	SR 559	Overturn/Rollover	Other (See Narrative)	Dark-Not Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			Q/C Completed - Loc Verified
882350420	19.415	16320000	2/4/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Other (See Narrative)	Dawn	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			Q/C Completed - Loc Verified
881412250	19.428	16320000	7/5/2019	2019	SR 400	CR 557	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1		Q/C Completed - Loc Verified
881412360	19.428	16320000	7/26/2019	2019	SR 400	CR 557	Fell/Jumped From Motor Vehicle	Other (See Narrative)	Dark-Not Lighted	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No	2	200	Q/C Completed - Loc Verified
882850610	19.428	16320000	10/26/2020	2020	SR 400	CR 557	Other Non-Collision	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	2	200	Q/C Completed - Loc Verified
884040530	19.428	16320000	12/31/2020	2020	SR 400	CR 557	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No		500	Q/C Completed - Loc Verified
854091460	19.439	16320000	2/23/2017	2017	SR 400	MM 45	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Influenced By Intersection	No			Q/C Completed - Loc Verified
872108050	19.458	16320000	12/20/2018	2018	SR 400	MM 45	Guardrail Face	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No	1	500	Q/C Completed - Loc Verified
852092200	19.506	16320000	3/7/2016	2016	I 4	MILE MARKER #45	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1	250	Q/C Completed - Loc Verified
871968620	19.579	16320000	4/4/2018	2018	SR 400	CR 557A	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1	500	Q/C Completed - Loc Verified

Crash Number	Location Mile Post	Roadway Id	Crash Date	Crash Year	On Road	Intersecting Road	First Harmful Event	Manner Of Collision	Light Condition	Weather Condition	Surface Condition	Junction	Site Location	Alcohol Drugs Involvement	Number of Fatalities	Number of Injured	Total Crash Damage Amount	Crash Status
852545640	0	16320030	6/23/2016	2016	SR 559	SR 400	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection-Related	At Intersection	No				Q/C Completed - Loc Verified
878698490	0	16320030	12/2/2018	2018	SR 559	I 4	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Crossover-Related	Not At Intersection/Rrx/Bridge	No			550	Q/C Completed - Loc Verified
872453940	0	16320030	2/22/2019	2019	SR 559	I 4	Motor Vehicle In Transport	Front To Front	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1			Q/C Completed - Loc Verified
890109100	0	16320030	5/13/2019	2019	SR 559	I 4	Cable Barrier	Other (See Narrative)	Daylight	Clear	Wet	Intersection	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
856031950	0	16320030	3/15/2018	2018	SR 559	SR 400	Concrete Traffic Barrier	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
838198810	0	16320030	7/21/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Front To Front	Daylight	Clear	Dry	Entrance/Exit Ramp	At Intersection	No	1			Q/C Completed - Loc Verified
863135840	0	16320030	4/11/2016	2016	SR 559	I 4	Motor Vehicle In Transport	Sideswipe, Opposite Direction	Daylight	Clear	Dry	Entrance/Exit Ramp	At Intersection	No			300	Q/C Completed - Loc Verified
869386140	0	16320030	7/31/2017	2017	SR 559	SR 400	Motor Vehicle In Transport	Front To Front	Dark-Lighted	Rain	Wet	Intersection	At Intersection	No				Q/C Completed - Loc Verified
856016520	0	16320030	2/25/2018	2018	SR 559	SR 400	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
871088160	0	16320030	4/3/2018	2018	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
871965870	0	16320030	6/20/2018	2018	SR 559	SR 400	Overturn/Rollover	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	Alc				Q/C Completed - Loc Verified
878713990	0	16320030	3/21/2019	2019	SR 559	I 4	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Entrance/Exit Ramp	At Intersection	No	1			Q/C Completed - Loc Verified
890097960	0	16320030	4/2/2019	2019	SR 559	I 4	Motor Vehicle In Transport	Front To Front	Dawn	Fog, Smog, Smoke	Dry	Intersection-Related	At Intersection	No				Q/C Completed - Loc Verified
893710000	0	16320030	10/16/2019	2019	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
241388870	0	16320030	12/29/2020	2020	SR 559	I 4	Motor Vehicle In Transport	Other (See Narrative)	Dark-Lighted	Clear	Dry	Entrance/Exit Ramp	At Intersection	No	2			Q/C Completed - Loc Verified
883091970	0	16320030	8/7/2020	2020	SR 559	SR 400	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Cloudy	Dry	Intersection	At Intersection	No	1			Q/C Completed - Loc Verified
898453380	0	16320030	9/3/2020	2020	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection	At Intersection	No	1			Q/C Completed - Loc Verified
241374700	0	16320030	11/13/2020	2020	SR 559	I 4	Ditch	Angle	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			200	Q/C Completed - Loc Verified
881663490	0	16320030	2/26/2020	2020	SR 559	I 4	Motor Vehicle In Transport	Front To Rear	Dusk	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
869397380	0	16320030	4/14/2017	2017	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			3	Q/C Completed - Loc Verified
846259230	0	16320030	2/20/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Sideswipe, Opposite Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Influenced By Intersection	No			200	Q/C Completed - Loc Verified
836850900	0.099	16320030	10/26/2015	2015	I 4	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Cloudy	Dry	Entrance/Exit Ramp	Entrance Ramp	No				Q/C Completed - Loc Verified
881842880	0.103	16320030	8/17/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Exit Ramp	No	2			Q/C Completed - Loc Verified
860848450	0.184	16320030	11/8/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Cloudy	Wet	Entrance/Exit Ramp	Exit Ramp	No			600	Q/C Completed - Loc Verified
853702660	0.198	16320030	11/16/2016	2016	SR 400	SR 559	Cable Barrier	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			400	Q/C Completed - Loc Verified
851503920	0.198	16320030	1/3/2016	2016	I 4	SR 559	Guardrail End	Other (See Narrative)	Dark-Not Lighted	Rain	Wet	Entrance/Exit Ramp	Not At Intersection/Rrx/Bridge	No	1			Q/C Completed - Loc Verified
852546440	0.198	16320030	7/6/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
882850550	0.198	16320030	9/22/2020	2020	SR 400	SR 559	Struck By Falling, Shifting Ca	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
863124190	0.198	16320030	1/20/2016	2016	SR 400	SR 559	Concrete Traffic Barrier	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
883283740	0.198	16320030	11/11/2020	2020	SR 400	SR 559	Overturn/Rollover	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No	1		300	Q/C Completed - Loc Verified

Crash Number	Location Mile Post	Roadway Id	Crash Date	Crash Year	On Road	Intersecting Road	First Harmful Event	Manner Of Collision	Light Condition	Weather Condition	Surface Condition	Junction	Site Location	Alcohol Drugs Involvement	Number of Fatalities	Number of Injured	Total Crash Damage Amount	Crash Status
871968770	0	16320031	5/13/2018	2018	SR 400	CR 557A	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
871968780	0	16320031	5/13/2018	2018	SR 400	CR 557A	Motor Vehicle In Transport	Other (See Narrative)	Dark-Not Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
880530500	0	16320031	5/14/2019	2019	SR 400	SR 559	Ditch	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No		1		Q/C Completed - Loc Verified
853702540	0	16320031	10/15/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
852301120	0	16320031	8/4/2016	2016	I 4	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			50	Q/C Completed - Loc Verified
852906560	0	16320031	8/31/2016	2016	I 4	SR 559	Other Non-Collision	Other (See Narrative)	Dark-Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No		3	500	Q/C Completed - Loc Verified
853519120	0	16320031	6/29/2016	2016	SR 400	SR 559	Guardrail Face	Other (See Narrative)	Daylight	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			200	Q/C Completed - Loc Verified
853519460	0	16320031	10/1/2016	2016	SR 400	SR 559	Fence	Other (See Narrative)	Dawn	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			800	Q/C Completed - Loc Verified
871966040	0	16320031	8/6/2018	2018	SR 400	SR 559	Overturn/Rollover	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No		2		Q/C Completed - Loc Verified
871968630	0	16320031	4/4/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
872352530	0	16320031	7/30/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
872453860	0	16320031	1/28/2019	2019	SR 400	SR 559	Other Non-Collision	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
872522980	0	16320031	4/14/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dawn	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
880197140	0	16320031	7/26/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
881738260	0	16320031	3/2/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Unknown	Dark-Not Lighted	Clear	Dry	Unknown	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
882946570	0	16320031	8/12/2020	2020	I 4	SR 559	Other Non-Fixed Object	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No		1	500	Q/C Completed - Loc Verified
883225520	0	16320031	11/1/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Other (See Narrative)	Dark-Not Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No		2		Q/C Completed - Loc Verified
884040330	0	16320031	11/11/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
882507830	0	16320031	2/4/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Lighted	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No			500	Q/C Completed - Loc Verified
851498720	0.003	16320031	10/5/2015	2015	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Entrance/Exit Ramp	Exit Ramp	No		1	200	Q/C Completed - Loc Verified
819626930	0.057	16320031	3/2/2015	2015	I 4	SR 559	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No		1		Q/C Completed - Loc Verified
873004780	0.073	16320031	3/23/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No				Q/C Completed - Loc Verified
845691610	0.095	16320031	4/13/2015	2015	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Rain	Wet	Non-Junction	Exit Ramp	No		1		Q/C Completed - Loc Verified
883691710	0.168	16320031	10/8/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Entrance/Exit Ramp	Exit Ramp	No			50	Q/C Completed - Loc Verified
890118800	0.187	16320031	7/1/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No			600	Q/C Completed - Loc Verified
851512350	0.189	16320031	11/5/2015	2015	I 4	SR 559	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No				Q/C Completed - Loc Verified
863148210	0.19	16320031	3/23/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection	Exit Ramp	No		1	100	Q/C Completed - Loc Verified
864443630	0.19	16320031	7/17/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No			500	Q/C Completed - Loc Verified
864427720	0.197	16320031	11/19/2016	2016	I 4	SR 559	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection-Related	Exit Ramp	No			500	Q/C Completed - Loc Verified
880352890	0.198	16320031	4/7/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No				Q/C Completed - Loc Verified
890095720	0.203	16320031	3/5/2019	2019	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No			100	Q/C Completed - Loc Verified
845691330	0.206	16320031	1/19/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Cloudy	Dry	Intersection	Exit Ramp	No		1		Q/C Completed - Loc Verified
851528450	0.206	16320031	2/9/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Angle	Daylight	Cloudy	Dry	Intersection	Exit Ramp	No				Q/C Completed - Loc Verified
853903670	0.206	16320031	1/20/2017	2017	I 4	SR 559	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection	Exit Ramp	No				Q/C Completed - Loc Verified
854734290	0.206	16320031	3/30/2017	2017	SR 400	SR 559	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection	Exit Ramp	No		1		Q/C Completed - Loc Verified
241360630	0.206	16320031	10/10/2020	2020	I 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Intersection	Exit Ramp	No			400	Q/C Completed - Loc Verified
852545640	0.206	16320031	6/23/2016	2016	SR 559	SR 400	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection-Related	At Intersection	No				Q/C Completed - Loc Verified
878698490	0.206	16320031	12/2/2018	2018	SR 559	I 4	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Crossover-Related	Not At Intersection/Rrx/Bridge	No			550	Q/C Completed - Loc Verified
872453940	0.206	16320031	2/22/2019	2019	SR 559	I 4	Motor Vehicle In Transport	Front To Front	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No		1		Q/C Completed - Loc Verified
890109100	0.206	16320031	5/13/2019	2019	SR 559	I 4	Cable Barrier	Other (See Narrative)	Daylight	Clear	Wet	Intersection	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
856031950	0.206	16320031	3/15/2018	2018	SR 559	SR 400	Concrete Traffic Barrier	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
838198810	0.206	16320031	7/21/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Front To Front	Daylight	Clear	Dry	Entrance/Exit Ramp	At Intersection	No		1		Q/C Completed - Loc Verified
863135840	0.206	16320031	4/11/2016	2016	SR 559	I 4	Motor Vehicle In Transport	Sideswipe, Opposite Direction	Daylight	Clear	Dry	Entrance/Exit Ramp	At Intersection	No			300	Q/C Completed - Loc Verified
869386140	0.206	16320031	7/31/2017	2017	SR 559	SR 400	Motor Vehicle In Transport	Front To Front	Dark-Lighted	Rain	Wet	Intersection	At Intersection	No				Q/C Completed - Loc Verified
856016520	0.206	16320031	2/25/2018	2018	SR 559	SR 400	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
871088160	0.206	16320031	4/3/2018	2018	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
871965870	0.206	16320031	6/20/2018	2018	SR 559	SR 400	Overturn/Rollover	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	Alc				Q/C Completed - Loc Verified
878713990	0.206	16320031	3/21/2019	2019	SR 559	I 4	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Entrance/Exit Ramp	At Intersection	No		1		Q/C Completed - Loc Verified
890097960	0.206	16320031	4/2/2019	2019	SR 559	I 4	Motor Vehicle In Transport	Front To Front	Dawn	Fog, Smog, Smoke	Dry	Intersection-Related	At Intersection	No				Q/C Completed - Loc Verified
893710000	0.206	16320031	10/16/2019	2019	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
241388870	0.206	16320031	12/29/2020	2020	SR 559	I 4	Motor Vehicle In Transport	Other (See Narrative)	Dark-Lighted	Clear	Dry	Entrance/Exit Ramp	At Intersection	No		2		Q/C Completed - Loc Verified
883091970	0.206	16320031	8/7/2020	2020	SR 559	SR 400	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Cloudy	Dry	Intersection	At Intersection	No		1		Q/C Completed - Loc Verified
898453380	0.206	16320031	9/3/2020	2020	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection	At Intersection	No		1		Q/C Completed - Loc Verified
241374700	0.206	16320031	11/13/2020	2020	SR 559	I 4	Ditch	Angle	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			200	Q/C Completed - Loc Verified
881663490	0.206	16320031	2/26/2020	2020	SR 559	I 4	Motor Vehicle In Transport	Front To Rear	Dusk	Cloudy	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
869397380	0.206	16320031	4/14/2017	2017	SR 559	I 4	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No		3		Q/C Completed - Loc Verified
846259230	0.206	16320031	2/20/2015	2015	SR 559	I 4	Motor Vehicle In Transport	Sideswipe, Opposite Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Influenced By Intersection	No			200	Q/C Completed - Loc Verified

Crash Number	Location Mile Post	Roadway Id	Crash Date	Crash Year	On Road	Intersecting Road	First Harmful Event	Manner Of Collision	Light Condition	Weather Condition	Surface Condition	Junction	Site Location	Alcohol Drugs Involvement	Number of Fatalities	Number of Injured	Total Crash Damage Amount	Crash Status
864425740	0	16320032	4/16/2016	2016	SR 559	SR 400	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Dry	Driveway/Alley Access Related	Driveway Access	No				Q/C Completed - Loc Verified
876654400	0	16320032	8/6/2018	2018	SR 559	SR 400	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			300	Q/C Completed - Loc Verified
898445450	0	16320032	8/28/2020	2020	SR 559	14	Utility Pole/Light Support	Other (See Narrative)	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	Alc	1			Q/C Completed - Loc Verified
853361010	0	16320032	10/27/2016	2016	SR 559	SR 400	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection	Not At Intersection/Rrx/Bridge	No			800	Q/C Completed - Loc Verified
893720250	0	16320032	11/17/2019	2019	SR 559	14	Tree (Standing)	Other (See Narrative)	Dark-Lighted	Clear	Dry	Entrance/Exit Ramp	Not At Intersection/Rrx/Bridge	No	1		500	Q/C Completed - Loc Verified
851512550	0	16320032	1/1/2016	2016	SR 559	14	Concrete Traffic Barrier	Other (See Narrative)	Dark-Lighted	Clear	Dry	Intersection	At Intersection	Alc	1			Q/C Completed - Loc Verified
853702280	0	16320032	8/7/2016	2016	SR 559	14	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Clear	Dry	Non-Junction	At Intersection	No	1			Q/C Completed - Loc Verified
863139820	0	16320032	2/20/2016	2016	SR 559	14	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Lighted	Clear	Dry	Intersection-Related	At Intersection	No			550	Q/C Completed - Loc Verified
863148830	0	16320032	3/23/2016	2016	SR 559	14	Motor Vehicle In Transport	Front To Front	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
858947840	0	16320032	4/4/2018	2018	SR 559	14	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Other (See Narrative)	At Intersection	No				Q/C Completed - Loc Verified
887514140	0	16320032	11/8/2018	2018	SR 559	14	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Non-Junction	At Intersection	No				Q/C Completed - Loc Verified
893704230	0	16320032	9/20/2019	2019	SR 559	14	Motor Vehicle In Transport	Front To Front	Dark-Lighted	Clear	Dry	Non-Junction	At Intersection	No	1			Q/C Completed - Loc Verified
241376330	0	16320032	11/28/2020	2020	SR 559	14	Motor Vehicle In Transport	Front To Front	Dark-Lighted	Clear	Dry	Intersection	At Intersection	No	1		500	Q/C Completed - Loc Verified
893749240	0	16320032	2/26/2020	2020	SR 559	14	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Non-Junction	At Intersection	No				Q/C Completed - Loc Verified
898417290	0	16320032	3/1/2020	2020	SR 559	14	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified
876662450	0	16320032	3/10/2018	2018	SR 559	14	Concrete Traffic Barrier	Other (See Narrative)	Dark-Lighted	Cloudy	Wet	Intersection-Related	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
856201120	0	16320032	8/26/2015	2015	SR 559	14	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Entrance/Exit Ramp	At Intersection	No			75	Q/C Completed - Loc Verified
834668660	0	16320032	3/7/2018	2018	SR 559	SR 400	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified
881689440	0	16320032	11/23/2019	2019	SR 559	SR 400	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Intersection-Related	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
884040390	0.167	16320032	12/6/2020	2020	14	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Entrance/Exit Ramp	Entrance Ramp	No				Q/C Completed - Loc Verified
854473270	0.186	16320032	5/11/2017	2017	14	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Entrance/Exit Ramp	Entrance Ramp	No			550	Q/C Completed - Loc Verified
856016350	0.186	16320032	1/19/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1			Q/C Completed - Loc Verified
856016360	0.186	16320032	1/19/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No	1		50	Q/C Completed - Loc Verified
871968770	0.186	16320032	5/13/2018	2018	SR 400	CR 557A	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
871968780	0.186	16320032	5/13/2018	2018	SR 400	CR 557A	Motor Vehicle In Transport	Other (See Narrative)	Dark-Not Lighted	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified
880530500	0.186	16320032	5/14/2019	2019	SR 400	SR 559	Ditch	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No	1			Q/C Completed - Loc Verified
853702540	0.186	16320032	10/15/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified

Crash Number	Location Mile Post	Roadway Id	Crash Date	Crash Year	On Road	Intersecting Road	First Harmful Event	Manner Of Collision	Light Condition	Weather Condition	Surface Condition	Junction	Site Location	Alcohol Drugs Involvement	Number of Fatalities	Number of Injured	Total Crash Damage Amount	Crash Status	
853702660	0	16320033	11/16/2016	2016	SR 400	SR 559	Cable Barrier	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			400	Q/C Completed - Loc Verified	
851503920	0	16320033	1/3/2016	2016	1 4	SR 559	Guardrail End	Other (See Narrative)	Dark-Not Lighted	Rain	Wet	Entrance/Exit Ramp	Not At Intersection/Rrx/Bridge	No	1			Q/C Completed - Loc Verified	
852546440	0	16320033	7/6/2016	2016	1 4	SR 559	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Cloudy	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified	
882850550	0	16320033	9/22/2020	2020	SR 400	SR 559	Struck By Falling, Shifting Ca	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified	
863124190	0	16320033	1/20/2016	2016	SR 400	SR 559	Concrete Traffic Barrier	Other (See Narrative)	Dark-Not Lighted	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified	
883283740	0	16320033	11/11/2020	2020	SR 400	SR 559	Overturn/Rollover	Other (See Narrative)	Daylight	Rain	Wet	Non-Junction	Not At Intersection/Rrx/Bridge	No	1	300		Q/C Completed - Loc Verified	
852468890	0	16320033	2/23/2016	2016	SR 400	SR 559	Ditch	Other (See Narrative)	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No	1			Q/C Completed - Loc Verified	
863148470	0	16320033	4/4/2016	2016	1 4	SR 559	Motor Vehicle In Transport	Other (See Narrative)	Dawn	Cloudy	Dry	Non-Junction	Exit Ramp	No	1			Q/C Completed - Loc Verified	
869950480	0	16320033	9/1/2017	2017	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Wet	Non-Junction	Exit Ramp	No				Q/C Completed - Loc Verified	
851611280	0	16320033	11/2/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Intersection-Related	Exit Ramp	No				Q/C Completed - Loc Verified	
893699660	0	16320033	8/31/2019	2019	1 4	SR 559	Embankment	Other (See Narrative)	Dusk	Clear	Wet	Non-Junction	Exit Ramp	No				Q/C Completed - Loc Verified	
837853070	0.006	16320033	10/30/2015	2015	1 4	SR 559	Parked Motor Vehicle	Sideswipe, Same Direction	Dark-Lighted	Clear	Dry	Other (See Narrative)	Exit Ramp	Alc			100	Q/C Completed - Loc Verified	
241387000	0.009	16320033	12/19/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Non-Junction	Exit Ramp	Alc			100	Q/C Completed - Loc Verified	
882335870	0.009	16320033	6/13/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Intersection-Related	Exit Ramp	No			810	Q/C Completed - Loc Verified	
872360290	0.019	16320033	11/23/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Intersection-Related	Exit Ramp	No			25	Q/C Completed - Loc Verified	
856883570	0.028	16320033	3/31/2015	2015	SR 559	1 4	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Intersection-Related	Exit Ramp	No			300	Q/C Completed - Loc Verified	
851509280	0.114	16320033	2/27/2016	2016	SR 400	SR 559	Ditch	Other (See Narrative)	Dark-Lighted	Clear	Dry	Non-Junction	Exit Ramp	No				Q/C Completed - Loc Verified	
863123950	0.12	16320033	11/14/2015	2015	1 4	SR 559	Concrete Traffic Barrier	Front To Rear	Dark-Not Lighted	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	Alc	2			Q/C Completed - Loc Verified	
852567110	0.145	16320033	7/26/2016	2016	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No	2			Q/C Completed - Loc Verified	
881689090	0.154	16320033	8/5/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Wet	Intersection-Related	Exit Ramp	No				Q/C Completed - Loc Verified	
883691760	0.154	16320033	10/20/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Cloudy	Dry	Entrance/Exit Ramp	Exit Ramp	No			500	Q/C Completed - Loc Verified	
853712120	0.178	16320033	8/29/2016	2016	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dawn	Clear	Dry	Non-Junction	Exit Ramp	Alc	1			Q/C Completed - Loc Verified	
872769410	0.183	16320033	8/27/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Rain	Wet	Non-Junction	Exit Ramp	No	2			Q/C Completed - Loc Verified	
883125870	0.184	16320033	8/1/2020	2020	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Exit Ramp	Drg				Q/C Completed - Loc Verified	
869380620	0.19	16320033	10/6/2017	2017	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Intersection	Exit Ramp	No	2		850	Q/C Completed - Loc Verified	
882268170	0.19	16320033	3/7/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No	1		600	Q/C Completed - Loc Verified	
837868760	0.192	16320033	1/3/2015	2015	SR 559	1 4	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Intersection	Exit Ramp	No	4			Q/C Completed - Loc Verified	
846252990	0.192	16320033	7/22/2015	2015	SR 559	1 4	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Dry	Entrance/Exit Ramp	Exit Ramp	No			500	Q/C Completed - Loc Verified	
846240320	0.192	16320033	3/29/2016	2016	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No			200	Q/C Completed - Loc Verified	
853837110	0.192	16320033	1/30/2017	2017	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Clear	Dry	Intersection	Exit Ramp	No	2			Q/C Completed - Loc Verified	
878699450	0.192	16320033	6/24/2018	2018	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No				Q/C Completed - Loc Verified	
872488710	0.192	16320033	1/14/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No	1			500	Q/C Completed - Loc Verified
882350240	0.192	16320033	12/20/2019	2019	SR 400	SR 559	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Non-Junction	Exit Ramp	No	1			300	Q/C Completed - Loc Verified
241367620	0.192	16320033	10/24/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No	4			250	Q/C Completed - Loc Verified
883278190	0.192	16320033	4/5/2020	2020	1 4	SR 559	Curb	Other (See Narrative)	Daylight	Rain	Wet	Intersection	Exit Ramp	Alc	1			Q/C Completed - Loc Verified	
883691680	0.192	16320033	9/27/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Cloudy	Wet	Entrance/Exit Ramp	Exit Ramp	No	1		200	Q/C Completed - Loc Verified	
898427290	0.192	16320033	6/23/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Dry	Entrance/Exit Ramp	Exit Ramp	No				Q/C Completed - Loc Verified	
898434950	0.192	16320033	7/2/2020	2020	1 4	SR 559	Motor Vehicle In Transport	Front To Rear	Daylight	Clear	Wet	Intersection-Related	Exit Ramp	No			700	Q/C Completed - Loc Verified	
864425740	0.192	16320033	4/16/2016	2016	SR 559	SR 400	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Cloudy	Dry	Driveway/Alley Access Related	Driveway Access	No				Q/C Completed - Loc Verified	
876654400	0.192	16320033	8/6/2018	2018	SR 559	SR 400	Motor Vehicle In Transport	Front To Rear	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			300	Q/C Completed - Loc Verified	
898445450	0.192	16320033	8/28/2020	2020	SR 559	1 4	Utility Pole/Light Support	Other (See Narrative)	Dark-Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	Alc	1			Q/C Completed - Loc Verified	
853361010	0.192	16320033	10/27/2016	2016	SR 559	SR 400	Motor Vehicle In Transport	Angle	Dark-Lighted	Clear	Dry	Intersection	Not At Intersection/Rrx/Bridge	No			800	Q/C Completed - Loc Verified	
893720250	0.192	16320033	11/17/2019	2019	SR 559	1 4	Tree (Standing)	Other (See Narrative)	Dark-Lighted	Clear	Dry	Entrance/Exit Ramp	Not At Intersection/Rrx/Bridge	No	1			500	Q/C Completed - Loc Verified
851512550	0.192	16320033	1/1/2016	2016	SR 559	1 4	Concrete Traffic Barrier	Other (See Narrative)	Dark-Lighted	Clear	Dry	Intersection	At Intersection	Alc	1			Q/C Completed - Loc Verified	
853702280	0.192	16320033	8/7/2016	2016	SR 559	1 4	Motor Vehicle In Transport	Angle	Dark-Not Lighted	Clear	Dry	Non-Junction	At Intersection	No	1			Q/C Completed - Loc Verified	
863139820	0.192	16320033	2/20/2016	2016	SR 559	1 4	Motor Vehicle In Transport	Sideswipe, Same Direction	Dark-Lighted	Clear	Dry	Intersection-Related	At Intersection	No			550	Q/C Completed - Loc Verified	
863148830	0.192	16320033	3/23/2016	2016	SR 559	1 4	Motor Vehicle In Transport	Front To Front	Dark-Not Lighted	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified	
858947840	0.192	16320033	4/4/2018	2018	SR 559	1 4	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Other (See Narrative)	At Intersection	No				Q/C Completed - Loc Verified	
887514140	0.192	16320033	11/8/2018	2018	SR 559	1 4	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Non-Junction	At Intersection	No				Q/C Completed - Loc Verified	
893704230	0.192	16320033	9/20/2019	2019	SR 559	1 4	Motor Vehicle In Transport	Front To Front	Dark-Lighted	Clear	Dry	Non-Junction	At Intersection	No	1			Q/C Completed - Loc Verified	
241376330	0.192	16320033	11/28/2020	2020	SR 559	1 4	Motor Vehicle In Transport	Front To Front	Dark-Lighted	Clear	Dry	Intersection	At Intersection	No	1			500	Q/C Completed - Loc Verified
893749240	0.192	16320033	2/26/2020	2020	SR 559	1 4	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Non-Junction	At Intersection	No				Q/C Completed - Loc Verified	
898417290	0.192	16320033	3/1/2020	2020	SR 559	1 4	Motor Vehicle In Transport	Other (See Narrative)	Daylight	Clear	Dry	Intersection	At Intersection	No				Q/C Completed - Loc Verified	
876662450	0.192	16320033	3/10/2018	2018	SR 559	1 4	Concrete Traffic Barrier	Other (See Narrative)	Dark-Lighted	Cloudy	Wet	Intersection-Related	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified	
856201120	0.192	16320033	8/26/2015	2015	SR 559	1 4	Motor Vehicle In Transport	Angle	Daylight	Clear	Dry	Entrance/Exit Ramp	At Intersection	No			75	Q/C Completed - Loc Verified	
834668660	0.192	16320033	3/7/2018	2018	SR 559	SR 400	Motor Vehicle In Transport	Sideswipe, Same Direction	Daylight	Clear	Dry	Non-Junction	Not At Intersection/Rrx/Bridge	No			500	Q/C Completed - Loc Verified	
881689440	0.192	16320033	11/23/2019	2019	SR 559	SR 400	Motor Vehicle In Transport	Front To Rear	Dark-Not Lighted	Clear	Dry	Intersection-Related	Not At Intersection/Rrx/Bridge	No				Q/C Completed - Loc Verified	

CRSH_NUM	CAL_YR	EVNT_CRSH_DT	EVNT_CRSH_TM	DAYOWEEK	MANDIST	CONTYDOT	RDWYID	LOCMP	LOCNODE	LOCDIST	LOCMACD	LOCDIRCD	EVNT_ON_RD_NM	EVNT_INTCT_RD_NM
241401840	2021	3/4/2021	211	4	1	16	16160000	7.737	1794	0.052	MI	N	STATE ROAD 559	COUNTY ROAD 557-A

DISTNTS	MEAINTCD	DIRINTCD	ROUTEID	USRTNO	CONTYDMV	DHSCCTNO	EVNT_CTY_PLCE_NM	EVNT_CTY_LMT_CD	ACCSEV	TYP_DR_ACDNT_CD	FRST_HARM_EVNT_CD	IMPCT_TYP_CD
0.5	MI	5	SR 559		5	0	POLK CITY (UNINCORPORATED)	1	5		10	3

CRSH_NUM	CAL_YR	EVNT_CRSH_DT	EVNT_CRSH_TM	DAYOWEEK	MANDIST	CONTYDOT	RDWYID	LOCMP	LOCNODE	LOCDIST	LOCMACD	LOCDIRCD	EVNT_ON_RD_NM	EVNT_INTCT_RD_NM
883225520	2020	11/1/2020	2352	7	1	16	16320000	18.665	765	0.042	MI	E	WB I-4 MM44	SR-559
884493110	2021	4/16/2021	813	5	1	16	16320000	18.315	749	0.081	MI	E	INTERSTATE 4 (STATE ROAD 400)	STATE ROAD 559
242886310	2021	5/2/2021	1237	7	1	16	16320000	19.411	751	0.668	MI	W	SR 400 (I-4)	
884871920	2021	6/6/2021	1500	7	1	16	16320000	17.382	767	0.412	MI	E	INTERSTATE 4 (SR400) MM 43	STATE ROAD 559
884872010	2021	7/7/2021	655	3	1	16	16320000	18.515	750	0.097	MI	W	INTERSTATE 4 (SR 400) MILE MARKER	STATE ROAD 559
884576510	2021	7/10/2021	2351	6	1	16	16320000	17.415	767	0.445	MI	E	INTERSTATE 4 (STATE ROAD 400)	STATE ROAD 557
881944410	2021	10/18/2021	1930	1	1	16	16320000	17.415	767	0.445	MI	E	WB STATE ROAD 400 (INTERSTATE 4)	STATE ROAD 559

DISTNTS	MEAINTCD	DIRINTCD	ROUTEID	USRTNO	CONTYDMV	DHSCCTNO	EVNT_CTY_PLCE_NM	EVNT_CTY_LMT_CD	ACCSEV	TYP_DR_ACDNT_CD	FRST_HARM_EVNT_CD	IMPCT_TYP_CD
0.25	MI	E	SR 400	I 4	5	0	UNINCORPORATED	1	4		14	77
0.1	MI	W	SR 400	I 4	5	0	UNINCORPORATED	1	4		14	4
0	FT		SR 400	I 4	5	0	UNINCORPORATED (POLK CTY)	1	4		14	6
0	FT		SR 400	I 4	5	0	UNINCORPORATED	1	4		14	4
0.1	MI	E	SR 400	I 4	5	0	UNINCORPORATED	1	4		14	77
1	MI	W	SR 400	I 4	5	0	UNINCORPORATED	1	4		14	77
1	MI	W	SR 400	I 4	5	0	UNINCORPORATED	1	5		14	3

CRSH_NUM	CAL_YR	EVNT_CRSH_DT	EVNT_CRSH_TM	DAYOWEEK	MANDIST	CONTYDOT	RDWYID	LOCMP	LOCNODE	LOCDIST	LOCMACD	LOCDIRCD	EVNT_ON_RD_NM	EVNT_INTCT_RD_NM
883225520	2020	11/1/2020	2352	7	1	16	16320000	18.665	765	0.042	MI	E	WB I-4 MM44	SR-559

DISTNTS	MEAINTCD	DIRINTCD	ROUTEID	USRTNO	CONTYDMV	DHSCCTNO	EVNT_CTY_PLCE_NM	EVNT_CTY_LMT_CD	ACCSEV	TYP_DR_ACDNT_CD	FRST_HARM_EVNT_CD	IMPCT_TYP_CD
0.25	MI	E	SR 400	I 4	5	0	UNINCORPORATED	1	4		14	77

FRST_HARM_LOC_CD	ICT_CD	INTCHG_CD	ACCSIDRD	ACCLANE	DHSRDSYS	TYPESHLD	INTCT_TYP_CD	RD_SRFC_COND_CD	LGHT_COND_CD	EVNT_WTHR_COND_CD	SGHL_BUS_REL_CD	WRK_ZONE_REL_CD	LOC_WTHN_ZONE_CD	WRK_ZONE_TYP_CD	WRK_PRSNT_CD	LAW_ENFRC_PRSNT_CD	FRST_RD_COND_CD	SCND_RD_COND_CD	THRD_RD_COND_CD	FRST_ENVRN_COND_CD	SCND_ENVRN_COND_CD	THRD_ENVRN_COND_CD
1	1	1	R	1	3	2	1	1	1	5	1	1	1	0	0	0	0	1	0	0	1	0
1	1	1	L	3	1	1	1	2	5	3	1	1	0	0	0	0	10	0	0	2	0	0
1	1	1	R	3	1	2	1	1	1	1	4	1	1	0	0	0	0	1	0	0	1	0
1	1	1	R	2	1	1	1	1	1	1	1	1	0	0	0	0	1	0	0	1	0	0
1	1	1	R	3	1	1	1	1	1	1	1	1	0	0	0	0	1	0	0	1	0	0
3	1	1	M	M	1	1	1	2	3	3	1	1	0	0	0	0	10	0	0	2	0	0
2	1	1	M	M	1	1	1	1	5	1	1	1	0	0	0	0	1	0	0	1	0	0
1	1	1	L	1	1	1	1	1	5	1	1	2	2	1	2	2	1	0	0	1	0	0
1	1	1	L	3	1	1	1	2	5	3	1	1	0	0	0	0	10	0	0	2	0	0

V1_TRAF_CTRL_CD	V2_TRAF_CTRL_CD	ALCNVCD	FAHWYSYS	FUNCLASS	GRRATECD	RDACCESS	PLACECD	SURWIDTH	SHLDTYPE	SHLDTP2	SHLDTP3	SLDWIDTH	SHLDWTH2	SHLDWTH3	MEDWIDTH	HRZDGRV	MAXSPEED	TYPEPARK	SECTADT	AVGTFAC	SKTRESNM	V1_MOST_HARM_EVNT_CD	V1_HARM_EVNT_SQ01_CD	V1_VHCL_BDY_TYP_CD	V1_VHCL_SPCL_FNC_CD	V1_CMRC_USE_CD	V1_CMRC_VEH_CNFG_CD	V1_CARY_BDY_TYP_CD
1		0	6	16	14	3		12	1	3		5	12	0	40		55	0	6900	13.8	42	10	10	1	1	0	0	0
V1_TRAF_CTRL_CD	V2_TRAF_CTRL_CD	ALCNVCD	FAHWYSYS	FUNCLASS	GRRATECD	RDACCESS	PLACECD	SURWIDTH	SHLDTYPE	SHLDTP2	SHLDTP3	SLDWIDTH	SHLDWTH2	SHLDWTH3	MEDWIDTH	HRZDGRV	MAXSPEED	TYPEPARK	SECTADT	AVGTFAC	SKTRESNM	V1_MOST_HARM_EVNT_CD	V1_HARM_EVNT_SQ01_CD	V1_VHCL_BDY_TYP_CD	V1_VHCL_SPCL_FNC_CD	V1_CMRC_USE_CD	V1_CMRC_VEH_CNFG_CD	V1_CARY_BDY_TYP_CD
1	1	0	5	1	2	1		36	1	5		8	4	0	174		70	0	96500	15.3	32	14	14	3	1	0	0	0
1	1	0	5	11	1	1		36	2	3		11	12	0	165		70	0	74000	13.8	30	14	14	1	1	0	0	0
1		0	5	1	2	1		36	2	3		10	12	0	227 D407		70	0	80000	15.3	30	6	6	11	1	0	0	0
1	1	0	5	11	1	1		36	2	3		10	12	0	66		70	0	74000	13.8	30	14	14	1	1	0	0	0
1		0	5	1	2	1		36	2	3		11	12	0	165		70	0	80000	15.3	38	34	43	1	1	0	0	0
1		2	5	11	1	1		36	2	3		10	12	0	66		70	0	74000	13.8	30	29	43	1	1	0	0	0
77	77	2	5	11	1	1		36	2	3		10	12	0	66		70	0	74000	13.8	30	14	14	1	3	0	0	0
V1_TRAF_CTRL_CD	V2_TRAF_CTRL_CD	ALCNVCD	FAHWYSYS	FUNCLASS	GRRATECD	RDACCESS	PLACECD	SURWIDTH	SHLDTYPE	SHLDTP2	SHLDTP3	SLDWIDTH	SHLDWTH2	SHLDWTH3	MEDWIDTH	HRZDGRV	MAXSPEED	TYPEPARK	SECTADT	AVGTFAC	SKTRESNM	V1_MOST_HARM_EVNT_CD	V1_HARM_EVNT_SQ01_CD	V1_VHCL_BDY_TYP_CD	V1_VHCL_SPCL_FNC_CD	V1_CMRC_USE_CD	V1_CMRC_VEH_CNFG_CD	V1_CARY_BDY_TYP_CD
1	1	0	5	1	2	1		36	1	5		8	4	0	174		70	0	96500	15.3	32	14	14	3	1	0	0	0

V2_SUSP_ALC_USE_CD	V2_SUSP_DRUG_USE_CD	TOT_CRSH_DMG_AMT	TOT_VHCL_DMG_AMT	TOT_PROP_DMG_AMT	TOT_OF_PERS_NUM	TOT_OF_DR_NUM	TOT_OF_VHCL_NUM	TOT_OF_FATL_NUM	TOT_OF_INJR_NUM	TOTSEVREINJ_NUM	TOTNONTRAFFATL_NUM	TOT_OF_PEDST_NUM	TOTOF_PEDLCYCL_NUM	EVNT_LAT_NUM	EVNT_LONG_NUM	CAR_LAT_NUM	CAR_LONG_NUM	RUN DATE	RUN TIME	OPT	PROGRAM	
		4000	4000		0	2	1	1	1	0	0	0	1	0	0	0	28.1587925	81.8018416	8/1/2022	11:24:46	1	CARPI126
V2_SUSP_ALC_USE_CD	V2_SUSP_DRUG_USE_CD	TOT_CRSH_DMG_AMT	TOT_VHCL_DMG_AMT	TOT_PROP_DMG_AMT	TOT_OF_PERS_NUM	TOT_OF_DR_NUM	TOT_OF_VHCL_NUM	TOT_OF_FATL_NUM	TOT_OF_INJR_NUM	TOTSEVREINJ_NUM	TOTNONTRAFFATL_NUM	TOT_OF_PEDST_NUM	TOTOF_PEDLCYCL_NUM	EVNT_LAT_NUM	EVNT_LONG_NUM	CAR_LAT_NUM	CAR_LONG_NUM	RUN DATE	RUN TIME	OPT	PROGRAM	
1	1	20000	20000	0	2	2	2	0	2	1	0	0	0	28.15753	81.79501	28.1574358	81.7977928	8/1/2022	11:25:35	1	CARPI126	
1	1	8000	8000	0	4	2	2	0	1	1	0	0	0	28.15753	81.79501	28.1574116	81.8035255	8/1/2022	11:25:35	1	CARPI126	
1	1	4000	4000	0	1	1	1	0	1	1	0	0	0	0	0	28.1559569	81.7853374	8/1/2022	11:25:35	1	CARPI126	
1	1	5000	5000	0	2	2	2	0	1	1	0	0	0	28.1574665	81.8144706	28.15744	81.8188067	8/1/2022	11:25:35	1	CARPI126	
1	1	4500	3500	1000	1	1	1	0	1	1	0	0	0	28.1507299	81.8595399	28.1574323	81.8002499	8/1/2022	11:25:35	1	CARPI126	
1	1	19000	9000	10000	1	1	1	0	1	1	0	0	0	28.1574099	81.8114	28.1574378	81.8182662	8/1/2022	11:25:35	1	CARPI126	
1	1	7100	7100	0	3	3	3	1	0	0	0	0	0	28.1507299	81.8595399	28.1574378	81.8182662	8/1/2022	11:25:35	1	CARPI126	
V2_SUSP_ALC_USE_CD	V2_SUSP_DRUG_USE_CD	TOT_CRSH_DMG_AMT	TOT_VHCL_DMG_AMT	TOT_PROP_DMG_AMT	TOT_OF_PERS_NUM	TOT_OF_DR_NUM	TOT_OF_VHCL_NUM	TOT_OF_FATL_NUM	TOT_OF_INJR_NUM	TOTSEVREINJ_NUM	TOTNONTRAFFATL_NUM	TOT_OF_PEDST_NUM	TOTOF_PEDLCYCL_NUM	EVNT_LAT_NUM	EVNT_LONG_NUM	CAR_LAT_NUM	CAR_LONG_NUM	RUN DATE	RUN TIME	OPT	PROGRAM	
1	1	20000	20000	0	2	2	2	0	2	1	0	0	0	28.15753	81.79501	28.1574358	81.7977928	8/1/2022	11:35:19	1	CARPI126	



I-4 at SR 559 Interchange
FPID 447436-2-52-01 Polk County



Appendix C

Existing Operational Analysis/ Level of Service (LOS) Calculations

C-1: HCS Worksheets

C-2: Synchro Worksheets

1	0.94	0.925	3096	6862	0.45	66.3	15.6	B
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Facility Analysis Results

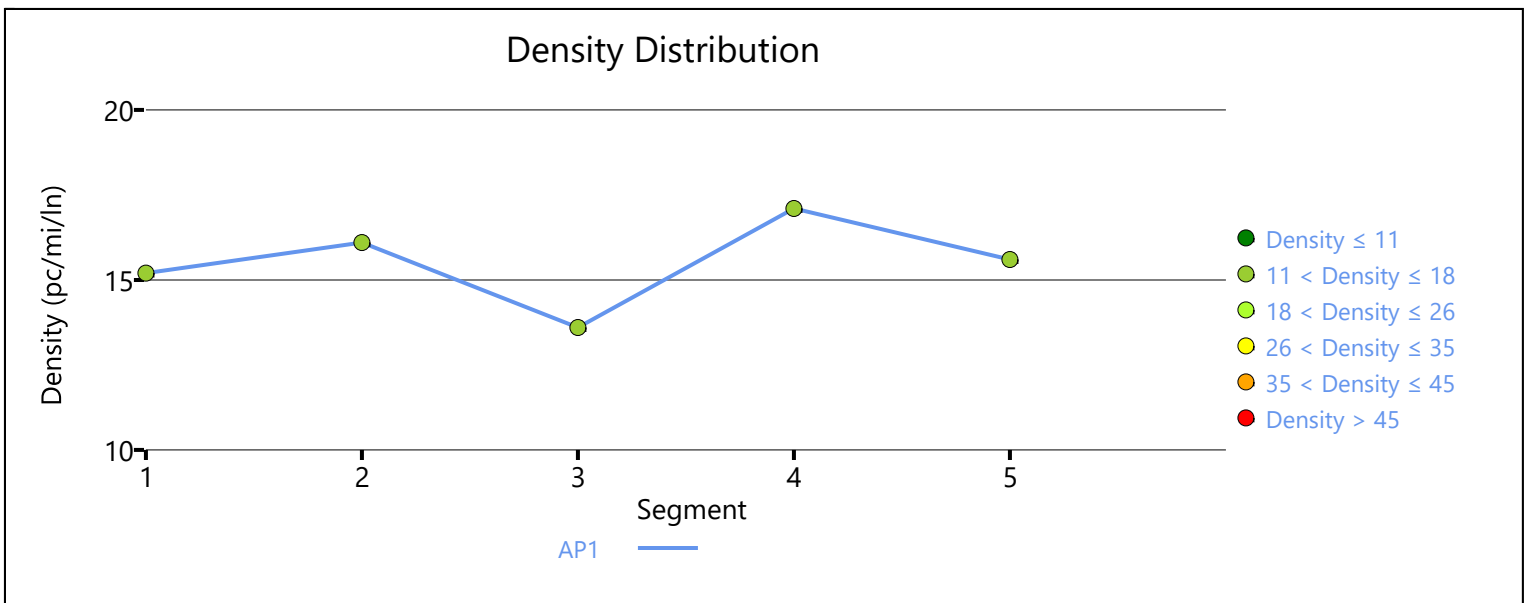
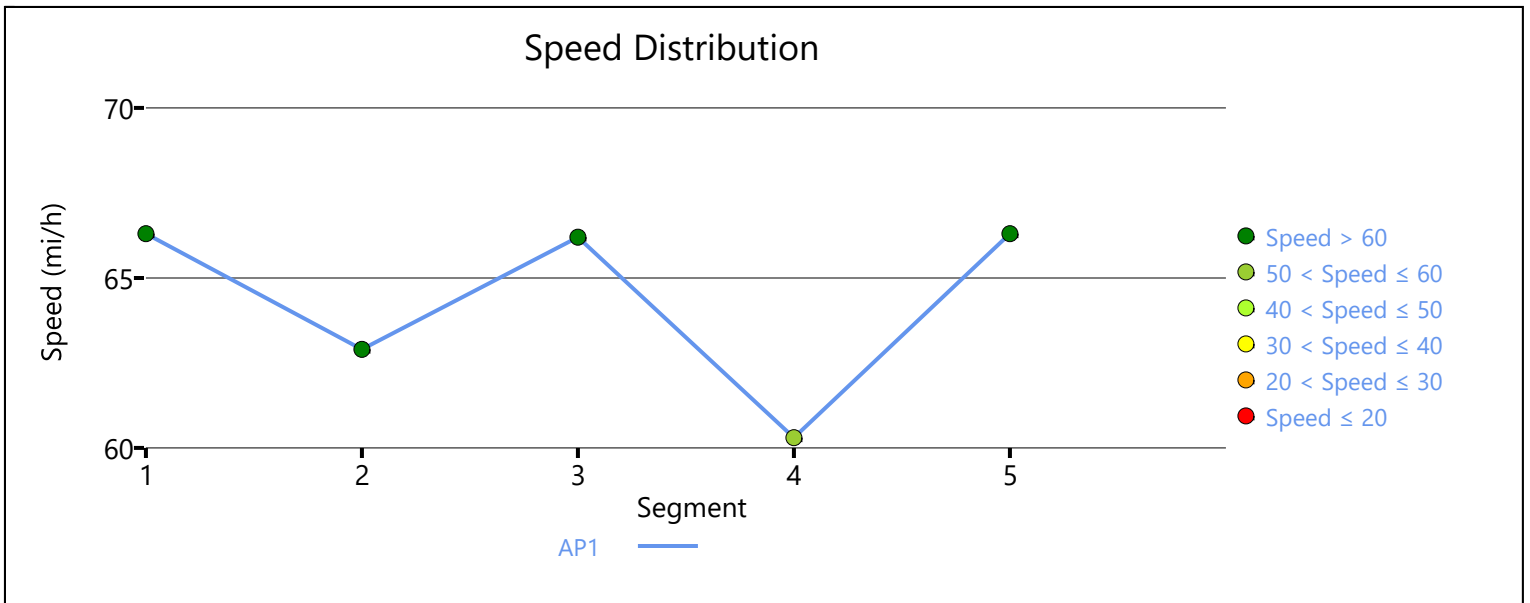
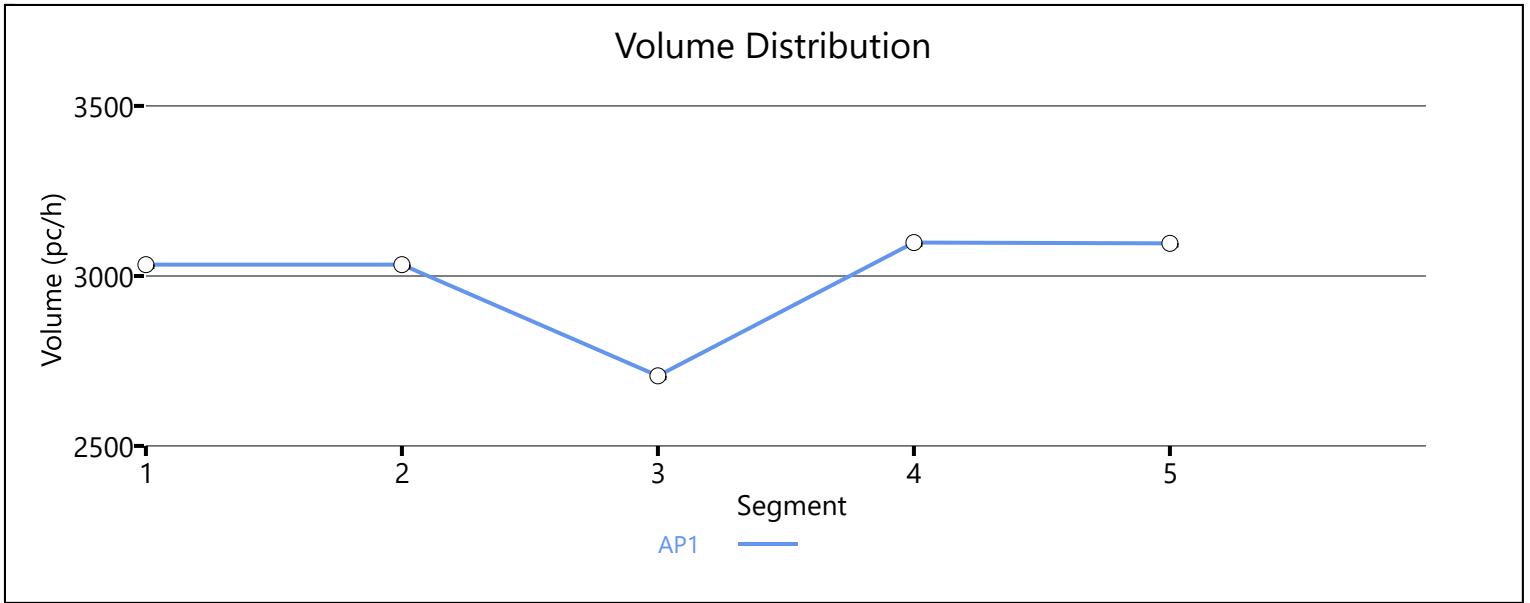
AP	VMT veh-mi/p	VMT-Demand veh-mi/p	VHD veh-h/p	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	2128	1976	0.48	65.3	15.3	14.2	2.80	B

Facility Overall Results

Space Mean Speed, mi/h	65.3	Density, veh/mi/ln	14.2
Average Travel Time, min	2.80	Density, pc/mi/ln	15.3

Messages

Comments



1	0.94	0.925	3804	6862	0.55	66.3	19.1	C
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Facility Analysis Results

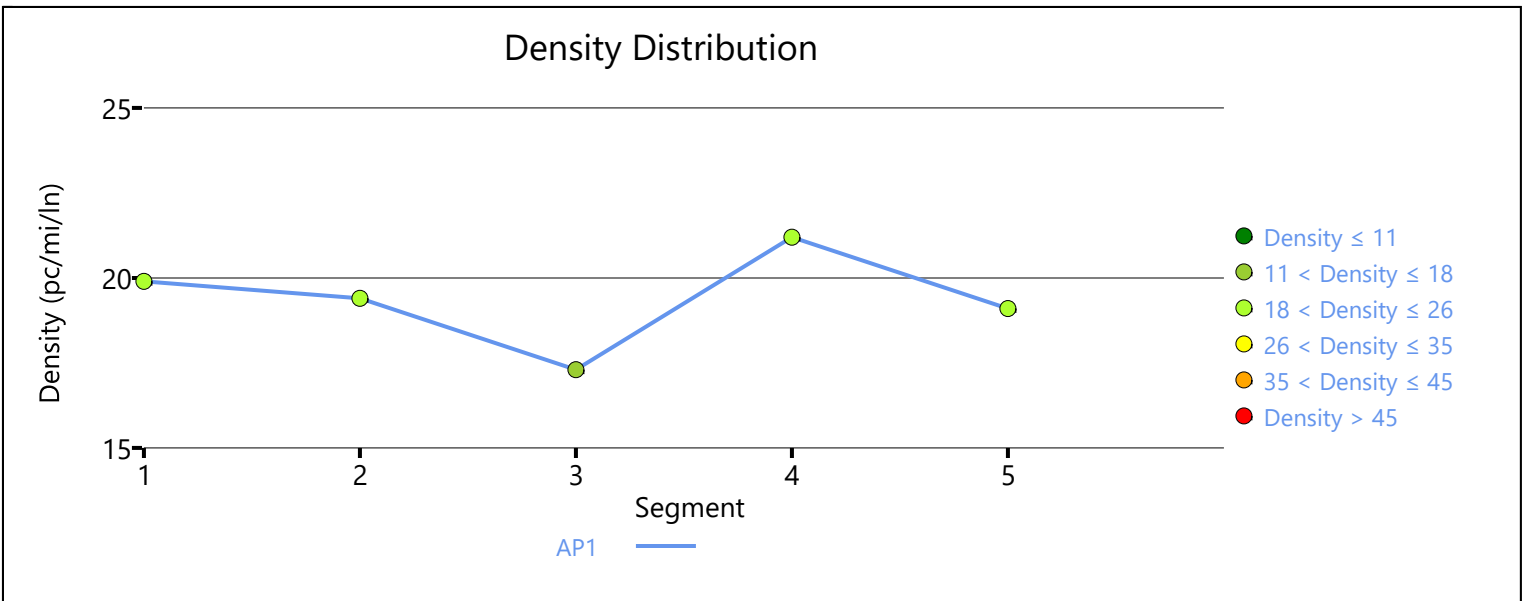
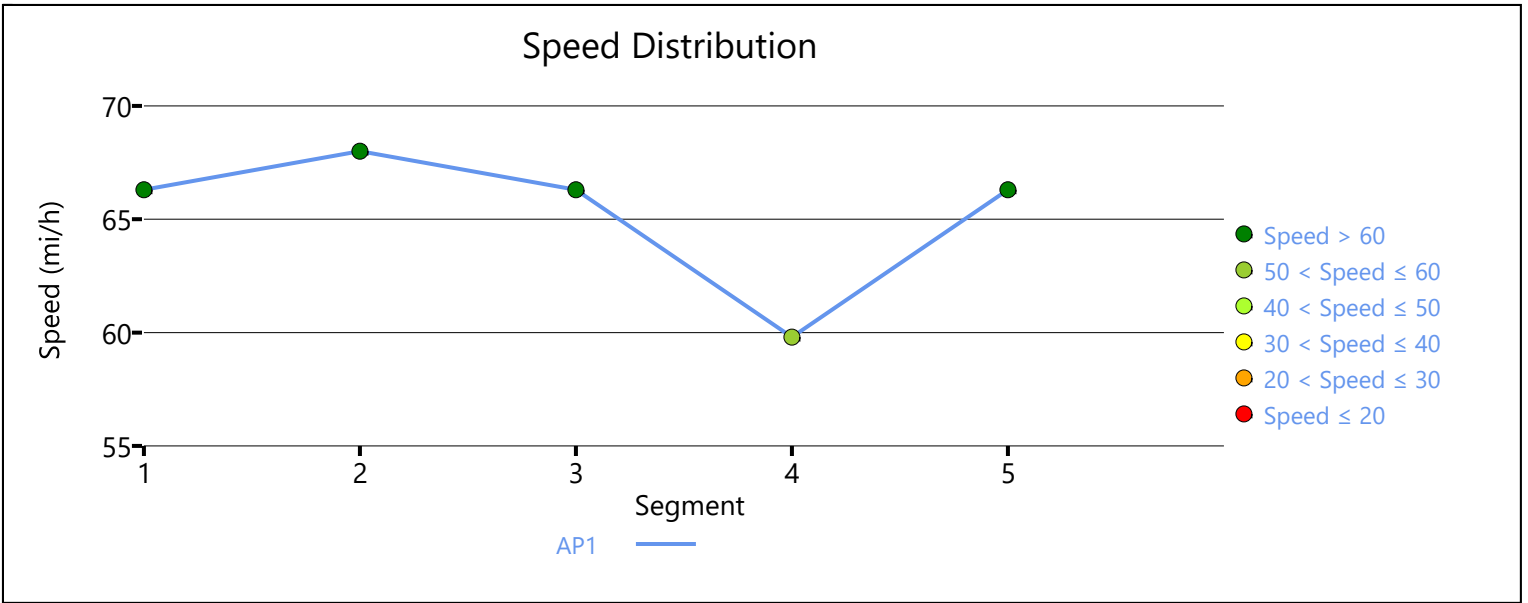
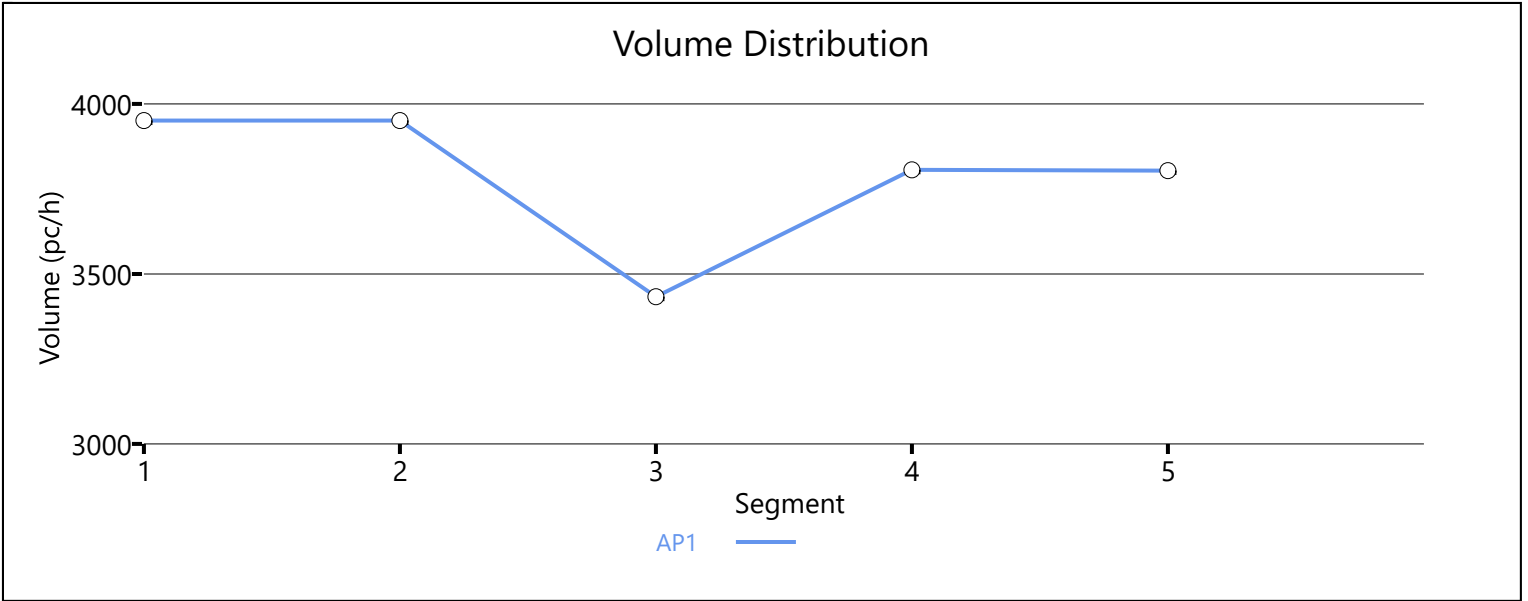
AP	VMT veh-mi/p	VMT-Demand veh-mi/p	VHD veh-h/p	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	2694	2509	0.68	65.8	19.3	17.9	2.80	C

Facility Overall Results

Space Mean Speed, mi/h	65.8	Density, veh/mi/ln	17.9
Average Travel Time, min	2.80	Density, pc/mi/ln	19.3

Messages

Comments



1	0.94	0.925	3730	6862	0.54	66.3	18.7	C
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Facility Analysis Results

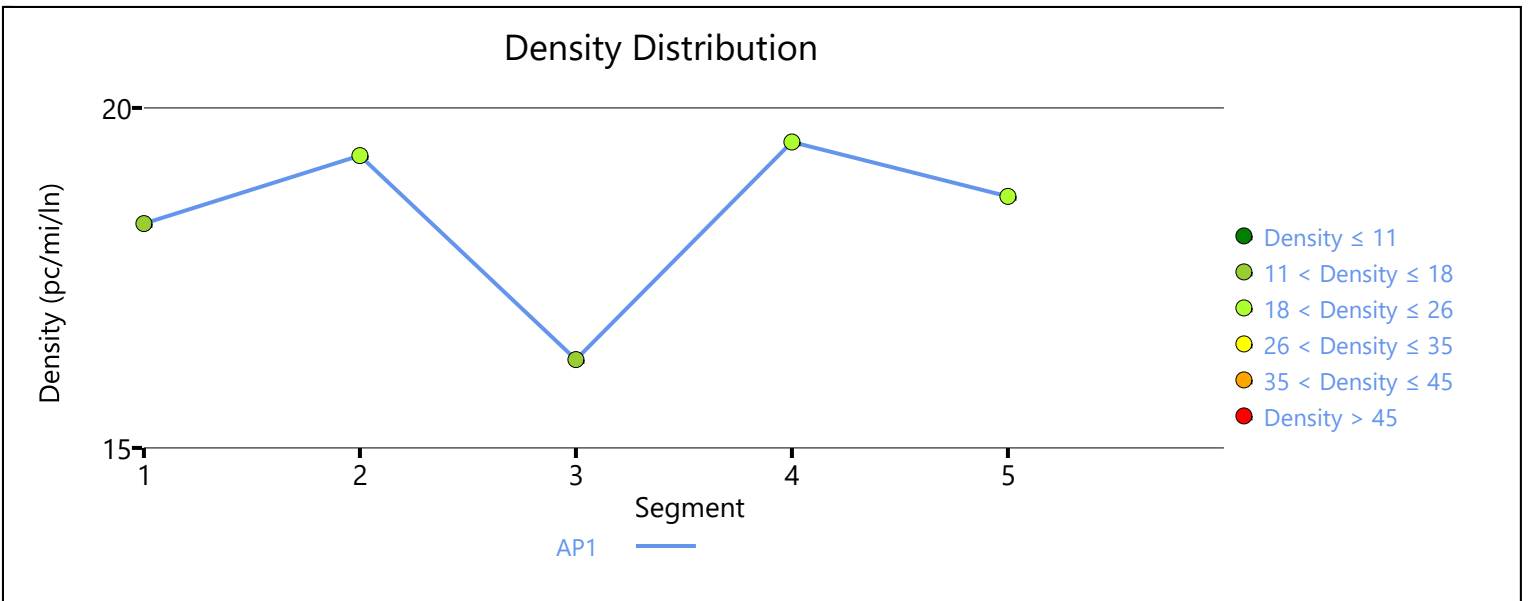
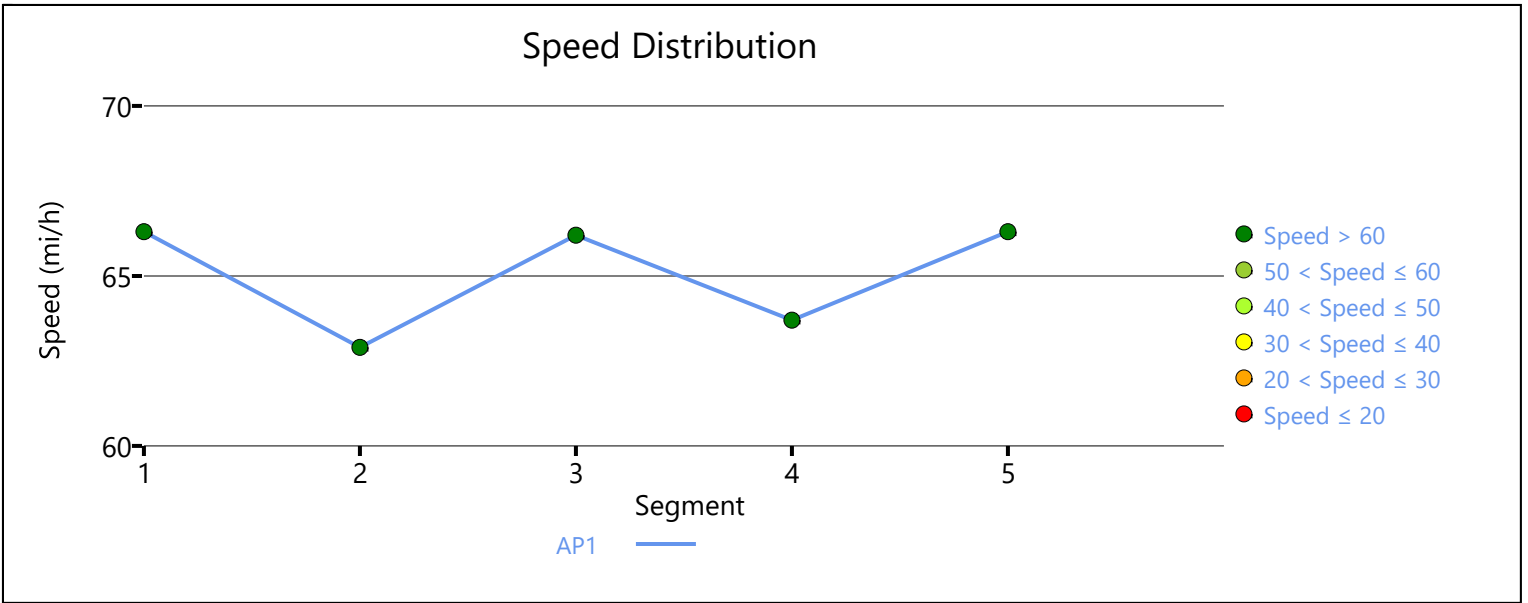
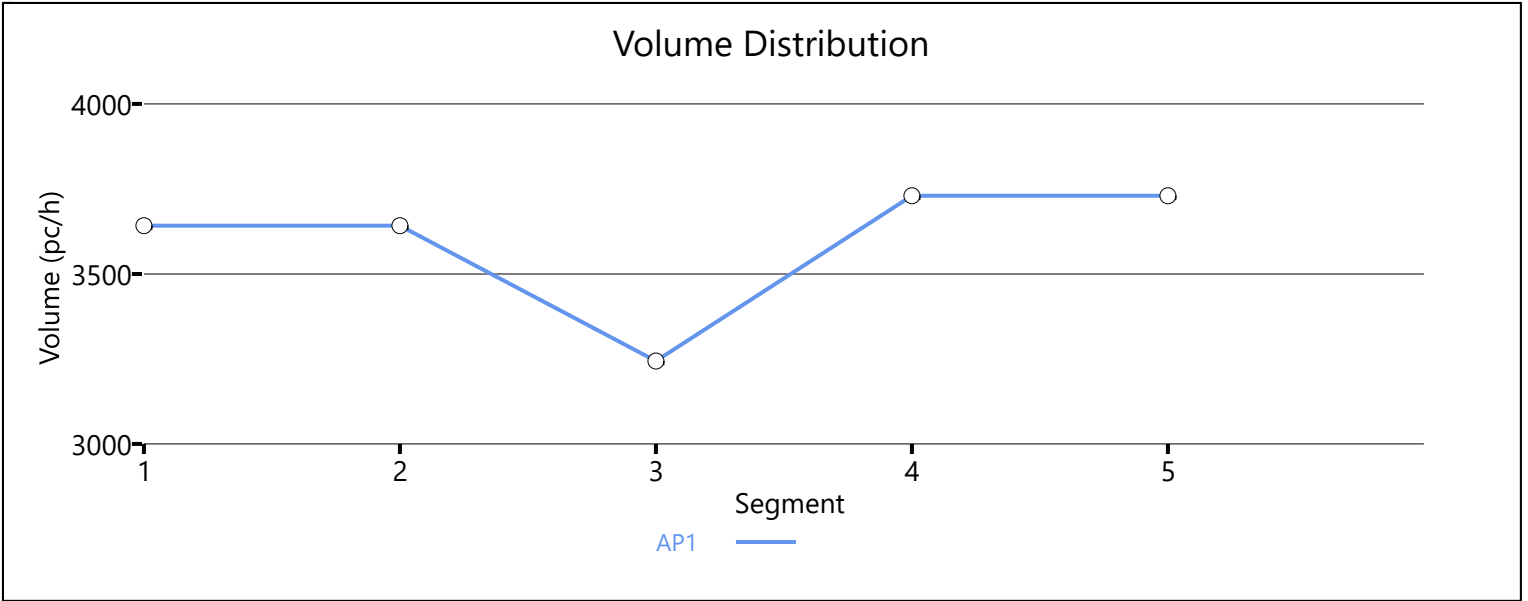
AP	VMT veh-mi/p	VMT-Demand veh-mi/p	VHD veh-h/p	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	2678	2487	0.64	65.7	18.2	16.9	2.90	C

Facility Overall Results

Space Mean Speed, mi/h	65.7	Density, veh/mi/ln	16.9
Average Travel Time, min	2.90	Density, pc/mi/ln	18.2

Messages

Comments



1	0.94	0.925	3573	6862	0.52	66.3	18.0	B
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Facility Analysis Results

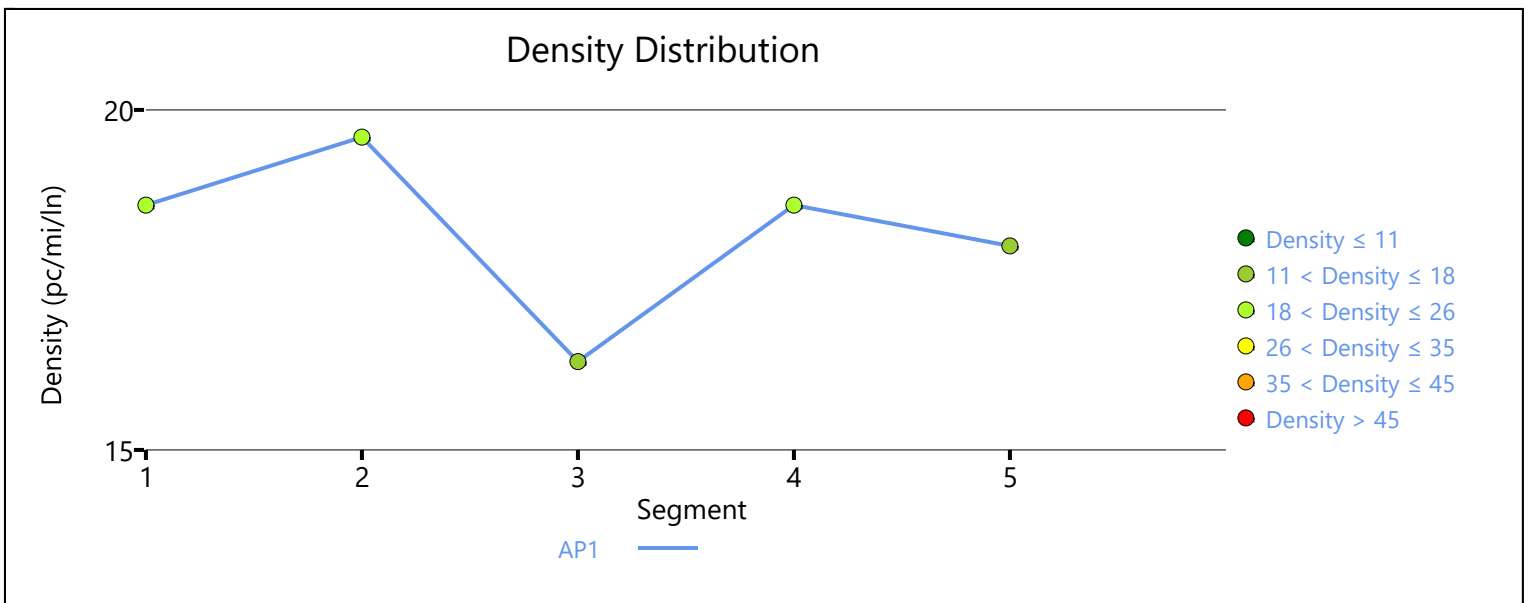
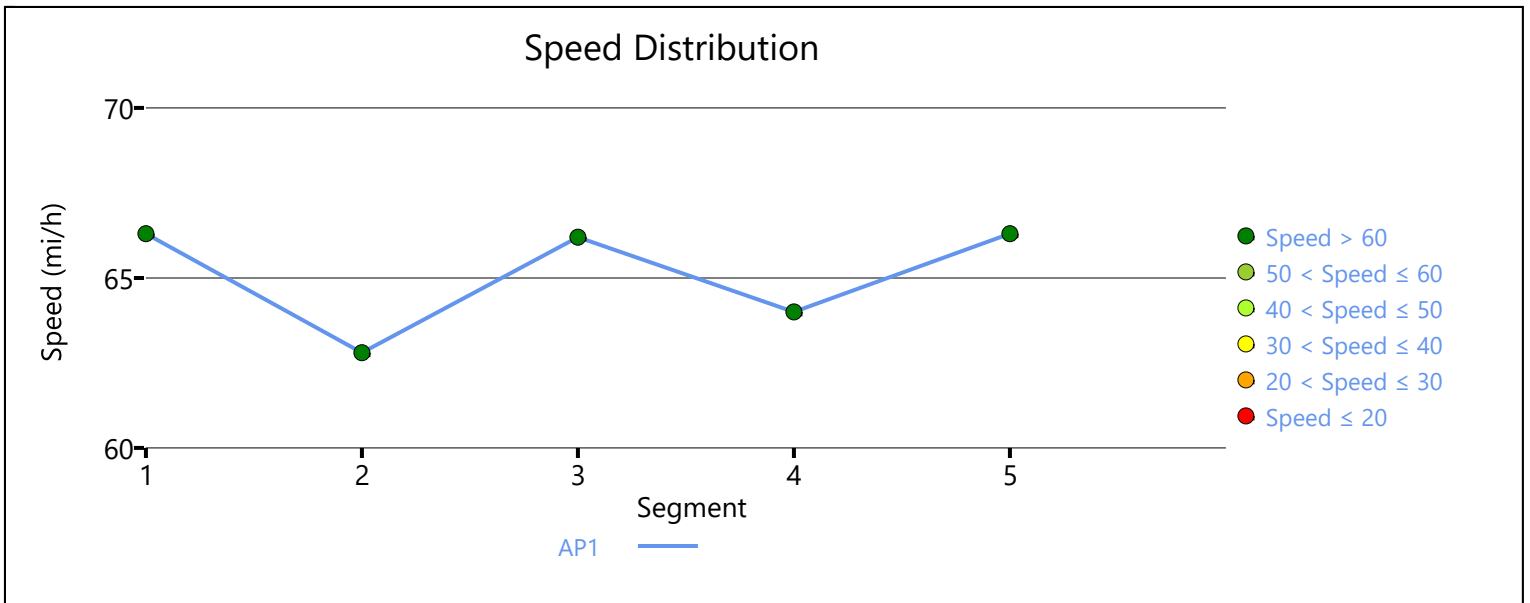
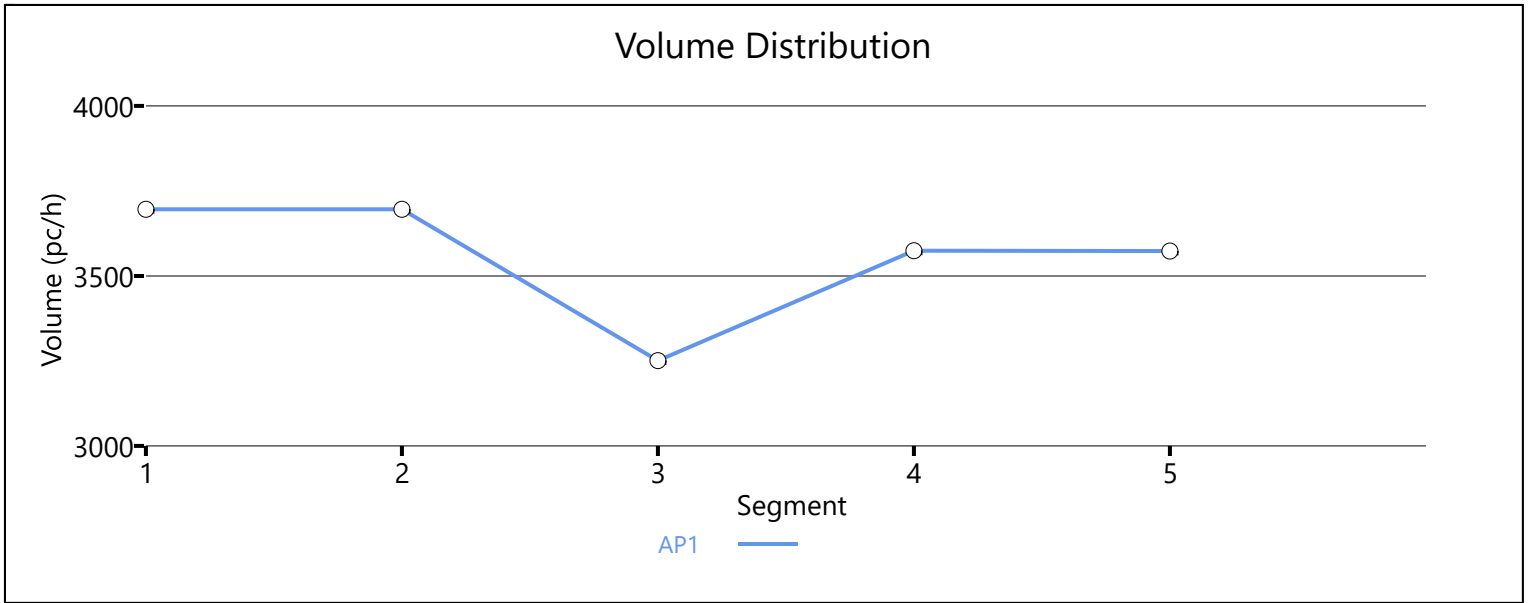
AP	VMT veh-mi/p	VMT-Demand veh-mi/p	VHD veh-h/p	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	2648	2470	0.62	65.7	18.0	16.7	2.90	C

Facility Overall Results

Space Mean Speed, mi/h	65.7	Density, veh/mi/ln	16.7
Average Travel Time, min	2.90	Density, pc/mi/ln	18.0

Messages

Comments



Lanes, Volumes, Timings
 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Existing 2022
 AM PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	26	43	21	16	116	63	345	50	112	229	280
Future Volume (vph)	210	26	43	21	16	116	63	345	50	112	229	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	590		0	0		0	250		250	430		280
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	50			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850				0.850			0.850		0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1671	1583	1583	1805	1583	1272	1770	3438	1583	1280	3406	1538
Flt Permitted	0.746			0.738			0.595			0.525		
Satd. Flow (perm)	1312	1583	1583	1402	1583	1272	1108	3438	1583	707	3406	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			113			129			123			311
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6284			182			439			1636	
Travel Time (s)		142.8			4.1			10.0			37.2	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	8%	20%	2%	0%	20%	27%	2%	5%	2%	41%	6%	5%
Adj. Flow (vph)	233	29	48	23	18	129	70	383	56	124	254	311
Shared Lane Traffic (%)												
Lane Group Flow (vph)	233	29	48	23	18	129	70	383	56	124	254	311
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)		24			12			24			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		40			40			50			40	
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	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	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	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	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	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	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	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	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	Perm	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	Perm
Protected Phases		8			4			1		6		5
												2

Lanes, Volumes, Timings
 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Existing 2022
 AM PEAK HOUR



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8		8	4		4	2		6	6		2
Detector Phase	8	8	8	4	4	4	1	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	5.0	10.0	10.0
Minimum Split (s)	42.8	42.8	42.8	18.8	18.8	18.8	12.7	54.7	54.7	12.7	34.7	34.7
Total Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	55.0	55.0	20.0	55.0	55.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%	16.7%	45.8%	45.8%	16.7%	45.8%	45.8%
Maximum Green (s)	36.2	36.2	36.2	36.2	36.2	36.2	12.3	47.3	47.3	12.3	47.3	47.3
Yellow Time (s)	5.8	5.8	5.8	5.8	5.8	5.8	5.7	5.7	5.7	5.7	5.7	5.7
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.8	8.8	8.8	8.8	8.8	8.8	7.7	7.7	7.7	7.7	7.7	7.7
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0	7.0		7.0	7.0
Flash Dont Walk (s)	27.0	27.0	27.0					40.0	40.0		20.0	20.0
Pedestrian Calls (#/hr)	0	0	0					0	0		0	0
Act Effct Green (s)	17.5	17.5	17.5	17.5	17.5	17.5	22.0	14.3	14.3	22.0	16.3	16.3
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28	0.28	0.35	0.23	0.23	0.35	0.26	0.26
v/c Ratio	0.64	0.07	0.09	0.06	0.04	0.29	0.15	0.49	0.12	0.37	0.29	0.49
Control Delay	31.1	19.5	0.3	19.5	19.3	6.3	11.7	26.0	0.6	15.0	21.8	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.1	19.5	0.3	19.5	19.3	6.3	11.7	26.0	0.6	15.0	21.8	6.2
LOS	C	B	A	B	B	A	B	C	A	B	C	A
Approach Delay		25.3			9.4			21.2			13.5	
Approach LOS		C			A			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 63
 Natural Cycle: 115
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.64
 Intersection Signal Delay: 17.6
 Intersection LOS: B
 Intersection Capacity Utilization 54.2%
 ICU Level of Service A
 Analysis Period (min) 15

























Splits and Phases: 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD



HCM 6th Signalized Intersection Summary

2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Existing 2022
AM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	26	43	21	16	116	63	345	50	112	229	280
Future Volume (veh/h)	210	26	43	21	16	116	63	345	50	112	229	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1604	1870	1900	1604	1500	1870	1826	1870	1292	1811	1826
Adj Flow Rate, veh/h	233	29	48	23	18	129	70	383	56	124	254	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	8	20	2	0	20	27	2	5	2	41	6	5
Cap, veh/h	424	406	402	457	406	322	436	671	307	320	803	
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.06	0.19	0.19	0.10	0.23	0.00
Sat Flow, veh/h	1182	1604	1585	1343	1604	1271	1781	3469	1585	1231	3441	1547
Grp Volume(v), veh/h	233	29	48	23	18	129	70	383	56	124	254	0
Grp Sat Flow(s),veh/h/ln	1182	1604	1585	1343	1604	1271	1781	1735	1585	1231	1721	1547
Q Serve(g_s), s	9.9	0.7	1.2	0.7	0.5	4.5	1.5	5.3	1.6	4.2	3.3	0.0
Cycle Q Clear(g_c), s	10.4	0.7	1.2	1.4	0.5	4.5	1.5	5.3	1.6	4.2	3.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	424	406	402	457	406	322	436	671	307	320	803	
V/C Ratio(X)	0.55	0.07	0.12	0.05	0.04	0.40	0.16	0.57	0.18	0.39	0.32	
Avail Cap(c_a), veh/h	925	1086	1074	1026	1086	861	739	3071	1403	479	3046	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.0	15.2	15.4	15.7	15.1	16.6	14.0	19.5	18.0	15.1	17.0	0.0
Incr Delay (d2), s/veh	1.1	0.1	0.1	0.0	0.0	0.8	0.2	0.8	0.3	0.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.6	0.4	0.8	0.4	0.3	2.2	1.0	3.7	1.0	2.0	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	15.2	15.5	15.8	15.1	17.4	14.1	20.3	18.3	15.9	17.2	0.0
LnGrp LOS	C	B	B	B	B	B	B	C	B	B	B	
Approach Vol, veh/h		310			170			509			378	A
Approach Delay, s/veh		18.9			16.9			19.2			16.8	
Approach LOS		B			B			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	20.2		22.3	13.1	18.0		22.3				
Change Period (Y+Rc), s	7.7	7.7		8.8	7.7	7.7		8.8				
Max Green Setting (Gmax), s	12.3	47.3		36.2	12.3	47.3		36.2				
Max Q Clear Time (g_c+I1), s	3.5	5.3		6.5	6.2	7.3		12.4				
Green Ext Time (p_c), s	0.1	1.8		0.6	0.1	3.0		1.2				

Intersection Summary

HCM 6th Ctrl Delay	18.2
HCM 6th LOS	B

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Existing 2022
 PM PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	239	47	64	28	20	113	52	270	32	146	407	303
Future Volume (vph)	239	47	64	28	20	113	52	270	32	146	407	303
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	590		0	0		0	250		250	430		280
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	50			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850				0.850			0.850		0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1610	1615	1736	1712	1324	1805	3471	1568	1378	3539	1568
Flt Permitted	0.742			0.721			0.478			0.561		
Satd. Flow (perm)	1343	1610	1615	1317	1712	1324	908	3471	1568	814	3539	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			113			131			123			352
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6284			182			439			1636	
Travel Time (s)		142.8			4.1			10.0			37.2	
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles (%)	5%	18%	0%	4%	11%	22%	0%	4%	3%	31%	2%	3%
Adj. Flow (vph)	278	55	74	33	23	131	60	314	37	170	473	352
Shared Lane Traffic (%)												
Lane Group Flow (vph)	278	55	74	33	23	131	60	314	37	170	473	352
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)		24			12			24			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		40			40			50			40	
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	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	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	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	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	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	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	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	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	Perm	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	Perm
Protected Phases		8			4			1		6		5
												2

Lanes, Volumes, Timings 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Existing 2022
PM PEAK HOUR



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8		8	4		4	2		6	6		2
Detector Phase	8	8	8	4	4	4	1	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	5.0	10.0	10.0
Minimum Split (s)	42.8	42.8	42.8	18.8	18.8	18.8	12.7	54.7	54.7	12.7	34.7	34.7
Total Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	55.0	55.0	20.0	55.0	55.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%	16.7%	45.8%	45.8%	16.7%	45.8%	45.8%
Maximum Green (s)	36.2	36.2	36.2	36.2	36.2	36.2	12.3	47.3	47.3	12.3	47.3	47.3
Yellow Time (s)	5.8	5.8	5.8	5.8	5.8	5.8	5.7	5.7	5.7	5.7	5.7	5.7
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.8	8.8	8.8	8.8	8.8	8.8	7.7	7.7	7.7	7.7	7.7	7.7
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0	7.0		7.0	7.0
Flash Dont Walk (s)	27.0	27.0	27.0					40.0	40.0		20.0	20.0
Pedestrian Calls (#/hr)	0	0	0					0	0		0	0
Act Effct Green (s)	20.5	20.5	20.5	20.5	20.5	20.5	29.2	14.6	14.6	25.3	25.0	25.0
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.29	0.41	0.21	0.21	0.36	0.35	0.35
v/c Ratio	0.72	0.12	0.14	0.09	0.05	0.28	0.13	0.44	0.09	0.45	0.38	0.45
Control Delay	34.6	19.9	2.1	19.8	19.2	5.8	13.0	27.9	0.4	17.5	21.9	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.6	19.9	2.1	19.8	19.2	5.8	13.0	27.9	0.4	17.5	21.9	5.1
LOS	C	B	A	B	B	A	B	C	A	B	C	A
Approach Delay		26.7			9.9			23.3			15.2	
Approach LOS		C			A			C			B	

Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	71
Natural Cycle:	115
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.72
Intersection Signal Delay:	18.7
Intersection LOS:	B
Intersection Capacity Utilization:	56.5%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD



HCM 6th Signalized Intersection Summary

2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Existing 2022
PM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗	↘	↑	↗	↘	↑↑	↗	↘	↑↑	↗
Traffic Volume (veh/h)	239	47	64	28	20	113	52	270	32	146	407	303
Future Volume (veh/h)	239	47	64	28	20	113	52	270	32	146	407	303
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1633	1900	1841	1737	1574	1900	1841	1856	1441	1870	1856
Adj Flow Rate, veh/h	278	55	74	33	23	131	60	314	37	170	473	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	5	18	0	4	11	22	0	4	3	31	2	3
Cap, veh/h	457	469	463	449	499	383	341	598	269	369	873	
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.05	0.17	0.17	0.13	0.25	0.00
Sat Flow, veh/h	1204	1633	1610	1241	1737	1334	1810	3497	1572	1372	3554	1572
Grp Volume(v), veh/h	278	55	74	33	23	131	60	314	37	170	473	0
Grp Sat Flow(s),veh/h/ln	1204	1633	1610	1241	1737	1334	1810	1749	1572	1372	1777	1572
Q Serve(g_s), s	12.7	1.5	2.0	1.2	0.6	4.5	1.4	4.8	1.2	5.8	6.8	0.0
Cycle Q Clear(g_c), s	13.2	1.5	2.0	2.6	0.6	4.5	1.4	4.8	1.2	5.8	6.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	457	469	463	449	499	383	341	598	269	369	873	
V/C Ratio(X)	0.61	0.12	0.16	0.07	0.05	0.34	0.18	0.52	0.14	0.46	0.54	
Avail Cap(c_a), veh/h	857	1011	997	861	1075	826	625	2829	1272	483	2875	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.8	15.4	15.6	16.3	15.1	16.5	15.3	22.1	20.6	16.7	19.2	0.0
Incr Delay (d2), s/veh	1.3	0.1	0.2	0.1	0.0	0.5	0.2	0.7	0.2	0.9	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.1	0.9	1.3	0.6	0.4	2.4	1.0	3.4	0.8	3.1	4.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.1	15.5	15.7	16.4	15.1	17.0	15.5	22.8	20.8	17.5	19.7	0.0
LnGrp LOS	C	B	B	B	B	B	B	C	C	B	B	
Approach Vol, veh/h		407			187			411			643	A
Approach Delay, s/veh		19.4			16.7			21.6			19.1	
Approach LOS		B			B			C			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	22.1		25.6	15.2	17.7		25.6				
Change Period (Y+Rc), s	7.7	7.7		8.8	7.7	7.7		8.8				
Max Green Setting (Gmax), s	12.3	47.3		36.2	12.3	47.3		36.2				
Max Q Clear Time (g_c+I1), s	3.4	8.8		6.5	7.8	6.8		15.2				
Green Ext Time (p_c), s	0.1	3.5		0.7	0.2	2.4		1.6				

Intersection Summary



















HCM 6th Ctrl Delay	19.5
HCM 6th LOS	B

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
3: SR 559 & I-4 EB

Existing 2022
AM PEAK HOUR

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	0	190	0	0	0	0	376	295	44	431	0
Future Volume (vph)	94	0	190	0	0	0	0	376	295	44	431	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		30	0		0	0		500	450		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	20			25			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850						0.850			
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1656	0	1302	0	0	0	0	3167	1429	1612	3312	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1656	0	1302	0	0	0	0	3167	1429	1612	3312	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1328			1315			1636			734	
Travel Time (s)		30.2			29.9			37.2			16.7	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	9%	0%	24%	0%	0%	0%	0%	14%	13%	12%	9%	0%
Adj. Flow (vph)	103	0	209	0	0	0	0	413	324	48	474	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	103	0	209	0	0	0	0	413	324	48	474	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			30			42	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			0			80	
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
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	52.3%						ICU Level of Service A					
Analysis Period (min)	15											

HCM 6th TWSC

3: SR 559 & I-4 EB

Existing 2022
AM PEAK HOUR

Intersection

Int Delay, s/veh 3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙		↗					↑↑	↗	↙	↑↑	
Traffic Vol, veh/h	94	0	190	0	0	0	0	376	295	44	431	0
Future Vol, veh/h	94	0	190	0	0	0	0	376	295	44	431	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	30	-	-	-	-	-	500	450	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	9	0	24	0	0	0	0	14	13	12	9	0
Mvmt Flow	103	0	209	0	0	0	0	413	324	48	474	0





















Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	777	-	237	-	0	0
Stage 1	570	-	-	-	-	-
Stage 2	207	-	-	-	-	-
Critical Hdwy	6.98	-	7.38	-	-	4.34
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	-	3.54	-	-	2.32
Pot Cap-1 Maneuver	319	0	701	0	-	1074
Stage 1	510	0	-	0	-	-
Stage 2	787	0	-	0	-	-
Platoon blocked, %						
Mov Cap-1 Maneuver	305	0	701	-	-	1074
Mov Cap-2 Maneuver	305	0	-	-	-	-
Stage 1	510	0	-	-	-	-
Stage 2	752	0	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.7	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	305	701	1074	-
HCM Lane V/C Ratio	-	-	0.339	0.298	0.045	-
HCM Control Delay (s)	-	-	22.7	12.3	8.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1.5	1.2	0.1	-

Lanes, Volumes, Timings
3: SR 559 & I-4 EB

Existing 2022
PM PEAK HOUR

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (vph)	78	0	372	0	0	0	0	335	287	36	484	0
Future Volume (vph)	78	0	372	0	0	0	0	335	287	36	484	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		30	0		0	0		500	450		0
Storage Lanes	1		1	0		0	0		1	1		0
Taper Length (ft)	20			25			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850							0.850		
Flt Protected	0.950									0.950		
Satd. Flow (prot)	1719	0	1468	0	0	0	0	3312	1429	1805	3406	0
Flt Permitted	0.950									0.950		
Satd. Flow (perm)	1719	0	1468	0	0	0	0	3312	1429	1805	3406	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1328			1315			1636			734	
Travel Time (s)		30.2			29.9			37.2			16.7	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	5%	0%	10%	0%	0%	0%	0%	9%	13%	0%	6%	0%
Adj. Flow (vph)	89	0	423	0	0	0	0	381	326	41	550	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	0	423	0	0	0	0	381	326	41	550	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			30			42	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			0			80	
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
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	48.8%						ICU Level of Service A					
Analysis Period (min)	15											

HCM 6th TWSC

3: SR 559 & I-4 EB

Existing 2022
PM PEAK HOUR

Intersection

Int Delay, s/veh 5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘		↗					↑↑	↗	↘	↑↑	
Traffic Vol, veh/h	78	0	372	0	0	0	0	335	287	36	484	0
Future Vol, veh/h	78	0	372	0	0	0	0	335	287	36	484	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	30	-	-	-	-	-	500	450	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	5	0	10	0	0	0	0	9	13	0	6	0
Mvmt Flow	89	0	423	0	0	0	0	381	326	41	550	0



















Major/Minor	Minor2		Major1			Major2			
Conflicting Flow All	823	-	275	-	0	0	381	0	0
Stage 1	632	-	-	-	-	-	-	-	-
Stage 2	191	-	-	-	-	-	-	-	-
Critical Hdwy	6.9	-	7.1	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	-	3.4	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	306	0	699	0	-	-	1189	-	0
Stage 1	484	0	-	0	-	-	-	-	0
Stage 2	814	0	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	296	0	699	-	-	-	1189	-	-
Mov Cap-2 Maneuver	296	0	-	-	-	-	-	-	-
Stage 1	484	0	-	-	-	-	-	-	-
Stage 2	786	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.5	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	296	699	1189	-
HCM Lane V/C Ratio	-	-	0.299	0.605	0.034	-
HCM Control Delay (s)	-	-	22.3	17.7	8.1	-
HCM Lane LOS	-	-	C	C	A	-
HCM 95th %tile Q(veh)	-	-	1.2	4.1	0.1	-

Lanes, Volumes, Timings
4: SR 559 & I-4 WB

Existing 2022
AM PEAK HOUR

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	261	0	85	299	171	0	0	214	123
Future Volume (vph)	0	0	0	261	0	85	299	171	0	0	214	123
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		385	0		0	0		360
Storage Lanes	0		0	1		1	1		0	0		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	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1612	0	1495	1530	1696	0	0	1776	1468
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	1612	0	1495	1530	1696	0	0	1776	1468
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1813			1673			734			1796	
Travel Time (s)		41.2			38.0			16.7			40.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	12%	0%	8%	18%	12%	0%	0%	7%	10%
Adj. Flow (vph)	0	0	0	290	0	94	332	190	0	0	238	137
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	290	0	94	332	190	0	0	238	137
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			42			40	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			40			0	
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
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	52.3%						ICU Level of Service A					
Analysis Period (min)	15											

HCM 6th TWSC

4: SR 559 & I-4 WB

Existing 2022
AM PEAK HOUR

Intersection												
Int Delay, s/veh	95.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↘		↗	↘	↗			↗	↘
Traffic Vol, veh/h	0	0	0	261	0	85	299	171	0	0	214	123
Future Vol, veh/h	0	0	0	261	0	85	299	171	0	0	214	123
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	Yield
Storage Length	-	-	-	0	-	385	0	-	-	-	-	360
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	12	0	8	18	12	0	0	7	10
Mvmt Flow	0	0	0	290	0	94	332	190	0	0	238	137

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1092	- 190 238	0 - - - 0
Stage 1	854	- - -	- - - - -
Stage 2	238	- - -	- - - - -
Critical Hdwy	6.52	- 6.28 4.28	- - - - -
Critical Hdwy Stg 1	5.52	- - -	- - - - -
Critical Hdwy Stg 2	5.52	- - -	- - - - -
Follow-up Hdwy	3.608	- 3.372 2.362	- - - - -
Pot Cap-1 Maneuver	~ 227	0 837 1241	- 0 0 - -
Stage 1	401	0 - -	- 0 0 - -
Stage 2	779	0 - -	- 0 0 - -
Platoon blocked, %			- - -
Mov Cap-1 Maneuver	~ 166	0 837 1241	- - - - -
Mov Cap-2 Maneuver	~ 166	0 - -	- - - - -
Stage 1	294	0 - -	- - - - -
Stage 2	779	0 - -	- - - - -

Approach	WB	NB	SB
HCM Control Delay, s	\$ 309.9	5.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	1241	- 166 837	- -	-
HCM Lane V/C Ratio	0.268	- 1.747 0.113	- -	-
HCM Control Delay (s)	9	-\$ 407.6 9.8	- -	-
HCM Lane LOS	A	- F A	- -	-
HCM 95th %tile Q(veh)	1.1	- 20.7 0.4	- -	-

Notes			
-: Volume exceeds capacity	\$. Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lanes, Volumes, Timings
4: SR 559 & I-4 WB

Existing 2022
PM PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	317	0	70	191	222	0	0	203	89
Future Volume (vph)	0	0	0	317	0	70	191	222	0	0	203	89
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		385	0		0	0		360
Storage Lanes	0		0	1		1	1		0	0		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	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1687	0	1482	1597	1792	0	0	1810	1524
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	1687	0	1482	1597	1792	0	0	1810	1524
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1813			1673			734			1796	
Travel Time (s)		41.2			38.0			16.7			40.8	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles (%)	0%	0%	0%	7%	0%	9%	13%	6%	0%	0%	5%	6%
Adj. Flow (vph)	0	0	0	337	0	74	203	236	0	0	216	95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	337	0	74	203	236	0	0	216	95
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			42			40	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			40			0	
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
Sign Control		Stop			Stop			Free			Free	

Intersection Summary	
Area Type:	Other
Control Type:	Unsignalized
Intersection Capacity Utilization	48.8%
Analysis Period (min)	15
	ICU Level of Service A

HCM 6th TWSC

4: SR 559 & I-4 WB

Existing 2022
PM PEAK HOUR

Intersection

Int Delay, s/veh 53.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↘		↗	↘	↗			↗	↘
Traffic Vol, veh/h	0	0	0	317	0	70	191	222	0	0	203	89
Future Vol, veh/h	0	0	0	317	0	70	191	222	0	0	203	89
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	Yield
Storage Length	-	-	-	0	-	385	0	-	-	-	-	360
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	7	0	9	13	6	0	0	5	6
Mvmt Flow	0	0	0	337	0	74	203	236	0	0	216	95

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	858	- 236 216	0 - - - 0
Stage 1	642	- - -	- - - - -
Stage 2	216	- - -	- - - - -
Critical Hdwy	6.47	- 6.29 4.23	- - - - -
Critical Hdwy Stg 1	5.47	- - -	- - - - -
Critical Hdwy Stg 2	5.47	- - -	- - - - -
Follow-up Hdwy	3.563	- 3.381 2.317	- - - - -
Pot Cap-1 Maneuver	~ 321	0 786 1291	- 0 0 - -
Stage 1	515	0 - -	- 0 0 - -
Stage 2	808	0 - -	- 0 0 - -
Platoon blocked, %			- - -
Mov Cap-1 Maneuver	~ 271	0 786 1291	- - - - -
Mov Cap-2 Maneuver	~ 271	0 - -	- - - - -
Stage 1	434	0 - -	- - - - -
Stage 2	808	0 - -	- - - - -

Approach	WB	NB	SB
HCM Control Delay, s	145.7	3.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	1291	- 271 786	- -	-
HCM Lane V/C Ratio	0.157	- 1.244 0.095	- -	-
HCM Control Delay (s)	8.3	- 175.6 10.1	- -	-
HCM Lane LOS	A	- F B	- -	-
HCM 95th %tile Q(veh)	0.6	- 16.1 0.3	- -	-

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon



I-4 at SR 559 Interchange
FPID 447436-2-52-01 Polk County



Appendix D

Travel Demand Modeling & Growth Rates

D-1: CFRPM Sub-Area validation

D-2: TRENDS Analysis Worksheets

D-3: BEBR Population Estimates

TECHNICAL MEMORANDUM

TRAFFIC FORECAST MODELING

I-4 AT SR 559

INTERCHANGE STUDY

POLK COUNTY, FLORIDA

August 2022

Traffic Forecast Modeling Technical Memorandum

I-4 at SR 559

Polk County, Florida

Introduction

This Technical Memorandum presents the details of the Model Traffic Forecasts developed in support of a traffic study at the interchange of I-4 with SR 559 in Polk County, Florida.

This effort involved conducting a sub-area base year (2015) validation refinement for the study area, as well as development of a refined forecast (2045) No-Build model.

The traffic model applied for this study was based on the current adopted District 1 Cost Feasible 2045 Regional Planning Model (D1RPM v2.0), as refined for the Tradeport development study, located near I-4 /SR 33 to the west of this study. The D1RPM is a travel demand forecasting tool developed by FDOT District 1, in conjunction with the six District MPO/TPOs in support of their current 2045 Long Range Transportation Plans (LRTP). This model was adopted by the Polk County TPO for use in developing traffic forecasts within the County.

Model Sub-Area Validation

The original 2015 base year model validation was refined for the project study area to ensure that the base year model is replicating 2015 traffic conditions and counts. The model refinement was performed by using the guidelines identified in "FDOT Project Traffic Forecasting Handbook". Validation criteria including volume over count (v/c) ratios were used to assess the accuracy of the base year model.

- Lakeshore Dr from Camp Gilead Dr to Commonwealth Ave - FT 35 to FT 46
- Berkley Rd from Commonwealth Blvd to Commonwealth Blvd – FT 35 to FT 43
- Camp Gilead Dr from CR 577A to Lakeshore Dr – FT 35 to FT 46
- I-4 from SR 33 to east - original speed from 62 mph to 70 mph (SPDCAP)
- I-4 at SR 559 ramps to/from the east – 1.2 min time penalty

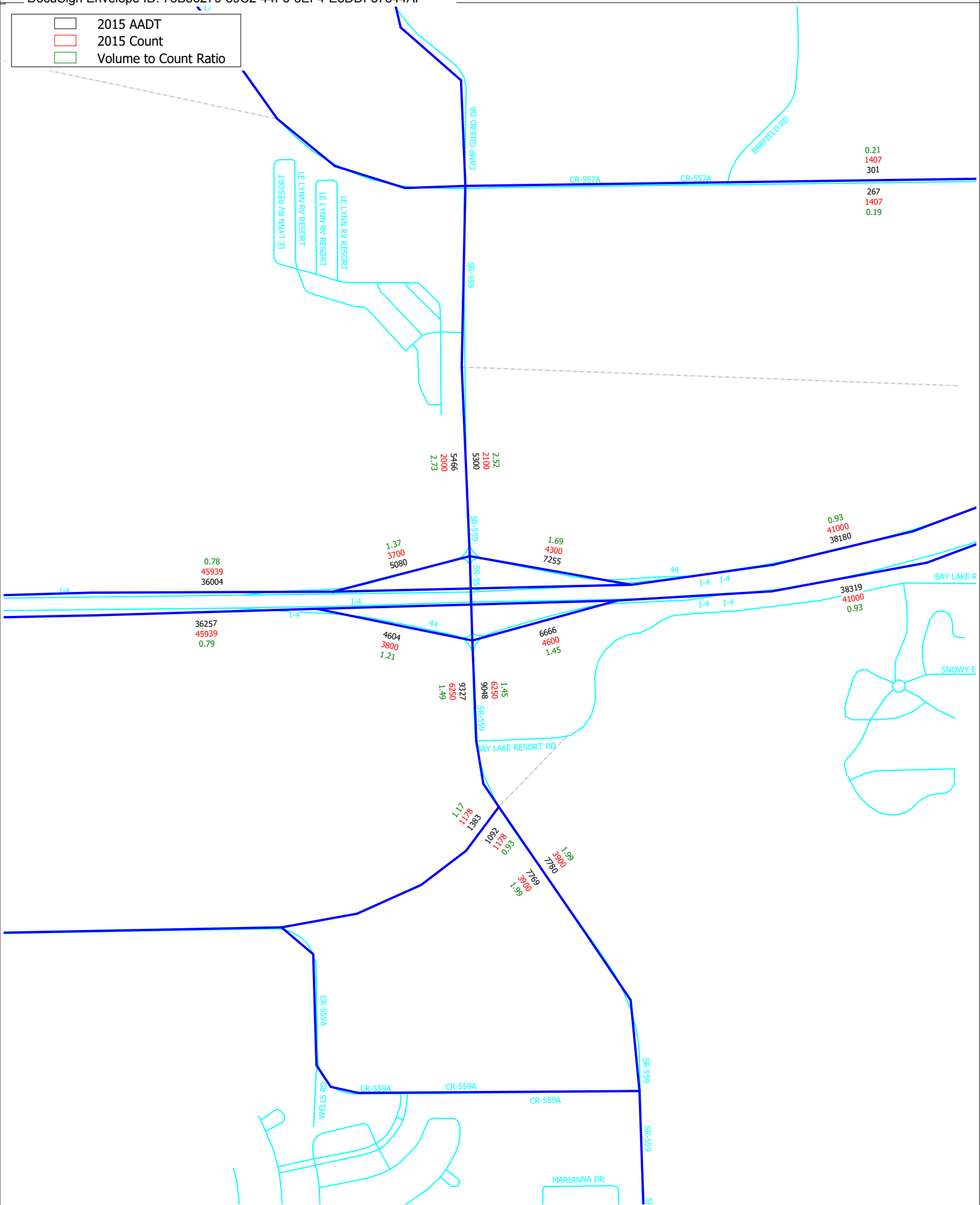
These revisions resulted in acceptable validation performance for the study area. The following tables and plots show the resulting level of validation before and after sub-area model refinement.

ORIGINAL VALIDATON

SL	Roadway	AT	FT	ANODE	BNODE	VOLUME	COUNT	VOL/CNT
55	CR-559A	31	41	37066	37067	1,383	1,178	1.17
55	CR-559A	31	41	37067	37066	1,092	1,178	0.93
55	Freeway Off-Ramp	33	75	7108	7109	7,255	4,300	1.69
55	Freeway Off-Ramp	33	75	9155	7120	4,604	3,800	1.21
55	Freeway On-Ramp	33	71	7109	7110	5,080	3,700	1.37
55	Freeway On-Ramp	33	71	7120	9156	6,666	4,600	1.45
55	I-4 SR-400	31	12	7059	89583	43018	42,000	1.02
55	I-4 SR-400	31	12	7110	89581	36,004	45,939	0.78
55	I-4 SR-400	31	12	8797	8814	38,180	41,000	0.93
55	I-4 SR-400	31	12	8802	8796	38,319	41,000	0.93
55	I-4 SR-400	31	12	9152	89580	36,817	39,500	0.93
55	I-4 SR-400	31	12	89579	7161	37,442	39,500	0.95
55	I-4 SR-400	31	12	89582	9155	36,257	45,939	0.79
55	I-4 SR-400	31	12	89584	9168	43,438	42,000	1.03
55	Polk Pkwy (toll) Facility	31	93	9430	89566	3,968	3,700	1.07
55	Polk Pkwy (toll) Facility	31	93	89567	9431	4,847	3,700	1.31
55	SR-557 CR-557	33	35	8880	9166	8,029	6,650	1.21
55	SR-557 CR-557	33	35	9166	8880	8,300	6,650	1.25
55	SR-557 CR-557A	33	42	7087	7140	267	1,407	0.19
55	SR-557 CR-557A	33	42	7140	7087	301	1,407	0.21
55	SR-559	33	35	7098	7109	5,466	2,000	2.73
55	SR-559	33	35	7109	7098	5,300	2,100	2.52
55	SR-559	33	35	7120	8795	9,327	6,250	1.49
55	SR-559	33	35	8795	7120	9,048	6,250	1.45
55	SR-559	33	35	36026	37066	7,780	3,900	1.99
55	SR-559	33	35	37066	36026	7,769	3,900	1.99

Study Area	405,957	403,548	1.01
SR 559	44,690	24,400	1.83
I-4	309475	336878	0.92

█	2015 AADT
█	2015 Count
█	Volume to Count Ratio






REFINED VALIDATON

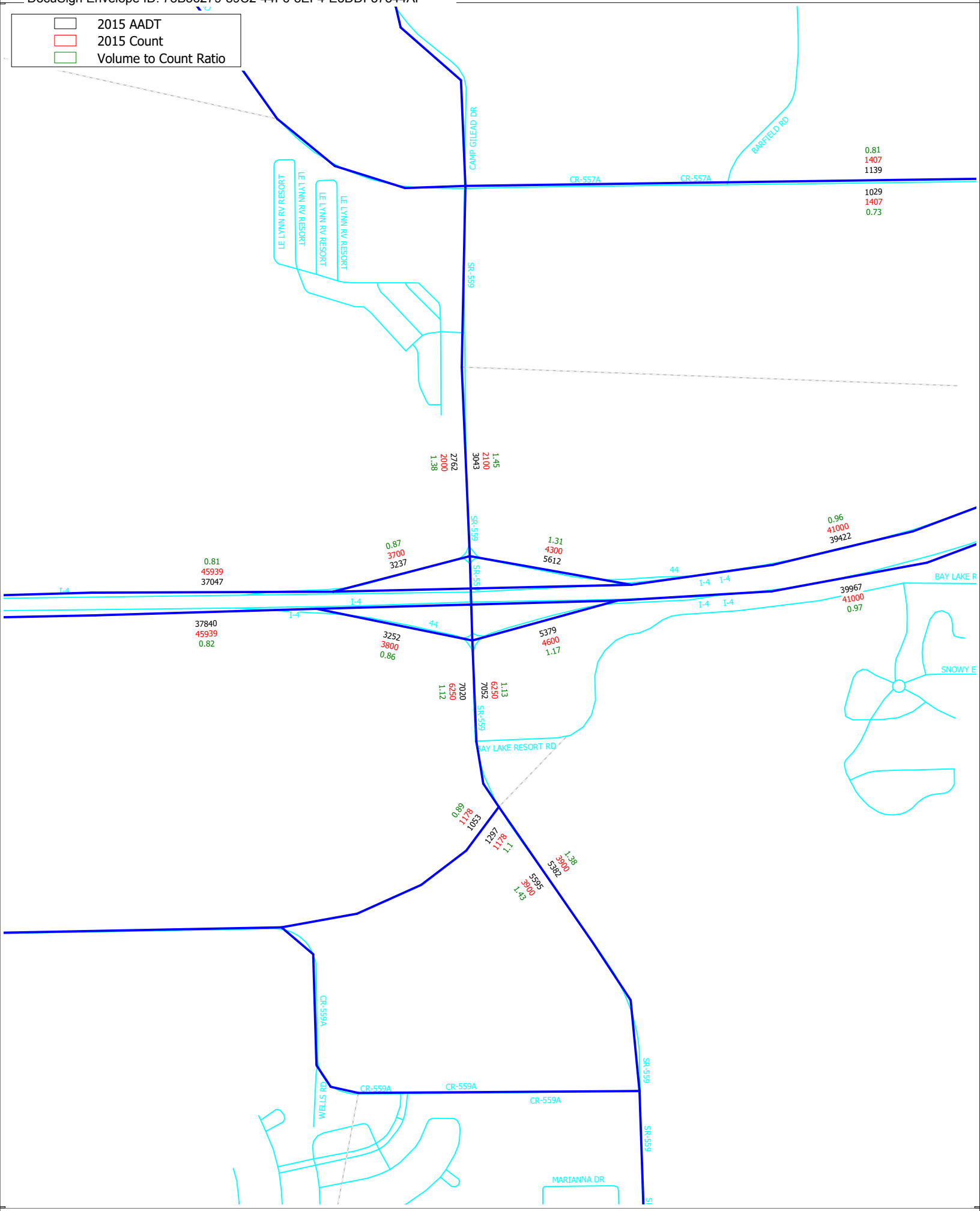
SL	Roadway	AT	FT	ANODE	BNODE	VOLUME	COUNT	VOL/CNT
55	CR-559A	31	41	37066	37067	1,053	1,178	0.89
55	CR-559A	31	41	37067	37066	1,297	1,178	1.10
55	Freeway Off-Ramp	33	77	7108	7109	5,612	4,300	1.31
55	Freeway Off-Ramp	33	77	9155	7120	3,252	3,800	0.86
55	Freeway On-Ramp	33	73	7109	7110	3,237	3,700	0.87
55	Freeway On-Ramp	33	73	7120	9156	5,379	4,600	1.17
55	I-4 SR-400	31	12	7059	89583	44379	42,000	1.06
55	I-4 SR-400	31	12	7110	89581	37,047	45,939	0.81
55	I-4 SR-400	31	12	8797	8814	39,422	41,000	0.96
55	I-4 SR-400	31	12	8802	8796	39,967	41,000	0.97
55	I-4 SR-400	31	12	9152	89580	38,400	39,500	0.97
55	I-4 SR-400	31	12	89579	7161	38,487	39,500	0.97
55	I-4 SR-400	31	12	89582	9155	37,840	45,939	0.82
55	I-4 SR-400	31	12	89584	9168	45,652	42,000	1.09
55	Polk Pkwy (toll) Facility	31	93	9430	89566	4,962	3,700	1.34
55	Polk Pkwy (toll) Facility	31	93	89567	9431	5,843	3,700	1.58
55	SR-557 CR-557	33	35	8880	9166	8,387	6,650	1.26
55	SR-557 CR-557	33	35	9166	8880	9,078	6,650	1.37
55	SR-557 CR-557A	33	42	7087	7140	1029	1,407	0.73
55	SR-557 CR-557A	33	42	7140	7087	1139	1,407	0.81
55	SR-559	33	36	7098	7109	2,762	2,000	1.38
55	SR-559	33	36	7109	7098	3,043	2,100	1.45
55	SR-559	33	36	7120	8795	7,020	6,250	1.12
55	SR-559	33	36	8795	7120	7,052	6,250	1.13
55	SR-559	33	36	36026	37066	5,382	3,900	1.38
55	SR-559	33	36	37066	36026	5,595	3,900	1.43

Study Area	402,316	403,548	1.00
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SR 559	30,854	24,400	1.26
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I-4	321194	336878	0.95
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	2015 AADT
	2015 Count
	Volume to Count Ratio



Forecast Model Development

Forecast model networks were developed by applying appropriate base year validation refinements to the 2045 LRTP Cost Feasible model network.

The 2045 model socioeconomic data was refined to include the following planned developments in the vicinity of the interchange based on information provided by Polk County and the City of Auburndale.

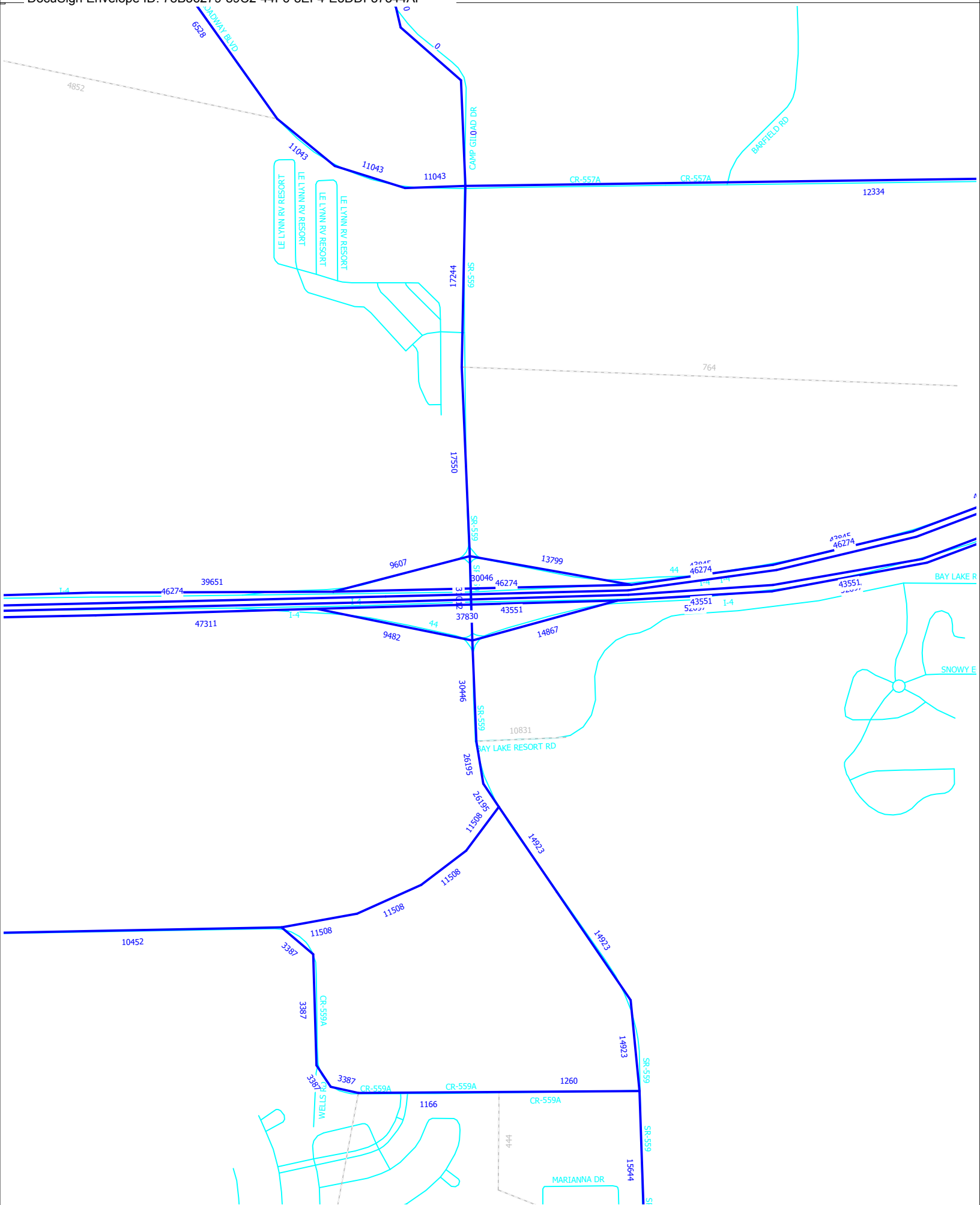
- Corsa Club Track – 123,750 sf of Industrial Development
- Auburndale Commerce Center – 896,400 sf of Warehouse/Logistics
- Lake Juliana – 110 Single Family dwelling units
- The Groves – 384 Multi-Family dwelling units
- Publix Plaza – 100 Commercial employees

This resulted in the following 2045 model socioeconomic data revisions to accommodate these developments.

TAZ 341 – additional 923 industrial employees

TAZ 344 – additional 136 Multi-Family dwelling units and 71 commercial employees

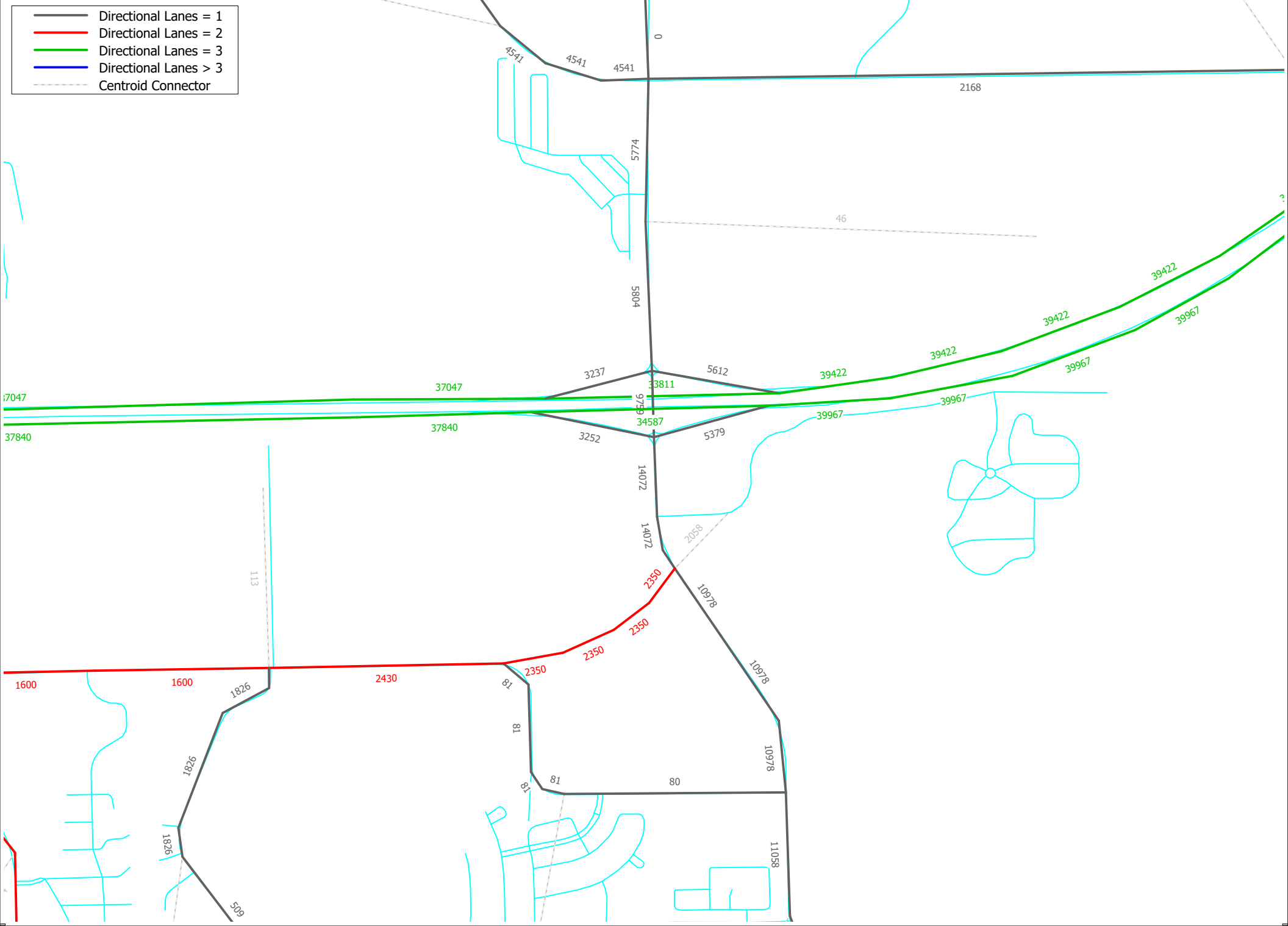
The following plot shows the resulting forecast 2045 Average Annual Daily Traffic (AADT) traffic volumes.



D1DDM v2.0 2015 CE Model with Refinements for T-4/SR 559 Sub-Area - 2015 AADT Volumes

DocuSign Envelope ID: 78B36279-89C2-44F6-8EF4-E3DDDF57344AF

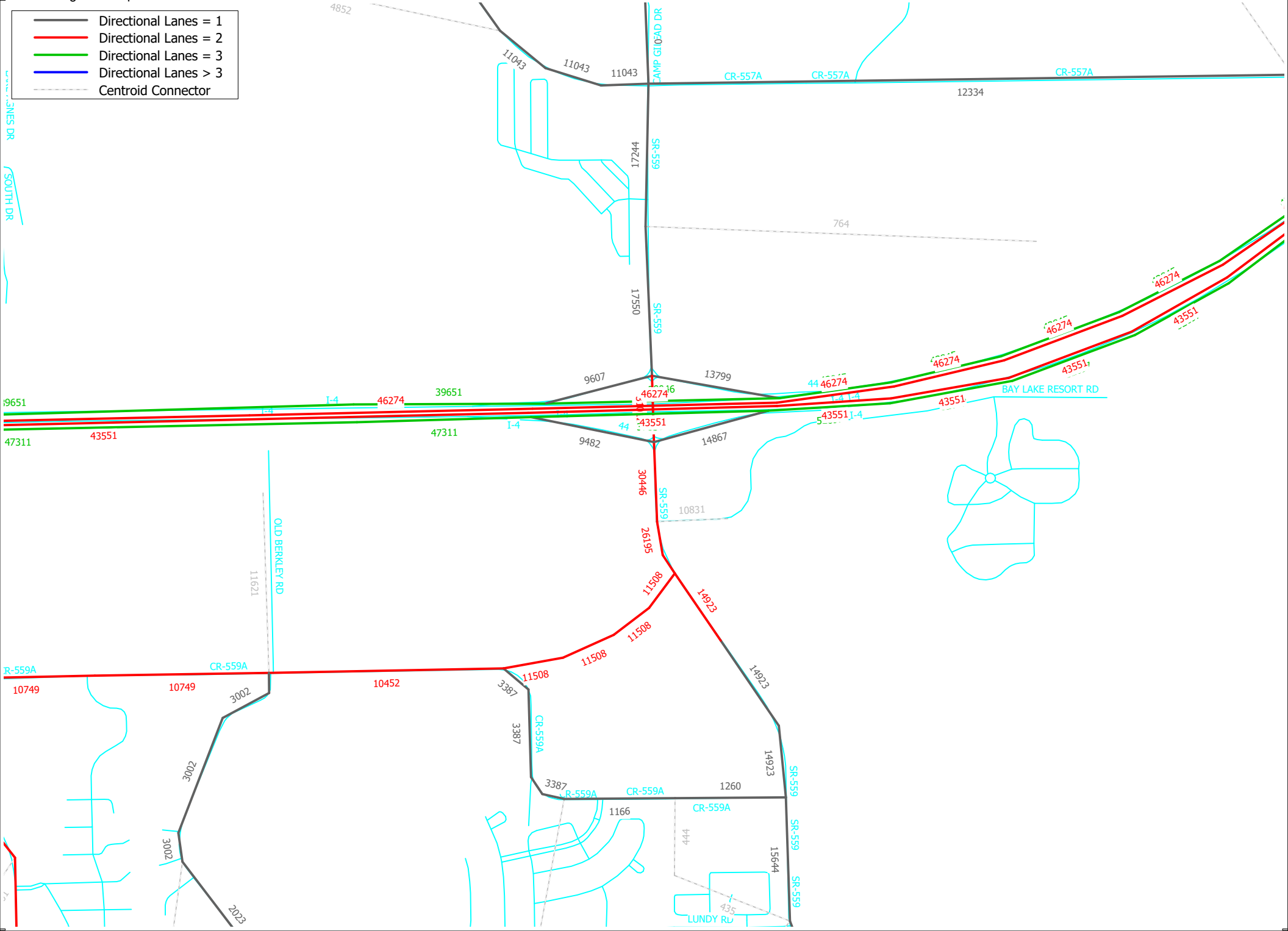
- Directional Lanes = 1
- Directional Lanes = 2
- Directional Lanes = 3
- Directional Lanes > 3
- Centroid Connector



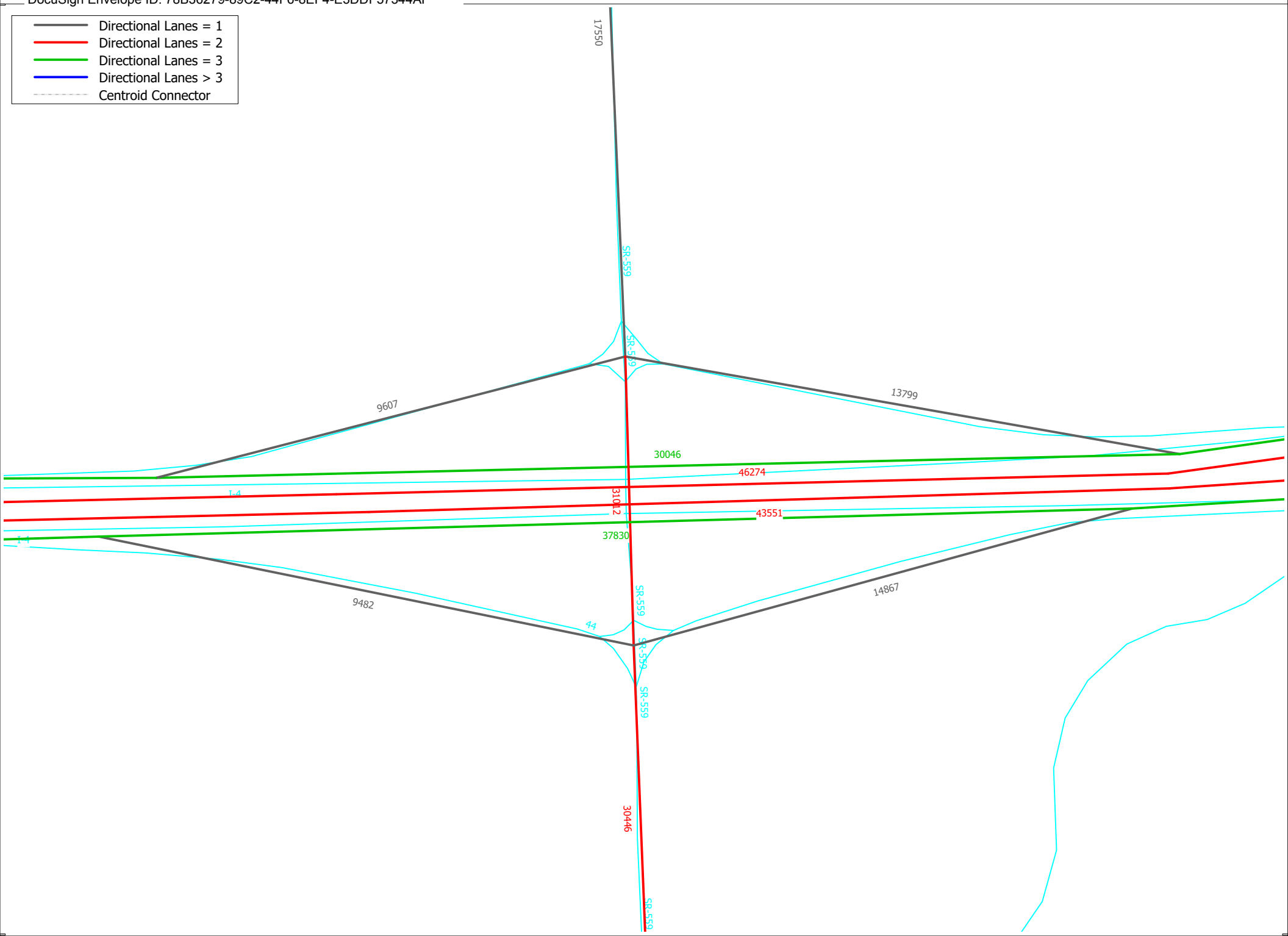
D1DDM v2.0 2045 CE Model with Refinements for I-4/SR 559 Sub-Area - 2045 AADT Volumes

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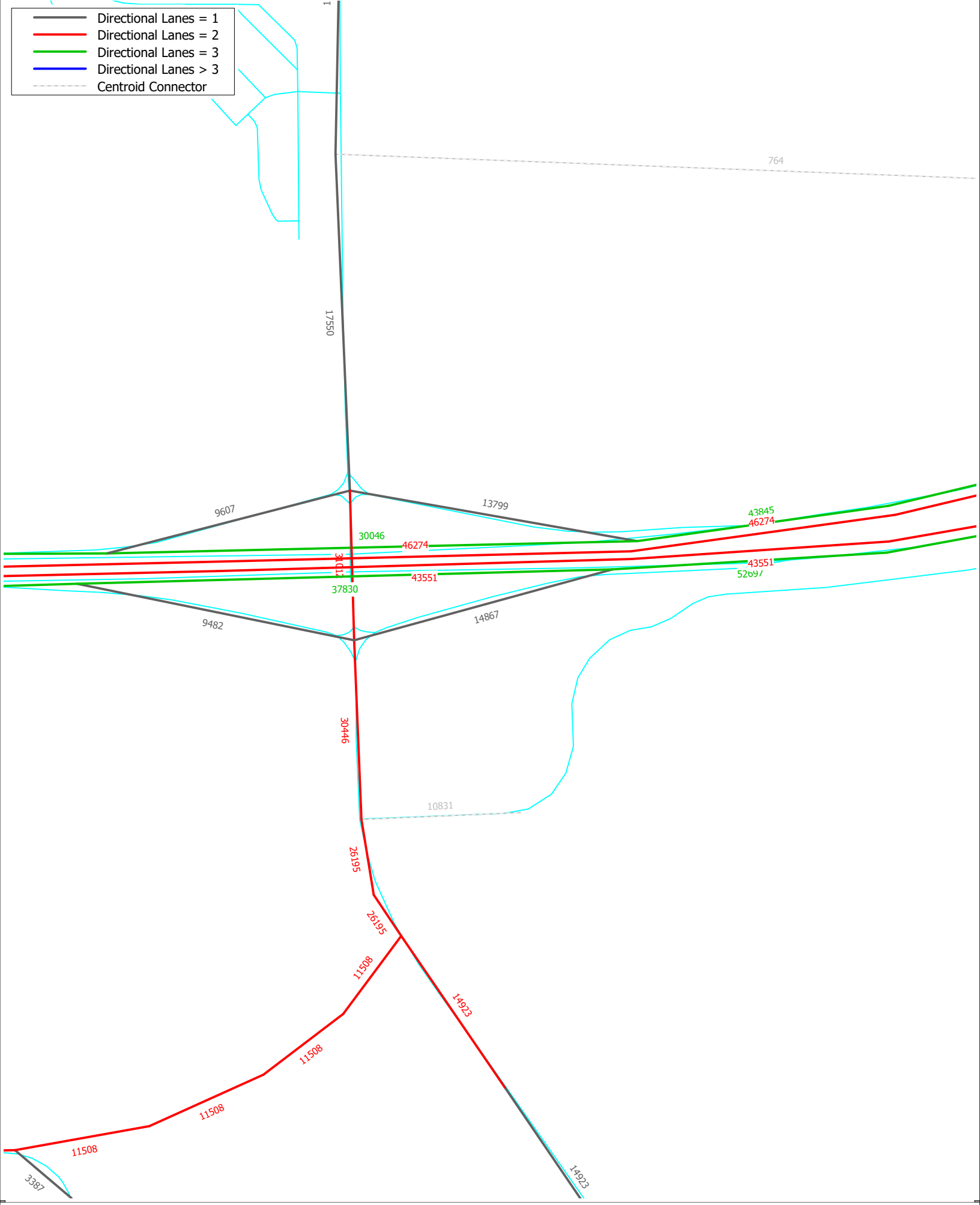
- Directional Lanes = 1
- Directional Lanes = 2
- Directional Lanes = 3
- Directional Lanes > 3
- Centroid Connector



- Directional Lanes = 1
- Directional Lanes = 2
- Directional Lanes = 3
- Directional Lanes > 3
- Centroid Connector



- Directional Lanes = 1
- Directional Lanes = 2
- Directional Lanes = 3
- Directional Lanes > 3
- Centroid Connector

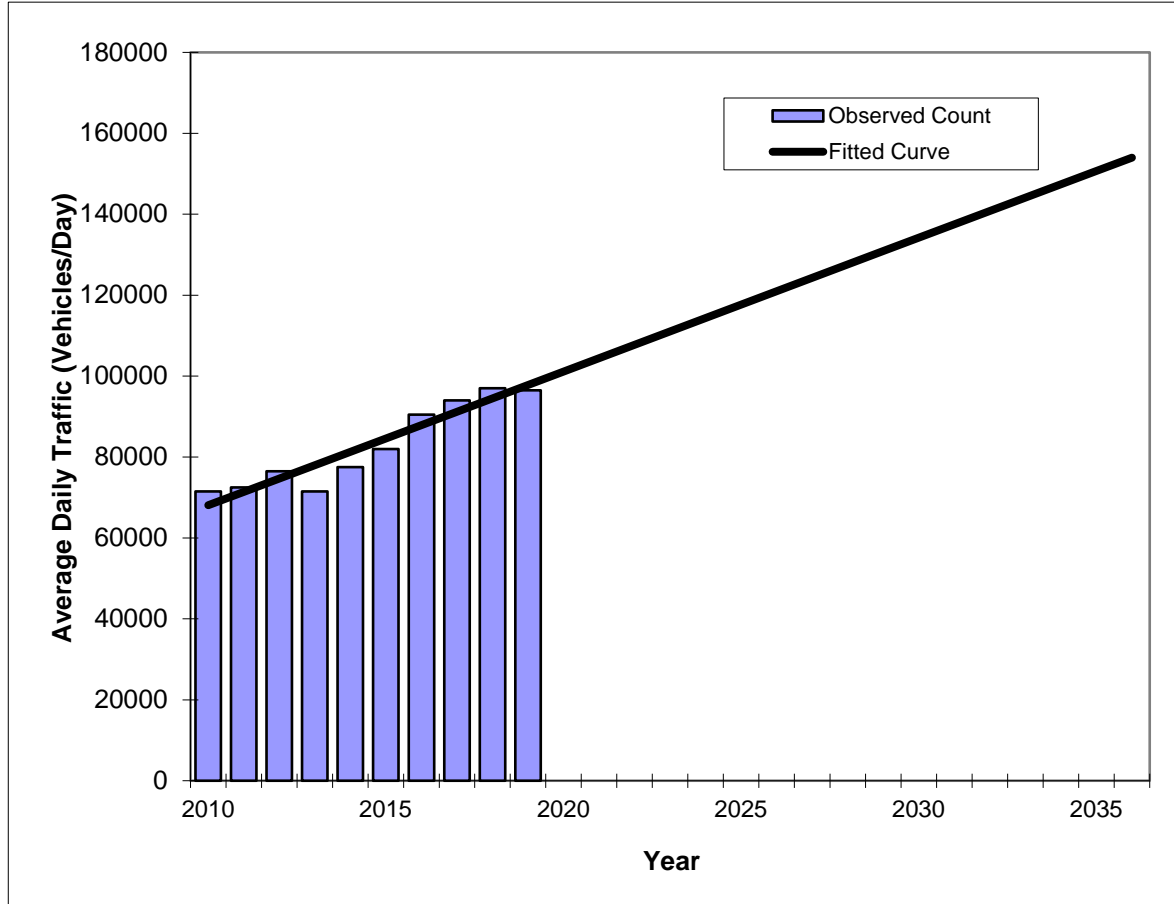


Traffic Trends - V03.a

SR 400/I-4, EAST OF SR 559 --

FIN#	1234
Location	1

County:	Polk (16)
Station #:	0112
Highway:	SR 400/I-4, EAST OF SR 559



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2010	71500	68100
2011	72500	71400
2012	76500	74700
2013	71500	78000
2014	77500	81300
2015	82000	84600
2016	90500	87900
2017	94000	91200
2018	97000	94500
2019	96500	97800
2026 Opening Year Trend		
2026	N/A	121000
2031 Mid-Year Trend		
2031	N/A	137500
2036 Design Year Trend		
2036	N/A	154000
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	3,306
Trend R-squared:	89.84%
Trend Annual Historic Growth Rate:	4.85%
Trend Growth Rate (2019 to Design Year):	3.38%
Printed:	3-Aug-22
Straight Line Growth Option	

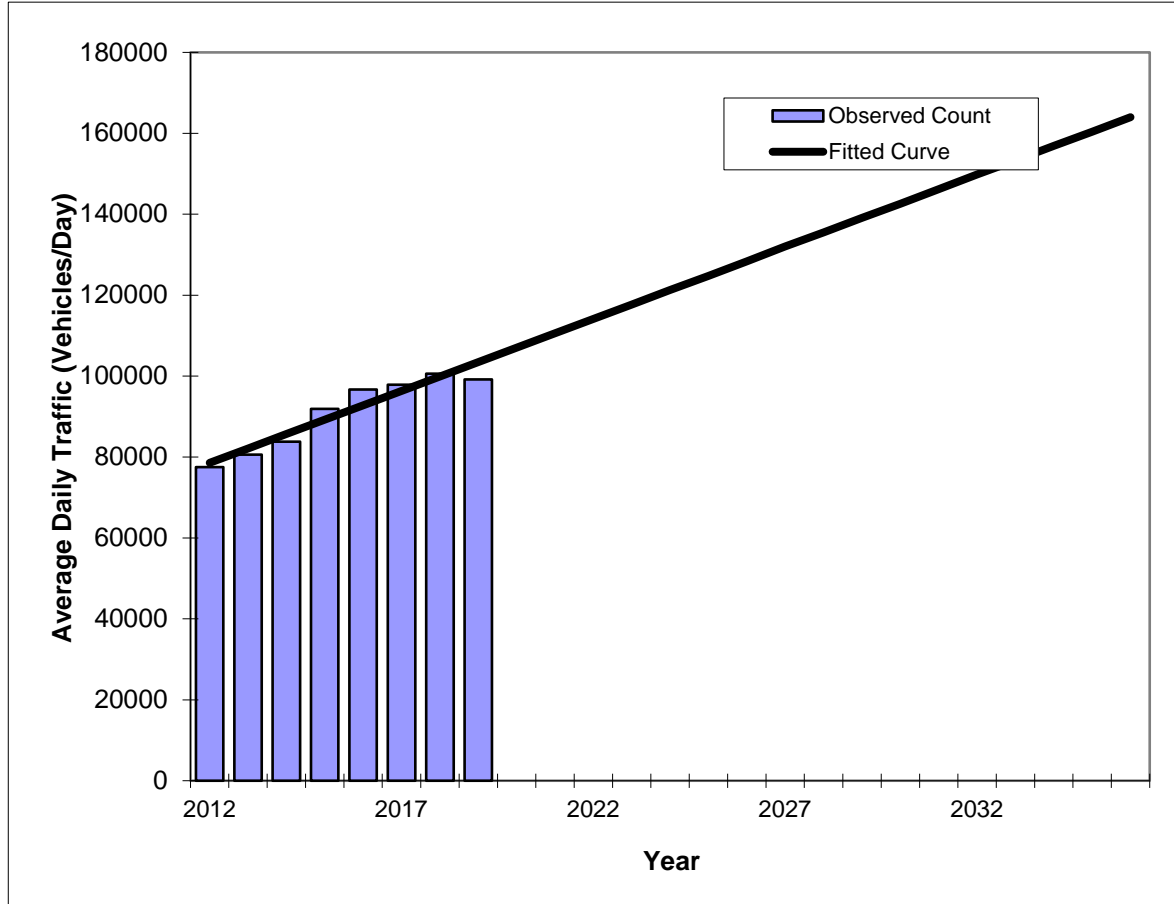
*Axle-Adjusted

Traffic Trends - V03.a

I-4, 0.6 MI W OF SR-559, POLK CO --

FIN#	1234
Location	1

County:	Polk (16)
Station #:	9951
Highway:	I-4, 0.6 MI W OF SR-559, POLK CO



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	77500	78600
2013	80600	82100
2014	83800	85700
2015	91900	89200
2016	96700	92800
2017	97900	96400
2018	100600	99900
2019	99200	103500
2026 Opening Year Trend		
2026	N/A	128400
2031 Mid-Year Trend		
2031	N/A	146200
2036 Design Year Trend		
2036	N/A	164000
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	3,560
Trend R-squared:	91.35%
Trend Annual Historic Growth Rate:	4.53%
Trend Growth Rate (2019 to Design Year):	3.44%
Printed:	3-Aug-22
Straight Line Growth Option	

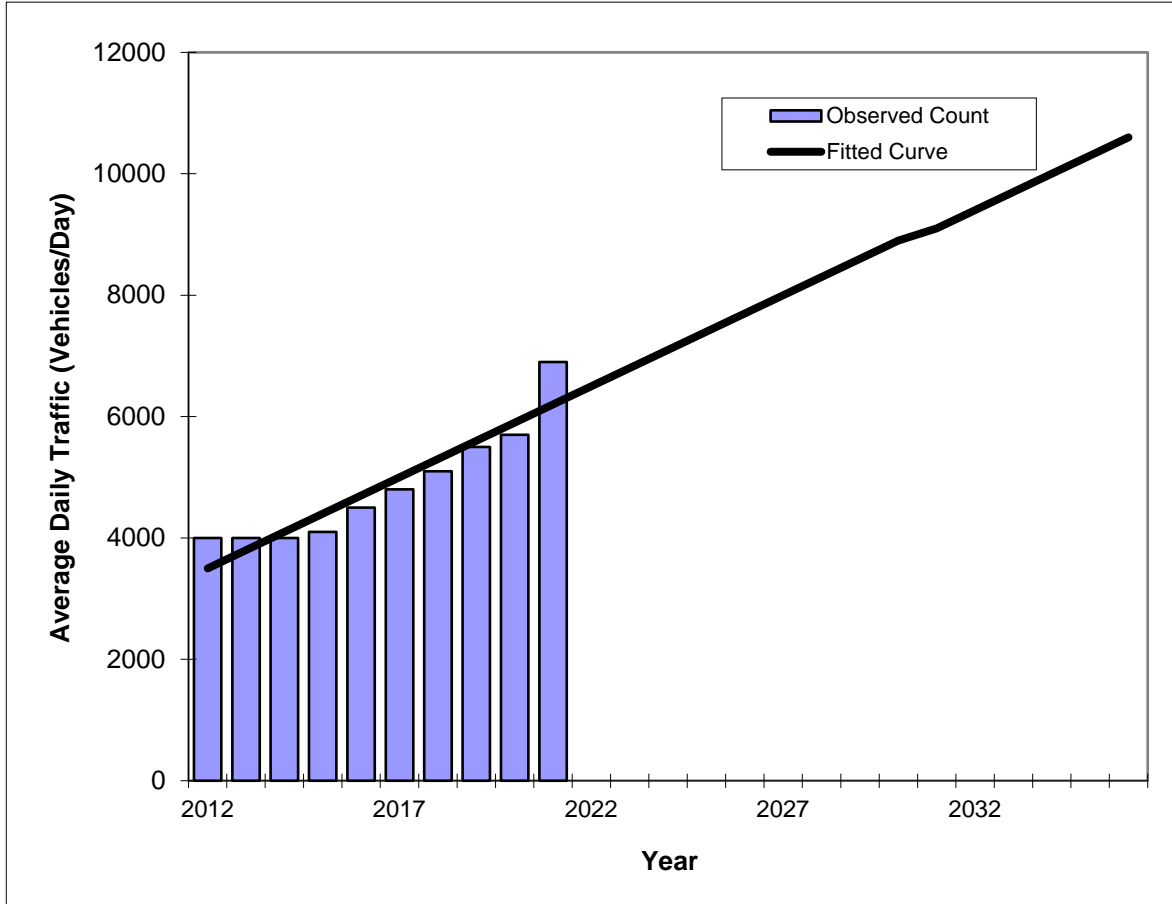
*Axle-Adjusted

Traffic Trends - V03.a

SR 559, NORTH OF SR 400/I-4 --

FIN#	1234
Location	1

County:	Polk (16)
Station #:	0131
Highway:	SR 559, NORTH OF SR 400/I-4



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	4000	3500
2013	4000	3800
2014	4000	4100
2015	4100	4400
2016	4500	4700
2017	4800	5000
2018	5100	5300
2019	5500	5600
2020	5700	5900
2021	6900	6200
2026 Opening Year Trend		
2026	N/A	7700
2031 Mid-Year Trend		
2031	N/A	9100
2036 Design Year Trend		
2036	N/A	10600
TRANPLAN Forecasts/Trends		

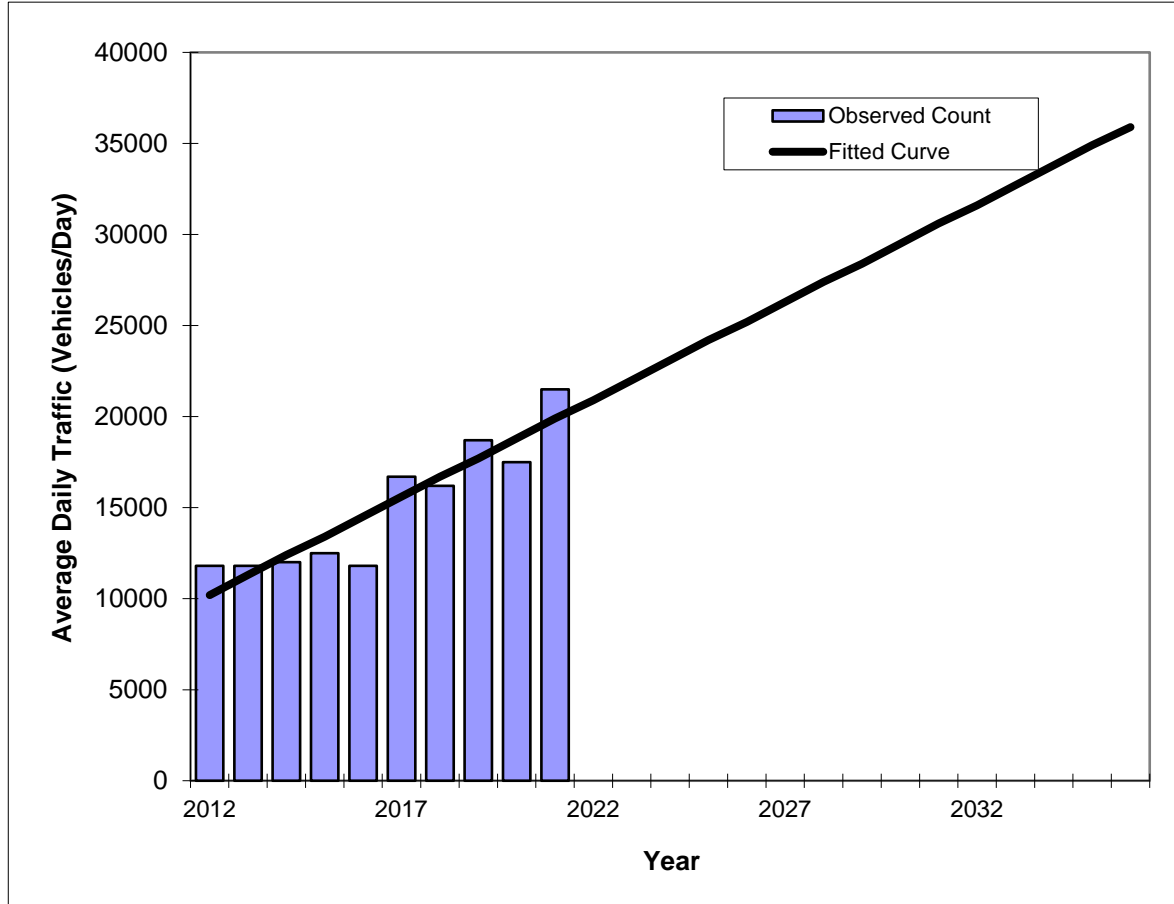
** Annual Trend Increase:	296
Trend R-squared:	87.32%
Trend Annual Historic Growth Rate:	8.57%
Trend Growth Rate (2021 to Design Year):	4.73%
Printed:	3-Aug-22
Straight Line Growth Option	

*Axle-Adjusted

Traffic Trends - V03.a SR-559, S OF SR 400/I-4 --

FIN#	1234
Location	1

County:	Polk (16)
Station #:	0133
Highway:	SR-559, S OF SR 400/I-4



Year	Traffic (ADT/AADT)	
	Count*	Trend**
2012	11800	10200
2013	11800	11300
2014	12000	12400
2015	12500	13400
2016	11800	14500
2017	16700	15600
2018	16200	16700
2019	18700	17700
2020	17500	18800
2021	21500	19900
2026 Opening Year Trend		
2026	N/A	25200
2031 Mid-Year Trend		
2031	N/A	30600
2036 Design Year Trend		
2036	N/A	35900
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	1,071
Trend R-squared:	84.13%
Trend Annual Historic Growth Rate:	10.57%
Trend Growth Rate (2021 to Design Year):	5.36%
Printed:	3-Aug-22
Straight Line Growth Option	

*Axle-Adjusted

**Projections of Florida Population by County,
2025–2050, with Estimates for 2021 (continued)**

County and State	Estimates April 1, 2021	Projections, April 1					
		2025	2030	2035	2040	2045	2050
MIAMI-DADE	2,731,939						
Low		2,682,600	2,674,200	2,649,100	2,615,800	2,579,400	2,543,700
Medium		2,823,800	2,922,600	3,001,800	3,068,400	3,126,600	3,179,600
High		2,965,000	3,171,000	3,354,500	3,521,000	3,673,700	3,815,500
MONROE	83,411						
Low		79,200	76,600	73,900	71,300	68,800	66,400
Medium		84,300	85,100	85,700	86,200	86,500	86,800
High		89,300	93,600	97,500	101,000	104,300	107,200
NASSAU	93,012						
Low		94,600	98,200	99,800	100,500	100,300	99,600
Medium		101,700	110,900	118,500	125,300	131,100	136,500
High		108,800	123,700	137,200	150,000	162,000	173,300
OKALOOSA	213,204						
Low		210,200	210,400	208,700	206,000	202,600	198,900
Medium		223,600	233,800	241,900	248,900	254,800	260,000
High		237,000	257,100	275,200	291,900	307,100	321,100
OKEECHOBEE	39,148						
Low		37,900	37,100	36,100	35,100	34,100	33,300
Medium		39,900	40,500	40,900	41,200	41,400	41,600
High		41,900	44,000	45,700	47,200	48,600	49,900
ORANGE	1,457,940						
Low		1,483,000	1,534,200	1,558,500	1,566,800	1,565,400	1,559,200
Medium		1,577,700	1,704,700	1,807,000	1,893,400	1,969,000	2,038,200
High		1,672,300	1,875,100	2,055,500	2,220,000	2,372,700	2,517,200
OSCEOLA	406,460						
Low		431,000	465,100	484,400	496,100	502,700	506,100
Medium		463,500	525,500	575,000	618,200	657,100	693,200
High		495,900	586,000	665,500	740,400	811,600	880,400
PALM BEACH	1,502,495						
Low		1,492,900	1,504,200	1,502,700	1,492,900	1,478,700	1,462,900
Medium		1,571,500	1,643,900	1,702,700	1,751,200	1,792,300	1,828,700
High		1,650,100	1,783,600	1,902,800	2,009,500	2,106,000	2,194,400
PASCO	575,891						
Low		585,900	605,100	614,800	617,900	617,200	614,600
Medium		623,300	672,400	712,800	746,700	776,300	803,400
High		660,700	739,600	810,800	875,500	935,500	992,200
PINELLAS	964,490						
Low		940,300	924,800	908,300	891,900	876,500	862,700
Medium		979,500	994,400	1,006,400	1,016,500	1,025,200	1,033,100
High		1,018,700	1,064,000	1,104,500	1,141,000	1,173,900	1,203,600
POLK	748,365						
Low		762,300	790,000	804,500	810,300	810,500	808,000
Medium		810,900	877,800	932,700	979,200	1,019,500	1,056,200
High		859,600	965,500	1,061,000	1,148,100	1,228,500	1,304,400
PUTNAM	73,673						
Low		70,300	68,100	65,900	63,900	62,000	60,300
Medium		74,000	74,400	74,700	75,000	75,200	75,400
High		77,700	80,700	83,500	86,000	88,300	90,500
ST. JOHNS	285,533						
Low		302,100	324,200	337,100	345,000	349,200	351,200
Medium		324,800	366,400	400,200	429,900	456,500	481,100
High		347,600	408,500	463,200	514,800	563,800	611,100
ST. LUCIE	340,060						
Low		348,200	362,900	370,700	373,200	373,400	372,500
Medium		370,400	403,200	429,800	451,000	469,700	486,900
High		392,600	443,500	488,900	528,800	566,000	601,400



I-4 at SR 559 Interchange
FPID 447436-2-52-01 Polk County



Appendix E

Traffic Volume Development

TURNS 5 WORKSHEETS

TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date: 29-Sep-22
Highway: SR 559
Intersection: I-4
Project: I-4 AT SR 559 IOAR - AM PEAK
County: POLK

Is this a 4 way intersection?
 Yes, my intersection has four approaches
 If not, which 3 approaches exist in the intersection?
 EB, WB, and SB
 EB, WB, and NB
 EB, SB, and NB
 WB, SB, and NB

Is the Mainline Oriented North/South?
 Enter Yes or No
 Yes
 No

K Factors	Mainline	D Factors	Mainline
	9.00%	Northbound (NB)	55.0%
	Side street	Southbound (SB)	45.0%
	9.00%		Side street
		Westbound (WB)	52.3%
		Eastbound (EB)	47.7%

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
 Yes
 No

If "Yes" go to cell C47

If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base	Year	Rate (1.0% = 0.01)	
		Mainline	Side Street
Opening			
Mid			
Design			

Mainline Growth Function
 Linear
 Exponential
 Decaying

Side Street Growth Function
 Linear
 Exponential
 Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
0	0	0	0	0

Enter Project and Model Years

Base	Year
Opening	2022
Mid	2026
Design	2031
Model	2036

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
2022	11178	11153	6810	21034	50175
2036	16000	19000	13500	27000	75500

1st Guess Actual/Counted
Turning %'s for Traffic
AADT Balancing for 2022

(EB LT)	West-to-North	33.1%	94
(EB THRU)	West-to-East	0.0%	0
(EB RT)	West-to-South	66.9%	190
(WB LT)	East-to-South	75.4%	261
(WB THRU)	East-to-West	0.0%	0
(WB RT)	East-to-North	24.6%	85
(SB LT)	North-to-East	13.1%	44
(SB THRU)	North-to-South	50.4%	170
(SB RT)	North-to-West	36.5%	123
(NB LT)	South-to-West	44.6%	299
(NB THRU)	South-to-North	11.4%	76
(NB RT)	South-to-East	44.0%	295

Existing Year AADTs

Existing Turning Movement Counts

FSUTMS Model Year AADTs

First Guess Turning % Option Used Existing Turning Movement Counts

Only the existing year total departure volumes [AADT*K*(1-D)] will be used to calculate the turning percentages first guess.

The turning percentages first guess is the same as the **actual distribution of turning volumes entered**. No balancing technique is used.

Only the FSUTMS model year departure volumes [AADT*K*(1-D)] will be used to calculate the

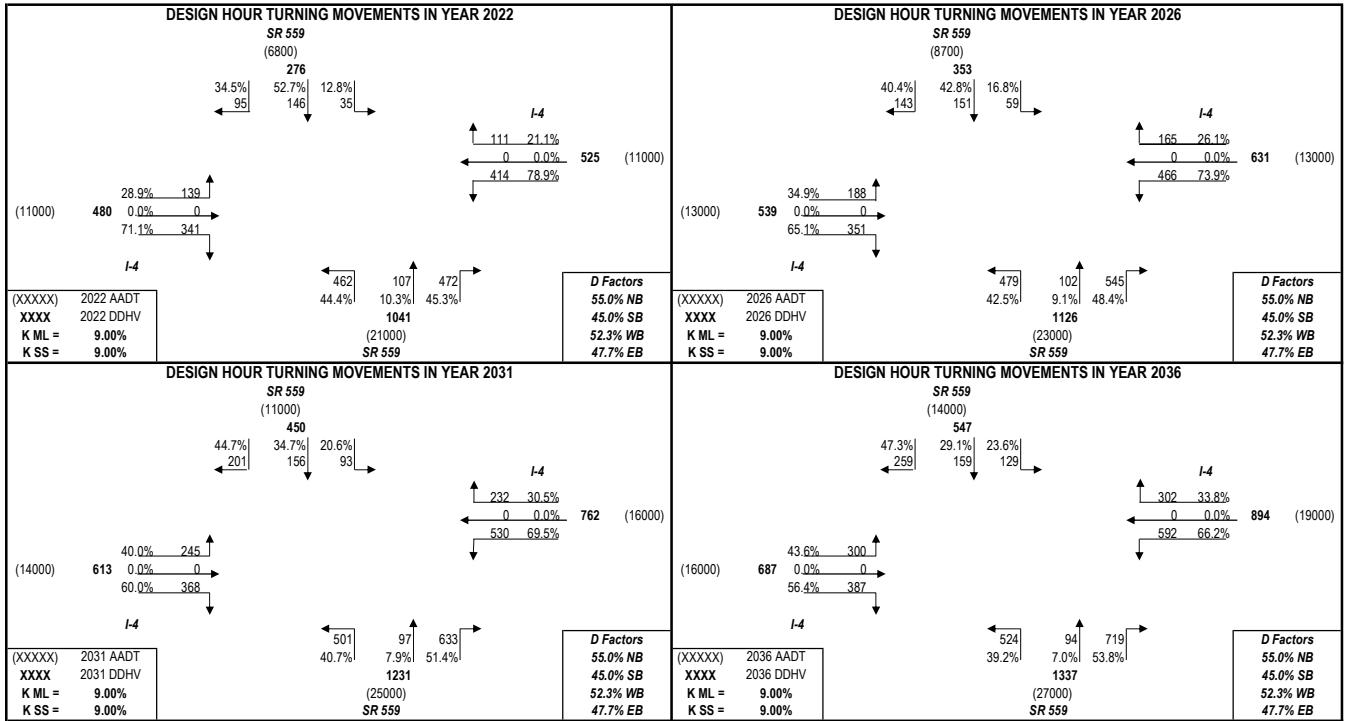
Desired Closure:

TURNS5 INITIAL TURNING VOLUME SUMMARY

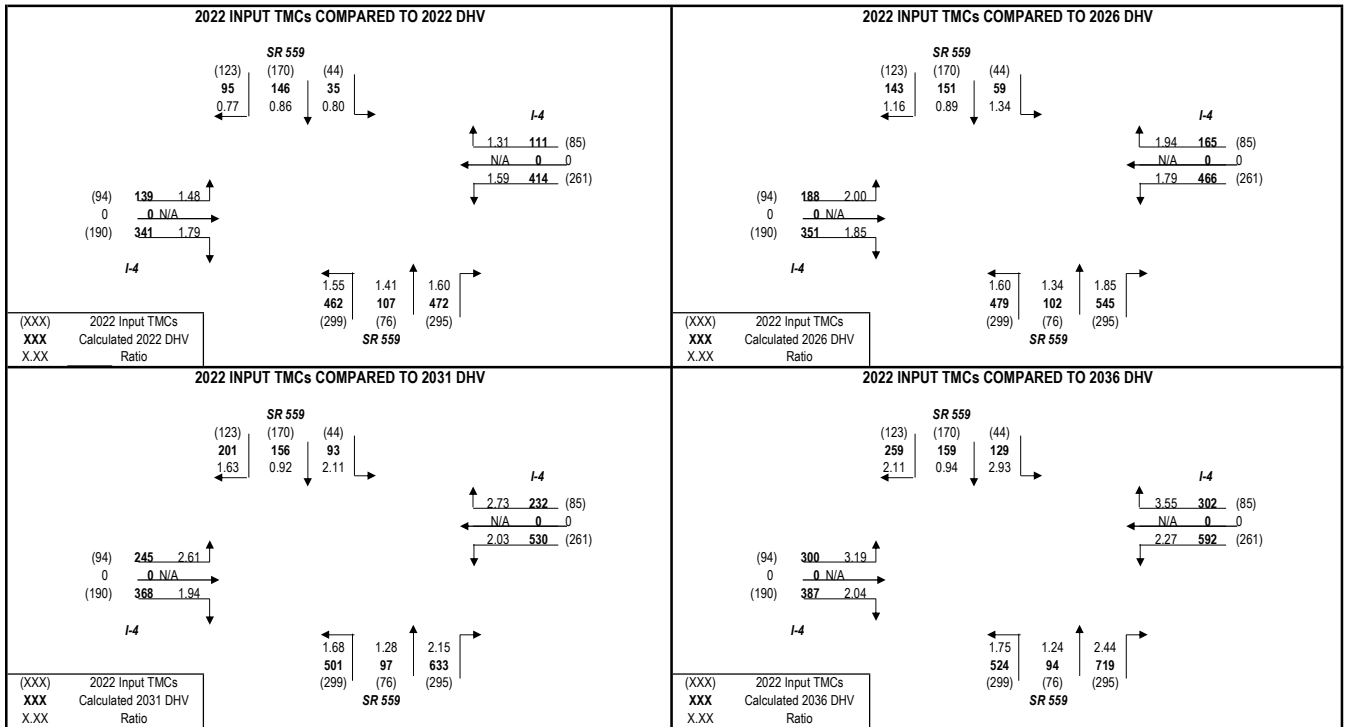
Highway:	SR 559	County:	POLK
Intersection:	I-4	Analyst:	0
Project:	I-4 AT SR 559 IOAR - AM PEAK	Date:	29-Sep-22

Approach-To-Approach	2022	2022		2026		2031		2036	
	Initial Estimate	Final Estimate	Calculated Volume	Final Estimate	Calculated Volume	Final Estimate	Calculated Volume	Final Estimate	Calculated Volume
West-To-North (LT)	0.331	0.289	139	0.349	188	0.400	245	0.436	300
West-To-East (Thru)	0.000	0.000	0	0.000	0	0.000	0	0.000	0
West-To-South (RT)	0.669	0.711	341	0.651	351	0.600	368	0.564	387
Total Flow From West:			480		539		613		687
East-To-South (LT)	0.754	0.789	414	0.739	466	0.695	530	0.662	592
East-To-West (Thru)	0.000	0.000	0	0.000	0	0.000	0	0.000	0
East-To-North (RT)	0.246	0.211	111	0.261	165	0.305	232	0.338	302
Total Flow From East:			525		631		762		894
North-To-East (LT)	0.131	0.128	35	0.168	59	0.206	93	0.236	129
North-To-South (Thru)	0.504	0.527	146	0.428	151	0.347	156	0.291	159
North-To-West (RT)	0.365	0.345	95	0.404	143	0.447	201	0.473	259
Total Flow From North:			276		353		450		547
South-To-West (LT)	0.446	0.444	462	0.425	479	0.407	501	0.392	524
South-To-North (Thru)	0.114	0.103	107	0.091	102	0.079	97	0.070	94
South-To-East (RT)	0.440	0.453	472	0.484	545	0.514	633	0.538	719
Total Flow From South:			1041		1126		1231		1337

PROJECT TRAFFIC FOR SR 559 AT I-4



PROJECT TRAFFIC FOR SR 559 AT I-4



TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date: 29-Sep-22
Highway: SR 559
Intersection: I-4
Project: I-4 AT SR 559 IOAR - PM PEAK
County: POLK

Is this a 4 way intersection?
 Yes, my intersection has four approaches
 If not, which 3 approaches exist in the intersection?
 EB, WB, and SB
 EB, WB, and NB
 EB, SB, and NB
 WB, SB, and NB

Is the Mainline Oriented North/South?
 Enter Yes or No
 Yes
 No

K Factors	Mainline	D Factors	Mainline
	9.00%	Northbound (NB)	45.0%
	Side street	Southbound (SB)	55.0%
	9.00%		Side street
		Westbound (WB)	47.7%
		Eastbound (EB)	52.3%

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
 Yes
 No

If "Yes" go to cell C47

If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base	Year	Rate (1.0% = 0.01)	
		Mainline	Side Street
Opening			
Mid			
Design			

Mainline Growth Function
 Linear
 Exponential
 Decaying

Side Street Growth Function
 Linear
 Exponential
 Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
0	0	0	0	0

Enter Project and Model Years

Base	Year
Opening	2022
Mid	2026
Design	2031
Model	2036

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
2022	11178	11153	6810	21034	50175
2036	16000	19000	13500	27000	75500

1st Guess Actual/Counted
Turning %'s for Traffic
AADT Balancing for 2022

Movement	Turning %	Actual/Counted
(EB LT) West-to-North	17.3%	78
(EB THRU) West-to-East	0.0%	0
(EB RT) West-to-South	82.7%	372
(WB LT) East-to-South	81.9%	317
(WB THRU) East-to-West	0.0%	0
(WB RT) East-to-North	18.1%	70
(SB LT) North-to-East	12.3%	36
(SB THRU) North-to-South	57.2%	167
(SB RT) North-to-West	30.5%	89
(NB LT) South-to-West	30.8%	191
(NB THRU) South-to-North	23.0%	143
(NB RT) South-to-East	46.2%	287

Existing Year AADTs
 Existing Turning Movement Counts
 FSUTMS Model Year AADTs

First Guess Turning % Option Used
Existing Turning Movement Counts

Only the existing year total departure volumes [AADT*K*(1-D)] will be used to calculate the turning percentages first guess.

The turning percentages first guess is the same as the **actual distribution of turning volumes entered**. No balancing technique is used.

Only the FSUTMS model year departure volumes [AADT*K*(1-D)] will be used to calculate the

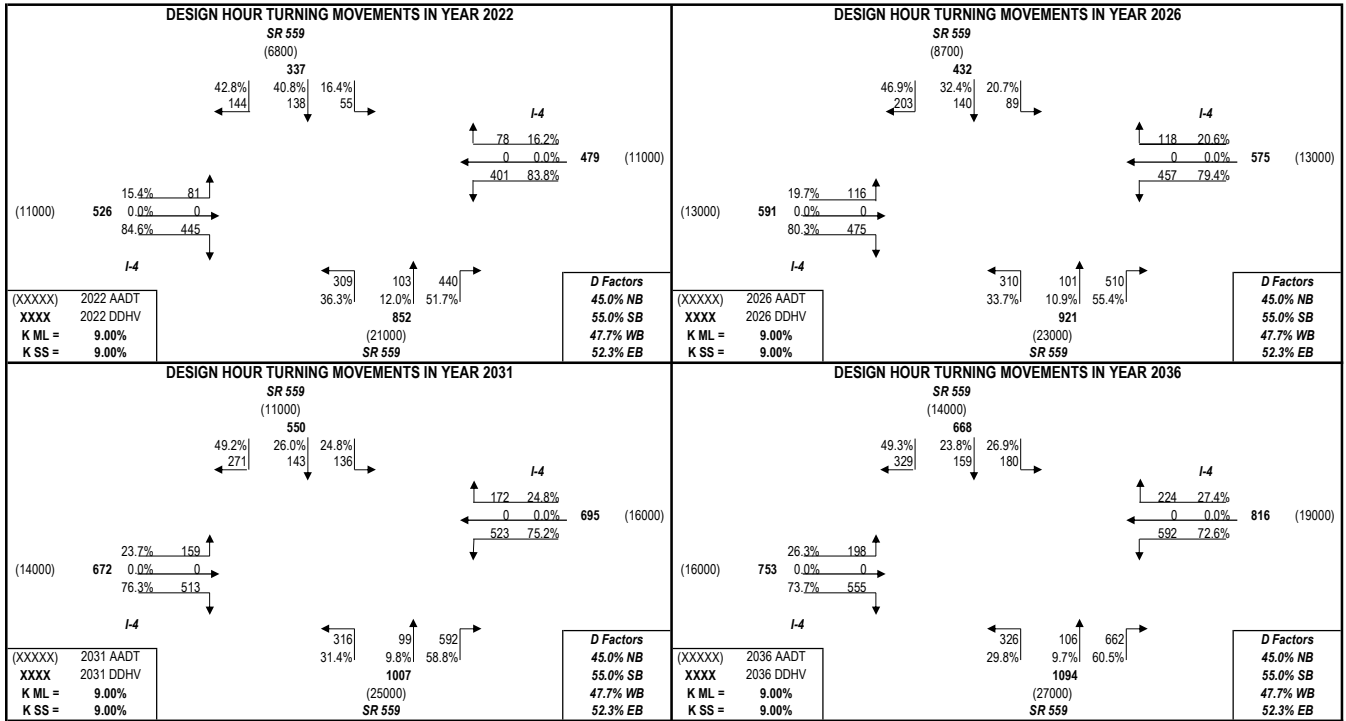
Desired Closure:

TURNS5 INITIAL TURNING VOLUME SUMMARY

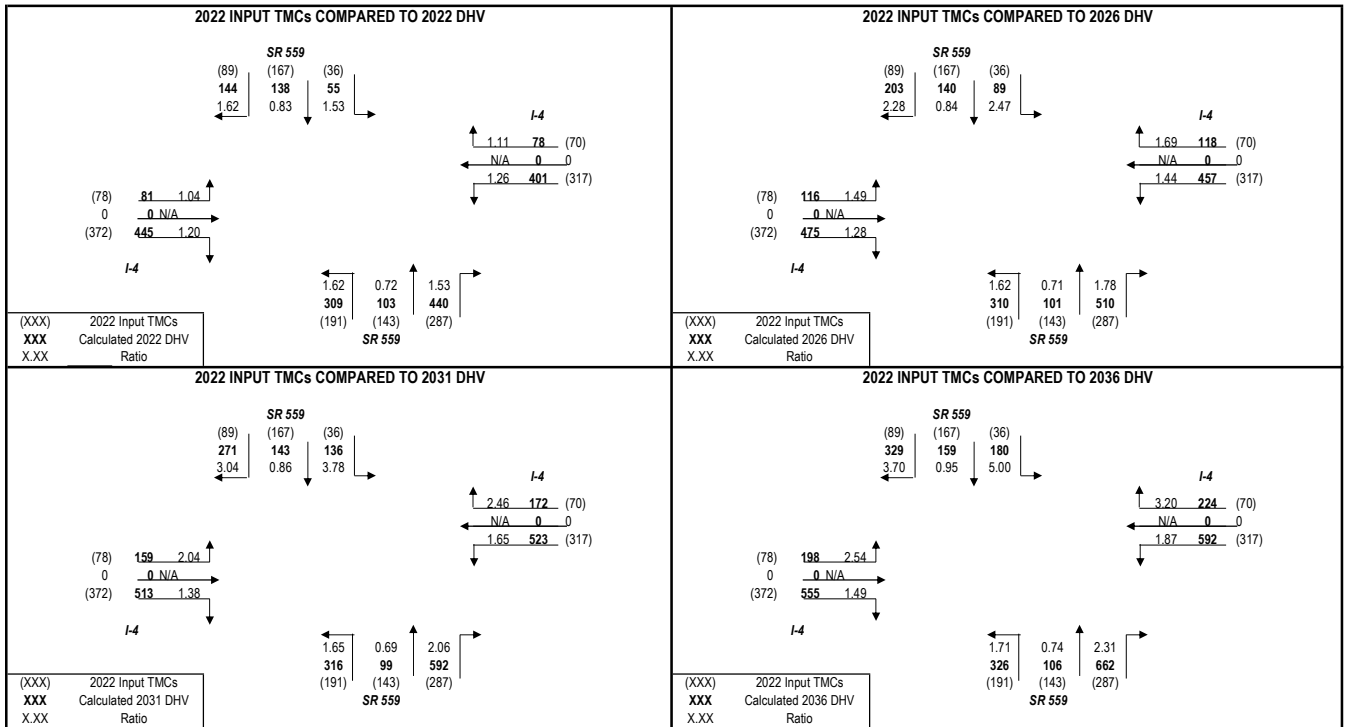
Highway:	SR 559	County:	POLK
Intersection:	I-4	Analyst:	0
Project:	I-4 AT SR 559 IOAR - PM PEAK	Date:	29-Sep-22

Approach-To-Approach	2022	2022		2026		2031		2036	
	Initial Estimate	Final Estimate	Calculated Volume	Final Estimate	Calculated Volume	Final Estimate	Calculated Volume	Final Estimate	Calculated Volume
West-To-North (LT)	0.173	0.154	81	0.197	116	0.237	159	0.263	198
West-To-East (Thru)	0.000	0.000	0	0.000	0	0.000	0	0.000	0
West-To-South (RT)	0.827	0.846	445	0.803	475	0.763	513	0.737	555
Total Flow From West:			526		591		672		753
East-To-South (LT)	0.819	0.838	401	0.794	457	0.752	523	0.726	592
East-To-West (Thru)	0.000	0.000	0	0.000	0	0.000	0	0.000	0
East-To-North (RT)	0.181	0.162	78	0.206	118	0.248	172	0.274	224
Total Flow From East:			479		575		695		816
North-To-East (LT)	0.123	0.164	55	0.207	89	0.248	136	0.269	180
North-To-South (Thru)	0.572	0.408	138	0.324	140	0.260	143	0.238	159
North-To-West (RT)	0.305	0.428	144	0.469	203	0.492	271	0.493	329
Total Flow From North:			337		432		550		668
South-To-West (LT)	0.308	0.363	309	0.337	310	0.314	316	0.298	326
South-To-North (Thru)	0.230	0.120	103	0.109	101	0.098	99	0.097	106
South-To-East (RT)	0.462	0.517	440	0.554	510	0.588	592	0.605	662
Total Flow From South:			852		921		1007		1094

PROJECT TRAFFIC FOR SR 559 AT I-4



PROJECT TRAFFIC FOR SR 559 AT I-4



TURNS5 ANALYSIS SHEET - INPUT

Analyst:

Date: 29-Sep-22

Highway: SR 559

Intersection: CR 559A/ C FRED JONES BLVD.

Project: I-4 AT SR 559 IOAR - AM PEAK

County: POLK

Is this a 4 way intersection?

Yes, my intersection has four approaches

If not, which 3 approaches exist in the intersection?

EB, WB, and SB

EB, WB, and NB

EB, SB, and NB

WB, SB, and NB

Is the Mainline Oriented North/South?

Enter Yes or No

Yes

No

K Factors	Mainline	D Factors	Mainline
	9.00%	Northbound (NB)	55.0%
	Side street	Southbound (SB)	45.0%
	9.00%		Side street
		Westbound (WB)	53.9%
		Eastbound (EB)	46.1%

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No

Yes

No

If "Yes" go to cell C47

If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base	Year	Rate (1.0% = 0.01)	
		Mainline	Side Street
Opening			
Mid			
Design			

Mainline Growth Function

Linear

Exponential

Decaying

Side Street Growth Function

Linear

Exponential

Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
0	0	0	0	0

Enter Project and Model Years

Base	Year
Opening	2022
Mid	2026
Design	2031
Model	2036

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
2022	10268	9816	21034	11377	52495
2036	11000	10500	27000	13500	62000

1st Guess Actual/Counted
Turning %'s for Traffic
AADT Balancing for 2022

(EB LT)	West-to-North	75.3%	210
(EB THRU)	West-to-East	9.3%	26
(EB RT)	West-to-South	15.4%	43
(WB LT)	East-to-South	13.7%	21
(WB THRU)	East-to-West	10.5%	16
(WB RT)	East-to-North	75.8%	116
(SB LT)	North-to-East	18.0%	112
(SB THRU)	North-to-South	36.9%	229
(SB RT)	North-to-West	45.1%	280
(NB LT)	South-to-West	13.8%	63
(NB THRU)	South-to-North	75.3%	345
(NB RT)	South-to-East	10.9%	50

Existing Year AADTs

Existing Turning Movement Counts

FSUTMS Model Year AADTs

First Guess Turning % Option Used
Existing Turning Movement Counts

Only the existing year total departure volumes [AADT*K*(1-D)] will be used to calculate the turning percentages first guess.

The turning percentages first guess is the same as the **actual distribution of turning volumes entered**. No balancing technique is used.

Only the FSUTMS model year departure volumes [AADT*K*(1-D)] will be used to calculate the

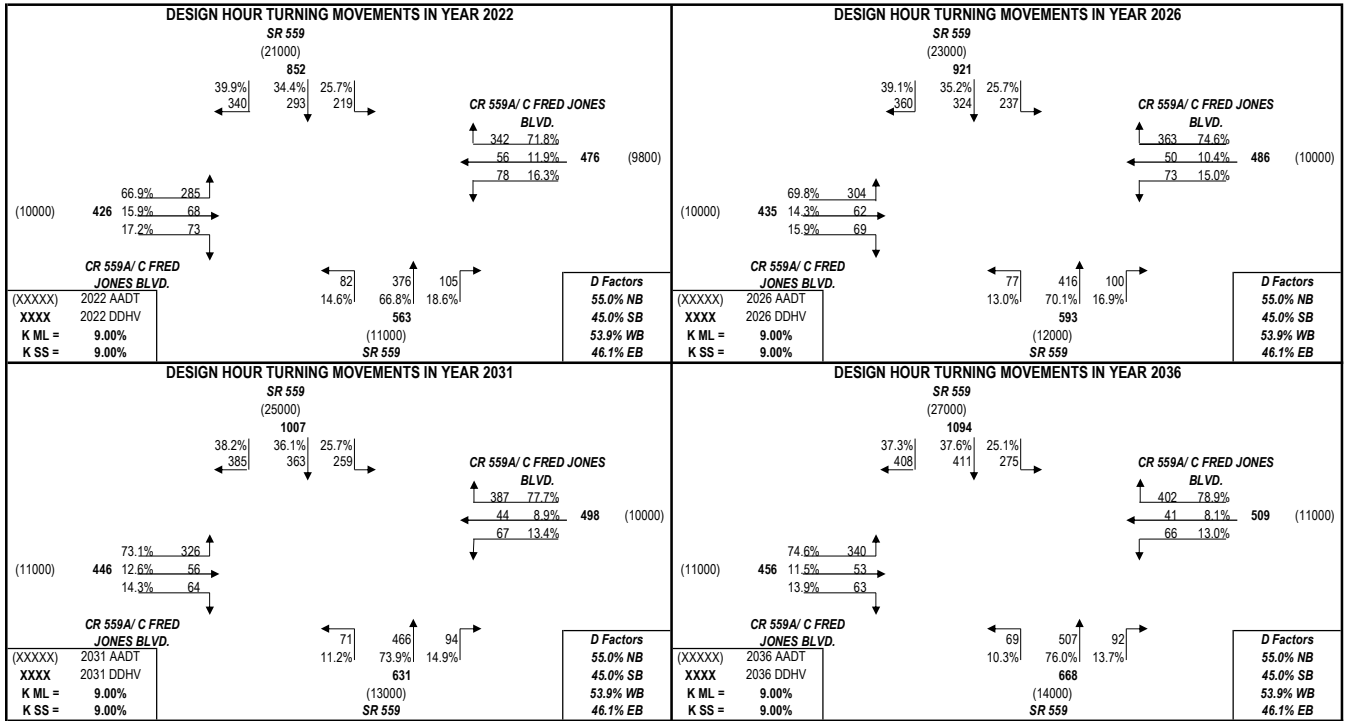
Desired Closure: 0.01

TURNS5 INITIAL TURNING VOLUME SUMMARY

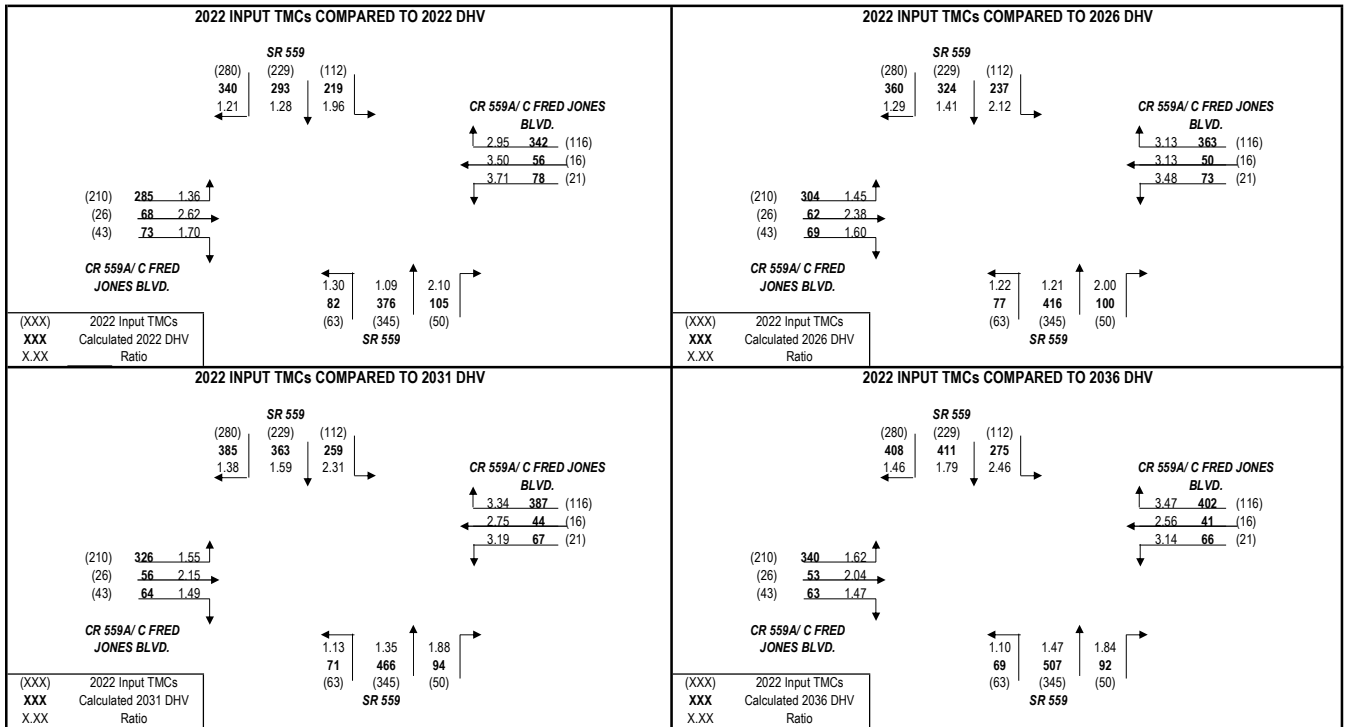
Highway:	SR 559	County:	POLK
Intersection:	CR 559A/ C FRED JONES BLVD.	Analyst:	0
Project:	I-4 AT SR 559 IOAR - AM PEAK	Date:	29-Sep-22

Approach-To-Approach	2022	2022		2026		2031		2036	
	Initial Estimate	Final Estimate	Calculated Volume	Final Estimate	Calculated Volume	Final Estimate	Calculated Volume	Final Estimate	Calculated Volume
West-To-North (LT)	0.753	0.669	285	0.698	304	0.731	326	0.746	340
West-To-East (Thru)	0.093	0.159	68	0.143	62	0.126	56	0.115	53
West-To-South (RT)	0.154	0.172	73	0.159	69	0.143	64	0.139	63
Total Flow From West:			426		435		446		456
East-To-South (LT)	0.137	0.163	78	0.150	73	0.134	67	0.130	66
East-To-West (Thru)	0.105	0.119	56	0.104	50	0.089	44	0.081	41
East-To-North (RT)	0.758	0.718	342	0.746	363	0.777	387	0.789	402
Total Flow From East:			476		486		498		509
North-To-East (LT)	0.180	0.257	219	0.257	237	0.257	259	0.251	275
North-To-South (Thru)	0.369	0.344	293	0.352	324	0.361	363	0.376	411
North-To-West (RT)	0.451	0.399	340	0.391	360	0.382	385	0.373	408
Total Flow From North:			852		921		1007		1094
South-To-West (LT)	0.138	0.146	82	0.130	77	0.112	71	0.103	69
South-To-North (Thru)	0.753	0.668	376	0.701	416	0.739	466	0.760	507
South-To-East (RT)	0.109	0.186	105	0.169	100	0.149	94	0.137	92
Total Flow From South:			563		593		631		668

PROJECT TRAFFIC FOR SR 559 AT CR 559A/ C FRED JONES BLVD.



PROJECT TRAFFIC FOR SR 559 AT CR 559A/ C FRED JONES BLVD.



TURNS5 ANALYSIS SHEET - INPUT

Analyst:
Date: 29-Sep-22
Highway: SR 559
Intersection: CR 559A/ C FRED JONES BLVD.
Project: I-4 AT SR 559 IOAR - PM PEAK
County: POLK

Is this a 4 way intersection?
 Yes, my intersection has four approaches
 If not, which 3 approaches exist in the intersection?
 EB, WB, and SB
 EB, WB, and NB
 EB, SB, and NB
 WB, SB, and NB

Is the Mainline Oriented North/South?
 Enter Yes or No
 Yes
 No

K Factors	Mainline	D Factors	Mainline
	9.00%	Northbound (NB)	45.0%
	Side street	Southbound (SB)	55.0%
	9.00%		Side street
		Westbound (WB)	53.9%
		Eastbound (EB)	46.1%

Do you have FTSUTMS Model Year traffic from which you would like to interpolate/extrapolate for project years? (Y/N)

Enter Yes or No
 Yes
 No

If "Yes" go to cell C47

If "No" go to cell C31

Enter Year and Growth Rates from Base Year:

Base	Year	Rate (1.0% = 0.01)	
		Mainline	Side Street
Opening			
Mid			
Design			

Mainline Growth Function
 Linear
 Exponential
 Decaying

Side Street Growth Function
 Linear
 Exponential
 Decaying

Enter Base Year AADTs for Volume Comparison:
(growth rates are used to calculate other project years)

From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
0	0	0	0	0

Enter Project and Model Years

Year
Base 2022
Opening 2026
Mid 2031
Design 2036
Model 2036

Enter Base and Model Year AADTs for Volume Comparison:
(volumes for other project years are calculated by interpolation)

	From West: EB Approach	From East: WB Approach	From North: SB Approach	From South: NB Approach	TOTAL
2022	10268	9816	21034	11377	52495
2036	11000	10500	27000	13500	62000

1st Guess Actual/Counted
Turning %'s for Traffic
AADT Balancing for 2022

(EB LT)	West-to-North	72.6%	239
(EB THRU)	West-to-East	7.9%	26
(EB RT)	West-to-South	19.5%	64
(WB LT)	East-to-South	17.8%	28
(WB THRU)	East-to-West	10.2%	16
(WB RT)	East-to-North	72.0%	113
(SB LT)	North-to-East	17.1%	146
(SB THRU)	North-to-South	47.5%	407
(SB RT)	North-to-West	35.4%	303
(NB LT)	South-to-West	14.7%	52
(NB THRU)	South-to-North	76.3%	270
(NB RT)	South-to-East	9.0%	32

Existing Year AADTs

Existing Turning Movement Counts

FSUTMS Model Year AADTs

First Guess Turning % Option Used Existing Turning Movement Counts

Only the existing year total departure volumes [AADT*K*(1-D)] will be used to calculate the turning percentages first guess.

The turning percentages first guess is the same as the **actual distribution of turning volumes entered**. No balancing technique is used.

Only the FSUTMS model year departure volumes [AADT*K*(1-D)] will be used to calculate the

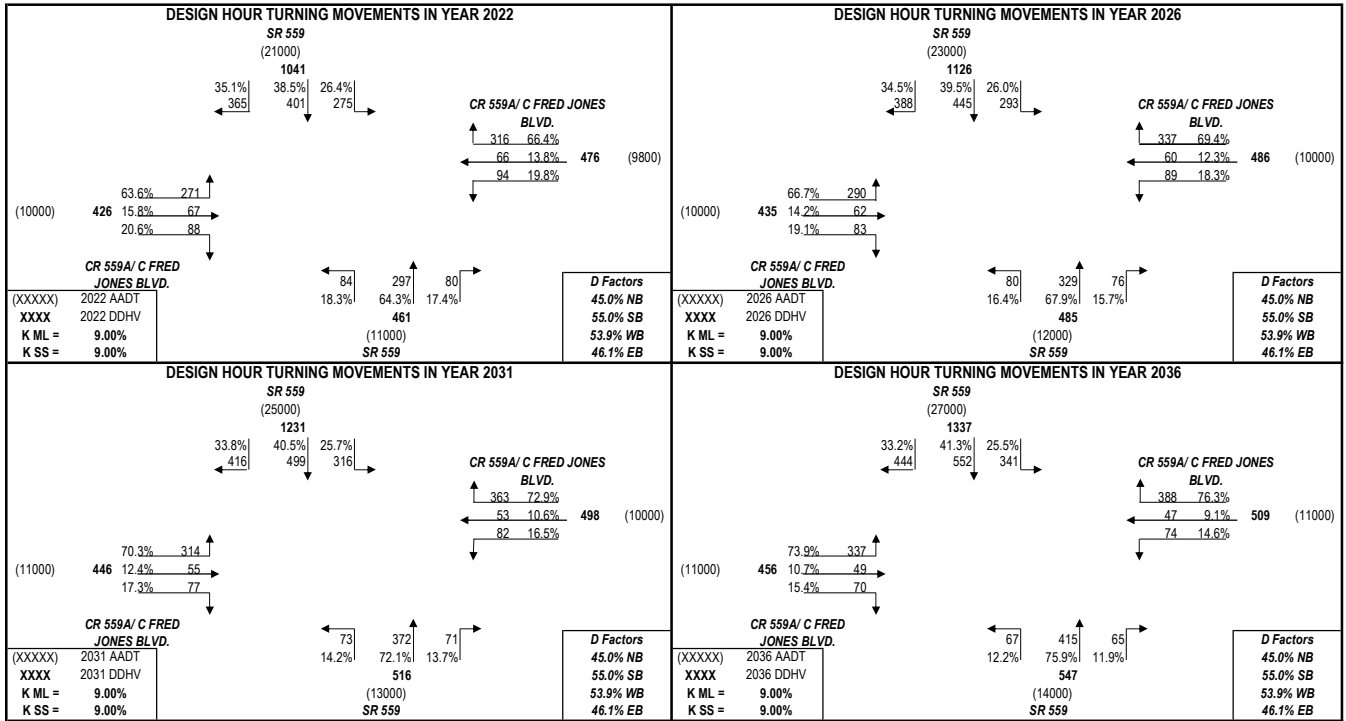
Desired Closure: 0.01

TURNS5 INITIAL TURNING VOLUME SUMMARY

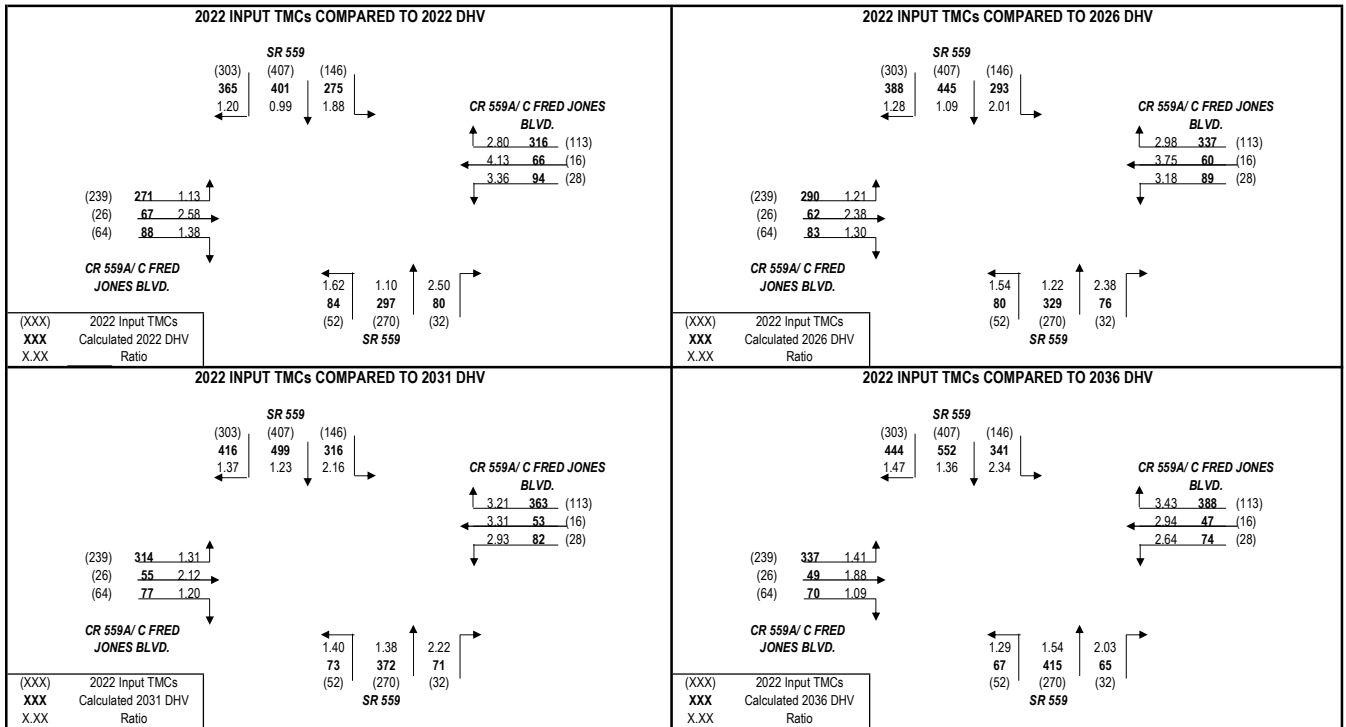
Highway:	SR 559	County:	POLK
Intersection:	CR 559A/ C FRED JONES BLVD.	Analyst:	0
Project:	I-4 AT SR 559 IOAR - PM PEAK	Date:	29-Sep-22

Approach-To-Approach	2022	2022		2026		2031		2036	
	Initial Estimate	Final Estimate	Calculated Volume	Final Estimate	Calculated Volume	Final Estimate	Calculated Volume	Final Estimate	Calculated Volume
West-To-North (LT)	0.726	0.636	271	0.667	290	0.703	314	0.739	337
West-To-East (Thru)	0.079	0.158	67	0.142	62	0.124	55	0.107	49
West-To-South (RT)	0.195	0.206	88	0.191	83	0.173	77	0.154	70
Total Flow From West:			426		435		446		456
East-To-South (LT)	0.178	0.198	94	0.183	89	0.165	82	0.146	74
East-To-West (Thru)	0.102	0.138	66	0.123	60	0.106	53	0.091	47
East-To-North (RT)	0.720	0.664	316	0.694	337	0.729	363	0.763	388
Total Flow From East:			476		486		498		509
North-To-East (LT)	0.171	0.264	275	0.260	293	0.257	316	0.255	341
North-To-South (Thru)	0.475	0.385	401	0.395	445	0.405	499	0.413	552
North-To-West (RT)	0.354	0.351	365	0.345	388	0.338	416	0.332	444
Total Flow From North:			1041		1126		1231		1337
South-To-West (LT)	0.147	0.183	84	0.164	80	0.142	73	0.122	67
South-To-North (Thru)	0.763	0.643	297	0.679	329	0.721	372	0.759	415
South-To-East (RT)	0.090	0.174	80	0.157	76	0.137	71	0.119	65
Total Flow From South:			461		485		516		547

PROJECT TRAFFIC FOR SR 559 AT CR 559A/ C FRED JONES BLVD.



PROJECT TRAFFIC FOR SR 559 AT CR 559A/ C FRED JONES BLVD.





I-4 at SR 559 Interchange
FPID 447436-2-52-01 Polk County



Appendix F

**Future Operational Analysis/ Level of Service (LOS)
Calculations**

F-1: HCS Worksheets

F-2: Synchro Worksheets

1	0.95	0.925	4176	6862	0.61	66.1	21.1	C
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Facility Time Period Results

T	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	66.1	20.5	18.9	2.8	C

Facility Overall Results

Space Mean Speed, mi/h	66.1	Density, veh/mi/ln	18.9
Average Travel Time, min	2.8	Density, pc/mi/ln	20.5

1	0.95	0.925	4700	6862	0.68	64.9	24.1	C
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Facility Time Period Results

T	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	65.2	23.8	22.0	2.8	C

Facility Overall Results

Space Mean Speed, mi/h	65.2	Density, veh/mi/ln	22.0
Average Travel Time, min	2.8	Density, pc/mi/ln	23.8

HCS7 Freeway Facilities Report

Project Information

Analyst	Stantec	Agency	FDOT
Jurisdiction	Polk County	Time Period Analyzed	AM Peak
Analysis Year	Future 2026	Date	01/2023
Project Description	I-4 at SR 559 IOAR; I-4 Westbound		

Facility Global Input

Jam Density, pc/mi/ln	190.0	Density at Capacity, pc/mi/ln	45.0
Queue Discharge Capacity Drop, %	7	Total Segments	5
Total Time Periods	1	Time Period Duration, min	15

Segment Geometric Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-4 East of SR 559	5280	3
2	Diverge	Diverge	I-4 WB off ramp to SR 559	1500	3
3	Basic	Basic	I-4 between off ramp & on ramp	3440	3
4	Merge	Merge	I-4 WB on ramp from SR 559	1500	3
5	Basic	Basic	I-4 West of SR 559	5280	3

Facility Segment Data

Segment 1: Basic

Time Period	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.925	4780	6862	0.70	64.7	24.6	C

Segment 2: Diverge

Time Period	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	0.95	0.95	0.925	0.923	4780	570	6970	2033	0.69	0.28	68.0	63.8	23.4	31.4	D

Segment 3: Basic

Time Period	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.925	4211	6862	0.61	66.0	21.3	C

Segment 4: Merge

Time Period	PHF		fHV		Flow Rate (pc/h)		Capacity (pc/h)		d/c Ratio		Speed (mi/h)		Density (pc/mi/ln)		LOS
	F	R	F	R	Freeway	Ramp	Freeway	Ramp	F	R	F	R	Freeway	Ramp	
1	0.95	0.95	0.925	0.923	4793	582	6970	2033	0.69	0.29	63.3	60.6	25.2	28.8	D

Segment 5: Basic

Time Period	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
-------------	-----	-----	------------------	-----------------	-----------	--------------	--------------------	-----

1	0.95	0.925	4791	6862	0.70	64.7	24.7	C
---	------	-------	------	------	------	------	------	---

Facility Time Period Results

T	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	65.1	23.9	22.1	3.0	C

Facility Overall Results

Space Mean Speed, mi/h	65.1	Density, veh/mi/ln	22.1
Average Travel Time, min	3.0	Density, pc/mi/ln	23.9

1	0.95	0.925	4051	6862	0.59	66.2	20.4	C
---	------	-------	------	------	------	------	------	---

Facility Time Period Results

T	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	66.1	20.3	18.8	2.9	C

Facility Overall Results

Space Mean Speed, mi/h	66.1	Density, veh/mi/ln	18.8
Average Travel Time, min	2.9	Density, pc/mi/ln	20.3

1	0.95	0.925	6390	6862	1.03	60.9	35.0	F
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Facility Time Period Results

T	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	44.3	47.6	44.1	4.1	F

Facility Overall Results

Space Mean Speed, mi/h	44.3	Density, veh/mi/ln	44.1
Average Travel Time, min	4.1	Density, pc/mi/ln	47.6

1	0.95	0.925	6390	6862	1.12	60.9	35.0	F
---	------	-------	------	------	------	------	------	---

Facility Time Period Results

T	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	43.5	48.6	44.9	4.2	F

Facility Overall Results

Space Mean Speed, mi/h	43.5	Density, veh/mi/ln	44.9
Average Travel Time, min	4.2	Density, pc/mi/ln	48.6

1	0.95	0.925	6680	6862	1.11	58.4	38.1	F
---	------	-------	------	------	------	------	------	---

Facility Time Period Results

T	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	59.5	36.8	34.1	3.2	F

Facility Overall Results

Space Mean Speed, mi/h	59.5	Density, veh/mi/ln	34.1
Average Travel Time, min	3.2	Density, pc/mi/ln	36.8

1	0.95	0.925	6634	6862	1.01	58.8	37.6	F
---	------	-------	------	------	------	------	------	---

Facility Time Period Results

T	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	59.6	36.8	34.0	3.2	F

Facility Overall Results

Space Mean Speed, mi/h	59.6	Density, veh/mi/ln	34.0
Average Travel Time, min	3.2	Density, pc/mi/ln	36.8

1	0.95	0.925	7078	9150	0.77	62.5	28.3	D
---	------	-------	------	------	------	------	------	---

Facility Time Period Results

T	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	63.8	26.9	24.9	2.9	D

Facility Overall Results

Space Mean Speed, mi/h	63.8	Density, veh/mi/ln	24.9
Average Travel Time, min	2.9	Density, pc/mi/ln	26.9

1	0.95	0.925	7670	9150	0.84	60.0	32.0	D
---	------	-------	------	------	------	------	------	---

Facility Time Period Results

T	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	61.6	30.5	28.2	3.0	D

Facility Overall Results

Space Mean Speed, mi/h	61.6	Density, veh/mi/ln	28.2
Average Travel Time, min	3.0	Density, pc/mi/ln	30.5

1	0.95	0.925	7624	9150	0.83	60.2	31.7	D
---	------	-------	------	------	------	------	------	---

Facility Time Period Results

T	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	61.4	30.6	28.3	3.1	D

Facility Overall Results

Space Mean Speed, mi/h	61.4	Density, veh/mi/ln	28.3
Average Travel Time, min	3.1	Density, pc/mi/ln	30.6

1	0.95	0.925	6942	9150	0.76	63.0	27.6	D
---	------	-------	------	------	------	------	------	---

Facility Time Period Results

T	Speed, mi/h	Density, pc/mi/ln	Density, veh/mi/ln	Travel Time, min	LOS
1	63.7	27.0	25.0	3.0	D

Facility Overall Results

Space Mean Speed, mi/h	63.7	Density, veh/mi/ln	25.0
Average Travel Time, min	3.0	Density, pc/mi/ln	27.0

HCM 6th Signalized Intersection Summary

2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2026 NB
AM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗	↖	↑↑	↗	↖	↑↑	↗
Traffic Volume (veh/h)	250	30	50	30	20	200	70	390	60	160	290	320
Future Volume (veh/h)	250	30	50	30	20	200	70	390	60	160	290	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1604	1870	1900	1604	1500	1870	1826	1870	1292	1811	1826
Adj Flow Rate, veh/h	263	32	53	32	21	211	74	411	63	168	305	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	20	2	0	20	27	2	5	2	41	6	5
Cap, veh/h	422	467	461	483	467	370	428	665	304	331	920	
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.06	0.19	0.19	0.13	0.27	0.00
Sat Flow, veh/h	1094	1604	1585	1333	1604	1271	1781	3469	1585	1231	3441	1547
Grp Volume(v), veh/h	263	32	53	32	21	211	74	411	63	168	305	0
Grp Sat Flow(s),veh/h/ln	1094	1604	1585	1333	1604	1271	1781	1735	1585	1231	1721	1547
Q Serve(g_s), s	14.3	0.9	1.5	1.1	0.6	8.9	1.8	6.8	2.1	6.7	4.5	0.0
Cycle Q Clear(g_c), s	14.9	0.9	1.5	2.0	0.6	8.9	1.8	6.8	2.1	6.7	4.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	422	467	461	483	467	370	428	665	304	331	920	
V/C Ratio(X)	0.62	0.07	0.11	0.07	0.05	0.57	0.17	0.62	0.21	0.51	0.33	
Avail Cap(c_a), veh/h	732	921	911	861	921	730	673	2604	1190	407	2583	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.4	16.2	16.4	16.9	16.1	19.0	15.1	23.4	21.4	17.1	18.6	0.0
Incr Delay (d2), s/veh	1.5	0.1	0.1	0.1	0.0	1.4	0.2	0.9	0.3	1.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.4	0.6	1.0	0.6	0.4	4.6	1.3	4.9	1.4	3.3	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.9	16.2	16.5	17.0	16.1	20.4	15.3	24.3	21.8	18.3	18.8	0.0
LnGrp LOS	C	B	B	B	B	C	B	C	C	B	B	
Approach Vol, veh/h		348			264			548			473	A
Approach Delay, s/veh		21.3			19.6			22.8			18.6	
Approach LOS		C			B			C			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	24.6		27.1	16.1	19.8		27.1				
Change Period (Y+Rc), s	7.7	7.7		8.8	7.7	7.7		8.8				
Max Green Setting (Gmax), s	12.3	47.3		36.2	12.3	47.3		36.2				
Max Q Clear Time (g_c+I1), s	3.8	6.5		10.9	8.7	8.8		16.9				
Green Ext Time (p_c), s	0.1	2.2		0.9	0.2	3.2		1.4				

Intersection Summary

HCM 6th Ctrl Delay	20.8
HCM 6th LOS	C

























Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2026 NB
PM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	50	70	40	30	190	60	310	40	200	450	340
Future Volume (veh/h)	260	50	70	40	30	190	60	310	40	200	450	340
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1633	1900	1841	1737	1574	1900	1841	1856	1441	1870	1856
Adj Flow Rate, veh/h	274	53	74	42	32	200	63	326	42	211	474	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	18	0	4	11	22	0	4	3	31	2	3
Cap, veh/h	437	491	484	460	523	401	348	557	250	384	927	
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.05	0.16	0.16	0.15	0.26	0.00
Sat Flow, veh/h	1121	1633	1610	1244	1737	1334	1810	3497	1572	1372	3554	1572
Grp Volume(v), veh/h	274	53	74	42	32	200	63	326	42	211	474	0
Grp Sat Flow(s),veh/h/ln	1121	1633	1610	1244	1737	1334	1810	1749	1572	1372	1777	1572
Q Serve(g_s), s	14.5	1.5	2.1	1.6	0.8	7.7	1.6	5.4	1.4	7.8	7.1	0.0
Cycle Q Clear(g_c), s	15.3	1.5	2.1	3.1	0.8	7.7	1.6	5.4	1.4	7.8	7.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	437	491	484	460	523	401	348	557	250	384	927	
V/C Ratio(X)	0.63	0.11	0.15	0.09	0.06	0.50	0.18	0.59	0.17	0.55	0.51	
Avail Cap(c_a), veh/h	746	941	928	802	1001	768	606	2633	1184	440	2675	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.1	15.9	16.1	17.0	15.6	18.1	15.8	24.5	22.8	17.8	19.8	0.0
Incr Delay (d2), s/veh	1.5	0.1	0.1	0.1	0.0	1.0	0.2	1.0	0.3	1.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.6	0.9	1.3	0.8	0.6	4.1	1.1	4.0	1.0	4.3	5.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.6	16.0	16.2	17.1	15.7	19.0	16.0	25.5	23.1	19.0	20.2	0.0
LnGrp LOS	C	B	B	B	B	B	B	C	C	B	C	
Approach Vol, veh/h		401			274			431			685	A
Approach Delay, s/veh		20.5			18.3			23.9			19.9	
Approach LOS		C			B			C			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	24.1		27.7	17.4	17.7		27.7				
Change Period (Y+Rc), s	7.7	7.7		8.8	7.7	7.7		8.8				
Max Green Setting (Gmax), s	12.3	47.3		36.2	12.3	47.3		36.2				
Max Q Clear Time (g_c+I1), s	3.6	9.1		9.7	9.8	7.4		17.3				
Green Ext Time (p_c), s	0.1	3.5		1.0	0.2	2.5		1.6				

Intersection Summary

HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC 3: SR 559 & I-4 EB

Future 2026 NB
AM PEAK HOUR

Intersection

Int Delay, s/veh 6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘		↗					↑↑	↗	↘	↑↑	
Traffic Vol, veh/h	160	0	250	0	0	0	0	430	410	70	520	0
Future Vol, veh/h	160	0	250	0	0	0	0	430	410	70	520	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	30	-	-	-	-	-	500	450	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	0	24	0	0	0	0	14	13	12	9	0
Mvmt Flow	168	0	263	0	0	0	0	453	432	74	547	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	922	-	274	-	0	0
Stage 1	695	-	-	-	-	-
Stage 2	227	-	-	-	-	-
Critical Hdwy	6.98	-	7.38	-	-	4.34
Critical Hdwy Stg 1	5.98	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-
Follow-up Hdwy	3.59	-	3.54	-	-	2.32
Pot Cap-1 Maneuver	257	0	662	0	-	1036
Stage 1	438	0	-	0	-	-
Stage 2	769	0	-	0	-	-
Platoon blocked, %						
Mov Cap-1 Maneuver	239	0	662	-	-	1036
Mov Cap-2 Maneuver	239	0	-	-	-	-
Stage 1	438	0	-	-	-	-
Stage 2	714	0	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	27.9	0	1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	239	662	1036	-
HCM Lane V/C Ratio	-	-	0.705	0.398	0.071	-
HCM Control Delay (s)	-	-	49.5	14	8.7	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	4.7	1.9	0.2	-

HCM 6th TWSC

3: SR 559 & I-4 EB

Future 2026 NB
PM PEAK HOUR

Intersection

Int Delay, s/veh 6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘		↗					↑↑	↗	↘	↑↑	
Traffic Vol, veh/h	110	0	420	0	0	0	0	380	380	80	570	0
Future Vol, veh/h	110	0	420	0	0	0	0	380	380	80	570	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	30	-	-	-	-	-	500	450	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	5	0	10	0	0	0	0	9	13	0	6	0
Mvmt Flow	116	0	442	0	0	0	0	400	400	84	600	0

Major/Minor	Minor2		Major1			Major2			
Conflicting Flow All	968	-	300	-	0	0	400	0	0
Stage 1	768	-	-	-	-	-	-	-	-
Stage 2	200	-	-	-	-	-	-	-	-
Critical Hdwy	6.9	-	7.1	-	-	-	4.1	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.55	-	3.4	-	-	-	2.2	-	-
Pot Cap-1 Maneuver	246	0	673	0	-	-	1170	-	0
Stage 1	411	0	-	0	-	-	-	-	0
Stage 2	805	0	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	228	0	673	-	-	-	1170	-	-
Mov Cap-2 Maneuver	228	0	-	-	-	-	-	-	-
Stage 1	411	0	-	-	-	-	-	-	-
Stage 2	747	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.3	0	1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	228	673	1170	-
HCM Lane V/C Ratio	-	-	0.508	0.657	0.072	-
HCM Control Delay (s)	-	-	36	20	8.3	-
HCM Lane LOS	-	-	E	C	A	-
HCM 95th %tile Q(veh)	-	-	2.6	4.9	0.2	-

HCM 6th TWSC

4: SR 559 & I-4 WB

Future 2026 NB
AM PEAK HOUR

Intersection

Int Delay, s/veh 216.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↘		↗	↘	↗			↗	↘
Traffic Vol, veh/h	0	0	0	350	0	150	350	240	0	0	240	160
Future Vol, veh/h	0	0	0	350	0	150	350	240	0	0	240	160
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	Yield
Storage Length	-	-	-	0	-	385	0	-	-	-	-	360
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	12	0	8	18	12	0	0	7	10
Mvmt Flow	0	0	0	368	0	158	368	253	0	0	253	168

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1242	- 253 253	0 - - - 0
Stage 1	989	- - -	- - - - -
Stage 2	253	- - -	- - - - -
Critical Hdwy	6.52	- 6.28 4.28	- - - - -
Critical Hdwy Stg 1	5.52	- - -	- - - - -
Critical Hdwy Stg 2	5.52	- - -	- - - - -
Follow-up Hdwy	3.608	- 3.372 2.362	- - - - -
Pot Cap-1 Maneuver	~ 184	0 771 1224	- 0 0 - -
Stage 1	~ 345	0 - -	- 0 0 - -
Stage 2	766	0 - -	- 0 0 - -
Platoon blocked, %			- - -
Mov Cap-1 Maneuver	~ 129	0 771 1224	- - - - -
Mov Cap-2 Maneuver	~ 129	0 - -	- - - - -
Stage 1	~ 241	0 - -	- - - - -
Stage 2	766	0 - -	- - - - -

Approach	WB	NB	SB
HCM Control Delay, s	\$ 639.6	5.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	1224	- 129 771	- -	-
HCM Lane V/C Ratio	0.301	- 2.856 0.205	- -	-
HCM Control Delay (s)	9.2	- \$ 909 10.9	- -	-
HCM Lane LOS	A	- F B	- -	-
HCM 95th %tile Q(veh)	1.3	- 34 0.8	- -	-

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC

4: SR 559 & I-4 WB

Future 2026 NB
PM PEAK HOUR

Intersection

Int Delay, s/veh 145.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↘		↗	↘	↗			↗	↘
Traffic Vol, veh/h	0	0	0	400	0	110	220	270	0	0	250	150
Future Vol, veh/h	0	0	0	400	0	110	220	270	0	0	250	150
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	Yield
Storage Length	-	-	-	0	-	385	0	-	-	-	-	360
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	7	0	9	13	6	0	0	5	6
Mvmt Flow	0	0	0	421	0	116	232	284	0	0	263	158

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1011	- 284 263	0 - - - 0
Stage 1	748	- - -	- - - - -
Stage 2	263	- - -	- - - - -
Critical Hdwy	6.47	- 6.29 4.23	- - - - -
Critical Hdwy Stg 1	5.47	- - -	- - - - -
Critical Hdwy Stg 2	5.47	- - -	- - - - -
Follow-up Hdwy	3.563	- 3.381 2.317	- - - - -
Pot Cap-1 Maneuver	~ 260	0 739 1240	- 0 0 - -
Stage 1	459	0 - -	- 0 0 - -
Stage 2	770	0 - -	- 0 0 - -
Platoon blocked, %			- - -
Mov Cap-1 Maneuver	~ 211	0 739 1240	- - - - -
Mov Cap-2 Maneuver	~ 211	0 - -	- - - - -
Stage 1	~ 373	0 - -	- - - - -
Stage 2	770	0 - -	- - - - -

Approach	WB	NB	SB
HCM Control Delay, s	\$ 396.1	3.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	1240	- 211 739	- -	- -
HCM Lane V/C Ratio	0.187	- 1.996 0.157	- -	- -
HCM Control Delay (s)	8.6	- \$ 502 10.8	- -	- -
HCM Lane LOS	A	- F B	- -	- -
HCM 95th %tile Q(veh)	0.7	- 31.3 0.6	- -	- -

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th Signalized Intersection Summary

2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2036 NB
AM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	50	60	60	40	420	70	490	90	280	430	420
Future Volume (veh/h)	360	50	60	60	40	420	70	490	90	280	430	420
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1604	1870	1900	1604	1500	1870	1826	1870	1292	1811	1826
Adj Flow Rate, veh/h	379	53	63	63	42	442	74	516	95	295	453	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	20	2	0	20	27	2	5	2	41	6	5
Cap, veh/h	408	634	627	564	634	502	337	715	327	282	1012	
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.05	0.21	0.21	0.13	0.29	0.00
Sat Flow, veh/h	868	1604	1585	1296	1604	1271	1781	3469	1585	1231	3441	1547
Grp Volume(v), veh/h	379	53	63	63	42	442	74	516	95	295	453	0
Grp Sat Flow(s),veh/h/ln	868	1604	1585	1296	1604	1271	1781	1735	1585	1231	1721	1547
Q Serve(g_s), s	34.7	1.9	2.3	2.9	1.5	29.5	2.6	12.7	4.6	12.3	9.8	0.0
Cycle Q Clear(g_c), s	36.2	1.9	2.3	4.8	1.5	29.5	2.6	12.7	4.6	12.3	9.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	408	634	627	564	634	502	337	715	327	282	1012	
V/C Ratio(X)	0.93	0.08	0.10	0.11	0.07	0.88	0.22	0.72	0.29	1.05	0.45	
Avail Cap(c_a), veh/h	408	634	627	564	634	502	493	1792	819	282	1777	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.7	17.3	17.4	18.8	17.2	25.7	21.4	33.9	30.7	30.7	26.3	0.0
Incr Delay (d2), s/veh	27.7	0.1	0.1	0.1	0.0	16.3	0.3	1.4	0.5	66.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.3	1.2	1.5	1.6	1.0	16.1	2.0	9.2	3.2	12.0	7.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.4	17.4	17.5	18.9	17.2	42.0	21.7	35.3	31.2	97.2	26.6	0.0
LnGrp LOS	E	B	B	B	B	D	C	D	C	F	C	
Approach Vol, veh/h		495			547			685			748	A
Approach Delay, s/veh		48.8			37.4			33.3			54.4	
Approach LOS		D			D			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	34.6		45.0	20.0	26.6		45.0				
Change Period (Y+Rc), s	7.7	7.7		8.8	7.7	7.7		8.8				
Max Green Setting (Gmax), s	12.3	47.3		36.2	12.3	47.3		36.2				
Max Q Clear Time (g_c+I1), s	4.6	11.8		31.5	14.3	14.7		38.2				
Green Ext Time (p_c), s	0.1	3.4		1.0	0.0	4.2		0.0				

Intersection Summary

HCM 6th Ctrl Delay	43.7
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2036 NB
PM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	50	70	70	50	380	70	410	70	340	560	440
Future Volume (veh/h)	330	50	70	70	50	380	70	410	70	340	560	440
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1633	1900	1841	1737	1574	1900	1841	1856	1441	1870	1856
Adj Flow Rate, veh/h	347	53	74	74	53	400	74	432	74	358	589	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	18	0	4	11	22	0	4	3	31	2	3
Cap, veh/h	440	669	660	566	712	546	271	620	279	315	956	
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.05	0.18	0.18	0.14	0.27	0.00
Sat Flow, veh/h	916	1633	1610	1244	1737	1334	1810	3497	1572	1372	3554	1572
Grp Volume(v), veh/h	347	53	74	74	53	400	74	432	74	358	589	0
Grp Sat Flow(s),veh/h/ln	916	1633	1610	1244	1737	1334	1810	1749	1572	1372	1777	1572
Q Serve(g_s), s	32.8	1.7	2.5	3.4	1.6	22.3	2.6	10.2	3.6	12.3	12.8	0.0
Cycle Q Clear(g_c), s	34.5	1.7	2.5	5.2	1.6	22.3	2.6	10.2	3.6	12.3	12.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	440	669	660	566	712	546	271	620	279	315	956	
V/C Ratio(X)	0.79	0.08	0.11	0.13	0.07	0.73	0.27	0.70	0.27	1.14	0.62	
Avail Cap(c_a), veh/h	440	669	660	566	712	546	437	1872	842	315	1902	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.4	15.9	16.1	17.5	15.9	22.0	22.5	34.1	31.4	30.6	28.3	0.0
Incr Delay (d2), s/veh	9.4	0.0	0.1	0.1	0.0	5.0	0.5	1.4	0.5	93.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.5	1.2	1.6	1.7	1.2	11.8	2.0	7.8	2.5	16.4	9.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	16.0	16.2	17.6	15.9	27.0	23.1	35.6	31.9	124.0	28.9	0.0
LnGrp LOS	D	B	B	B	B	C	C	D	C	F	C	
Approach Vol, veh/h		474			527			580			947	A
Approach Delay, s/veh		30.5			24.6			33.5			64.9	
Approach LOS		C			C			C			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	31.5		45.0	20.0	23.4		45.0				
Change Period (Y+Rc), s	7.7	7.7		8.8	7.7	7.7		8.8				
Max Green Setting (Gmax), s	12.3	47.3		36.2	12.3	47.3		36.2				
Max Q Clear Time (g_c+I1), s	4.6	14.8		24.3	14.3	12.2		36.5				
Green Ext Time (p_c), s	0.1	4.5		1.7	0.0	3.4		0.0				

Intersection Summary

HCM 6th Ctrl Delay	42.8
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC

3: SR 559 & I-4 EB

Future 2036 NB
AM PEAK HOUR

Intersection

Int Delay, s/veh 103.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘		↗					↑↑	↗	↘	↑↑	
Traffic Vol, veh/h	310	0	380	0	0	0	0	580	690	120	750	0
Future Vol, veh/h	310	0	380	0	0	0	0	580	690	120	750	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	30	-	-	-	-	-	500	450	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	0	24	0	0	0	0	14	13	12	9	0
Mvmt Flow	326	0	400	0	0	0	0	611	726	126	789	0

Major/Minor	Minor2		Major1			Major2			
Conflicting Flow All	1347	-	395	-	0	0	611	0	0
Stage 1	1041	-	-	-	-	-	-	-	-
Stage 2	306	-	-	-	-	-	-	-	-
Critical Hdwy	6.98	-	7.38	-	-	-	4.34	-	-
Critical Hdwy Stg 1	5.98	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.98	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.59	-	3.54	-	-	-	2.32	-	-
Pot Cap-1 Maneuver	~ 134	0	546	0	-	-	899	-	0
Stage 1	~ 286	0	-	0	-	-	-	-	0
Stage 2	700	0	-	0	-	-	-	-	0
Platoon blocked, %									
Mov Cap-1 Maneuver	~ 115	0	546	-	-	-	899	-	-
Mov Cap-2 Maneuver	~ 115	0	-	-	-	-	-	-	-
Stage 1	~ 286	0	-	-	-	-	-	-	-
Stage 2	602	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s\$	423.5	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	115	546	899	-
HCM Lane V/C Ratio	-	-	2.838	0.733	0.141	-
HCM Control Delay (s)	-	-	\$ 909	27.5	9.7	-
HCM Lane LOS	-	-	F	D	A	-
HCM 95th %tile Q(veh)	-	-	30.4	6.1	0.5	-

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: SR 559 & I-4 EB

Future 2036 NB
PM PEAK HOUR

Intersection												
Int Delay, s/veh	52.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘		↗					↑↑	↗	↘	↑↑	
Traffic Vol, veh/h	190	0	560	0	0	0	0	500	620	170	780	0
Future Vol, veh/h	190	0	560	0	0	0	0	500	620	170	780	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	None	-	-	Yield	-	-	None
Storage Length	0	-	30	-	-	-	-	-	500	450	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	5	0	10	0	0	0	0	9	13	0	6	0
Mvmt Flow	200	0	589	0	0	0	0	526	653	179	821	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1442	-	411	-	0	0
Stage 1	1179	-	-	-	-	-
Stage 2	263	-	-	-	-	-
Critical Hdwy	6.9	-	7.1	-	-	4.1
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	-	3.4	-	-	2.2
Pot Cap-1 Maneuver	~ 120	0	~ 568	0	-	1051
Stage 1	248	0	-	0	-	-
Stage 2	748	0	-	0	-	-
Platoon blocked, %						
Mov Cap-1 Maneuver	~ 100	0	~ 568	-	-	1051
Mov Cap-2 Maneuver	~ 100	0	-	-	-	-
Stage 1	248	0	-	-	-	-
Stage 2	621	0	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	196.3	0	1.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	EBLn2	SBL	SBT
Capacity (veh/h)	-	-	100	568	1051	-
HCM Lane V/C Ratio	-	-	2	1.038	0.17	-
HCM Control Delay (s)	-	-	\$ 554.1	74.9	9.1	-
HCM Lane LOS	-	-	F	F	A	-
HCM 95th %tile Q(veh)	-	-	16.9	16.3	0.6	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC

4: SR 559 & I-4 WB

Future 2036 NB
AM PEAK HOUR

Intersection

Int Delay, s/veh 1388.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↘		↗	↘	↗			↗	↘
Traffic Vol, veh/h	0	0	0	580	0	320	500	400	0	0	290	240
Future Vol, veh/h	0	0	0	580	0	320	500	400	0	0	290	240
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	Yield
Storage Length	-	-	-	0	-	385	0	-	-	-	-	360
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	12	0	8	18	12	0	0	7	10
Mvmt Flow	0	0	0	611	0	337	526	421	0	0	305	253

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1778	- 421 305	0 - - - 0
Stage 1	1473	- - -	- - - - -
Stage 2	305	- - -	- - - - -
Critical Hdwy	6.52	- 6.28 4.28	- - - - -
Critical Hdwy Stg 1	5.52	- - -	- - - - -
Critical Hdwy Stg 2	5.52	- - -	- - - - -
Follow-up Hdwy	3.608	- 3.372 2.362	- - - - -
Pot Cap-1 Maneuver	~ 85	0 620 1170	- 0 0 - -
Stage 1	~ 200	0 - -	- 0 0 - -
Stage 2	725	0 - -	- 0 0 - -
Platoon blocked, %			- - -
Mov Cap-1 Maneuver	~ 47	0 620 1170	- - - - -
Mov Cap-2 Maneuver	~ 47	0 - -	- - - - -
Stage 1	~ 110	0 - -	- - - - -
Stage 2	725	0 - -	- - - - -

Approach	WB	NB	SB
HCM Control Delay, s	\$ 3588.6	5.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	1170	- 47 620	- -	- -
HCM Lane V/C Ratio	0.45	- 12.99 0.543	- -	- -
HCM Control Delay (s)	10.6	\$ 5558.8 17.5	- -	- -
HCM Lane LOS	B	- F C	- -	- -
HCM 95th %tile Q(veh)	2.4	- 73.6 3.3	- -	- -

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC

4: SR 559 & I-4 WB

Future 2036 NB
PM PEAK HOUR

Intersection

Int Delay, s/veh 625.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↘		↗	↘	↗			↗	↘
Traffic Vol, veh/h	0	0	0	590	0	220	300	390	0	0	360	310
Future Vol, veh/h	0	0	0	590	0	220	300	390	0	0	360	310
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	Stop	-	-	None	-	-	Yield
Storage Length	-	-	-	0	-	385	0	-	-	-	-	360
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	7	0	9	13	6	0	0	5	6
Mvmt Flow	0	0	0	621	0	232	316	411	0	0	379	326

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1422	- 411 379	0 - - - 0
Stage 1	1043	- - -	- - - - -
Stage 2	379	- - -	- - - - -
Critical Hdwy	6.47	- 6.29 4.23	- - - - -
Critical Hdwy Stg 1	5.47	- - -	- - - - -
Critical Hdwy Stg 2	5.47	- - -	- - - - -
Follow-up Hdwy	3.563	- 3.381 2.317	- - - - -
Pot Cap-1 Maneuver	~ 146	0 626 1122	- 0 0 - -
Stage 1	~ 332	0 - -	- 0 0 - -
Stage 2	681	0 - -	- 0 0 - -
Platoon blocked, %			- - -
Mov Cap-1 Maneuver	~ 105	0 626 1122	- - - - -
Mov Cap-2 Maneuver	~ 105	0 - -	- - - - -
Stage 1	~ 238	0 - -	- - - - -
Stage 2	681	0 - -	- - - - -

Approach	WB	NB	SB
HCM Control Delay, s	\$ 1672.9	4.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBTWBLn1WBLn2	SBT	SBR
Capacity (veh/h)	1122	- 105 626	- -	-
HCM Lane V/C Ratio	0.281	- 5.915 0.37	- -	-
HCM Control Delay (s)	9.5	\$ 2291.5 14.1	- -	-
HCM Lane LOS	A	- F B	- -	-
HCM 95th %tile Q(veh)	1.2	- 67.9 1.7	- -	-

Notes

-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes, Volumes, Timings 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2026 Build
AM PEAK HOUR



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	250	30	50	30	20	200	70	390	60	160	290	320
Future Volume (vph)	250	30	50	30	20	200	70	390	60	160	290	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	590		0	0		0	250		250	430		280
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	50			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1671	1583	1583	1805	1583	1272	1770	3438	1583	1280	3406	1538
Flt Permitted	0.744			0.736			0.566			0.511		
Satd. Flow (perm)	1309	1583	1583	1398	1583	1272	1054	3438	1583	689	3406	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			118			211			128			337
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6284			182			439			1636	
Travel Time (s)		142.8			4.1			10.0			37.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	8%	20%	2%	0%	20%	27%	2%	5%	2%	41%	6%	5%
Adj. Flow (vph)	263	32	53	32	21	211	74	411	63	168	305	337
Shared Lane Traffic (%)												
Lane Group Flow (vph)	263	32	53	32	21	211	74	411	63	168	305	337
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)		24			12			24			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		40			40			50			40	
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	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	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	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	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	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	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	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	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	Perm	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	Perm
Protected Phases		8			4			1		6		5
												2

Lanes, Volumes, Timings
 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2026 Build
 AM PEAK HOUR

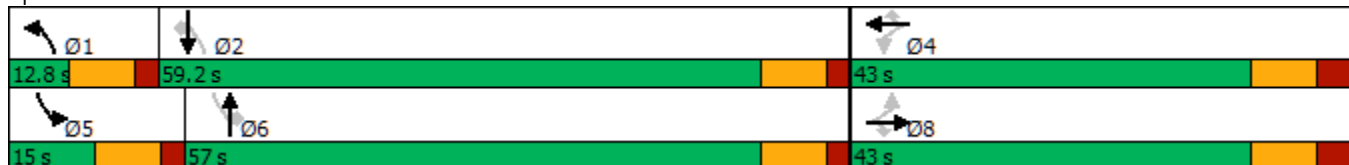


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8		8	4		4	2		6	6		2
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	42.8	42.8	42.8	18.8	18.8	18.8	12.7	54.7	54.7	12.7	34.7	34.7
Total Split (s)	43.0	43.0	43.0	43.0	43.0	43.0	12.8	57.0	57.0	15.0	59.2	59.2
Total Split (%)	37.4%	37.4%	37.4%	37.4%	37.4%	37.4%	11.1%	49.6%	49.6%	13.0%	51.5%	51.5%
Maximum Green (s)	34.2	34.2	34.2	34.2	34.2	34.2	5.1	49.3	49.3	7.3	51.5	51.5
Yellow Time (s)	5.8	5.8	5.8	5.8	5.8	5.8	5.7	5.7	5.7	5.7	5.7	5.7
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.8	8.8	8.8	8.8	8.8	8.8	7.7	7.7	7.7	7.7	7.7	7.7
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0	7.0		7.0	7.0
Flash Dont Walk (s)	27.0	27.0	27.0					40.0	40.0		20.0	20.0
Pedestrian Calls (#/hr)	0	0	0					0	0		0	0
Act Effct Green (s)	18.3	18.3	18.3	18.3	18.3	18.3	23.9	14.6	14.6	22.0	20.0	20.0
Actuated g/C Ratio	0.28	0.28	0.28	0.28	0.28	0.28	0.37	0.22	0.22	0.34	0.31	0.31
v/c Ratio	0.71	0.07	0.10	0.08	0.05	0.41	0.17	0.53	0.14	0.56	0.29	0.48
Control Delay	33.0	17.7	0.4	17.9	17.4	5.7	12.9	25.7	0.8	22.1	20.6	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.0	17.7	0.4	17.9	17.4	5.7	12.9	25.7	0.8	22.1	20.6	5.4
LOS	C	B	A	B	B	A	B	C	A	C	C	A
Approach Delay		26.6			8.1			21.1			14.6	
Approach LOS		C			A			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 115
 Actuated Cycle Length: 65.1
 Natural Cycle: 115
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 17.7
 Intersection LOS: B
 Intersection Capacity Utilization 60.3%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD



HCM 6th Signalized Intersection Summary

2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2026 Build
AM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗	↖	↑↑	↗	↖	↑↑	↗
Traffic Volume (veh/h)	250	30	50	30	20	200	70	390	60	160	290	320
Future Volume (veh/h)	250	30	50	30	20	200	70	390	60	160	290	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1604	1870	1900	1604	1500	1870	1826	1870	1292	1811	1826
Adj Flow Rate, veh/h	263	32	53	32	21	211	74	411	63	168	305	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	20	2	0	20	27	2	5	2	41	6	5
Cap, veh/h	426	468	462	487	468	371	417	673	307	319	877	
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.06	0.19	0.19	0.12	0.25	0.00
Sat Flow, veh/h	1094	1604	1585	1333	1604	1271	1781	3469	1585	1231	3441	1547
Grp Volume(v), veh/h	263	32	53	32	21	211	74	411	63	168	305	0
Grp Sat Flow(s),veh/h/ln	1094	1604	1585	1333	1604	1271	1781	1735	1585	1231	1721	1547
Q Serve(g_s), s	13.9	0.9	1.5	1.1	0.6	8.6	1.8	6.6	2.0	6.6	4.4	0.0
Cycle Q Clear(g_c), s	14.5	0.9	1.5	2.0	0.6	8.6	1.8	6.6	2.0	6.6	4.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	426	468	462	487	468	371	417	673	307	319	877	
V/C Ratio(X)	0.62	0.07	0.11	0.07	0.04	0.57	0.18	0.61	0.20	0.53	0.35	
Avail Cap(c_a), veh/h	718	896	885	843	896	710	462	2793	1276	319	2894	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.8	15.7	15.9	16.4	15.6	18.4	15.2	22.6	20.7	17.2	18.7	0.0
Incr Delay (d2), s/veh	1.5	0.1	0.1	0.1	0.0	1.4	0.2	0.9	0.3	1.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.1	0.6	0.9	0.6	0.4	4.4	1.3	4.7	1.3	3.3	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.2	15.7	16.0	16.4	15.6	19.8	15.4	23.5	21.0	18.8	18.9	0.0
LnGrp LOS	C	B	B	B	B	B	B	C	C	B	B	
Approach Vol, veh/h		348			264			548			473	A
Approach Delay, s/veh		20.7			19.1			22.1			18.9	
Approach LOS		C			B			C			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.3	23.3		26.7	15.0	19.6		26.7				
Change Period (Y+Rc), s	7.7	7.7		8.8	7.7	7.7		8.8				
Max Green Setting (Gmax), s	5.1	51.5		34.2	7.3	49.3		34.2				
Max Q Clear Time (g_c+I1), s	3.8	6.4		10.6	8.6	8.6		16.5				
Green Ext Time (p_c), s	0.0	2.2		0.9	0.0	3.2		1.4				

Intersection Summary

HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2026 Build
PM PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	260	50	70	40	30	190	60	310	40	200	450	340
Future Volume (vph)	260	50	70	40	30	190	60	310	40	200	450	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	590		0	0		0	250		250	430		280
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	50			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850				0.850			0.850		0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1610	1615	1736	1712	1324	1805	3471	1568	1378	3539	1568
Flt Permitted	0.736			0.722			0.481			0.555		
Satd. Flow (perm)	1332	1610	1615	1319	1712	1324	914	3471	1568	805	3539	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			118			200			128			358
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6284			182			439			1636	
Travel Time (s)		142.8			4.1			10.0			37.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	18%	0%	4%	11%	22%	0%	4%	3%	31%	2%	3%
Adj. Flow (vph)	274	53	74	42	32	200	63	326	42	211	474	358
Shared Lane Traffic (%)												
Lane Group Flow (vph)	274	53	74	42	32	200	63	326	42	211	474	358
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)		24			12			24			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		40			40			50			40	
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	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	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	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	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	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	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	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	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	Perm	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	Perm
Protected Phases		8			4			1		6		2

Lanes, Volumes, Timings
 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2026 Build
 PM PEAK HOUR



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8		8	4		4	2		6	6		2
Detector Phase	8	8	8	4	4	4	1	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	5.0	10.0	10.0
Minimum Split (s)	42.8	42.8	42.8	18.8	18.8	18.8	12.7	54.7	54.7	12.7	34.7	34.7
Total Split (s)	43.0	43.0	43.0	43.0	43.0	43.0	12.8	56.0	56.0	16.0	59.2	59.2
Total Split (%)	37.4%	37.4%	37.4%	37.4%	37.4%	37.4%	11.1%	48.7%	48.7%	13.9%	51.5%	51.5%
Maximum Green (s)	34.2	34.2	34.2	34.2	34.2	34.2	5.1	48.3	48.3	8.3	51.5	51.5
Yellow Time (s)	5.8	5.8	5.8	5.8	5.8	5.8	5.7	5.7	5.7	5.7	5.7	5.7
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.8	8.8	8.8	8.8	8.8	8.8	7.7	7.7	7.7	7.7	7.7	7.7
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0	7.0		7.0	7.0
Flash Dont Walk (s)	27.0	27.0	27.0					40.0	40.0		20.0	20.0
Pedestrian Calls (#/hr)	0	0	0					0	0		0	0
Act Effct Green (s)	19.4	19.4	19.4	19.4	19.4	19.4	25.3	14.9	14.9	23.4	21.4	21.4
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.29	0.37	0.22	0.22	0.35	0.32	0.32
v/c Ratio	0.72	0.11	0.14	0.11	0.07	0.38	0.15	0.43	0.09	0.60	0.42	0.48
Control Delay	33.4	18.6	1.8	18.8	18.1	5.5	13.2	25.3	0.4	23.1	22.0	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.4	18.6	1.8	18.8	18.1	5.5	13.2	25.3	0.4	23.1	22.0	5.2
LOS	C	B	A	B	B	A	B	C	A	C	C	A
Approach Delay		25.6			9.0			21.1			16.5	
Approach LOS		C			A			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 115
 Actuated Cycle Length: 67.7
 Natural Cycle: 115
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 18.2
 Intersection LOS: B
 Intersection Capacity Utilization 60.9%
 ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD



HCM 6th Signalized Intersection Summary

2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2026 Build
PM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	50	70	40	30	190	60	310	40	200	450	340
Future Volume (veh/h)	260	50	70	40	30	190	60	310	40	200	450	340
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1633	1900	1841	1737	1574	1900	1841	1856	1441	1870	1856
Adj Flow Rate, veh/h	274	53	74	42	32	200	63	326	42	211	474	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	18	0	4	11	22	0	4	3	31	2	3
Cap, veh/h	442	493	486	464	524	402	338	575	258	367	877	
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.05	0.16	0.16	0.14	0.25	0.00
Sat Flow, veh/h	1121	1633	1610	1244	1737	1334	1810	3497	1572	1372	3554	1572
Grp Volume(v), veh/h	274	53	74	42	32	200	63	326	42	211	474	0
Grp Sat Flow(s),veh/h/ln	1121	1633	1610	1244	1737	1334	1810	1749	1572	1372	1777	1572
Q Serve(g_s), s	14.0	1.4	2.0	1.5	0.8	7.5	1.5	5.2	1.4	7.7	7.1	0.0
Cycle Q Clear(g_c), s	14.8	1.4	2.0	3.0	0.8	7.5	1.5	5.2	1.4	7.7	7.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	442	493	486	464	524	402	338	575	258	367	877	
V/C Ratio(X)	0.62	0.11	0.15	0.09	0.06	0.50	0.19	0.57	0.16	0.58	0.54	
Avail Cap(c_a), veh/h	734	918	905	788	976	750	392	2776	1248	367	3007	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.4	15.3	15.6	16.4	15.1	17.5	15.9	23.4	21.8	17.9	19.9	0.0
Incr Delay (d2), s/veh	1.4	0.1	0.1	0.1	0.0	1.0	0.3	0.9	0.3	2.2	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.3	0.9	1.3	0.7	0.5	4.0	1.1	3.8	0.9	4.4	5.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	15.4	15.7	16.5	15.2	18.4	16.1	24.3	22.1	20.1	20.4	0.0
LnGrp LOS	C	B	B	B	B	B	B	C	C	C	C	
Approach Vol, veh/h		401			274			431			685	A
Approach Delay, s/veh		19.8			17.7			22.9			20.3	
Approach LOS		B			B			C			C	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.0	22.7		27.2	16.0	17.7		27.2				
Change Period (Y+Rc), s	7.7	7.7		8.8	7.7	7.7		8.8				
Max Green Setting (Gmax), s	5.1	51.5		34.2	8.3	48.3		34.2				
Max Q Clear Time (g_c+I1), s	3.5	9.1		9.5	9.7	7.2		16.8				
Green Ext Time (p_c), s	0.0	3.6		1.0	0.0	2.5		1.6				

Intersection Summary


















HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
3: SR 559 & I-4 EB

Future 2026 Build
AM PEAK HOUR

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	0	250	0	0	0	0	430	410	70	520	0
Future Volume (vph)	160	0	250	0	0	0	0	430	410	70	520	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	450		0
Storage Lanes	0		0	0		0	0		1	1		0
Taper Length (ft)	20			25			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.918							0.850			
Flt Protected		0.981								0.950		
Satd. Flow (prot)	0	1448	0	0	0	0	0	3167	1429	1612	3312	0
Flt Permitted		0.981								0.491		
Satd. Flow (perm)	0	1448	0	0	0	0	0	3167	1429	833	3312	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)									432			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1328			1315			1636			734	
Travel Time (s)		30.2			29.9			37.2			16.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	9%	0%	24%	0%	0%	0%	0%	14%	13%	12%	9%	0%
Adj. Flow (vph)	168	0	263	0	0	0	0	453	432	74	547	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	431	0	0	0	0	0	453	432	74	547	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			30			42	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			0			80	
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						2	1	1	2	
Detector Template	Left	Thru						Thru	Right	Left	Thru	
Leading Detector (ft)	20	100						100	20	20	100	
Trailing Detector (ft)	0	0						0	0	0	0	
Detector 1 Position(ft)	0	0						0	0	0	0	
Detector 1 Size(ft)	20	6						6	20	20	6	
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			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	Split	NA						NA	Perm	Perm	NA	
Protected Phases	8	8						6			2	

Lanes, Volumes, Timings
3: SR 559 & I-4 EB

Future 2026 Build
AM PEAK HOUR

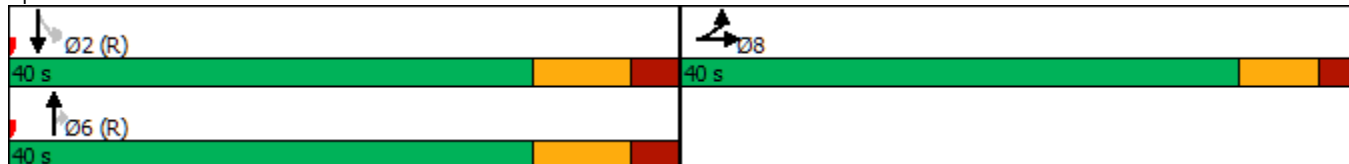


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases									6	2		
Detector Phase	8	8						6	6	2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0						10.0	10.0	10.0	10.0	
Minimum Split (s)	11.8	11.8						39.8	39.8	39.8	39.8	
Total Split (s)	40.0	40.0						40.0	40.0	40.0	40.0	
Total Split (%)	50.0%	50.0%						50.0%	50.0%	50.0%	50.0%	
Maximum Green (s)	33.2	33.2						31.2	31.2	31.2	31.2	
Yellow Time (s)	4.8	4.8						5.8	5.8	5.8	5.8	
All-Red Time (s)	2.0	2.0						3.0	3.0	3.0	3.0	
Lost Time Adjust (s)		0.0						0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.8						8.8	8.8	8.8	8.8	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Recall Mode	None	None						C-Max	C-Max	C-Max	C-Max	
Walk Time (s)								7.0	7.0	7.0	7.0	
Flash Dont Walk (s)								24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)								0	0	0	0	
Act Effct Green (s)		28.2						36.2	36.2	36.2	36.2	
Actuated g/C Ratio		0.35						0.45	0.45	0.45	0.45	
v/c Ratio		0.85						0.32	0.49	0.20	0.36	
Control Delay		39.4						15.9	4.0	8.4	7.9	
Queue Delay		0.0						0.0	0.0	0.0	0.0	
Total Delay		39.4						15.9	4.0	8.4	7.9	
LOS		D						B	A	A	A	
Approach Delay		39.4						10.1			8.0	
Approach LOS		D						B			A	

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 36 (45%), Referenced to phase 2:SBTL and 6:NBT, Start of Green
 Natural Cycle: 70
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 15.9
 Intersection LOS: B
 Intersection Capacity Utilization 78.3%
 ICU Level of Service D
 Analysis Period (min) 15



















Splits and Phases: 3: SR 559 & I-4 EB



HCM 6th Signalized Intersection Summary

3: SR 559 & I-4 EB

Future 2026 Build
AM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	0	250	0	0	0	0	430	410	70	520	0
Future Volume (veh/h)	160	0	250	0	0	0	0	430	410	70	520	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1767	1900	1544				0	1693	1707	1722	1767	0
Adj Flow Rate, veh/h	168	0	263				0	453	0	74	547	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	0	24				0	14	13	12	9	0
Cap, veh/h	194	0	304				0	1638		460	1710	0
Arrive On Green	0.30	0.00	0.30				0.00	0.51	0.00	1.00	1.00	0.00
Sat Flow, veh/h	656	0	1027				0	3300	1447	864	3445	0
Grp Volume(v), veh/h	431	0	0				0	453	0	74	547	0
Grp Sat Flow(s),veh/h/ln	1682	0	0				0	1608	1447	864	1678	0
Q Serve(g_s), s	19.4	0.0	0.0				0.0	6.4	0.0	1.3	0.0	0.0
Cycle Q Clear(g_c), s	19.4	0.0	0.0				0.0	6.4	0.0	7.7	0.0	0.0
Prop In Lane	0.39		0.61				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	497	0	0				0	1638		460	1710	0
V/C Ratio(X)	0.87	0.00	0.00				0.00	0.28		0.16	0.32	0.00
Avail Cap(c_a), veh/h	698	0	0				0	1638		460	1710	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.81	0.00	0.76	0.76	0.00
Uniform Delay (d), s/veh	26.7	0.0	0.0				0.0	11.2	0.0	0.6	0.0	0.0
Incr Delay (d2), s/veh	8.3	0.0	0.0				0.0	0.3	0.0	0.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	13.3	0.0	0.0				0.0	3.9	0.0	0.1	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.9	0.0	0.0				0.0	11.5	0.0	1.2	0.4	0.0
LnGrp LOS	C	A	A				A	B		A	A	A
Approach Vol, veh/h		431						453	A		621	
Approach Delay, s/veh		34.9						11.5			0.5	
Approach LOS		C						B			A	
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		49.5				49.5		30.5				
Change Period (Y+Rc), s		8.8				8.8		6.8				
Max Green Setting (Gmax), s		31.2				31.2		33.2				
Max Q Clear Time (g_c+I1), s		9.7				8.4		21.4				
Green Ext Time (p_c), s		4.2				3.1		2.2				

Intersection Summary


















HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
3: SR 559 & I-4 EB

Future 2026 Build
PM PEAK HOUR

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	0	420	0	0	0	0	380	380	80	570	0
Future Volume (vph)	110	0	420	0	0	0	0	380	380	80	570	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	450		0
Storage Lanes	0		0	0		0	0		1	1		0
Taper Length (ft)	20			25			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.893							0.850			
Flt Protected		0.990								0.950		
Satd. Flow (prot)	0	1542	0	0	0	0	0	3312	1429	1805	3406	0
Flt Permitted		0.990								0.516		
Satd. Flow (perm)	0	1542	0	0	0	0	0	3312	1429	980	3406	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)									400			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1328			1315			1636			734	
Travel Time (s)		30.2			29.9			37.2			16.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	0%	10%	0%	0%	0%	0%	9%	13%	0%	6%	0%
Adj. Flow (vph)	116	0	442	0	0	0	0	400	400	84	600	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	558	0	0	0	0	0	400	400	84	600	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			30			42	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			0			80	
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						2	1	1	2	
Detector Template	Left	Thru						Thru	Right	Left	Thru	
Leading Detector (ft)	20	100						100	20	20	100	
Trailing Detector (ft)	0	0						0	0	0	0	
Detector 1 Position(ft)	0	0						0	0	0	0	
Detector 1 Size(ft)	20	6						6	20	20	6	
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			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	Split	NA						NA	Perm	Perm	NA	
Protected Phases	8	8						6			2	

Lanes, Volumes, Timings
3: SR 559 & I-4 EB

Future 2026 Build
PM PEAK HOUR

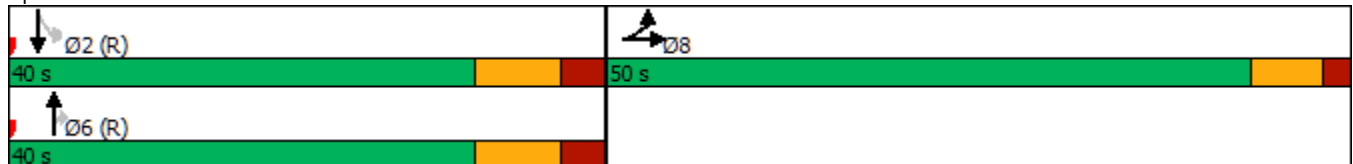


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases									6	2		
Detector Phase	8	8						6	6	2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0						10.0	10.0	10.0	10.0	
Minimum Split (s)	11.8	11.8						39.8	39.8	39.8	39.8	
Total Split (s)	50.0	50.0						40.0	40.0	40.0	40.0	
Total Split (%)	55.6%	55.6%						44.4%	44.4%	44.4%	44.4%	
Maximum Green (s)	43.2	43.2						31.2	31.2	31.2	31.2	
Yellow Time (s)	4.8	4.8						5.8	5.8	5.8	5.8	
All-Red Time (s)	2.0	2.0						3.0	3.0	3.0	3.0	
Lost Time Adjust (s)		0.0						0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.8						8.8	8.8	8.8	8.8	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Recall Mode	None	None						C-Max	C-Max	C-Max	C-Max	
Walk Time (s)								7.0	7.0	7.0	7.0	
Flash Dont Walk (s)								24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)								0	0	0	0	
Act Effct Green (s)		37.8						36.6	36.6	36.6	36.6	
Actuated g/C Ratio		0.42						0.41	0.41	0.41	0.41	
v/c Ratio		0.86						0.30	0.49	0.21	0.43	
Control Delay		37.6						20.1	4.6	14.8	14.4	
Queue Delay		0.0						0.0	0.0	0.0	0.0	
Total Delay		37.6						20.1	4.6	14.8	14.4	
LOS		D						C	A	B	B	
Approach Delay		37.6						12.3			14.4	
Approach LOS		D						B			B	

Intersection Summary


















Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 80 (89%), Referenced to phase 2:SBTL and 6:NBT, Start of Green
 Natural Cycle: 80
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.86
 Intersection Signal Delay: 20.0
 Intersection LOS: B
 Intersection Capacity Utilization 84.2%
 ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 3: SR 559 & I-4 EB



HCM 6th Signalized Intersection Summary 3: SR 559 & I-4 EB

Future 2026 Build
PM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	0	420	0	0	0	0	380	380	80	570	0
Future Volume (veh/h)	110	0	420	0	0	0	0	380	380	80	570	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1752				0	1767	1707	1900	1811	0
Adj Flow Rate, veh/h	116	0	442				0	400	0	84	600	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	0	10				0	9	13	0	6	0
Cap, veh/h	129	0	492				0	1509		455	1547	0
Arrive On Green	0.38	0.00	0.38				0.00	0.45	0.00	0.30	0.30	0.00
Sat Flow, veh/h	343	0	1305				0	3445	1447	1000	3532	0
Grp Volume(v), veh/h	558	0	0				0	400	0	84	600	0
Grp Sat Flow(s),veh/h/ln	1648	0	0				0	1678	1447	1000	1721	0
Q Serve(g_s), s	28.7	0.0	0.0				0.0	6.7	0.0	6.0	12.4	0.0
Cycle Q Clear(g_c), s	28.7	0.0	0.0				0.0	6.7	0.0	12.7	12.4	0.0
Prop In Lane	0.21		0.79				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	622	0	0				0	1509		455	1547	0
V/C Ratio(X)	0.90	0.00	0.00				0.00	0.27		0.18	0.39	0.00
Avail Cap(c_a), veh/h	791	0	0				0	1509		455	1547	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	0.67	0.67	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.85	0.00	0.76	0.76	0.00
Uniform Delay (d), s/veh	26.4	0.0	0.0				0.0	15.5	0.0	24.4	21.7	0.0
Incr Delay (d2), s/veh	11.0	0.0	0.0				0.0	0.4	0.0	0.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	18.4	0.0	0.0				0.0	4.6	0.0	2.8	8.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.4	0.0	0.0				0.0	15.8	0.0	25.1	22.2	0.0
LnGrp LOS	D	A	A				A	B		C	C	A
Approach Vol, veh/h		558						400	A		684	
Approach Delay, s/veh		37.4						15.8			22.6	
Approach LOS		D						B			C	
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		49.3				49.3		40.7				
Change Period (Y+Rc), s		8.8				8.8		6.8				
Max Green Setting (Gmax), s		31.2				31.2		43.2				
Max Q Clear Time (g_c+I1), s		14.7				8.7		30.7				
Green Ext Time (p_c), s		4.2				2.7		3.2				

Intersection Summary



















HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
4: SR 559 & I-4 WB

Future 2026 Build
AM PEAK HOUR

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	350	0	150	350	240	0	0	240	160
Future Volume (vph)	0	0	0	350	0	150	350	240	0	0	240	160
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		385	0		0	0		360
Storage Lanes	0		0	1		1	1		0	0		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	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1612	0	1495	1530	1696	0	0	1776	1468
Flt Permitted				0.950			0.602					
Satd. Flow (perm)	0	0	0	1612	0	1495	969	1696	0	0	1776	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						158						168
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1813			1673			734			1796	
Travel Time (s)		41.2			38.0			16.7			40.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	12%	0%	8%	18%	12%	0%	0%	7%	10%
Adj. Flow (vph)	0	0	0	368	0	158	368	253	0	0	253	168
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	368	0	158	368	253	0	0	253	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)		12			12			42			40	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			30			40			0	
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		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	Perm	NA			NA	custom
Protected Phases				7				6			2	

Lanes, Volumes, Timings
4: SR 559 & I-4 WB

Future 2026 Build
AM PEAK HOUR

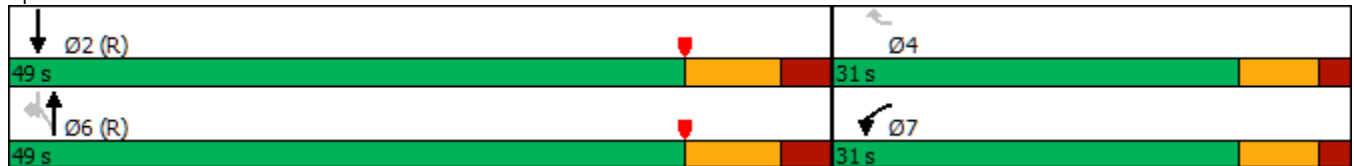


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						4	6					6
Detector Phase				7		4	6	6			2	6
Switch Phase												
Minimum Initial (s)				5.0		5.0	10.0	10.0			10.0	10.0
Minimum Split (s)				11.8		24.8	39.8	39.8			39.8	39.8
Total Split (s)				31.0		31.0	49.0	49.0			49.0	49.0
Total Split (%)				38.8%		38.8%	61.3%	61.3%			61.3%	61.3%
Maximum Green (s)				24.2		24.2	40.2	40.2			40.2	40.2
Yellow Time (s)				4.8		4.8	5.8	5.8			5.8	5.8
All-Red Time (s)				2.0		2.0	3.0	3.0			3.0	3.0
Lost Time Adjust (s)				0.0		0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				6.8		6.8	8.8	8.8			8.8	8.8
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Recall Mode				None		None	C-Max	C-Max			C-Max	C-Max
Walk Time (s)							7.0	7.0			7.0	7.0
Flash Dont Walk (s)							24.0	24.0			24.0	24.0
Pedestrian Calls (#/hr)							0	0			0	0
Act Effct Green (s)				21.7		21.7	42.7	42.7			42.7	42.7
Actuated g/C Ratio				0.27		0.27	0.53	0.53			0.53	0.53
v/c Ratio				0.84		0.30	0.71	0.28			0.27	0.20
Control Delay				45.5		5.5	17.6	6.0			11.8	2.5
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0
Total Delay				45.5		5.5	17.6	6.0			11.8	2.5
LOS				D		A	B	A			B	A
Approach Delay					33.5			12.9			8.1	
Approach LOS					C			B			A	

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Yellow
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.84
 Intersection Signal Delay: 18.5 Intersection LOS: B
 Intersection Capacity Utilization 78.3% ICU Level of Service D
 Analysis Period (min) 15



















Splits and Phases: 4: SR 559 & I-4 WB



HCM 6th Signalized Intersection Summary



















4: SR 559 & I-4 WB

Future 2026 Build
AM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	350	0	150	350	240	0	0	240	160
Future Volume (veh/h)	0	0	0	350	0	150	350	240	0	0	240	160
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1722	0	1781	1633	1722	0	0	1796	1752
Adj Flow Rate, veh/h				368	0	0	368	253	0	0	253	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				12	0	8	18	12	0	0	7	10
Cap, veh/h				408	0		565	957	0	0	999	
Arrive On Green				0.25	0.00	0.00	0.93	0.93	0.00	0.00	0.56	0.00
Sat Flow, veh/h				1640	0	1510	984	1722	0	0	1796	1485
Grp Volume(v), veh/h				368	0	0	368	253	0	0	253	0
Grp Sat Flow(s),veh/h/ln				1640	0	1510	984	1722	0	0	1796	1485
Q Serve(g_s), s				17.4	0.0	0.0	15.4	1.1	0.0	0.0	5.8	0.0
Cycle Q Clear(g_c), s				17.4	0.0	0.0	21.2	1.1	0.0	0.0	5.8	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				408	0		565	957	0	0	999	
V/C Ratio(X)				0.90	0.00		0.65	0.26	0.00	0.00	0.25	
Avail Cap(c_a), veh/h				496	0		565	957	0	0	999	
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.96	0.96	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				29.1	0.0	0.0	3.5	1.3	0.0	0.0	9.2	0.0
Incr Delay (d2), s/veh				17.2	0.0	0.0	5.5	0.6	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				13.3	0.0	0.0	2.5	0.8	0.0	0.0	4.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				46.3	0.0	0.0	9.0	2.0	0.0	0.0	9.8	0.0
LnGrp LOS				D	A		A	A	A	A	A	
Approach Vol, veh/h					368	A		621			253	A
Approach Delay, s/veh					46.3			6.1			9.8	
Approach LOS					D			A			A	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		53.3		26.7		53.3						
Change Period (Y+Rc), s		8.8		6.8		8.8						
Max Green Setting (Gmax), s		40.2		24.2		40.2						
Max Q Clear Time (g_c+I1), s		7.8		19.4		23.2						
Green Ext Time (p_c), s		1.6		0.5		3.3						
Intersection Summary												
HCM 6th Ctrl Delay				18.8								
HCM 6th LOS				B								
Notes												
Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

Lanes, Volumes, Timings
4: SR 559 & I-4 WB

Future 2026 Build
PM PEAK HOUR

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	400	0	110	220	270	0	0	250	150
Future Volume (vph)	0	0	0	400	0	110	220	270	0	0	250	150
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		385	0		0	0		360
Storage Lanes	0		0	1		1	1		0	0		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	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1687	0	1482	1597	1792	0	0	1810	1524
Flt Permitted				0.950			0.597					
Satd. Flow (perm)	0	0	0	1687	0	1482	1004	1792	0	0	1810	1524
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						116						158
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1813			1673			734				1796
Travel Time (s)		41.2			38.0			16.7				40.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	7%	0%	9%	13%	6%	0%	0%	5%	6%
Adj. Flow (vph)	0	0	0	421	0	116	232	284	0	0	263	158
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	421	0	116	232	284	0	0	263	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			42				40
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			30			40				0
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		1	1	2				2
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	Perm	NA			NA	Perm
Protected Phases				7				6			2	

Lanes, Volumes, Timings
4: SR 559 & I-4 WB

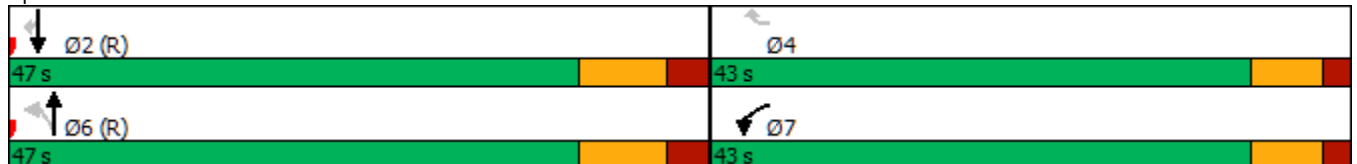
Future 2026 Build
PM PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						4	6					2
Detector Phase				7		4	6	6			2	2
Switch Phase												
Minimum Initial (s)				5.0		5.0	10.0	10.0			10.0	10.0
Minimum Split (s)				11.8		24.8	39.8	39.8			39.8	39.8
Total Split (s)				43.0		43.0	47.0	47.0			47.0	47.0
Total Split (%)				47.8%		47.8%	52.2%	52.2%			52.2%	52.2%
Maximum Green (s)				36.2		36.2	38.2	38.2			38.2	38.2
Yellow Time (s)				4.8		4.8	5.8	5.8			5.8	5.8
All-Red Time (s)				2.0		2.0	3.0	3.0			3.0	3.0
Lost Time Adjust (s)				0.0		0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				6.8		6.8	8.8	8.8			8.8	8.8
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Recall Mode				None		None	C-Max	C-Max			C-Max	C-Max
Walk Time (s)							7.0	7.0			7.0	7.0
Flash Dont Walk (s)							24.0	24.0			24.0	24.0
Pedestrian Calls (#/hr)							0	0			0	0
Act Effct Green (s)				27.9		27.9	46.5	46.5			46.5	46.5
Actuated g/C Ratio				0.31		0.31	0.52	0.52			0.52	0.52
v/c Ratio				0.81		0.22	0.45	0.31			0.28	0.18
Control Delay				40.3		4.7	9.1	5.6			14.8	3.2
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0
Total Delay				40.3		4.7	9.1	5.6			14.8	3.2
LOS				D		A	A	A			B	A
Approach Delay					32.6			7.2			10.5	
Approach LOS					C			A			B	

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 0 (0%), Referenced to phase 2:SBT and 6:NBTL, Start of Green
 Natural Cycle: 65
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 17.4 Intersection LOS: B
 Intersection Capacity Utilization 84.2% ICU Level of Service E
 Analysis Period (min) 15

Splits and Phases: 4: SR 559 & I-4 WB



HCM 6th Signalized Intersection Summary

4: SR 559 & I-4 WB

Future 2026 Build
PM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖		↖	↖	↖			↖	↖
Traffic Volume (veh/h)	0	0	0	400	0	110	220	270	0	0	250	150
Future Volume (veh/h)	0	0	0	400	0	110	220	270	0	0	250	150
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1796	0	1767	1707	1811	0	0	1826	1811
Adj Flow Rate, veh/h				421	0	0	232	284	0	0	263	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				7	0	9	13	6	0	0	5	6
Cap, veh/h				466	0		568	1004	0	0	1012	
Arrive On Green				0.27	0.00	0.00	1.00	1.00	0.00	0.00	0.55	0.00
Sat Flow, veh/h				1711	0	1497	1019	1811	0	0	1826	1535
Grp Volume(v), veh/h				421	0	0	232	284	0	0	263	0
Grp Sat Flow(s),veh/h/ln				1711	0	1497	1019	1811	0	0	1826	1535
Q Serve(g_s), s				21.4	0.0	0.0	4.7	0.0	0.0	0.0	6.7	0.0
Cycle Q Clear(g_c), s				21.4	0.0	0.0	11.5	0.0	0.0	0.0	6.7	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				466	0		568	1004	0	0	1012	
V/C Ratio(X)				0.90	0.00		0.41	0.28	0.00	0.00	0.26	
Avail Cap(c_a), veh/h				688	0		568	1004	0	0	1012	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.96	0.96	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				31.6	0.0	0.0	0.8	0.0	0.0	0.0	10.4	0.0
Incr Delay (d2), s/veh				11.3	0.0	0.0	2.1	0.7	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				15.2	0.0	0.0	0.6	0.3	0.0	0.0	4.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				42.9	0.0	0.0	2.9	0.7	0.0	0.0	11.1	0.0
LnGrp LOS				D	A		A	A	A	A	B	
Approach Vol, veh/h					421	A		516			263	A
Approach Delay, s/veh					42.9			1.7			11.1	
Approach LOS					D			A			B	
Timer - Assigned Phs		2		4		6						
Phs Duration (G+Y+Rc), s		58.7		31.3		58.7						
Change Period (Y+Rc), s		8.8		6.8		8.8						
Max Green Setting (Gmax), s		38.2		36.2		38.2						
Max Q Clear Time (g_c+I1), s		8.7		23.4		13.5						
Green Ext Time (p_c), s		1.6		1.1		2.9						

Intersection Summary

HCM 6th Ctrl Delay	18.2
HCM 6th LOS	B

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2036 Build
 AM PEAK HOUR



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	360	50	60	60	40	420	70	490	90	280	430	420
Future Volume (vph)	360	50	60	60	40	420	70	490	90	280	430	420
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	590		0	0		0	250		250	430		280
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	50			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1671	1583	1583	1805	1583	1272	1770	3438	1583	1280	3406	1538
Flt Permitted	0.730			0.722			0.450			0.356		
Satd. Flow (perm)	1284	1583	1583	1372	1583	1272	838	3438	1583	480	3406	1538
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			113			381			123			442
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6284			182			439			1636	
Travel Time (s)		142.8			4.1			10.0			37.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	8%	20%	2%	0%	20%	27%	2%	5%	2%	41%	6%	5%
Adj. Flow (vph)	379	53	63	63	42	442	74	516	95	295	453	442
Shared Lane Traffic (%)												
Lane Group Flow (vph)	379	53	63	63	42	442	74	516	95	295	453	442
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)		24			12			24			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		40			40			50			40	
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	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	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	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	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	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	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	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	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	Perm	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	Perm
Protected Phases		8			4		1	6		5	2	

Lanes, Volumes, Timings
 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2036 Build
 AM PEAK HOUR

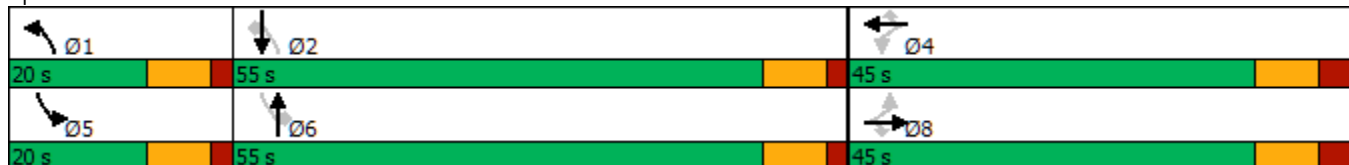


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8		8	4		4	2		6	6		2
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	42.8	42.8	42.8	18.8	18.8	18.8	12.7	54.7	54.7	12.7	34.7	34.7
Total Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	55.0	55.0	20.0	55.0	55.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%	16.7%	45.8%	45.8%	16.7%	45.8%	45.8%
Maximum Green (s)	36.2	36.2	36.2	36.2	36.2	36.2	12.3	47.3	47.3	12.3	47.3	47.3
Yellow Time (s)	5.8	5.8	5.8	5.8	5.8	5.8	5.7	5.7	5.7	5.7	5.7	5.7
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.8	8.8	8.8	8.8	8.8	8.8	7.7	7.7	7.7	7.7	7.7	7.7
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0	7.0		7.0	7.0
Flash Dont Walk (s)	27.0	27.0	27.0					40.0	40.0		20.0	20.0
Pedestrian Calls (#/hr)	0	0	0					0	0		0	0
Act Effct Green (s)	34.7	34.7	34.7	34.7	34.7	34.7	34.2	20.0	20.0	32.4	27.8	27.8
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.38	0.38	0.37	0.22	0.22	0.35	0.30	0.30
v/c Ratio	0.78	0.09	0.09	0.12	0.07	0.61	0.19	0.69	0.21	1.06	0.44	0.57
Control Delay	38.8	19.9	1.0	20.4	19.8	8.4	16.8	37.9	4.1	96.6	28.8	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.8	19.9	1.0	20.4	19.8	8.4	16.8	37.9	4.1	96.6	28.8	6.0
LOS	D	B	A	C	B	A	B	D	A	F	C	A
Approach Delay		31.9			10.7			30.9			37.1	
Approach LOS		C			B			C			D	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 91.5
 Natural Cycle: 115
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.06
 Intersection Signal Delay: 29.8
 Intersection LOS: C
 Intersection Capacity Utilization 80.6%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD



HCM 6th Signalized Intersection Summary

2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2036 Build
AM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑	↗	↘	↑	↗	↘	↑↑	↗	↘	↑↑	↗
Traffic Volume (veh/h)	360	50	60	60	40	420	70	490	90	280	430	420
Future Volume (veh/h)	360	50	60	60	40	420	70	490	90	280	430	420
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1781	1604	1870	1900	1604	1500	1870	1826	1870	1292	1811	1826
Adj Flow Rate, veh/h	379	53	63	63	42	442	74	516	95	295	453	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	20	2	0	20	27	2	5	2	41	6	5
Cap, veh/h	408	634	627	564	634	502	337	715	327	282	1012	
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.05	0.21	0.21	0.13	0.29	0.00
Sat Flow, veh/h	868	1604	1585	1296	1604	1271	1781	3469	1585	1231	3441	1547
Grp Volume(v), veh/h	379	53	63	63	42	442	74	516	95	295	453	0
Grp Sat Flow(s),veh/h/ln	868	1604	1585	1296	1604	1271	1781	1735	1585	1231	1721	1547
Q Serve(g_s), s	34.7	1.9	2.3	2.9	1.5	29.5	2.6	12.7	4.6	12.3	9.8	0.0
Cycle Q Clear(g_c), s	36.2	1.9	2.3	4.8	1.5	29.5	2.6	12.7	4.6	12.3	9.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	408	634	627	564	634	502	337	715	327	282	1012	
V/C Ratio(X)	0.93	0.08	0.10	0.11	0.07	0.88	0.22	0.72	0.29	1.05	0.45	
Avail Cap(c_a), veh/h	408	634	627	564	634	502	493	1792	819	282	1777	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.7	17.3	17.4	18.8	17.2	25.7	21.4	33.9	30.7	30.7	26.3	0.0
Incr Delay (d2), s/veh	27.7	0.1	0.1	0.1	0.0	16.3	0.3	1.4	0.5	66.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.3	1.2	1.5	1.6	1.0	16.1	2.0	9.2	3.2	12.0	7.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.4	17.4	17.5	18.9	17.2	42.0	21.7	35.3	31.2	97.2	26.6	0.0
LnGrp LOS	E	B	B	B	B	D	C	D	C	F	C	
Approach Vol, veh/h		495			547			685			748	A
Approach Delay, s/veh		48.8			37.4			33.3			54.4	
Approach LOS		D			D			C			D	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	34.6		45.0	20.0	26.6		45.0				
Change Period (Y+Rc), s	7.7	7.7		8.8	7.7	7.7		8.8				
Max Green Setting (Gmax), s	12.3	47.3		36.2	12.3	47.3		36.2				
Max Q Clear Time (g_c+I1), s	4.6	11.8		31.5	14.3	14.7		38.2				
Green Ext Time (p_c), s	0.1	3.4		1.0	0.0	4.2		0.0				

Intersection Summary

HCM 6th Ctrl Delay	43.7
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2036 Build
PM PEAK HOUR



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	50	70	70	50	380	70	410	70	340	560	440
Future Volume (vph)	330	50	70	70	50	380	70	410	70	340	560	440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	590		0	0		0	250		250	430		280
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	50			25			50			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1719	1610	1615	1736	1712	1324	1805	3471	1568	1378	3539	1568
Flt Permitted	0.722			0.722			0.359			0.459		
Satd. Flow (perm)	1306	1610	1615	1319	1712	1324	682	3471	1568	666	3539	1568
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			113			400			123			463
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		6284			182			439			1636	
Travel Time (s)		142.8			4.1			10.0			37.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	18%	0%	4%	11%	22%	0%	4%	3%	31%	2%	3%
Adj. Flow (vph)	347	53	74	74	53	400	74	432	74	358	589	463
Shared Lane Traffic (%)												
Lane Group Flow (vph)	347	53	74	74	53	400	74	432	74	358	589	463
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)		24			12			24			22	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		40			40			50			40	
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	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	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	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	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	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	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	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	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	Perm	NA	Perm	D.P+P	NA	Perm	D.P+P	NA	Perm
Protected Phases		8			4			1		6		5
												2

Lanes, Volumes, Timings
 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2036 Build
 PM PEAK HOUR

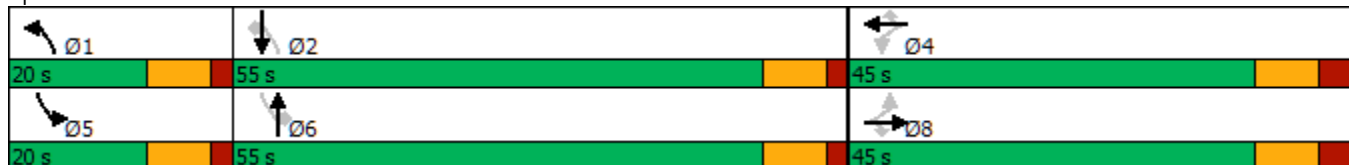


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	8		8	4		4	2		6	6		2
Detector Phase	8	8	8	4	4	4	1	6	6	5	2	2
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	42.8	42.8	42.8	18.8	18.8	18.8	12.7	54.7	54.7	12.7	34.7	34.7
Total Split (s)	45.0	45.0	45.0	45.0	45.0	45.0	20.0	55.0	55.0	20.0	55.0	55.0
Total Split (%)	37.5%	37.5%	37.5%	37.5%	37.5%	37.5%	16.7%	45.8%	45.8%	16.7%	45.8%	45.8%
Maximum Green (s)	36.2	36.2	36.2	36.2	36.2	36.2	12.3	47.3	47.3	12.3	47.3	47.3
Yellow Time (s)	5.8	5.8	5.8	5.8	5.8	5.8	5.7	5.7	5.7	5.7	5.7	5.7
All-Red Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	8.8	8.8	8.8	8.8	8.8	8.8	7.7	7.7	7.7	7.7	7.7	7.7
Lead/Lag							Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	Min	Min	None	Min	Min
Walk Time (s)	7.0	7.0	7.0					7.0	7.0		7.0	7.0
Flash Dont Walk (s)	27.0	27.0	27.0					40.0	40.0		20.0	20.0
Pedestrian Calls (#/hr)	0	0	0					0	0		0	0
Act Effct Green (s)	29.4	29.4	29.4	29.4	29.4	29.4	34.9	20.3	20.3	32.9	28.7	28.7
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.34	0.34	0.40	0.23	0.23	0.38	0.33	0.33
v/c Ratio	0.79	0.10	0.12	0.17	0.09	0.56	0.20	0.54	0.16	1.01	0.51	0.56
Control Delay	41.4	21.7	2.0	22.7	21.6	6.0	15.6	32.0	1.8	75.3	27.5	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.4	21.7	2.0	22.7	21.6	6.0	15.6	32.0	1.8	75.3	27.5	5.5
LOS	D	C	A	C	C	A	B	C	A	E	C	A
Approach Delay		33.0			9.9			26.1			32.4	
Approach LOS		C			A			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 87.2
 Natural Cycle: 115
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 1.01
 Intersection Signal Delay: 27.3
 Intersection LOS: C
 Intersection Capacity Utilization 75.3%
 ICU Level of Service D
 Analysis Period (min) 15

Splits and Phases: 2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD



HCM 6th Signalized Intersection Summary

2: SR 559 & C FRED JONES BLVD/CR 559A/BAYLAKE RESORT RD

Future 2036 Build
PM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	50	70	70	50	380	70	410	70	340	560	440
Future Volume (veh/h)	330	50	70	70	50	380	70	410	70	340	560	440
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1633	1900	1841	1737	1574	1900	1841	1856	1441	1870	1856
Adj Flow Rate, veh/h	347	53	74	74	53	400	74	432	74	358	589	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	18	0	4	11	22	0	4	3	31	2	3
Cap, veh/h	440	669	660	566	712	546	271	620	279	315	956	
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.05	0.18	0.18	0.14	0.27	0.00
Sat Flow, veh/h	916	1633	1610	1244	1737	1334	1810	3497	1572	1372	3554	1572
Grp Volume(v), veh/h	347	53	74	74	53	400	74	432	74	358	589	0
Grp Sat Flow(s),veh/h/ln	916	1633	1610	1244	1737	1334	1810	1749	1572	1372	1777	1572
Q Serve(g_s), s	32.8	1.7	2.5	3.4	1.6	22.3	2.6	10.2	3.6	12.3	12.8	0.0
Cycle Q Clear(g_c), s	34.5	1.7	2.5	5.2	1.6	22.3	2.6	10.2	3.6	12.3	12.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	440	669	660	566	712	546	271	620	279	315	956	
V/C Ratio(X)	0.79	0.08	0.11	0.13	0.07	0.73	0.27	0.70	0.27	1.14	0.62	
Avail Cap(c_a), veh/h	440	669	660	566	712	546	437	1872	842	315	1902	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.4	15.9	16.1	17.5	15.9	22.0	22.5	34.1	31.4	30.6	28.3	0.0
Incr Delay (d2), s/veh	9.4	0.0	0.1	0.1	0.0	5.0	0.5	1.4	0.5	93.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.5	1.2	1.6	1.7	1.2	11.8	2.0	7.8	2.5	16.4	9.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.7	16.0	16.2	17.6	15.9	27.0	23.1	35.6	31.9	124.0	28.9	0.0
LnGrp LOS	D	B	B	B	B	C	C	D	C	F	C	
Approach Vol, veh/h		474			527			580			947	A
Approach Delay, s/veh		30.5			24.6			33.5			64.9	
Approach LOS		C			C			C			E	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.9	31.5		45.0	20.0	23.4		45.0				
Change Period (Y+Rc), s	7.7	7.7		8.8	7.7	7.7		8.8				
Max Green Setting (Gmax), s	12.3	47.3		36.2	12.3	47.3		36.2				
Max Q Clear Time (g_c+I1), s	4.6	14.8		24.3	14.3	12.2		36.5				
Green Ext Time (p_c), s	0.1	4.5		1.7	0.0	3.4		0.0				

Intersection Summary


















HCM 6th Ctrl Delay	42.8
HCM 6th LOS	D

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
3: SR 559 & I-4 EB

Future 2036 Build
AM PEAK HOUR

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	0	380	0	0	0	0	580	690	120	750	0
Future Volume (vph)	310	0	380	0	0	0	0	580	690	120	750	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	450		0
Storage Lanes	0		0	0		0	0		1	1		0
Taper Length (ft)	20			25			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.926							0.850			
Flt Protected		0.978								0.950		
Satd. Flow (prot)	0	1467	0	0	0	0	0	3167	1429	1612	3312	0
Flt Permitted		0.978								0.332		
Satd. Flow (perm)	0	1467	0	0	0	0	0	3167	1429	563	3312	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)									726			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1328			1315			1636			734	
Travel Time (s)		30.2			29.9			37.2			16.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	9%	0%	24%	0%	0%	0%	0%	14%	13%	12%	9%	0%
Adj. Flow (vph)	326	0	400	0	0	0	0	611	726	126	789	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	726	0	0	0	0	0	611	726	126	789	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			30			42	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			0			80	
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						2	1	1	2	
Detector Template	Left	Thru						Thru	Right	Left	Thru	
Leading Detector (ft)	20	100						100	20	20	100	
Trailing Detector (ft)	0	0						0	0	0	0	
Detector 1 Position(ft)	0	0						0	0	0	0	
Detector 1 Size(ft)	20	6						6	20	20	6	
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			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	Split	NA						NA	Perm	D.Pm	NA	
Protected Phases	8	8						6			2	

Lanes, Volumes, Timings
3: SR 559 & I-4 EB

Future 2036 Build
AM PEAK HOUR

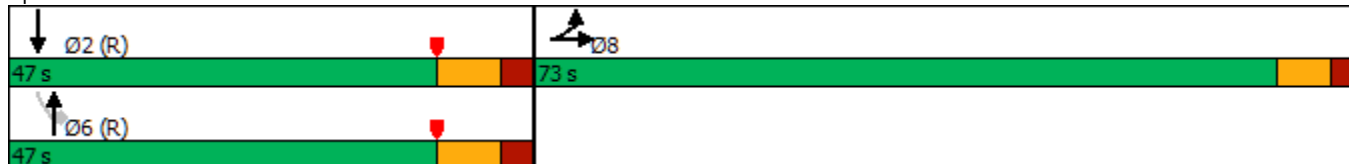


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases									6	6		
Detector Phase	8	8						6	6	6	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0						10.0	10.0	10.0	10.0	
Minimum Split (s)	11.8	11.8						39.8	39.8	39.8	39.8	
Total Split (s)	73.0	73.0						47.0	47.0	47.0	47.0	
Total Split (%)	60.8%	60.8%						39.2%	39.2%	39.2%	39.2%	
Maximum Green (s)	66.2	66.2						38.2	38.2	38.2	38.2	
Yellow Time (s)	4.8	4.8						5.8	5.8	5.8	5.8	
All-Red Time (s)	2.0	2.0						3.0	3.0	3.0	3.0	
Lost Time Adjust (s)		0.0						0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.8						8.8	8.8	8.8	8.8	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Recall Mode	None	None						C-Min	C-Min	C-Min	C-Min	
Walk Time (s)								7.0	7.0	7.0	7.0	
Flash Dont Walk (s)								24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)								0	0	0	0	
Act Effct Green (s)		63.9						40.5	40.5	40.5	40.5	
Actuated g/C Ratio		0.53						0.34	0.34	0.34	0.34	
v/c Ratio		0.93						0.57	0.75	0.66	0.71	
Control Delay		45.6						35.8	8.1	31.0	22.0	
Queue Delay		0.0						0.0	0.0	0.0	0.0	
Total Delay		45.6						35.8	8.1	31.0	22.0	
LOS		D						D	A	C	C	
Approach Delay		45.6						20.8			23.3	
Approach LOS		D						C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 100 (83%), Referenced to phase 2:SBT and 6:NBSB, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.93
 Intersection Signal Delay: 27.6
 Intersection LOS: C
 Intersection Capacity Utilization 111.9%
 ICU Level of Service H
 Analysis Period (min) 15

Splits and Phases: 3: SR 559 & I-4 EB



HCM 6th Signalized Intersection Summary 3: SR 559 & I-4 EB

Future 2036 Build
AM PEAK HOUR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	0	380	0	0	0	0	580	690	120	750	0
Future Volume (veh/h)	310	0	380	0	0	0	0	580	690	120	750	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1767	1900	1544				0	1693	1707	1722	1767	0
Adj Flow Rate, veh/h	326	0	400				0	611	0	126	789	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	0	24				0	14	13	12	9	0
Cap, veh/h	352	0	431				0	808		197	1369	0
Arrive On Green	0.46	0.00	0.46				0.00	0.25	0.00	0.17	0.82	0.00
Sat Flow, veh/h	761	0	933				0	3300	1447	1640	3445	0
Grp Volume(v), veh/h	726	0	0				0	611	0	126	789	0
Grp Sat Flow(s),veh/h/ln	1694	0	0				0	1608	1447	1640	1678	0
Q Serve(g_s), s	48.4	0.0	0.0				0.0	21.1	0.0	6.8	9.8	0.0
Cycle Q Clear(g_c), s	48.4	0.0	0.0				0.0	21.1	0.0	6.8	9.8	0.0
Prop In Lane	0.45		0.55				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	783	0	0				0	808		0	1369	0
V/C Ratio(X)	0.93	0.00	0.00				0.00	0.76		0.00	0.58	0.00
Avail Cap(c_a), veh/h	935	0	0				0	1024		0	1369	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.68	0.00	0.39	0.39	0.00
Uniform Delay (d), s/veh	30.4	0.0	0.0				0.0	41.5	0.0	0.0	7.5	0.0
Incr Delay (d2), s/veh	13.5	0.0	0.0				0.0	4.5	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	29.8	0.0	0.0				0.0	12.9	0.0	0.0	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.9	0.0	0.0				0.0	46.1	0.0	0.0	8.1	0.0
LnGrp LOS	D	A	A				A	D		A	A	A
Approach Vol, veh/h		726						611	A		915	
Approach Delay, s/veh		43.9						46.1			7.0	
Approach LOS		D						D			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		57.7			18.8	38.9		62.3				
Change Period (Y+Rc), s		8.8			8.8	8.8		6.8				
Max Green Setting (Gmax), s		38.2			38.2	38.2		66.2				
Max Q Clear Time (g_c+I1), s		11.8			8.8	23.1		50.4				
Green Ext Time (p_c), s		6.1			0.3	3.7		5.1				

Intersection Summary

HCM 6th Ctrl Delay	29.5
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
3: SR 559 & I-4 EB

Future 2036 Build
PM PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	0	560	0	0	0	0	500	620	170	780	0
Future Volume (vph)	190	0	560	0	0	0	0	500	620	170	780	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	450		0
Storage Lanes	0		0	0		0	0		1	1		0
Taper Length (ft)	20			25			25			50		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.899							0.850			
Flt Protected		0.987								0.950		
Satd. Flow (prot)	0	1550	0	0	0	0	0	3312	1429	1805	3406	0
Flt Permitted		0.987								0.418		
Satd. Flow (perm)	0	1550	0	0	0	0	0	3312	1429	794	3406	0
Right Turn on Red			No			Yes			Yes			Yes
Satd. Flow (RTOR)									653			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1328			1315			1636			734	
Travel Time (s)		30.2			29.9			37.2			16.7	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	5%	0%	10%	0%	0%	0%	0%	9%	13%	0%	6%	0%
Adj. Flow (vph)	200	0	589	0	0	0	0	526	653	179	821	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	789	0	0	0	0	0	526	653	179	821	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			30			42	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			0			80	
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						2	1	1	2	
Detector Template	Left	Thru						Thru	Right	Left	Thru	
Leading Detector (ft)	20	100						100	20	20	100	
Trailing Detector (ft)	0	0						0	0	0	0	
Detector 1 Position(ft)	0	0						0	0	0	0	
Detector 1 Size(ft)	20	6						6	20	20	6	
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			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	Split	NA						NA	Perm	Perm	NA	
Protected Phases	8	8						6			2	

Lanes, Volumes, Timings
3: SR 559 & I-4 EB

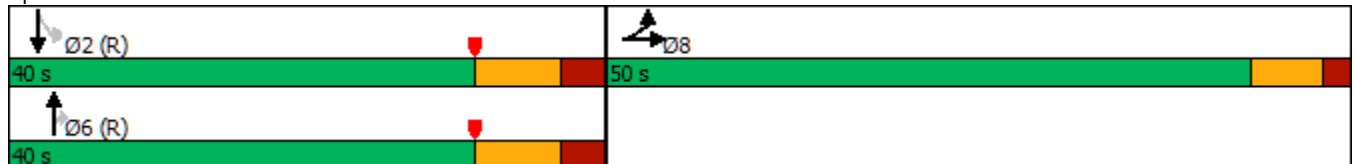
Future 2036 Build
PM PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases										6	2	
Detector Phase	8	8						6	6	2	2	
Switch Phase												
Minimum Initial (s)	5.0	5.0						10.0	10.0	10.0	10.0	
Minimum Split (s)	11.8	11.8						39.8	39.8	39.8	39.8	
Total Split (s)	50.0	50.0						40.0	40.0	40.0	40.0	
Total Split (%)	55.6%	55.6%						44.4%	44.4%	44.4%	44.4%	
Maximum Green (s)	43.2	43.2						31.2	31.2	31.2	31.2	
Yellow Time (s)	4.8	4.8						5.8	5.8	5.8	5.8	
All-Red Time (s)	2.0	2.0						3.0	3.0	3.0	3.0	
Lost Time Adjust (s)		0.0						0.0	0.0	0.0	0.0	
Total Lost Time (s)		6.8						8.8	8.8	8.8	8.8	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Recall Mode	None	None						C-Min	C-Min	C-Min	C-Min	
Walk Time (s)								7.0	7.0	7.0	7.0	
Flash Dont Walk (s)								24.0	24.0	24.0	24.0	
Pedestrian Calls (#/hr)								0	0	0	0	
Act Effct Green (s)		46.0						28.4	28.4	28.4	28.4	
Actuated g/C Ratio		0.51						0.32	0.32	0.32	0.32	
v/c Ratio		1.00						0.50	0.73	0.72	0.77	
Control Delay		55.9						26.5	7.4	30.4	22.9	
Queue Delay		0.0						0.0	0.0	0.0	0.0	
Total Delay		55.9						26.5	7.4	30.4	22.9	
LOS		E						C	A	C	C	
Approach Delay		55.9						15.9			24.3	
Approach LOS		E						B			C	

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 84 (93%), Referenced to phase 2:SBTL and 6:NBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.00
 Intersection Signal Delay: 29.4
 Intersection LOS: C
 Intersection Capacity Utilization 113.2%
 ICU Level of Service H
 Analysis Period (min) 15


















Splits and Phases: 3: SR 559 & I-4 EB



HCM 6th Signalized Intersection Summary

3: SR 559 & I-4 EB

Future 2036 Build
PM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	0	560	0	0	0	0	500	620	170	780	0
Future Volume (veh/h)	190	0	560	0	0	0	0	500	620	170	780	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1826	1900	1752				0	1767	1707	1900	1811	0
Adj Flow Rate, veh/h	200	0	589				0	526	0	179	821	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	0	10				0	9	13	0	6	0
Cap, veh/h	202	0	594				0	1164		281	1193	0
Arrive On Green	0.48	0.00	0.48				0.00	0.35	0.00	0.69	0.69	0.00
Sat Flow, veh/h	420	0	1237				0	3445	1447	891	3532	0
Grp Volume(v), veh/h	789	0	0				0	526	0	179	821	0
Grp Sat Flow(s),veh/h/ln	1656	0	0				0	1678	1447	891	1721	0
Q Serve(g_s), s	42.6	0.0	0.0				0.0	10.9	0.0	16.6	12.6	0.0
Cycle Q Clear(g_c), s	42.6	0.0	0.0				0.0	10.9	0.0	27.5	12.6	0.0
Prop In Lane	0.25		0.75				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	795	0	0				0	1164		281	1193	0
V/C Ratio(X)	0.99	0.00	0.00				0.00	0.45		0.64	0.69	0.00
Avail Cap(c_a), veh/h	795	0	0				0	1164		281	1193	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	2.00	2.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	0.75	0.00	0.53	0.53	0.00
Uniform Delay (d), s/veh	23.2	0.0	0.0				0.0	22.8	0.0	18.3	10.9	0.0
Incr Delay (d2), s/veh	29.9	0.0	0.0				0.0	1.0	0.0	5.8	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	29.5	0.0	0.0				0.0	7.3	0.0	4.8	5.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.2	0.0	0.0				0.0	23.7	0.0	24.0	12.7	0.0
LnGrp LOS	D	A	A				A	C		C	B	A
Approach Vol, veh/h		789						526	A		1000	
Approach Delay, s/veh		53.2						23.7			14.7	
Approach LOS		D						C			B	
Timer - Assigned Phs		2				6		8				
Phs Duration (G+Y+Rc), s		40.0				40.0		50.0				
Change Period (Y+Rc), s		8.8				8.8		6.8				
Max Green Setting (Gmax), s		31.2				31.2		43.2				
Max Q Clear Time (g_c+I1), s		29.5				12.9		44.6				
Green Ext Time (p_c), s		1.0				3.4		0.0				

Intersection Summary



















HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
4: SR 559 & I-4 WB

Future 2036 Build
AM PEAK HOUR

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	580	0	320	500	400	0	0	290	240
Future Volume (vph)	0	0	0	580	0	320	500	400	0	0	290	240
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		385	0		0	0		360
Storage Lanes	0		0	1		1	1		0	0		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	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1612	0	1495	1530	1696	0	0	1776	1468
Flt Permitted				0.950			0.551					
Satd. Flow (perm)	0	0	0	1612	0	1495	887	1696	0	0	1776	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						337						253
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1813			1673			734				1796
Travel Time (s)		41.2			38.0			16.7				40.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	12%	0%	8%	18%	12%	0%	0%	7%	10%
Adj. Flow (vph)	0	0	0	611	0	337	526	421	0	0	305	253
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	611	0	337	526	421	0	0	305	253
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			42				40
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			30			40				0
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		1	1	2				2
Detector Template				Left		Right	Left	Thru				Thru
Leading Detector (ft)				20		20	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		20	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
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	D.Pm	NA				NA
Protected Phases				7				6				2

Lanes, Volumes, Timings
4: SR 559 & I-4 WB

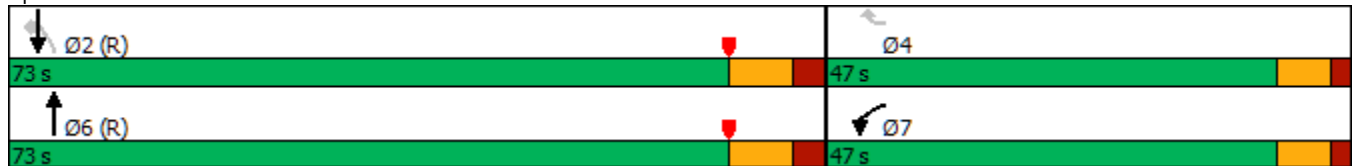
Future 2036 Build
AM PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						4	2					2
Detector Phase				7		4	2	6			2	2
Switch Phase												
Minimum Initial (s)				5.0		5.0	10.0	10.0			10.0	10.0
Minimum Split (s)				11.8		11.8	39.7	39.7			39.7	39.7
Total Split (s)				47.0		47.0	73.0	73.0			73.0	73.0
Total Split (%)				39.2%		39.2%	60.8%	60.8%			60.8%	60.8%
Maximum Green (s)				40.2		40.2	64.3	64.3			64.3	64.3
Yellow Time (s)				4.8		4.8	5.7	5.7			5.7	5.7
All-Red Time (s)				2.0		2.0	3.0	3.0			3.0	3.0
Lost Time Adjust (s)				0.0		0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				6.8		6.8	8.7	8.7			8.7	8.7
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Recall Mode				None		None	C-Min	C-Min			C-Min	C-Min
Walk Time (s)							7.0	7.0			7.0	7.0
Flash Dont Walk (s)							24.0	24.0			24.0	24.0
Pedestrian Calls (#/hr)							0	0			0	0
Act Effct Green (s)				40.2		40.2	64.3	64.3			64.3	64.3
Actuated g/C Ratio				0.34		0.34	0.54	0.54			0.54	0.54
v/c Ratio				1.13		0.47	1.11	0.46			0.32	0.28
Control Delay				117.8		5.3	94.4	12.5			16.8	2.5
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0
Total Delay				117.8		5.3	94.4	12.5			16.8	2.5
LOS				F		A	F	B			B	A
Approach Delay					77.8			58.0			10.3	
Approach LOS					E			E			B	

Intersection Summary

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 12 (10%), Referenced to phase 2:NBSB and 6:NBT, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.13
 Intersection Signal Delay: 54.8 Intersection LOS: D
 Intersection Capacity Utilization 111.9% ICU Level of Service H
 Analysis Period (min) 15



















Splits and Phases: 4: SR 559 & I-4 WB



HCM 6th Signalized Intersection Summary

4: SR 559 & I-4 WB

Future 2036 Build
AM PEAK HOUR

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	580	0	320	500	400	0	0	290	240
Future Volume (veh/h)	0	0	0	580	0	320	500	400	0	0	290	240
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1722	0	1781	1633	1722	0	0	1796	1752
Adj Flow Rate, veh/h				611	0	0	526	421	0	0	305	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				12	0	8	18	12	0	0	7	10
Cap, veh/h				549	0		893	9999	0	0	9999	
Arrive On Green				0.34	0.00	0.00	0.89	1.00	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1640	0	1510	1555	1722	0	0	1796	1485
Grp Volume(v), veh/h				611	0	0	526	421	0	0	305	0
Grp Sat Flow(s),veh/h/ln				1640	0	1510	1555	1722	0	0	1796	1485
Q Serve(g_s), s				40.2	0.0	0.0	65.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				40.2	0.0	0.0	65.8	0.0	0.0	0.0	0.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				549	0		0	11386	0	0	10784	
V/C Ratio(X)				1.11	0.00		0.00	0.04	0.00	0.00	0.03	
Avail Cap(c_a), veh/h				549	0		0	11386	0	0	10784	
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.80	0.80	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				39.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				72.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				38.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				112.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS				F	A		A	A	A	A	A	
Approach Vol, veh/h					611	A		947			305	A
Approach Delay, s/veh					112.8			0.0			0.0	
Approach LOS					F			A			A	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	73.0	747.8		47.0		820.8						
Change Period (Y+Rc), s	8.7	8.7		6.8		8.7						
Max Green Setting (Gmax), s	64.3	64.3		40.2		64.3						
Max Q Clear Time (g_c+I1), s	67.8	2.0		42.2		2.0						
Green Ext Time (p_c), s	0.0	2.0		0.0		3.0						

Intersection Summary



















HCM 6th Ctrl Delay	37.0
HCM 6th LOS	D

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lanes, Volumes, Timings
4: SR 559 & I-4 WB

Future 2036 Build
PM PEAK HOUR

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	590	0	220	330	390	0	0	360	310
Future Volume (vph)	0	0	0	590	0	220	330	390	0	0	360	310
Ideal Flow (vphp)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		385	0		0	0		360
Storage Lanes	0		0	1		1	1		0	0		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	1.00	1.00	1.00	1.00	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	1687	0	1482	1597	1792	0	0	1810	1524
Flt Permitted				0.950			0.477					
Satd. Flow (perm)	0	0	0	1687	0	1482	802	1792	0	0	1810	1524
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						232						326
Link Speed (mph)		30			30			30				30
Link Distance (ft)		1813			1673			734				1796
Travel Time (s)		41.2			38.0			16.7				40.8
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles (%)	0%	0%	0%	7%	0%	9%	13%	6%	0%	0%	5%	6%
Adj. Flow (vph)	0	0	0	621	0	232	347	411	0	0	379	326
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	621	0	232	347	411	0	0	379	326
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			42				40
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			30			40				0
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		1	1	2				2
Detector Template				Left		Right	Left	Thru				Thru
Leading Detector (ft)				20		20	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		20	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
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	D.Pm	NA				NA
Protected Phases				7				6				2

Lanes, Volumes, Timings
4: SR 559 & I-4 WB

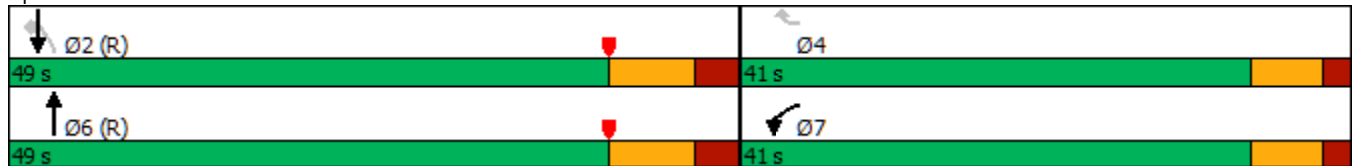
Future 2036 Build
PM PEAK HOUR

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases						4	2					2
Detector Phase				7		4	2	6			2	2
Switch Phase												
Minimum Initial (s)				5.0		5.0	10.0	10.0			10.0	10.0
Minimum Split (s)				11.8		22.5	39.8	39.8			39.8	39.8
Total Split (s)				41.0		41.0	49.0	49.0			49.0	49.0
Total Split (%)				45.6%		45.6%	54.4%	54.4%			54.4%	54.4%
Maximum Green (s)				34.2		34.2	40.2	40.2			40.2	40.2
Yellow Time (s)				4.8		4.8	5.8	5.8			5.8	5.8
All-Red Time (s)				2.0		2.0	3.0	3.0			3.0	3.0
Lost Time Adjust (s)				0.0		0.0	0.0	0.0			0.0	0.0
Total Lost Time (s)				6.8		6.8	8.8	8.8			8.8	8.8
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Recall Mode				None		None	C-Min	C-Min			C-Min	C-Min
Walk Time (s)							7.0	7.0			7.0	7.0
Flash Dont Walk (s)							24.0	24.0			24.0	24.0
Pedestrian Calls (#/hr)							0	0			0	0
Act Effct Green (s)				34.1		34.1	40.3	40.3			40.3	40.3
Actuated g/C Ratio				0.38		0.38	0.45	0.45			0.45	0.45
v/c Ratio				0.97		0.33	0.97	0.51			0.47	0.38
Control Delay				58.7		4.1	58.9	10.3			19.8	3.2
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0
Total Delay				58.7		4.1	58.9	10.3			19.8	3.2
LOS				E		A	E	B			B	A
Approach Delay					43.9			32.6			12.1	
Approach LOS					D			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 90
 Actuated Cycle Length: 90
 Offset: 88 (98%), Referenced to phase 2:NBSB and 6:NBT, Start of Yellow
 Natural Cycle: 90
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.97
 Intersection Signal Delay: 30.5 Intersection LOS: C
 Intersection Capacity Utilization 113.2% ICU Level of Service H
 Analysis Period (min) 15

Splits and Phases: 4: SR 559 & I-4 WB



HCM 6th Signalized Intersection Summary

4: SR 559 & I-4 WB

Future 2036 Build
PM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖		↖	↖	↑			↗	↗
Traffic Volume (veh/h)	0	0	0	590	0	220	330	390	0	0	360	310
Future Volume (veh/h)	0	0	0	590	0	220	330	390	0	0	360	310
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1796	0	1767	1707	1811	0	0	1826	1811
Adj Flow Rate, veh/h				621	0	0	347	411	0	0	379	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				7	0	9	13	6	0	0	5	6
Cap, veh/h				646	0		616	7711	0	0	6994	
Arrive On Green				0.38	0.00	0.00	0.66	1.00	0.00	0.00	1.00	0.00
Sat Flow, veh/h				1711	0	1497	1626	1811	0	0	1826	1535
Grp Volume(v), veh/h				621	0	0	347	411	0	0	379	0
Grp Sat Flow(s),veh/h/ln				1711	0	1497	1626	1811	0	0	1826	1535
Q Serve(g_s), s				31.9	0.0	0.0	26.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s				31.9	0.0	0.0	26.8	0.0	0.0	0.0	0.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				646	0		0	7711	0	0	6994	
V/C Ratio(X)				0.96	0.00		0.00	0.05	0.00	0.00	0.05	
Avail Cap(c_a), veh/h				650	0		0	7711	0	0	6994	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	0.00	0.86	0.86	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh				25.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln				23.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				53.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS				D	A		A	A	A	A	A	A
Approach Vol, veh/h					621	A		758			379	A
Approach Delay, s/veh					53.2			0.0			0.0	
Approach LOS					D			A			A	
Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	38.5	361.6		40.8		400.0						
Change Period (Y+Rc), s	8.8	8.8		6.8		8.8						
Max Green Setting (Gmax), s	40.2	40.2		34.2		40.2						
Max Q Clear Time (g_c+I1), s	28.8	2.0		33.9		2.0						
Green Ext Time (p_c), s	0.9	2.6		0.1		2.8						

Intersection Summary

HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Notes

Unsignalized Delay for [WBR, SBR] is excluded from calculations of the approach delay and intersection delay.



I-4 at SR 559 Interchange
FPID 447436-2-52-01 Polk County



Appendix G
Long Range Estimates

Date: 9/27/2022 6:55:46 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 447436-2-52-01

Letting Date: 01/2099

Description: SR 400 (I-4) AT SR 559 RAMP SIGNALIZATION

District: 01

County: 16 POLK

Market Area: 08

Units: English

Contract Class: 1 Lump Sum Project: N

Design/Build: N

Project Length: 0.106 MI

Project Manager: JMK-KSJ-CSM

Version 3 Project Grand Total

\$997,306.20

Description: Markups per PM - Copied from Version 2P - 9/26/22

Sequence: 1 RSD - Resurfacing, Divided

Net Length:

0.106 MI

560 LF

Description: Milling and resurfacing of SR 559

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	48.00 / 48.00
Structural Spread Rate	0
Friction Course Spread Rate	165

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	6,189.00	SY	\$4.57	\$28,283.73
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	511.00	TN	\$180.54	\$92,255.94
706-1-3	RAISED PAVMT MARK, TYPE B	130.00	EA	\$4.04	\$525.20
710-11-170	PAINTED PAVT MARK,STD,WHITE, ARROWS	25.00	EA	\$31.42	\$785.50
710-11-224	PAINTED PAVT MARK,STD,YELLOW,SOLID,18"	340.00	LF	\$1.25	\$425.00
711-11-124	THERMOPLASTIC, STD, WHITE, SOLID, 18"	452.00	LF	\$4.34	\$1,961.68
711-11-125	THERMOPLASTIC, STD, WHITE, SOLID, 24"	209.00	LF	\$5.75	\$1,201.75
711-11-160	THERMOPLASTIC, STD, WHITE, MESSAGE	6.00	EA	\$173.40	\$1,040.40
711-11-170	THERMOPLASTIC, STD, WHITE, ARROW	10.00	EA	\$68.60	\$686.00
711-11-224	THERMOPLASTIC, STD, YELLOW, SOLID, 18"	373.00	LF	\$5.03	\$1,876.19
711-11-241	THERMOPLASTIC,STD,YELLOW,DOT / GUIDE, 6"	0.07	GM	\$2,285.66	\$160.00
711-14-123	THERMOPLASTIC, PREFORM, WHITE, SOLID,12"	619.00	LF	\$6.09	\$3,769.71
	Comment: Crosswalks at the ramp intersections				
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.30	GM	\$5,093.33	\$1,528.00
711-15-102	THERMOPLASTIC, STD-OP, WHITE,	0.21	GM	\$6,542.54	\$1,373.93

	SOLID, 8"			
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.06 GM	\$1,730.39	\$103.82
711-15-201	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6"	0.11 GM	\$5,099.34	\$560.93
711-15-202	THERMOPLASTIC, STD-OP, YELLOW, SOLID, 8"	0.10 GM	\$6,590.23	\$659.02

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
710-11-101	PAINTED PAVT MARK, STD, WHITE, SOLID, 6"	0.42	GM	\$1,132.51	\$475.65
710-11-131	PAINTED PAVT MARK, STD, WHITE, SKIP, 6"	0.42	GM	\$488.27	\$205.07
711-16-201	THERMOPLASTIC, STD-OTH, YELLOW, SOLID, 6"	0.42	GM	\$4,419.66	\$1,856.26
Roadway Component Total					\$139,733.78

SHOULDER COMPONENT**User Input Data**

Description	Value
Total Outside Shoulder Width L/R	0.00 / 0.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 0.00
Paved Outside Shoulder Width L/R	0.00 / 0.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips \bar{i} ; $\frac{1}{2}$ No. of Sides	0

Erosion Control**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-11	FLOATING TURBIDITY BARRIER	10.60	LF	\$11.77	\$124.76
104-12	STAKED TURBIDITY BARRIER- NYL REINF PVC	10.60	LF	\$4.61	\$48.87
107-1	LITTER REMOVAL	0.77	AC	\$39.68	\$30.55
107-2	MOWING	0.77	AC	\$68.08	\$52.42
Shoulder Component Total					\$256.60

SIGNING COMPONENT**Pay Items**

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
----------	-------------	----------	------	------------	-----------------

700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00 AS	\$379.98	\$759.96
700-1-50	SINGLE POST SIGN, RELOCATE	1.00 AS	\$255.07	\$255.07
700-1-60	SINGLE POST SIGN, REMOVE	2.00 AS	\$32.00	\$64.00
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	1.00 AS	\$4,989.48	\$4,989.48
700-2-60	MULTI- POST SIGN, REMOVE	1.00 AS	\$714.95	\$714.95

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF Comment: Previously found in Seq. 2	2.00 AS	\$379.98	\$759.96
700-3-201	SIGN PANEL, F&I OM, UP TO 12 SF Comment: Previously found in Seq. 2	6.00 EA	\$666.08	\$3,996.48
700-5-22	INTERNAL ILLUM SIGN, F&I OM, 12-18 SF Comment: Previously found in Seq. 2	7.00 EA	\$4,358.56	\$30,509.92
705-11-1	DELINEATOR, FLEXIBLE TUBULAR Comment: Previously found in Seq. 2	30.00 EA	\$73.96	\$2,218.80
Signing Component Total				\$44,268.62

SIGNALIZATIONS COMPONENT**Signalization 1**

Description	Value
Type	2 Lane Strain Pole
Multiplier	2
Description	Signalized ramp intersections

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	449.00 LF	\$11.37	\$5,105.13
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	646.00 LF	\$25.70	\$16,602.20
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	2.00 PI	\$7,506.66	\$15,013.32
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	20.00 EA	\$844.57	\$16,891.40
639-2-1	ELECTRICAL SERVICE WIRE, F&I	400.00 LF	\$7.63	\$3,052.00
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	8.00 EA	\$1,589.10	\$12,712.80
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	12.00 AS	\$1,007.37	\$12,088.44
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00 AS	\$717.84	\$5,742.72
665-1-11	PEDESTRIAN DETECTOR, F&I, STANDARD	8.00 EA	\$233.43	\$1,867.44

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
630-2-14	CONDUIT, F& I, ABOVEGROUND	40.00 LF	\$33.54	\$1,341.60
633-1-121	FIBER OPTIC CABLE, F&I, UG,2-12	200.00 LF	\$3.36	\$672.00
633-2-31	FIBER OPTIC CONNECTION, INSTALL, SPLICE	24.00 EA	\$46.05	\$1,105.20
633-2-32	FIBER OPTIC CONNECTION, INSTALL, TERM	24.00 EA	\$103.57	\$2,485.68

633-3-11	FIBER OPTIC CONN HDWR, SPLICE ENCLOSURE	2.00 EA	\$945.01	\$1,890.02
633-3-12	FIBER OPTIC CONN HDWR, SPLICE TRAY	2.00 EA	\$63.75	\$127.50
633-3-16	FIBER OPTIC CONN HDWR, PATCH PANEL- FIE	2.00 EA	\$1,333.84	\$2,667.68
634-4-153	SPAN WIRE ASSEM, F&I, TWO PT, BOX/DROP B	2.00 PI	\$9,243.43	\$18,486.86
635-2-12	PULL & SPLICE BOX, F&I, 24" X 36"	2.00 EA	\$1,780.45	\$3,560.90
639-1-122	ELECTRICAL POWER SRV,F&I, UG,PUR CONT	2.00 AS	\$3,390.21	\$6,780.42
639-3-11	ELEC SERV DISCON, F&I, POLE MNT	2.00 EA	\$1,147.22	\$2,294.44
641-2-12	PREST CNC POLE,F&I,TYP P-II SRV POLE	2.00 EA	\$1,389.25	\$2,778.50
641-2-18	PREST CNC POLE,F&I,TYP P-VIII	8.00 EA	\$24,346.30	\$194,770.40
650-1-16	VEH TRAF SIGNAL,F&I ALUMINUM, 4 S 1 W	2.00 AS	\$1,104.95	\$2,209.90
660-4-11	VEHICLE DETECTION SYSTEM-VIDEO, CABINET	2.00 EA	\$12,542.95	\$25,085.90
660-4-12	VEHICLE DETECTION SYSTEM-VIDEO, ABOVE G	6.00 EA	\$4,143.53	\$24,861.18
670-5-110	TRAF CNTL ASSEM, F&I, NEMA	2.00 AS	\$33,149.53	\$66,299.06
682-1-113	ITS CCTV CAMERA, F&I, DOME ENCL-PRESS	2.00 EA	\$8,076.78	\$16,153.56
684-1-1	MANAGED FIELD ETHERNET SWITCH, F&I	2.00 EA	\$3,521.30	\$7,042.60
685-1-11	UPS POWER SUPPLY, F&I, LINE INTERACTIVE	2.00 EA	\$3,864.22	\$7,728.44
Signalizations Component Total				\$477,417.29

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description		Value		
Spacing		MIN		
Pay Items				
Pay item	Description	Quantity	Unit Price	Extended Amount
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	7.00 EA	\$6,636.06	\$46,452.42
X-Items				
Pay item	Description	Quantity	Unit Price	Extended Amount
715-1-12	LIGHTING CONDUCTORS, F&I, INSUL,NO.8-6	969.00 LF	\$1.70	\$1,647.30
715-21-2	LIGHTING REPAIRS AND RETROFITS, LED RETR	3.00 EA	\$1,770.61	\$5,311.83
Lighting Component Total				\$53,411.55

Sequence 1 Total **\$715,087.84**

Date: 9/27/2022 6:55:46 AM

FDOT Long Range Estimating System - Production
R3: Project Details by Sequence Report

Project: 447436-2-52-01**Letting Date:** 01/2099**Description:** SR 400 (I-4) AT SR 559 RAMP SIGNALIZATION**District:** 01**County:** 16 POLK**Market Area:** 08**Units:** English**Contract Class:** 1 **Lump Sum Project:** N**Design/Build:** N**Project Length:** 0.106 MI**Project Manager:** JMK-KSJ-CSM**Version 3 Project Grand Total****\$997,306.20****Description:** Markups per PM - Copied from Version 2P - 9/26/22

Project Sequences Subtotal**\$715,087.84**

102-1	Maintenance of Traffic	15.00 %	\$107,263.18
101-1	Mobilization	10.00 %	\$82,235.10

Project Sequences Total**\$904,586.12**

Project Unknowns	5.00 %	\$45,229.31
Design/Build	0.00 %	\$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	\$47,490.77	\$47,490.77

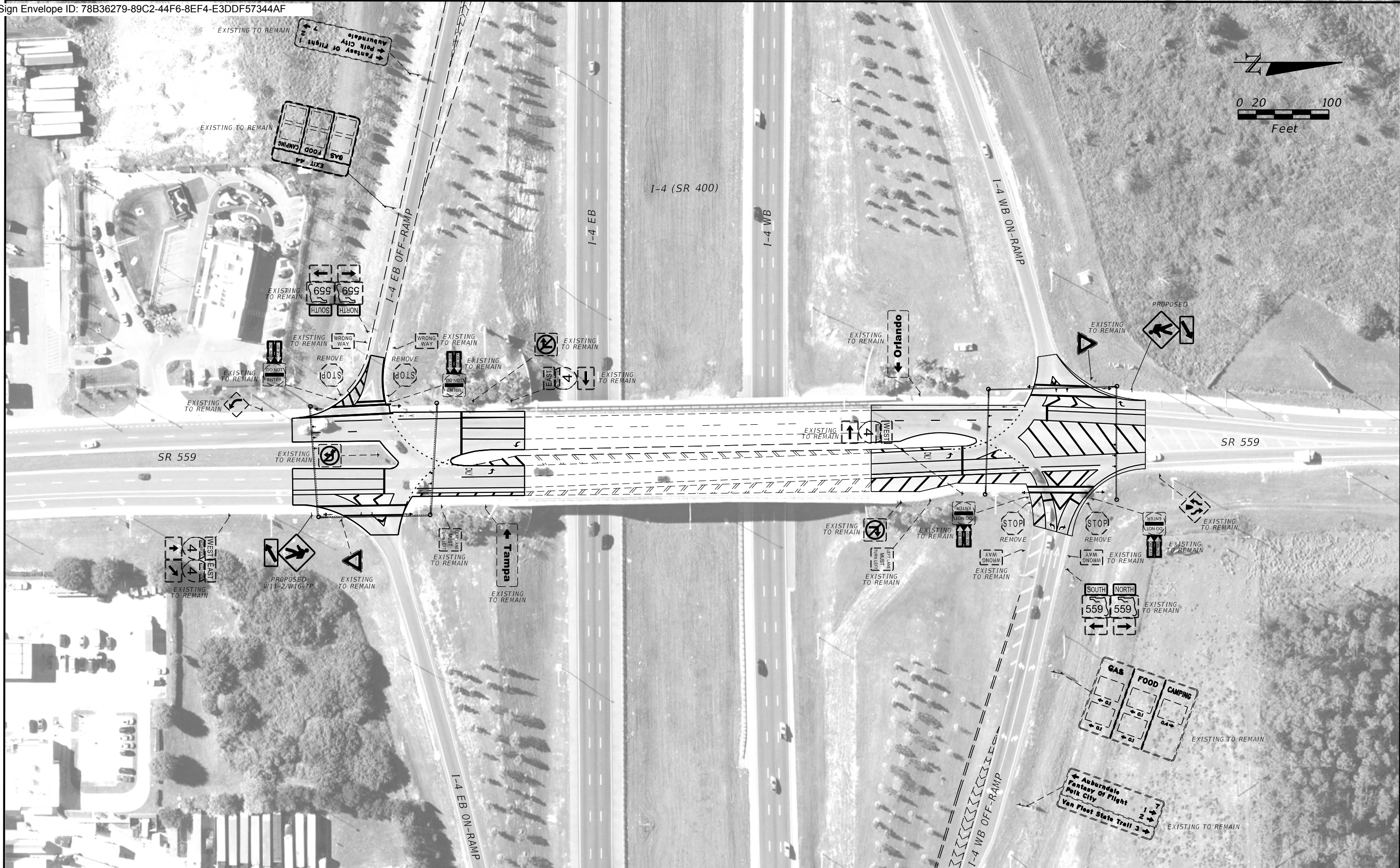
Project Non-Bid Subtotal**\$47,490.77****Version 3 Project Grand Total****\$997,306.20**



I-4 at SR 559 Interchange
FPID 447436-2-52-01 Polk County



Appendix H
Conceptual Signing Plan



REVISIONS	
DATE	DESCRIPTION

ROSS S. SHILLINGFORD, P.E.
 P.E. LICENSE NUMBER 56901
 STANTEC CONSULTING SERVICES, INC.
 2056 VISTA PARKWAY, SUITE 100
 WEST PALM BEACH, FLORIDA 33411

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 400	POLK	TBD

SIGN INVENTORY
RAMP TERMINALS

SHEET NO.
 1 OF 1

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.