FINAL

IMR RE-EVALUATION

I-75/SR 93 AT SR 951/COLLIER BOULEVARD

Financial Project No.: 425843-2-52-01, 425843-2-56-01, 425843-56-02

Prepared for:
Florida Department of Transportation – District 1

FDOT Project Manager:
Joshua Jester, P.E.

FDOT

I-75/SR 93 at SR 951/Collier Boulevard Interchange

Financial Project No.: 425843-2-52-01, 425843-2-56-01, 425843-56-02

Interchange Modification Report (IMR) Re-evaluation

(FINAL)

Prepared for:

Florida Department of Transportation, District One

Joshua Jester, P.E.
FDOT District Interchange Review Coordinator (DIRC)

April 2023

Florida Department of Transportation Interchange Access Request for I-75 and SR 951/Collier Boulevard Re-evaluation

Interchange Modification Report
Determination of Safety, Operational, and Engineering Acceptability

Acceptance of this document indicates successful completion of the review and the Interchange Access Request is considered acceptable for safety, operations, and engineering. Approval is contingent upon compliance with applicable Federal requirements, specifically the National Environmental Policy Act (NEPA) or Department Project Development and Environment (PD&E) Procedures. Completion of NEPA/PD&E process is considered acceptance of the general project and concepts described in the environmental document.

Requestor	DocuSigned by: Kati Sherrard 5B2DD25917341... Kati C. Sherrard, PE, CPM Corridors Program Engineer, District One	04/20/2023 | 9:09 AM EDT Date
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FDOT Chief Engineer (if applicable)	DocuSigned by: Dan Hurtado C42B6FE133D648A... Dan Hurtado, P.E. FDOT Chief Engineer	05/01/2023 | 3:29 PM EDT Date

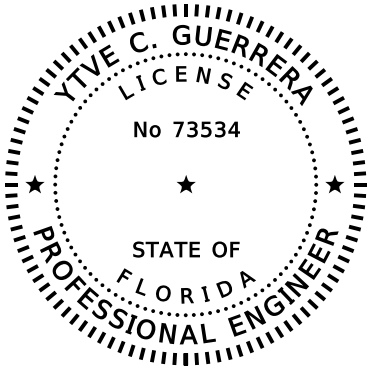
PROFESSIONAL ENGINEER'S CERTIFICATION

I, Ytve Guerrera, P.E., certify that I currently hold an active Professional Enginee's License in the State of Florida and I am competent throuh ecucation and experience to provide engineering services in civil and traffic engineering disciplines contained in this report. I further certify that this report was prepared by me or under my responsible charge as deifned in Chapter 61G15-18.0001 F.A.C. and that all statements, conclusions, and recommendations made herein are true and correct to the best of my knowledge and ability.

Project Description: I-75/SR 93 at SR 951/Collier Boulevard Interchange – Interchange Modification Report (IMR)

Location: Collier Coounty, Flrorida

FPID No.: 425843-2-52-01, 425843-2-56-01, 425843-56-02



Ytve Guerrera

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Ytve Guerrera, MS, Florida PE No. 73534
Date: 04-19-2023

This item has been digitally signed and sealed by Ytve C. Guerrera on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.
The official record of this document is the electronic file signed and sealed under Rule 61G15-23.003 F.A.C.

SYSTEMS IMPLEMENTATION OFFICE

QUALITY CONTROL CERTIFICATION FOR INTERCHANGE ACCESS REQUEST SUBMITTAL

Submital Date:

FM Number: 425843-2-52-01, 425843-2-56-01, 425843-56-02

Project Title: FDOT D1 I-75 at SR 951 Interchange – Interchange Modification Report (IMR) Re-evaluation

Dsitrict: One

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Status of Document:

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.

Requestor DocuSigned by: Kati Sherrard F32DDD591732411... Date: 04/20/2023 | 9:09 AM EDT

IRC DocuSigned by: Joshua Jester 532828D21AF54A7... Date: 04/20/2023 | 9:10 AM EDT

EXECUTIVE SUMMARY

The interchange of I-75 with SR 951/Collier Boulevard is scheduled to undergo improvements through a Design/Build (D/B) project. A re-evaluation of the Interchange Modification Report (IMR) was required since the D/B concept slightly differs from the Request for Proposal (RFP) Concept. The initial planned improvements were identified through a Project Development and Environment (PD&E) Study and an Interchange Modification Report prepared in 2013 and approved in 2014, which recommended a partial clover leaf interchange with loop ramps in the northeast and southwest quadrants of the interchange. The main difference between the interchange configuration proposed by the D/B team and the Preferred Alternative evaluated in the PD&E/IMR documents is the number of entrance ramps in the eastbound direction along the I-75 freeway mainline.

The project is located along I-75 (Roadway ID: 03175000) at the interchange with SR 951/Collier Boulevard from Milepost (MP) 50.096 through MP 50.757. This interchange is located east of the City of Naples, in Collier County.

Based upon the results of this IMR Re-evaluation performed at the subject interchange, the following conclusions are summarized below:

- The Purpose and Need stated in the 2013 PD&E Study and in the 2013 IMR is still applicable for this IMR Re-evaluation. The purpose of the interchange modification is to improve the safety, LOS, and traffic operations at the I-75/Collier Boulevard interchange and adjacent intersections. Other goals of the project are to preserve the operational integrity and regional functionality of I-75, and enhance emergency evacuation and response times.
- The area of influence for this IMR Re-evaluation was selected in close coordination with FDOT D1 and using the guidelines described in the IARUG. Based on coordination with FDOT D1, it was decided that the main area of influence would concentrate only on the I-75 freeway segments and ramp junctions in proximity with the SR 951/Collier Boulevard interchange.
- In the case of this IMR Re-evaluation the analysis will focus on evaluating two alternatives; specifically, the RFP and D/B Concepts.
- Travel demand forecasting was performed using historical traffic data, the D1RPM model, and FDOT manuals to obtain future traffic volumes for the area of influence. It should be noted that for the development of the travel demand forecasting, planned and programmed projects were considered. Forecasted volumes were utilized in the safety and operational analysis.
- A freeway operational analysis was performed, using HCS, for each alternative for the future years of 2025 and 2045. Based on the results of the 2025 and 2045 operational analysis, both alternatives are expected

to operate at acceptable LOS and meet the FDOT LOS target of D. Although both alternatives are expected to operate satisfactorily, the D/B alternative seems to operate slightly better than the RFP alternative in certain portions of the I-75 mainline.

- A freeway safety analysis was performed, using ISATe, for each alternative for the future year of 2045. Overall, based on the results of the 2045 safety analysis, the RFP and D/B concepts are expected to have 18.9 and 19.6 crashes/year, respectively. This represents a slight increase (0.7 crashes/year) in the number of minor injury and property damaged only type crashes when comparing the D/B and RFP alternatives. It is noted that based on a review of the historical five-year crash data (2017-2021), the existing crash frequency (with the diamond interchange configuration) is about 13.75 crashes/year.
- Both alternatives would require identical design variations for several roadway elements related to horizontal curve radius, shoulder width, and horizontal clearance.
- Both alternatives would require identical environmental permits and no additional environmental impacts are expected.
- The cost for the RFP alternative is $114,258,982.00 and the cost for the D/B alternative is $97,900,000.00. The cost estimates are inclusive of preliminary engineering (PE), construction engineering and inspection (CEI), and contingency.
- The comparison of the two alternatives is based on numerous factors including construction costs, safety and operational performance, environmental and socioeconomic impacts, etc. Based on this comparison, the D/B alternative was determined to result in construction cost savings and offers similar safety and operational performances in comparison to the RFP alternative.
- A review of the FHWA policy points demonstrated that the D/B Alternative is expected to have similar safety and operational performances when compared to the RFP alternative, will not have adverse effects to the interstate facility, and will meet the FHWA policy points requirements.

Recommendation(s): Based on a comprehensive review documented in this IMR re-evaluation, it was determined that the D/B Concept performs equal to or better when compared to the RFP Concept. Design changes proposed by the D/B Concept are minor when compared to the RFP Concept. Based on the results of the analysis, the D/B alternative is expected to cost less, and it satisfies the purpose and need, SO&E requirements and FHWA's policy points, similar to the RFP Concept.

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1. INTRODUCTION

The interchange of I-75 with SR 951/Collier Boulevard is scheduled to undergo improvements through a Design/Build (D/B) project. A re-evaluation of the Interchange Modification Report (IMR) is required since the D/B concept slightly differs from the Request for Proposal (RFP) Concept.

The initial planned improvements were identified through a Project Development and Environment (PD&E) Study and an Interchange Modification Report prepared in 2013 and approved in 2014, which recommended a partial clover leaf interchange with loop ramps in the northeast and southwest quadrants of the interchange. The main difference between the interchange configuration proposed by the D/B team and the Preferred Alternative evaluated in the PD&E/IMR documents is the number of entrance ramps in the eastbound direction along the I-75 freeway mainline.

This IMR Re-evaluation summarizes the traffic analysis and evaluation of the interchange configuration presented by the D/B team which includes two entrance ramps in the I-75 eastbound direction. The D/B concept also includes the widening of the I-75 bridge over SR 951/Collier Boulevard to accommodate the entrance loop ramp from southbound SR 951/Collier Boulevard and provide the necessary acceleration lane for these drivers and the drivers entering from northbound SR 951/Collier Boulevard.

The subsequent sections provide more detailed information of this Re-evaluation.

1.1. APPLICANT INFORMATION

This document is being submitted by the Florida Department of Transportation (FDOT) District One (D1).

Table 1: District One Contact Information

Address	Phone Number
801 N. Broadway Avenue Bartow, FL 33830-3809	863-519-2300

1.2. PROJECT LOCATION

The project is located along I-75 (Roadway ID: 03175000) from Milepost (MP) 50.096 through MP 50.757 at the interchange with SR 951, located east of the City of Naples, in Collier County (see **Figure 1**). Everglades Boulevard is the closest continuous north-south roadway (located 8.9 miles east of SR 951). The nearest major I-75 interchanges, east and west of SR 951 are SR 29 (located 21.2 miles east of SR 951) and CR 886/Golden Gate Parkway (CR 886) (located 3.3 miles west of SR 951).

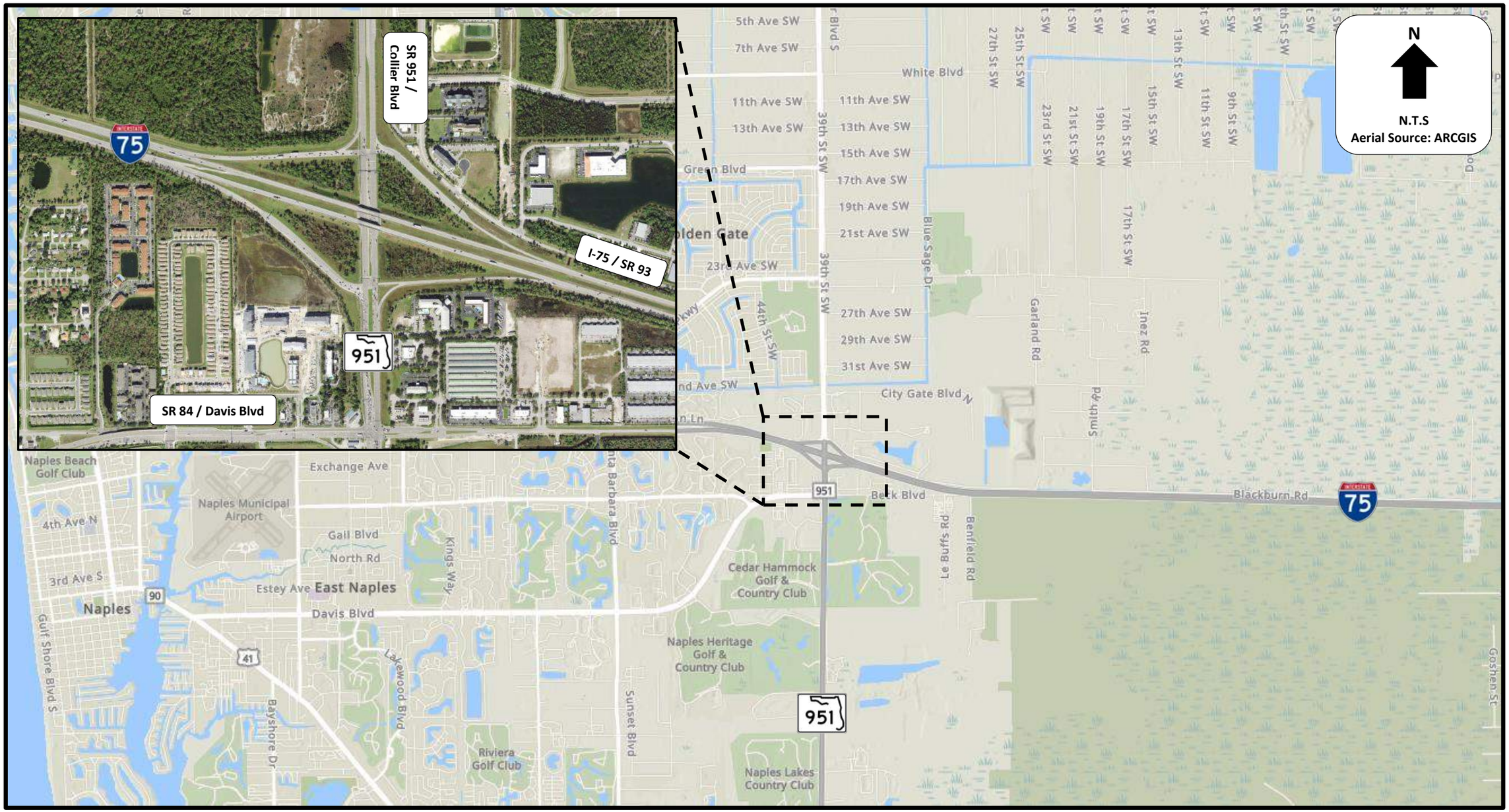


Figure 1: Project Location Map

1.3. PROJECT BACKGROUND

In September 2022, a D/B Contract (FPID: 425843-2-52-01, 425843-2-56-01, 425843-56-02) was issued by the Florida Department of Transportation (FDOT) District One (D1) to construct a new configuration at the current interchange of I-75 with SR 951/Collier Boulevard. During the D/B pursuit, the interchange design concept proposed by the D/B Team (referred as the D/B Concept in this report) was slightly different than the one included in the original RFP Concept provided by FDOT-D1 during the advertisement.

The RFP concept corresponds to the Preferred Alternative (Alternative 1) selected under the PD&E Study signed in 2014 (FPID: 425843-1-22-01). The Preferred Alternative was evaluated from the safety and traffic operations perspective in the Project Traffic Report (PTR) dated July 2013 and in the Interchange Modification Report (IMR) dated September 2013. Based on the analysis documented in these two reports, the diamond interchange at I-75 with Collier Boulevard and adjacent intersections along Collier Boulevard operated at acceptable levels of service (LOS) for existing conditions (2011). However, Alternative 1 was recommended to ensure acceptable LOS along Collier Boulevard since the existing diamond interchange would result in segments operating at unacceptable LOS under the 2035 projected volumes. Alternative 1 modifies the existing diamond interchange to a partial clover leaf configuration (with loop ramps in the southwest and northeast quadrants of the interchange).

The main difference between the RFP Concept and the D/B Concept (presented as Alternative Technical Concept #5 – ATC #5) is the number of merge points along eastbound I-75 at the interchange with Collier Boulevard. In the RFP concept, the loop ramp from southbound Collier Boulevard to eastbound I-75 and the ramp from northbound Collier Boulevard to eastbound I-75 merge on a ramp parallel to the mainline prior to merging with eastbound I-75 mainline traffic as a single point entrance ramp. A new bridge parallel to the mainline carries the loop ramp traffic over Collier Boulevard.

In the D/B Concept, the existing mainline bridge is widened to accommodate the loop ramp traffic from southbound Collier Boulevard to eastbound I-75. This ramp merges with the I-75 mainline onto a new auxiliary lane. The ramp for northbound Collier Boulevard to eastbound I-75 merges with the new auxiliary lane approximately 2,500 feet east of Collier Boulevard.

The overall purpose of this IMR Re-evaluation is to determine if the D/B Concept satisfies the Safety, Operational and Engineering (SO&E) criteria; and the Federal Highway Administration (FHWA) policy points, as the RFP Concept did. Hence, this IMR Re-evaluation will involve performing a safety and operational analysis, traffic data forecasting, traffic and safety data collection, conceptual signing plan, review of existing and future plans/projects,

and coordination to evaluate these alternatives. The following sections briefly describe the previous studies and current efforts performed in relation to the subject interchange.

1.4. PURPOSE AND NEED

The Purpose and Need stated in the 2013 PD&E Study and in the 2013 IMR is still applicable for this IMR Re-evaluation and is summarized in this report for reference. I-75 is an integral part of the Strategic Intermodal System (SIS) providing for high-speed and high-volume traffic movements along the west coast of Florida and connecting the metropolitan areas of Naples and Miami. Collier Boulevard is the eastern most major north-south arterial of the Naples metropolitan region and connects densely developed areas such as Marco Island and Golden Gate to I-75. The Collier Boulevard interchange at I-75 is the last access point prior to the Alligator Alley entry toll gate. Therefore, the aim of the interchange modification is to improve the safety, LOS, and traffic operations at the I-75/Collier Boulevard interchange and adjacent intersections.

From the analysis conducted during the preparation of the 2013 PD&E Study it was determined that the interchange of I-75 with Collier Boulevard operated at acceptable LOS in 2011. Although along Collier Boulevard moderate levels of congestion were observed south of I-75 through the Collier Boulevard/Davis Boulevard intersection (located approximately 1,300 feet south), overall acceptable LOS were also estimated. However, for the year 2035 the No-Build Scenario showed that several intersections along Collier Boulevard would operate below acceptable LOS. In other words, the 2013 analyses determined that the capacity deficiency was not displayed in the existing conditions evaluation, but it is expected to occur by the year 2035 along the SR 951/Collier Boulevard limits.

Other goals of the project are to:

1. Preserve the operational integrity and regional functionality of I-75 (and, therefore, the regional transportation network).
2. Enhance emergency evacuation and response times.

2. METHODOLOGY

The methodology utilized for this IMR Re-evaluation follows the guidelines contained in the FDOT Policy No. 000-525-015, "Approval of New or Modified Access to Limited Access Highways on the State Highway System (SHS)"; FDOT Interchange Access Request User's Guide (IARUG; New or Modified Interchanges FDOT Procedure No. 525-030-160); and the Project Traffic Forecasting FDOT Procedure No. 525-030-120. In addition, close coordination with FDOT D1 was conducted prior to developing the Methodology Letter of Understanding (MLOU) where details of the steps to conduct the analysis were outlined and described. The MLOU was signed on December 22, 2022, and is included in **Appendix A**. Through early coordination with FDOT D1 it was determined that the IMR Re-evaluation would focus on the analysis of the RFP Concept versus the D/B Concept based on forecasted traffic. Existing conditions analysis is not necessary.

The following sections summarize the information documented in the MLOU signed on December 22, 2022.

2.1. AREA OF INFLUENCE

The area of influence for this IMR Re-evaluation was selected in close coordination with FDOT D1 and using the guidelines described in the IARUG. Based on coordination with FDOT D1, it was decided that the main area of influence would concentrate only on the I-75 segments in proximity with the SR 951/Collier Boulevard interchange. Local intersections along the SR 951/Collier Boulevard were not considered in the analysis since the D/B Concept did not propose any design changes along the local arterial. In other words, the selected area of influence corresponds to the area that was anticipated to experience significant operational changes when the RFP Concept was compared to the D/B Concept. The following briefly outlines the freeway segments and ramp junctions within the influence area along the mainline:

Freeway Segments:

- Segment along I-75 from the overpass at Everglades Boulevard (MP 41.520) to the CR 886 northbound off-ramp (MP 53.349)

Ramp Junctions:

- EB I-75 to NB/SB Collier Boulevard Off-Ramp
- SB Collier Boulevard to EB I-75 Loop On-Ramp
- NB Collier Boulevard to EB I-75 On-Ramp
- WB I-75 to NB/SB Collier Boulevard Off-Ramp
- NB Collier Boulevard to WB I-75 Loop On-Ramp
- NB/SB Collier Boulevard to WB I-75 On-Ramp

It is noted that for the safety and travel demand forecasting analyses (described in subsequent sections of this report) the area of influence was slightly modified to accurately include all elements required for these types of analyses.

2.2. ANALYSIS YEARS

This IMR Re-evaluation will focus on the analysis of future conditions to ensure that the RFP Concept and the D/B Concept offer similar operational conditions.

Traffic Forecasting:

- Base Year: 2015
- Opening Year: 2025
- Horizon Year: 2045

Traffic Operational Analysis:

- Opening Year: 2025
- Design Year: 2045

2.3. ALTERNATIVES

For the purposes of this IMR Re-evaluation, the RFP Concept will represent the No-Build Alternative, and the D/B Concept will represent the Build Alternative. Comparison between the two alternatives will be conducted to ensure that the D/B Concept provides comparable LOS results (equal or better) than the RFP Concept.

2.4. TRAVEL DEMAND FORECASTING ANALYSIS

The travel demand forecasting began by utilizing the FDOT D1 Reginal Planning Model (D1RPM) (travel demand model) to obtain base, opening, and design year preliminary AADTs with accompanying growth rates. Base (2015), opening (2025) and design year (2045) traffic volumes were developed considering various methods (outlined below) to ensure that the developed traffic volumes are accurate and reasonable. It is noted that opening year traffic volumes will be developed by linear interpolation between 2019 historical and design year volumes. The travel demand output was reviewed for reasonableness by:

- Comparing preliminary D1RPM outputs and growth rates to historical AADTs, growth rates, population and economic data, and existing and future land uses (obtained from Florida Traffic Online (FTO), Bureau of Economic and Business Research (BEBR), past FDOT studies, among other resources)
- Comparing preliminary D1RPM output AADTs to the latest historical AADTs that will be projected to the future year (2045) using the growth rates obtained from this analysis.

Based on these reviews, the FDOT D1RPM travel demand model was adjusted to account for any errors in the base year model validation to obtain the finalized AADTs to be used in the analysis.

2.5. TRAFFIC OPERATIONAL ANALYSIS

The traffic operational analysis will focus on the freeway segments (basic and merge/diverge) in the vicinity of the interchange of I-75 at Collier Boulevard. The segments of I-75 to the east and west of the I-75 interchange at Collier Boulevard will be analyzed using the procedure and criteria outlined in the Highway Capacity Manual 7th Edition (HCM 7) and its respective software Highway Capacity Software 2023 (HCS 2023 version 8.2).

Level of Service (LOS) will be estimated based on density (pc/mile/lane) as the measure of effectiveness (MOE) as per the HCM methodology. Density will be the primary MOE to evaluate basic mainline freeway segments as well as the merge/diverge areas. Speed will also be summarized and compared between the alternatives. LOS targets per the State Highway System, Policy No. 000-525-006, effective April 19, 2017, will be utilized and are summarized below:

- I-75 freeway mainline and merge/diverge urban segments: LOS D

2.6. SAFETY ANALYSIS

The safety analysis will also focus on the freeway segments (basic and merge/diverge) in the vicinity of the interchange of I-75 at SR 951. The segments along the I-75 freeway mainline will be analyzed using the Highway Safety Manual 2010 - 1st Edition (HSM 1st Edition) methodologies by utilizing the Enhanced Interchange Safety Analysis Tool (ISATe).

The latest five years of crash data were used to perform the safety analysis (2017-2021). Data was obtained through different sources: FDOT's CARS database, FDOT SSOGIS database and Signal Four Data Analytics.

3. DATA COLLECTION

A desktop data collection effort took place in order to better understand the characteristics of the area being analyzed. Additionally, this information was utilized as a reference to compare anticipated future results and develop a sound technical analysis for this IMR Re-evaluation. The data collection effort primarily focused on gathering information from previous studies, straight line diagrams (SLD), historical traffic counts from the Florida Traffic Online (FTO) website, crash data, land use, and environmental data, among other types of data. Since a local arterial traffic operational analysis was not required for this IMR Re-evaluation, data collection such as traffic counts were not performed.

The following subsections summarize the data collection performed for this IMR Re-evaluation.

3.1. TRANSPORTATION SYSTEM DATA

The current configuration of the I-75 and SR 951/Collier Boulevard interchange corresponds to a diamond interchange design with single lane ramps (at ramp gore) in all four quadrants. The roadways surrounding and encompassing the study area with their Section ID (if applicable), posted speed limit, and number of lanes are outlined in **Table 2**.

Table 2: Surrounding Roadway Network

Surrounding Roadway Network			
Description	**Section ID**	**Posted Speed Limit (mph)**	**No. of Lanes (Both Directions)**
I-75/SR 93	3175000	70	4
SR 951/Collier Blvd	3030001	45	6 - 8

Previous reports were gathered and reviewed to gain knowledge of the area under analysis. The following list summarizes the reports that were reviewed, and utilized as a historical data collection resource for the analysis conducted in this IMR Re-evaluation:

- Project Traffic Report (PTR), dated July 2013
- Interchange Modification Report, dated September 2013
- Previous Re-evaluations:
    - Design Traffic Technical Memorandum, dated May 2016
    - Interchange Access Request Re-evaluation Assessment Technical Memorandum, dated November 2018

- I-75 Southwest Connect, FDOT District One Interstate Project – I-75 South Corridor Master Plan (November 2021)

Appendix B includes information related to Straight Line Diagrams (SLD) as well as some traffic data information extracted from previous studies.

It is noted that the 2019 traffic volumes obtained from the I-75 Southwest Connect Project were compared to the 2019 and 2021 volumes obtained from the Florida Traffic Online website (stations 037014, 037013, 037012, 037011, 0320000, 030351). Based on the comparison it was concluded that the volumes were equivalent and no major changes in traffic patterns were observed.

3.2. EXISTING AND HISTORICAL TRAFFIC DATA

The latest available and historical traffic data was obtained from FDOT's Florida Traffic Online (FTO) database. Additionally, traffic data from the 2019 data collection effort associated with D1's Southwest Connect project, which included the I-75/SR 951 interchange, was used to supplement, compare, and confirm data from the FDOT's FTO, depending on the location and type of count performed. **Table 3** summarizes the FDOT Traffic count stations located in the vicinity of the interchange of I-75 with SR 951/Collier Boulevard. **Appendix C** includes the information downloaded from the FTO website.

Table 3: FDOT Traffic Count Stations

Description	Station ID
I-75, West of SR 951/Collier Boulevard	32000
I-75 EB Off-Ramp to SR 951/Collier Boulevard	37014
I-75 EB On-Ramp from SR 951/Collier Boulevard	37011
I-75 WB Off-Ramp to SR 951/Collier Boulevard	37012
I-75 WB On-Ramp from SR 951/Collier Boulevard	37013

3.3. CRASH DATA

The latest five years of crash data will be used to perform the analysis (2017-2021). Data will be obtained through different sources: FDOT's CARS database, FDOT SSOGIS database and Signal Four Data Analytics. **Appendix D** includes the crash summary information.

3.4. LAND USE

The D1RPM, v2 was released on January 29, 2021, and was used in this IMR Re-evaluation. The future land use was updated to 2045 as part of the model development efforts and the D1RPM, v2 reflects the most up-to-date land use assumptions along the I-75 corridor. **Appendix E** includes a 2045 Land Use Map.

3.5. ENVIRONMENTAL DATA

No detailed environmental data was collected since the D/B Concept is not expected to change the environmental impacts already evaluated during the 2013 PD&E Study where the RFP Concept was selected as the preferred alternative.

Nonetheless, the status of the following environmental permits was reviewed and is summarized below:

- SFWMD Right of Way Occupancy Permit – Issued 9/30/22.
- SFWMD Environmental Resource Permit – Anticipated issue date of 11/29/22
- FDEP 404 Permit – 30-45 days after SFWMD ERP is issued.

3.6. PLANNED AND PROGRAMMED PROJECTS

When developing/confirming the roadway network for the travel demand model for the 2045 RFP Concept several adopted 2045 Long-Range Transportation Plan (LRTP) (from various agencies) were reviewed. Some of the LRTPs that were reviewed were: Collier County Transportation Improvement Program (TIP), SIS adopted 5-year plan, and SIS Long Range Cost Feasible Plan. The following is the summary of the projects programmed to be built in the area and for which information had to be confirmed with FDOT:

1. I-75 Managed Lanes:

Based on the information included in the SIS Long Range Cost Feasible Plan (FY 2029 – 2045) ID 3332 from East of SR 951 to Collier / Lee County Line, this managed lane project was funded for Preliminary Engineering; however, it was not funded for construction. Moreover, it was not listed in the current I-75 master plan.

Based on the coordination with FDOT District 1, it was recommended not to assume the managed lanes along I-75 for the development of future travel demand. The managed lanes were deleted and instead an extra General Purpose Lane was added for travel demand purposes.

2. Golden Gate Parkway and I-75 Interchange:

Through coordination with D1 it was determined that the improvements listed in the Collier Country LRTP Cost Feasible Plan for the interchange of Golden Gate Parkway and the I-75 interchange only considered the widening

of the southbound on-ramp from northbound Golden Gate Parkway. However, no construction funds were allocated for the project. So, it was decided that this ramp would remain coded as a one-lane ramp in the travel demand model.

3. Everglades Boulevard South widening between I-75 and Vanderbilt Beach Road:

Based on the information presented in the Cost Feasible Plan/TIP/SIS plans, no widening is programmed for Everglades Boulevard between I-75 and Vanderbilt Road. However, the 2045 original travel demand model network shows Everglades Boulevard as a 4-lane roadway.

Based on coordination with FDOT, this widening project was requested to be included in the D1RPM by Collier County. Since the original modeling effort for the 2013 PD&E Study project included the Everglades interchange, then the Everglades interchange and the 4 lanes (as coded in the model) were considered for this IMR Re-evaluation.

4. ALTERNATIVES

As stated in the latest version of the IARUG, when the change in approved access design concept occurs during a D/B project, the Re-evaluation shall show that the new concept satisfies the Safety, Operational and Engineering (SO&E) acceptability, and FHWA's policy points. Therefore, in these types of projects, the approved RFP concept is included and serves as the No-Build Alternative for comparison purposes.

In the case of this IMR Re-evaluation the analysis will focus on evaluating two alternatives:

1. The RFP Concept
2. The D/B Concept

The following sections will provide a detailed description of these alternatives. In addition, detailed conceptual figures are provided in **Appendix D** for each alternative.

4.1. RFP CONCEPT

The RFP Concept is shown in **Figure 2** and **Figure 3**. The RFP Concept pertains to the PD&E Alternative 1 (FPID: 425843-1-22-01) completed in 2013. This alternative combines a classic Partial Cloverleaf (ParClo) interchange with two flyover ramp connections to and from northbound and southbound SR 951. This design allows vehicular traffic to access I-75 without traveling through the signalized intersections along the SR 951 arterial. The alternative provides two new loop ramps in the southwest and northeast quadrants with new bridges providing acceleration lanes onto the I-75 freeway. The entrance for the northbound SR 951 loop ramp to I-75 westbound

is provided along Collier Boulevard just north of the intersection with Business Circle South. The entrance for southbound SR 951 loop ramp to eastbound I-75 is located just south of the westbound on/off ramps signalized intersection. This loop ramp merges with the northbound SR 951 to eastbound I-75 ramp on a bridge parallel to the I-75 mainline, prior to entering the mainline about 2,500 feet east of SR 951/Collier Boulevard as one single merge point.

Figure 2: RFP Concept

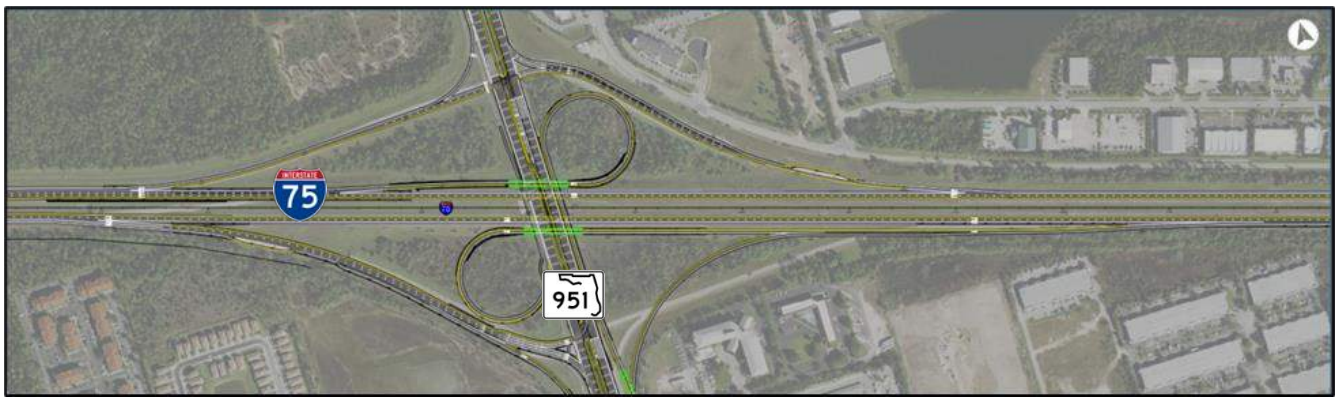
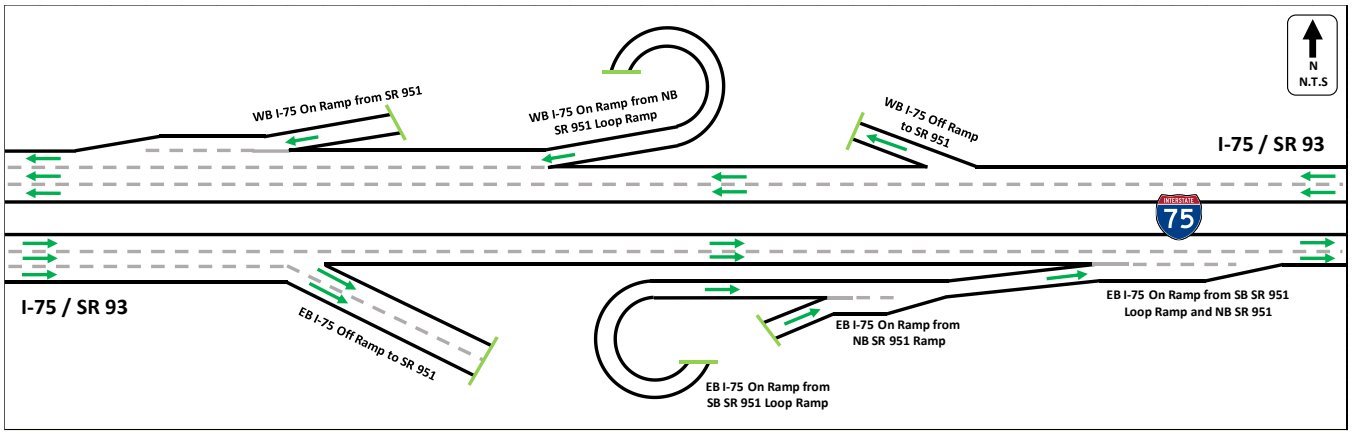


Figure 3: RFP Concept Lane Configuration



4.2. D/B CONCEPT

The D/B Concept is shown in **Figure 4** and **Figure 5** and it was developed as part of ATC #5 proposed during the design phase of the D/B project. Overall, the D/B alternative is similar to the RFP alternative with the exception of the number of merge points along eastbound I-75 at the subject interchange. In the RFP concept, the loop ramp from southbound SR 951 to eastbound I-75, and the ramp from northbound SR 951 to eastbound I-75 merge onto a ramp parallel to the I-75 mainline prior to merging with eastbound I-75 mainline traffic as a single point entrance ramp. Additionally, in the RFP alternative, a new bridge parallel to the mainline would carry the loop ramp traffic over SR 951. However, in the D/B Concept, the existing mainline bridge is widened to accommodate the auxiliary lane that would carry the traffic for the loop ramp. As a result, the ramp for southbound SR 951 to eastbound I-

75 merges directly with the I-75 mainline though an auxiliary lane that ends approximately 2,500 feet east of SR 951/Collier Boulevard. It is noted that the entrance for the new northbound I-75 on-ramp loop from SR 951 was shifted approximately 990 feet, along I-75, upstream of the original location proposed by the RFP alternative.

The entrance point for the northbound SR 951 to eastbound I-75 on-ramp was moved north of the Davis Boulevard intersection, in order to reduce the number of potential conflicts. The new location of the entrance ramp resulted in a shorter turning lane of about 330 feet. By moving the entrance point to the ramp north, the number of potential conflicting movements is decreased by increasing the distance that in-coming drivers from Davis Boulevard have to position themselves to enter the ramp.

Figure 4: D/B Concept

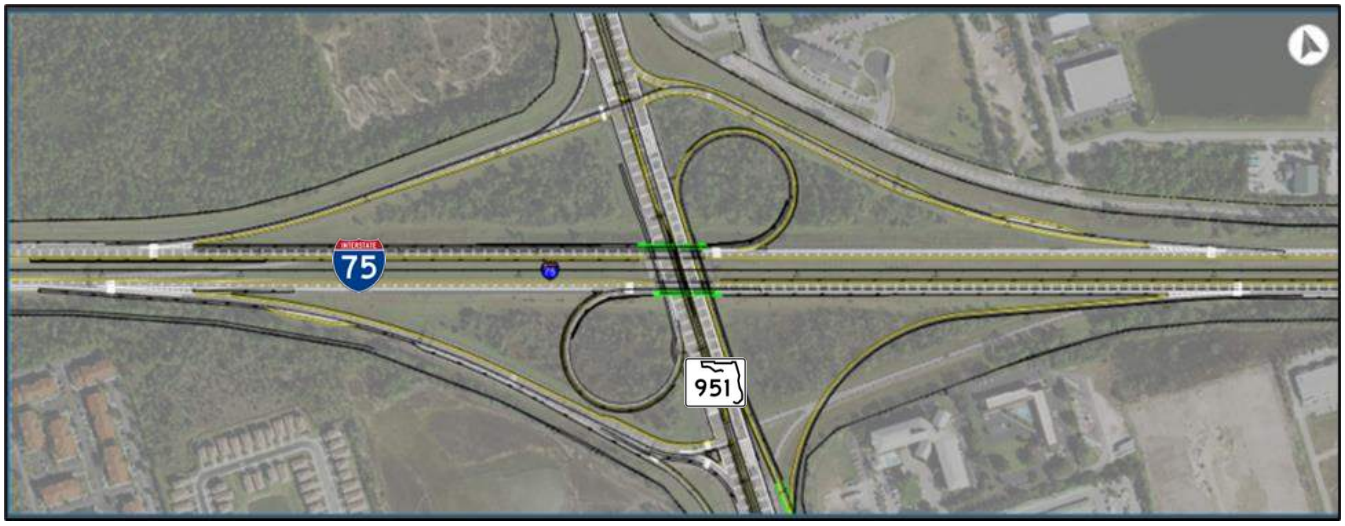
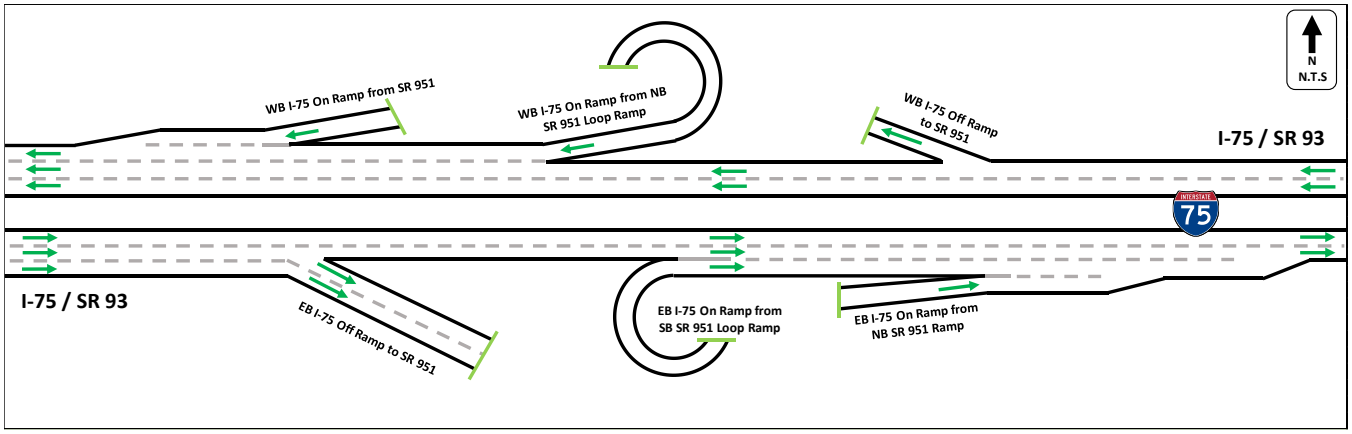


Figure 5: D/B Concept



5. TRAVEL DEMAND FORECASTING

The travel demand forecasting effort was briefly described in Section 2.4 of this report. The model selection and development of traffic demand volume projections were performed based on the guidelines and techniques published in the FDOT Project Traffic Forecasting Handbook, Project Traffic Forecasting Procedure Topic 525-030-120, and the Traffic Analysis Handbook. The sections below provide detailed information in regards to the model selection, assumptions, and validation techniques utilized in the traffic forecasting.

5.1. SELECTED TRAVEL DEMAND MODEL AND YEARS OF ANALYSIS

The D1 Regional Planning Model Version 2.0 (D1RPM V2.0), updated on January 29, 2021, was selected to develop the travel demand forecasting for this study. The D1RPM model is a Florida Standard Urban Transportation Structure (FSUTMS), four-step, trip-based model. The model, with 5,280 traffic analysis zones (TAZ) covers 12,400 square miles in 12 counties: Charlotte, Collier, Desoto, Glades, Hardee, Hendry, Highlands, Lee, Manatee, Okeechobee, Polk, and Sarasota. A portion of Osceola County adjacent to NE Polk County is also included. The D1RPM consists of a base year of 2015 and a forecast year of 2045. The model was used and comprehensively tested in the MPO LRTP's and is the adopted official model in the region to be used in the planning/PD&E and traffic forecasting studies. The model has 4 time-period assignments:

1. AM-Peak Period (6:00 AM – 9:00 AM)
2. Midday Period (9:00 AM – 4:00 PM)
3. PM-Peak Period (4:00 PM – 7:00 PM)
4. Overnight Period (7:00 PM – 6:00 AM)

The model's highway traffic assignment is performed at individual peak period-level, and the assigned volumes from all four periods are combined to report the annual average daily traffic (AADT) volumes. Therefore, no adjustment factors are necessary to forecast the AADT volumes. However, adjustments may be needed to ensure subarea model volumes match the AADT counts closely.

As mentioned in **Section 2.2** of this report the analysis years considered for the travel demand forecasting effort included:

- Base year: 2015 (for subarea model validation)
- Opening year: 2025 (developed by interpolation)
- Horizon year: 2045 (for design traffic development)

5.2. PROJECT TRAFFIC FORECAST DEVELOPMENT METHODOLOGY

Several methods were considered for developing the 2025 and 2045 AADT to ensure accuracy and reasonableness of the volumes. The travel demand forecasting effort started with the 2045 AADTs obtained from the model as the basis. These AADTs will be used to compute growth rates based on model AADTs (2015 vs 2045). These growth rates were compared to historical growth rates estimated from various sources. **Appendix H** contains the historical trendline analysis. Then, growth rates were used to project 2019 volumes into the year 2045. Several comparisons were performed between AADTs obtained from the model and AADTs obtained from projecting 2019 volumes using growth rates. Estimation of the AADTs to be used for the analysis was a combination of these procedures. Therefore, post-model adjustments were performed (as necessary) if the volume-to-count ratio was more or less than 10%, by accounting for the errors in the base year model validation. The project traffic forecasting methodology was developed using the following tasks series described below:

5.2.1. FDOT District 1 (FDOT D1) Model setup and "as is" 2015 and 2045 runs:

The latest FDOT D1 Regional Planning Model (D1RPM) from the model inventory (fsutmsonline.net) was obtained and the "as is" model runs of the 2015 and 2045 scenarios were performed. The 2015 base year and the 2045 cost-feasible LRTP model runs were performed as is, without any modifications to the model inputs. The key regional model output summaries such as the RMSE, vehicle miles traveled (VMT) and vehicle hours traveled (VHT) measures were benchmarked as shown in **Table 4** and **Table 5**. **Appendix G** contains information documenting the D1RMP 2015 Volume to count ratios.

Table 4: RMSE by Volume Group - D1RPM 2015

Item No.	Volume Group	Acceptable RMSE	No of Links	RMSE
1	1- 5,000	< 55.00%	3,034	59.00%
2	5,000- 10,000	< 45.00%	1,254	34.90%
3	10,000- 20,000	< 35.00%	982	24.80%
4	20,000- 30,000	< 27.00%	318	20.90%
5	30,000- 40,000	< 24.00%	39	18.70%
6	40,000- 50,000	< 22.00%	34	14.30%
7	50,000- 60,000	< 20.00%	15	8.00%
8	60,000- 70,000	< 18.00%	6	6.00%

Table 5: Highway Evaluation Statistics

Description	As-is 2015	As-is 2045
Total Number of Links	47517.00	49429.00
Total Centerline Miles	12029.00	11369.00
Total Lane Miles	17913.00	20014.00
Total Directional Miles	13504.00	14197.00
Total Volumes All Links	251584574.00	392899033.00
Total VMT All Links	64224542.00	107502143.00
Total VHT All Links	1625398.00	2852726.00
Original Speed (MPH)	36.98	37.77
Congested Speed (MPH)	36.66	36.70

5.2.2. COLLIER BOULEVARD & I-75 SUBAREA IDENTIFICATION AND SUBAREA MODEL STATISTICS REVIEW:

A subarea was delineated for the travel demand model validation checks. The subarea included I-75 and Collier Boulevard interchange and its upstream and downstream interchanges. In addition to this core area of influence, the roadway network links within an approximate radius of 2.0 miles were included in the subarea. Note that the purpose of the subarea delineation is to identify the network links and TAZs within the subarea boundary and to measure model validation statistics within this area. The subarea TAZ boundary is depicted in **Figure 6**.

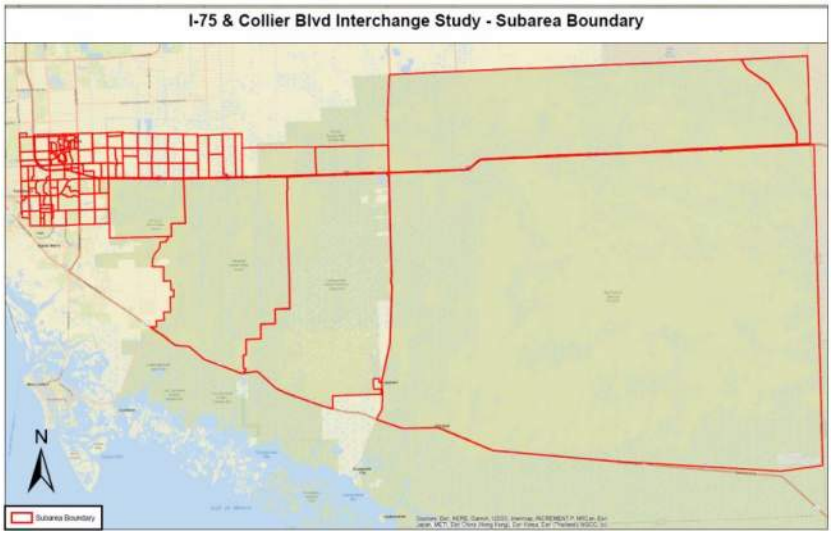


Figure 6: Subarea TAZ Boundary

The following three sub-sections **(5.2.3 through 5.2.5)** relate to the model validation methodology.

5.2.3. SUBAREA NETWORK, ATTRIBUTES, COUNTS REVIEW, AND CODING:

Within the subarea boundary, the study team performed the model's base year network reviews. **Figure 7** shows the Cube network subarea boundary. The model's 2015 network was reviewed against the historic aerial images available from Google and other free sources. It is standard practice to perform a detailed review of the model network links and their characteristics within a designated subarea while performing the design traffic forecasts. The model's network geometry, and key network attributes such as the number of lanes, posted speeds, and facility types were reviewed and updated as part of this effort. The changes to the model network were documented for (a) model validation check documentation purposes, and (b) propagating the changes to the future conditions' networks. In addition, the 2015 traffic counts coded in the model networks were reviewed and updated as needed. **Appendix G** documents the network, count, and attribute updates.

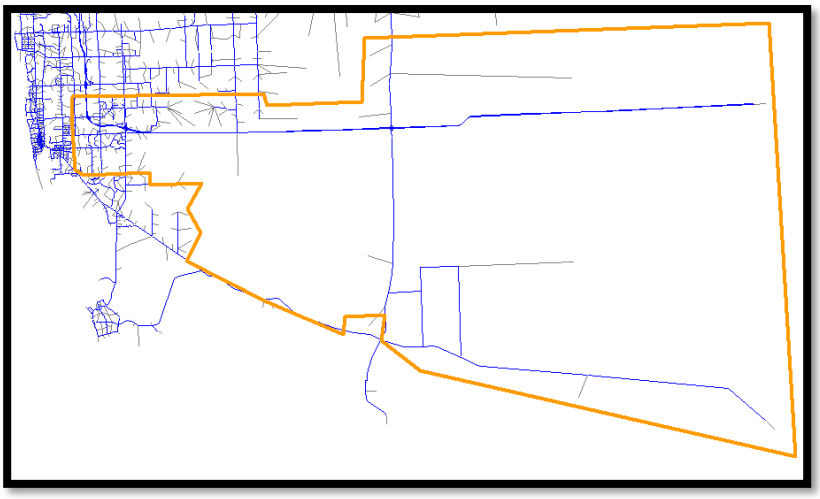


Figure 7: CUBE Network- Subarea Boundary

5.2.4. SUBAREA TAZ DATA REVIEW AND ADJUSTMENTS:

The review of the TAZ data within the subarea included the review of the population and employment growth between the base year (2015) and the future year (2045) TAZs. **Figure 8** depicts the subarea TAZ population growth between 2015 and 2045. **Figure 9** shows the subarea TAZ employment growth between 2015 and 2045.

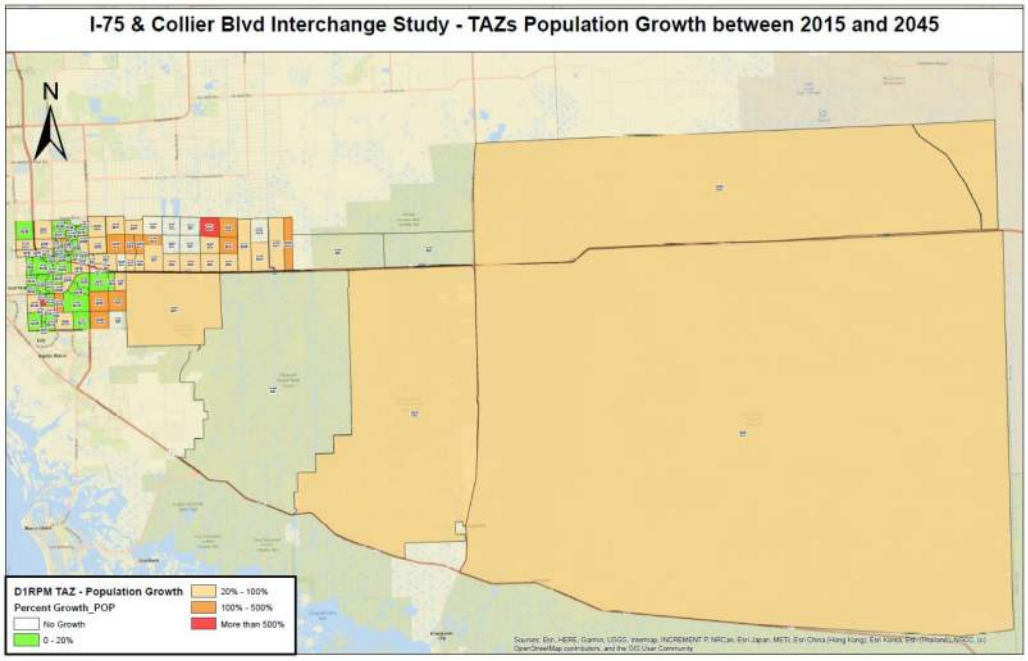


Figure 8: Population Growth Map (2015 to 2045)

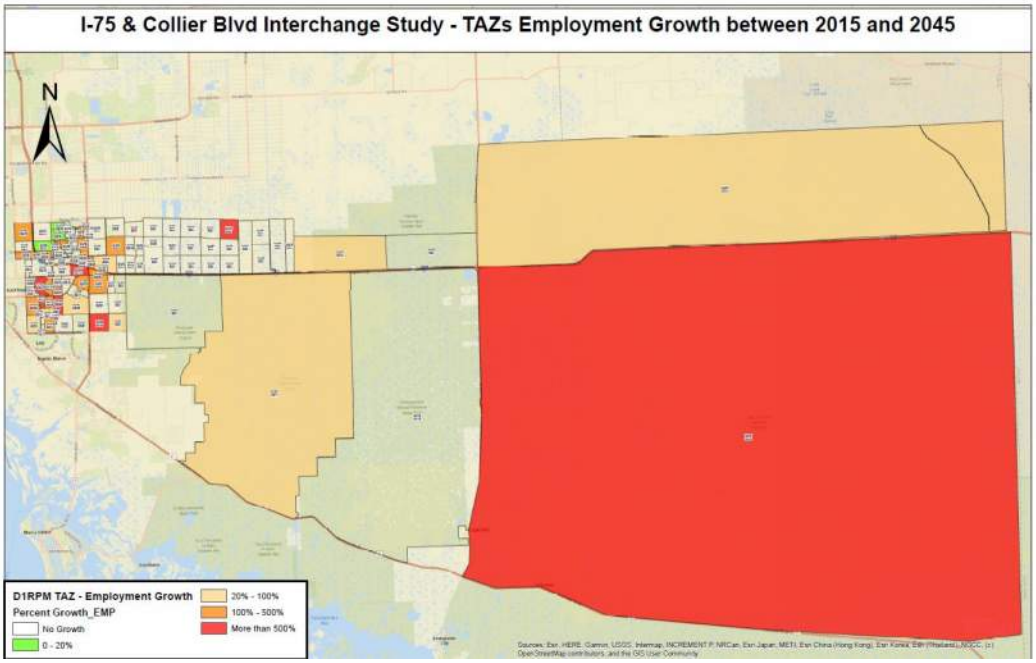


Figure 9: Employment Growth Map (2015 to 2045)

Table 6 and **Table 7** show the subarea model population and employment statistics for 2015 and 2045, respectively.

Table 6: Subarea Model 2015 Population and Employment Statistics

2015 Population		2015 Employment	
Single Family Residential	26,526	Industrial Jobs	1,519
Multi Family Residential	30,548	Commercial Jobs	2,395
		Service Jobs	5,994
Influence Area Total	**57,074**	**Influence Area Total**	**9,908**

Table 7: Subarea Model 2045 Population and Employment Statistics

2045 Population		2045 Employment	
Single Family Residential	34,523	Industrial Jobs	2,760
Multi Family Residential	36,090	Commercial Jobs	5,367
		Service Jobs	14,905
Influence Area Total	**70,613**	**Influence Area Total**	**23,032**

Table 8 and **Table 9** present the growth rates at the county level and subarea levels, respectively.

Table 8: County Growth Rate

Collier County	Population	Employment
2015	357112.00	143041.00
2045	511012.00	241366.00
Growth from 2015 to 2045	153900.00	98325.00
Annual Growth	5130.00	3278.00
Annual Growth Rate	1.44%	2.29%
Average Weighted Growth Rate	**1.71%**	

Table 9: Subarea TAZ Growth Rate

Subarea	Population	Employment
2015	59272.00	10211.00
2045	73170.00	23852.00
Growth from 2015 to 2045	13898.00	13641.00
Annual Growth	463.00	455.00
Annual Growth Rate	0.78%	4.45%
Average Weighted Growth Rate	**1.68%**	

5.2.5. SUBAREA MODEL VALIDATION CHECKS:

The model validation checks and adjustments were performed within the subarea boundary. The 2015 model outputs were compared against the 2015 AADT traffic counts, and the model validation summaries within the subarea were checked. Also, the subarea-level, facility type, and link-level model validation statistics were evaluated. The model parameters like centroid connectors, facility type, capacity, and speeds were adjusted,

as necessary, to improve the model validation. **Table 10** shows the comparison of the volume group statistics at the subarea level. In addition, **Table 11** shows a volume-to-count ratio comparison by facility type at the subarea level. Similarly, **Table 12** shows the calculated average volume-to-count ratios by facility subgroups (e.g. FTYPE 2x) for the subarea and its comparison with acceptable thresholds.

Table 10: Volume Group Statistics Comparison - Subarea Level

Item No.	Volume Group	Acceptable RMSE	As-is 2015		Updated 2015	
			No of Links	RMSE	No of Links	RMSE
1	1- 5,000	< 55.00%	30	28%	29	32%
2	5,000-10,000	< 45.00%	20	23%	24	25%
3	10,000-20,000	< 35.00%	38	21%	37	24%
4	20,000-30,000	< 27.00%	7	11%	7	13%
5	30,000-40,000	< 24.00%	2	10%	2	12%
Total	**1-500,000**	**<39.00%**	**97**	**22%**	**99**	**25%**

Table 11: Facility Type Volume to Count Statistics - Subarea Level

Facility Type	As-is 2015				Updated 2015			
	No. of Links	Volume	Count	Volume/ Count	No. of Links	Volume	Count	Volume/ Count
12	4	104,873	110,500	0.95	4	113,108	110,500	1.02
22	4	5,059	4,550	1.11	4	5,061	4,550	1.11
23	46	560,922	627,362	0.89	48	564,956	640,582	0.88
35	6	8,113	8,392	0.97	6	8,137	8,392	0.97
41	6	30,486	50,532	0.6	8	39,263	68,964	0.57
43	6	18,487	17,708	1.04	6	20,329	17,708	1.15
44	2	6,286	7,800	0.81	2	6,245	7,800	0.8
52	4	21,898	23,000	0.95	4	21,900	23,000	0.95
71	5	26,599	24,600	1.08	4	24,085	22,100	1.09
72	1	8,227	10,000	0.82	1	8,749	10,000	0.87
75	4	30,586	34,300	0.89	4	40,351	34,300	1.18
92	4	38,097	43,626	0.87	4	38,110	43,626	0.87
97	2	2,062	1,950	1.06	2	2,068	1,950	1.06
98	2	2,072	1,950	1.06	2	2,076	1,950	1.06
Total	**96**	**863,767**	**966,270**	**0.89**	**99**	**894,438**	**995,422**	**0.9**

Table 12: Facility Type Volume to Count Statistics - Subarea Level

Facility Type	FTYPE	Acceptable		As-is 2015					Updated 2015				
		Volume / Count	Volume Group RMSE	No. of Links	Volume	Count	Volume / Count	RMSE	No. of Links	Volume	Count	Volume / Count	RMSE
Freeway	12, 15, 16	± 7%	27%	4	104,873	110,500	0.95	10.38%	4	113,108	110,500	1.02	11.98%
Major Arterial	21, 22, 23, 24, 25, 26, 27, 28, 29	± 15%	35%	50	565,981	631,912	0.9	19.38%	52	570,017	645,132	0.88	22.71%
Minor Arterial	31,32,33,34,35,36,37,38,39	± 15%	100%	6	8,113	8,392	0.97	23.65%	6	573,093	648,974	0.88	23.96%
Collector	41, 42, 43, 44, 45, 46, 47, 48, 49	± 25%	45%	14	55,259	76,040	0.73	45.06%	16	47,400	77,356	0.61	48.86%
Ramps	7x	± 25%	45%	10	65,412	68,900	0.95	30.63%	9	26,574	25,508	1.04	27.52%
Toll Facilities	9x	± 6%	45%	8	42,231	47,526	0.89	21.02%	8	28,145	30,800	0.91	20.98%
Overall				92	841,869	943,270	0.89	21.64%	95	1,358,337	1,538,270	0.88	24.83%

5.2.6. 2045 NO-BUILD (RFP CONCEPT) NETWORK DEVELOPMENT, MODEL RUN, AND REASONABLENESS CHECKS:

As mentioned in **Section 4.0** of this report, the RFP concept will serve as the No-Build Alternative, and it will be used to compare the results from D/B concept (Build Alternative). In general, the development of the No-Build network is an important step in the design traffic development process. The No-Build network assumes existing plus committed conditions of the model's roadway network within the core area of influence of the study area. The core area of influence for this study is the I-75 and Collier Boulevard interchange and its upstream and downstream interchanges.

The 2045 LRTP network was distributed along with the official model package used as the basis for the No-Build network. This network was updated with the following changes: (a) the changes identified in the 2015 model validation process (b) within the core area of influence, the network was matched with the existing plus committed roadway network, including the RFP Concept for the interchange coding (c) for the rest of the background network links, the roadway network was matched with the MPO/FDOT cost feasible LRTP networks. The LRTP network checks were performed within the 2.0 mile subarea of the area of influence.

The 2045 No-Build Model run was performed and evaluated for reasonableness checks. In addition, checks were performed to evaluate the model volume growth against the 2045 TAZ data. Similarly, an annual growth rate comparison was performed between historical data, model volumes, the average of historic growth and model growth, and the county growth rate from socioeconomic data. The population projections used in the model are derived from the BEBR control totals. The mainline control point was determined based on the model validation south of I-75 and Golden Gate parkway interchange. An average of historic and model growth rates was used to develop the mainline forecast at this location. In addition, the ramp forecasts were used as a control to develop the mainline forecast. The reasonableness of the growth rates was considered in developing the ramp forecasts, and an average growth rate was used in cases where the historic or model growth rate

seemed unreasonable.

Appendix H includes the growth rate estimated based on the historical trend analysis using traffic counts obtained from the FTO information.

5.2.7. DESIGN TRAFFIC DEVELOPMENT FOR 2045 NO-BUILD ALTERNATIVE AADT DEVELOPMENT:

A prototype spreadsheet including the I-75/Collier Boulevard interchanges and its upstream and downstream interchanges was developed using formulas in EXCEL that can read model AADTs into labels for each of the prototype roadway links. The 2045 model volumes were extracted into the design traffic spreadsheet, using the coded location numbers in the network links. The model volumes were post-processed to account for the model validation differences. The model results were post-processed using the 2019 FDOT Project Traffic Forecasting Handbook and NCHRP 765 recommendations. Generally, post-processing was applied if the model volumes are different from the traffic counts +/- 10%. The resulting AADTs were balanced and rounded according to the FDOT Project traffic forecasting handbook guidelines.

5.2.8. DESIGN TRAFFIC DEVELOPMENT FOR 2045 NO-BUILD ALTERNATIVE (RFP CONCEPT) AND BUILD ALTERNATIVES (D/B CONCEPT) - AM/PM DDHV DEVELOPMENT:

The corridor directional design hour volumes were developed using standard K and D factors, and balanced AADTs. As a reasonableness check, the standard K and D factors documented in the MLOU, and the factors developed using the FDOT Traffic Information Online (FTO) website published data were compared. The balanced AADTs developed in Section 5.2.7 were converted into AM/PM DDHVs using the K and D factors. Then, resulting DDHVs were balanced. The final products were submitted in Excel spreadsheet format.

Once the No-Build volumes were approved, the Build Alternative volumes were developed by the redistribution method. Since there is only one Build Alternative (D/B Concept) which considers minor changes to the number of merge points along I-75 eastbound when compared to the No-Build Alternative, additional model runs for the Build Alternative were not required.

5.2.9. DESIGN TRAFFIC DEVELOPMENT FOR 2025 NO-BUILD ALTERNATIVE (RFP CONCEPT) AND BUILD ALTERNATIVES (D/B CONCEPT) - AM/PM DDHV DEVELOPMENT:

No-Build (RFP Concept) opening year traffic volumes were developed by linear interpolation between 2019 traffic volumes (obtained from FTO and I-75 Southwest Connect, FDOT District One Interstate Project – I-75 South Corridor Master Plan) and the estimated design year volumes (2045). For the development of the Build Alternative (D/B Concept) opening year volumes, the redistribution method was applied.

5.3. TRAFFIC FACTORS

Traffic factors were determined based on information from the FDOT FTO Portable Traffic Monitoring Station (PTMS) No. 032000 (located west of SR 951). Similarly, ramp truck percentages were calculated for each ramp based on information obtained from the FDOT FTO platform. Based on this review, the five-year (2017-2021) average for each factor was calculated (see **Table 13**) and utilized for the traffic forecasting and related traffic operational analyses.

Table 13: Traffic Factors

Traffic Factors							
Roadway	**K**	**D**	**$T_{(Mainline)}$**	**$Tf_{(Mainline)}$**	**$T_{(Ramp)}$**	**$Tf_{(Ramp)}$**	**PHF**
I-75 / SR 93	9.00%	56%	12%	6%	7%	3.5%	0.95

Figure 10 through **Figure 15** include the line diagrams summarizing the 2025 and 2045 volumes for the RFP Concept and D/B Alternatives.

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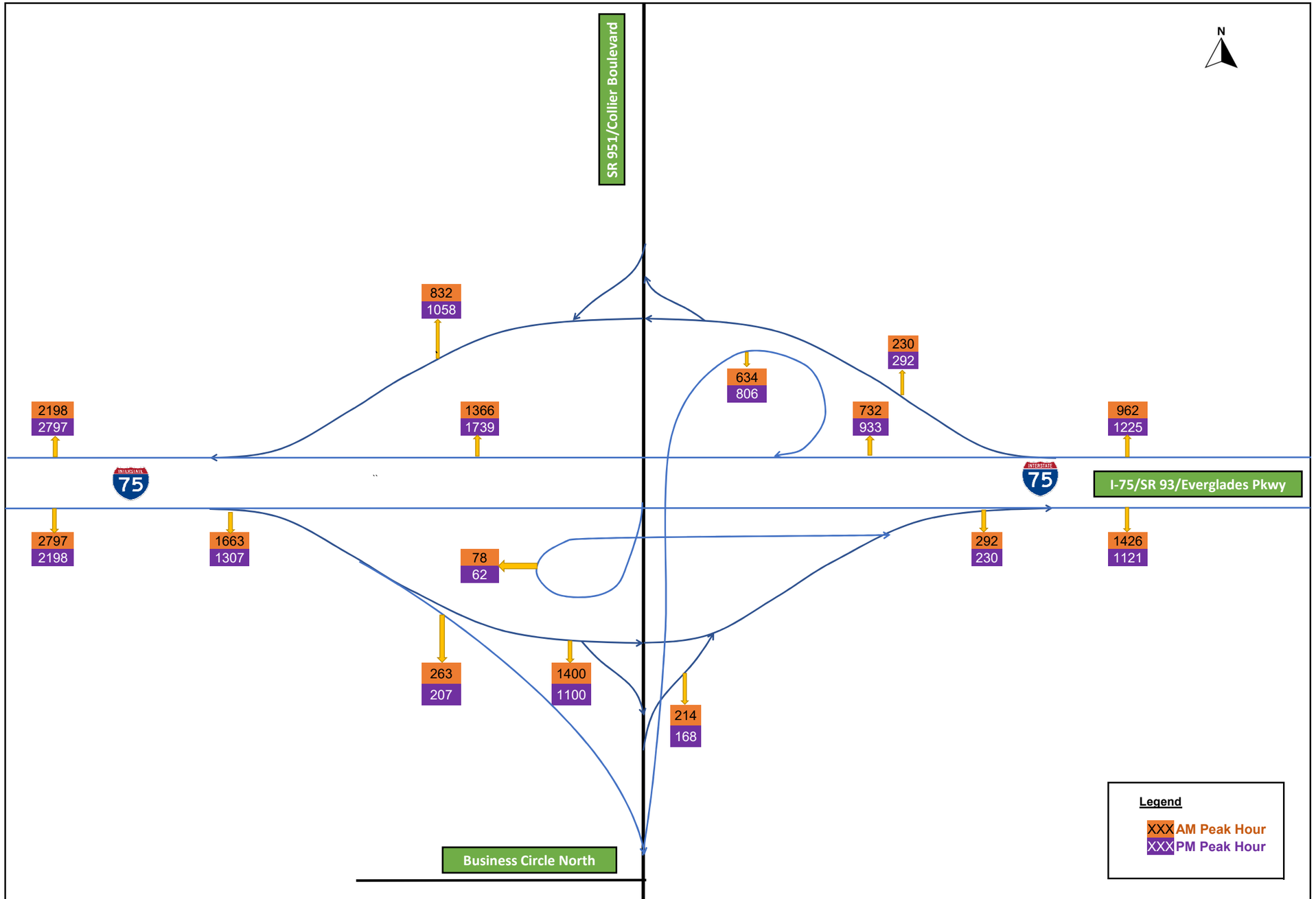
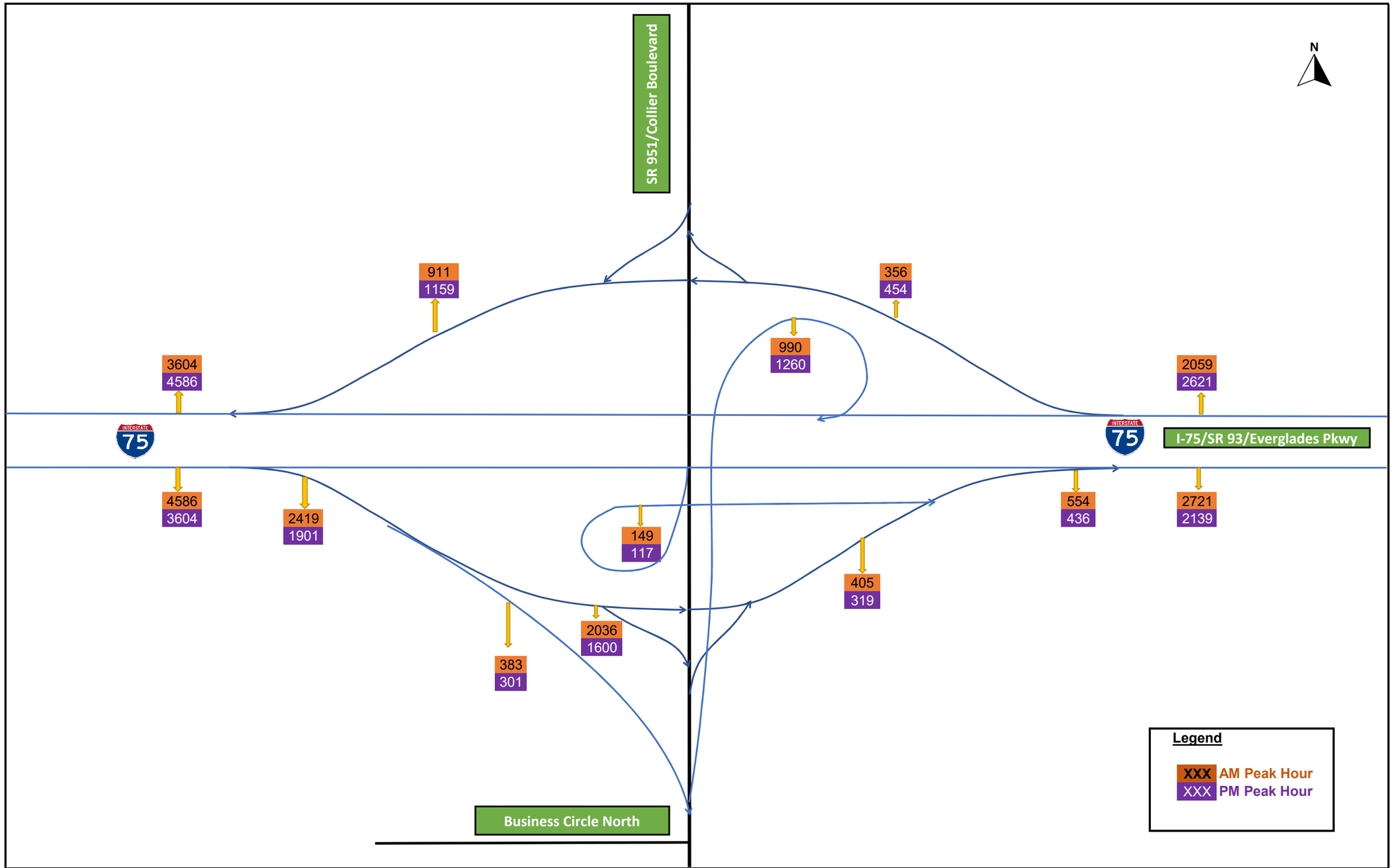


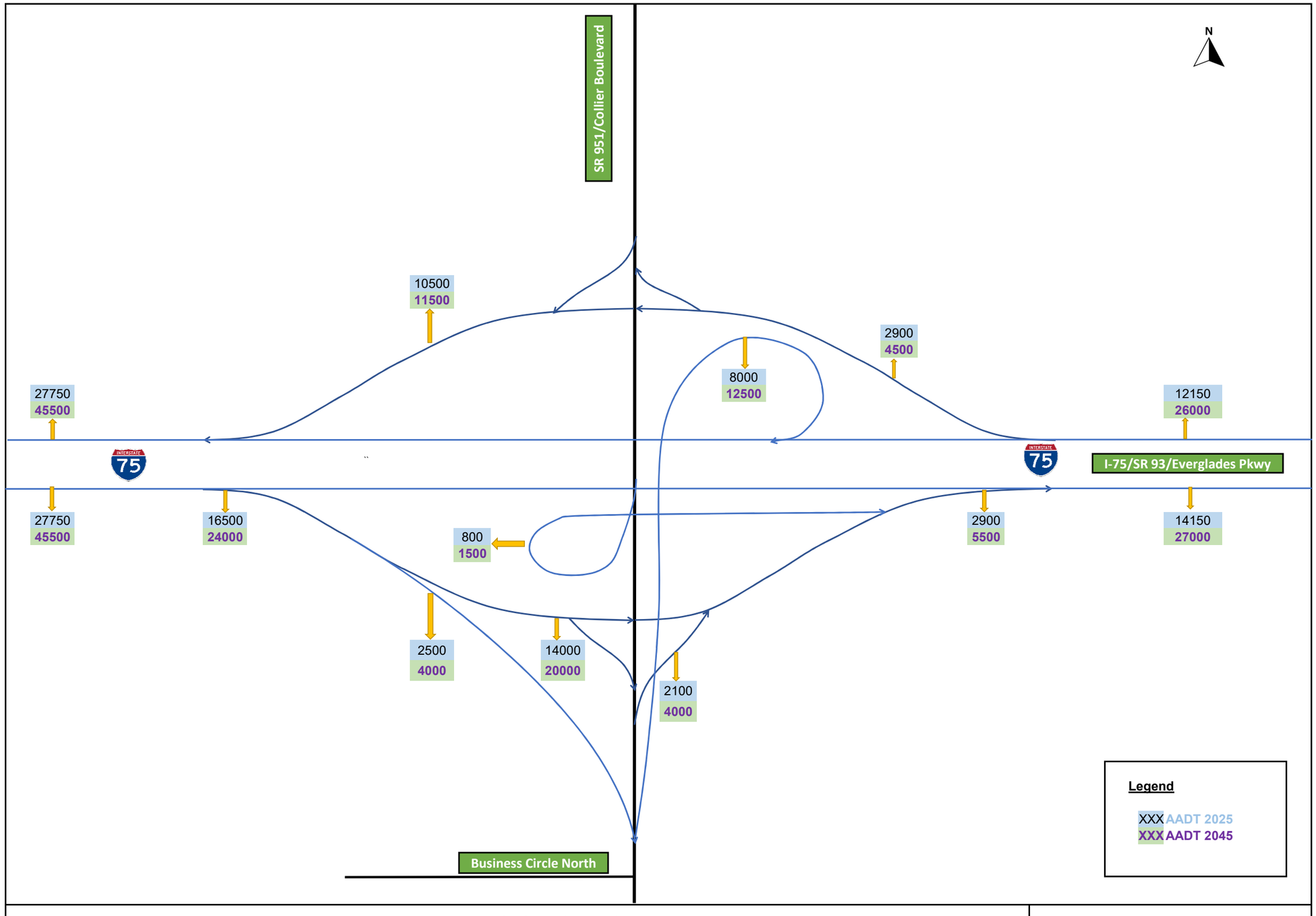
RFP Concept (IMR Re-evaluation) Peak Hours Volumes (2025 - AM & PM)
I-75 & SR 951/Collier Boulevard Interchange

Figure 10



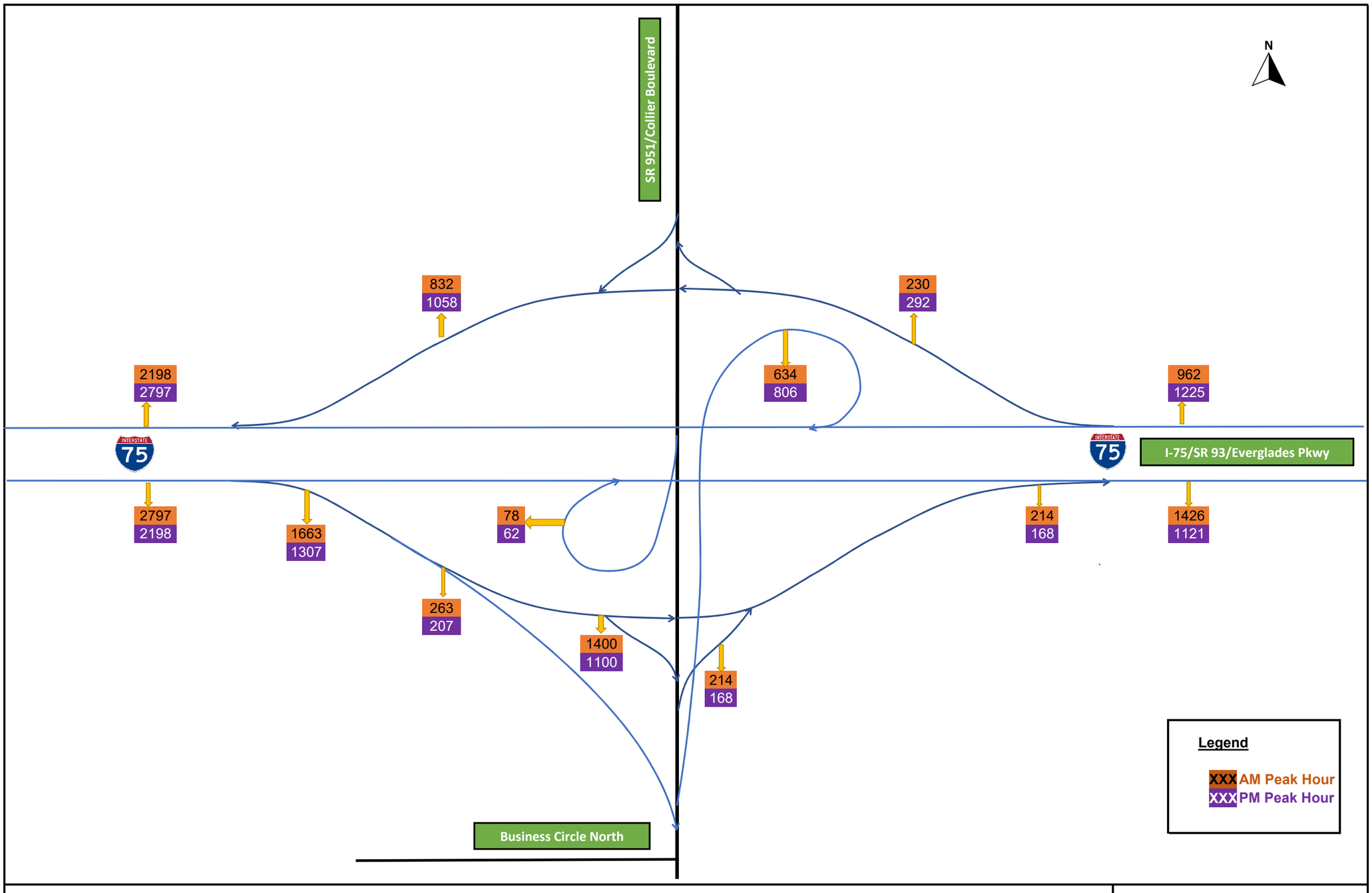
RFP Concept (IMR Re-evaluation) Peak Hours Volumes (2045 - AM & PM)
I-75 & SR 951/Collier Boulevard Interchange

Figure 11



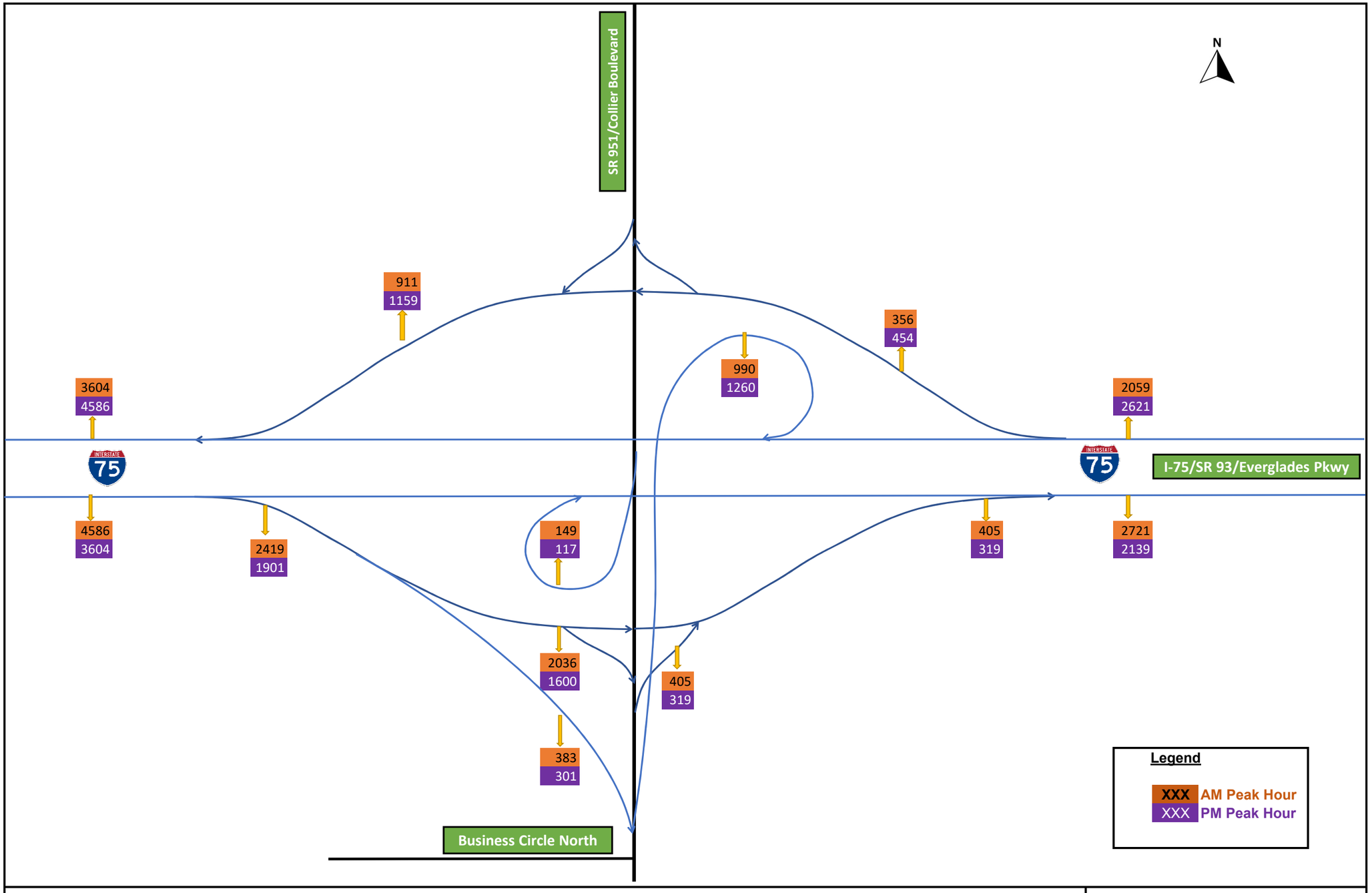
RFP Concept (IMR Re-evaluation) 2025 VS 2045 AADTs
I-75 & SR 951/Collier Boulevard Interchange

Figure 12



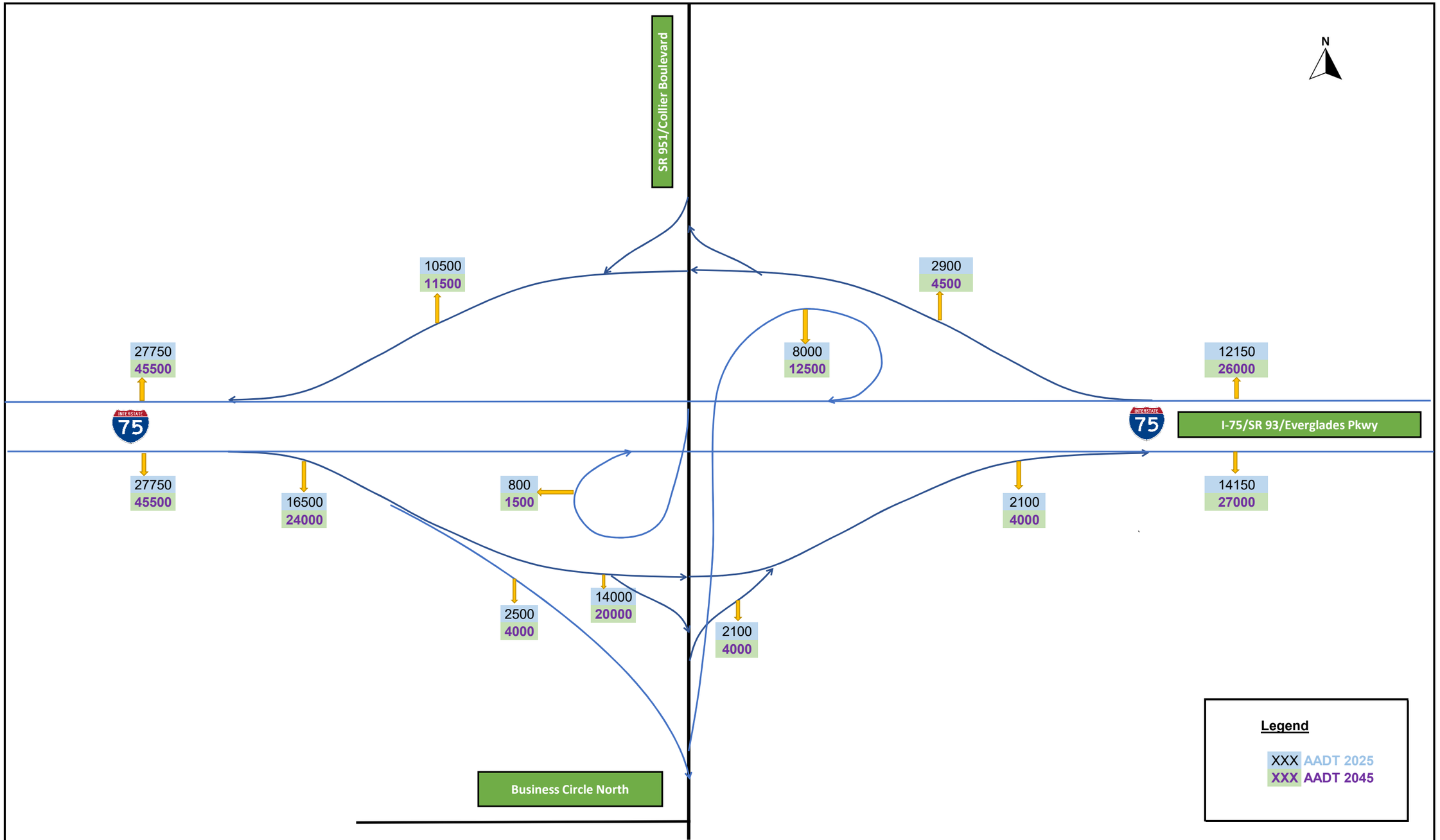
D/B Concept (IMR Re-evaluation) Peak Hours Volumes (2025 - AM & PM)
I-75 & SR 951/Collier Boulevard Interchange

Figure 13



D/B Concept (IMR Re-evaluation) Peak Hours Volumes (2045 - AM & PM)
I-75 & SR 951/Collier Boulevard Interchange

Figure 14



D/B Concept (IMR Re-evaluation) 2025 VS 2045 AADTs
I-75 & SR 951/Collier Boulevard Interchange

Figure 15

6. TRAFFIC OPERATIONAL ANALYSIS

As mentioned in Section 2.5 of this IMR Re-evaluation, the traffic operational analysis focused on the freeway segments (basic and merge/diverge areas) in the vicinity of the interchange of I-75 at Collier Boulevard. The segments of I-75 to the east and west of the I-75 interchange at Collier Boulevard were analyzed using the procedure and criteria outlined in Chapter 10 (Freeway Facilities) of the Highway Capacity Manual 7th Edition (HCM 7) and its respective module included in the Highway Capacity Software 2023 (HCS 2023 version 8.2). This methodology is consistent with FDOT IARUG.

HCS provides an estimate of the Level of Service (LOS) based on density (pc/mile/lane) as the measure of effectiveness (MOE) as per the HCM methodology. Density was the primary MOE to evaluate basic mainline freeway segments as well as the merge/diverge areas. Speed was also summarized and compared between the RFP Concept and the D/B Concept.

The HCM utilizes density to relate the traffic operations to a given LOS. The LOS grading scale ranges from LOS A to LOS F, where LOS A represents under-saturated/free flow conditions and LOS F represents over-saturated/congestion. The following sections summarize the traffic operations analysis conducted for both alternatives for the opening year (2025) and the design year 2045 (Section 8.2) for the morning and afternoon peak hours. The analysis was conducted for each direction of travel along the I-75 mainline.

Each direction was segmented based on the characteristics of the portion of I-75 being analyzed. **Table 14** summarizes the number of segments in which the I-75 mainline (per direction) was divided. The limits of the segments are described in the tables summarizing the results of the HCS analysis conducted. HCS output reports for future operational analysis for each alternative are provided in **Appendix I**.

Table 14: Number of Segments along I-75 used for the Freeway Operational Analysis

Alternative	Direction of Travel	
	Eastbound	Westbound
RFP Concept	5	6
D/B Concept	8	7

6.1. OPENING YEAR (2025) OPERATING CONDITIONS

This section summarizes the HCS results for the AM and PM peak hour analysis conducted for the opening year (2025). **Table 15** and **Table 16** summarize results for the RFP Concept and the D/B Concept, respectively. Similarly, **Table 17** summarizes the overall facility results of the two alternatives. The detailed traffic analysis output reports are included in **Appendix I**.

Based on the results of the operational analysis, both alternatives are expected to operate at acceptable LOS for the year 2025 and they meet the FDOT LOS target of D per the State Highway System, Policy No. 000-525-006, effective April 19, 2017. Although both alternatives are expected to operate satisfactorily, the D/B alternative seems to operate slightly better than the RFP alternative in certain portions of the I-75 mainline. This results in an overall lower density in the eastbound direction of travel (for both peak hours), as seen in **Table 17.** In the westbound direction, results for both alternatives show the same density. In the case of speed and travel time, both alternatives operate very similarly.

Table 15: Summary of 2025 Peak Hour RFP Freeway Operating Conditions

Direction of Travel	Segment No.	Segment Description	Segment Type	AM Peak Hour			PM Peak Hour		
				Speed (mi/h)	Density (pc/mi/ln)	LOS	Speed (mi/h)	Density (pc/mi/ln)	LOS
EB	1	From CR 886 SB On Ramp to SR 951 EB Off Ramp	Basic Freeway Segment	75.4	13.8	B	75.4	10.8	A
	2	SR 951 EB Off Ramp	Diverge Ramp Freeway Segment	60.2	17.3	B	61.2	13.4	A
	3	From SR 951 EB Off Ramp to SR 951 EB On Ramp	Basic Freeway Segment	75.3	8.4	A	75.3	6.6	A
	4	SR 951 EB On Ramp	Merge Ramp Freeway Segment	67.0	11.8	A	67.2	9.3	A
	5	From SR 951 EB On Ramp to Everglades Blvd EB Off Ramp	Basic Freeway Segment	75.4	10.6	A	75.4	8.3	A
WB	1	Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp	Basic Freeway Segment	75.4	7.1	A	75.4	9.1	A
	2	SR 951 WB Off Ramp	Diverge Ramp Freeway Segment	60.3	8.9	B	60.1	11.4	B
	3	SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	Basic Freeway Segment	75.0	5.4	A	74.9	6.9	A
	4	SR 951 WB On Ramp Loop	Merge Ramp Freeway Segment	75.4	6.7	A	75.4	8.5	A
	5	SR 951 WB On Ramp	Merge Ramp Freeway Segment	68.6	11.8	B	68.0	15.2	B
	6	SR 951 WB On Ramp to CR 886 NB Off Ramp	Basic Freeway Segment	75.4	10.8	A	75.4	13.8	B

Table 16: Summary of 2025 Peak Hour D/B Freeway Operating Conditions

Direction of Travel	Segment No.	Segment Description	Segment Type	AM Peak Hour			PM Peak Hour		
				Speed (mi/h)	Density (pc/mi/ln)	LOS	Speed (mi/h)	Density (pc/mi/ln)	LOS
EB	1	From CR 886 SB On Ramp to SR 951 EB Off Ramp	Basic Freeway Segment	75.4	13.8	B	75.4	10.5	A
	2	SR 951 EB Off Ramp	Diverge Ramp Freeway Segment	60.2	17.3	B	61.2	13.4	A
	3	From SR 951 EB Off Ramp to SR 951 EB On Ramp	Basic Freeway Segment	74.4	8.4	A	74.5	6.6	A
	4	SR 951 EB On Ramp Loop	Merge Ramp Freeway Segment	75.3	6.0	A	75.3	4.7	A
	5	From SR 951 EB On Ramp Loop to SR 951 EB On Ramp	Basic Freeway Segment	75.4	6.0	A	75.4	4.7	A
	6	SR 951 EB On Ramp	Merge Ramp Freeway Segment	69.9	7.6	A	70.0	5.9	A
	7	From SR 951 EB On Ramp to EB Lane Drop	Basic Freeway Segment	74.6	7.0	A	74.6	5.5	A
	8	From EB Lane Drop to Everglades Blvd EB Off Ramp	Basic Freeway Segment	75.4	10.6	A	75.4	8.3	A
WB	1	From Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp	Basic Freeway Segment	75.4	7.1	A	75.4	9.1	A
	2	SR 951 WB Off Ramp	Diverge Ramp Freeway Segment	60.3	8.9	B	60.1	11.4	B
	3	From SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	Basic Freeway Segment	74.3	5.4	A	74.3	6.9	A
	4	SR 951 WB On Ramp Loop	Merge Ramp Freeway Segment	75.3	6.7	A	75.3	8.5	A
	5	From SR 951 WB On Ramp Loop to SR 951 WB On Ramp	Basic Freeway Segment	75.4	6.7	A	75.4	8.6	A
	6	SR 951 WB On Ramp	Merge Ramp Freeway Segment	68.6	11.8	B	68.1	15.1	B
	7	From SR 951 WB On Ramp to CR 886 NB Off Ramp	Basic Freeway Segment	75.4	10.8	A	75.4	13.8	B

Table 17: Summary of 2025 Peak Hour RFP and D/B Freeway Facility Operating Conditions

Direction of Travel	Alternative	AM Peak Hour				PM Peak Hour			
		Space Mean Speed (mi/h)	Average Travel Time (min)	Average Density (pc/mi/ln)	LOS	Space Mean Speed (mi/h)	Average Travel Time (min)	Average Density (pc/mi/ln)	LOS
EB	RFP	74.5	10.0	11.6	B	74.6	10.0	9.1	A
	D/B	74.6	10.0	11.3	B	74.6	10.0	8.8	A
WB	RFP	74.7	9.6	8.2	A	74.7	9.6	10.5	A
	D/B	74.7	9.6	8.2	A	74.7	9.6	10.5	A

6.2. DESIGN YEAR (2045) OPERATING CONDITIONS

This section summarizes the HCS results for the AM and PM peak hour analysis conducted for the design year (2045). **Table 18** and **Table 19** summarize results for the RFP Concept and the D/B Concept, respectively. Similarly, **Table 20** summarizes the overall facility results of the two alternatives. The detailed traffic analysis output reports are included in **Appendix I**.

Based on the results of the operational analysis, both alternatives are expected to operate at acceptable LOS for the year 2045 and they meet the FDOT LOS target of D per the State Highway System, Policy No. 000-525-006, effective April 19, 2017. Although both alternatives are expected to operate satisfactorily, the D/B alternative seems to operate slightly better than the RFP alternative in certain portions of the I-75 mainline. This results in an overall lower density in the eastbound direction of travel (for both peak hours), as seen in **Table 20.** In the westbound direction, results for both alternatives show the same density. In the case of speed and travel time, both alternatives operate very similarly.

Table 18: Summary of 2045 Peak Hour RFP Freeway Operating Conditions

Direction of Travel	Segment No.	Segment Description	Segment Type	AM Peak Hour			PM Peak Hour		
				Speed (mi/h)	Density (pc/mi/ln)	LOS	Speed (mi/h)	Density (pc/mi/ln)	LOS
EB	1	From CR 886 SB On Ramp to SR 951 EB Off Ramp	Basic Freeway Segment	69.7	24.5	C	74.0	18.1	C
	2	SR 951 EB Off Ramp	Diverge Ramp Freeway Segment	58.6	29.1	C	60.3	22.2	B
	3	From SR 951 EB Off Ramp to SR 951 EB On Ramp	Basic Freeway Segment	74.8	16.2	B	75.3	12.6	B
	4	SR 951 EB On Ramp	Merge Ramp Freeway Segment	64.9	23.3	C	66.2	17.9	B
	5	From SR 951 EB On Ramp to Everglades Blvd EB Off Ramp	Basic Freeway Segment	72.3	21.0	C	74.9	15.9	B
WB	1	Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp	Basic Freeway Segment	75.1	15.3	B	72.9	20.1	C
	2	SR 951 WB Off Ramp	Diverge Ramp Freeway Segment	59.9	19.2	C	59.6	24.5	C
	3	SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	Basic Freeway Segment	74.9	12.6	B	74.8	16.2	B
	4	SR 951 WB On Ramp Loop	Merge Ramp Freeway Segment	75.4	13.2	B	74.5	17.0	B
	5	SR 951 WB On Ramp	Merge Ramp Freeway Segment	67.4	19.8	B	65.2	26.0	C
	6	SR 951 WB On Ramp to CR 886 NB Off Ramp	Basic Freeway Segment	74.0	18.1	C	69.7	24.5	C

Table 19: Summary of 2045 Peak Hour D/B Freeway Operating Conditions

Direction of Travel	Segment No.	Segment Description	Segment Type	AM Peak Hour			PM Peak Hour		
				Speed (mi/h)	Density (pc/mi/ln)	LOS	Speed (mi/h)	Density (pc/mi/ln)	LOS
EB	1	From CR 886 SB On Ramp to SR 951 EB Off Ramp	Basic Freeway Segment	69.7	24.5	C	74.0	18.1	C
	2	SR 951 EB Off Ramp	Diverge Ramp Freeway Segment	58.6	29.1	C	60.3	22.2	B
	3	From SR 951 EB Off Ramp to SR 951 EB On Ramp	Basic Freeway Segment	74.3	16.2	B	74.4	12.6	B
	4	SR 951 EB On Ramp Loop	Merge Ramp Freeway Segment	75.3	11.4	B	75.3	9.0	A
	5	From SR 951 EB On Ramp Loop to SR 951 EB On Ramp	Basic Freeway Segment	75.4	11.4	B	75.4	9.0	A
	6	SR 951 EB On Ramp	Merge Ramp Freeway Segment	68.9	14.6	B	69.4	11.4	A
	7	From SR 951 EB On Ramp to EB Lane Drop	Basic Freeway Segment	74.4	13.4	B	74.5	10.6	A
	8	From EB Lane Drop to Everglades Blvd EB Off Ramp	Basic Freeway Segment	72.3	21.0	C	74.9	15.9	B
WB	1	From Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp	Basic Freeway Segment	75.1	15.3	B	72.9	20.1	C
	2	SR 951 WB Off Ramp	Diverge Ramp Freeway Segment	59.9	19.2	C	59.6	24.5	C
	3	From SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	Basic Freeway Segment	74.2	12.6	B	74.2	16.2	B
	4	SR 951 WB On Ramp Loop	Merge Ramp Freeway Segment	75.3	13.2	B	74.5	17.0	B
	5	From SR 951 WB On Ramp Loop to SR 951 WB On Ramp	Basic Freeway Segment	75.4	13.3	B	74.5	17.1	B
	6	SR 951 WB On Ramp	Merge Ramp Freeway Segment	67.4	19.8	B	65.2	26.0	C
	7	From SR 951 WB On Ramp to CR 886 NB Off Ramp	Basic Freeway Segment	74.0	18.1	C	69.7	24.5	C

Table 20: Summary of 2045 Peak Hour RFP and D/B Freeway Facility Operating Conditions

Direction of Travel	Alternative	AM Peak Hour				PM Peak Hour			
		Space Mean Speed (mi/h)	Average Travel Time (min)	Average Density (pc/mi/ln)	LOS	Space Mean Speed (mi/h)	Average Travel Time (min)	Average Density (pc/mi/ln)	LOS
EB	RFP	70.9	10.5	21.9	C	73.9	10.1	16.5	B
	D/B	71.0	10.5	21.3	C	73.9	10.0	16.1	B
WB	RFP	74.1	9.6	16.1	B	71.4	10.0	21.3	C
	D/B	74.1	9.6	16.1	B	71.4	10.0	21.3	C

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7. SAFETY ANALYSIS

The safety analysis focused on the freeway segments (basic and merge/diverge) in the vicinity of the interchange of I-75 at SR 951. The segments along the I-75 freeway mainline were analyzed using the Highway Safety Manual 2010 - 1st Edition (HSM 1st Edition) methodologies by means of the Enhanced Interchange Safety Analysis Tool (ISATe). The safety analysis was consistent with the procedure presented in the 2022 IARUG and the IARUG Safety Analysis Guidance.

The HSM methodologies allowed to quantitatively assess the geometric (where applicable) for the roadway segments in the study area.

The most recent five years of crash data (2017-2021) were obtained through FDOT D1 and were downloaded from various sources including FDOT's CARS database, FDOT SSOGIS database, and Signal Four Data Analytics.

7.1. HISTORICAL CRASH ANALYSIS

The historical crash analysis was initiated by evaluating the safety conditions for the segment of I-75 between the Everglades Boulevard interchange (MP 41.520) up to just east of the interchange with CR 886 (MP 43.349).

A more detailed crash analysis was conducted for the segments of I-75 directly adjacent to the interchange with SR 951/Collier Boulevard. The limits were picked as MP 49.53, approximately 3,000 feet east of the subject interchange and (MP 51.04), approximately 1,500 feet west. The limits used were selected to cover the segments along I-75 where the RFP Concept and D/B Concept were proposing changes.

The purpose of these two analyses was to determine if the segments of I-75 immediately adjacent to the interchange with SR 951/Collier Boulevard will result in different crash frequencies. Crash summary worksheets are included in **Appendix J**.

7.1.1. CRASH ANALYSIS BETWEEN EVERGLADES BOULEVARD AND EAST OF THE INTERCHANGE WITH CR 886

Table 20 summarizes the results for the crashes occurring along I-75 between Everglades Boulevard interchange (MP 41.520) and just east of CR 886 interchange (MP 43.349), a distance of approximately 1.829 miles. Within this segment a total of 379 crashes were reported. As seen in **Table 20,** the number of crashes per year were as follows: 70 crashes in 2017, 84 crashes in 2018, 67 crashes in 2019, 63 crashes in 2020, and 95 crashes in 2021. Overall, the number of crashes seems to be relatively constant through the years, except for the year 2021 where an increase of about 33% (when compared to the previous year) was calculated.

The top three leading crash types consisted of crashes with Fixed Object (28%), Sideswipe with (22%), and Rear End (21%) crashes. Additionally, there was 1 (<1%) Pedestrian and no Bicycle related crashes, during the referenced five-year period. Based on crash severity, 271 (72%) were Property Damage Only crashes, 103 (27%) were Injury crashes, and 5 (1%) were Fatal crashes. The detailed police reports of the Fatal and Pedestrian type crashes are attached in **Appendix J**. There were 144 (38%) Dark/Dusk/Dawn crashes reported and there were 67 (18%) crashes reported to have occurred under Wet/Slippery pavement conditions.

Table 21: Entire Study Corridor Crash Statistics

I-75 Study Freeway Limits from NB CR 886 Off Ramp to EB/WB Everglades Blvd On/Off Ramps Segment/Spot with No Expected Values Available		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		Year							
		2017	2018	2019	2020	2021			
CRASH TYPE	Rear End	12	20	12	16	18	78	15.60	20.6%
	Head On	0	0	0	0	0	0	0.00	0.0%
	Angle	1	4	1	5	6	17	3.40	4.5%
	Left Turn	0	0	0	0	0	0	0.00	0.0%
	Right Turn	1	0	0	0	0	1	0.20	0.3%
	Sideswipe	15	17	22	9	19	82	16.40	21.6%
	Backed Into	0	0	0	0	0	0	0.00	0.0%
	Pedestrian	0	0	0	1	0	1	0.20	0.3%
	Bicycle	0	0	0	0	0	0	0.00	0.0%
	Fixed Object	14	26	21	16	28	105	21.00	27.7%
	Other Non-Collisions	9	7	0	3	7	26	5.20	6.9%
	Overturn/Rollover	9	2	4	2	3	20	4.00	5.3%
	Others	9	8	7	11	14	49	9.80	12.9%
	Total Crashes	**70**	**84**	**67**	**63**	**95**	**379**	**75.80**	**100.0%**
SEVERITY	PDO Crashes	43	65	49	47	67	271	54.20	71.5%
	Fatal Crashes	1	1	0	1	2	5	1.00	1.3%
	Injury Crashes	26	18	18	15	26	103	20.60	27.2%
LIGHTING CONDITIONS	Daylight	44	53	44	36	58	235	47.00	62.0%
	Dusk	0	3	1	2	3	9	1.80	2.4%
	Dawn	3	0	1	2	2	8	1.60	2.1%
	Dark	23	28	21	23	32	127	25.40	33.5%
	Unknown	0	0	0	0	0	0	0.00	0.0%
SURFACE CONDITIONS	Dry	57	70	58	55	72	312	62.40	82.3%
	Wet	13	14	9	8	23	67	13.40	17.7%
	Others	0	0	0	0	0	0	0.00	0.0%

7.1.2. STUDY INTERCHANGE

Table 22 summarizes the results of the crash analysis conducted for the I-75 segment between MP 49.53 (3,000 feet east of the interchange with SR 951/Collier Boulevard) and MP 51.04 (about 1,500 feet west of the subject interchange). Crash data and detailed police reports within the immediate area surrounding the study interchange were reviewed and crashes occurring outside the I-75 mainline study limits were removed. Based on a review of the combined crash data, a total of 57 crashes were reported within the immediate limits of the study interchange with 13 crashes in 2017, 13 crashes in 2018, 12 crashes in 2019, 2 crashes in 2020, and 17 crashes in 2021. The average crash frequency for the study interchange was approximately 13.75 crashes per year with the number of crashes in 2020 being excluded from the calculation due to being an outlier. Crash statistics, such as the existing yearly crash frequency, were compared to the future yearly crash frequency (obtained from the HSM safety analysis in **Section 7.2** of this report) to ensure that the predicted number of crashes are reasonable and accurate. The top three leading crash types consisted of Sideswipe with 17 (30%) crashes, Rear End with 10 (18%) crashes, and Fixed Objects with 9 (16%) crashes. Based on crash severity, 42 (74%) were Property Damage Only crashes, 15 (26%) were Injury crashes, and none were Fatal crashes. There were 14 (25%) Dark/Dusk/dawn crashes reported and 15 (26%) crashes occurring under Wet pavement conditions.

Table 22: Immediate Interchange Limits Crash Statistics

I-75 and SR 951 Interchange Immediate Limits Segment/Spot with No Expected Values Available		Number of Crashes					5 Year Total Crashes	Mean Crashes Per Year	%
		Year							
		2017	2018	2019	2020	2021			
CRASH TYPE	Rear End	0	3	3	0	4	10	2.00	17.5%
	Head On	0	0	0	0	0	0	0.00	0.0%
	Angle	0	0	1	0	2	3	0.60	5.3%
	Left Turn	0	0	0	0	0	0	0.00	0.0%
	Right Turn	1	0	0	0	0	1	0.20	1.8%
	Sideswipe	7	4	2	0	4	17	3.40	29.8%
	Backed Into	0	0	0	0	0	0	0.00	0.0%
	Pedestrian	0	0	0	0	0	0	0.00	0.0%
	Bicycle	0	0	0	0	0	0	0.00	0.0%
	Fixed Object	0	3	3	0	3	9	1.80	15.8%
	Other Non-Collisions	3	1	0	0	1	5	1.00	8.8%
	Overturn/Rollover	2	0	0	1	1	4	0.80	7.0%
	Others	0	2	3	1	2	8	1.60	14.0%
	Total Crashes	**13**	**13**	**12**	**2**	**17**	**57**	**11.40**	**100.0%**
SEVERITY	PDO Crashes	11	11	9	2	9	42	8.40	73.7%
	Fatal Crashes	0	0	0	0	0	0	0.00	0.0%
	Injury Crashes	2	2	3	0	8	15	3.00	26.3%
LIGHTING CONDITIONS	Daylight	8	11	9	2	13	43	8.60	75.4%
	Dusk	0	0	1	0	0	1	0.20	1.8%
	Dawn	1	0	0	0	0	1	0.20	1.8%
	Dark	4	2	2	0	4	12	2.40	21.1%
	Unknown	0	0	0	0	0	0	0.00	0.0%
SURFACE CONDITIONS	Dry	12	11	8	2	9	42	8.40	73.7%
	Wet	1	2	4	0	8	15	3.00	26.3%
	Others	0	0	0	0	0	0	0.00	0.0%

7.2. PREDICTIVE METHOD CRASH ANALYSIS

A future conditions safety analysis was performed to compare the predicted 2045 future freeway safety performance of the RFP and D/B Concepts. The safety analysis followed the 2010 HSM (and corresponding 2014 freeways supplement), and procedures outlined in the FDOT IARUG and the FDOT Safety Crash Data Guidance. The future safety analysis utilizes ISATe as the software tool, which follows the HSM methodologies, and estimates the predicted average crash frequency for specific design elements part of the typical sections. The following sections will outline the methodology, considerations and limitations, and the segmented future RFP and D/B freeway alternatives with respective results.

7.2.1. I-75 FREEWAY SAFETY ANALYSIS METHODOLOGY

The safety analysis methodology outlined in the HSM 2010 predicts the number of crashes along a specific roadway facility by applying the HSM Safety Performance Functions (SPF) on roadway segments with similar characteristics and design elements. Proper segmentation of the roadway facility is key to develop an accurate analysis. The HSM methodology predicts the number of crashes based on the extent that each design element deviates from an “ideal” or base condition. Crash Modification Factors (CMF) are applied to the SPFs to adjust the estimates of the predicted number of crashes in each segment. The segmentation process produces a set of disaggregated segments with varying lengths, each of which is homogeneous with respect to characteristics such as traffic volumes, key geometrics design features, and traffic control features as defined in the ISATe segmentation criteria.

Important considerations, limitations, and assumptions used in the modeling procedure are summarized below:

- The ISATe safety analysis focused on the same limits assumed for the crash analysis conducted in the vicinity of the interchange of I-75 with SR 951/Collier Boulevard. Using the same limits as the historical crash analysis facilitates the comparison between the existing and expected future conditions crash frequency. In addition, RFP and D/B Concepts do not consider design changes beyond those limits. Hence, segments outside of these limits are not expected to experience a change in safety performances.
- As suggested by the HSM methodology, the default calibration factor was used since no specific field data was available. Therefore, the analysis was based on the nationwide characteristics of an average segment.
- A clear zone width of 30 feet was used for all segments which were within the influence area and in close proximity to barriers (concrete, guardrail, etc).

- Some segment lengths resulted in distances shorter than the ones recommended by HSM methodology (which are between 0.1 and 1.0 miles). However, the overall freeway design meets FDOT and/or AASHTO design criteria.

7.3. SUMMARY OF I-75 RFP AND D/B FREEWAY SEGMENTS

The results of the safety analysis per segment for the RFP Concept are presented in **Table 23** and the results of the D/B Concept are presented in **Table 24**. Similarly, the overall facility comparison between the two alternatives is summarized in **Table 25**. The detailed operational results are included in **Appendix J**.

Overall, based on the results of the safety analysis for the 2045 design year, the RFP and D/B concepts are expected to have 18.9 and 19.6 crashes/year, respectively. In other words, the crash frequency for the D/B Concept is expected to report about less than one crash/year more than the RFP Concept (0.7 crashes/year more). The probability of this 0.7 crash being categorized as high severity crash is about 2%, the same probability is expected for the RFP Concept.

Additionally, based on a review of the historical crash data (**Section 7.1**), the existing crash frequency (with the diamond interchange configuration) is about 13.75 crashes/year. The predicted crash frequency for the D/B Concept is about 19.6 crashes/year which represents an increase of about 5.85 crashes/year, while the increase for the RFP Concept is about 5.15 crashes/year. Therefore, the slight increase in the predicted number of crashes for the D/B Concept seems reasonable. The D/B concepts presents two merge points along the eastbound direction. One merge point relates to the new southbound to eastbound loop ramp and the second merge point relates to northbound to eastbound entrance ramp. The RFP Concept only presents one merge point in the eastbound direction. The difference in the number of entrance ramps between D/B Concept and the RFP Concept may be related to a higher number of lane changing maneuvers (along the I-75 mainline) and therefore, slightly higher probabilities for crashes to occur. However, as it is indicated by the summary presented in **Table 25**, the increase in number of crashes is almost insignificant, and it is only evident in the minor injury and property damage only crashes.

Although the D/B Concept presents two merge points along the eastbound direction and the RFP Concept only one, it has to be mentioned that both entrance ramps (for the D/B Concept) will provide acceleration lanes along the I-75 mainline. These acceleration lanes will allow drivers to enter the freeway without immediately performing lane changing maneuvers. The length of the auxiliary lanes will provide enough distance for drivers to accelerate and gain the appropriate merging speed with the I-75 freeway mainline traffic. Thus, reducing the probabilities of collisions occurring in high traffic turbulence areas such as ramps.

Table 23: Summary of 2045 RFP Freeway Safety Conditions

Segment No.	Segment Description	Crash Severity					Total(s)
		(K)	(A)	(B)	(C)	(O)	
		Fatal	Incapacitating Injury	Non-Incapacitating Injury	Minor Injury	Property Damage Only	
1	Start (STA 245+00) to SR 951 EB On Ramp	0.0	0.1	0.3	0.9	2.3	3.6
2	SR 951 EB On Ramp to SR 951 WB Off Ramp	0.0	0.0	0.1	0.4	1.1	1.7
3	SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	0.0	0.1	0.3	1.1	2.5	4.1
4	SR 951 WB On Ramp Loop to SR 951 WB On Ramp	0.0	0.0	0.1	0.4	1.1	1.7
5	SR 951 WB On Ramp to SR 951 EB Off Ramp	0.0	0.0	0.1	0.2	0.6	0.9
6	SR 951 EB Off Ramp to END (STA 330+00)	0.0	0.1	0.5	1.7	4.7	7.0
Total(s)		0.1	0.3	1.4	4.8	12.3	18.9

Table 24: Summary of 2045 D/B Freeway Safety Conditions

Segment No.	Segment Description	Crash Severity					Total(s)
		(K)	(A)	(B)	(C)	(O)	
		Fatal	Incapacitating Injury	Non-Incapacitating Injury	Minor Injury	Property Damage Only	
1	START (STA 245+00) to I-75 EB Lane Drop	0.0	0.0	0.1	0.2	0.6	0.9
2	I-75 EB Lane Drop to SR 951 EB On & WB Off Ramps	0.0	0.1	0.3	1.1	2.8	4.4
3	SR 951 EB On & WB Off Ramps to SR 951 WB On Ramp Loop	0.0	0.0	0.2	0.6	1.3	2.1
4	SR 951 WB On Ramp Loop to SR 951 EB On Ramp Loop	0.0	0.0	0.1	0.4	0.8	1.3
5	SR 951 EB On Ramp Loop to SR 951 WB On Ramp	0.0	0.0	0.2	0.9	2.2	3.4
6	SR 951 WB On Ramp to SR 951 EB Off Ramp	0.0	0.0	0.0	0.2	0.4	0.7
7	SR 951 EB Off Ramp to END (STA 330+00)	0.0	0.1	0.5	1.7	4.6	6.8
Total(s)		0.1	0.3	1.4	5.0	12.7	19.6

Table 25: Summary of 2045 RFP and D/B Freeway Safety Conditions

Alternative	Crash Severity					Total
	(K)	(A)	(B)	(C)	(O)	
	Fatal	Incapacitating Injury	Non-Incapacitating Injury	Minor Injury	Property Damage Only	
RFP	0.1	0.3	1.4	4.8	12.3	18.9
D/B	0.1	0.3	1.4	5.0	12.7	19.6

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8. ANTICIPATED DESIGN VARIATIONS

Both the RFP and D/B alternatives will require identical design variations for several roadway elements, as outlined in **Table 26** below. **Table 27** and **Table 28** describe details of the Design Variations

Table 26: RFP and D/B Alternatives Design Variations

Location	Design Variation	From	To
Ramp A-3	Horizontal Curve Radius	STA 634+98.21	STA 645+63.14
Ramp C-2	Horizontal Curve Radius	STA 932+83.55	STA 942+83.56
	Shoulder Width	STA 924+24.71	STA 928+08.46
		STA 928+08.46	STA 933+02.80
		STA 933+02.80	STA 933+35.29
Shared Use Path (Right Side)	Horizontal Clearence	STA 155+66.60	155+94.53
		STA 155+94.53	STA 158+82.37
		STA 158+82.37	STA 159+09.21
Shared Use Path (Left Side)	Horizontal Clearence	STA 156+80.92	156+87.80
		STA 156+87.80	STA 158+82.76
		STA 158+82.76	STA 159+45.88

Table 27: Horizontal Curve Radius Summary

Ramp Name	Curve Name	Design Speed (mph)	Begin Limits	End Limits	FDM Required Curve Radius (ft)	AASHTO Required Curve Radius (ft)	Provided Curve Radius (ft)
A-3	A3-3	30	STA 634+50.00	STA 645+65.00	239	200	200
C-2	C2-4	30	STA 933+17.00	STA 943+90.00	239	200	200

Table 28: Ramp C2 Shoulder Width Summary

Begin Limits	End Limits	Length (ft)	Full Inside Shoulder Width (Paved & Adjacent to Barrier Wall, ft)
STA 923+54.65	STA 928+08.23	435.58	Varies (3 to 6)
STA 928+08.23	STA 933+20.81	512.58	3
STA 933+20.81	STA 933+53.30	32.49	Varies (3 to 6)

9. ENVIRONMENTAL IMPACTS

The review of potential environmental impacts was performed and completed for the RFP Concept during the previously mentioned PD&E project. No additional environmental impacts are expected to potentially implement the D/B Concept. FDOT has already purchased mitigation credits which cover 100% of the wetland area within the interchange infields. It is worth noting that the 404 Permit has not been formally issued yet due to a modification to the mitigation bank from which the credits are being processed. This modification and permit is anticipated to occur in early February 2023 at the latest.

The list below summarizes the list of permits that FDOT has secured and the ones that are still being processed:

- SFWMD Right of Way Occupancy Permit – Issued 9/30/22
- SFWMD Environmental Resource Permit – Anticipated issue date of 11/29/22
- FDEP 404 Permit – 30-45 days after SFWMD ERP is issued.

This section was intentionally left blank.

10. COST ESTIMATE

The cost estimate for the RFP and D/B alternatives are presented in **Table 29**. The cost estimates are inclusive of preliminary engineering (PE), construction engineering and inspection (CEI), and contingency.

Table 29: Cost Estimate for RFP and D/B Alternatives

Alternative	Cost ($)
RFP Concept	114,258,982
D/B Concept	97,900,000

11. ALTERNATIVE COMPARISON

The comparison of the RFP and D/B Concepts is based on numerous factors including construction costs, safety and operational performance, environmental and socioeconomic impacts, among others. The comparative matrix in **Table 30** summarizes the various comparisons performed to determine that D/B Concept performs equal to or better than the original RFP Concept and satisfies the FHWA policy points. Based on this review, the D/B alternative was determined to result in construction cost savings and offers similar safety and operational performances when compared to the RFP alternative.

Table 30: RFP & D/B Alternative Comparison

Re-evaluation Evaluation Criteria	Alternative	
	RFP	D/B
2025 Traffic Operational Performance		
AM Peak Hour EB/WB Average Density (pc/mi/ln)	9.90	9.75
PM Peak Hour EB/WB Average Density (pc/mi/ln)	9.80	9.65
2045 Traffic Operational Performance		
AM Peak Hour EB/WB Average Density (pc/mi/ln)	19.00	18.70
PM Peak Hour EB/WB Average Density (pc/mi/ln)	18.90	18.70
Safety Performance		
Expected Crash Frequency (crashes/year)	18.9	19.6
Environmental Impacts		
Environmental Impacts	Same	Same
Right-of-Way (R/W) Impacts		
Right of Way to be Acquired (acres)	Same	Same
Estimated Total Project Costs		
Total Project Costs	$114,258,982.00	$97,900,000.00

12. FUNDING PLAN AND SCHEDULE

Based on a review of the FDOT Five Year Work Program for 2017-2022 and 2023-2027, these interchange improvements are anticipated to be implemented within the on-going D/B project (FPID: 425843-2). Funding for the Highways/Design-Build project ($20,715,957.00) has been secured for 2023.

A schedule of on-going efforts related to this project is displayed below.

- IMR Re-evaluation – February 2023
- Design-Build Phase Kickoff – September 2022
- Construction – Anticipated Start: Spring 2023
- Permit: Per FDOT, to be received by Tuesday, November 29, 2022
- Estimated opening - 2025

13. CONCEPTUAL SIGNING PLAN

A conceptual signing plan was developed for the recommended alternative and is provided in **Appendix K**.

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14. QUALIFYING PROVISIONS

An assessment was performed of the Federal Highway Administration's (FHWA) two policy points that must be addressed for the justification and documentation necessary to substantiate any proposed change(s) in access to the Interstate System. Adequate access control to limited access facilities is essential to provide the highest LOS in terms of safety and mobility in these facilities. **Table 31** demonstrates compliance with the FHWA's requirements and justification for the D/B alternative.

Table 31: Review of Qualifying Provisions

FHWA Policy Points		IMR Re-evaluation Comment/Response	Policy Point Met?
Number	**Description**		
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, 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)).*	Based on the results of the study, the D/B alternative is expected to have similar safety and operational performances when compared to the RFP alternative, will not have adverse effects to the interstate facility, and will meet the previously outlined requirements. It is noted that only a freeway safety and operational analysis was performed since no changes are expected to the local roadway network that would significantly impact safety or traffic operations.	**Y**
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 proposed interchange layout for the D/B Concept is expected to provide adequate access to the public roadway and will provide access for all traffic movements. Similarly, the proposed interchange modifications will be designed and constructed to meet current FDOT and AASHTO design standards.	**Y**

15. RECOMMENDATIONS AND CONCLUSIONS

Based on a comprehensive review documented in this IMR re-evaluation, it was determined that the D/B Concept performs equal to or better when compared to the RFP Concept. Design changes proposed by the D/B Concept are minor when compared to the RFP Concept. Based on the results of the analysis, the D/B alternative is expected to cost less, and it satisfies the purpose and need, SO&E requirements and FHWA's policy points, similar to the RFP Concept.

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Appendices:

Appendix A: Approved and Signed MLOU

Appendix B: Transportation System Data

Appendix C: FTO Traffic Data

Appendix D: Crash Summary Worksheets and Detailed Fatal and Pedestrian Police Reports

Appendix E: Land Use Map

Appendix F: Conceptual RFP and D/B Figures

Appendix G: Travel Demand Forecasting Information

Appendix H: Historical Trendline Analysis

Appendix I: Traffic Analysis Output Reports

Appendix J: Safety Analysis Output Reports

Appendix K: Conceptual Signing Plan

Appendix A: Approved and Signed MLOU

Florida Department of Transportation Interchange Access Request Methodology Letter of Understanding (MLOU)

Type of Request: ☐ IJR ☒ IMR (Re-evaluation) ☐ IOAR ☐ SIMR

Type of Process: ☒ Programmatic ☐ Non-Programmatic ☐ Other

I-75 (SR 93) at SR 951 (Collier Boulevard) Interchange Modification Report Re-evaluation

FPID: 425843-2

Coordination of assumptions, procedures, data, networks, and outputs for project traffic review during the access request process will be maintained throughout the evaluation process.

Full compliance with all MLOU requirements does not obligate the Acceptance Authorities to accept the IAR.

The Requestor shall inform the approval authorities of any changes to the approved methodology in the MLOU and an amendment shall be prepared if determined to be necessary.

Requestor	DocuSigned by: Kati Sherrard F32DDD591732411...	12/22/2022 | 7:56 AM EST
	Kati C. Sherrard, PE, CPM Corridors Program Engineer, District One	Date
Interchange Review Coordinator	DocuSigned by: Joshua Jester 532028D21AF54A7...	12/22/2022 | 7:56 AM EST
	Josnua A. Jester E.I. District Interchange Review Coordinator, District One	Date
Systems Management Administrator	DocuSigned by: Jenna Bowman 4AD03E6A337F4C1...	12/22/2022 | 10:50 AM EST
	Jenna Bowman, PE Systems Implementation Office-Central Office	Date

1.0 Project Description

On June 15, 2022, the Contractor/Consultant team won the Design Build (D/B) project for I-75 (SR 93) at SR 951 (Collier Boulevard) and the contract's Notice to Proceed was officially received on September 9, 2022. The interchange design concept (D/B concept) presented by the D/B Team was slightly different than the one included in the original Request for Proposal Concept (RFP Concept) provided by the Florida Department of Transportation (FDOT), District One (D1) during advertisement.

The RFP concept corresponds to the Preferred Alternative (Alternative 1) selected under the Project Development and Environment (PD&E) Study signed in 2014 (FPID: 425843-1-22-01). The Preferred Alternative was evaluated from the traffic operations perspective in the Project Traffic Report (PTR) dated July 2013 and in the Interchange Modification Report (IMR) dated September 2013. Based on the analysis documented in these two reports, the diamond interchange at I-75 with Collier Boulevard and adjacent intersections along Collier Boulevard operated at acceptable levels of service (LOS) for existing conditions (2011). However, Alternative 1 was recommended to ensure acceptable LOS along Collier Boulevard since 2035 projected volumes operating under the existing diamond interchange would result in segments operating at unacceptable LOS. Alternative 1 proposes, modifying the existing diamond interchange to a partial clover leaf configuration (with loop ramps in the southwest and northeast quadrants of the interchange).

The main difference between the RFP Concept and the D/B Concept (presented as Alternative Technical Concept # 5 – ATC#5) is the number of merge points along eastbound I-75 at the interchange with Collier Boulevard. In the RFP concept, the loop ramp from southbound Collier Boulevard to eastbound I-75 and the ramp from northbound Collier Boulevard to eastbound I-75 merge on a ramp parallel to the mainline prior to merging with eastbound I-75 mainline traffic as a single point entrance ramp (See **Figure 1**). A new bridge parallel to the mainline carries the loop ramp traffic over Collier Boulevard.

Figure 1 – RFP Concept (Alternative 1 – 2013 PD&E Study - Preferred Alternative)

In the D/B Concept, the existing mainline bridge is widened to accommodate the loop ramp traffic from southbound Collier Boulevard to eastbound I-75. This ramp merges with I-75 mainline onto a new auxiliary lane. The ramp for northbound Collier Boulevard to eastbound I-75 merges with the new auxiliary lane approximately 2,500 feet east of Collier Boulevard (See **Figure 2**)

Figure 2 – D/B Concept

The purpose of the Interchange Modification Report (IMR) re-evaluation is to analyze the D/B Concept and compare its performance with the RFP Concept. Since the IMR was approved in 2013, the project's design year will be updated to 2045. New design traffic volumes (for the I-75 facility only) will be developed using the District 1 Regional Planning Model (D1RPM) - travel demand model. Updated traffic data for the year 2045 will be used to analyze operations along the I-75 freeway facility.

This Methodology Letter of Understanding (MLOU) is being developed in accordance with the FDOT Policy No. 000-525-015, "Approval of New or Modified Access to Limited Access Highways on the State Highway System (SHS)"; FDOT Interchange Access Request User's Guide (IARUG), New or Modified Interchanges FDOT Procedure No. 525-030-160; and the Project Traffic Forecasting FDOT Procedure No. 525-030-120.

A. Purpose and Need Statement - No Change

The PD&E Study Purpose and Need is still applicable for this re-evaluation and summarized below for reference. I-75 is an integral part of the Strategic Intermodal System (SIS) providing for high-speed and high-volume traffic movements along the west coast of Florida and connecting the metropolitan areas of Naples and Miami. Collier Boulevard is the eastern most major north-south arterial of the Naples metropolitan region and connects densely developed areas such as Marco Island and Golden Gate to I-75. The Collier Boulevard interchange at I-75 is the last access prior to the Alligator Alley entry toll gate. Therefore, the interchange modification aimed to improve the safety, LOS, and traffic operations at the I-75/Collier Boulevard interchange and adjacent intersections.

From the analysis conducted during the preparation of the Project Development and Environment (PD&E) Study (dated July 2013) it was determined that the interchange of I-75 with Collier Boulevard operated at acceptable LOS in 2011. Although along Collier Boulevard moderate levels of congestion were observed south of I-75 through the Collier Boulevard/Davis Boulevard intersection (located approximately 1,300 feet south), overall acceptable LOS were also estimated. However, for the year 2035 the No-Build Scenario showed that several intersections along Collier Boulevard would operate below acceptable LOS.

B. Project Location - No Change

The project is located along I-75 (Roadway ID 03175000, Milepost 50.445) at the interchange with Collier Boulevard, located east of the City of Naples, in Collier County. Everglades Boulevard, located 8.9 miles away, is the next closest continuous north-south roadway east of Collier Boulevard. The closest I-75 interchanges, east and west of Collier Boulevard are SR 29 to the east (21.2 miles away) and Golden Gate Parkway to the west (3.3 miles away).

C. Area of Influence

The area of influence from the original IMR is described below:

- I-75 mainline from the overpass at Everglades Boulevard to the Golden Gate Parkway interchange
- Collier Boulevard: from Business Circle South to the south to Golden Gate Parkway to the north

The proposed area under analysis includes the original I-75 mainline segment and the related ramp junctions (merge/diverge points) within this segment, including the ramp junctions (merge/diverge points) that are affected by the proposed design changes. No design changes are proposed that would affect the operational analysis previously completed for the intersections along Collier Boulevard; hence, the ramp terminals will not be included within the influence area.

The ramp junctions within the area of influence include:

- EB I-75 to NB/SB Collier Boulevard Off-Ramp
- SB Collier Boulevard to EB I-75 Loop On-Ramp
- NB Collier Boulevard to EB I-75 On-Ramp
- WB I-75 to NB/SB Collier Boulevard Off-Ramp
- NB Collier Boulevard to WB I-75 Loop On-Ramp
- NB/SB Collier Boulevard to WB I-75 On-Ramp

Figure 3 shows the mainline I-75 area of influence to be used in the IMR Re-evaluation.

Figure 3 - Area of Influence

Note:
The closest I-75 interchanges, east and west of Collier Boulevard are SR 29 to the east (21.2 miles away) and Golden Gate Parkway to the west (3.3 miles away).

D. Project Schedule

The following is the anticipated schedule for this project:

- IMR Re-evaluation – Underway
- Design-Build Phase Kickoff – September 2022
- Construction – Anticipated Start: Spring 2023
- Permit: Per FDOT, to be received by Tuesday, November 29, 2022
- Estimated opening - 2025

2.0 Analysis Years

A. Travel Demand Model – District One Regional Planning Model, version 2 (D1RPM, v2)

- Base Year - 2015
- Horizon Year - 2045

B. Traffic Operational Analysis

- Existing Year – No existing year will be evaluated given that the re-evaluation will be performed by comparing the results of the design year (2045) for the RFP Concept with the D/B Concept presented as part of the ATC developed by the D/B Team
- Opening Year – 2025
- Design Year - 2045

A year of failure analysis shall be performed for the Preferred Alternative, in case a failing LOS is obtained in the Design Year.

3.0 Alternatives

For the purposes of this re-evaluation, the Preferred Alternative (RFP Concept) will represent the No Build Alternative, and the proposed modified design concept (D/B Concept) will represent the Build Alternative. Comparison between the two alternatives will be conducted to ensure that the D/B Concept provides comparable LOS results (equal or better) than the RFP Concept.

4.0 Data Collection

The type of data that may be used is identified below:

A. Transportation System Data

FDOT Straight-Line Diagrams (SLDs), Roadway Characteristic Inventory (RCI), and field observations will be used along with the historical crash data, prior reports, and prior studies. Data will be collected from various sources including FDOT D1, Collier County, and other agencies if necessary. Field visits will be conducted to collect information on existing geometry, as needed.

B. Existing and Historical Traffic Data

The latest available and historical traffic data will be obtained from FDOT's Florida Traffic Online (FTO) database and will be reviewed to identify any significant variations in volumes or patterns in recent years. It is noted that within the study area the latest available FTO traffic data includes data from 2006 up to 2021. Additionally, traffic data from the 2019 data collection effort associated with the District 1's Southwest Connect project, which included the I-75/SR 951 interchange, will be used to supplement, compare and confirm data from the FDOT's FTO, depending on the location and type of count performed (if applicable).

C. Land Use Data

The D1RPM, v2 was released on January 29, 2021, and will be used in this re-evaluation. The future land use was updated to 2045 as part of the model development efforts and the D1RPM, v2 reflects the most up-to-date land use assumptions along the I-75 corridor.

D. Environmental Data - No Change

E. Planned and Programmed Projects

This study will consider programmed and planned roadway improvements in the area and will be consistent with regional transportation plans including the following:

- FDOT Five Year Work Program
- FDOT Strategic Intermodal System (SIS) plans
- Committed improvements from local and private sources
- Adopted Long Range Transportation Plans (LRTPs) and Comprehensive Plans

5.0 Travel Demand Forecasting

A. Selected Travel Demand Model(s)

The D1RPM V2.0, updated on January 29, 2021, will be used to develop the travel demand forecasting for this study. The D1RPM model is a Florida Standard Urban Transportation Structure (FSUTMS), four-step, trip-based model. Developed with CUBE/Voyager v6.4.2 transportation planning software. The model, with 5,280 traffic analysis zones (TAZ) covers 12,400 square miles in 12 counties: Charlotte, Collier, Desoto, Glades, Hardee, Hendry, Highlands, Lee, Manatee, Okeechobee, Polk, and Sarasota. A portion of Osceola County adjacent to NE Polk County is also included. The D1RPM consists of a base year of 2015 and a forecast year of 2045. The model was used and comprehensively tested in the MPO LRTPs and is the adopted official model in the region to be used in the planning/PD&E and traffic forecasting studies.

The model has 4 time-period assignments:

- AM-Peak Period (6:00 AM – 9 AM)
- Midday Period (9:00 AM – 4 PM)
- PM-Peak Period (4:00 PM – 7 PM)
- Overnight Period (7:00 PM – 6 AM)

The model's highway traffic assignment is performed at individual peak period-level and the assigned volumes from all four periods are then combined to report the average annual daily traffic (AADT) volumes. Therefore, no adjustment factors are necessary to forecast the AADT volumes. However, adjustments may be needed to ensure subarea model volumes match the AADT counts closely.

B. Project Traffic Forecast Development Methodology

Base (2015), opening (2025) and future year (2045) traffic volumes will be developed considering various methods (outlined below) to ensure that the developed traffic volumes are accurate and reasonable. The project traffic forecast development will be performed in accordance with FDOT's Project Traffic Forecasting Handbook and will be further detailed in the report documentation.

The travel demand forecasting will begin by utilizing the FDOT D1RPM (travel demand model) to obtain base, opening, and future year preliminary AADTs with accompanying growth rates. The travel demand output will be reviewed for reasonableness by:

- Comparing preliminary D1RPM outputs and growth rates to historical AADTs, growth rates, population and economic data, and existing and future land uses (obtained from FTO, BEBR, past FDOT studies, etc).
- Comparing preliminary D1RPM output AADTs to the latest historical AADTs that will be projected to the future year (2045) using the growth rates obtained from this analysis.

Based on these reviews, the FDOT D1RPM travel demand model may be adjusted to account for any errors in the base year model validation to obtain the finalized AADTs to be used in the analysis.

C. Validation Methodology

A subarea of the D1RPM, v2 will be validated to acceptable Florida Standard Urban Transportation Model Structure (FSUTMS) standards per section 3.8 of the Project Traffic Forecasting Handbook (2019). The D1RPM, v2 2015 and 2045 inputs, including the networks, zonal structure, and socioeconomic (SE) data, will be reviewed within the subarea. A detailed description of the validation checks is provided below:

- **Review of subarea network, attributes, counts review and coding.** A model's base year network review will be performed. The model's 2015 network will be reviewed against the historic aerial images available from Google and other free sources. This is a standard practice to perform detailed review of the model network links and their characteristics within a designated subarea while performing the design traffic forecasts. The model's network geometry, and key network attributes such as the number of lanes, posted speeds, facility types will be reviewed and updated as part of this effort. Any changes to the model network will be documented for a) model validation check documentation purpose, and b) propagating the changes to the future conditions' networks. In addition, the 2015 traffic counts coded in the model networks will be reviewed and updated as needed.
- **Review of subarea TAZ data review and adjustments.** The TAZ data within the subarea will be reviewed. Primarily, the review will focus on the population and employment growth between the base year (2015) and the future year (2045) TAZs. The TAZ growth rates will be documented within the model subarea. Any growth rate issues within the subarea boundary will be documented. These will be used to evaluate the corresponding model forecasts.
- **Subarea model validation checks.** The model validations checks and adjustments will be performed within the subarea boundary. Primarily, the 2015 model outputs will be evaluated against the 2015 AADT traffic counts and the model validation summaries within the subarea will be checked. Subarea-level, facility type level and link-level model validation statistics will be evaluated. The RMSE and Volume to Count Ratio measures will be used for this evaluation. Necessary adjustments will be made to the model parameters, such as centroid connectors, facility type, capacity, and speeds to improve the model validation.

D. Adjustment Procedures

As described in Section 5.B of this MLOU, the traffic forecasting methodology includes utilizing the FDOT D1RPM model to obtain projected volumes and performing various checks to adequately adjust the AADTs to be utilized in this study. A summary of the reviews and adjustment procedures is described below and will be further detailed in the report documentation.

- Compare base (2015), opening (2025) and future year (2045) preliminary D1RPM traffic volume outputs and growth rates to historical AADTs, growth rates, population and economic data, and existing and future land uses.
- Compare preliminary D1RPM output AADTs to the latest historical AADTs (2019) that will be projected to the future year (2045) using the growth rates obtained from this analysis.
- Based on these reviews, perform adjustments, if any, to the FDOT D1RPM travel demand model to account for any errors in the base year model validation to obtain the finalized AADTs to be used in the analysis.

E. Traffic Factors

- The corridor design traffic will be based on the K and D factors. Selection of the K and D factors will follow the criteria outlined in the 2019 FDOT Project Traffic Forecasting Handbook and Procedure (525-030-120).
- Tables 2-1 and 2-2 (of the 2019 FDOT Project Traffic Forecasting Handbook) provide a summary of Kstd and acceptable ranges for D factors. The Kstd factor is the proportion of AADT volumes occurring during the peak-hour of the design year, depending upon the area type and facility type. The D factor is the proportion of traffic traveling in the peak period direction.
- **Table 1** and **2** summarize the FDOT Kstd and D target thresholds, respectively, that are applicable to this project, as presented in the 2019 Project Traffic Forecasting Handbook.

Table 1 – FDOT Recommended Standard K (K_{std}) Factor

Area Type	Facility Type	Kstd
Other Urbanized Areas	Freeways	9.0
	Arterials	9.0

Table 2 – FDOT Recommended D-Factors for Project Traffic Forecasting

Road Type	Low D	Medium D	High D	Standard Deviation
Urban Freeways	50.4	55.8	61.2	4.11
Urban Arterials	50.8	57.9	67.1	4.60

To determine which will be the most appropriate Kstd and D factors to be used in this re-evaluation, data from the FDOT traffic monitoring station No. 032000 (located west of CR 951) was reviewed. From the review, a Kstd equal to 0.9 and a D equal 56% were preliminarily selected for the I-75 mainline. These factors were estimated by calculating the average of the D factor for the last five years (as reported on the Historical AADT Report). The daily truck factor T24 was selected to be 12%. Similar to the calculation for the Dfactor, the T24 was estimated as the average of the last five years for the I-75 mainline. The previously identified factors are summarized in **Table 3**.

Table 3 -Traffic Factors*

Roadway	K	D	T	T_f	PHF	MOCF**
I-75	9.00%	56%	12%	6%	0.95	N/A

Note(s):
(*) This data was obtained from FDOT FTO PTMS Site No. 032000. If any of the above traffic factors are modified during the IAR due to additional information becoming available, then CO will be informed and supporting information will be provided in the IAR.
(**) It is noted that a Model Output Conversion Factor (MOCF) is not applicable for the current version of the D1RPM model.

6.0 Traffic Operational Analysis

The traffic operational analysis will focus on the freeway segments (basic and merge/diverge) in the vicinity of the interchange of I-75 at Collier Boulevard. The segments of I-75 to the east and west of the I-75 interchange at Collier Boulevard will be analyzed using the Highway Capacity Software (HCS). Based on results summarized in the PTR and IMR completed in 2013, I-75 mainline operated at acceptable LOS up to design year 2035. No operational analysis of the intersections along Collier Boulevard will be developed. **Table 4** and **Table 5** summarize the area type/traffic conditions and Traffic Analysis Software.

A. Existing Area Type/Traffic Conditions

Table 4 – Existing Area Type/Traffic Conditions

Area Type	Conditions	
	Under Saturated	Saturated
Rural	☐	☐
Urban Area/Transitioning Area	☒	☐

B. Traffic Analysis Software Used

Table 5 – Traffic Analysis Software

Software		System Component					
		Freeway				Crossroad	
Name	Version	Basic Segment	Weaving	Ramp Merge	Ramp Diverge	Arterials	Intersections
HCS/HCM	8.2	☒	☐	☒	☒	☐	☐
Synchro	N/A	☐	☐	☐	☐	☐	☐
Corsim	N/A	☐	☐	☐	☐	☐	☐
Vissim	N/A	☐	☐	☐	☐	☐	☐
Other	N/A	☐	☐	☐	☐	☐	☐

C. Calibration Methodology

Since Microsimulation will not be conducted for the re-evaluation, then Calibration will not be necessary for this project. Therefore, Measures of Effectiveness (MOEs) and calibration targets were not established.

D. Selection of Measures of Effectiveness (MOE)

The Level of Service criteria for freeway is based on Density (pc/mi/ln). Therefore, Density will be the primary Measure of Effectiveness (MOE) to develop the analysis. Similar to the tables included in the Project Traffic Report (PTR) completed in July 2013, for the PD&E Study, speed will also be used to summarize and compare the results of the analysis. These two MOEs will be used for the basic freeway mainline segments and the merge/diverge areas.

LOS Targets per the State Highway System, Policy No. 000-525-006c, effective April 19, 2017 will be utilized and are summarized below:

- I-75 Mainline and Ramps: LOS D

7.0 Safety Analysis

A. **Detailed crash data within the study area will be analyzed and documented. The latest five years of crash data shall be used.**

Years: 2017-2021 (or latest available fully certified data) as well as the latest available uncertified data for comparison purposes.

Source: FDOT's CARS and SSOGIS database, and Signal Four Data Analytics.

B. **Identify the level of safety analysis to be performed, along with any software and tools to be used.**

The safety analysis will be consistent with the 2022 IARUG and the IARUG Safety Analysis Guidance. The safety analysis will be performed for the most recently FDOT-approved five years of crash data. The safety analysis will document crash rate, crash patterns, crash types, and their contributing causes for existing conditions and will provide safety impact (positive or negative) of the proposed improvements for the design year. Where applicable, Highway Safety Manual (HSM) methodologies will be utilized to quantitatively assess the geometric and traffic control options for the roadway intersection/segments in the study area. Since the analysis will focus on the I-75 freeway mainline, the ISATe Spreadsheet tool will be used.

8.0 Consistency with Other Plans/Projects

A. **The request will be reviewed for consistency with facility Master Plans, Actions Plans, SIS Plan, MPO Long Range Transportation Plans, Local Government Comprehensive Plans or development applications, etc.**

The following plans will be evaluated with this request for consistency:

- The Collier MPO 2045 LRTP
- I-75 Southwest Connect South Corridor Master Plan (FPID No. 442519-1-12-01)

B. **Where the request is inconsistent with any plan, steps to bring the plan into consistency will be developed.**

This request will be evaluated and compared to the applicable plans and projects listed above for consistency. If inconsistency is determined, a plan for consistency will be developed.

C. **The operational relationship of this request to the other interchanges will be reviewed and documented. The following other IARs are located within the area of influence.**

There are no other active IARs currently within the area of influence.

9.0 Environmental Considerations

A. **Status of Environmental Approval and permitting process.**

FDOT is in the process of securing the following permits:

- SFWMD Right of Way Occupancy Permit – Issued 9/30/22
- SFWMD Environmental Resource Permit – Anticipated issue date of 11/29/22
- FDEP 404 Permit – 30-45 days after SFWMD ERP is issued

B. **Identify the environmental considerations that could influence the outcome of the alternative development and selection process.**

The proposed design change is not anticipated to result in any environmental impacts or considerations that were not already evaluated during the development of the originally approved design concept. The permitted design concept accounts for 7.28 acres of wetland and surface water direct impacts, which includes 100% of the wetland area within the interchange infields. Further, the FDOT has purchased 2.51 UMAM forested freshwater mitigation credits at Panther Island Mitigation Bank to offset wetland impacts of this project.

10.0 Coordination

Yes	No	N/A	
☒	☐	☐	An appropriate effort of coordination will be made with appropriate proposed developments in the area.
☒	☐	☐	Request will identify and include (if applicable) a commitment to complete the other non-interchange/non-intersection improvements that are necessary for the interchange/intersection to function as proposed.
☒	☐	☐	Request will document whether the project requires financial or infrastructure commitments from other agencies, organizations, or private entities.
☒	☐	☐	Request will document any pre-condition contingencies required in regards to the timing of other improvements and their inclusion in a TIP/STIP/LRTP prior to the Interstate access approval (final approval of NEPA document).
☒	☐	☐	Request will document the funding and phasing.

The main purpose of this re-evaluation is to assess the impacts that the changes proposed by the D/B Project will have on the traffic operations along I-75 mainline (in the vicinity of the interchange with Collier Boulevard).

Significant coordination efforts took place during the PD&E Phase. All of the improvements proposed in the RFP concept will be considered in the D/B project, except for elimination of the parallel bridge ramp on the south side of I-75. Therefore, coordination as part of this re-evaluation will include FDOT D1 and Central Office. No coordination with other local agencies is foreseen for this re-evaluation.

In addition, the project is already in the D/B phase which signifies that it has previously been included in the TIP/STIP/LRTP and funding has been secured. Therefore, the funding and phasing plan have already been established.

11.0 Anticipated Design Exceptions and Variations

The following are exceptions/variations to FDOT, AASHTO or FHWA rules, policies, standards, criteria or procedures which are listed in the IAR document. It is noted that the design exceptions and variations will be further detailed in the report documentation.

- Two Design Variations related to the Horizontal Curve Radius for ramps A-3 and C-2.
- Three Design Variations for Shoulder Widths along Ramp C2.
- Various Design Variations related to the Shared Use Path Horizontal Clearance which does not impact the development of the IMR Re-evaluation.

12.0 Conceptual Signing Plan

A conceptual preliminary signing and marking plan shall be prepared in accordance with MUTCD criteria and included in the access request.

13.0 Access Management Plan

☒ *Access management plan within the area of influence will not be changed by the proposed improvements to the interchange.*

☐ *The improvement will affect the access management within the area of influence that will require a change to the access management plan. An access management plan will be developed within the area of influence to complement the improvements to the interchange.*

14.0 FHWA Policy Points

The two FHWA policy points will be addressed as part of the IMR Re-evaluation. LOS and Safety analyses will be prepared to ensure that the proposed improvements do not detrimentally impact traffic operations within the area of influence. The proposed interchange configuration proposes modifications to a full existing interchange with a local road.

Appendix B: Transportation System Data

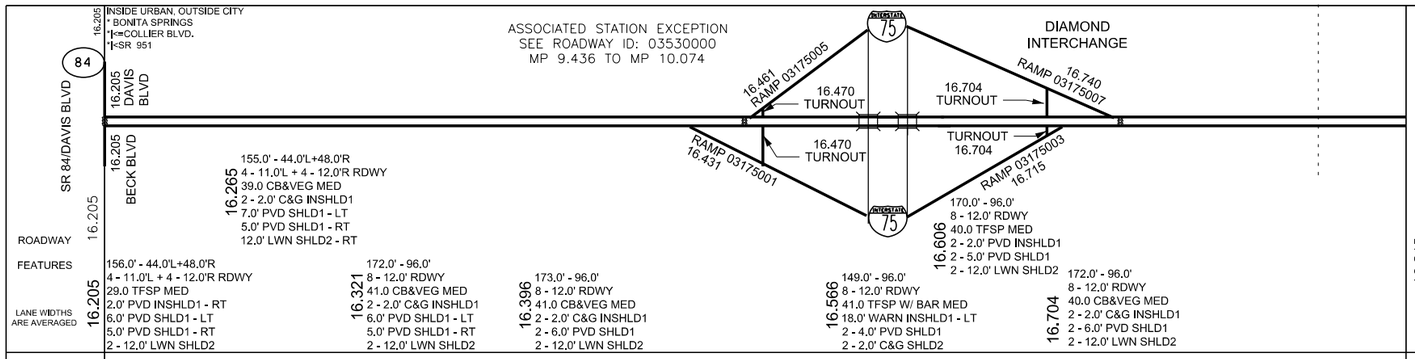
	5 YR INV	SLD REV
DATE	08/20/2020	09/03/2020
BY	FTE	FTE

BMP	EMP	INV	SLD REV
16.205	16.396		6/3/22(QAR22-F212)

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO.
02		SR 951	COLLIER	01	03030001	1 OF 1



ENDS @ RIGHT OF WAY
16.843

16.843

END MP: 16.843
NET ROADWAY ID LENGTH: 0.638

ROADWAY COMPOSITION	28/FC-2 28/FC-2
HORIZONTAL ALIGNMENT	CURVE DATA NOT FIELD VERIFIED B=N00°01'00"E
STRUCTURE DESCRIPTION	16.570 #0196 47.5' UP 16.579 16.594 #0195 47.5' UP 16.603
DISTRICT USE	
SIS	
FUN CLASS	URBAN PRIN ART OTHER

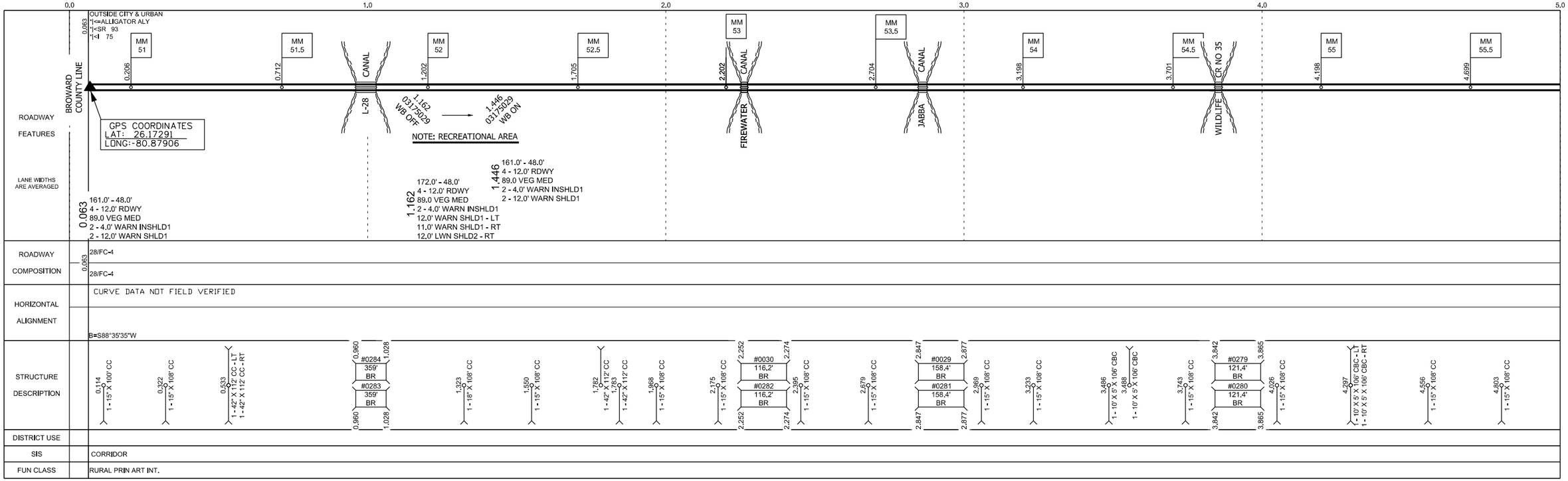
	5 YR INV	SLD REV
DATE	03/29/2018	04/13/2018
BY	FTE	FTE

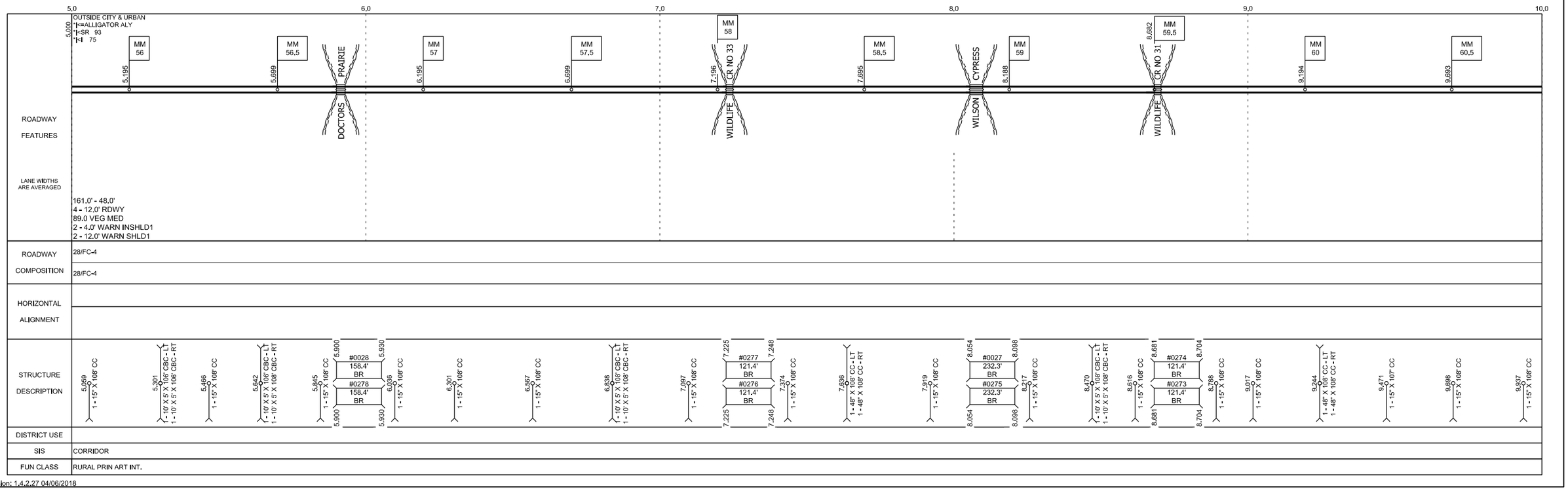
BMP	EMP	INV	SLD REV
00.063	63.676		5/21&9/11/20(F241)
00.063	63.676		03/17/2022 (F241)

FLORIDA DEPARTMENT OF TRANSPORTATION FDOT

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO.
02	I 75	SR 93	COLLIER	01	03175000	1 OF 9





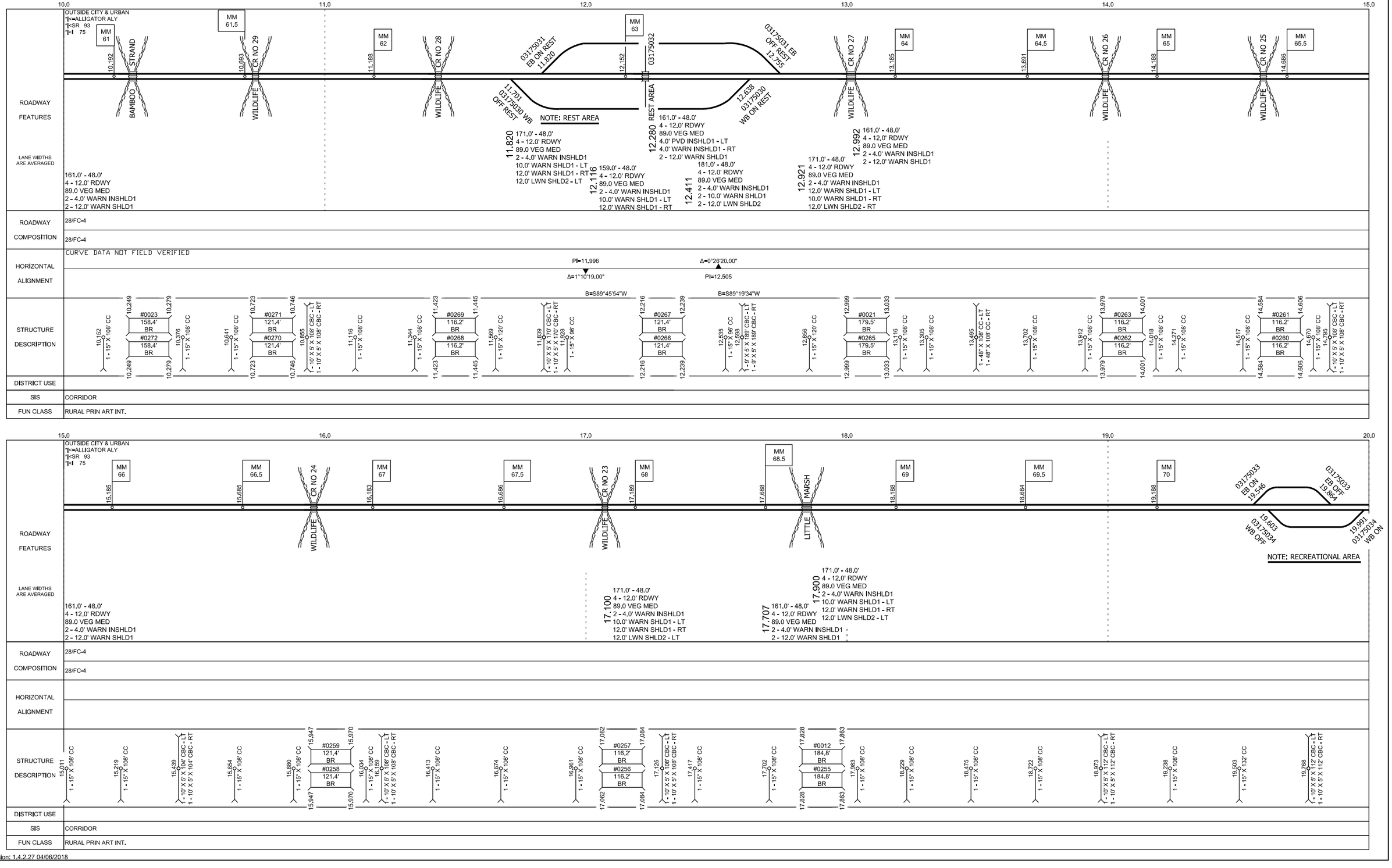
	5 YR INV	SLD REV
DATE	03/29/2018	04/13/2018
BY	FTE	FTE

BMP	EMP	INV	SLD REV
12.033	12.280	06/21/2019	7/3/19(200746-15201)
00.063	63.676		5/21&9/11/20(F241)
00.063	63.676		03/17/2022 (F241)

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO.
02	I 75	SR 93	COLLIER	01	03175000	2 OF 9



	5 YR INV	SLD REV
DATE	03/29/2018	04/13/2018
BY	FTE	FTE

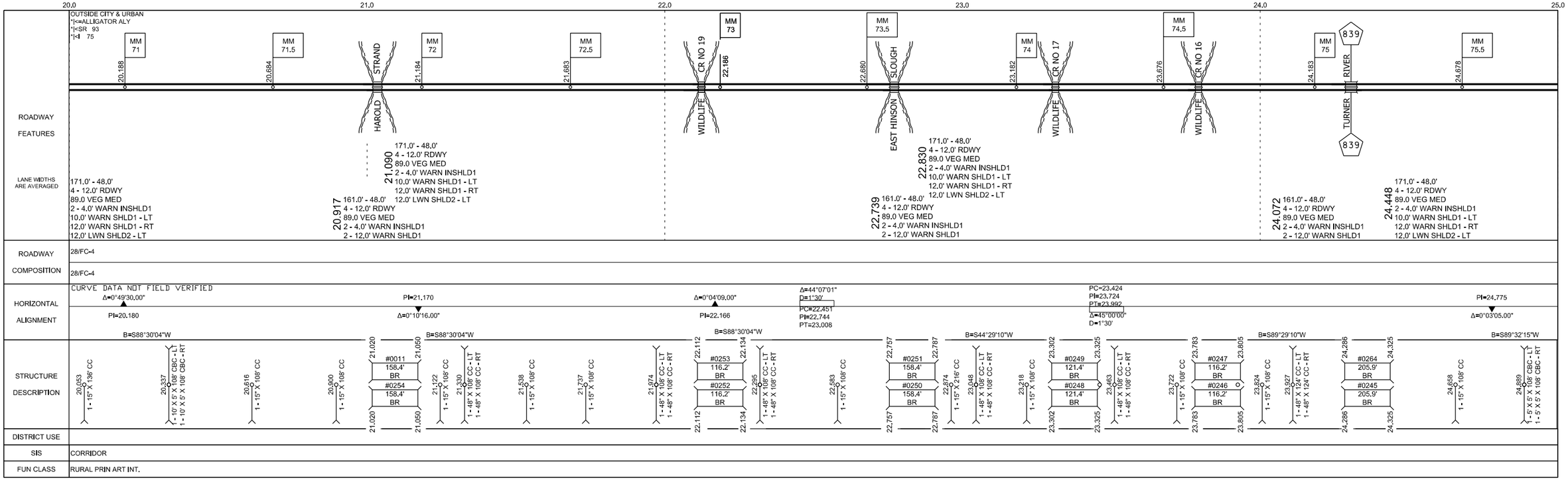
BMP	EMP	INV	SLD REV
00.063	63.676		5/21&9/11/20(F241)
00.063	63.676		03/17/2022 (F241)

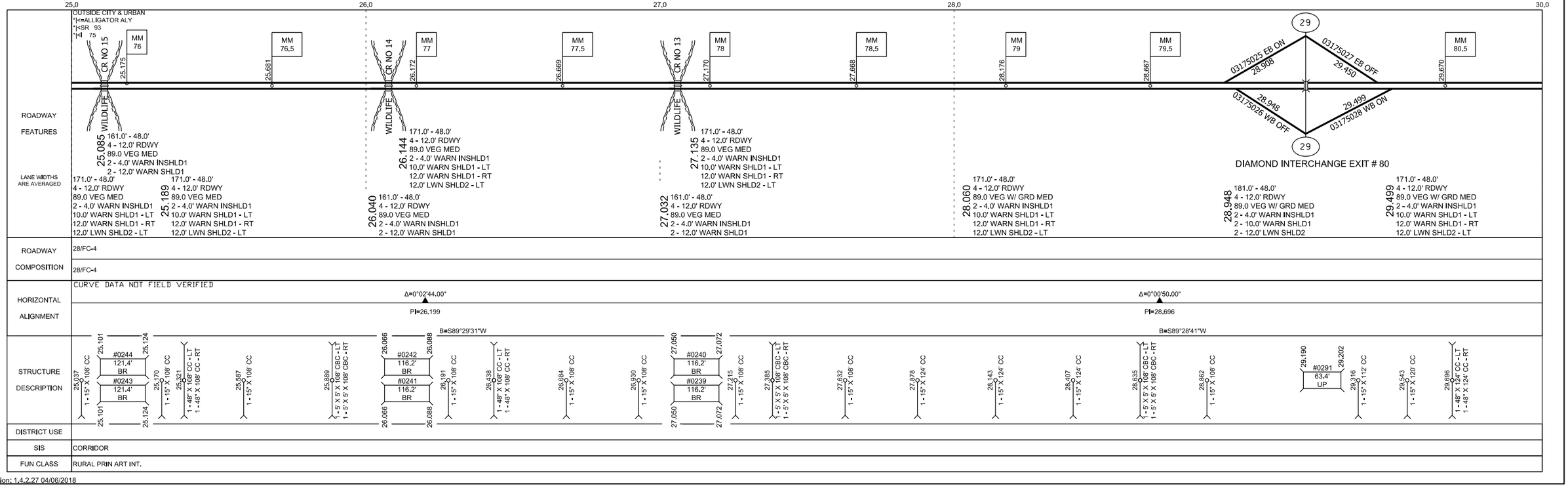
FLORIDA DEPARTMENT OF TRANSPORTATION

FDOT

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO.
02	I 75	SR 93	COLLIER	01	03175000	3 OF 9





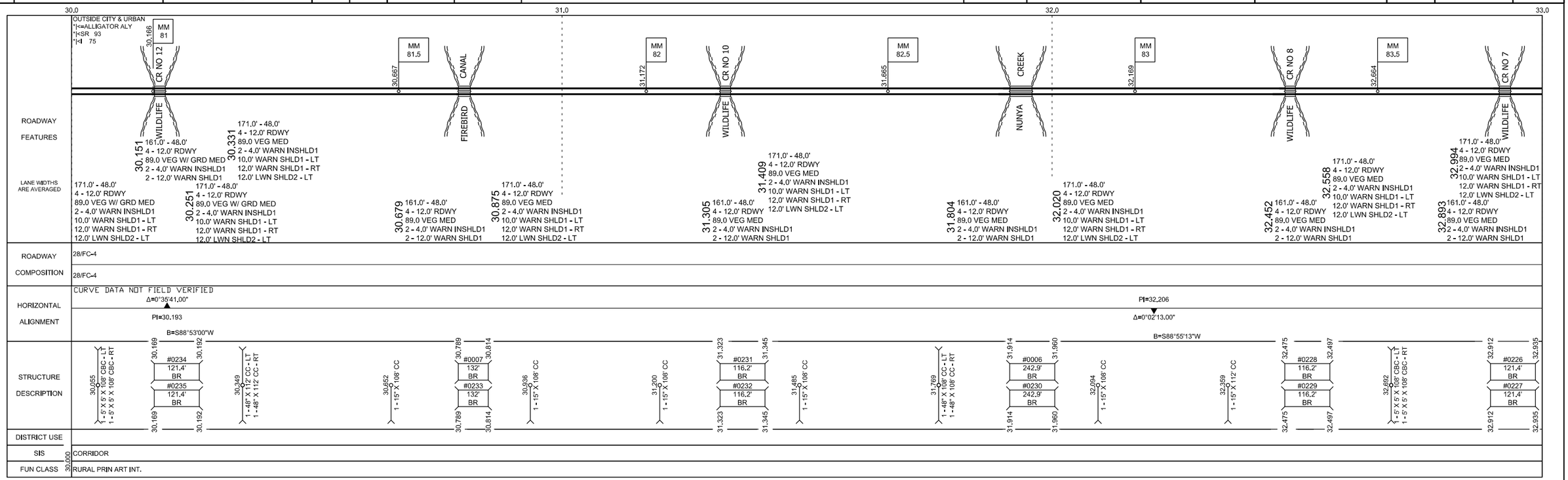
	5 YR INV	SLD REV
DATE	03/29/2018	04/13/2018
BY	FTE	FTE

BMP	EMP	INV	SLD REV
00.063	63.676		5/21&9/11/20(F241
00.063	63.676		03/17/2022 (F241)

FLORIDA DEPARTMENT OF TRANSPORTATION FDOT

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02	I 75	SR 93	COLLIER	01	03175000	4 OF 9



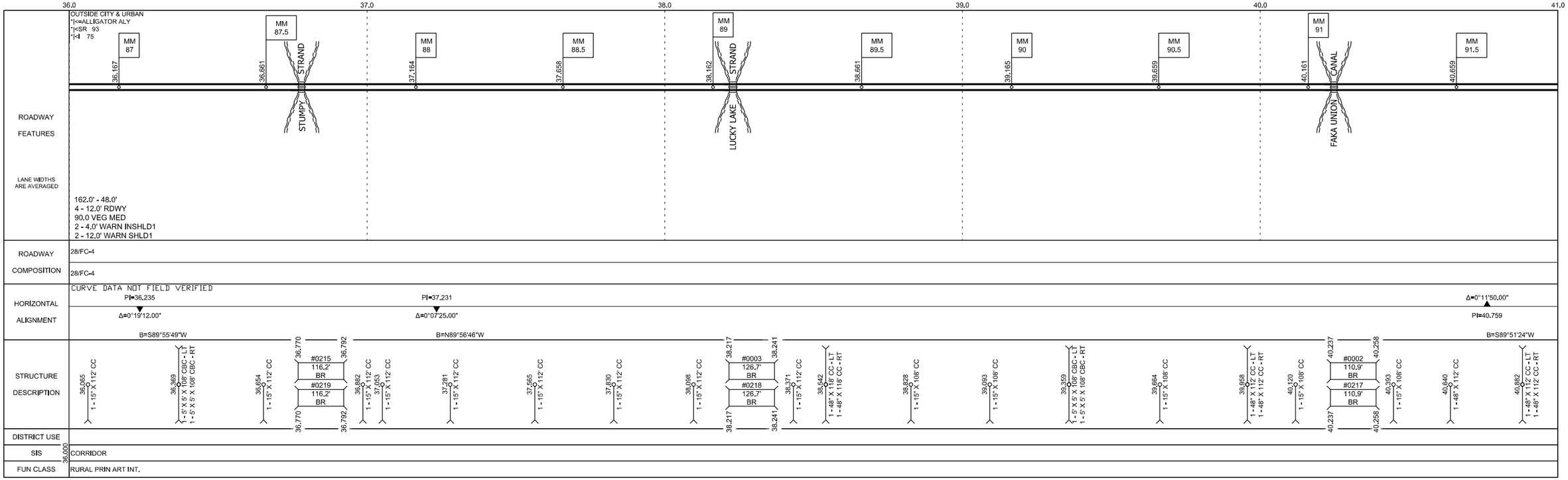
	5 YR INV	SLD REV
DATE	03/29/2018	04/13/2018
BY	FTE	FTE

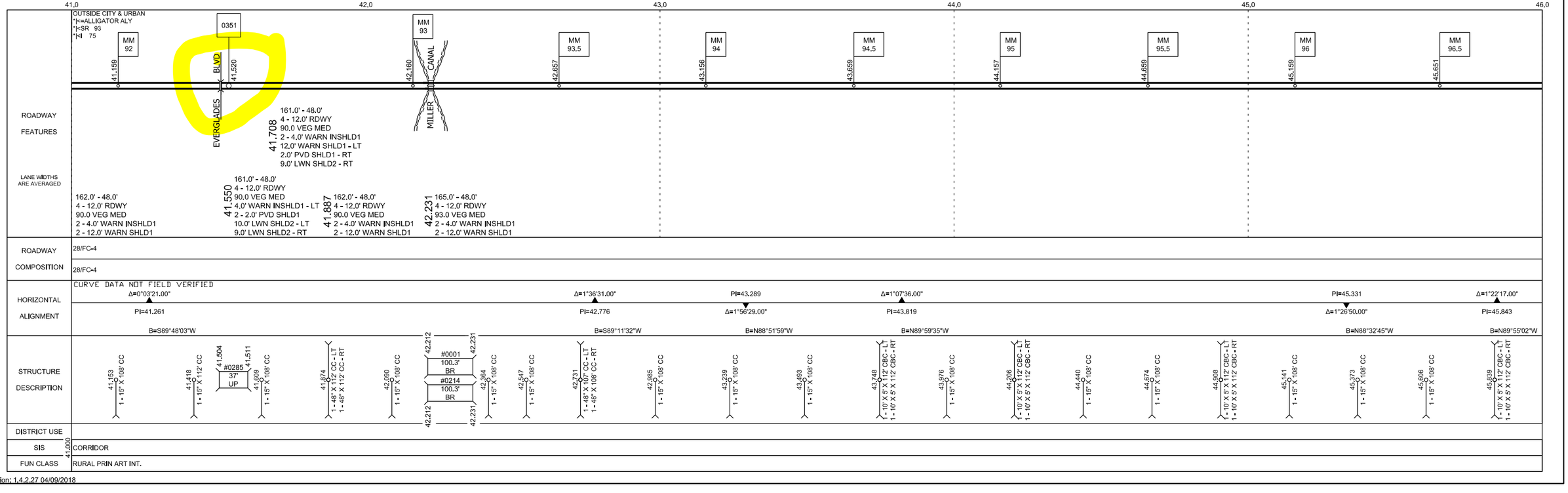
BMP	EMP	INV	SLD REV
00.063	63.676		5/21&9/11/20(F241)
00.063	63.676		03/17/2022 (F241)

FLORIDA DEPARTMENT OF TRANSPORTATION FDOT

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02	I 75	SR 93	COLLIER	01	03175000	5 OF 9



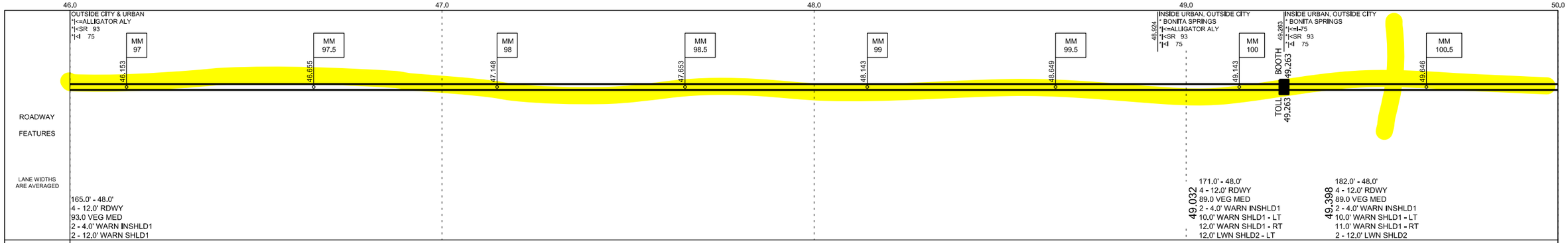


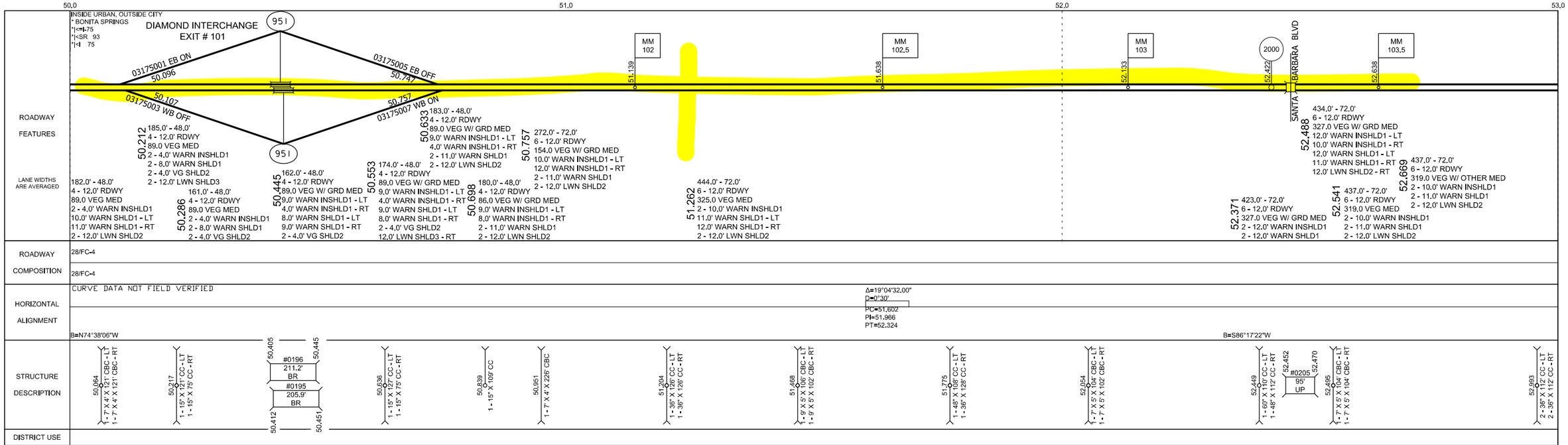
	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	03/29/2018	04/13/2018	00.063	63.676		5/21&9/11/20(F241)
BY	FTE	FTE	00.063	63.676		03/17/2022 (F241)

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02	I 75	SR 93	COLLIER	01	03175000	6 OF 9



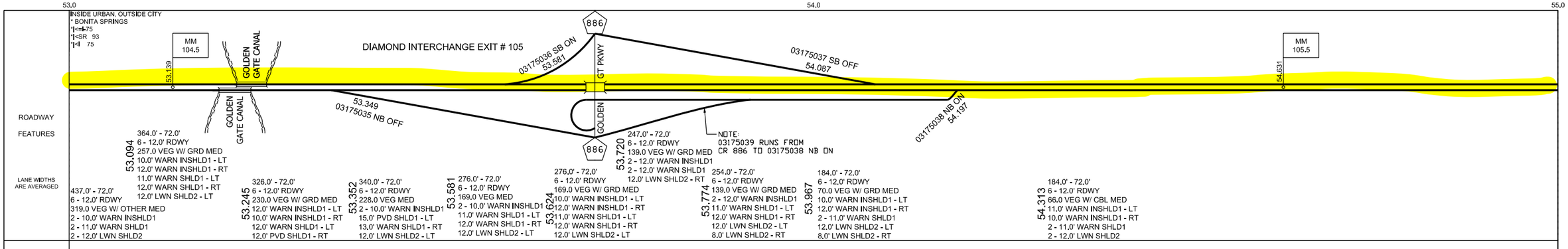


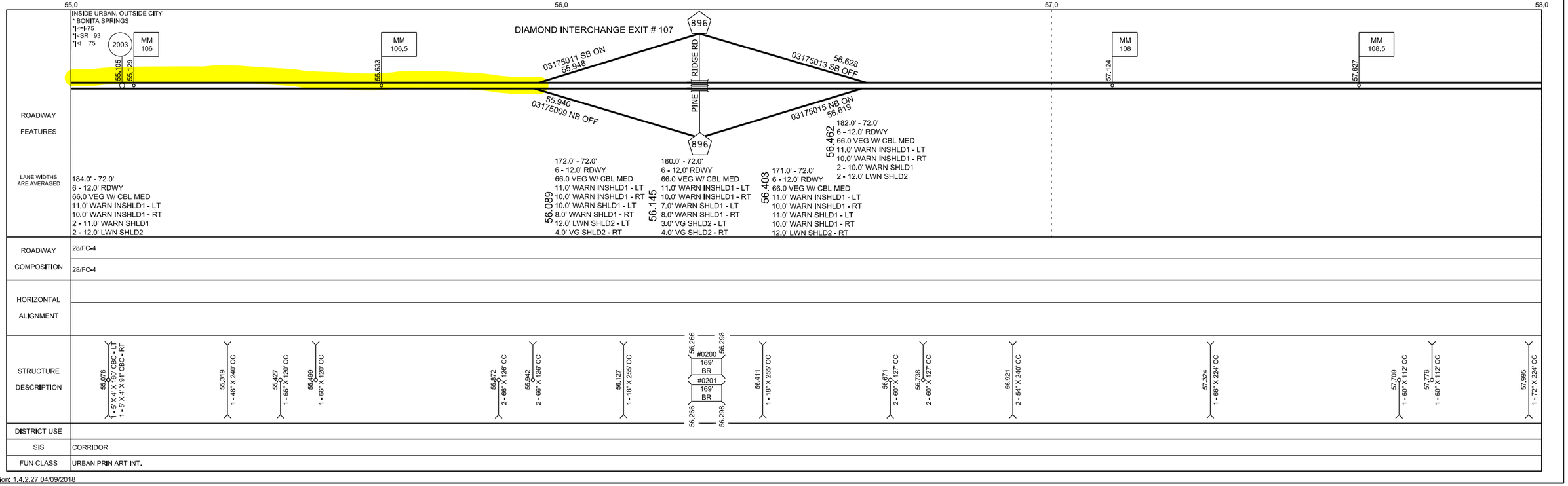
	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	03/29/2018	04/13/2018	00.063	63.676		5/21&9/11/20(F241)
BY	FTE	FTE	00.063	63.676		03/17/2022 (F241)

FLORIDA DEPARTMENT OF TRANSPORTATION — FDOT

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02	I 75	SR 93	COLLIER	01	03175000	7 OF 9





	5 YR INV	SLD REV
DATE	03/29/2018	04/13/2018
BY	FTE	FTE

BMP	EMP	INV	SLD REV
00.063	63.676		5/21&9/11/20(F241)
00.063	63.676		03/17/2022 (F241)

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02	I 75	SR 93	COLLIER	01	03175000	8 OF 9

58.0 59.0 60.0

ROADWAY FEATURES

INSIDE URBAN, OUTSIDE CITY
* BONITA SPRINGS
*I<=I-75
*I<SR 93
*I<I 75

MM 109 — 58.124
862 BCH RD — VNDRBLT 862
MM 109.5 — 58.629
MM 110 — 59.125
MM 110.5 — 59.620

58.342 175.0' - 72.0'
6 - 12.0' RDWY
79.0 VEG W/ CBL MED
2 - 10.0' WARN INSHLD1
2 - 8.0' WARN SHLD1
2 - 4.0' VG SHLD2

58.646 378.0' - 72.0'
6 - 12.0' RDWY
282.0 VEG W/ GRD MED
12.0' WARN INSHLD1 - LT
8.0' WARN INSHLD1 - RT
4.0' VG INSHLD2 - RT
8.0' PVD SHLD1 - LT
12.0' WARN SHLD1 - RT
4.0' VG SHLD2 - LT

LANE WIDTHS ARE AVERAGED

182.0' - 72.0'
6 - 12.0' RDWY
66.0 VEG W/ CBL MED
11.0' WARN INSHLD1 - LT
10.0' WARN INSHLD1 - RT
2 - 10.0' WARN SHLD1
2 - 12.0' LWN SHLD2

58.269 175.0' - 72.0'
6 - 12.0' RDWY
79.0 VEG W/ CBL MED
2 - 10.0' WARN INSHLD1
2 - 12.0' WARN SHLD1

58.390 250.0' - 72.0'
6 - 12.0' RDWY
154.0 VEG W/ GRD MED
12.0' WARN INSHLD1 - LT
8.0' WARN INSHLD1 - RT
4.0' VG INSHLD2 - RT
8.0' WARN SHLD1 - LT
12.0' WARN SHLD1 - RT
4.0' VG SHLD2 - LT

58.530 340.0' - 72.0'
6 - 12.0' RDWY
244.0 VEG W/ GRD MED
12.0' WARN INSHLD1 - LT
8.0' WARN INSHLD1 - RT
4.0' VG INSHLD2 - RT
8.0' PVD SHLD1 - LT
12.0' WARN SHLD1 - RT
4.0' VG SHLD2 - LT

58.720 445.0' - 72.0'
6 - 12.0' RDWY
329.0 VEG W/ CBL MED
11.0' WARN INSHLD1 - LT
10.0' WARN INSHLD1 - RT
2 - 10.0' WARN SHLD1
2 - 12.0' LWN SHLD2

59.850 182.0' - 72.0'
6 - 12.0' RDWY
66.0 VEG W/ CBL MED
11.0' WARN INSHLD1 - LT
10.0' WARN INSHLD1 - RT
2 - 10.0' WARN SHLD1
2 - 12.0' LWN SHLD2

ROADWAY COMPOSITION

28/FC-4

28/FC-4

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED

Δ=17°40'21.00"
D=0°45'
PC=58.978
PI=59.203
PT=59.425

PC=59.993
PI=60.343
PT=60.686
Δ=18°17'38.00"
D=0°30'

B=N18°20'08"W

STRUCTURE DESCRIPTION

58.085 — 1 - 60' X 248' CC

58.479 — 1 - 6' X 7' X 75' CBC - LT
1 - 6' X 7' X 175' CBC - RT
58.497 — 58.530
#0202 174.2' BR
#0203 174.2' BR
58.497 — 58.530

59.263 — 1 - 24' X 160' CC

DISTRICT USE

SIS: CORRIDOR

FUN CLASS: URBAN PRIN ART INT.

60.0 61.0 62.0

ROADWAY FEATURES

INSIDE URBAN, OUTSIDE CITY
* BONITA SPRINGS
*I<=I-75
*I<SR 93
*I<I 75

0191 — 60.100
846 HWY — NAP IMMOK 846
DIAMOND INTERCHANGE
03175017 SB ON — 60.294
03175021 SB OFF — 60.785
60.294 — 03175019 NB OFF
60.779 — 03175023 NB ON
CANAL — ROCK
MM 112 — 61.119
9950 — 61.558
MM 112.5 — 61.624

LANE WIDTHS ARE AVERAGED

182.0' - 72.0'
6 - 12.0' RDWY
66.0 VEG W/ CBL MED
11.0' WARN INSHLD1 - LT
10.0' WARN INSHLD1 - RT
2 - 10.0' WARN SHLD1
2 - 12.0' LWN SHLD2

60.349 185.0' - 72.0'
6 - 12.0' RDWY
66.0 VEG W/ CBL MED
2 - 11.0' WARN INSHLD1
7.0' WARN SHLD1 - LT
8.0' WARN SHLD1 - RT
2 - 4.0' VG SHLD2
2 - 12.0' LWN SHLD3

60.403 161.0' - 72.0'
6 - 12.0' RDWY
66.0 VEG W/ CBL MED
2 - 11.0' WARN INSHLD1
7.0' WARN SHLD1 - LT
8.0' WARN SHLD1 - RT
2 - 4.0' VG SHLD2

60.459 160.0' - 72.0'
6 - 12.0' RDWY
65.0 VEG W/ GRD MED
20.0' WARN INSHLD1 - LT
18.0' WARN INSHLD1 - RT
7.0' WARN SHLD1 - LT
8.0' WARN SHLD1 - RT
2 - 4.0' VG SHLD2

60.619 160.0' - 72.0'
6 - 12.0' RDWY
65.0 VEG W/ CBL MED
2 - 11.0' WARN INSHLD1
7.0' WARN SHLD1 - LT
8.0' WARN SHLD1 - RT
2 - 4.0' VG SHLD2

60.670 185.0' - 72.0'
6 - 12.0' RDWY
65.0 VEG W/ CBL MED
2 - 11.0' WARN INSHLD1
2 - 8.0' WARN SHLD1
2 - 4.0' VG SHLD2
2 - 12.0' LWN SHLD3

60.727 181.0' - 72.0'
6 - 12.0' RDWY
65.0 VEG W/ CBL MED
2 - 11.0' WARN INSHLD1
2 - 10.0' WARN SHLD1
2 - 12.0' LWN SHLD2

60.820 171.0' - 72.0'
6 - 12.0' RDWY
66.0 VEG W/ GRD MED
13.0' WARN INSHLD1 - LT
10.0' WARN INSHLD1 - RT
12.0' WARN SHLD1 - LT
9.0' PVD SHLD1 - RT
12.0' LWN SHLD2 - RT

60.964 182.0' - 72.0'
6 - 12.0' RDWY
66.0 VEG W/ CBL MED
2 - 10.0' WARN INSHLD1
2 - 10.0' WARN SHLD1
2 - 12.0' LWN SHLD2

ROADWAY COMPOSITION

28/FC-4

28/FC-4

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED

B=N00°28'34"W

STRUCTURE DESCRIPTION

60.519 — 60.553
#0321 179.5' BR
#0322 179.5' BR
60.519 — 60.553

60.828 — 1 - 18' X 120' CC

60.885 — 60.907
#0189 116.2' BR
#0190 116.2' BR
60.885 — 60.907

61.162 — 1 - 30' X 230' CC

61.506 — 1 - 12' X 10' X 242' CBC

61.728 — 1 - 42' X 290' CC

DISTRICT USE

SIS: CORRIDOR

FUN CLASS: URBAN PRIN ART INT.

	5 YR INV	SLD REV
DATE	03/29/2018	04/13/2018
BY	FTE	FTE

BMP	EMP	INV	SLD REV
00.063	63.676		5/21&9/11/20(F241)
00.063	63.676		03/17/2022 (F241)

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
02	I 75	SR 93	COLLIER	01	03175000	9 OF 9

62.0 63.0

ROADWAY FEATURES

INSIDE URBAN, OUTSIDE CITY
* BONITA SPRINGS
*I<=I-75
*I<SR 93
*I<I 75

MM 113 — 62.122
MM 113.5 — 62.616
MM 114 — 63.115
LEE COUNTY LINE — 63.676

GPS COORDINATES
LAT: 26.31689
LONG:-81.74618

END MP: 63.676
NET ROADWAY ID LENGTH: 63.613

LANE WIDTHS ARE AVERAGED

182.0' - 72.0'
6 - 12.0' RDWY
66.0 VEG W/ CBL MED
2 - 10.0' WARN INSHLD1
2 - 10.0' WARN SHLD1
2 - 12.0' LWN SHLD2

ROADWAY COMPOSITION

28/FC-4
28/FC-4

HORIZONTAL ALIGNMENT

CURVE DATA NOT FIELD VERIFIED

Δ=19°28'46.00"
D=1°00'
PC=62.889
PI=62.714
PT=63.259
B=N19°57'20"W

STRUCTURE DESCRIPTION

62.049 — 1 - 30' X 240' CC
62.349 — 1 - 18' X 120' CC
62.645 — 1 - 30' X 240' CC
63.258 — 2 - 10' X 8' X 220' CBC

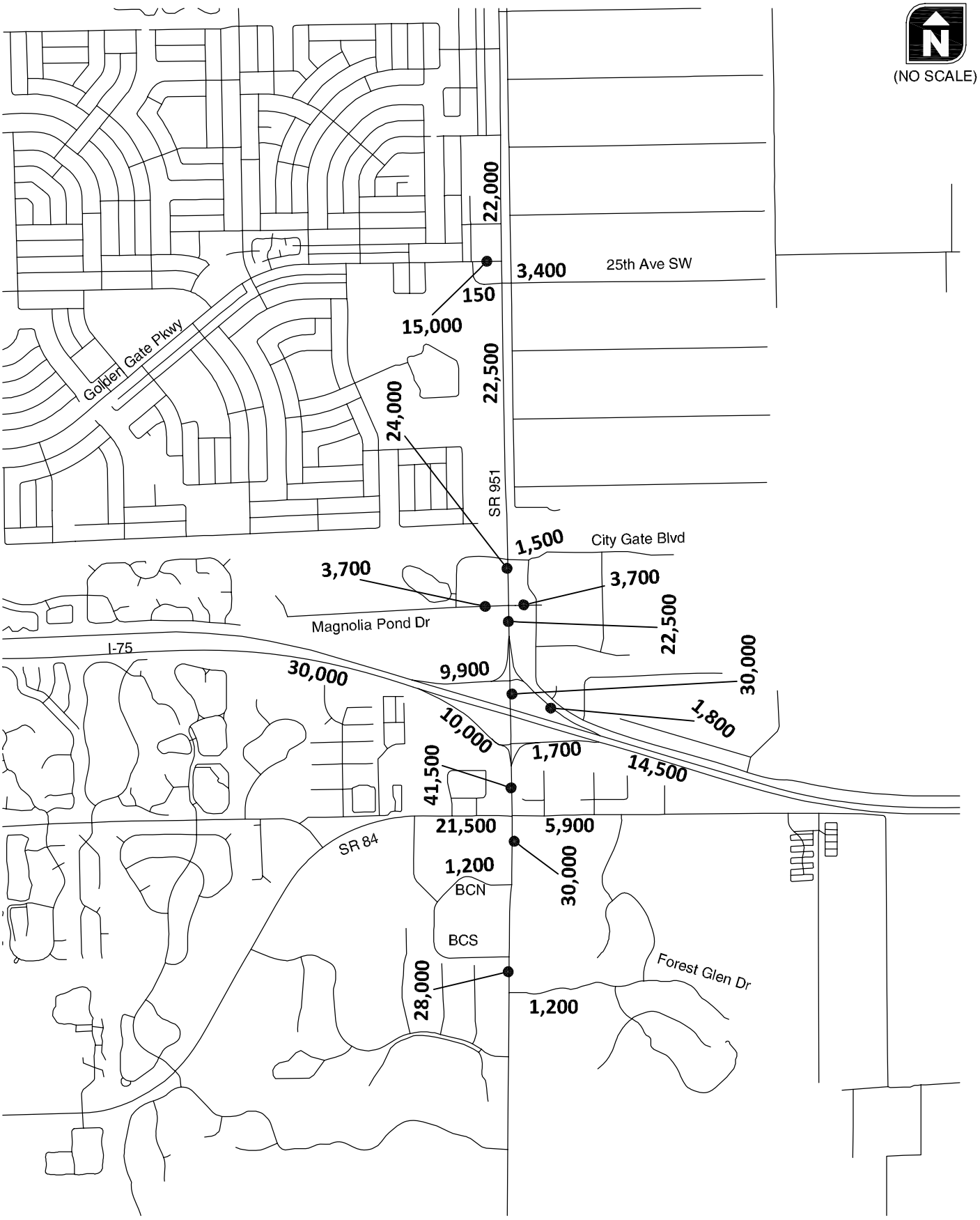
DISTRICT USE

SIS

CORRIDOR — CORRIDOR

FUN CLASS

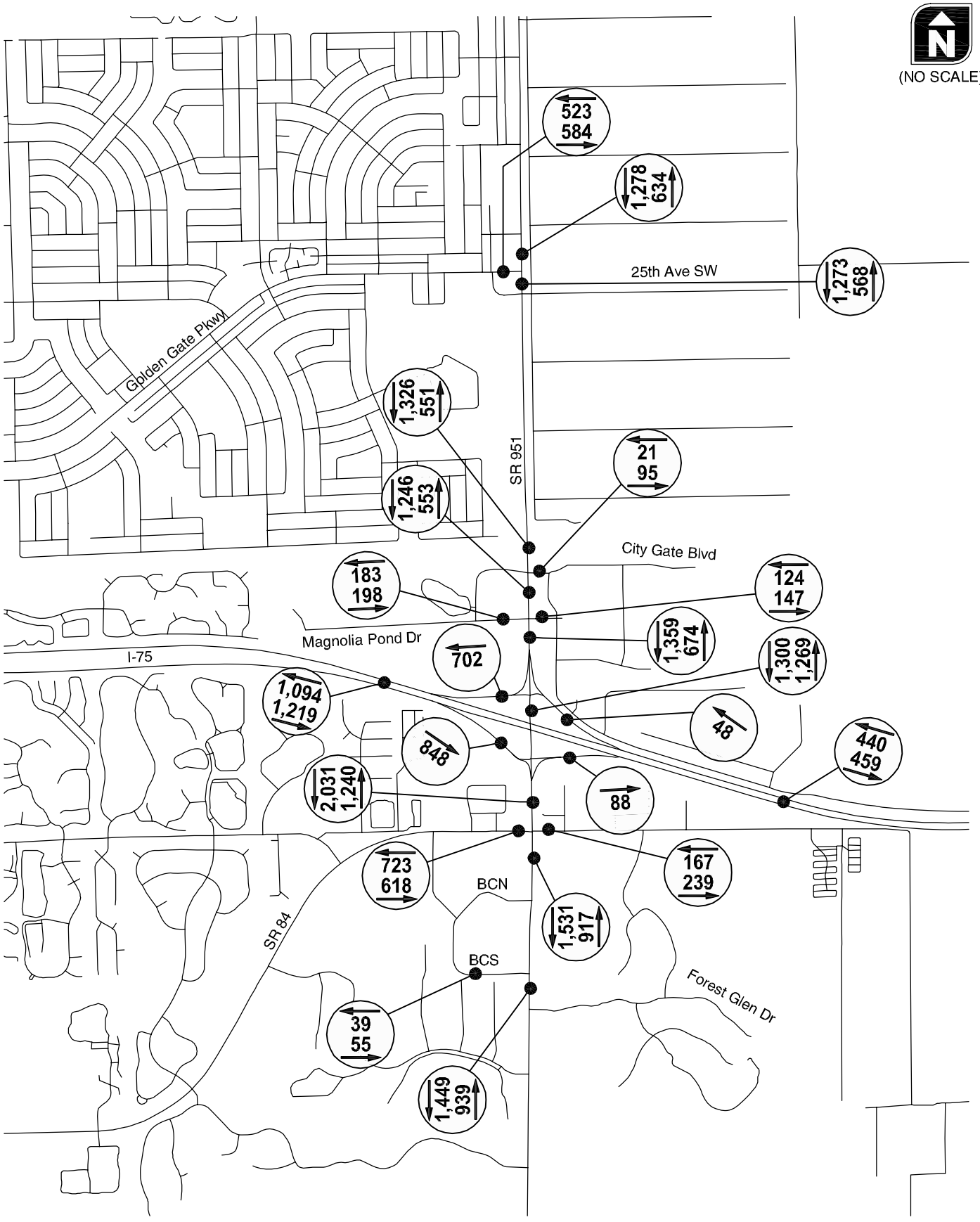
URBAN PRIN ART INT.



SUMMARY OF 2011 EXISTING AADT
COLLIER COUNTY, FLORIDA

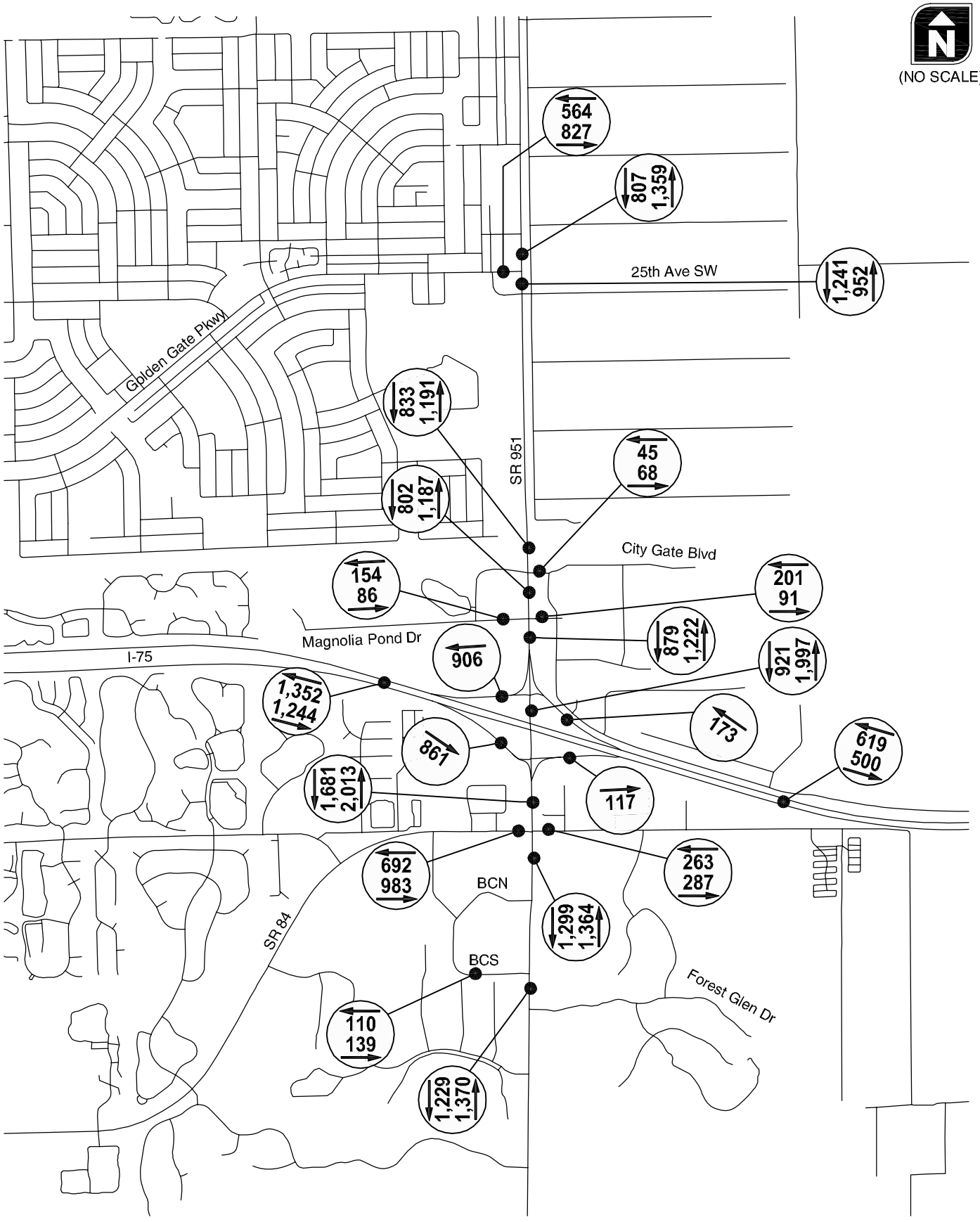
FIGURE **3**

H:\profile\11330 - I-75 and SR 951 Interchange PD&E\dwgs\figs\Existing Conditions TM Figs\Existing conditions_REV.dwg Feb 04, 2013 - 3:23pm - bboncore Layout Tab: Exist AADT



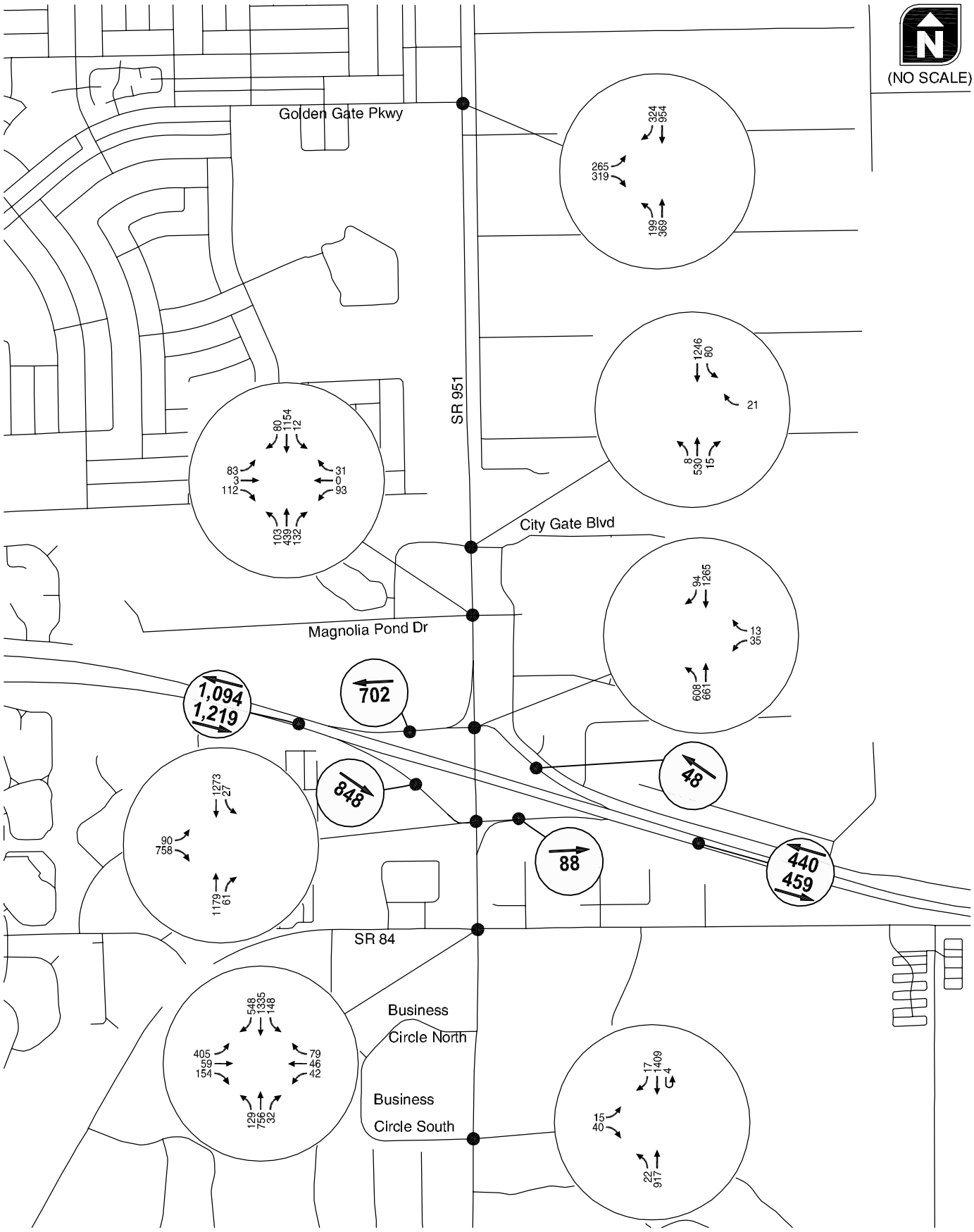
SUMMARY OF 2011 EXISTING AM PEAK-HOUR SEGMENT VOLUMES
COLLIER COUNTY, FLORIDA

FIGURE
4



SUMMARY OF 2011 EXISTING PM PEAK-HOUR SEGMENT VOLUMES
COLLIER COUNTY, FLORIDA

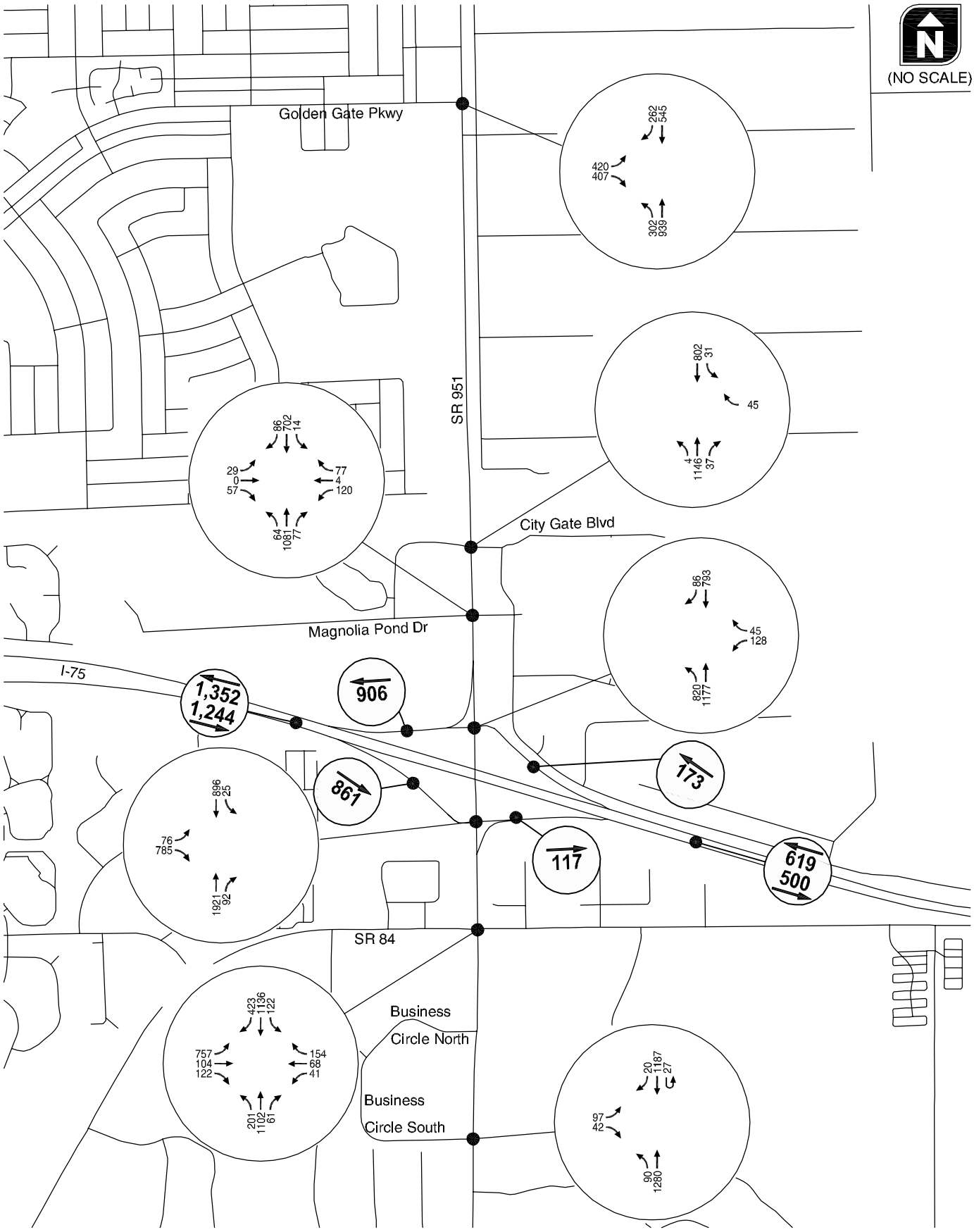
FIGURE **5**



SUMMARY OF 2011 EXISTING AM PEAK-HOUR TURNING MOVEMENT VOLUMES
COLLIER COUNTY, FLORIDA

FIGURE
6

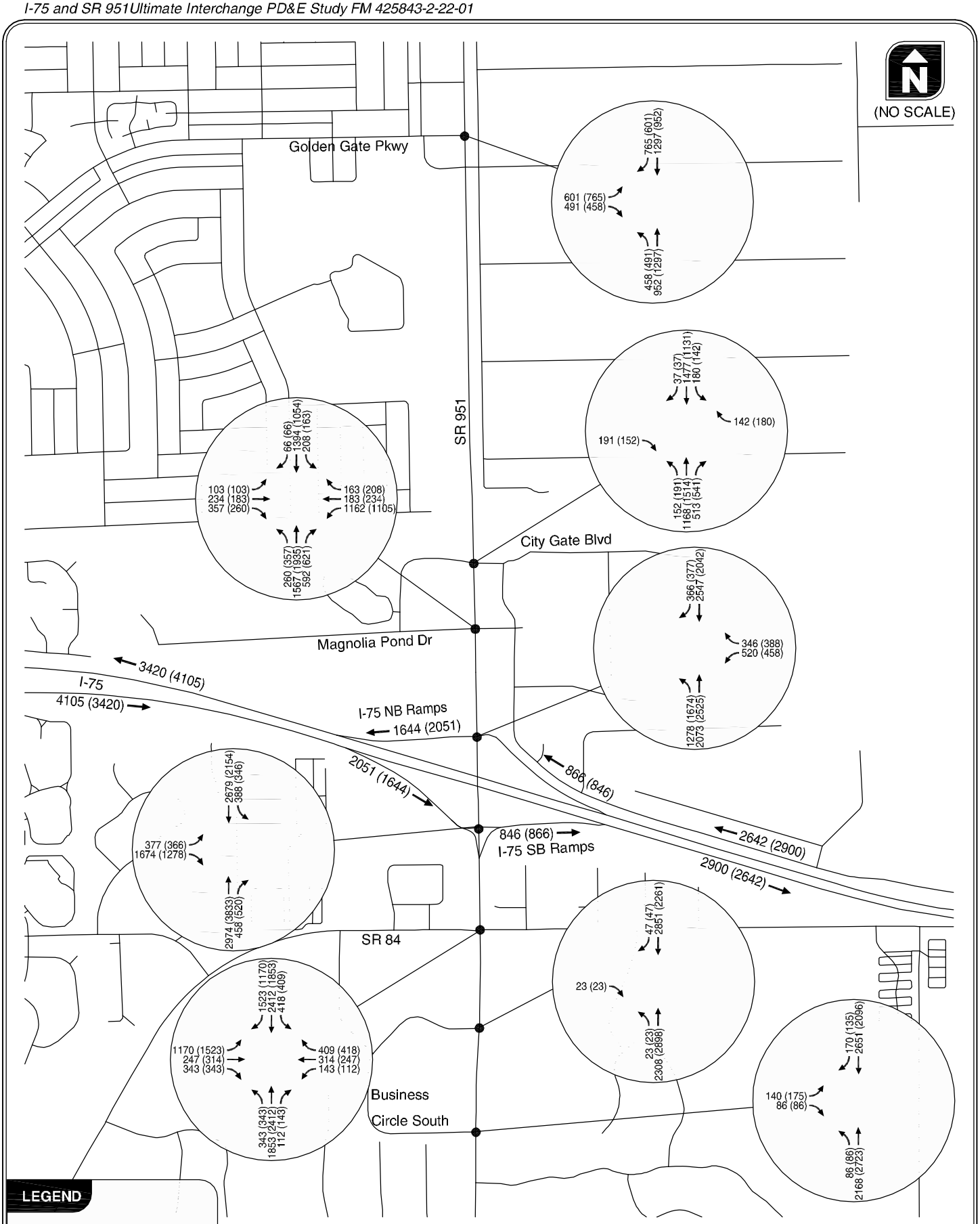
H:\profile\11330 - I-75 and SR 951 Interchange PD&E\dwgs\figs\Existing Conditions TM Figs\Existing conditions_REV.dwg Feb 04, 2013 - 3:25pm - bboncore Layout Tab: Exist AM Turn Count



SUMMARY OF 2011 EXISTING PM PEAK-HOUR TURNING MOVEMENT VOLUMES
COLLIER COUNTY, FLORIDA

FIGURE
7

H:\profile\11330 - I-75 and SR 951 Interchange PD&E\dwgs\figs\Existing Conditions TM Figs\Existing conditions_REV.dwg Feb 04, 2013 - 3:25pm - bboncore Layout Tab: Exist PM Turn Count



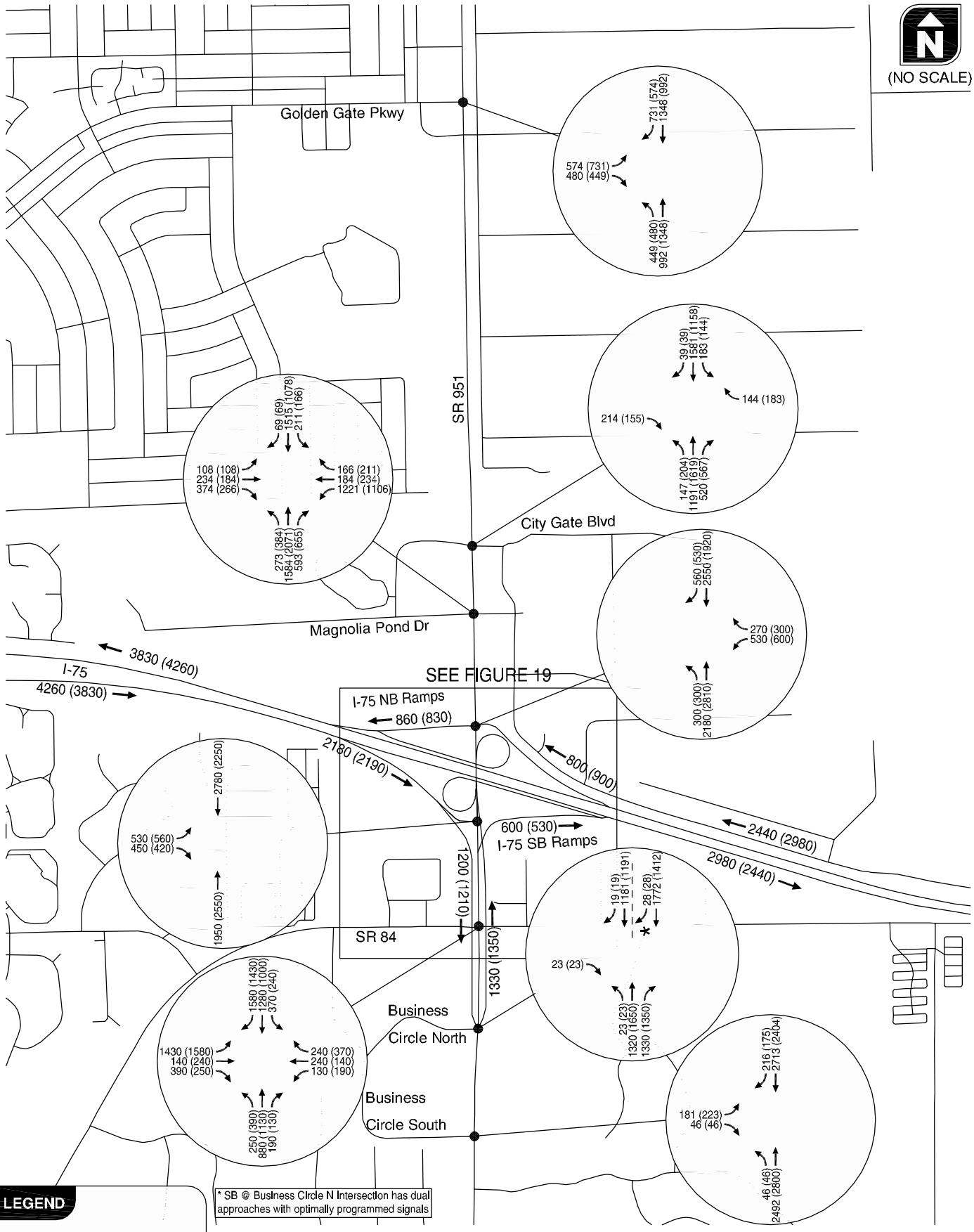
LEGEND

XX - AM PEAK
(XX) - PM PEAK

SUMMARY OF 2035 NO BUILD AM AND PM PEAK-HOUR VOLUMES
COLLIER COUNTY, FLORIDA

FIGURE **17**

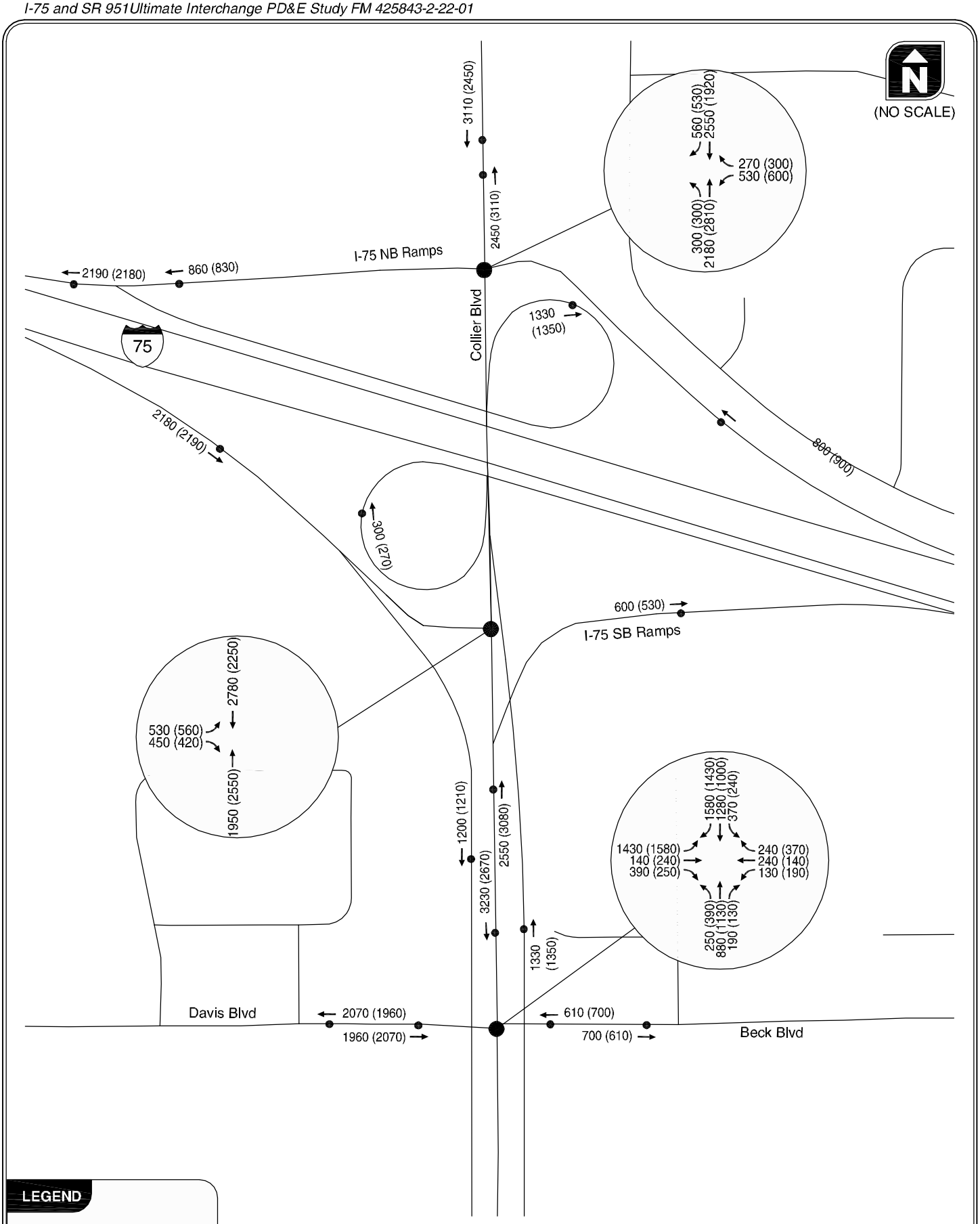
H:\proj\file\11330 - I-75 and SR 951 Interchange PD&E\dwgs\figs\Traffic Forecasting TM Figs\Preliminary 2035 TMV 091412.dwg Jun 27, 2013 - 3:28pm - openorl Layout Tab: No Build 2035 Volumes



SUMMARY OF 2035 ALT 1 AM AND PM PEAK-HOUR VOLUMES
COLLIER COUNTY, FLORIDA

FIGURE **18**

H:\proffile\11330 - I-75 and SR 951 Interchange PD&E\dwgs\figs\Traffic Forecasting TM Figs\Preliminary 2035 TMV 091412.dwg Jun 27, 2013 - 3:28pm - openorl Layout Tab: Alt 1



LEGEND

XX - AM PEAK
(XX) - PM PEAK

SUMMARY OF 2035 ALT 1 AM & PM INTERCHANGE PEAK-HOUR VOLUMES
COLLIER COUNTY, FLORIDA

FIGURE **19**

H:\proffile\11330 - I-75 and SR 951 Interchange PD&E\dwgs\figs\Traffic Forecasting TM Figs\Preliminary 2035 TMV 091412.dwg Jun 27, 2013 - 3:29pm - openorl Layout Tab: Alt 1 Zoom

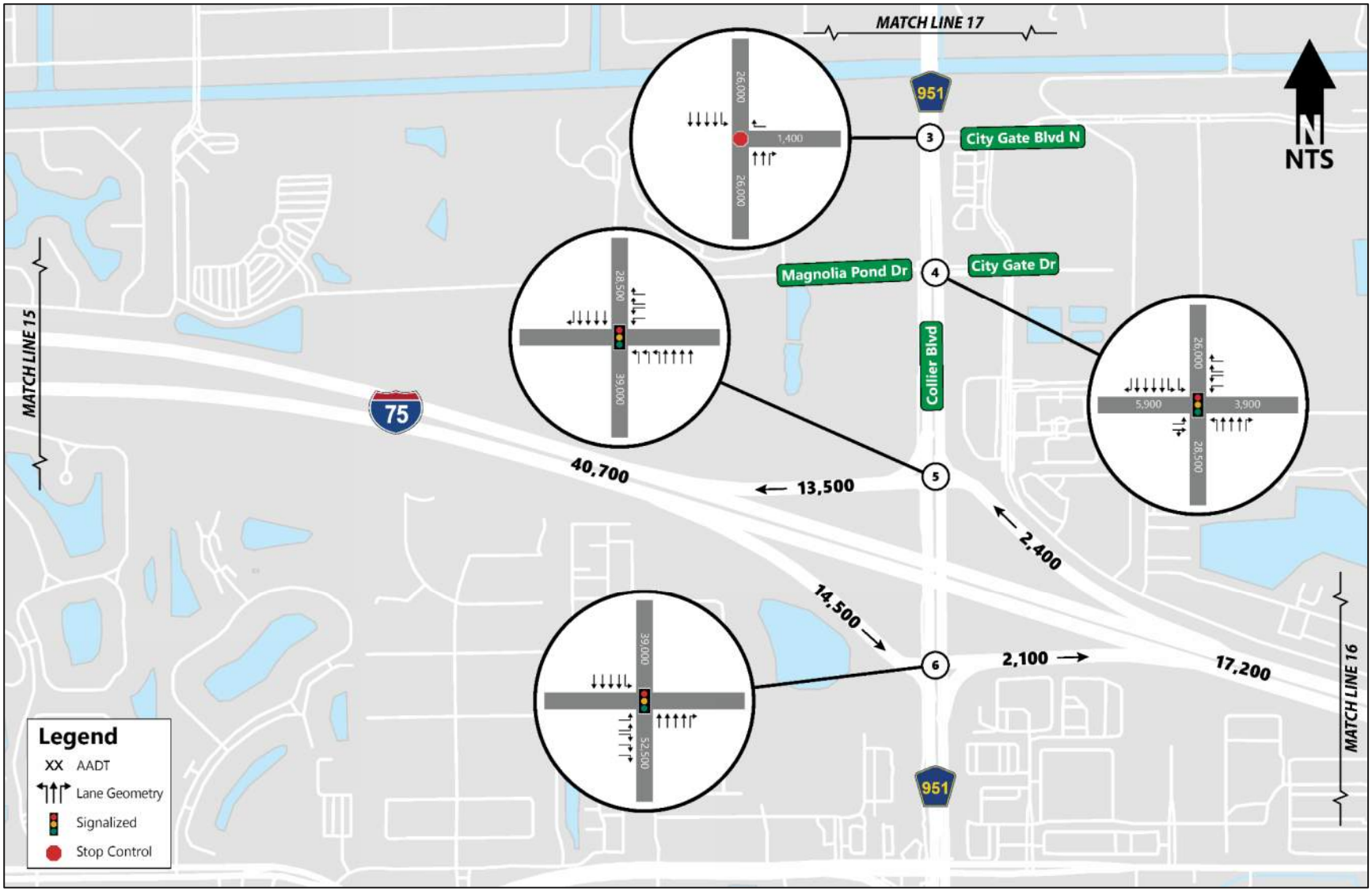


Figure 6-1 (Continued) Existing Year (2019) Lane Geometry and AADT – I-75 and SR 951 (Collier Blvd)

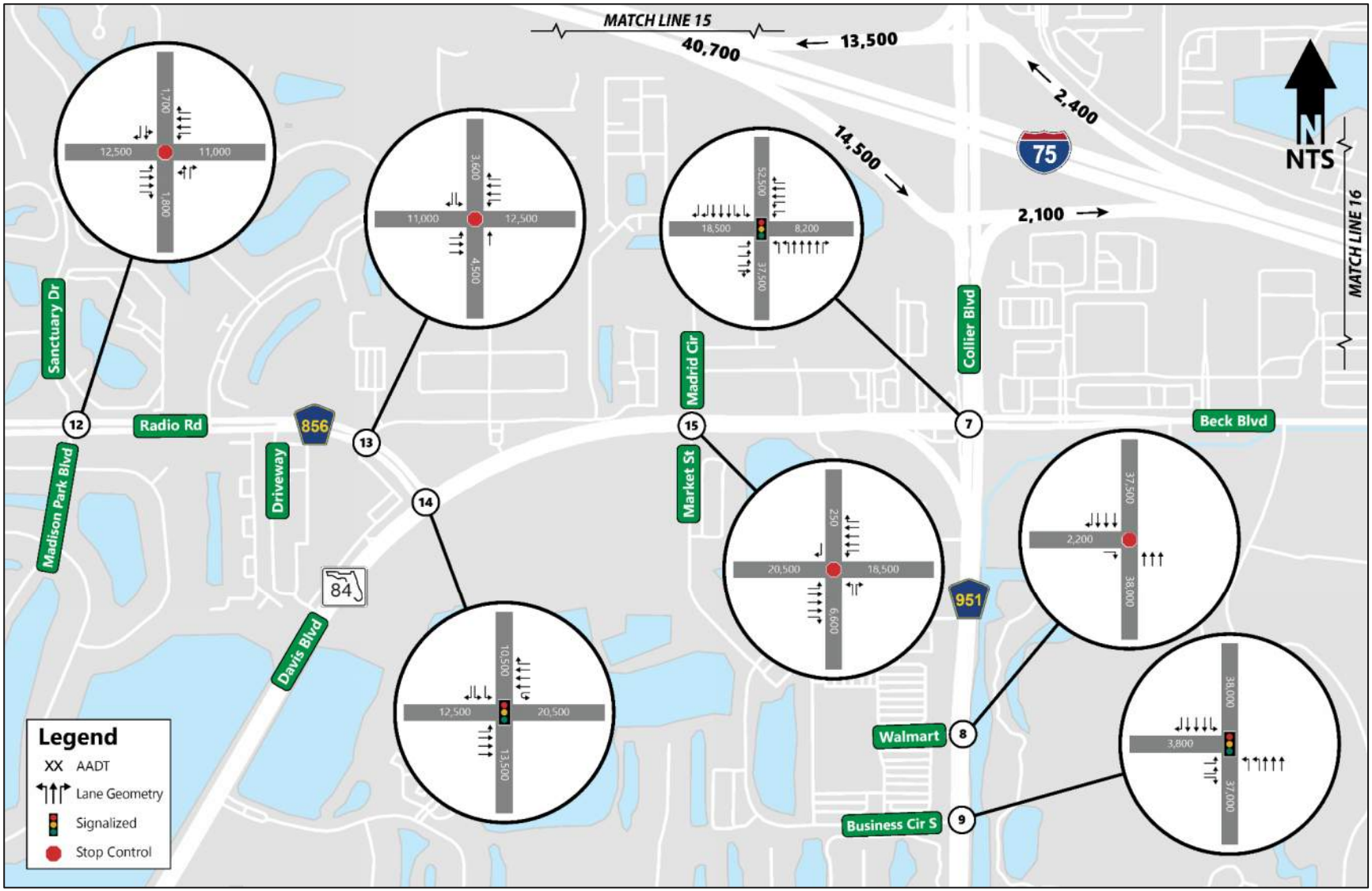
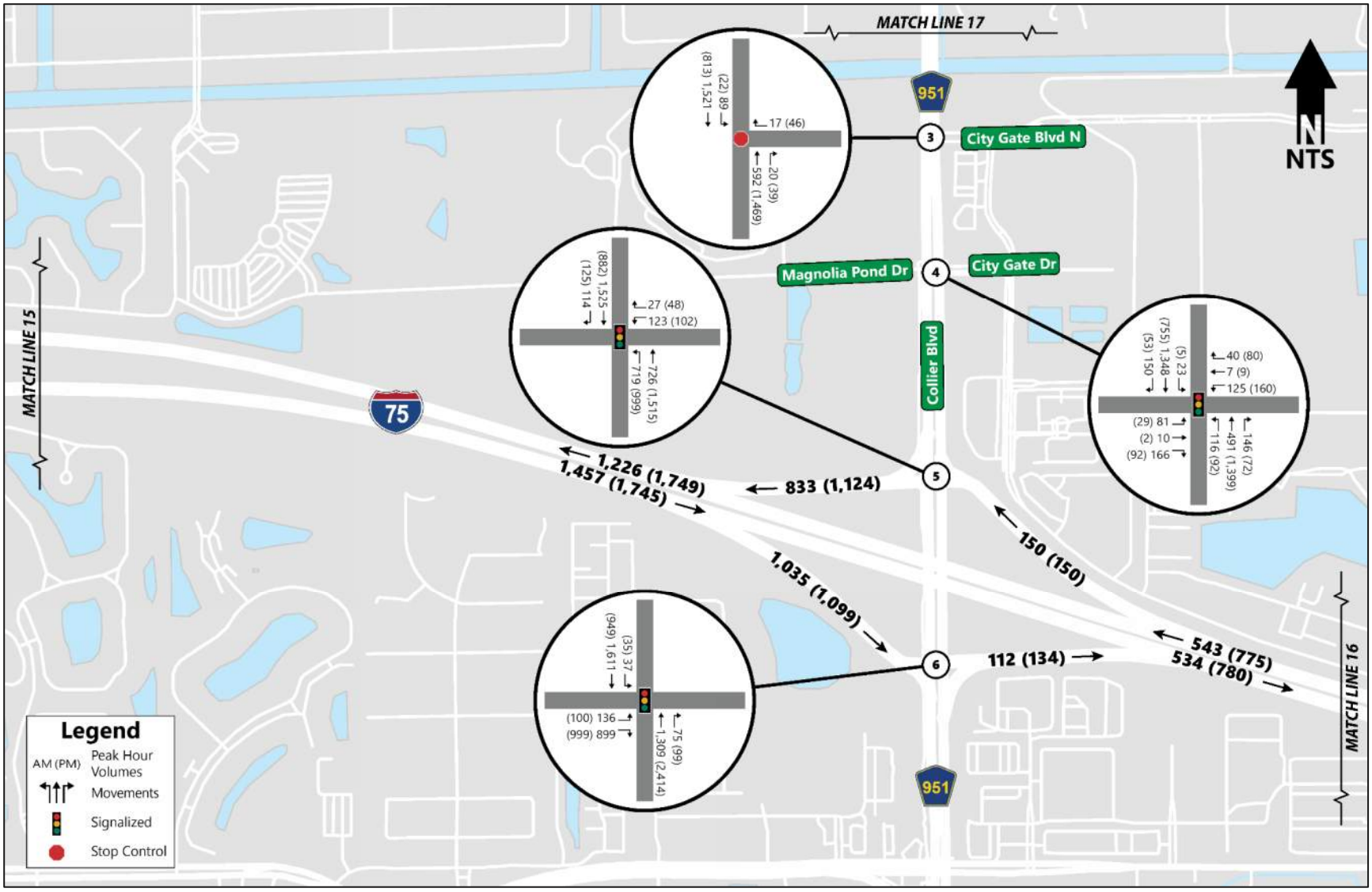
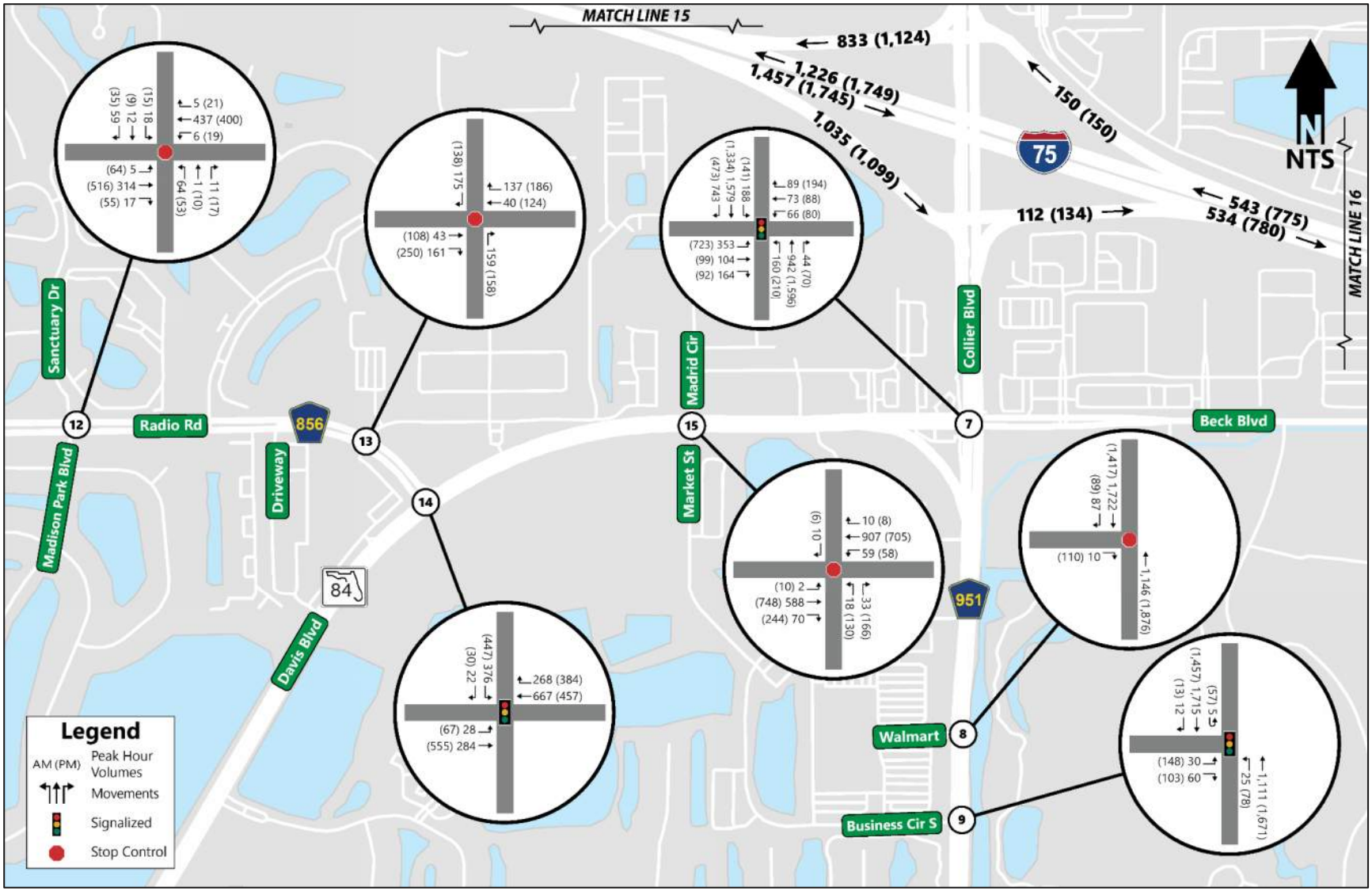
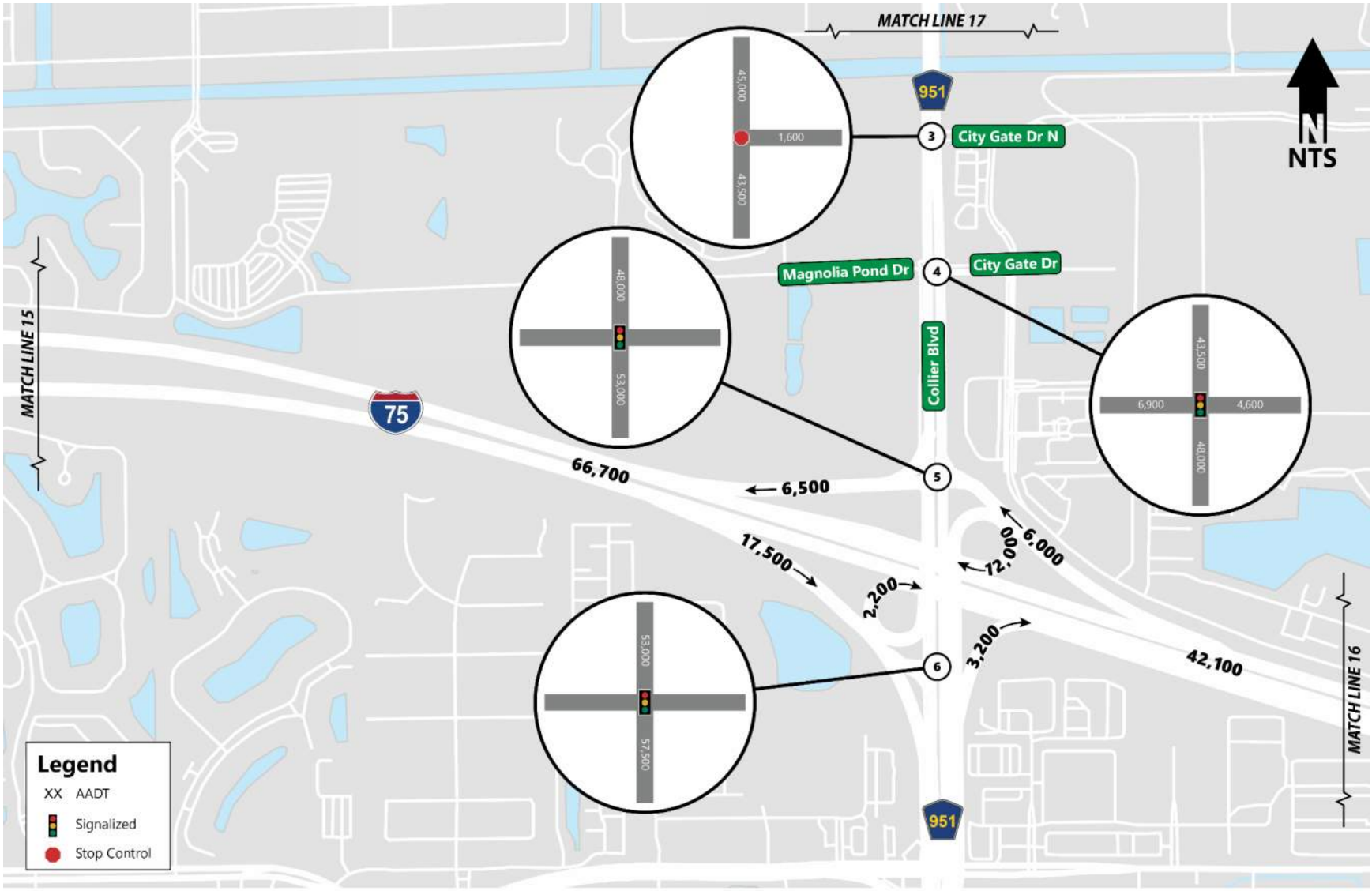


Figure 6-1 (Continued) Existing Year (2019) Lane Geometry and AADT – I-75 and SR 951 (Collier Blvd)

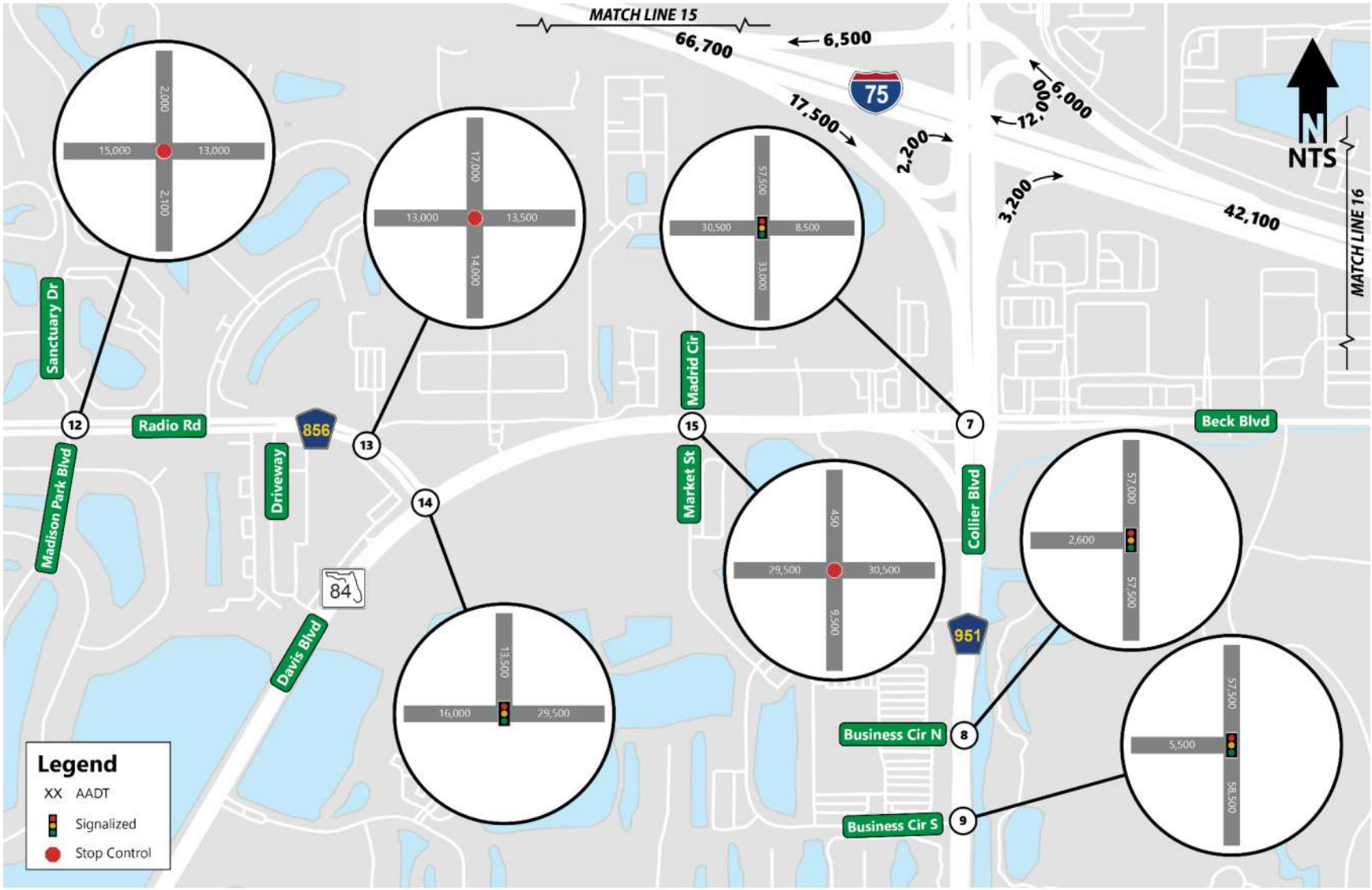






*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 25: No-Build 2045 AADT - SR 951 (Collier Blvd), North of I-75



*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 24: No-Build 2045 AADT - SR 951 (Collier Blvd), South of I-75

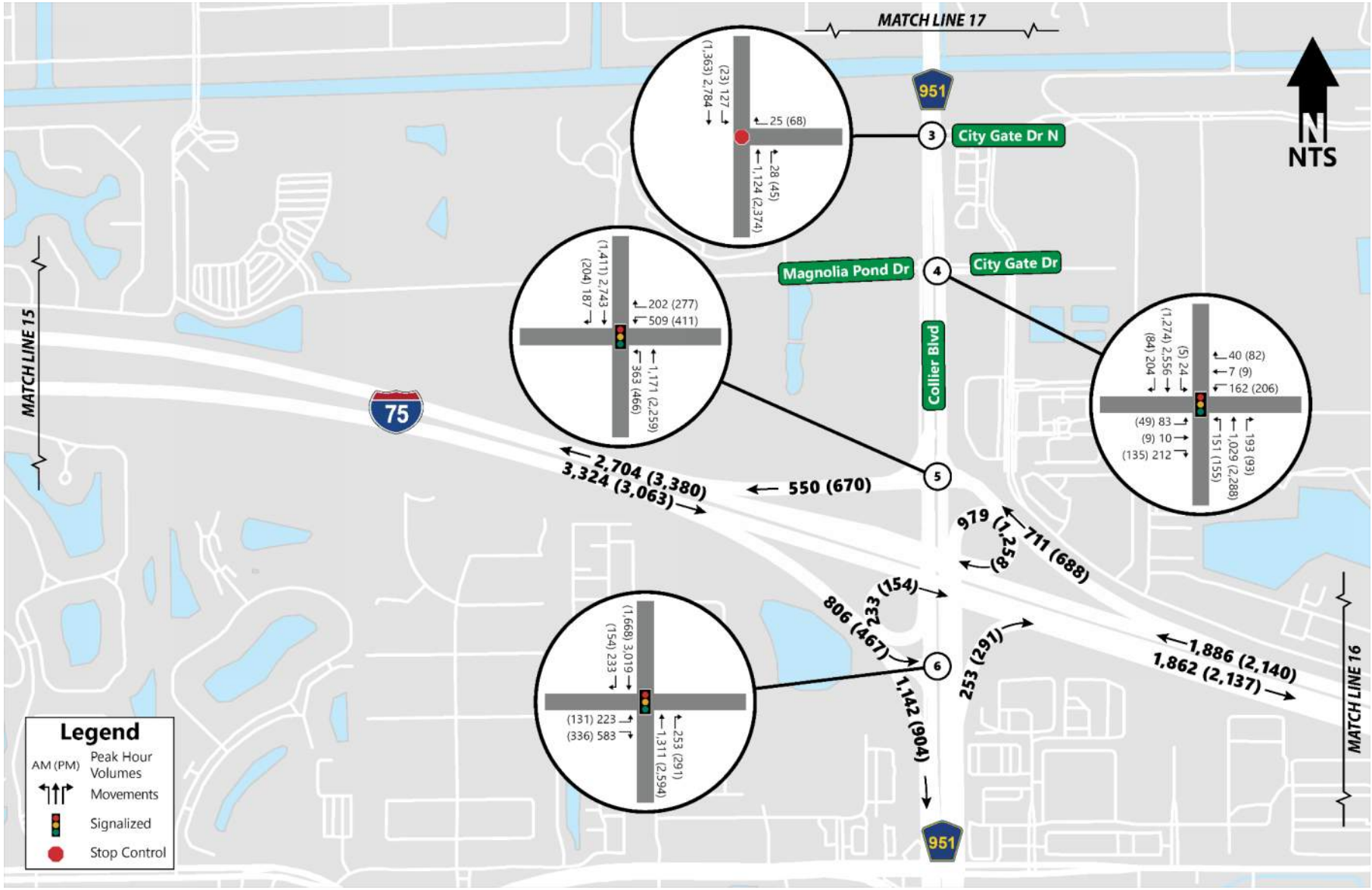


Figure 25: No-Build 2045 DDHV - SR 951 (Collier Blvd), North of I-75

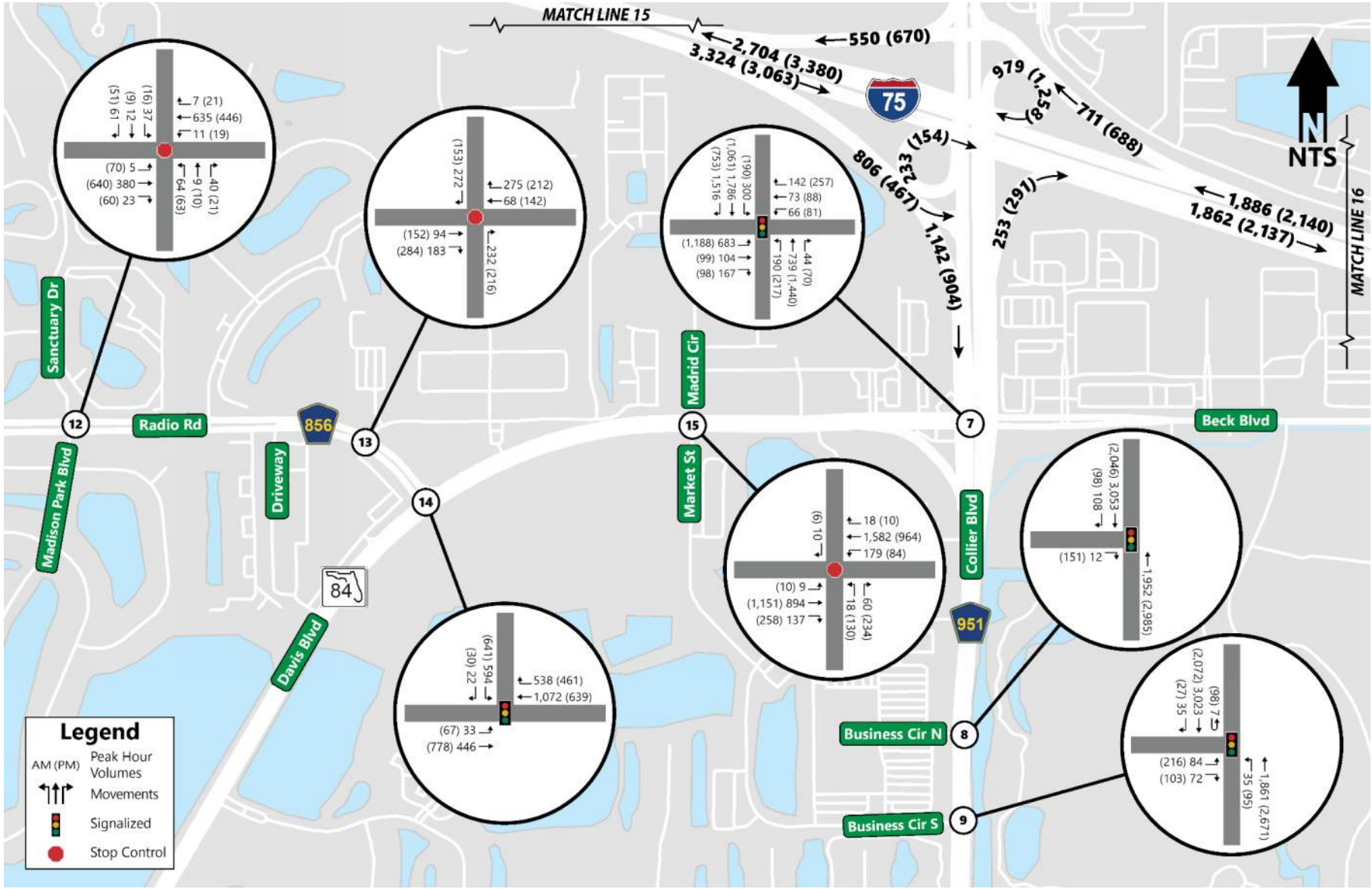
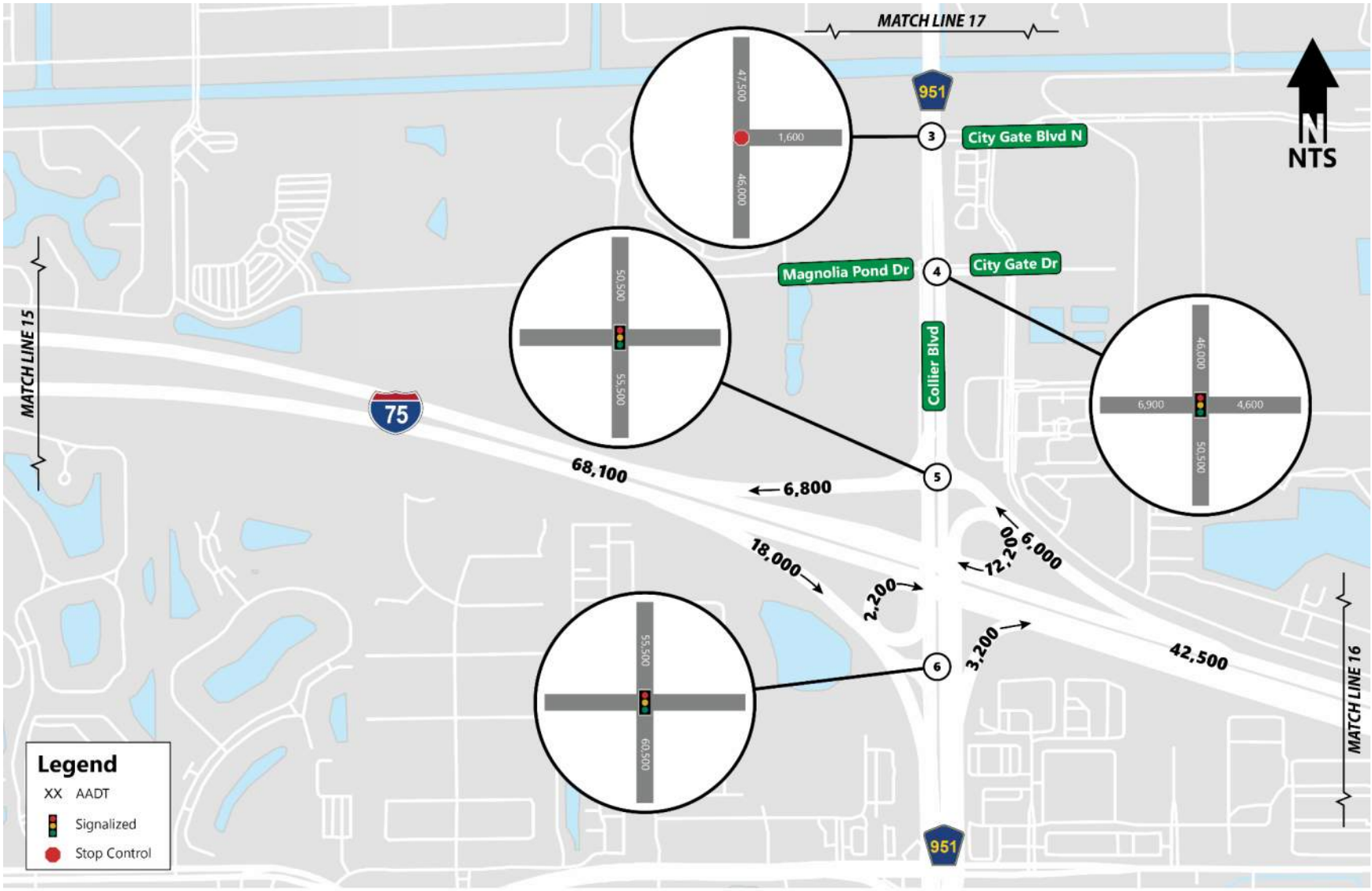
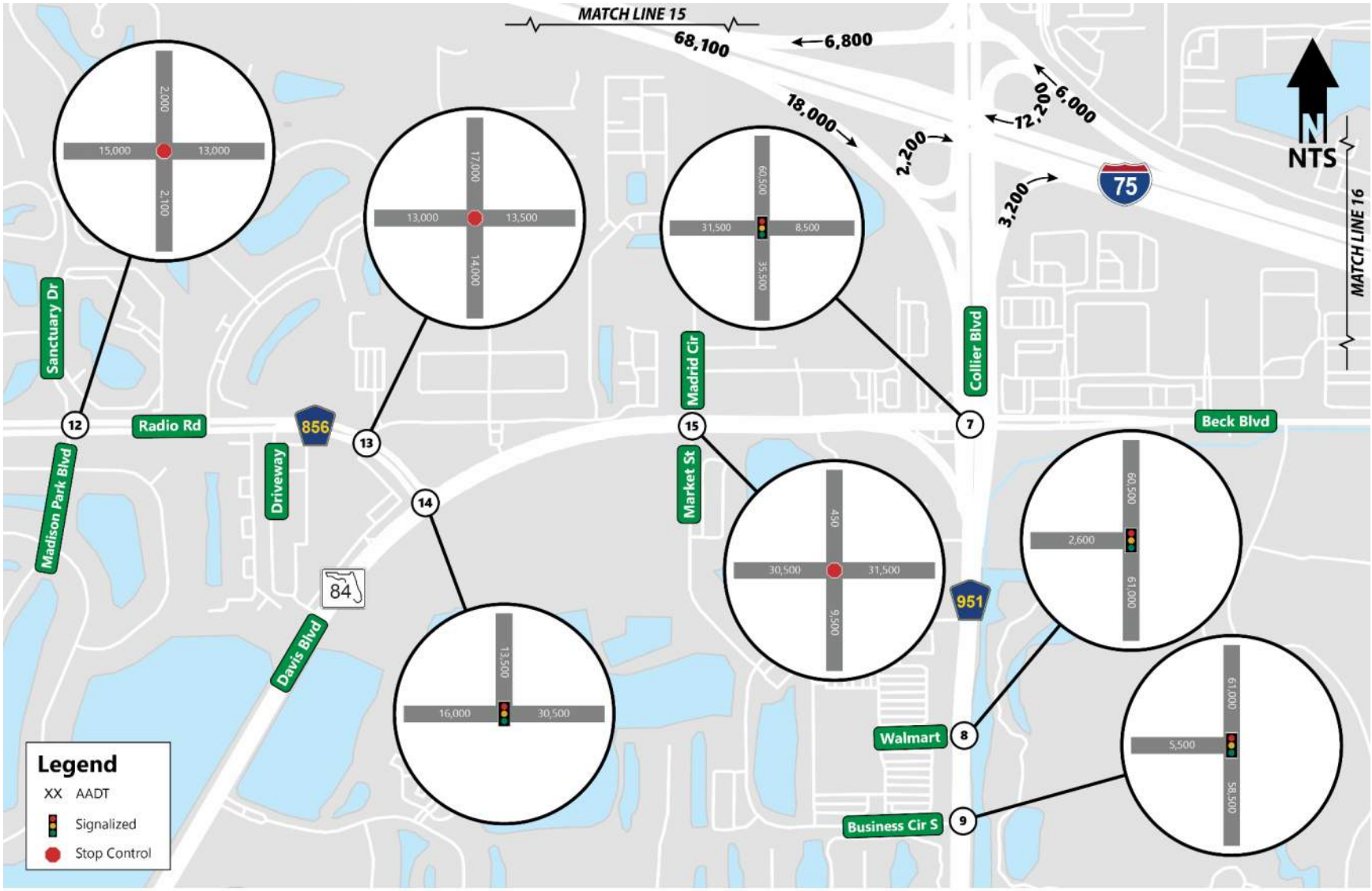


Figure 24: No-Build 2045 DDHV - SR 951 (Collier Blvd), South of I-75



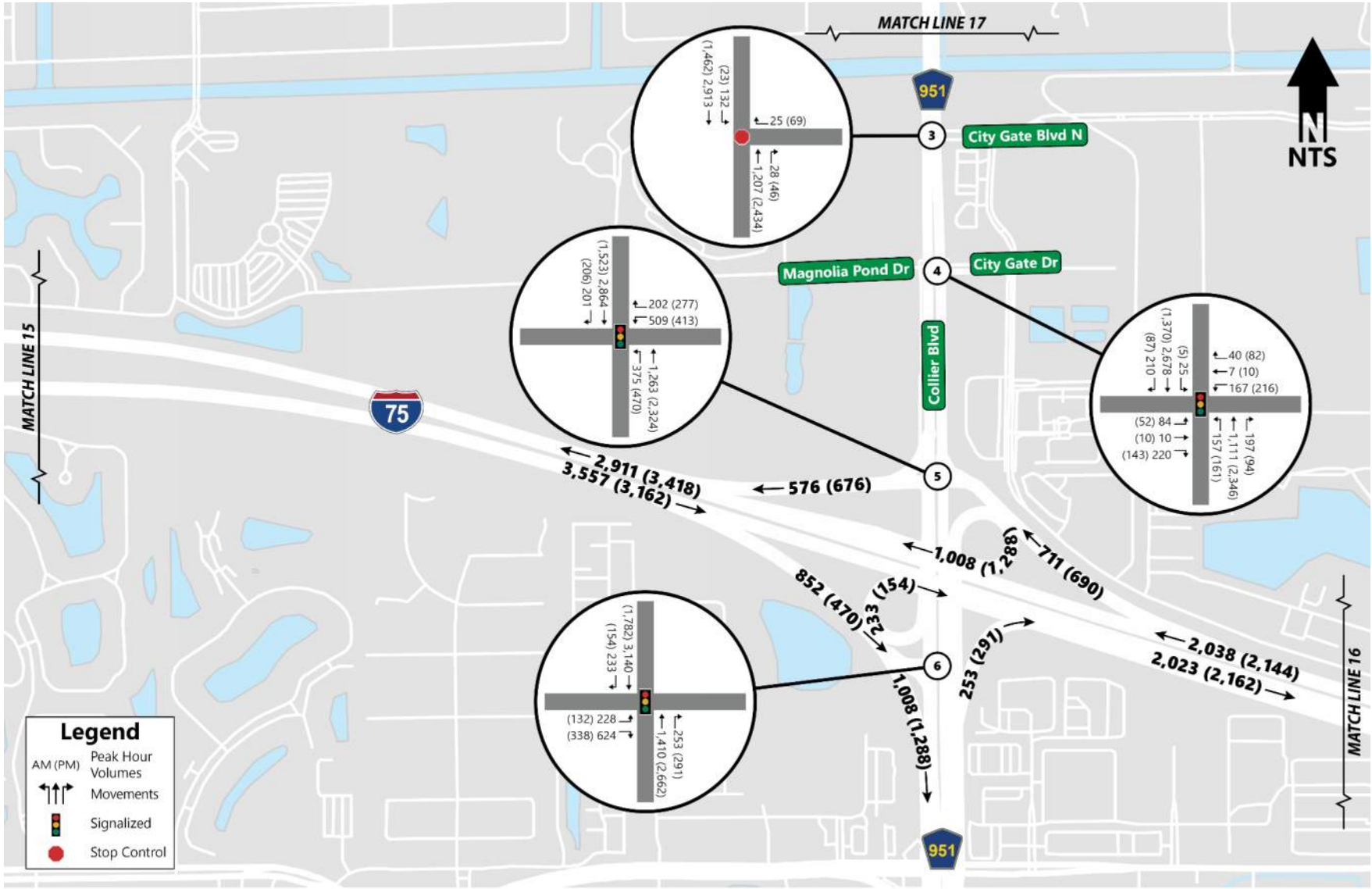
*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 25: Build 2045 AADT - SR 951 (Collier Blvd), North of I-75



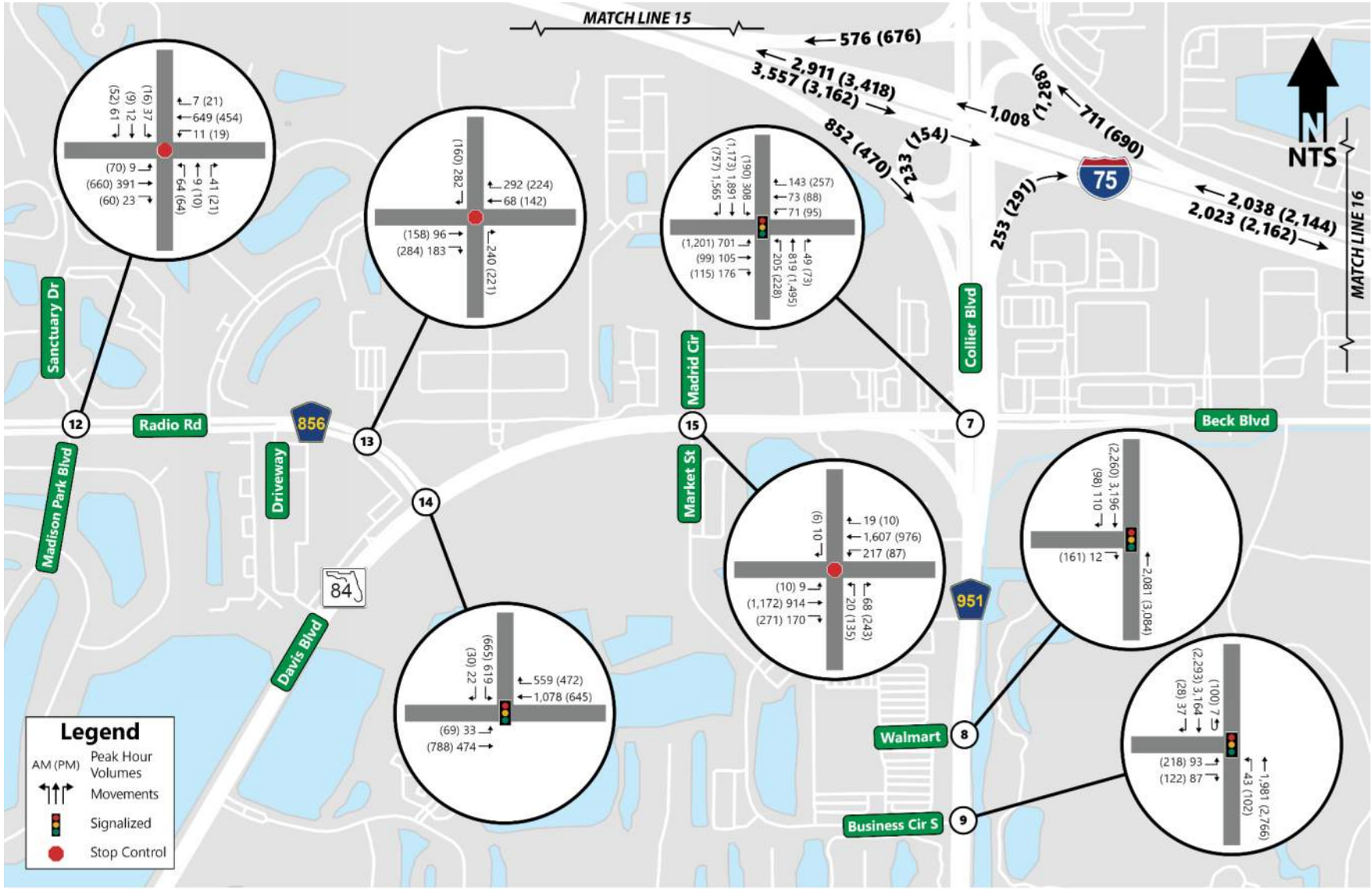
*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 24: Build 2045 AADT - SR 951 (Collier Blvd), South of I-75



*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 25: Build 2045 DDHV - SR 951 (Collier Blvd), North of I-75



*The intersection control shown represents the E+C condition and is subject to change, pending the findings of the forthcoming PD&E studies.

Figure 24: Build 2045 DDHV - SR 951 (Collier Blvd), South of I-75

Appendix C: FTO Traffic Data

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2021 HISTORICAL AADT REPORT

COUNTY: 03 - COLLIER

SITE: 7013 - SR93/I-75 NB,ON-RAMP FROM SR951/COLLIER BLVD X101

YEAR	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2021	13500	T	0	0	10.50	99.90	5.60
2020	13500	S	0	0	10.50	99.90	8.10
2019	14000	F	0	0	10.50	99.90	7.50
2018	13500	C	W 13500	0	9.50	99.90	9.10
2017	12500	T	0	0	9.50	99.90	6.20
2016	12000	S	0	0	9.50	99.90	6.40
2015	11000	F	0	0	9.00	99.90	4.70
2014	10500	C	W 10500		9.00	99.90	5.50
2013	11500	S	0	0	9.00	99.90	3.10
2012	11000	F	0	0	9.00	99.90	2.90
2011	10500	C	W 10500	0	9.00	99.90	6.30
2010	11000	S	0	0	9.50	99.99	3.70
2009	11000	F	0	0	9.40	99.99	6.00
2008	11000	C	W 11000	0	9.07	99.99	5.10
2007	11500	S	0	0		13.90	
2006	11500	F			8.64	99.99	15.50

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2021 HISTORICAL AADT REPORT

COUNTY: 03 - COLLIER

SITE: 7014 - SR93/I-75 SB,OFF-RAMP TO SR951/COLLIER BLVD X101

YEAR	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2021	14000	T	0	0	10.50	99.90	5.60
2020	14000	S	0	0	10.50	99.90	8.10
2019	14500	F	0	0	10.50	99.90	7.50
2018	14000	C E	14000	0	9.50	99.90	9.10
2017	13500	T	0	0	9.50	99.90	6.20
2016	13000	S	0	0	9.50	99.90	6.40
2015	12000	F	0	0	9.00	99.90	4.70
2014	11000	C E	11000		9.00	99.90	5.50
2013	12000	S	0	0	9.00	99.90	3.10
2012	11500	F	0	0	9.00	99.90	2.90
2011	11000	C E	11000	0	9.00	99.90	6.30
2010	11500	S	0	0	9.50	99.99	3.70
2009	11500	F	0	0	9.40	99.99	6.00
2008	11500	C E	11500	0	9.07	99.99	5.10
2007	13000	S	0	0		13.90	
2006	13000	F			8.64	99.99	15.50

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

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2021 HISTORICAL AADT REPORT

COUNTY: 03 - COLLIER

SITE: 2000 - SR 93/I 75, WEST OF CR 951

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2021	45500 C	W 22000	E 23500	9.00	55.90	13.30
2020	39000 C	W 19000	E 20000	9.00	55.70	14.20
2019	45000 C	W 22000	E 23000	9.00	55.00	12.00
2018	41500 C	W 20500	E 21000	9.00	56.00	12.20
2017	43500 C	W 21000	E 22500	9.00	55.90	11.80
2016	39500 C	W 19500	E 20000	9.00	56.10	9.90
2015	40500 C	W 20000	E 20500	9.00	56.50	9.90
2014	36500 C	W 18000	E 18500	9.00	56.10	11.80
2013	34500 C	W 17000	E 17500	9.00	56.10	10.10
2012	31000 C	W 15500	E 15500	9.00	55.80	12.10
2011	31500 C	W 15500	E 16000	9.00	55.90	12.60
2010	32500 C	W 16000	E 16500	9.50	56.47	13.50
2009	34000 C	W 17000	E 17000	9.40	55.84	11.20
2008	32500 C	W 16000	E 16500	9.07	55.79	13.10
2007	33500 C	W 16500	E 17000	9.29	52.37	14.80
2006	28500 C	W 14000	E 14500	8.64	51.95	17.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2021 HISTORICAL AADT REPORT

COUNTY: 03 - COLLIER

SITE: 7011 - SR93/I-75 SB, ON-RAMP FROM SR951/COLLIER BLVD X101

YEAR	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2021	2500	T	0	0	9.00	99.90	5.60
2020	2500	S	0	0	9.00	99.90	8.10
2019	2600	F	0	0	9.00	99.90	7.50
2018	2500	C	W 2500	0	9.00	99.90	9.10
2017	2800	T	0	0	9.00	99.90	6.20
2016	2700	S	0	0	9.00	99.90	6.40
2015	2500	F	0	0	9.00	99.90	4.70
2014	2300	C	W 2300		9.00	99.90	5.50
2013	2100	S	0	0	9.00	99.90	3.10
2012	2000	F	0	0	9.00	99.90	2.90
2011	2000	C	W 2000	0	9.00	99.90	6.30
2010	2200	S	0	0	9.50	99.99	3.70
2009	2200	F	0	0	9.40	99.99	6.00
2008	2200	C	W 2200	0	9.07	99.99	5.10
2007	2900	S	0	0		13.90	
2006	2900	F			8.64	99.99	15.50

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN

*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2021 HISTORICAL AADT REPORT

COUNTY: 03 - COLLIER

SITE: 7012 - SR93/I-75 NB, OFF-RAMP TO SR951/COLLIER BLVD X101

YEAR	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2021	2200	T	0	0	9.00	99.90	5.60
2020	2200	S	0	0	9.00	99.90	8.10
2019	2300	F	0	0	9.00	99.90	7.50
2018	2200	C	E 2200	0	9.00	99.90	9.10
2017	2500	T	0	0	9.00	99.90	6.20
2016	2400	S	0	0	9.00	99.90	6.40
2015	2200	F	0	0	9.00	99.90	4.70
2014	2100	C	E 2100		9.00	99.90	5.50
2013	2000	S	0	0	9.00	99.90	3.10
2012	1900	F	0	0	9.00	99.90	2.90
2011	1900	C	E 1900	0	9.00	99.90	6.30
2010	2000	S	0	0	9.50	99.99	3.70
2009	2000	F	0	0	9.40	99.99	6.00
2008	2000	C	E 2000	0	9.07	99.99	5.10
2007	3200	S	0	0		13.90	
2006	3200	F			8.64	99.99	15.50

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

Appendix D: Crash Summary Worksheets and Detailed Fatal and Pedestrian Police Reports

State of Florida Department of Transportation
CARS CRASH SUMMARY

SECTION: 3175000 STATE ROUTE: #N/A

ROADWAY LIMITS: I-75 from NB CR 886 Off Ramp to EB/WB Everglades Blvd (M.P. 41.520 TO 53.349 ENGINEER: PHD

STUDY PERIOD: FROM 1/ 2017 TO 12/ 2017 COUNTY: #N/A

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	50.412	01/04/17	Wed	1521	Overturn/Rollover	0	1	0	Day	Dry	Failed To Keep In Proper Lane
2	48.263	01/12/17	Thu	1237	Other Fixed Object	0	0	1	Day	Dry	Failed To Keep In Proper Lane
3	49.412	01/13/17	Fri	2230	Rear-End	0	1	0	Night	Dry	Careless or Negligent Manner
4	53.081	01/13/17	Fri	2115	Not Coded	0	0	1	Night	Dry	Failed To Keep In Proper Lane
5	46.263	01/22/17	Sun	1018	Overturn/Rollover	0	2	0	Day	Dry	No Contributing Action
6	51.694	01/24/17	Tue	2156	Guardrail Face	0	1	0	Night	Dry	Careless or Negligent Manner
7	50.878	03/10/17	Fri	0825	Right-Turn	0	0	1	Day	Dry	#N/A
8	50.412	03/20/17	Mon	2206	Other Non-Collision	0	0	1	Night	Dry	Ran Off Roadway
9	52.694	03/22/17	Wed	1802	Sideswipe	0	2	0	Day	Dry	Careless or Negligent Manner
10	50.412	03/26/17	Sun	0631	Overturn/Rollover	0	1	0	Night	Dry	No Contributing Action
11	47.405	03/27/17	Mon	0310	Not Coded	0	2	0	Night	Dry	No Contributing Action
12	50.412	04/27/17	Thu	1557	Sideswipe	0	0	1	Day	Dry	Careless or Negligent Manner
13	51.671	05/17/17	Wed	1752	Rear-End	1	3	0	Day	Dry	Careless or Negligent Manner
14	51.720	05/19/17	Fri	1309	Overturn/Rollover	0	1	0	Day	Dry	Careless or Negligent Manner
15	49.363	05/28/17	Sun	1131	Guardrail Face	0	1	0	Day	Dry	No Contributing Action
16	46.451	06/18/17	Sun	0817	Guardrail Face	0	1	0	Day	Dry	Careless or Negligent Manner
17	48.263	06/20/17	Tue	1430	Overturn/Rollover	0	1	0	Day	Dry	Careless or Negligent Manner
18	53.220	06/20/17	Tue	1255	Angle	0	0	1	Day	Dry	Careless or Negligent Manner
19	47.412	07/06/17	Thu	1350	Cargo/Equipment Loss or Shift	0	0	1	Day	Wet	Other Contributing Action
20	44.190	07/13/17	Thu	1321	Guardrail Face	0	1	0	Day	Dry	No Contributing Action
21	50.412	07/24/17	Mon	0753	Sideswipe	0	0	1	Day	Dry	Careless or Negligent Manner
22	50.412	07/30/17	Sun	2049	Sideswipe	0	0	1	Night	Wet	Careless or Negligent Manner
23	45.412	07/31/17	Mon	2050	Rear-End	0	3	0	Night	Wet	Careless or Negligent Manner
24	48.263	07/31/17	Mon	1430	Impact Attenuator/Crash Cushion	0	0	1	Day	Wet	Careless or Negligent Manner
25	49.263	08/05/17	Sat	1024	Struck by Falling/Shifting Cargo	0	0	1	Day	Dry	Other Contributing Action
26	49.263	08/08/17	Tue	0407	Rear-End	0	2	0	Night	Dry	Careless or Negligent Manner
27	43.451	08/15/17	Tue	1125	Guardrail Face	0	0	1	Day	Dry	Careless or Negligent Manner
28	45.263	08/21/17	Mon	1022	Overturn/Rollover	0	1	0	Day	Dry	Careless or Negligent Manner
29	45.967	08/27/17	Sun	1655	Overturn/Rollover	0	0	1	Day	Wet	Drove too Fast for Conditions
30	47.412	09/01/17	Fri	2015	Rear-End	0	1	0	Night	Wet	Careless or Negligent Manner
31	42.451	09/05/17	Tue	1557	Not Coded	0	0	1	Day	Wet	Careless or Negligent Manner
32	46.451	09/07/17	Thu	1411	Other Non-Collision	0	1	0	Day	Dry	Ran Off Roadway
33	48.263	09/13/17	Wed	1352	Sideswipe	0	0	1	Day	Wet	Other Contributing Action
34	51.336	10/17/17	Tue	0803	Sideswipe	0	0	1	Day	Dry	Careless or Negligent Manner
35	50.412	10/22/17	Sun	0959	Other Non-Collision	0	0	1	Day	Dry	No Contributing Action
36	53.197	10/28/17	Sat	2200	Other Non-Collision	0	0	1	Night	Wet	Careless or Negligent Manner
37	50.912	11/27/17	Mon	1555	Sideswipe	0	0	1	Day	Dry	Other Contributing Action
38	52.220	11/28/17	Tue	1820	Cargo/Equipment Loss or Shift	0	0	1	Night	Dry	No Contributing Action
39	47.412	12/08/17	Fri	1517	Rear-End	0	2	0	Day	Dry	Careless or Negligent Manner
40	48.763	12/25/17	Mon	1850	Other Non-Fixed Object	0	0	1	Night	Dry	No Contributing Action
41	51.412	12/26/17	Tue	1216	Rear-End	0	2	0	Day	Dry	Careless or Negligent Manner

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
41	**1**	**20**	**21**	**7**	**0**	**1**	**0**	**1**	**7**	**0**	**0**	**0**	**7**	**0**	**3**
Percent	*2.44%*	*48.78%*	*51.22%*	*17.07%*	*0.00%*	*2.44%*	*0.00%*	*2.44%*	*17.07%*	*0.00%*	*0.00%*	*0.00%*	*17.07%*	*0.00%*	*7.32%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**28**	**13**	**9**	**32**	**22**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**4**	**0**
Percent	*68.29%*	*31.71%*	*21.95%*	*78.05%*	*53.66%*	*0.00%*	*0.00%*	*0.00%*	*2.44%*	*0.00%*	*0.00%*	*0.00%*	*4.88%*	*9.76%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **476,426**

SEGMENT CRASH RATE: **0.020** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation
CARS CRASH SUMMARY

SECTION: 3175000 STATE ROUTE: #N/A

ROADWAY LIMITS: I-75 from NB CR 886 Off Ramp to EB/WB Everglades Blvd (M.P. 41.520 TO 53.349 ENGINEER: PHD

STUDY PERIOD: FROM 1/ 2018 TO 12/ 2018 COUNTY: #N/A

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	46.371	01/29/18	Mon	2315	Other Non-Collision	0	0	1	Night	Wet	No Contributing Action
2	45.451	02/01/18	Thu	1335	Thrown or Falling Object	0	0	1	Day	Dry	Other Contributing Action
3	44.451	02/07/18	Wed	1550	Sideswipe	0	2	0	Day	Dry	Other Contributing Action
4	49.951	02/14/18	Wed	1300	Other Non-Fixed Object	0	0	1	Day	Dry	No Contributing Action
5	46.451	02/16/18	Fri	1940	Other Non-Fixed Object	0	0	1	Night	Dry	Other Contributing Action
6	51.694	03/03/18	Sat	2008	Other Non-Collision	0	0	1	Night	Dry	Ran Off Roadway
7	48.451	03/17/18	Sat	1905	Not Coded	0	0	1	Day	Dry	Careless or Negligent Manner
8	47.451	03/26/18	Mon	0238	Rear-End	0	0	1	Night	Dry	Careless or Negligent Manner
9	48.451	03/26/18	Mon	0315	Rear-End	0	5	0	Night	Dry	Careless or Negligent Manner
10	50.905	03/27/18	Tue	1111	Rear-End	0	1	0	Day	Dry	Careless or Negligent Manner
11	44.462	04/03/18	Tue	0009	Rear-End	0	0	1	Night	Dry	Not Coded
12	42.405	04/04/18	Wed	0818	Guardrail End	0	0	1	Day	Dry	#N/A
13	51.105	04/10/18	Tue	0845	Angle	0	1	0	Day	Dry	#N/A
14	45.159	04/22/18	Sun	1850	Guardrail Face	0	0	1	Day	Wet	Drove too Fast for Conditions
15	50.802	04/23/18	Mon	1239	Ditch	0	1	0	Day	Dry	Careless or Negligent Manner
16	0.321	05/11/18	Fri	0846	Sideswipe	0	0	1	Day	Dry	Failed To Keep In Proper Lane
17	47.405	06/10/18	Sun	1543	Guardrail Face	0	0	1	Day	Wet	Careless or Negligent Manner
18	48.905	06/16/18	Sat	0354	Guardrail Face	0	0	1	Night	Dry	No Contributing Action
19	49.405	06/16/18	Sat	0245	Angle	0	2	0	Night	Wet	Careless or Negligent Manner
20	46.451	06/18/18	Mon	0845	Sideswipe	0	0	1	Day	Dry	Other Contributing Action
21	49.451	06/18/18	Mon	1315	Sideswipe	0	0	1	Day	Dry	Careless or Negligent Manner
22	47.305	06/22/18	Fri	1605	Guardrail Face	0	0	1	Day	Dry	No Contributing Action
23	50.787	07/02/18	Mon	1349	Embankment	0	0	1	Day	Wet	No Contributing Action
24	50.016	07/03/18	Tue	1636	Guardrail Face	0	0	1	Day	Wet	No Contributing Action
25	45.405	07/08/18	Sun	0540	Guardrail Face	0	0	1	Night	Dry	Careless or Negligent Manner
26	43.405	08/04/18	Sat	2026	Guardrail Face	0	2	0	Night	Wet	Failed To Keep In Proper Lane
27	49.143	08/06/18	Mon	1339	Guardrail Face	0	1	0	Day	Dry	Careless or Negligent Manner
28	49.263	08/11/18	Sat	1413	Guardrail Face	0	0	1	Day	Dry	Careless or Negligent Manner
29	46.451	08/14/18	Tue	1306	Parked Motor Vehicle	0	0	1	Day	Dry	Careless or Negligent Manner
30	48.451	08/16/18	Thu	1211	Guardrail Face	0	0	1	Day	Dry	Careless or Negligent Manner
31	52.619	08/27/18	Mon	1242	Sideswipe	0	0	1	Day	Dry	Over-Correcting/Over-Steering
32	42.405	09/08/18	Sat	1646	Guardrail Face	0	1	0	Day	Wet	Careless or Negligent Manner
33	44.451	09/10/18	Mon	1219	Other Non-Fixed Object	0	0	1	Day	Dry	No Contributing Action
34	46.951	09/17/18	Mon	1423	Cargo/Equipment Loss or Shift	0	0	1	Day	Dry	Other Contributing Action
35	44.659	09/20/18	Thu	1550	Guardrail Face	0	0	1	Day	Dry	Other Contributing Action
36	42.451	10/01/18	Mon	0446	Guardrail End	1	0	0	Night	Dry	Careless or Negligent Manner
37	43.412	10/01/18	Mon	0446	Guardrail Face	0	0	1	Night	Dry	Careless or Negligent Manner
38	45.202	10/12/18	Fri	2036	Guardrail Face	0	3	0	Night	Dry	Careless or Negligent Manner
39	41.905	10/14/18	Sun	1619	Angle	0	0	1	Day	Dry	Careless or Negligent Manner
40	46.451	11/08/18	Thu	1911	Angle	0	4	0	Night	Dry	Careless or Negligent Manner
41	46.451	11/15/18	Thu	0405	Rear-End	0	3	0	Night	Wet	Careless or Negligent Manner
42	43.190	11/23/18	Fri	1836	Sideswipe	0	0	1	Night	Dry	#N/A
43	48.190	12/07/18	Fri	0410	Rear-End	0	3	0	Night	Dry	Other Contributing Action
44	46.251	12/13/18	Thu	2220	Overturn/Rollover	0	0	1	Night	Dry	Other Contributing Action
45	52.694	12/23/18	Sun	1315	Sideswipe	0	0	1	Day	Dry	#N/A

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
45	**1**	**13**	**31**	**6**	**0**	**4**	**0**	**0**	**7**	**0**	**0**	**1**	**18**	**0**	**1**
Percent	*2.22%*	*28.89%*	*68.89%*	*13.33%*	*0.00%*	*8.89%*	*0.00%*	*0.00%*	*15.56%*	*0.00%*	*0.00%*	*2.22%*	*40.00%*	*0.00%*	*2.22%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**27**	**18**	**9**	**36**	**20**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**2**	**0**
Percent	*60.00%*	*40.00%*	*20.00%*	*80.00%*	*44.44%*	*0.00%*	*0.00%*	*0.00%*	*2.22%*	*0.00%*	*0.00%*	*0.00%*	*2.22%*	*4.44%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **86,418**

SEGMENT CRASH RATE: **0.121** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation
CARS CRASH SUMMARY

SECTION: 3175000 STATE ROUTE: #N/A

ROADWAY LIMITS: I-75 from NB CR 886 Off Ramp to EB/WB Everglades Blvd (M.P. 41.520 TO 53.349 ENGINEER: PHD

STUDY PERIOD: FROM 1/ 2019 TO 12/ 2019 COUNTY: #N/A

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	0.323	01/17/19	Thu	0735	Sideswipe	0	0	1	Day	Dry	Failed To Keep In Proper Lane
2	46.153	01/19/19	Sat	1700	Guardrail Face	0	1	0	Day	Dry	Careless or Negligent Manner
3	49.451	01/22/19	Tue	1720	Sideswipe	0	0	1	Day	Dry	Failed To Keep In Proper Lane
4	46.405	01/25/19	Fri	1428	Guardrail Face	0	1	0	Day	Dry	Ran Off Roadway
5	42.202	02/03/19	Sun	1814	Guardrail Face	0	0	1	Night	Dry	No Contributing Action
6	48.451	02/16/19	Sat	0200	Rear-End	0	0	1	Night	Dry	Careless or Negligent Manner
7	47.451	02/24/19	Sun	2105	Other Non-Fixed Object	0	0	1	Night	Dry	No Contributing Action
8	49.451	03/08/19	Fri	1502	Not Coded	0	0	1	Day	Dry	Failed To Keep In Proper Lane
9	0.323	03/08/19	Fri	1015	Sideswipe	0	0	1	Day	Dry	Improper Turn
10	48.451	04/04/19	Thu	0412	Sideswipe	0	0	1	Night	Dry	Failed To Keep In Proper Lane
11	49.451	04/20/19	Sat	2100	Sideswipe	0	0	1	Night	Dry	Careless or Negligent Manner
12	43.451	05/04/19	Sat	0849	Sideswipe	0	0	1	Day	Dry	#N/A
13	49.451	05/05/19	Sun	1535	Overturn/Rollover	0	1	0	Day	Dry	No Contributing Action
14	0.323	05/24/19	Fri	2035	Rear-End	0	1	0	Night	Dry	Followed too Closely
15	50.905	05/27/19	Mon	1420	Angle	0	0	1	Day	Dry	Careless or Negligent Manner
16	52.451	05/30/19	Thu	0852	Guardrail Face	0	1	0	Day	Dry	Swerved Or Avoided
17	42.202	06/08/19	Sat	1706	Guardrail Face	0	0	1	Day	Wet	Careless or Negligent Manner
18	42.451	06/08/19	Sat	0948	Guardrail Face	0	1	0	Day	Wet	Careless or Negligent Manner
19	53.194	06/24/19	Mon	1530	Sideswipe	0	0	1	Day	Dry	Careless or Negligent Manner
20	49.951	06/28/19	Fri	0733	Sideswipe	0	0	1	Day	Dry	Improper Passing
21	47.405	07/01/19	Mon	2120	Overturn/Rollover	0	0	1	Night	Dry	Careless or Negligent Manner
22	47.412	07/01/19	Mon	1237	Guardrail Face	0	1	0	Day	Dry	Improper Turn
23	47.705	07/01/19	Mon	0842	Parked Motor Vehicle	0	1	0	Day	Dry	Careless or Negligent Manner
24	52.694	08/02/19	Fri	2120	Overturn/Rollover	0	1	0	Night	Dry	Ran Off Roadway
25	49.451	08/04/19	Sun	1229	Tree (Standing)	0	0	1	Day	Wet	Careless or Negligent Manner
26	50.432	08/13/19	Tue	1456	Other Non-Fixed Object	0	0	1	Day	Dry	No Contributing Action
27	50.905	08/18/19	Sun	1624	Animal	0	1	0	Day	Wet	No Contributing Action
28	51.405	09/06/19	Fri	0544	Sideswipe	0	1	0	Night	Dry	Failed To Keep In Proper Lane
29	48.405	09/08/19	Sun	0005	Fence	0	1	0	Night	Dry	Careless or Negligent Manner
30	0.321	09/12/19	Thu	1458	Sideswipe	0	5	0	Day	Dry	Other Contributing Action
31	0.323	09/18/19	Wed	0944	Sideswipe	0	0	1	Day	Dry	No Contributing Action
32	50.263	09/30/19	Mon	1723	Rear-End	0	1	0	Night	Dry	Careless or Negligent Manner
33	51.405	10/04/19	Fri	1400	Sideswipe	0	0	1	Day	Dry	#N/A
34	47.405	10/21/19	Mon	1433	Sideswipe	0	0	1	Day	Dry	Careless or Negligent Manner
35	49.451	10/31/19	Thu	1407	Ditch	0	0	1	Day	Dry	Careless or Negligent Manner
36	50.135	11/13/19	Wed	0239	Tree (Standing)	0	1	0	Night	Wet	Ran Off Roadway
37	43.451	11/15/19	Fri	1244	Rear-End	0	0	1	Day	Wet	Careless or Negligent Manner
38	49.451	12/05/19	Thu	1222	Rear-End	0	0	1	Day	Dry	Careless or Negligent Manner
39	53.306	12/09/19	Mon	1145	Other Non-Fixed Object	0	0	1	Day	Dry	No Contributing Action
40	45.405	12/26/19	Thu	0340	Guardrail Face	0	1	0	Night	Dry	Careless or Negligent Manner
41	48.405	12/27/19	Fri	1213	Guardrail Face	0	0	1	Day	Dry	#N/A

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
41	**0**	**16**	**25**	**5**	**0**	**1**	**0**	**0**	**13**	**0**	**0**	**1**	**13**	**0**	**1**
Percent	*0.00%*	*39.02%*	*60.98%*	*12.20%*	*0.00%*	*2.44%*	*0.00%*	*0.00%*	*31.71%*	*0.00%*	*0.00%*	*2.44%*	*31.71%*	*0.00%*	*2.44%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**28**	**13**	**6**	**35**	**17**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**3**	**2**	**0**
Percent	*68.29%*	*31.71%*	*14.63%*	*85.37%*	*41.46%*	*0.00%*	*4.88%*	*0.00%*	*0.00%*	*2.44%*	*0.00%*	*0.00%*	*7.32%*	*4.88%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **-7,482,971**

SEGMENT CRASH RATE: **-0.001** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation
CARS CRASH SUMMARY

SECTION: 3175000 STATE ROUTE: #N/A

ROADWAY LIMITS: I-75 from NB CR 886 Off Ramp to EB/WB Everglades Blvd (M.P. 41.520 TO 53.349 ENGINEER: PHD

STUDY PERIOD: FROM 1/ 2020 TO 12/ 2020 COUNTY: #N/A

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	49.451	01/03/20	Fri	0508	Other Fixed Object	0	0	1	Night	Dry	Careless or Negligent Manner
2	52.694	01/16/20	Thu	1250	Rear-End	0	0	1	Day	Dry	#N/A
3	44.405	02/02/20	Sun	2246	Rear-End	0	1	0	Night	Dry	Careless or Negligent Manner
4	51.405	02/21/20	Fri	1510	Struck by Falling/Shifting Cargo	0	0	1	Day	Dry	Other Contributing Action
5	43.451	03/09/20	Mon	0639	Cargo/Equipment Loss or Shift	0	0	1	Night	Dry	Other Contributing Action
6	48.451	03/24/20	Tue	0615	Sideswipe	0	0	1	Night	Dry	#N/A
7	51.694	03/28/20	Sat	0421	Animal	0	0	1	Night	Dry	No Contributing Action
8	48.263	04/25/20	Sat	0005	Utility Pole/Light Support	0	0	1	Night	Wet	#N/A
9	0.321	05/01/20	Fri	1645	Utility Pole/Light Support	0	1	0	Day	Dry	Careless or Negligent Manner
10	42.504	05/05/20	Tue	0948	Guardrail End	0	1	0	Day	Dry	Careless or Negligent Manner
11	51.439	05/23/20	Sat	1450	Guardrail Face	0	0	1	Day	Wet	Drove too Fast for Conditions
12	0.000	06/09/20	Tue	1210	Rear-End	0	0	1	Day	Dry	Not Coded
13	0.321	06/09/20	Tue	2131	Angle	0	2	0	Night	Dry	Ran Red Light
14	48.451	06/14/20	Sun	0309	Rear-End	0	2	0	Night	Dry	Careless or Negligent Manner
15	50.694	06/18/20	Thu	0725	Overturn/Rollover	0	0	1	Day	Dry	Swerved Or Avoided
16	43.690	06/20/20	Sat	2225	Ditch	0	0	1	Night	Dry	Other Contributing Action
17	43.405	06/22/20	Mon	2210	Pedestrian	1	0	0	Night	Dry	No Contributing Action
18	47.451	06/26/20	Fri	0230	Rear-End	0	0	1	Night	Dry	Careless or Negligent Manner
19	49.451	07/03/20	Fri	0800	Sideswipe	0	0	1	Day	Dry	Careless or Negligent Manner
20	45.405	07/06/20	Mon	2021	Guardrail Face	0	1	0	Night	Dry	Careless or Negligent Manner
21	45.451	07/10/20	Fri	1224	Guardrail Face	0	0	1	Day	Dry	Careless or Negligent Manner
22	45.405	08/12/20	Wed	0439	Angle	0	2	0	Night	Dry	Wrong Side or Wrong Way
23	0.309	08/13/20	Thu	1117	Rear-End	0	0	1	Day	Dry	Other Contributing Action
24	0.323	08/13/20	Thu	1051	Angle	0	0	1	Day	Dry	Ran Red Light
25	48.451	08/19/20	Wed	0624	Rear-End	0	1	0	Night	Dry	Careless or Negligent Manner
26	41.693	08/27/20	Thu	2120	Guardrail Face	0	0	1	Night	Dry	No Contributing Action
27	43.451	08/31/20	Mon	1727	Rear-End	0	0	1	Day	Dry	Careless or Negligent Manner
28	46.451	09/08/20	Tue	2035	Struck by Falling/Shifting Cargo	0	0	1	Night	Dry	#N/A
29	52.395	09/13/20	Sun	1351	Sideswipe	0	0	1	Day	Wet	#N/A
30	53.194	09/22/20	Tue	1430	Rear-End	0	0	1	Day	Dry	Failed to Yield Right-Of-Way
31	45.451	09/23/20	Wed	1908	Guardrail Face	0	0	1	Night	Dry	Careless or Negligent Manner
32	48.451	10/06/20	Tue	0712	Sideswipe	0	0	1	Day	Dry	Failed To Keep In Proper Lane
33	52.694	10/07/20	Wed	1240	Angle	0	1	0	Day	Dry	Failed To Keep In Proper Lane
34	47.451	10/18/20	Sun	1751	Guardrail End	0	0	1	Day	Dry	Improper Backing
35	45.451	11/07/20	Sat	1554	Not Coded	0	0	1	Day	Wet	Drove too Fast for Conditions
36	48.951	11/07/20	Sat	1547	Guardrail Face	0	0	1	Day	Wet	Careless or Negligent Manner
37	49.405	11/11/20	Wed	1353	Rear-End	0	1	0	Day	Wet	Careless or Negligent Manner
38	43.451	11/21/20	Sat	0100	Angle	0	0	1	Night	Dry	Careless or Negligent Manner
39	48.263	11/23/20	Mon	0828	Rear-End	0	1	0	Day	Dry	Careless or Negligent Manner
40	49.405	11/27/20	Fri	1816	Tree (Standing)	0	2	0	Night	Dry	Careless or Negligent Manner
41	52.694	12/03/20	Thu	0820	Other Non-Fixed Object	0	0	1	Day	Dry	No Contributing Action
42	48.451	12/14/20	Mon	0315	Rear-End	0	0	1	Night	Dry	Other Contributing Action
43	49.451	12/16/20	Wed	0148	Animal	0	0	1	Night	Dry	No Contributing Action
44	47.451	12/18/20	Fri	1020	Rear-End	0	1	0	Day	Dry	Careless or Negligent Manner
45	46.451	12/23/20	Wed	1606	Overturn/Rollover	0	0	1	Day	Dry	No Contributing Action

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
45	**1**	**13**	**31**	**13**	**0**	**5**	**0**	**0**	**4**	**0**	**1**	**0**	**13**	**0**	**1**
Percent	*2.22%*	*28.89%*	*68.89%*	*28.89%*	*0.00%*	*11.11%*	*0.00%*	*0.00%*	*8.89%*	*0.00%*	*2.22%*	*0.00%*	*28.89%*	*0.00%*	*2.22%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**24**	**21**	**6**	**39**	**18**	**1**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**4**	**1**
Percent	*53.33%*	*46.67%*	*13.33%*	*86.67%*	*40.00%*	*2.22%*	*0.00%*	*4.44%*	*4.44%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*8.89%*	*2.22%*

TOTAL ENTERING VEHICLES/ADT: **-7,482,971**

SEGMENT CRASH RATE: **-0.001** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation
CARS CRASH SUMMARY

SECTION: 3175000 STATE ROUTE: #N/A

ROADWAY LIMITS: I-75 from NB CR 886 Off Ramp to EB/WB Everglades Blvd (M.P. 41.520 TO 53.349 ENGINEER: PHD

STUDY PERIOD: FROM 1/ 2021 TO 12/ 2021 COUNTY: #N/A

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	52.183	01/19/21	Tue	1020	Other Fixed Object	0	2	0	Day	Dry	Over-Correcting/Over-Steering
2	42.451	01/22/21	Fri	1621	Not Coded	0	1	0	Day	Dry	Over-Correcting/Over-Steering
3	43.451	02/05/21	Fri	1858	Sideswipe	0	0	1	Night	Dry	Careless or Negligent Manner
4	42.405	02/18/21	Thu	1038	Guardrail Face	0	1	0	Day	Dry	Careless or Negligent Manner
5	42.222	03/06/21	Sat	0340	Concrete Traffic Barrier	1	0	0	Night	Dry	Exceed Posted Speed
6	44.157	03/20/21	Sat	0324	Rear-End	0	3	0	Night	Dry	Careless or Negligent Manner
7	49.719	04/03/21	Sat	0820	Other Fixed Object	0	0	1	Day	Dry	Careless or Negligent Manner
8	50.640	04/07/21	Wed	2350	Other Non-Fixed Object	0	4	0	Night	Dry	No Contributing Action
9	46.405	04/11/21	Sun	0355	Angle	0	2	0	Night	Dry	Careless or Negligent Manner
10	51.186	04/19/21	Mon	0932	Sideswipe	0	5	0	Day	Dry	No Contributing Action
11	50.423	04/30/21	Fri	2228	Other Non-Collision	0	8	0	Night	Dry	No Contributing Action
12	50.460	04/30/21	Fri	2230	Angle	0	1	0	Night	Dry	Other Contributing Action
13	52.405	06/05/21	Sat	1733	Angle	0	2	0	Day	Wet	Careless or Negligent Manner
14	46.451	07/14/21	Wed	2115	Guardrail Face	0	0	1	Night	Wet	Careless or Negligent Manner
15	51.451	07/16/21	Fri	1715	Fence	0	1	0	Day	Dry	Careless or Negligent Manner
16	49.405	07/17/21	Sat	2138	Concrete Traffic Barrier	0	0	1	Night	Dry	Careless or Negligent Manner
17	47.405	07/24/21	Sat	1153	Traffic Sign Support	0	0	1	Day	Dry	Careless or Negligent Manner
18	48.665	08/07/21	Sat	0828	Sideswipe	0	2	0	Day	Dry	Failed To Keep In Proper Lane
19	48.405	08/12/21	Thu	1444	Angle	1	2	0	Day	Dry	Erratic, Reckless or Aggressive
20	43.905	08/14/21	Sat	0720	Guardrail Face	0	2	0	Day	Dry	Careless or Negligent Manner
21	45.405	08/17/21	Tue	1501	Guardrail Face	0	0	1	Day	Wet	Drove too Fast for Conditions
22	47.451	09/11/21	Sat	1742	Guardrail Face	0	0	1	Day	Dry	No Contributing Action
23	49.978	09/12/21	Sun	1720	Angle	0	3	0	Day	Wet	Swerved Or Avoided
24	50.394	09/12/21	Sun	1725	Guardrail Face	0	0	1	Day	Wet	Careless or Negligent Manner
25	53.194	09/16/21	Thu	1408	Guardrail Face	0	0	1	Day	Wet	Drove too Fast for Conditions
26	42.405	09/20/21	Mon	0405	Guardrail Face	0	0	1	Night	Dry	Careless or Negligent Manner
27	43.405	09/22/21	Wed	1306	Other Non-Collision	0	0	1	Day	Wet	No Contributing Action
28	43.405	11/12/21	Fri	1325	Rear-End	0	0	1	Day	Dry	Careless or Negligent Manner
29	42.405	12/23/21	Thu	0514	Guardrail Face	0	2	0	Night	Dry	No Contributing Action

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
29	**2**	**16**	**12**	**2**	**0**	**5**	**0**	**0**	**3**	**0**	**0**	**0**	**15**	**0**	**1**
Percent	*6.90%*	*55.17%*	*41.38%*	*6.90%*	*0.00%*	*17.24%*	*0.00%*	*0.00%*	*10.34%*	*0.00%*	*0.00%*	*0.00%*	*51.72%*	*0.00%*	*3.45%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**18**	**11**	**7**	**22**	**14**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**1**	**0**
Percent	*62.07%*	*37.93%*	*24.14%*	*75.86%*	*48.28%*	*0.00%*	*0.00%*	*0.00%*	*10.34%*	*0.00%*	*0.00%*	*3.45%*	*0.00%*	*3.45%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **-7,482,971**

SEGMENT CRASH RATE: **-0.001** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation

SIGNAL FOUR DATA ANALYTICS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

INTERSECTING ROADWAY: **I-75 from NB CR 886 Off Ramp to EB/WB Everglades Blvd** M.P. **41.520** TO **53.349** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2017** TO **12/ 2017** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
42	0.000	01/07/17	Sun	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
43	0.000	01/30/17	Tue	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
44	0.000	04/04/17	Wed	0000	Guardrail Face	0	0	1	Unknown	Other	Not Coded
45	0.000	04/09/17	Mon	0000	Guardrail Face	0	0	1	Unknown	Other	Not Coded
46	0.000	05/03/17	Thu	0001	Thrown or Falling Object	0	0	1	Unknown	Other	Not Coded
47	0.000	05/09/17	Wed	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
48	0.000	05/13/17	Sun	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
49	0.000	05/22/17	Tue	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
50	0.000	05/30/17	Wed	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
51	0.000	05/30/17	Wed	0001	Thrown or Falling Object	0	0	1	Unknown	Other	Not Coded
52	0.000	06/25/17	Mon	0001	Rear-End	0	2	0	Unknown	Other	Not Coded
53	0.000	07/01/17	Sun	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
54	0.000	07/05/17	Thu	0001	Overturn/Rollover	0	2	0	Unknown	Other	Not Coded
55	0.000	07/08/17	Sun	0000	Parked Motor Vehicle	0	1	0	Unknown	Other	Not Coded
56	0.000	07/18/17	Wed	0000	Animal	0	0	1	Unknown	Other	Not Coded
57	0.000	07/24/17	Tue	0001	Utility Pole/Light Support	0	1	0	Unknown	Other	Not Coded
58	0.000	08/03/17	Fri	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
59	0.000	08/05/17	Sun	0000	Sideswipe	0	1	0	Unknown	Other	Not Coded
60	0.000	08/06/17	Mon	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
61	0.000	08/20/17	Mon	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
62	0.000	08/30/17	Thu	0001	Overturn/Rollover	0	1	0	Unknown	Other	Not Coded
63	0.000	09/02/17	Sun	0001	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
64	0.000	09/23/17	Sun	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
65	0.000	10/03/17	Wed	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
66	0.000	10/08/17	Mon	0000	Struck by Falling/Shifting Cargo	0	0	1	Unknown	Other	Not Coded
67	0.000	10/10/17	Wed	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
68	0.000	10/27/17	Sat	0000	Sideswipe	0	1	0	Unknown	Other	Not Coded
69	0.000	11/06/17	Tue	0000	Fence	0	0	1	Unknown	Other	Not Coded
70	0.000	12/25/17	Tue	0001	Thrown or Falling Object	0	0	1	Unknown	Other	Not Coded

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
29	**0**	**7**	**22**	**5**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**1**	**7**	**0**	**0**
Percent	*0.00%*	*24.14%*	*75.86%*	*17.24%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*27.59%*	*0.00%*	*0.00%*	*3.45%*	*24.14%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **#DIV/0!** SPOT CRASH RATE: **#DIV/0!** CRASHES PER MILLION ENTERING VEHICLES

State of Florida Department of Transportation
SIGNAL FOUR DATA ANALYTICS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

INTERSECTING ROADWAY: **I-75 from NB CR 886 Off Ramp to EB/WB Everglades Blvd** M.P. **41.520** TO **53.349** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2018** TO **12/ 2018** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
46	0.000	01/23/18	Wed	0001	Rear-End	0	1	0	Unknown	Other	Not Coded
47	0.000	01/29/18	Tue	0001	Thrown or Falling Object	0	0	1	Unknown	Other	Not Coded
48	0.000	02/19/18	Tue	0001	Animal	0	0	1	Unknown	Other	Not Coded
49	0.000	03/08/18	Fri	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
50	0.000	03/21/18	Thu	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
51	0.000	03/26/18	Tue	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
52	0.000	03/26/18	Tue	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
53	0.000	03/26/18	Tue	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
54	0.000	04/06/18	Sat	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
55	0.000	04/09/18	Tue	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
56	0.000	04/11/18	Thu	0001	Rear-End	0	3	0	Unknown	Other	Not Coded
57	0.000	04/14/18	Sun	0000	Guardrail Face	0	1	0	Unknown	Other	Not Coded
58	0.000	04/14/18	Sun	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
59	0.000	04/23/18	Tue	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
60	0.000	05/05/18	Sun	0001	Concrete Traffic Barrier	0	0	1	Unknown	Other	Not Coded
61	0.000	05/16/18	Thu	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
62	0.000	05/21/18	Tue	0000	Guardrail Face	0	1	0	Unknown	Other	Not Coded
63	0.000	05/23/18	Thu	0001	Thrown or Falling Object	0	0	1	Unknown	Other	Not Coded
64	0.000	06/14/18	Fri	0001	Thrown or Falling Object	0	0	1	Unknown	Other	Not Coded
65	0.000	06/21/18	Fri	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
66	0.000	06/22/18	Sat	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
67	0.000	07/13/18	Sat	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
68	0.000	07/26/18	Fri	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
69	0.000	08/17/18	Sat	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
70	0.000	08/18/18	Sun	0000	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
71	0.000	09/09/18	Mon	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
72	0.000	09/12/18	Thu	0000	Animal	0	0	1	Unknown	Other	Not Coded
73	0.000	09/12/18	Thu	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
74	0.000	10/03/18	Thu	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
75	0.000	10/06/18	Sun	0000	Overturn/Rollover	0	0	1	Unknown	Other	Not Coded
76	0.000	10/10/18	Thu	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
77	0.000	10/20/18	Sun	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
78	0.000	11/05/18	Tue	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
79	0.000	11/07/18	Thu	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
80	0.000	11/08/18	Fri	0001	Guardrail Face	0	2	0	Unknown	Other	Not Coded
81	0.000	12/07/18	Sat	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
82	0.000	12/10/18	Tue	0000	Guardrail Face	0	0	1	Unknown	Other	Not Coded
83	0.000	12/24/18	Tue	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
84	0.000	12/29/18	Sun	0001	Rear-End	0	0	1	Unknown	Other	Not Coded

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
39	**0**	**5**	**34**	**14**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**8**	**0**	**0**
Percent	*0.00%*	*12.82%*	*87.18%*	*35.90%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*25.64%*	*0.00%*	*0.00%*	*0.00%*	*20.51%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **#DIV/0!** SPOT CRASH RATE: **#DIV/0!** CRASHES PER MILLION ENTERING VEHICLES

State of Florida Department of Transportation
SIGNAL FOUR DATA ANALYTICS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

INTERSECTING ROADWAY: **I-75 from NB CR 886 Off Ramp to EB/WB Everglades Blvd** M.P. **41.520** TO **53.349** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2019** TO **12/ 2019** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
42	0.000	01/03/19	Fri	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
43	0.000	01/07/19	Tue	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
44	0.000	01/14/19	Tue	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
45	0.000	01/17/19	Fri	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
46	0.000	02/21/19	Fri	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
47	0.000	03/14/19	Fri	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
48	0.000	04/22/19	Tue	0000	Guardrail Face	0	0	1	Unknown	Other	Not Coded
49	0.000	05/03/19	Sat	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
50	0.000	05/17/19	Sat	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
51	0.000	05/22/19	Thu	0001	Guardrail Face	0	1	0	Unknown	Other	Not Coded
52	0.000	06/03/19	Tue	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
53	0.000	07/25/19	Fri	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
54	0.000	07/30/19	Wed	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
55	0.000	09/03/19	Wed	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
56	0.000	09/28/19	Sun	0000	Guardrail Face	0	0	1	Unknown	Other	Not Coded
57	0.000	10/20/19	Mon	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
58	0.000	10/29/19	Wed	0000	Guardrail Face	0	0	1	Unknown	Other	Not Coded
59	0.000	11/02/19	Sun	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
60	0.000	11/24/19	Mon	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
61	0.000	11/27/19	Thu	0000	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
62	0.000	11/29/19	Sat	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
63	0.000	12/02/19	Tue	0000	Overturn/Rollover	0	1	0	Unknown	Other	Not Coded
64	0.000	12/06/19	Sat	0000	Guardrail Face	0	0	1	Unknown	Other	Not Coded
65	0.000	12/08/19	Mon	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
66	0.000	12/11/19	Thu	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
67	0.000	12/21/19	Sun	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
26	**0**	**2**	**24**	**7**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**8**	**0**	**0**
Percent	*0.00%*	*7.69%*	*92.31%*	*26.92%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*34.62%*	*0.00%*	*0.00%*	*0.00%*	*30.77%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **#DIV/0!** SPOT CRASH RATE: **#DIV/0!** CRASHES PER MILLION ENTERING VEHICLES

State of Florida Department of Transportation
SIGNAL FOUR DATA ANALYTICS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

INTERSECTING ROADWAY: **I-75 from NB CR 886 Off Ramp to EB/WB Everglades Blvd** M.P. **41.520** TO **53.349** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2020** TO **12/ 2020** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
46	0.000	01/03/20	Sat	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
47	0.000	01/23/20	Fri	0000	Animal	0	0	1	Unknown	Other	Not Coded
48	0.000	02/11/20	Wed	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
49	0.000	03/04/20	Thu	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
50	0.000	03/08/20	Mon	0000	Guardrail Face	0	0	1	Unknown	Other	Not Coded
51	0.000	03/15/20	Mon	0001	Not Coded	0	0	1	Unknown	Other	Not Coded
52	0.000	03/20/20	Sat	0000	Animal	0	0	1	Unknown	Other	Not Coded
53	0.000	05/02/20	Sun	0000	Other Non-Collision	0	0	1	Unknown	Other	Not Coded
54	0.000	06/03/20	Thu	0001	Rear-End	0	1	0	Unknown	Other	Not Coded
55	0.000	06/26/20	Sat	0000	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
56	0.000	07/22/20	Thu	0001	Jackknife	0	0	1	Unknown	Other	Not Coded
57	0.000	07/23/20	Fri	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
58	0.000	08/14/20	Sat	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
59	0.000	11/13/20	Sat	0000	Sideswipe	0	2	0	Unknown	Other	Not Coded
60	0.000	11/29/20	Mon	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
61	0.000	12/05/20	Sun	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
62	0.000	12/21/20	Tue	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
63	0.000	12/28/20	Tue	0001	Struck by Falling/Shifting Cargo	0	0	1	Unknown	Other	Not Coded

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
18	**0**	**2**	**16**	**3**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**0**	**1**
Percent	*0.00%*	*11.11%*	*88.89%*	*16.67%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*27.78%*	*0.00%*	*0.00%*	*0.00%*	*16.67%*	*0.00%*	*5.56%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **#DIV/0!** SPOT CRASH RATE: **#DIV/0!** CRASHES PER MILLION ENTERING VEHICLES

State of Florida Department of Transportation
SIGNAL FOUR DATA ANALYTICS CRASH SUMMARY

SECTION: 3175000 STATE ROUTE: #N/A

INTERSECTING ROADWAY: I-75 from NB CR 886 Off Ramp to EB/WB Everglades Blvd M.P. 41.520 TO 53.349 ENGINEER: PHD

STUDY PERIOD: FROM 1/ 2021 TO 12/ 2021 COUNTY: #N/A

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
30	0.000	01/01/21	Sat	0001	Struck by Falling/Shifting Cargo	0	0	1	Unknown	Other	Not Coded
31	0.000	01/06/21	Thu	0001	Thrown or Falling Object	0	0	1	Unknown	Other	Not Coded
32	0.000	01/16/21	Sun	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
33	0.000	01/20/21	Thu	0001	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
34	0.000	01/22/21	Sat	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
35	0.000	01/25/21	Tue	0000	Overturn/Rollover	0	1	0	Unknown	Other	Not Coded
36	0.000	01/25/21	Tue	0001	Rear-End	0	2	0	Unknown	Other	Not Coded
37	0.000	01/26/21	Wed	0001	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
38	0.000	02/25/21	Fri	0000	Other Non-Collision	0	0	1	Unknown	Other	Not Coded
39	0.000	02/28/21	Mon	0000	Rear-End	0	2	0	Unknown	Other	Not Coded
40	0.000	03/03/21	Thu	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
41	0.000	03/08/21	Tue	0000	Fence	0	0	1	Unknown	Other	Not Coded
42	0.000	03/11/21	Fri	0001	Thrown or Falling Object	0	0	1	Unknown	Other	Not Coded
43	0.000	03/22/21	Tue	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
44	0.000	03/23/21	Wed	0000	Rear-End	0	4	0	Unknown	Other	Not Coded
45	0.000	03/24/21	Thu	0001	Angle	0	0	1	Unknown	Other	Not Coded
46	0.000	03/31/21	Thu	0001	Utility Pole/Light Support	0	0	1	Unknown	Other	Not Coded
47	0.000	04/18/21	Mon	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
48	0.000	04/19/21	Tue	0000	Rear-End	0	3	0	Unknown	Other	Not Coded
49	0.000	05/28/21	Sat	0001	Sideswipe	0	1	0	Unknown	Other	Not Coded
50	0.000	05/31/21	Tue	0001	Rear-End	0	1	0	Unknown	Other	Not Coded
51	0.000	06/04/21	Sat	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
52	0.000	06/10/21	Fri	0001	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
53	0.000	06/21/21	Tue	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
54	0.000	06/24/21	Fri	0001	Guardrail Face	0	1	0	Unknown	Other	Not Coded
55	0.000	06/27/21	Mon	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
56	0.000	06/28/21	Tue	0001	Overturn/Rollover	0	0	1	Unknown	Other	Not Coded
57	0.000	06/29/21	Wed	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
58	0.000	07/03/21	Sun	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
59	0.000	07/05/21	Tue	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
60	0.000	07/13/21	Wed	0001	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
61	0.000	07/18/21	Mon	0001	Tree (Standing)	0	0	1	Unknown	Other	Not Coded
62	0.000	07/18/21	Mon	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
63	0.000	07/20/21	Wed	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
64	0.000	07/31/21	Sun	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
65	0.000	08/05/21	Fri	0000	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
66	0.000	08/05/21	Fri	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
67	0.000	08/08/21	Mon	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
68	0.000	08/08/21	Mon	0001	Tree (Standing)	0	0	1	Unknown	Other	Not Coded
69	0.000	08/08/21	Mon	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
70	0.000	08/09/21	Tue	0000	Guardrail Face	0	0	1	Unknown	Other	Not Coded
71	0.000	08/11/21	Thu	0000	Not Coded	0	0	1	Unknown	Other	Not Coded
72	0.000	08/15/21	Mon	0000	Guardrail Face	0	0	1	Unknown	Other	Not Coded
73	0.000	08/20/21	Sat	0000	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
74	0.000	08/24/21	Wed	0000	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
75	0.000	08/26/21	Fri	0000	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
76	0.000	09/01/21	Thu	0000	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
77	0.000	09/06/21	Tue	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
78	0.000	09/12/21	Mon	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
79	0.000	09/13/21	Tue	0000	Thrown or Falling Object	0	0	1	Unknown	Other	Not Coded
80	0.000	09/16/21	Fri	0001	Other Non-Collision	0	0	1	Unknown	Other	Not Coded
81	0.000	09/17/21	Sat	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
82	0.000	09/24/21	Sat	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
83	0.000	10/04/21	Tue	0001	Guardrail Face	0	2	0	Unknown	Other	Not Coded
84	0.000	10/12/21	Wed	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
85	0.000	10/22/21	Sat	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
86	0.000	10/28/21	Fri	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
87	0.000	11/08/21	Tue	0000	Struck by Falling/Shifting Cargo	0	0	1	Unknown	Other	Not Coded
88	0.000	11/10/21	Thu	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
89	0.000	11/18/21	Fri	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
90	0.000	11/20/21	Sun	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
91	0.000	12/03/21	Sat	0000	Rear-End	0	1	0	Unknown	Other	Not Coded
92	0.000	12/10/21	Sat	0000	Overturn/Rollover	0	0	1	Unknown	Other	Not Coded
93	0.000	12/13/21	Tue	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
94	0.000	12/14/21	Wed	0001	Ditch	0	1	0	Unknown	Other	Not Coded
95	0.000	12/19/21	Mon	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
66	**0**	**11**	**55**	**16**	**0**	**1**	**0**	**0**	**16**	**0**	**0**	**0**	**13**	**0**	**1**
Percent	*0.00%*	*16.67%*	*83.33%*	*24.24%*	*0.00%*	*1.52%*	*0.00%*	*0.00%*	*24.24%*	*0.00%*	*0.00%*	*0.00%*	*19.70%*	*0.00%*	*1.52%*
Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **#DIV/0!** SPOT CRASH RATE: **#DIV/0!** CRASHES PER MILLION ENTERING VEHICLES

State of Florida Department of Transportation
CARS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

ROADWAY LIMITS: **i-75 From East of SR 951 WB On Ramp to West of SR 951 E** M.P. **49.530** TO **51.040** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2017** TO **12/ 2017** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	50.412	01/04/17	Wed	1521	Overturn/Rollover	0	1	0	Day	Dry	Failed To Keep In Proper Lane
2	50.878	03/10/17	Fri	0825	Right-Turn	0	0	1	Day	Dry	#N/A
3	50.412	03/20/17	Mon	2206	Other Non-Collision	0	0	1	Night	Dry	Ran Off Roadway
4	50.412	03/26/17	Sun	0631	Overturn/Rollover	0	1	0	Night	Dry	No Contributing Action
5	50.412	04/27/17	Thu	1557	Sideswipe	0	0	1	Day	Dry	Careless or Negligent Manner
6	50.412	07/24/17	Mon	0753	Sideswipe	0	0	1	Day	Dry	Careless or Negligent Manner
7	50.412	07/30/17	Sun	2049	Sideswipe	0	0	1	Night	Wet	Careless or Negligent Manner
8	50.412	10/22/17	Sun	0959	Other Non-Collision	0	0	1	Day	Dry	No Contributing Action
9	50.912	11/27/17	Mon	1555	Sideswipe	0	0	1	Day	Dry	Other Contributing Action

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
9	**0**	**2**	**7**	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*22.22%*	*77.78%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*11.11%*	*44.44%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**6**	**3**	**1**	**8**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
Percent	*66.67%*	*33.33%*	*11.11%*	*88.89%*	*33.33%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*11.11%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **60,772**

SEGMENT CRASH RATE: **0.269** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation
CARS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

ROADWAY LIMITS: **i-75 From East of SR 951 WB On Ramp to West of SR 951 E** M.P. **49.530** TO **51.040** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2018** TO **12/ 2018** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	49.951	02/14/18	Wed	1300	Other Non-Fixed Object	0	0	1	Day	Dry	No Contributing Action
2	50.905	03/27/18	Tue	1111	Rear-End	0	1	0	Day	Dry	Careless or Negligent Manner
3	50.802	04/23/18	Mon	1239	Ditch	0	1	0	Day	Dry	Careless or Negligent Manner
4	50.787	07/02/18	Mon	1349	Embankment	0	0	1	Day	Wet	No Contributing Action
5	50.016	07/03/18	Tue	1636	Guardrail Face	0	0	1	Day	Wet	No Contributing Action

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
5	**0**	**2**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**
Percent	*0.00%*	*40.00%*	*60.00%*	*20.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*60.00%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**5**	**0**	**2**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*100.00%*	*0.00%*	*40.00%*	*60.00%*	*40.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **237,571**

SEGMENT CRASH RATE: **0.038** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation
CARS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

ROADWAY LIMITS: **i-75 From East of SR 951 WB On Ramp to West of SR 951 E** M.P. **49.530** TO **51.040** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2019** TO **12/ 2019** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	50.905	05/27/19	Mon	1420	Angle	0	0	1	Day	Dry	Careless or Negligent Manner
2	49.951	06/28/19	Fri	0733	Sideswipe	0	0	1	Day	Dry	Improper Passing
3	50.432	08/13/19	Tue	1456	Other Non-Fixed Object	0	0	1	Day	Dry	No Contributing Action
4	50.905	08/18/19	Sun	1624	Animal	0	1	0	Day	Wet	No Contributing Action
5	50.263	09/30/19	Mon	1723	Rear-End	0	1	0	Night	Dry	Careless or Negligent Manner
6	50.135	11/13/19	Wed	0239	Tree (Standing)	0	1	0	Night	Wet	Ran Off Roadway

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
6	**0**	**3**	**3**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**
Percent	*0.00%*	*50.00%*	*50.00%*	*16.67%*	*0.00%*	*16.67%*	*0.00%*	*0.00%*	*16.67%*	*0.00%*	*0.00%*	*0.00%*	*16.67%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**4**	**2**	**2**	**4**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**
Percent	*66.67%*	*33.33%*	*33.33%*	*66.67%*	*33.33%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*16.67%*	*0.00%*	*0.00%*	*16.67%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **3,364**

SEGMENT CRASH RATE: **3.236** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation
CARS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

ROADWAY LIMITS: **i-75 From East of SR 951 WB On Ramp to West of SR 951 E** M.P. **49.530** TO **51.040** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2020** TO **12/ 2020** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	50.694	06/18/20	Thu	0725	Overturn/Rollover	0	0	1	Day	Dry	Swerved Or Avoided

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
1	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*100.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*100.00%*	*0.00%*	*0.00%*	*100.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **3,364**

SEGMENT CRASH RATE: **3.236** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation
CARS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

ROADWAY LIMITS: **i-75 From East of SR 951 WB On Ramp to West of SR 951 E** M.P. **49.530** TO **51.040** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2021** TO **12/ 2021** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	50.640	04/07/21	Wed	2350	Other Non-Fixed Object	0	4	0	Night	Dry	No Contributing Action
2	50.423	04/30/21	Fri	2228	Other Non-Collision	0	8	0	Night	Dry	No Contributing Action
3	50.460	04/30/21	Fri	2230	Angle	0	1	0	Night	Dry	Other Contributing Action
4	49.978	09/12/21	Sun	1720	Angle	0	3	0	Day	Wet	Swerved Or Avoided
5	50.394	09/12/21	Sun	1725	Guardrail Face	0	0	1	Day	Wet	Careless or Negligent Manner

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
5	**0**	**4**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**
Percent	*0.00%*	*80.00%*	*20.00%*	*0.00%*	*0.00%*	*40.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*20.00%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**2**	**3**	**2**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*40.00%*	*60.00%*	*40.00%*	*60.00%*	*20.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **3,364**

SEGMENT CRASH RATE: **3.236** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation

SIGNAL FOUR DATA ANALYTICS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

ROADWAY LIMITS: **i-75 From East of SR 951 WB On Ramp to West of SR 951 E** M.P. **49.530** TO **51.040** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2017** TO **12/ 2017** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	0.000	05/13/17	Sun	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
2	0.000	08/03/17	Fri	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
3	0.000	10/03/17	Wed	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
4	0.000	12/25/17	Tue	0001	Thrown or Falling Object	0	0	1	Unknown	Other	Not Coded

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
4	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*100.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*75.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **#DIV/0!**

SEGMENT CRASH RATE: **#DIV/0!** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation

SIGNAL FOUR DATA ANALYTICS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

ROADWAY LIMITS: **i-75 From East of SR 951 WB On Ramp to West of SR 951 E** M.P. **49.530** TO **51.040** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2018** TO **12/ 2018** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	0.000	01/29/18	Tue	0001	Thrown or Falling Object	0	0	1	Unknown	Other	Not Coded
2	0.000	03/21/18	Thu	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
3	0.000	04/14/18	Sun	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
4	0.000	07/26/18	Fri	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
5	0.000	08/17/18	Sat	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
6	0.000	08/18/18	Sun	0000	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded
7	0.000	09/09/18	Mon	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
8	0.000	11/07/18	Thu	0000	Rear-End	0	0	1	Unknown	Other	Not Coded

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
8	**0**	**0**	**8**	**2**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*100.00%*	*25.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*50.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **#DIV/0!** SEGMENT CRASH RATE: **#DIV/0!** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation

SIGNAL FOUR DATA ANALYTICS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

ROADWAY LIMITS: **i-75 From East of SR 951 WB On Ramp to West of SR 951 E** M.P. **49.530** TO **51.040** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2019** TO **12/ 2019** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	0.000	01/14/19	Tue	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
2	0.000	07/25/19	Fri	0001	Guardrail Face	0	0	1	Unknown	Other	Not Coded
3	0.000	07/30/19	Wed	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
4	0.000	11/02/19	Sun	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
5	0.000	11/24/19	Mon	0000	Rear-End	0	0	1	Unknown	Other	Not Coded
6	0.000	11/27/19	Thu	0000	Other Non-Fixed Object	0	0	1	Unknown	Other	Not Coded

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
6	**0**	**0**	**6**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**
Percent	*0.00%*	*0.00%*	*100.00%*	*33.33%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*16.67%*	*0.00%*	*0.00%*	*0.00%*	*33.33%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **#DIV/0!**

SEGMENT CRASH RATE: **#DIV/0!** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation

SIGNAL FOUR DATA ANALYTICS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

ROADWAY LIMITS: **i-75 From East of SR 951 WB On Ramp to West of SR 951 E** M.P. **49.530** TO **51.040** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2020** TO **12/ 2020** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	0.000	03/20/20	Sat	0000	Animal	0	0	1	Unknown	Other	Not Coded

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
1	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*100.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **#DIV/0!**

SEGMENT CRASH RATE: **#DIV/0!** CRASHES PER MILLION VEHICLE MILES

State of Florida Department of Transportation

SIGNAL FOUR DATA ANALYTICS CRASH SUMMARY

SECTION: **3175000** STATE ROUTE: **#N/A**

ROADWAY LIMITS: **i-75 From East of SR 951 WB On Ramp to West of SR 951 E** M.P. **49.530** TO **51.040** ENGINEER: **PHD**

STUDY PERIOD: FROM **1/ 2021** TO **12/ 2021** COUNTY: **#N/A**

No.	MILE POST	DATE	DAY	TIME	CRASH TYPE	FATAL	INJURIES	PROP DAM	DAY / NIGHT	WET / DRY	CONTRIBUTING CAUSE (VEHICLE ONLY)
1	0.000	03/23/21	Wed	0000	Rear-End	0	4	0	Unknown	Other	Not Coded
2	0.000	03/31/21	Thu	0001	Utility Pole/Light Support	0	0	1	Unknown	Other	Not Coded
3	0.000	04/19/21	Tue	0000	Rear-End	0	3	0	Unknown	Other	Not Coded
4	0.000	05/31/21	Tue	0001	Rear-End	0	1	0	Unknown	Other	Not Coded
5	0.000	06/04/21	Sat	0001	Rear-End	0	0	1	Unknown	Other	Not Coded
6	0.000	06/21/21	Tue	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
7	0.000	06/24/21	Fri	0001	Guardrail Face	0	1	0	Unknown	Other	Not Coded
8	0.000	06/28/21	Tue	0001	Overturn/Rollover	0	0	1	Unknown	Other	Not Coded
9	0.000	09/24/21	Sat	0001	Sideswipe	0	0	1	Unknown	Other	Not Coded
10	0.000	11/08/21	Tue	0000	Struck by Falling/Shifting Cargo	0	0	1	Unknown	Other	Not Coded
11	0.000	11/18/21	Fri	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded
12	0.000	12/13/21	Tue	0000	Sideswipe	0	0	1	Unknown	Other	Not Coded

Total No.	Fatal	Injury	PDO	Rear-End	Head-On	Angle	Left-Turn	Right-Turn	Sideswipe	Backed Into	Ped/Bike	Parked Car	Fixed Object	Ran into Water	Other
12	**0**	**4**	**8**	**4**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**0**
Percent	*0.00%*	*33.33%*	*66.67%*	*33.33%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*33.33%*	*0.00%*	*0.00%*	*0.00%*	*16.67%*	*0.00%*	*0.00%*

Contrib. Cause	Day	Night	Wet	Dry	Careless Driving	FTYRW	Improper Turn	Ran Red Light	Exceeded Speed	Improper Passing	Disreg Cntl Dev	Erratic/ Aggress	Ran off Road	DUI	Wrong Way
Total	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Percent	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*

TOTAL ENTERING VEHICLES/ADT: **#DIV/0!**

SEGMENT CRASH RATE: **#DIV/0!** CRASHES PER MILLION VEHICLE MILES

FLORIDA TRAFFIC CRASH REPORT

LONG FORM [ ] SHORT FORM [ ] UPDATE [X]

(Electronic Version)

HIGHWAY SAFETY & MOTOR VEHICLES,
TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

Date of Crash	Time of Crash	Date of Report	Invest. Agency Report Number	HSMV Crash Report Number
17/May/2017 05:52 PM	17/May/2017 05:52 PM	12/Apr/2018 07:40 AM	FHPF17OFF033431	85417288

CRASH IDENTIFIERS

County Code	City Code	County of Crash	Place or City of Crash	Within City Limits	Time Reported	Time Dispatched
64	52	COLLIER	NAPLES	No	17/May/2017 05:57 PM	17/May/2017 06:00 PM

Time on Scene	Time Cleared Scene	Completed	Reason (if Investigation NOT Completed)	Notified By
17/May/2017 06:12 PM	17/May/2017 09:42 PM	Yes		Law Enforcement

ROADWAY INFORMATION

Crash Occured On Street, Road, Highway	1 At Street Address#	2 At Lattitude	and Longitude
I-75 (SR-93)		26.163970185443802	-81.705837417393894

At Feet	Or Miles	Direction	3 From Intersection With Street, Road, Highway	4 Or From Milepost #
	2.00	North	CR-951 (COLLIER BLVD)	

Road System Identifier	Type Of Shoulder	Type Of Intersection
1 Interstate	1 Paved	1 Not at Intersection

CRASH INFORMATION (Check if Pictures Taken) [X]

light Condition	Weather Condition	Roadway Surface Condition	School Bus Related	Manner Of Collision
1 Daylight	1 Clear	1 Dry	1 No	1 Front to Rear

First Harmful Event Type	First Harmful Event	First Harmful Event Location	Within Interchange	First Harmful Event Relation to Junction
	14	1 On Roadway	No	1 Non.Junction

Contributing Circumstances: Road	Contributing Circumstances: Road	Contributing Circumstances: Road
1 None		

Contributing Circumstances: Environment	Contributing Circumstances: Environment	Contributing Circumstances: Environment
1 None		

Work Zone Related	Crash In Work Zone	Type Of Work Zone	Workers In Work Zone	Law Enforcement In Work Zone
1 No				

VEHICLE (Check if Commercial) [ ]

Vehicle	Motor Vehicle Type	Hit and Run	Veh License Number	State	Reg. Expires	Permanent Reg.	VIN
2	1 Vehicle in Transport	1 No	CKXE83	FL	04/Feb/2018	No	KNDJN2A26E7039417

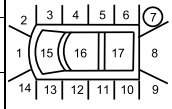
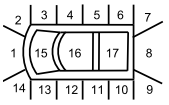
Year	Make	Model	Style	Color	Extent of Damage	Est. Damage	Towed Due To Damage	Vehicle Removed By	Rotation
2014	KIA	SOUL	SUV	BLK	Disabling	10000	Yes	T and C TOWING	Rotation

Insurance Company	Insurance Policy Number
PERMANENT GENERAL ASSURANCE CORPORATION	FL2906708

Name of Vehicle Owner (Check Box If Business)	Current Address (Number and Street)	City and State	Zip Code
ADRIAN DENORRIS ADDERLEY [ ]	4868 N CITATION DR #11-204	DELRAY BEACH FL	33445-0000

	License Number	State	Reg. Expires	Permanent Reg.	VIN	Year	Make	Length	Axles
Trailer One:									
Trailer Two:									

Vehicle Traveling:	Direction	On Street, Road, Highway	At Est. Speed	Posted Speed	Total Lanes
	East	I-75 (SR-93)	68	70	6

CMV Configuration	Cargo Body Type	Area of Initial Impact	Most Damaged Area
		 18. Undercarriage 19. Overturn 20. Windshield 21. Trailer	 18. Undercarriage 19. Overturn 20. Windshield 21. Trailer

Comm GVWR/GCWR	Trailer Type (trailer one)	Trailer Type (trailer two)

Haz. Mat. Release	Haz Mat. Placard	Number	Class

Motor Carrier Name	US DOT Number

Motor Carrier Address	City and State	Zip Code	Phone Number

Comm/Non-Commercial	Vehicle Body Type	Vehicle Defects (one)	Vehicle Defects (two)	Emergency Vehicle Use	Speciual Function of MV
	16 (Sport) Utility Vehicle	1 None		1 No	1 No Special Function

Vehicle Maneuver Action	Trafficway	Roadway Grade	Roadway Alignment	Most Harmful Event	Most Harmful Event Detail
1 Straight Ahead	4 Two-Way, Divided, Positive Median Barrier	1 Level	1 Straight	1 Non-Collision	1 Overturn/Rollover

Traffic Control Device For This Vehicle	First (1) Sequence of Events	Second (2) Sequence of Events	Third (3) Sequence of Events	Fourth (4) Sequence of Events
1 No Controls	2 Collision with Non-Fixed Object 14 Motor Vehicle in Transport	43 Ran Off Roadway, Left	1 Overturn/Rollover	

VEHICLE (Check if Commercial) [ ]

Vehicle	Motor Vehicle Type	Hit and Run	Veh License Number	State	Reg. Expires	Permanent Reg.	VIN
1	1 Vehicle in Transport	1 No	BYL7833	FL	10/Jun/2017	No	5NPEU46F37H187955

Year	Make	Model	Style	Color	Extent of Damage	Est. Damage	Towed Due To Damage	Vehicle Removed By	Rotation
2007	HYUN	SONATA	4D	WHI	Disabling	5000	Yes	T and C TOWING	Rotation

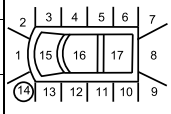
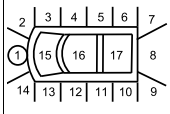
Insurance Company	Insurance Policy Number
GEICO INSURANCE	4491314052/09170

Date of Crash	Date of Report	Agency Report Number	HSMV Crash Report Number
17/May/2017 05:32 PM	17/May/2017 05:32 PM	FHPF17OFF033431	85417288

Name of Vehicle Owner (Check Box If Business)	Current Address (Number and Street)	City and State	Zip Code
MARCUS DEMOND COLEMAN ☐	81 NW 29TH TER	FORT LAUDERDALE FL	33311-0000

	License Number	State	Reg. Expires	Permanent Reg.	VIN	Year	Make	Length	Axles
Trailer One:									
Trailer Two:									

Vehicle Traveling:	Direction	On Street, Road, Highway	At Est. Speed	Posted Speed	Total Lanes
	East	I-75 (SR-93)	103	70	6

CMV Configuration	Cargo Body Type	Area of Initial Impact	Most Damaged Area
			

Comm GVWR	Trailer Type (trailer one)	Trailer Type (trailer two)

Haz. Mat. Release	Haz Mat. Placard	Number	Class

Motor Carrier Name	US DOT Number

Motor Carrier Address	City and State	Zip Code	Phone Number

Comm/Non-Commercial	Vehicle Body Type	Vehicle Defects (one)	Vehicle Defects (two)	Emergency Vehicle Use	Speciual Function of MV
	1 Passenger Car	1 None		1 No	1 No Special Function

Vehicle Maneuver Action	Trafficway	Roadway Grade	Roadway Alignment	Most Harmful Event	Most Harmful Event Detail
1 Straight Ahead	4 Two-Way, Divided, Positive Median Barrier	1 Level	1 Straight	2 Collision with Non-Fixed Object	14 Motor Vehicle in Transport

Traffic Control Device For This Vehicle	First (1) Sequence of Events	Second (2) Sequence of Events	Third (3) Sequence of Events	Fourth (4) Sequence of Events
1 No Controls	2 Collision with Non-Fixed Object 14 Motor Vehicle in Transport			

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Phone Number	Re-Exam
1	1 Driver	1	MARCUS DEMOND COLEMAN	21/Dec/1994	1 Male	954-288-9825	No

Address	City	State	Zip Code
81 NW 29TH TER	FORT LAUDERDALE	FL	33311

Driver License Number	State	Expires	DL Type	Req. End.	Injury Severity	Ejection
C455544944611	FL	21/Dec/2020	5 E/Operator	3 No Req Endorsement	2 Possible	1 Not Ejected

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
2 None Used -Motor Vehicle Occupant	6 Deployed-Combination		3 Not Applicable	1 Left	1 Front	

Drivers Actions at Time of Crash (first)	Drivers Actions at Time of Crash (second)	Driver Distracted By	Vision Obstruction
2 Operated MV in Careless or Negligent Manner		1 Not Distracted	1 Vision Not Obscured

Drivers Actions at Time of Crash (third)	Drivers Actions at Time of Crash (fourth)	Drivers Condition at Time of Crash
		1 Apparently Normal

Suspected Alcohol Use	Alcohol Tested	Alcohol Test Type	Alcohol Test Result	BAC	Suspected Drug Use	Drug Tested	Drug Test Type	Drug Test Result
1 No	3 Test Given	1 Blood	2 Completed	0.060	1 No	3 Test Given	1 Blood	1 Positive

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Injury Severity	Ejection
2	3 Passenger	1	NAJEE JANEE GADSON	22/Jul/1995	2 Female	1 None	1 Not Ejected

Address	City	State	Zip Code
3210 NW 16TH ST	FT LAUDERDALE	FL	33311

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
2 None Used -Motor Vehicle Occupant	3 Deployed-Front		3 Not Applicable	3	1	

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Injury Severity	Ejection
3	3 Passenger	1	JOSHUA DAVID BLAIR	15/Aug/1997	1 Male	1 None	1 Not Ejected

Address	City	State	Zip Code
1147 NW 17TH ST	FORT LAUDERDALE	FL	33311

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
3 Shoulder and Lap Belt Used	4 Deployed-Side		3 Not Applicable	1	2	

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Phone Number	Re-Exam
4	1 Driver	2	DEBBIE ALLEN	01/Jan/1967	2 Female		No

[illegible]	[illegible]	st. Agency Report Number **FHPF17OFF033431**	HSMV Crash Report Number **85417288**

Address	City	State	Zip Code
422 NW 15TH TER	**FORT LAUDERDALE**	**FL**	**33311**

Driver License Number	State	Expires	DL Type	Req. End.	Injury Severity	Ejection
A450160675012	**FL**	**01/Jan/2019**	**5 E/Operator**	**3 No Req Endorsement**	**5 Fatal (within 30 days)**	**1 Not Ejected**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
2 None Used -Motor Vehicle Occupant	**6 Deployed-Combination**		**3 Not Applicable**	**1 Left**	**1 Front**	

Drivers Actions at Time of Crash (first)	Drivers Actions at Time of Crash (second)	Driver Distracted By	Vision Obstruction
1 No Contributing Action		**1 Not Distracted**	**1 Vision Not Obscured**

Drivers Actions at Time of Crash (third)	Drivers Actions at Time of Crash (fourth)	Drivers Condition at Time of Crash
		1 Apparently Normal

Suspected Alcohol Use	Alcohol Tested	Alcohol Test Type	Alcohol Test Result	BAC	Suspected Drug Use	Drug Tested	Drug Test Type	Drug Test Result
1 No	**1 Test Not Given**				**1 No**	**1 Test Not Given**		

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Injury Severity	Ejection
5	**3 Passenger**	**2**	**KARMA LASHEIA TALOMERNA**	**22/Sep/1976**	**2 Female**	**4 Incapacitating**	**1 Not Ejected**

Address	City	State	Zip Code
4001 WOODSIDE DR	**CORAL SPRINGS**	**FL**	**33065**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
2 None Used -Motor Vehicle Occupant	**4 Deployed-Side**		**3 Not Applicable**	**3**	**2**	

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
2 EMS	**COLLIER COUNTY EMS**		**LEE MEMORIAL HOSPITAL**

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Injury Severity	Ejection
6	**3 Passenger**	**2**	**ALICIA VONCIA FERGUSON**	**04/Apr/1968**	**2 Female**	**4 Incapacitating**	**1 Not Ejected**

Address	City	State	Zip Code
8123 SW 24TH ST	**DAVIE**	**FL**	**33324**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
3 Shoulder and Lap Belt Used	**6 Deployed-Combination**		**3 Not Applicable**	**3**	**1**	

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
2 EMS	**COLLIER COUNTY EMS**		**LEE MEMORIAL HOSPITAL**

WITNESSES

Name	Address	City	State	Zip Code
GINA ELGISA SULLIVAN	**4234 N OCEAN DR**	**HOLLYWOOD**	**FL**	**33019**

WITNESSES

Name	Address	City	State	Zip Code
MICHAEL SEAN HARTNETT	**8910 VERDUCCI CT**	**NAPLES**	**FL**	**34114**

WITNESSES

Name	Address	City	State	Zip Code
WILLIAM PAUL RALPH	**9217 ABBOTT AVE**	**SURFSIDE**	**FL**	**33154**

WITNESSES

Name	Address	City	State	Zip Code
JOSHUA M HAMILIN	**409 MILLSTONE RD**	**BREWSTER**	**MA**	**02631**

WITNESSES

Name	Address	City	State	Zip Code
YANET PEREZ	**8474 NW 103 STREET APT 106G**	**HIALEAH GARDENS**	**FL**	**33016**

WITNESSES

Name	Address	City	State	Zip Code
JOSEPH CHRISTOPHER ORLANDO	**PO BOX 2251**	**MARCO ISLAND**	**FL**	**34146**

VIOLATIONS

Person#	Name	Florida Statute Number	Charge	Citation
1	**MARCUS DEMOND COLEMAN**	**316.1925(1)**	**CARELESS DRIVING**	**A7MUUCE**

NARRATIVE

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
2937	TROOPER	E.J. HENRIQUEZ	F	FLORIDA HIGHWAY PATROL	239-344-1730	May 18, 2017

V01 was traveling south on I-75 (SR-93) north of CR-951 (Collier Blvd) in the inside lane. V02 was traveling south on I-75 (SR-93) north of CR-951(Collier Blvd) in the inside lane directly ahead of V01. V01 failed to slow for slower traffic. The front left of V01 struck the rear right of V02. V02 began to rotate counterclockwise and left the roadway left into the grass median. V02 overturned and came to rest in the median upright facing northeast. V01 rotated clockwise and left the roadway to the right. V01 came to rest in the outside grass shoulder facing southwest.

Name of deceased: Debbie Allen
Date of birth: 01/01/1967
Date of death: 05/17/2017
Time of death: 6:27 P.M.
Pronounced by: Batalion Chief Wayne Watson of Collier County Fire / EMS.
Traffic Homicide Investigator: Cpl. J. A. Harris # 1217 Florida Highway Patrol
Traffic Homicide Case No.: FHP717-64-018
Photographs taken by: Cpl. J.A. Harris # 1217

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
2937	TROOPER	E.J. HENRIQUEZ	F	FLORIDA HIGHWAY PATROL	239-344-1730	Jun 09, 2017

V01 and V02 passenger information updated.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
2937	TROOPER	E.J. HENRIQUEZ	F	FLORIDA HIGHWAY PATROL	239-344-1730	Jun 27, 2017

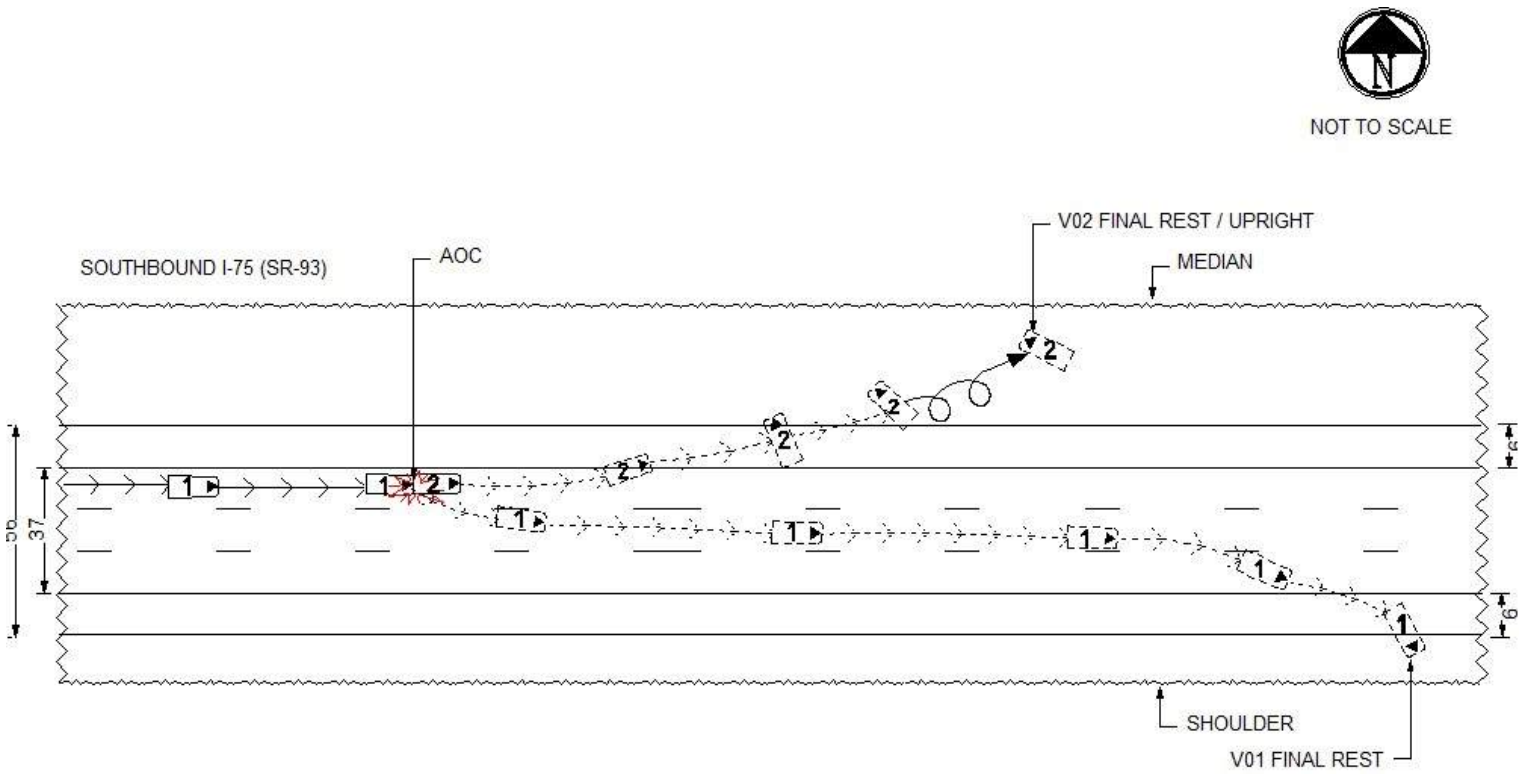
FHP received the toxicology report for D01 from FDLE showing his blood alcohol content to be .058 g/100mL of blood. Also Delta 9 tetrahydrocannabinol (THC) 3.3+- 1.3 ng/mL, and 11 Nor 9 Carboxy Delta 9 Tetrahydrocannabinol 16+- 4 ng/mL. This report was updated to reflect the toxicology report.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
3389	CORPORAL	J.A. HARRIS	F	FLORIDA HIGHWAY PATROL	239-344-1730	Apr 12, 2018

On 4/12/2017, Corporal James A Harris of the Florida Highway Patrol added an update to this report. The update was added to include discovery from the Traffic Homicide Investigative Report. The updates were as follows:
1. Drug type(marijuana/cannabis) for Driver-1 (Marcus Coleman).
2. Updated contact information for occupants.
3. The estimated speed of Vehicle-1 (103 mph).
4. The estimated speed of Vehicle-2 (68 mph).
5. Direction of travel (east).
6. Rear passenger of V-2 (unbelted).

REPORTING OFFICER

ID/Badge #	Rank and Name	Department	Type of Department
3389	CORPORAL J.A. HARRIS	FLORIDA HIGHWAY PATROL	FHP


NOT TO SCALE
V02 FINAL REST / UPRIGHT
MEDIAN
SOUTHBOUND I-75 (SR-93)
AOC
37
SHOULDER
V01 FINAL REST

FLORIDA TRAFFIC CRASH REPORT

LONG FORM [ ] SHORT FORM [ ] UPDATE [X]

(Electronic Version)

HIGHWAY SAFETY & MOTOR VEHICLES,
TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

Date of Crash	Time of Crash	Date of Report	Invest. Agency Report Number	HSMV Crash Report Number
22/Jun/2020 10:10 PM	22/Jun/2020 10:10 PM	25/Jan/2021 10:51 AM	FHPF20OFF026256	87154678

CRASH IDENTIFIERS

County Code	City Code	County of Crash	Place or City of Crash	Within City Limits	Time Reported	Time Dispatched
64	0	COLLIER	UNINCORPORATED	No	22/Jun/2020 10:14 PM	22/Jun/2020 10:17 PM

Time on Scene	Time Cleared Scene	Completed	Reason (if Investigation NOT Completed)	Notified By
22/Jun/2020 10:25 PM	23/Jun/2020 02:15 AM	Yes		Law Enforcement

ROADWAY INFORMATION

Crash Occured On Street, Road, Highway	1 At Street Address#	2 At Lattitude and Longitude
I-75 (SR 93)		26.153259999999999 -81.570729999999997

At Feet	Or Miles	Direction	3 From Intersection With Street, Road, Highway	4 Or From Milepost #
	7.00	East	CR 951 (COLLIER BLVD)	

Road System Identifier	Type Of Shoulder	Type Of Intersection
1 Interstate	1 Paved	1 Not at Intersection

CRASH INFORMATION (Check if Pictures Taken) [X]

light Condition	Weather Condition	Roadway Surface Condition	School Bus Related	Manner Of Collision
5 Dark-Not Lighted	2 Cloudy	1 Dry	1 No	77 Other, Explain in Narrative

First Harmful Event Type	First Harmful Event	First Harmful Event Location	Within Interchange	First Harmful Event Relation to Junction
	10	1 On Roadway	No	1 Non.Junction

Contributing Circumstances: Road	Contributing Circumstances: Road	Contributing Circumstances: Road
1 None		

Contributing Circumstances: Environment	Contributing Circumstances: Environment	Contributing Circumstances: Environment
1 None		

Work Zone Related	Crash In Work Zone	Type Of Work Zone	Workers In Work Zone	Law Enforcement In Work Zone
1 No				

VEHICLE (Check if Commercial) [ ]

Vehicle	Motor Vehicle Type	Hit and Run	Veh License Number	State	Reg. Expires	Permanent Reg.	VIN
1	1 Vehicle in Transport	1 No	EVUL61	FL	30/Jun/2021	No	5TDKZ3DC3LS059727

Year	Make	Model	Style	Color	Extent of Damage	Est. Damage	Towed Due To Damage	Vehicle Removed By	Rotation
2020	TOYT	SIENNA	VN	BLK	Functional	7000	Yes	BALD EAGLE TOWIN	Rotation

Insurance Company	Insurance Policy Number
ESURANCE INSURANCE CO.	PAFL-8358588

Name of Vehicle Owner (Check Box If Business)	Current Address (Number and Street)	City and State	Zip Code
PV HOLDING CORP [X]	8600 HANGAR BLVD	ORLANDO FL	32827-0000

	License Number	State	Reg. Expires	Permanent Reg.	VIN	Year	Make	Length	Axles
Trailer One:									
Trailer Two:									

Vehicle Traveling:	Direction	On Street, Road, Highway	At Est. Speed	Posted Speed	Total Lanes
	North	I-75 (SR 93)	75	70	4

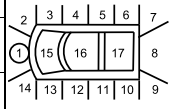
CMV Configuration	Cargo Body Type

Comm GVWR/GCWR	Trailer Type (trailer one)	Trailer Type (trailer two)

Haz. Mat. Release	Haz Mat. Placard	Number	Class

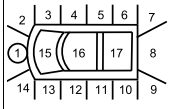
Motor Carrier Name	US DOT Number

Area of Initial Impact



18. Undercarriage
19. Overturn
20. Windshield
21. Trailer

Most Damaged Area



18. Undercarriage
19. Overturn
20. Windshield
21. Trailer

Motor Carrier Address	City and State	Zip Code	Phone Number

Comm/Non-Commercial	Vehicle Body Type	Vehicle Defects (one)	Vehicle Defects (two)	Emergency Vehicle Use	Speciual Function of MV
	2 Passenger Van	1 None	1 None	1 No	1 No Special Function

Vehicle Maneuver Action	Trafficway	Roadway Grade	Roadway Alignment	Most Harmful Event	Most Harmful Event Detail
1 Straight Ahead	4 Two-Way, Divided, Positive Median Barrier	1 Level	1 Straight	2 Collision with Non-Fixed Object	10 Pedestrian

Traffic Control Device For This Vehicle	First (1) Sequence of Events	Second (2) Sequence of Events	Third (3) Sequence of Events	Fourth (4) Sequence of Events
1 No Controls	2 Collision with Non-Fixed Object 10 Pedestrian			

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Phone Number	Re-Exam
1	1 Driver	1	HOVVER YAIR SANCHEZ	11/Oct/1980	1 Male	813-294-5456	No

Address	City	State	Zip Code
3711 CAT MINT ST	TAMPA	FL	33619

Driver License Number	State	Expires	DL Type	Req. End.	Injury Severity	Ejection
S522339803711	FL	11/Oct/2025	5 E/Operator	3 No Req Endorsement	1 None	1 Not Ejected

		st. Agency Report Number	HSMV Crash Report Number
		FHPF20OFF026256	**87154678**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
3 Shoulder and Lap Belt Used	**2 Not Deployed**		**3 Not Applicable**	**1 Left**	**1 Front**	

Drivers Actions at Time of Crash (first)	Drivers Actions at Time of Crash (second)	Driver Distracted By	Vision Obstruction
1 No Contributing Action		**1 Not Distracted**	**1 Vision Not Obscured**

Drivers Actions at Time of Crash (third)	Drivers Actions at Time of Crash (fourth)	Drivers Condition at Time of Crash
		1 Apparently Normal

Suspected Alcohol Use	Alcohol Tested	Alcohol Test Type	Alcohol Test Result	BAC	Suspected Drug Use	Drug Tested	Drug Test Type	Drug Test Result
1 No	**2 Test Refused**				**1 No**	**2 Test Refused**		

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Injury Severity	Ejection
5	**3 Passenger**	**1**	**NELSON WILLIAM SANCHEZ REY**	**09/Dec/1974**	**1 Male**	**1 None**	**1 Not Ejected**

Address	City	State	Zip Code
8546 EDGEWATER PLACE BLVD	**TAMPA**	**FL**	**33615**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
3 Shoulder and Lap Belt Used	**2 Not Deployed**		**3 Not Applicable**	**3**	**2**	

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Injury Severity	Ejection
3	**3 Passenger**	**1**	**MARIA TERESA REY DE SANCHEZ**	**02/Aug/1956**	**2 Female**	**1 None**	**1 Not Ejected**

Address	City	State	Zip Code
8546 EDGEWATER PL BLVD	**TAMPA**	**FL**	**33615**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
3 Shoulder and Lap Belt Used	**2 Not Deployed**		**3 Not Applicable**	**1**	**3**	

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Injury Severity	Ejection
2	**3 Passenger**	**1**	**HERNANDO SANCHEZ ZAROS**	**06/Mar/1941**	**1 Male**	**1 None**	**1 Not Ejected**

Address	City	State	Zip Code
8546 EDGEWATER PL BLVD	**TAMPA**	**FL**	**33615**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
3 Shoulder and Lap Belt Used	**2 Not Deployed**		**3 Not Applicable**	**3**	**1**	

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Injury Severity	Ejection
4	**3 Passenger**	**1**	**ALEX FABIAN MUNETON**	**19/Aug/1976**	**1 Male**	**1 None**	**1 Not Ejected**

Address	City	State	Zip Code
9052 LAKE PLACE LANE 42A	**TAMPA**	**FL**	**33634**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
3 Shoulder and Lap Belt Used	**2 Not Deployed**			**1**	**2**	

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

PERSON RECORD

Person#	Description	Name	Date of Birth	Sex	Injury Severity	Phone Number
7	**2 Non-Motorist**	**TIFFANY MARIE KEMPER**	**22/Nov/1986**	**2 Female**	**5 Fatal (within 30 days)**	

Address	City	State	Zip Code
258 E GRAVES AVE APT 4	**ORANGE CITY**	**FL**	**32763**

Non-Motorist Description Detail	Non-Motorist Action Prior to Crash	Non-Motorist Location at Time of Crash
5 Occupant of Motor Vehicle Not in Transport (parked, etc.)	**1 Crossing Roadway**	**5 Travel Lane - Other Location**

Non-Motorist Actions/Circumstance (First)	Non-Motorist Actions/Circumstance (Second)	Non-Motorist Safety Equipment (One)	Non-Motorist Safety Equipment (Two)
2 Dart/Dash		**1 None**	

Suspected Alcohol Use	Alcohol Tested	Alcohol Test Type	Alcohol Test Result	BAC	Suspected Drug Use	Drug Tested	Drug Test Type	Drug Test Result
2 Yes	**3 Test Given**	**1 Blood**	**2 Completed**	**0.110**	**2 Yes**	**3 Test Given**	**1 Blood**	**1 Positive**

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

WITNESSES

		st. Agency Report Number	HSMV Crash Report Number
		FHPF20OFF026256	**87154678**

Name	Address	City	State	Zip Code
LEONARD SCOT ROBERTS	**96223 PARLIMENT DRIVE**	**FERNANDINA BEACH**	**FL**	**32034**

NARRATIVE

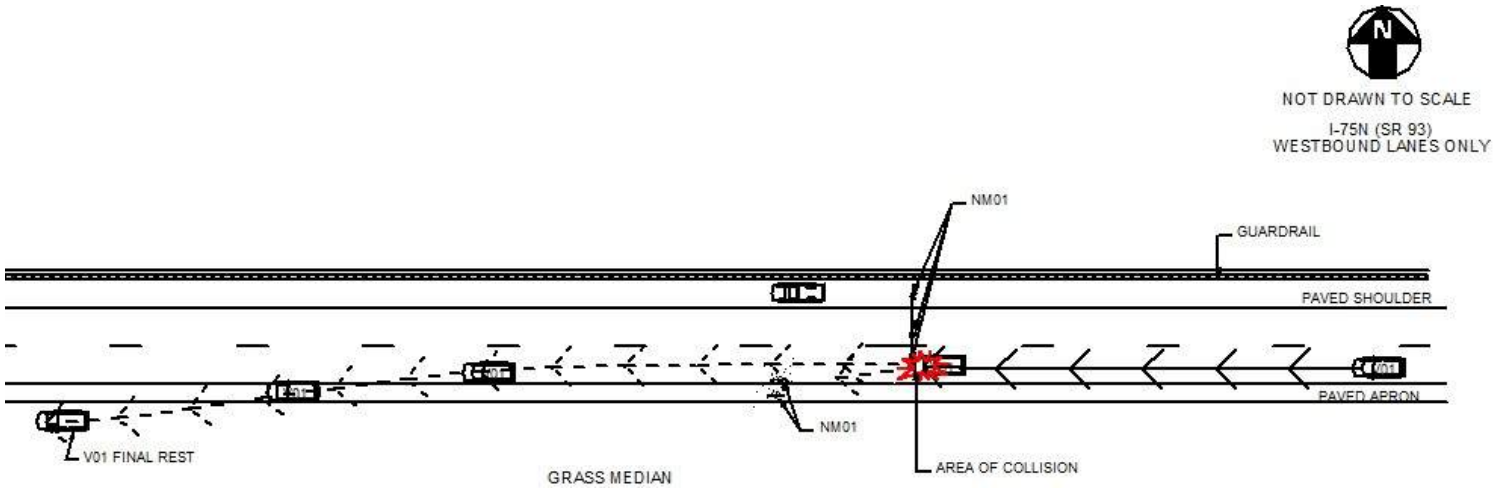
ID Number Rank Name Troop / Post Officer Agency Phone Number Date Created
3687 TPR A. L. SACKMANN F FLORIDA HIGHWAY PATROL 239-344-1730 Jun 24, 2020

Vehicle 1 (V01) was traveling west on the inside lane I-75N (SR 93). Non-motorist 01 (NM01) exited a stopped vehicle on the north paved shoulder of I-75N. NM01 dashed south across the outside lane to the inside lane, into the path of V01. The front V01 collided with NM01 on the inside lane of I-75N. V01 came to a controlled stop on the grass median of I-75N, facing west. NM01 came to final rest on the inside lane. Then was moved to the inside paved apron on I-75N to render aide, post collision.

Deceased: Tiffany Marie Kemper D.O.B. 11.22.1986
Date of Death: 6.22.2020
Pronounced By: Battalion Chief Matthew Trump
THI Case#: FHP720-64-023
Traffic Homicide Investigator and Photos By: Cpl. J. Close

REPORTING OFFICER

ID/Badge #	Rank and Name	Department	Type of Department
2569	**CPL J.D. CLOSE**	**FLORIDA HIGHWAY PATROL**	**FHP**


N
NOT DRAWN TO SCALE
I-75N (SR 93)
WESTBOUND LANES ONLY
NM01
GUARDRAIL
PAVED SHOULDER
PAVED APRON
NM01
V01 FINAL REST
AREA OF COLLISION
GRASS MEDIAN

FLORIDA TRAFFIC CRASH REPORT

LONG FORM [ ] SHORT FORM [ ] UPDATE [X]

(Electronic Version)

HIGHWAY SAFETY & MOTOR VEHICLES,
TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

Date of Crash	Time of Crash	Date of Report	Invest. Agency Report Number	HSMV Crash Report Number
01/Oct/2018 04:46 AM	01/Oct/2018 04:46 AM	07/Aug/2019 09:24 AM	FHPF18OFF064181	87161995

CRASH IDENTIFIERS

County Code	City Code	County of Crash	Place or City of Crash	Within City Limits	Time Reported	Time Dispatched
64	0	COLLIER	UNINCORPORATED	No	01/Oct/2018 11:31 AM	01/Oct/2018 11:31 AM

Time on Scene	Time Cleared Scene	Completed	Reason (if Investigation NOT Completed)	Notified By
01/Oct/2018 11:31 AM	01/Oct/2018 04:00 PM	Yes		Law Enforcement

ROADWAY INFORMATION

Crash Occured On Street, Road, Highway	1 At Street Address#	2 At Lattitude	and Longitude
INTERSTATE 75 (STATE ROAD 93)		26.152600562867601	-81.556567302186295

At Feet	Or Miles	Direction	3 From Intersection With Street, Road, Highway	4 Or From Milepost #
	8.00	East	COUNTY ROAD 951 (COLLIER BLVD)	

Road System Identifier	Type Of Shoulder	Type Of Intersection
1 Interstate	1 Paved	1 Not at Intersection

CRASH INFORMATION (Check if Pictures Taken) [X]

light Condition	Weather Condition	Roadway Surface Condition	School Bus Related	Manner Of Collision
5 Dark-Not Lighted	1 Clear	1 Dry	1 No	77 Other, Explain in Narrative

First Harmful Event Type	First Harmful Event	First Harmful Event Location	Within Interchange	First Harmful Event Relation to Junction
	28	4 Median	No	1 Non.Junction

Contributing Circumstances: Road	Contributing Circumstances: Road	Contributing Circumstances: Road
1 None		

Contributing Circumstances: Environment	Contributing Circumstances: Environment	Contributing Circumstances: Environment
1 None		

Work Zone Related	Crash In Work Zone	Type Of Work Zone	Workers In Work Zone	Law Enforcement In Work Zone
1 No				

VEHICLE (Check if Commercial) [ ]

Vehicle	Motor Vehicle Type	Hit and Run	Veh License Number	State	Reg. Expires	Permanent Reg.	VIN
1	1 Vehicle in Transport	1 No	HFRP16	FL	17/Dec/2018	No	5NPE34AB0FH046752

Year	Make	Model	Style	Color	Extent of Damage	Est. Damage	Towed Due To Damage	Vehicle Removed By	Rotation
2015	HYUN	SONATA	4D	BLK	Disabling	22000	Yes	ECONOMY TOWING	Rotation

Insurance Company	Insurance Policy Number
STATE FARM MUTUAL AUTOMOBILE INS CO	E188153594

Name of Vehicle Owner (Check Box If Business)	Current Address (Number and Street)	City and State	Zip Code
AUBREY JERMAINE MIXON [ ]	1283 CYPRESS WOODS DR	NAPLES FL	34103

	License Number	State	Reg. Expires	Permanent Reg.	VIN	Year	Make	Length	Axles
Trailer One:									
Trailer Two:									

Vehicle Traveling:	Direction	On Street, Road, Highway	At Est. Speed	Posted Speed	Total Lanes
	East	INTERSTATE 75 (STATE ROAD 93)	85	70	4

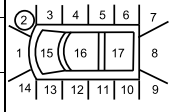
CMV Configuration	Cargo Body Type

Comm GVWR/GCWR	Trailer Type (trailer one)	Trailer Type (trailer two)

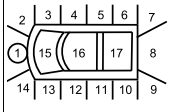
Haz. Mat. Release	Haz Mat. Placard	Number	Class

Motor Carrier Name	US DOT Number

Area of Initial Impact



Most Damaged Area



Motor Carrier Address	City and State	Zip Code	Phone Number

Comm/Non-Commercial	Vehicle Body Type	Vehicle Defects (one)	Vehicle Defects (two)	Emergency Vehicle Use	Speciual Function of MV
	1 Passenger Car	1 None		1 No	1 No Special Function

Vehicle Maneuver Action	Trafficway	Roadway Grade	Roadway Alignment	Most Harmful Event	Most Harmful Event Detail
1 Straight Ahead	4 Two-Way, Divided, Positive Median Barrier	1 Level	1 Straight	3 Collision with Fixed Object	26 Embankment

Traffic Control Device For This Vehicle	First (1) Sequence of Events	Second (2) Sequence of Events	Third (3) Sequence of Events	Fourth (4) Sequence of Events
1 No Controls	3 Collision with Fixed Object 28 Guardrail End	37 Fence	39 Other Fixed Object (wall, building, tunnel, etc.)	26 Embankment

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Phone Number	Re-Exam
1	1 Driver	1	AUBREY JERMAINE MIXON	17/Dec/1996	1 Male	954-260-7254	No

Address	City	State	Zip Code
1283 CYPRESS WOODS DR	NAPLES	FL	34103

Driver License Number	State	Expires	DL Type	Req. End.	Injury Severity	Ejection
M250010964571	FL	17/Dec/2020	5 E/Operator	2 No	5 Fatal (within 30 days)	2 Ejected, Totally

		st. Agency Report Number **FHPF18OFF064181**	HSMV Crash Report Number **87161995**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
2 None Used -Motor Vehicle Occupant	**3 Deployed-Front**		**3 Not Applicable**	**1 Left**	**1 Front**	

Drivers Actions at Time of Crash (first)	Drivers Actions at Time of Crash (second)	Driver Distracted By	Vision Obstruction
2 Operated MV in Careless or Negligent Manner	**17 Exceeded Posted Speed**	**88 Unknown**	**1 Vision Not Obscured**

Drivers Actions at Time of Crash (third)	Drivers Actions at Time of Crash (fourth)	Drivers Condition at Time of Crash
26 Ran off Roadway		**88 Unknown**

Suspected Alcohol Use	Alcohol Tested	Alcohol Test Type	Alcohol Test Result	BAC	Suspected Drug Use	Drug Tested	Drug Test Type	Drug Test Result
88 Unknown	**3 Test Given**	**1 Blood**	**2 Completed**	**0.000**	**88 Unknown**	**3 Test Given**	**1 Blood**	**2 Negative**

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
77 Other, Explain in Narrative	**COLLIER COUNTY EMS**	**CC201810010000055**	**COLLIER CO MEDICAL EXAMINER**

NON VEHICLE PROPERTY DAMAGE

Vehicle#	Person#	Property Damage - Other Than Vehicle	Est. Amount	Business	Owner's Name	Address	City & State	Zip Code
		GUARDRAIL END	**5000**	**Yes**	**FLORIDA DOT**	**4800 DAVIS BLVD**	**NAPLES FL**	**34104**

NON VEHICLE PROPERTY DAMAGE

Vehicle#	Person#	Property Damage - Other Than Vehicle	Est. Amount	Business	Owner's Name	Address	City & State	Zip Code
		FLOOD GAUGE	**5000**	**Yes**	**FLORIDA DOT**	**4800 DAVIS BLVD**	**NAPLES FL**	**34104**

NON VEHICLE PROPERTY DAMAGE

Vehicle#	Person#	Property Damage - Other Than Vehicle	Est. Amount	Business	Owner's Name	Address	City & State	Zip Code
		30FT CHAIN LINK FENCE W/ POSTS	**2000**	**Yes**	**FLORIDA DOT**	**4800 DAVIS BLVD**	**NAPLES FL**	**34104**

NARRATIVE

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1910	TROOPER	J.A. BENOIT	F	FLORIDA HIGHWAY PATROL	239-344-1730	Oct 01, 2018

V01 traveled east on Interstate 75 (State Road 93) on the eastbound inside lane. For unknown reasons; V01's driver failed to maintain control of V01. V01 traveled to the left in a northeasterly direction and entered the grassy median where V01's right front struck a guardrail end. The impact caused V01 to rotate clockwise as V01 continued to travel in a northeasterly direction on the grassy median. V01's front left struck and breached a chain link fence on the west side of the mile marker 93 canal crossing. V01 vaulted over the canal striking a flood gauge sensor assembly with V01's undercarriage. V01's front subsequently struck the east embankment where V01's driver was ejected into the fence on the east side of the canal crossing. V01 came to final rest faced southeast on the east embankment.

Name of Decedent (V01's occupant 1): Aubrey Jermaine Mixon
Date of Birth: 12/17/1996
Date of Death: 10/01/2018
Time of Death: 11:51 AM
Pronounced By (At scene): Lt. Thomas Szempruch of Great Naples Fire Rescue (Ladder 72).

FHP Traffic Homicide Case Number: FHP718-64-026
FHP Traffic Homicide Case Investigator: Corporal Michael Reed I.D. 3902 / 1412
Photographs Taken By: Corporal Michael Reed I.D. 3902 / 1412

Source of Transportation to Medical Facility: Aubrey Jermaine Mixon (V01's O-1) was removed from the scene by SW Professional Services.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1910	TROOPER	J.A. BENOIT	F	FLORIDA HIGHWAY PATROL	239-344-1730	Oct 29, 2018

This update is to reflect that as of 10/29/2018 V01 driver's B.A.C. results are still pending.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1910	TROOPER	J.A. BENOIT	F	FLORIDA HIGHWAY PATROL	239-344-1730	Nov 26, 2018

This update is to reflect that as of 11/26/2018 V01 driver's B.A.C. results are still pending.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1910	TROOPER	J.A. BENOIT	F	FLORIDA HIGHWAY PATROL	239-344-1730	Dec 22, 2018

This update is to reflect that as of 12/22/2018 V02 driver's B.A.C. results are still pending.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1910	TROOPER	J.A. BENOIT	F	FLORIDA HIGHWAY PATROL	239-344-1730	Jan 19, 2019

This update is to reflect that as of 01/19/2019 V01 driver's B.A.C. results are still pending.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1910	TROOPER	J.A. BENOIT	F	FLORIDA HIGHWAY PATROL	239-344-1730	Feb 08, 2019

This update is to reflect that as of 02/08/2019 V01 driver's B.A.C. results are still pending.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1910	TROOPER	J.A. BENOIT	F	FLORIDA HIGHWAY PATROL	239-344-1730	Mar 05, 2019

This update is to reflect that as of 03/05/2019 V01 driver's B.A.C. results are still pending.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1910	TROOPER	J.A. BENOIT	F	FLORIDA HIGHWAY PATROL	239-344-1730	Apr 05, 2019

This update is to reflect that as of 04/05/2019 V01 driver's B.A.C. results are still pending.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1910	TROOPER	J.A. BENOIT	F	FLORIDA HIGHWAY PATROL	239-344-1730	May 05, 2019

This update is to reflect that as of 05/05/2019 V01 driver's B.A.C. results are still pending.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1910	TROOPER	J.A. BENOIT	F	FLORIDA HIGHWAY PATROL	239-344-1730	Jun 02, 2019

This update is to reflect that as of 06/02/2019 V01 driver's B.A.C. results are still pending.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1910	TROOPER	J.A. BENOIT	F	FLORIDA HIGHWAY PATROL	239-344-1730	Jul 03, 2019

This update is to reflect that as of 07/03/2019 V01 driver's B.A.C. results are still pending.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1910	TROOPER	J.A. BENOIT	F	FLORIDA HIGHWAY PATROL	239-344-1730	Jul 24, 2019

This update is to reflect that as of 07/24/2019 V01 driver's B.A.C. results were negative. The crash report investigation has been completed.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
3902	CORPORAL	M. REED	F	FLORIDA HIGHWAY PATROL	239-344-1730	Jul 26, 2019

Update 08-07-2019 to include the Traffic Homicide Investigation:

ASSIGNMENT

This crash occurred on October 1, 2018, at 04:46 a.m., on I-75 (State Road 93) (Alligator Alley), eight miles east of the intersection with County Road 951 (Collier Boulevard) in the unincorporated area of Collier County, Florida. This was a single vehicle crash involving one sedan and one fatality. Trooper Jeffrey Benoit, ID #: 587, of the Florida Highway Patrol (FHP) was dispatched to this crash on October 1, 2018, at 11:31 a.m., and arrived on scene at 11:41 p.m., to conduct a crash investigation. I was assigned to conduct the Traffic Homicide Investigation.

CRASH ANALYSIS SUMMARY

I-75, in the area of the crash, was a four lane divided roadway. The roadway was oriented in a predominantly east and west direction. The roadway had no discernable

Date of Crash	Date of Report	st. Agency Report Number	HSMV Crash Report Number
01/Oct/2018 04:40 AM	01/Oct/2018 04:40 AM	FHPF18OFF064181	87161995

grade or superelevation. The lanes were bordered to the outside by a solid white painted edge line. Beyond the edge line was a paved shoulder then a grass shoulder. The lanes were bordered to the inside by a solid yellow painted line. The speed limit signs in this area were posted at 70 miles per hour located at two miles west and seven miles east of the area of collision. The coefficient of friction for the I-75 grass median was .66 and the eastbound lanes asphalt surface was measured at 0.83 as obtained by utilizing drag sled #046 on the level portion of the travel lanes and median. The roadway and traffic control devices did not contribute to this crash. According to local weather reports, the weather conditions for this crash were that it was clear around the time of the crash. The crash occurred before sunrise which was at 7:19 a.m. The area of the crash was a rural highway. Driver 01 (D-1) was Aubrey Jermaine Mixon (DOB: 12/17/1996) of 1283 Cypress Woods Drive, Naples, Florida, 34103. D-1 was identified by his photo FCIC/NCIC, from a valid Florida Driver License, with no restrictions or endorsements. D-1 was established as the driver of V-1 by physical evidence consisting of injuries and final rest location, indicating that he was the only occupant in the vehicle at the time of the crash. A toxicology analysis of a blood sample obtained from D-1 indicated no alcohol or drug content. D-1 operated V-1, a black 2015 Hyundai Sonata (VIN #: 5NPE34AB0FH046752) displaying Florida Tag #: HFRP16 east on I-75. D-1 failed to maintain his lane and traveled onto the grass median where the front right of V-1 collided with a guardrail abutment. V-1 continued east on the grass median where the front of V-1 collided with a chain link fence, separated from the ground, and then collided with a handrail and water management pole before landing front first onto a rock bank. D-1 was ejected from V-1 and came to final rest facing down on the grass median with the feet oriented south. The initial area of collision took place within the grass median with the guardrail west of the canal, the fence-line west of the canal, the handrail over the canal, and the rocks on the east bank of the canal. Fresh furrow marks began west of the area of collision and continued east into the collision area with the guardrail, continued east into the collision area with the chain-link fence and then ended at the top of the embankment. The front, side, and knee airbags were deployed on V-1. I photographed the scene and took scene evidence measurements utilizing a department issued Leica Total Station Serial Number 876910 which I positioned on the grass median of I-75, west of the canal. V-1 traveled onto the grass median for 158'5" before colliding with the guardrail. V-1 traveled on the grass median for another 171'7" before colliding with the chain link fence on the west canal embankment. V-1 continued past the chain link fence for 44'11" off of the west canal embankment, separated from the ground, then collided with a handrail and water management pole. V-1 was airborne for 81'5" before colliding with the canal east rock embankment. D-1 was ejected from V-1 and traveled 12'3" to final rest on the top of the embankment. I marked and measured the physical evidence on scene from which I was able to create the attached Reconstruction Diagram. Collier County Emergency Medical Services (EMS) Greater Naples Fire Rescue responded to the scene and Lieutenant Thomas Szempruch of Ladder 72 of pronounced D-1 deceased on scene at 11:51 a.m. The autopsy of D-1 of V-1 was conducted on Tuesday, October 2nd, 2018 at 08:30 a.m. The autopsy was conducted by Doctor Manfred C. Borges, Jr., Deputy Chief Medical Examiner of the District 20 Medical Examiner's Office. Doctor Borges concluded that D-1 of V-1's death was the result of blunt force injuries as a result of this crash. Utilizing accepted traffic crash reconstruction formulas, I was able to calculate the speed of V-1 at the location of separation from the ground before it traveled over the canal and collided with the rock embankment to be 76 miles per hour. V-1 entered into the median without any input from D-1 as evidenced by the lack of braking and steering action as the front and rear wheels tracked in line. No paint transfers or damage was observed on V-1 which indicated a collision with another vehicle. D-1 violated Florida State Statue 316.1925(1), careless driving, 316.187(2)(a), excessive speed, and 316.614(4)(b), safety belt usage. These violations were determined to be the cause of all property damage and injuries associated with this crash as well as the untimely death of D-1.

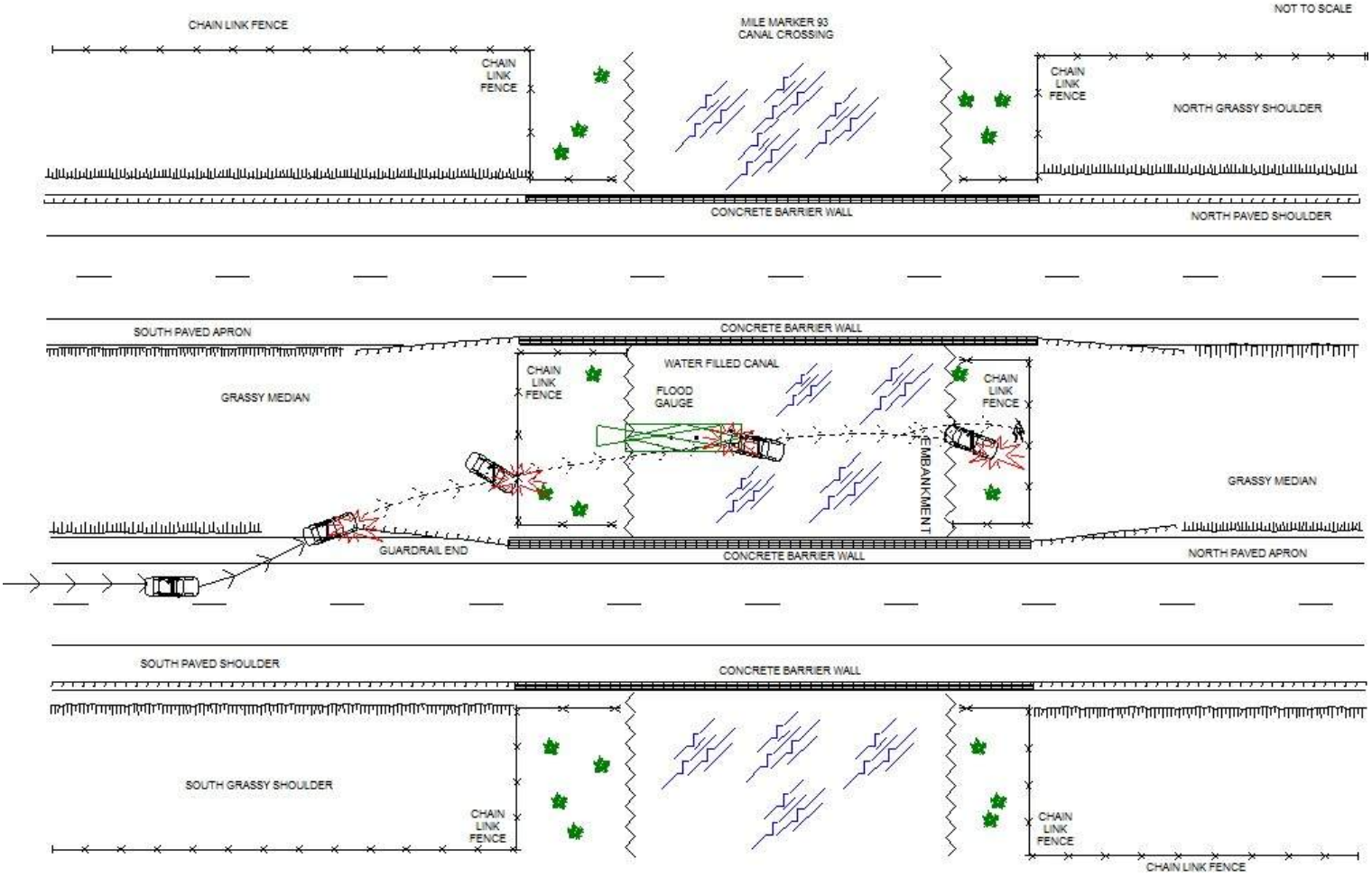
CASE CLOSING STATUS
Closed: Exception - The investigation is complete and no charges will be filed because the at-fault person expired as a result of this crash.

REPORTING OFFICER

ID/Badge #	Rank and Name	Department	Type of Department
3902	CORPORAL M. REED	FLORIDA HIGHWAY PATROL	FHP

INTERSTATE 75 (STATE ROAD 93)

NOT TO SCALE



FLORIDA TRAFFIC CRASH REPORT

LONG FORM ☐ SHORT FORM ☐ UPDATE ☒

(Electronic Version)

HIGHWAY SAFETY & MOTOR VEHICLES,
TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

Date of Crash	Time of Crash	Date of Report	Invest. Agency Report Number	HSMV Crash Report Number
12/Aug/2021 02:44 PM	12/Aug/2021 02:44 PM	16/Mar/2022 01:58 PM	FHPF21OFF039340	88551203

CRASH IDENTIFIERS

County Code	City Code	County of Crash	Place or City of Crash	Within City Limits	Time Reported	Time Dispatched
64	0	COLLIER	UNINCORPORATED	No	12/Aug/2021 02:44 PM	12/Aug/2021 02:44 PM

Time on Scene	Time Cleared Scene	Completed	Reason (if Investigation NOT Completed)	Notified By
12/Aug/2021 02:45 PM	12/Aug/2021 07:01 PM	Yes		Law Enforcement

ROADWAY INFORMATION

Crash Occured On Street, Road, Highway	❶ At Street Address#	❷ At Lattitude	and Longitude
I-75 / SR-93		26.1541146150714	-81.619554065415201

At Feet	Or Miles	Direction	❸ From Intersection With Street, Road, Highway	❹ Or From Milepost #
	4.00	East	CR-951 / COLLIER BOULEVARD	

Road System Identifier	Type Of Shoulder	Type Of Intersection
1 Interstate	1 Paved	1 Not at Intersection

CRASH INFORMATION (Check if Pictures Taken) ☒

light Condition	Weather Condition	Roadway Surface Condition	School Bus Related	Manner Of Collision
1 Daylight	1 Clear	1 Dry	1 No	3 Angle

First Harmful Event Type	First Harmful Event	First Harmful Event Location	Within Interchange	First Harmful Event Relation to Junction
	14	1 On Roadway	No	1 Non.Junction

Contributing Circumstances: Road	Contributing Circumstances: Road	Contributing Circumstances: Road
1 None		

Contributing Circumstances: Environment	Contributing Circumstances: Environment	Contributing Circumstances: Environment
1 None		

Work Zone Related	Crash In Work Zone	Type Of Work Zone	Workers In Work Zone	Law Enforcement In Work Zone
1 No				

VEHICLE (Check if Commercial) ☐

Vehicle	Motor Vehicle Type	Hit and Run	Veh License Number	State	Reg. Expires	Permanent Reg.	VIN
3	1 Vehicle in Transport	1 No	Z436NC	FL	03/Jul/2020	No	JA4AP4AU4BZ024349

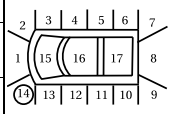
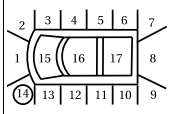
Year	Make	Model	Style	Color	Extent of Damage	Est. Damage	Towed Due To Damage	Vehicle Removed By	Rotation
2011	MITS	OUTLANDER	UT	BLU	Disabling	2000	Yes	T AND C TOWING	Rotation

Insurance Company	Insurance Policy Number
INFINITY AUTO INSURANCE COMPANY	109900886949001

Name of Vehicle Owner (Check Box If Business)	Current Address (Number and Street)	City and State	Zip Code
HENRY IGLESIAS OSENDI ☐	203 SE 16TH TER	CAPE CORAL FL	33990

	License Number	State	Reg. Expires	Permanent Reg.	VIN	Year	Make	Length	Axles
Trailer One:									
Trailer Two:									

Vehicle Traveling:	Direction	On Street, Road, Highway	At Est. Speed	Posted Speed	Total Lanes
	West	I-75 / SR-93	50	70	6

CMV Configuration	Cargo Body Type	Area of Initial Impact	Most Damaged Area
		 18. Undercarriage 19. Overturn 20. Windshield 21. Trailer	 18. Undercarriage 19. Overturn 20. Windshield 21. Trailer

Comm GVWR/GCWR	Trailer Type (trailer one)	Trailer Type (trailer two)

Haz. Mat. Release	Haz Mat. Placard	Number	Class

Motor Carrier Name	US DOT Number

Motor Carrier Address	City and State	Zip Code	Phone Number

Comm/Non-Commercial	Vehicle Body Type	Vehicle Defects (one)	Vehicle Defects (two)	Emergency Vehicle Use	Speciual Function of MV
	16 (Sport) Utility Vehicle	1 None		1 No	1 No Special Function

Vehicle Maneuver Action	Trafficway	Roadway Grade	Roadway Alignment	Most Harmful Event	Most Harmful Event Detail
1 Straight Ahead	4 Two-Way, Divided, Positive Median Barrier	1 Level	1 Straight	2 Collision with Non-Fixed Object	17 Struck By Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle

Traffic Control Device For This Vehicle	First (1) Sequence of Events	Second (2) Sequence of Events	Third (3) Sequence of Events	Fourth (4) Sequence of Events
1 No Controls	2 Collision with Non-Fixed Object 17 Struck By Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle			

VEHICLE (Check if Commercial) ☐

Vehicle	Motor Vehicle Type	Hit and Run	Veh License Number	State	Reg. Expires	Permanent Reg.	VIN
2	1 Vehicle in Transport	1 No	BGRDX	FL	29/Sep/2021	No	1C4BJWEG8CL174402

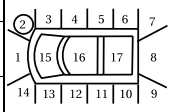
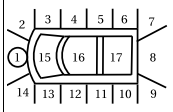
Year	Make	Model	Style	Color	Extent of Damage	Est. Damage	Towed Due To Damage	Vehicle Removed By	Rotation
2012	JEEP	WRANGLER	UT	BLU	Disabling	10000	Yes	T AND C TOWING	Rotation

Insurance Company	Insurance Policy Number
STATE FARM INS CO	C383059594

Name of Vehicle Owner (Check Box If Business)	Current Address (Number and Street)	City and State	Zip Code
MICHAEL CARTER ☐	2303 NW 36TH PL	CAPE CORAL FL	33993

	License Number	State	Reg. Expires	Permanent Reg.	VIN	Year	Make	Length	Axles
Trailer One:	MMUM42	FL	06/18/2022 00:00	No	5A4JVSJ13E2067683	2014	LOAD	19	1
Trailer Two:									

Vehicle Traveling:	Direction	On Street, Road, Highway	At Est. Speed	Posted Speed	Total Lanes
	West	I-75 / SR-93	70	70	6

CMV Configuration	Cargo Body Type	Area of Initial Impact	Most Damaged Area
		 18. Undercarriage 19. Overturn 20. Windshield 21. Trailer	 18. Undercarriage 19. Overturn 20. Windshield 21. Trailer

Comm GVWR/GCWR	Trailer Type (trailer one)	Trailer Type (trailer two)
	Boat Trailer	

Haz. Mat. Release	Haz Mat. Placard	Number	Class

Motor Carrier Name	US DOT Number

Motor Carrier Address	City and State	Zip Code	Phone Number

Comm/Non-Commercial	Vehicle Body Type	Vehicle Defects (one)	Vehicle Defects (two)	Emergency Vehicle Use	Speciual Function of MV
	16 (Sport) Utility Vehicle	1 None		1 No	1 No Special Function

Vehicle Maneuver Action	Trafficway	Roadway Grade	Roadway Alignment	Most Harmful Event	Most Harmful Event Detail
1 Straight Ahead	4 Two-Way, Divided, Positive Median Barrier	1 Level	1 Straight	2 Collision with Non-Fixed Object	14 Motor Vehicle in Transport

Traffic Control Device For This Vehicle	First (1) Sequence of Events	Second (2) Sequence of Events	Third (3) Sequence of Events	Fourth (4) Sequence of Events
1 No Controls	2 Collision with Non-Fixed Object 14 Motor Vehicle in Transport	1 Overturn/Rollover		

VEHICLE (Check if Commercial) ☐

Vehicle	Motor Vehicle Type	Hit and Run	Veh License Number	State	Reg. Expires	Permanent Reg.	VIN
1	1 Vehicle in Transport	1 No	QWMK81	FL	20/Mar/2022	No	JN1EV7BP9MM703401

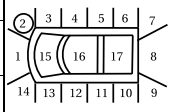
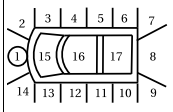
Year	Make	Model	Style	Color	Extent of Damage	Est. Damage	Towed Due To Damage	Vehicle Removed By	Rotation
2021	INFI	Q50	4D	BLK	Disabling	60000	Yes	T AND C TOWING	Rotation

Insurance Company	Insurance Policy Number
INFINITY INDEMNITY INSURANCE COMPANY	109910983197001

Name of Vehicle Owner (Check Box If Business)	Current Address (Number and Street)	City and State	Zip Code
DIEGO ERNESTO AVILA MAYO ☐	3301 SW 92 AVE	MIAMI FL	33165

	License Number	State	Reg. Expires	Permanent Reg.	VIN	Year	Make	Length	Axles
Trailer One:									
Trailer Two:									

Vehicle Traveling:	Direction	On Street, Road, Highway	At Est. Speed	Posted Speed	Total Lanes
	East	I-75 / SR-93	90	70	6

CMV Configuration	Cargo Body Type	Area of Initial Impact	Most Damaged Area
		 18. Undercarriage 19. Overturn 20. Windshield 21. Trailer	 18. Undercarriage 19. Overturn 20. Windshield 21. Trailer

Comm GVWR/GCWR	Trailer Type (trailer one)	Trailer Type (trailer two)

Haz. Mat. Release	Haz Mat. Placard	Number	Class

Motor Carrier Name	US DOT Number

Motor Carrier Address	City and State	Zip Code	Phone Number

Comm/Non-Commercial	Vehicle Body Type	Vehicle Defects (one)	Vehicle Defects (two)	Emergency Vehicle Use	Speciual Function of MV
	1 Passenger Car	1 None		1 No	1 No Special Function

Vehicle Maneuver Action	Trafficway	Roadway Grade	Roadway Alignment	Most Harmful Event	Most Harmful Event Detail
1 Straight Ahead	4 Two-Way, Divided, Positive Median Barrier	1 Level	1 Straight	2 Collision with Non-Fixed Object	14 Motor Vehicle in Transport

Traffic Control Device For This Vehicle	First (1) Sequence of Events	Second (2) Sequence of Events	Third (3) Sequence of Events	Fourth (4) Sequence of Events
1 No Controls	43 Ran Off Roadway, Left	14 Motor Vehicle in Transport	27 Guardrail Face	

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Phone Number	Re-Exam
1	1 Driver	1	AMARI XAVIER CALVIN JONES	26/Feb/2001	1 Male		No

Address	City	State	Zip Code
2720 NW 26TH AVE	OAKLAND PARK	FL	33311

Driver License Number	State	Expires	DL Type	Req. End.	Injury Severity	Ejection
J520019010660	FL	26/Feb/2028	7 None	3 No Req Endorsement	3 Non-incapacitating	2 Ejected, Totally

		st. Agency Report Number **FHPF21OFF039340**	HSMV Crash Report Number **88551203**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
2 None Used -Motor Vehicle Occupant	**6 Deployed-Combination**			**1 Left**	**1 Front**	

Drivers Actions at Time of Crash (first)	Drivers Actions at Time of Crash (second)	Driver Distracted By	Vision Obstruction
31 Operated MV in Erratic, Reckless or Aggressive Manner		**1 Not Distracted**	**1 Vision Not Obscured**

Drivers Actions at Time of Crash (third)	Drivers Actions at Time of Crash (fourth)	Drivers Condition at Time of Crash
		77 Other, Explain in Narrative

Suspected Alcohol Use	Alcohol Tested	Alcohol Test Type	Alcohol Test Result	BAC	Suspected Drug Use	Drug Tested	Drug Test Type	Drug Test Result
1 No	**1 Test Not Given**				**1 No**	**1 Test Not Given**		

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
2 EMS	**COLLIER COUNTY EMS**	**210-53-124**	**LEE MEMORIAL HOSPITAL**

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Phone Number	Re-Exam
2	**1 Driver**	**2**	**MICHAEL CARTER**	**29/Sep/1971**	**1 Male**		**No**

Address	City	State	Zip Code
2303 NW 36TH PL	**CAPE CORAL**	**FL**	**33993**

Driver License Number	State	Expires	DL Type	Req. End.	Injury Severity	Ejection
C636540713490	**FL**	**29/Sep/2021**	**5 E/Operator**	**3 No Req Endorsement**	**4 Incapacitating**	**1 Not Ejected**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
3 Shoulder and Lap Belt Used	**3 Deployed-Front**			**1 Left**	**1 Front**	

Drivers Actions at Time of Crash (first)	Drivers Actions at Time of Crash (second)	Driver Distracted By	Vision Obstruction
1 No Contributing Action		**1 Not Distracted**	**1 Vision Not Obscured**

Drivers Actions at Time of Crash (third)	Drivers Actions at Time of Crash (fourth)	Drivers Condition at Time of Crash
		1 Apparently Normal

Suspected Alcohol Use	Alcohol Tested	Alcohol Test Type	Alcohol Test Result	BAC	Suspected Drug Use	Drug Tested	Drug Test Type	Drug Test Result
1 No	**1 Test Not Given**				**1 No**	**1 Test Not Given**		

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
2 EMS	**COLLIER COUNTY EMS**	**CC2021-08-120053124**	**NAPLES COMMUNITY HOSPITAL**

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Injury Severity	Ejection
3	**3 Passenger**	**2**	**SHELLI LYNN CARTER**	**02/Jan/1974**	**2 Female**	**5 Fatal (within 30 days)**	**1 Not Ejected**

Address	City	State	Zip Code
2303 NW 36TH PLACE	**CAPE CORAL**	**FL**	**33993**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
3 Shoulder and Lap Belt Used	**3 Deployed-Front**			**3**	**1**	

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
2 EMS	**COLLIER COUNTY EMD**	**210-53-124**	**LEE MEMORIAL HOSPITAL**

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Phone Number	Re-Exam
4	**1 Driver**	**3**	**VERONICA IGLESIAS**	**06/Oct/1970**	**2 Female**	**336-301-2277**	**No**

Address	City	State	Zip Code
203 SE 16TH TER	**CAPE CORAL**	**FL**	**33990**

Driver License Number	State	Expires	DL Type	Req. End.	Injury Severity	Ejection
I242860708660	**FL**	**06/Oct/2027**	**5 E/Operator**	**3 No Req Endorsement**	**1 None**	**1 Not Ejected**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
3 Shoulder and Lap Belt Used	**2 Not Deployed**			**1 Left**	**1 Front**	

Drivers Actions at Time of Crash (first)	Drivers Actions at Time of Crash (second)	Driver Distracted By	Vision Obstruction
1 No Contributing Action		**1 Not Distracted**	**1 Vision Not Obscured**

Drivers Actions at Time of Crash (third)	Drivers Actions at Time of Crash (fourth)	Drivers Condition at Time of Crash
		1 Apparently Normal

Suspected Alcohol Use	Alcohol Tested	Alcohol Test Type	Alcohol Test Result	BAC	Suspected Drug Use	Drug Tested	Drug Test Type	Drug Test Result
1 No	**1 Test Not Given**				**1 No**	**1 Test Not Given**		

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Injury Severity	Ejection
5	**3 Passenger**	**3**	**HENRY IGLESIAS MEDINA**	**18/Feb/2006**	**1 Male**	**1 None**	**1 Not Ejected**

Address	City	State	Zip Code
203 SE 16TH TER	**CAPE CORAL**	**FL**	**33990**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
3 Shoulder and Lap Belt Used	**1 Not Applicable**			**3**	**2**	

		st. Agency Report Number	HSMV Crash Report Number
12/Aug/2021 02:44 PM	12/Aug/2021 02:44 PM	**FHPF21OFF039340**	**88551203**

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

VIOLATIONS

Person#	Name	Florida Statute Number	Charge	Citation
1	**AMARI XAVIER CALVIN JONES**	**322.34(6)(a)**	**OPERATING WITHOUT A DL CAUSING DEATH OR SERIOUS BODILY INJUR**	**ACYF6OE**
1	**AMARI XAVIER CALVIN JONES**	**316.1935(4)(a)**	**FLEEING/ELUDE OFFICER AFTER CRASH INVOLVING PROPERTY DAMAGE**	**ACYF6QE**
1	**AMARI XAVIER CALVIN JONES**	**316.192(3)(c)2**	**RECKLESS DRIVING- SERIOUS BODILY INJURY**	**ACYF6RE**
1	**AMARI XAVIER CALVIN JONES**	**322.34(6)(a)**	**OPERATING WITHOUT A DL CAUSING DEATH OR SERIOUS BODILY INJUR**	**ACYF6PE**

NON VEHICLE PROPERTY DAMAGE

Vehicle#	Person#	Property Damage - Other Than Vehicle	Est. Amount	Business	Owner's Name	Address	City & State	Zip Code
		BOAT - 2010 DENO MARINE - 17' - OUTBOARD	**5000**	**No**	**MICHAEL CARTER**	**2303 NW 36TH PL**	**CAPE CORAL FL**	**33993**

NON VEHICLE PROPERTY DAMAGE

Vehicle#	Person#	Property Damage - Other Than Vehicle	Est. Amount	Business	Owner's Name	Address	City & State	Zip Code
		GUARDRAIL	**10000**	**Yes**	**FDOT**	**2981 NE PINE ISLAND ROAD**	**CAPE CORAL FL**	**33909**

NARRATIVE

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
1452	SGT	D.W. COOPER	F	FLORIDA HIGHWAY PATROL	239-344-1730	Aug 13, 2021

Vehicle 1 was traveling east at a high rate of speed on Interstate 75 in the inside lane in the area of the 97-mile marker. Vehicle 2 (Jeep towing boat) was traveling west on Interstate 75 in the inside lane. Vehicle 3 was traveling west on Interstate 75 directly behind vehicle 2. Vehicle 1 approached slower traffic ahead, veered left, rotated and crossed the center grass median. Vehicle 1's right front collided with vehicle 2's right front. Debris from this crash struck the front left of vehicle 3. Vehicle 1 rotated and came to final rest on the north shoulder of Interstate 75 with the right front and rear guardrail and the front in emergency lane. Vehicle 2 rotated and came to rest on the westbound travel lanes facing northeast. The boat and trailer became separated from vehicle 2 with the boat facing east in the outside lane and the trailer in the median. Vehicle 3 came to rest in the median facing west.

Name of Deceased: Shelli Lynn Carter
Date of Birth: 01/02/1974
Date of Death: 08/12/21
Time of Death: 7:36 PM
Pronounced By: Dr. Robert O'Connor (Lee Memorial Hospital).
THI Case: FHP721-64-016.
FLAIR Investigator: Master Corporal John T. Schultz ID 478 (Florida Highway Patrol).
Photographs Taken By: Corporal John T. Schultz ID 478. Corporal James Harris ID 979 and Corporal Justin Close ID 753.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
2333	LT	J.A. VAN ARSDALE	F	FLORIDA HIGHWAY PATROL	239-344-1730	Sep 20, 2021

This update was performed due to corrections needed for this report created by Sergeant D. Cooper. Sergeant Cooper retired from the Florida Highway Patrol (FHP) during this investigation, and these corrections are being made to correct errors and update new information obtained during the investigation.

On Thursday, August 12, 2021, at 02:33pm, the driver of V-01, Amari Jones, fled from an attempted traffic stop by Sergeant Cooper on southbound I-75 at mile marker 117 in Lee County. Prior to this traffic crash, Trooper A. Marras was attempting to overtake Amari Jones for another traffic stop.

This crash report update corrects the following:
1) The crash occurred 4 miles east of CR 951.
2) The trailer for V-02 is 19'.
3) V-02 second sequence of events is "non-collistion / overturned".
4) V-03 is classifed as a Sport Utility Vehicle.
5) The condition of the driver of V-01 is "other".
6) The driver of V-01 did not have his seatbelt on.
7) The air bags for V-02 were deployed in combination.
8) The driver of V-02 has injuries which were "incapacitating"
9) Vehicle 2 was traveling in the right lane of westbound I-75 and the area of collision was in the right lane.
10) V-03 was traveling west in the left lane of I-75, and was not behind V-02.
11) V-02 overturned after the crash occurred.
12) V-01 came to final rest facing south on top of the north shoulder guardrail of I-75.

The diagram has been changed to reflect these updates.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
2333	LT	J.A. VAN ARSDALE	F	FLORIDA HIGHWAY PATROL	239-344-1730	Oct 22, 2021

This update is to reflect the current open Traffic Homicide Investigation.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
2333	LT	J.A. VAN ARSDALE	F	FLORIDA HIGHWAY PATROL	239-344-1730	Nov 22, 2021

This update is to reflect the current open Traffic Homicide Investigation as of Monday, November 22, 2021.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
2333	LT	J.A. VAN ARSDALE	F	FLORIDA HIGHWAY PATROL	239-344-1730	Dec 22, 2021

This update is to reflect the current open Traffic Homicide Investigation as of Wednesday, December 22, 2021.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
2333	LT	J.A. VAN ARSDALE	F	FLORIDA HIGHWAY PATROL	239-344-1730	Feb 20, 2022

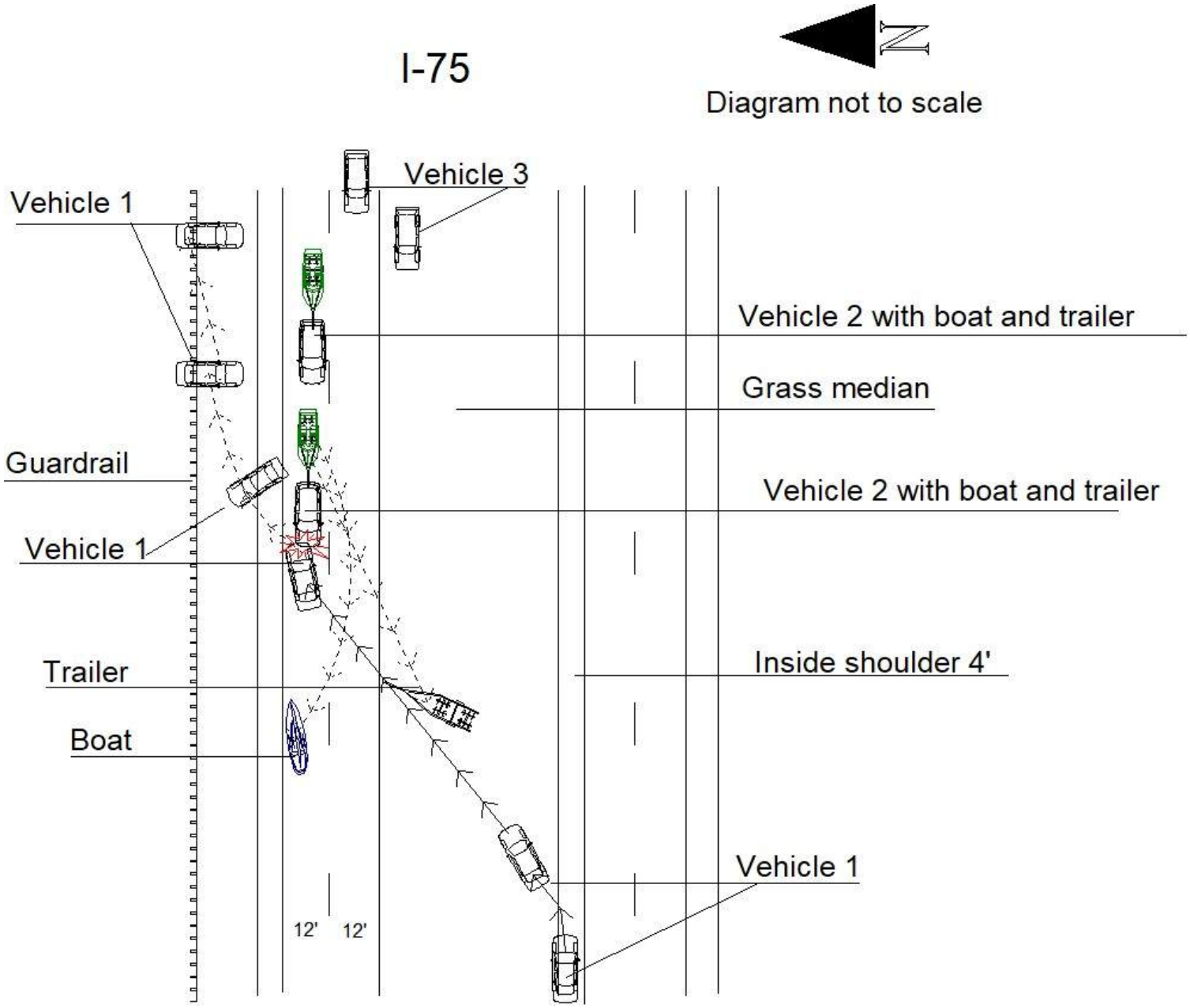
This update is to reflect the current open Traffic Homicide Investigation as of Sunday, February 20, 2022.

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
2333	LT	J.A. VAN ARSDALE	F	FLORIDA HIGHWAY PATROL	239-344-1730	Mar 16, 2022

As of Wednesday, March 16, 2022, this crash investigation is complete.

REPORTING OFFICER

ID/Badge #	Rank and Name	Department	Type of Department
2333	LT J.A. VAN ARSDALE	FHPF	FHP


I-75
N
Diagram not to scale
Vehicle 3
Vehicle 1
Vehicle 2 with boat and trailer
Grass median
Guardrail
Vehicle 2 with boat and trailer
Vehicle 1
Trailer
Inside shoulder 4'
Boat
Vehicle 1
12'
12'

FLORIDA TRAFFIC CRASH REPORT

LONG FORM [X] SHORT FORM [ ] UPDATE [ ]

(Electronic Version)

HIGHWAY SAFETY & MOTOR VEHICLES,
TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

Date of Crash	Time of Crash	Date of Report	Invest. Agency Report Number	HSMV Crash Report Number
06/Mar/2021 03:40 AM	06/Mar/2021 03:40 AM	06/Mar/2021 12:48 PM	FHPF21OFF010630	85230205

CRASH IDENTIFIERS

County Code	City Code	County of Crash	Place or City of Crash	Within City Limits	Time Reported	Time Dispatched
64	0	COLLIER	UNINCORPORATED	No	06/Mar/2021 03:44 AM	06/Mar/2021 03:49 AM

Time on Scene	Time Cleared Scene	Completed	Reason (if Investigation NOT Completed)	Notified By
06/Mar/2021 04:00 AM	06/Mar/2021 01:36 PM	Yes		Law Enforcement

ROADWAY INFORMATION

Crash Occured On Street, Road, Highway	1 At Street Address#	2 At Lattitude	and Longitude
I-75 N (SR-93)		26.153130000000001	-81.554630000000003

At Feet	Or Miles	Direction	3 From Intersection With Street, Road, Highway	4 Or From Milepost #
	8.00	East	CR 951	

Road System Identifier	Type Of Shoulder	Type Of Intersection
1 Interstate	1 Paved	1 Not at Intersection

CRASH INFORMATION (Check if Pictures Taken) [X]

light Condition	Weather Condition	Roadway Surface Condition	School Bus Related	Manner Of Collision
5 Dark-Not Lighted	1 Clear	1 Dry	1 No	77 Other, Explain in Narrative

First Harmful Event Type	First Harmful Event	First Harmful Event Location	Within Interchange	First Harmful Event Relation to Junction
	30	3 Shoulder	No	1 Non.Junction

Contributing Circumstances: Road	Contributing Circumstances: Road	Contributing Circumstances: Road
1 None		

Contributing Circumstances: Environment	Contributing Circumstances: Environment	Contributing Circumstances: Environment
1 None		

Work Zone Related	Crash In Work Zone	Type Of Work Zone	Workers In Work Zone	Law Enforcement In Work Zone
1 No				

VEHICLE (Check if Commercial) [ ]

Vehicle	Motor Vehicle Type	Hit and Run	Veh License Number	State	Reg. Expires	Permanent Reg.	VIN
1	1 Vehicle in Transport	1 No	AZ87276	IL	16/Feb/2021	No	1C4PJMDX3JD578159

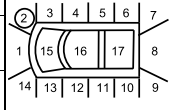
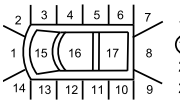
Year	Make	Model	Style	Color	Extent of Damage	Est. Damage	Towed Due To Damage	Vehicle Removed By	Rotation
2018	JEEP	CHEROKEE	UT	BLK	Disabling	20000	Yes	ECONOMY TOWING	Rotation

Insurance Company	Insurance Policy Number
GEICO INS CO	4532611508

Name of Vehicle Owner (Check Box If Business)	Current Address (Number and Street)	City and State	Zip Code
MICHELLE DNIECE HALPER CROW [ ]	3500 EL CONQUISTADOR PKWY	BRADENTON FL	34210

	License Number	State	Reg. Expires	Permanent Reg.	VIN	Year	Make	Length	Axles
Trailer One:									
Trailer Two:									

Vehicle Traveling:	Direction	On Street, Road, Highway	At Est. Speed	Posted Speed	Total Lanes
	South	I-75 (SR-93)	88	70	4

CMV Configuration	Cargo Body Type	Area of Initial Impact	Most Damaged Area
			

Comm GVWR/GCWR	Trailer Type (trailer one)	Trailer Type (trailer two)

Haz. Mat. Release	Haz Mat. Placard	Number	Class

Motor Carrier Name	US DOT Number

Motor Carrier Address	City and State	Zip Code	Phone Number

Comm/Non-Commercial	Vehicle Body Type	Vehicle Defects (one)	Vehicle Defects (two)	Emergency Vehicle Use	Speciual Function of MV
	16 (Sport) Utility Vehicle	1 None		1 No	1 No Special Function

Vehicle Maneuver Action	Trafficway	Roadway Grade	Roadway Alignment	Most Harmful Event	Most Harmful Event Detail
1 Straight Ahead	4 Two-Way, Divided, Positive Median Barrier	1 Level	1 Straight	1 Non-Collision	1 Overturn/Rollover

Traffic Control Device For This Vehicle	First (1) Sequence of Events	Second (2) Sequence of Events	Third (3) Sequence of Events	Fourth (4) Sequence of Events
1 No Controls	43 Ran Off Roadway, Left	30 Concrete Traffic Barrier	1 Overturn/Rollover	

PERSON RECORD

Person#	Description	Vehicle #	Name	Date of Birth	Sex	Phone Number	Re-Exam
2	1 Driver	1	EDDY JEAN LAURENT	29/Nov/2003	1 Male		No

Address	City	State	Zip Code
123 SAN AVELLINO CT	BRADENTON	FL	34208

Driver License Number	State	Expires	DL Type	Req. End.	Injury Severity	Ejection
UK			7 None		5 Fatal (within 30 days)	2 Ejected, Totally

		st. Agency Report Number	HSMV Crash Report Number
		FHPF21OFF010630	**85230205**

Restraint System	Air Bag Deployed	Helmet Use	Eye Protection	Seating Location Seat	Seating Location Row	Seating Location Other
2 None Used -Motor Vehicle Occupant	**6 Deployed-Combination**		**3 Not Applicable**	**1 Left**	**1 Front**	

Drivers Actions at Time of Crash (first)	Drivers Actions at Time of Crash (second)	Driver Distracted By	Vision Obstruction
17 Exceeded Posted Speed	**26 Ran off Roadway**	**2 Electronic Communication Devices (cell phone, etc.)**	**1 Vision Not Obscured**

Drivers Actions at Time of Crash (third)	Drivers Actions at Time of Crash (fourth)	Drivers Condition at Time of Crash
29 Over.Correcting/Over.Steering		**1 Apparently Normal**

Suspected Alcohol Use	Alcohol Tested	Alcohol Test Type	Alcohol Test Result	BAC	Suspected Drug Use	Drug Tested	Drug Test Type	Drug Test Result
88 Unknown	**1 Test Not Given**				**88 Unknown**	**1 Test Not Given**		

Source of Transport to Medical Facility	EMS Agency Name or ID	EMS Run Number	Medical Facility Transported To
1 Not Transported			

WITNESSES

Name	Address	City	State	Zip Code
AARON CHRISTOPHER MAKARA	**12945 VANDERBILT DR UNIT 504**	**NAPLES**	**FL**	**34110**

NARRATIVE

ID Number	Rank	Name	Troop / Post	Officer Agency	Phone Number	Date Created
3389	CPL	J.A. HARRIS	F	FLORIDA HIGHWAY PATROL	239-344-1730	Mar 06, 2021

ASSIGNMENT

On Saturday, March 6, 2021 at 4:04 a.m., the Florida Highway Patrol Regional Communications Center notified me of this fatal traffic crash that occurred on Southbound Interstate-75 at Mile Marker 93, Collier County, Florida. I arrived on scene on that same day at 5:27 a.m. and conducted a Traffic Homicide investigation.

CRASH ANALYSIS SUMMARY

During the investigation the crash scene and any following referenced physical evidence were documented using an instrument referred to as the Leica Total Station 12 (S/N 879578). All relevant roadway and physical evidence measurements addressed in this summary are contained in the "Field Notes" packet for this case. Additionally, many investigative details used to formulate the summarized conclusions in this report may also be found in the "Field Notes" packet for this case. There was no known video footage of this crash. Recorded weather conditions for the date, time, and area of the crash indicated that it was clear. The official sunrise time of record for that day was 6:46 a.m. according to Sunrise-Sunset Calendar website.

I-75 in the area of the crash was a flat and level four-lane highway oriented in an east and west direction. Although this portion of I-75 was oriented in an east and west direction, its designation was a northbound and southbound highway. Each lane of I-75 measured 12' in width and was constructed of traffic worn asphalt with a calculated coefficient of friction value of .78. This portion of I-75 was constructed with a 90' concrete bridge that transected a manmade drainage waterway. The surface of the bridge had a calculated coefficient of friction value of .78. The posted speed limit of I-75 was 70 miles per hour.

D01, Eddy Jean Laurent (DOB: 11/29/2003), operated V01, a black 2018 Jeep Cherokee from 3500 El Conquistador Parkway, Bradenton, Florida and traveled south on I-75, toward Collier County. V01 was a sport utility vehicle equipped with a Type II-A occupant restraint system consisting of a lap belt and shoulder harness for all occupant positions of V01. Additionally, V01 was equipped with supplemental restraint system (SRS) consisting of a combination of front, side and knee airbags. D01 did not utilize the occupant restraint system of V01 and the airbags deployed. On the morning of the crash, D01 stole V01 from parking space number 262 at 3500 El Conquistador Parkway. D01 did not possess a valid Florida operator's license. D01 was identified as the driver and sole occupant of V01 by the first on scene witness. D01's identity was confirmed by fingerprint.

A records search through the National Highway Traffic Safety Administration (NHTSA) revealed there were no safety issues or recalls of V01 that caused or contributed to the crash.

After stealing V01, D01 traveled south in I-75 in V01. After passing the toll both at mile marker 100, V01 passed to the right of witness, Aaron Makara. V01 continued south and transitioned into the inside lane and continued south. As V01 continued south, D01 controlled V01 with only his left hand while his cell phone occupied his right hand. Using only his left hand to steer, V01 began to drift left onto the grass median. V01 created a furrow path as it traveled on the shoulder for 105' before D01 reacted to the upcoming guard rail face. V01 created a crossover furrow on the shoulder as D01 over steered to the right and lost control of V01. V01 traveled 102' before it reentered the paved portion of the roadway and headed toward the bridge wall. V01 created 150' of yaw marks as it traveled across both travel lanes and into the concrete bridge wall. The right front of V01 collided with the bridge wall redirecting V01 northeast into a right-side leading slide precipitating an overturning event. V01 traveled 70' and overturned. V01 overturned for 210' and ejected D01 out of the sunroof into the inside lane. V01 overturned an additional 36' and came to an uncontrolled stop upright in the outside lane faced north. D01 came to rest in the inside lane with his cell phone in his right hand, 36' west of V01.

Traffic crash and reconstruction combined speed formulas across multiple surfaces were used to determine V01 traveled at a minimum speed between 88 miles per hour and 96 miles per hour as he lost control of V01.

After V01 came to rest, motorists stopped on scene and notified 9-1-1. Collier County EMS and Greater Naples Fire Rescue responded to the scene and assessed D01.

On March 6, 2021, Paramedic Will Hamilton pronounced D01 deceased on scene at 3:56 a.m.

On March 10, 2021 at 12:45 p.m., Dr. Andrea Minyard of the District 20 Medical Examiner's Office, Naples performed the autopsy of D01. Dr. Minyard concluded the cause of death to be traumatic injuries of the chest and abdomen as a result of a motor vehicle accident.

By stealing V01 from the registered owner and causing damage to it, D01 was in violation of Florida State Statute 812.014 (1a3b) entitled "Grand Theft". A stolen vehicle report was filed under case number: 2010-006179 with Manatee County Sheriff's Department.

By operating V01 without a valid Florida Driver License, D01 was in violation of Florida State Statute 322.03(1) entitled "Drivers must be licensed".

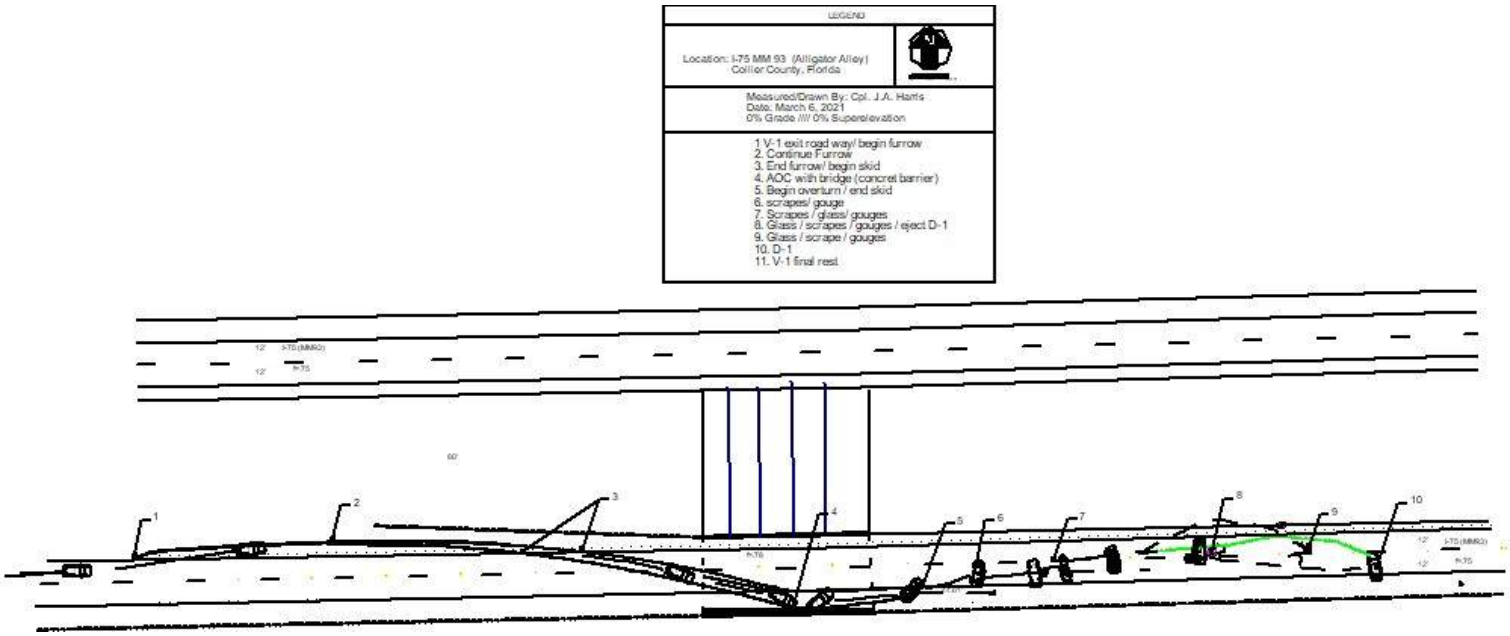
By operating V01 at a speed between 88 and 96 miles per hour where the posted speed limit is 70 miles per hour, D01 violated Florida State Statute 316.183 entitled "Unlawful speed".

By failing to maintain control of V01 and exiting the roadway, D01 was in violation of Florida State Statute 316.1925 entitled "Careless driving".

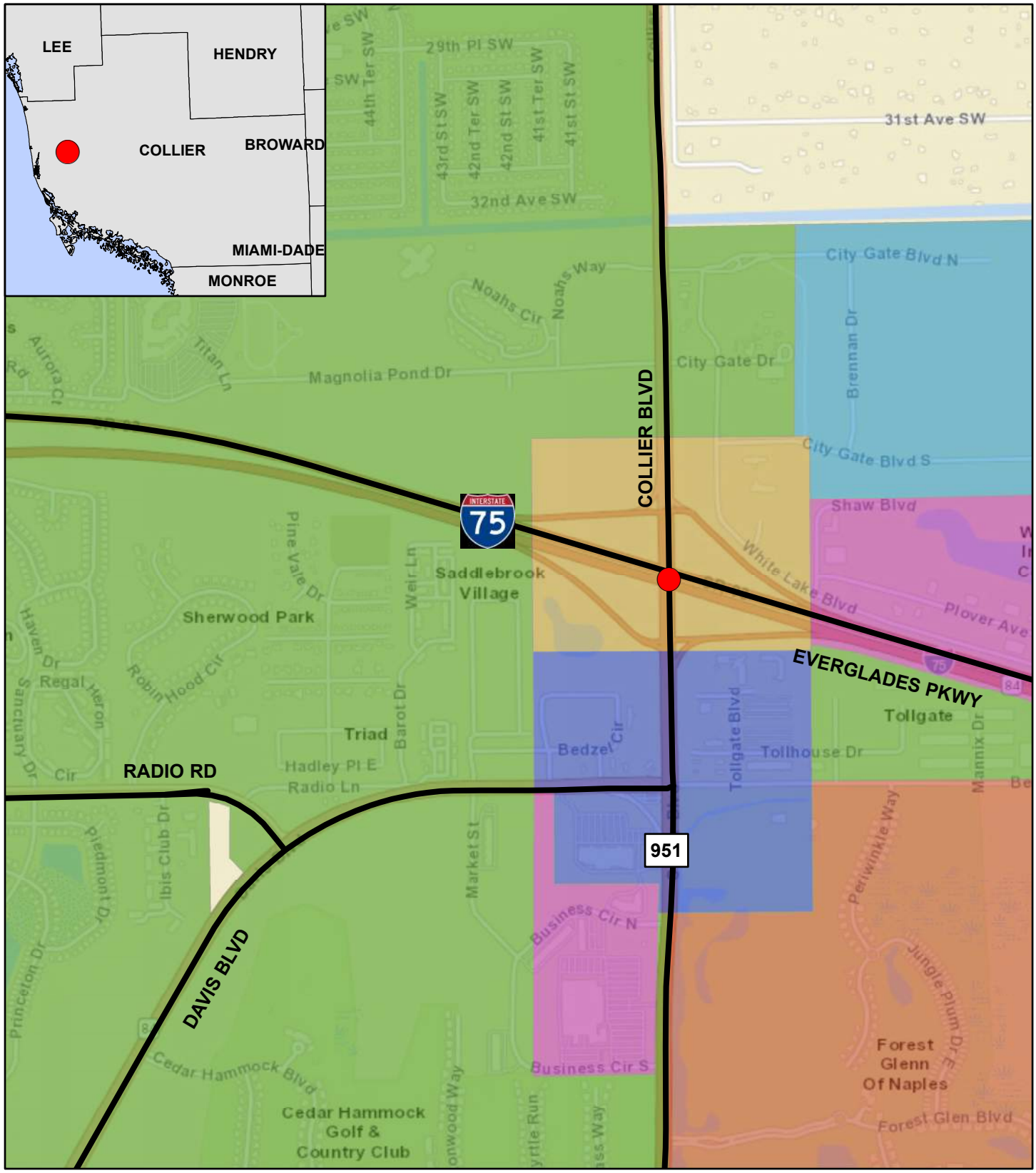
CASE CLOSING STATUS
Exception: by Deceased Person - this investigation is complete, and no charges will be filed because the at-fault person expired as a result of this crash.

REPORTING OFFICER

ID/Badge #	Rank and Name	Department	Type of Department
3389	**CPL J.A. HARRIS**	**FLORIDA HIGHWAY PATROL**	**FHP**


LEGEND
Location: I-75 MM 93 (Alligator Alley)
Collier County, Florida
Measured/Drawn By: Cpl. J.A. Harris
Date: March 6, 2021
0% Grade /// 0% Superelevation
1 V-1 exit road way/ begin furrow
2. Continue Furrow
3. End furrow/ begin skid
4. AOC with bridge (concrete barrier)
5. Begin overturn / end skid
6. scrapes/ gouge
7. Scrapes / glass/ gouges
8. Glass / scrapes / gouges / eject D-1
9. Glass / scrape / gouges
10. D-1
11. V-1 final rest
I-75 (MM92)
N-75
60'
1
2
3
4
5
6
7
8
9
10

Appendix E: Land Use Map



Miles
0 0.1

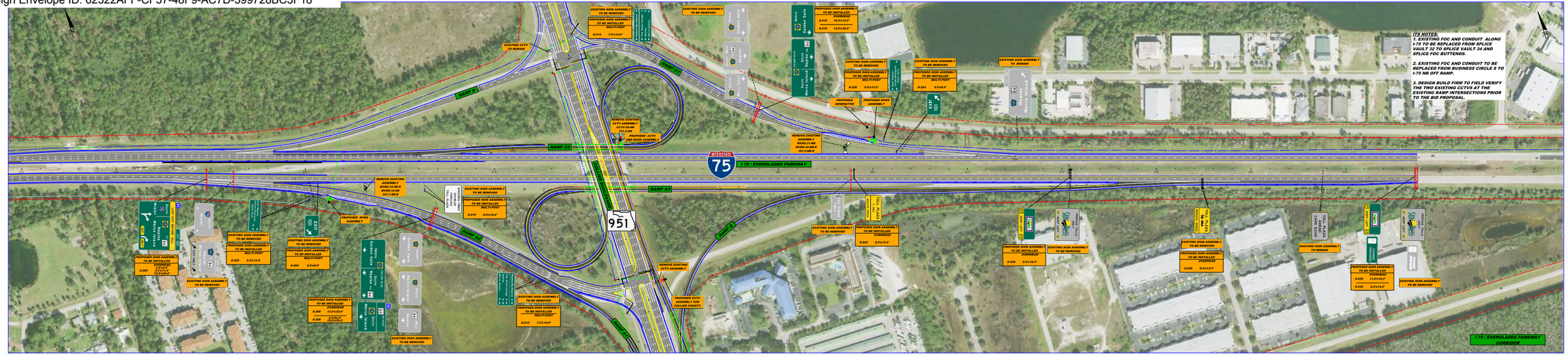
Future Land Use (2045) Map

N
W E
S

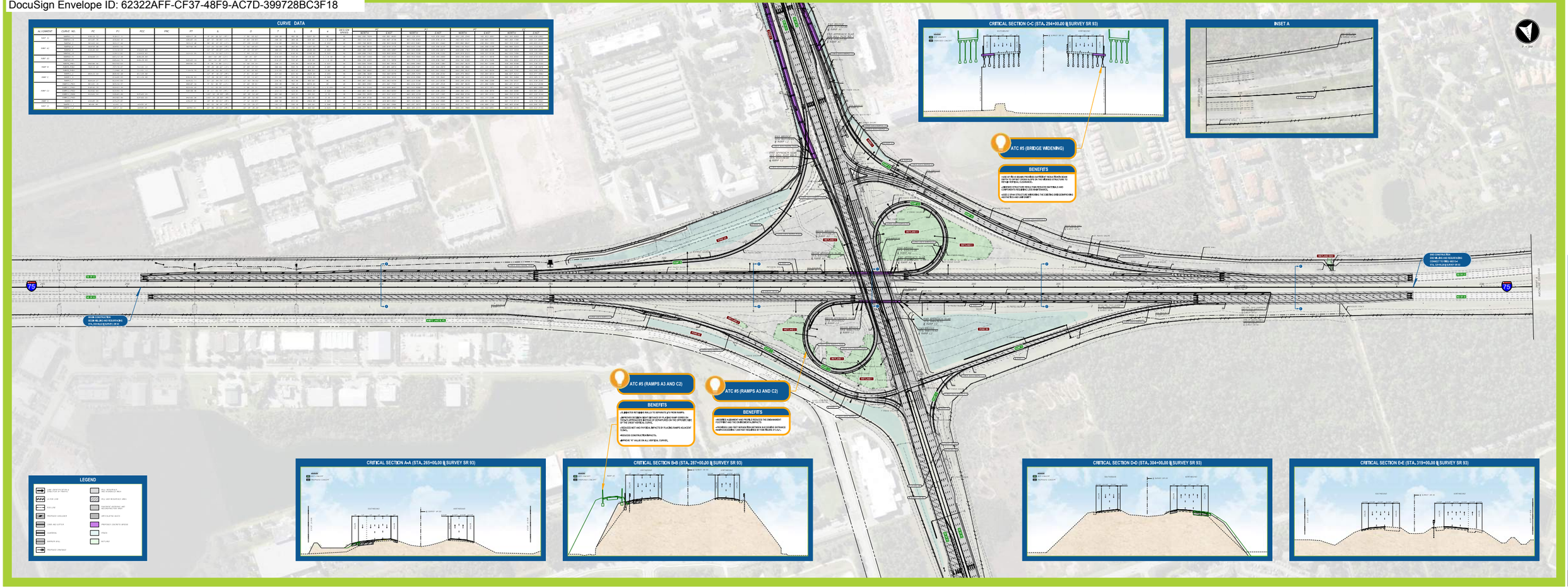
Data Sources:
Collier County GIS HUB
Florida GeoPlan Center
FDOT TDA Office

- Project Location
- Major Roads
- Industrial District
- Interchange Activity Center Subdistrict
- Mixed Use Activity Center Subdistrict
- Residential Density Bands
- Urban Residential Fringe Subdistrict
- Urban Residential Subdistrict

Appendix F: Conceptual RFP and D/B Figures



ROADWAY PLANS

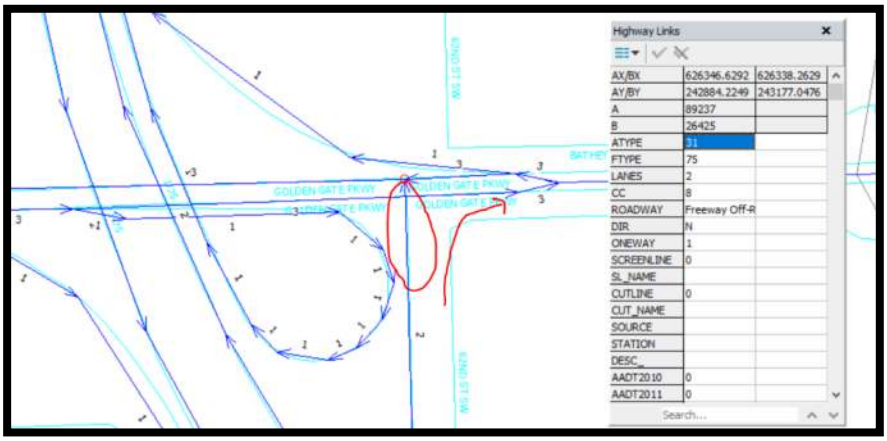


Appendix G: Travel Demand Forecasting Information

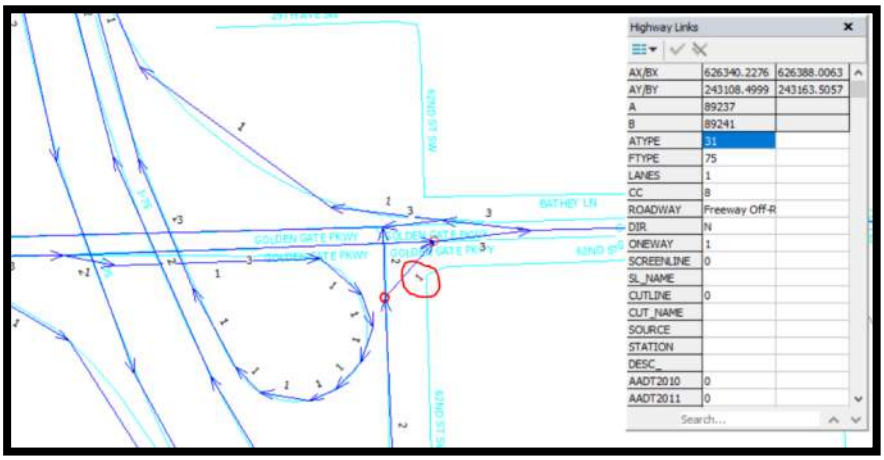
D1RPM Subarea 2015 and 2045 Network Updates

Lane Number Update

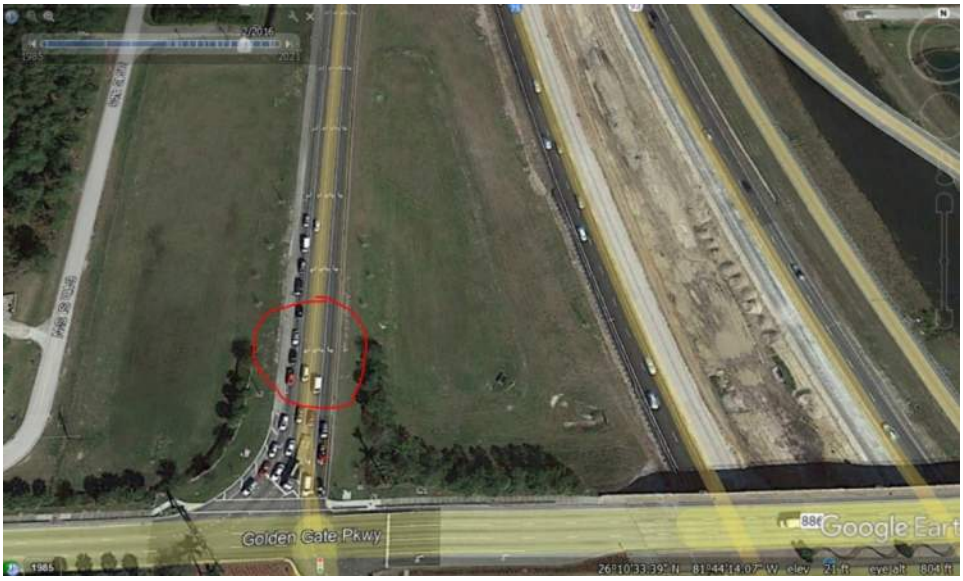
1. I-75 NB off-ramp should be connected to Gates Pkwy EB

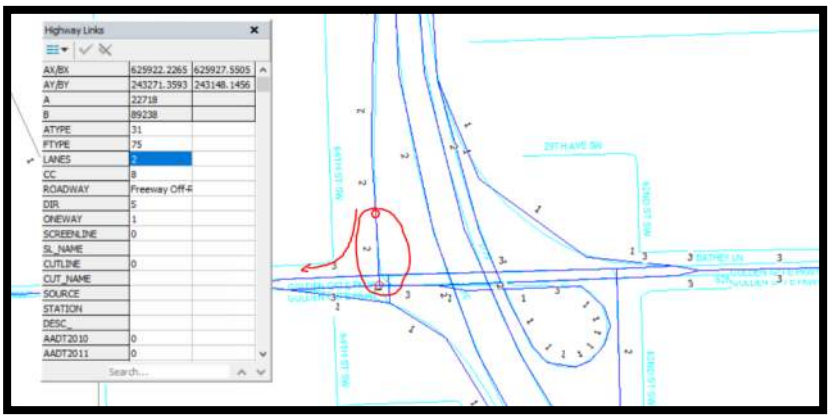


- Added a new link with Lanes=1

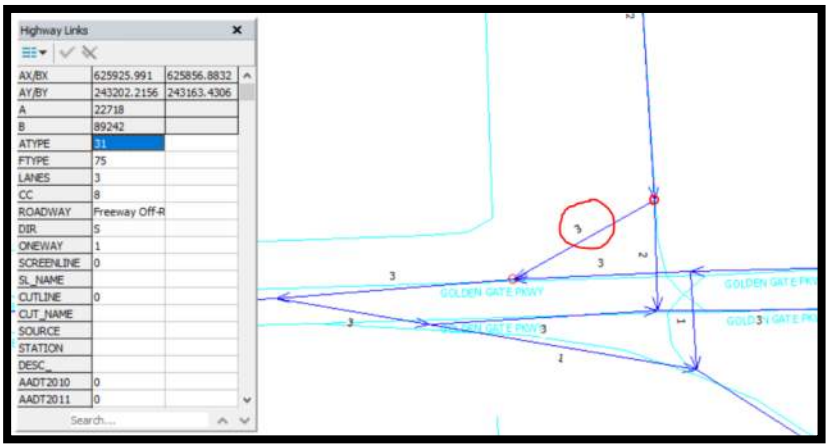


2. I-75 SB off-ramp should be connected to Golden Gates Pkwy WB

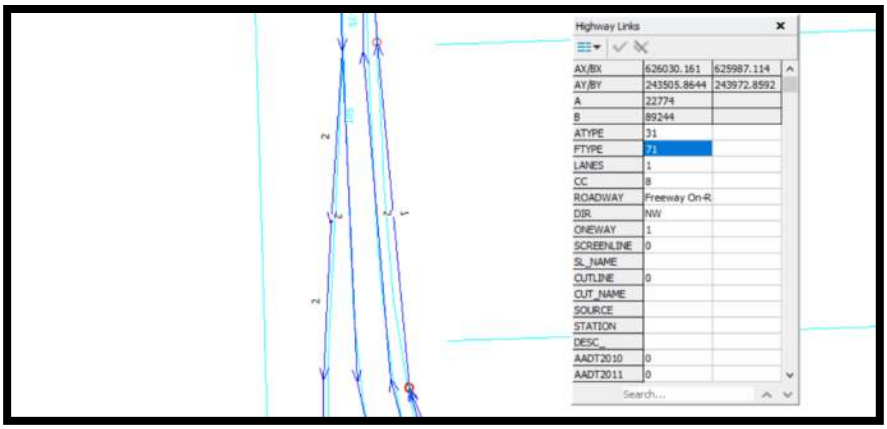




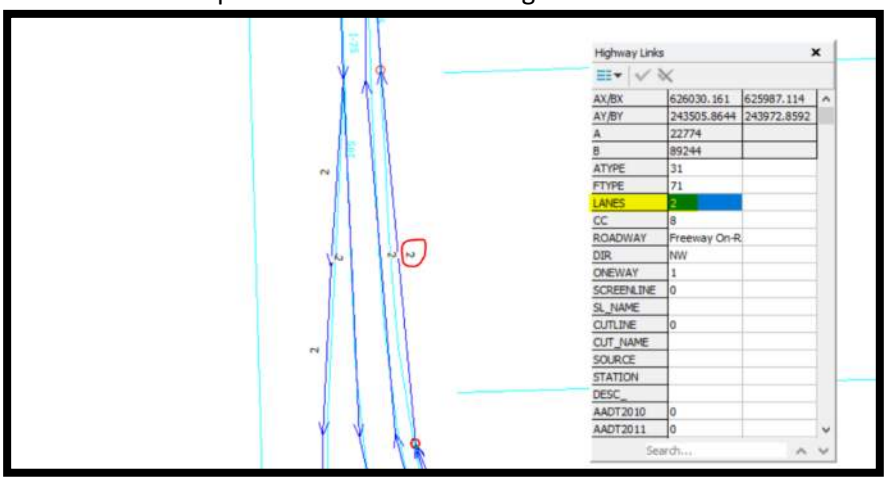
- Added a new link with Lanes=3



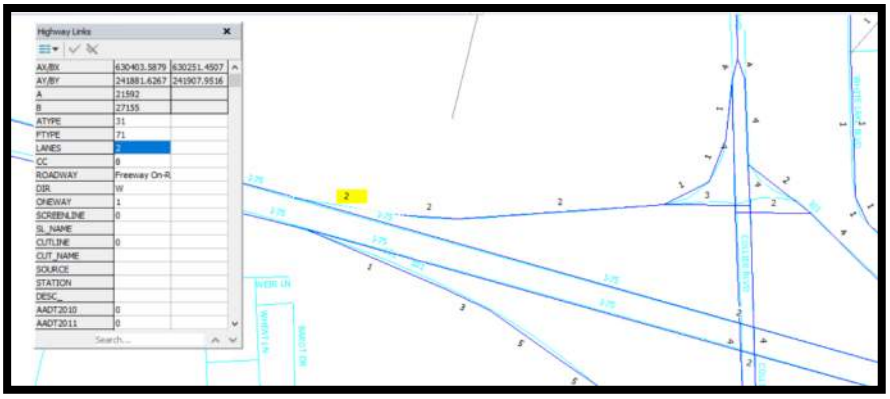
3. I-75 NB on-ramp



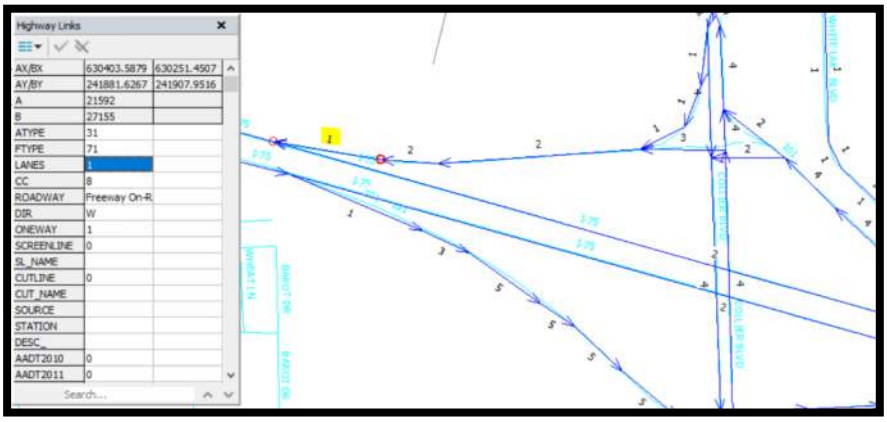
- Link update: Lanes=1 was changed to Lanes=2



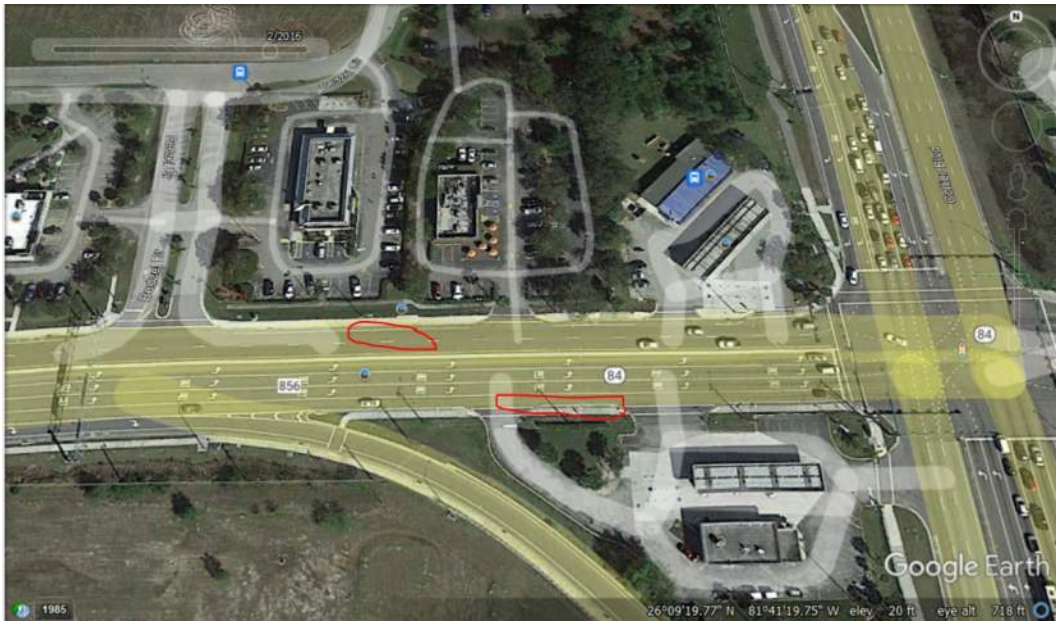
4. Collier SB on ramp should be 1 lane when merging into I-75 (2015 only)

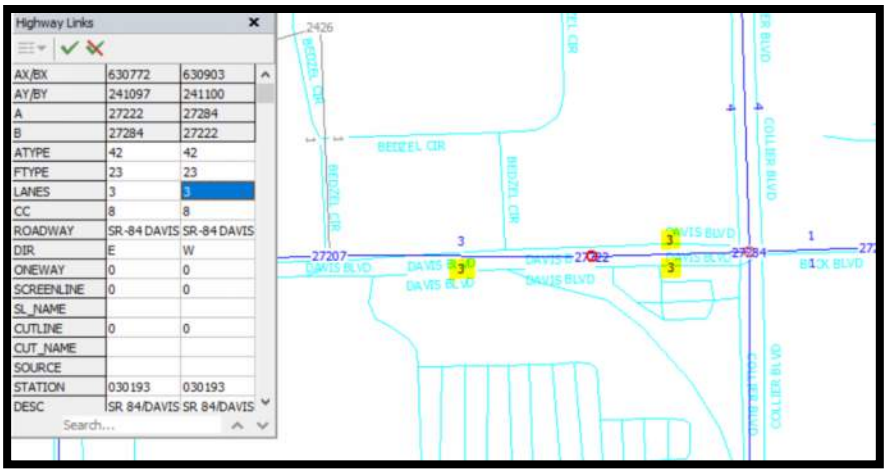


- Link update: Lanes=2 was changed to Lanes=1

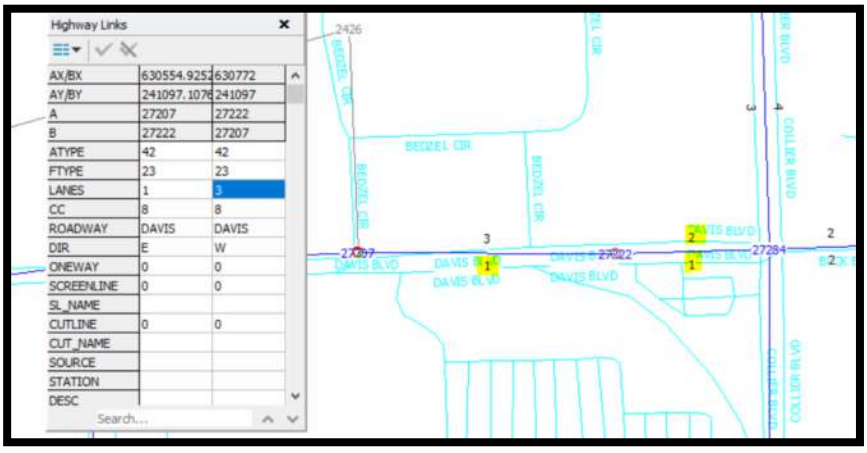


5. Beck Blvd, west of Collier Blvd

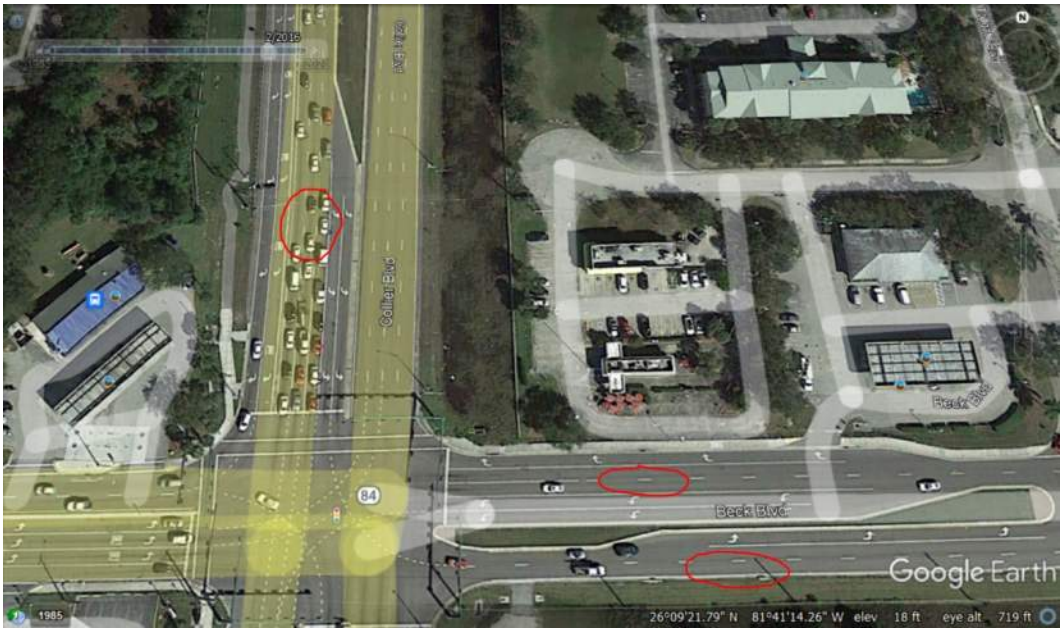


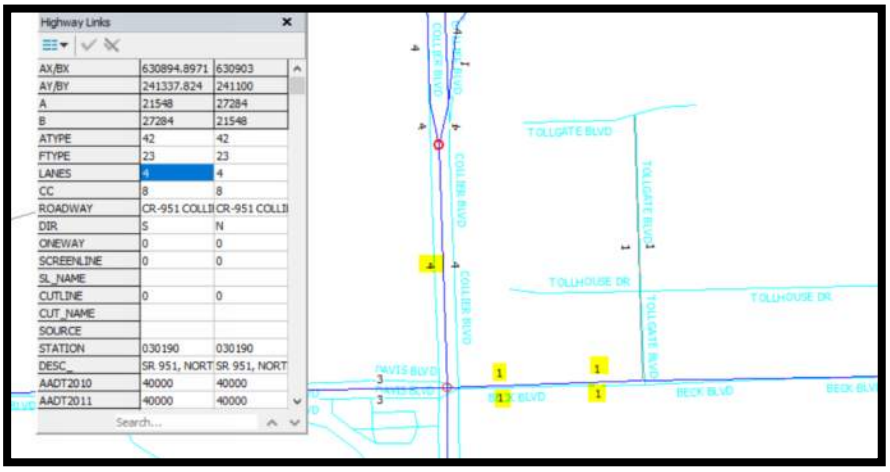


- Link update: Lanes=3 was changed to Lanes=2
- Link update: Lanes=3 was changed to Lanes=1

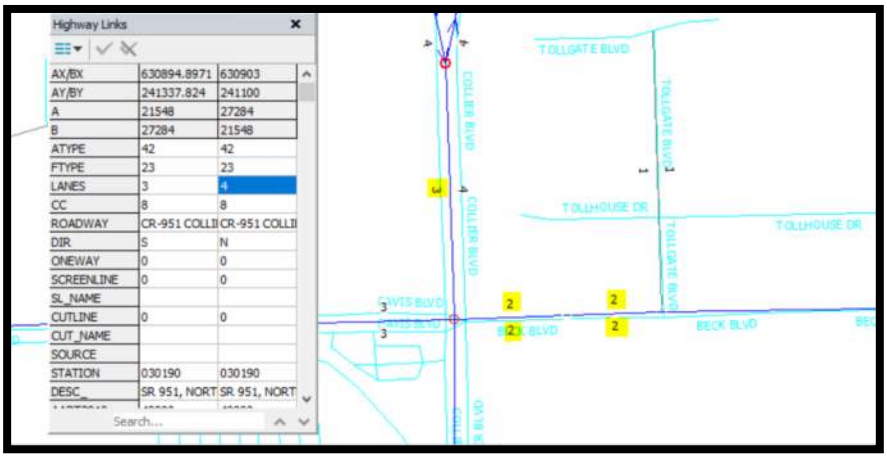


6. Collier Blvd and Beck Blvd

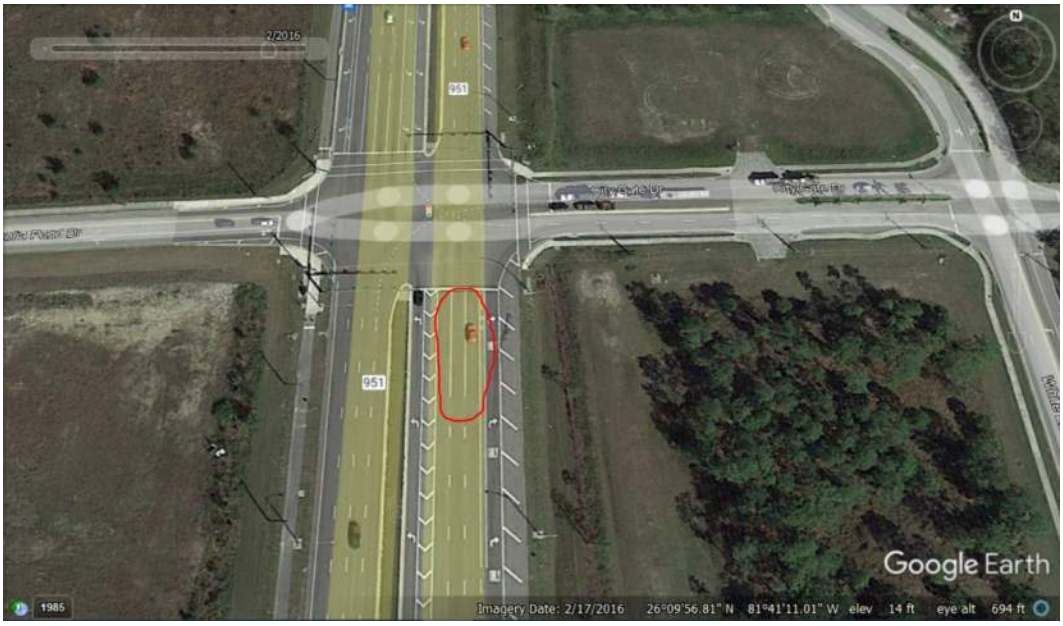


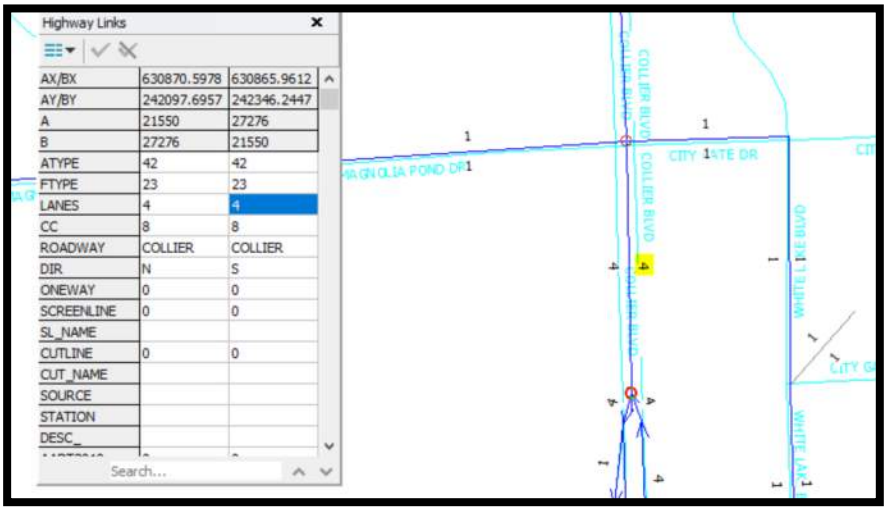


- Link update: Lanes=4 was changed to Lanes=3
- Link update: Lanes=1 was changed to Lanes=2

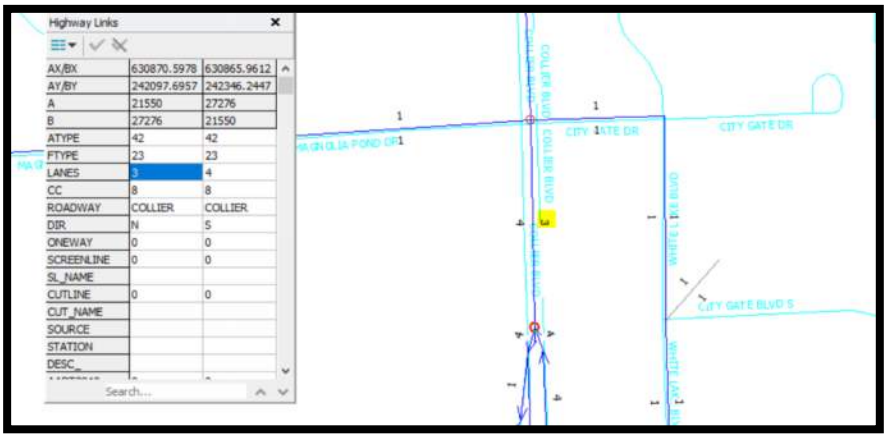


7. Collier Blvd, S of City Gate Dr

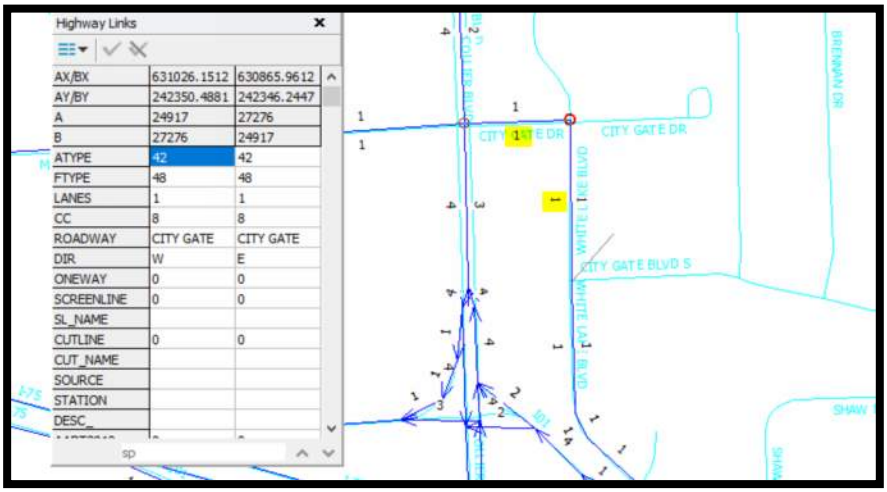




- Link update: Lanes=4 was changed to Lanes=3

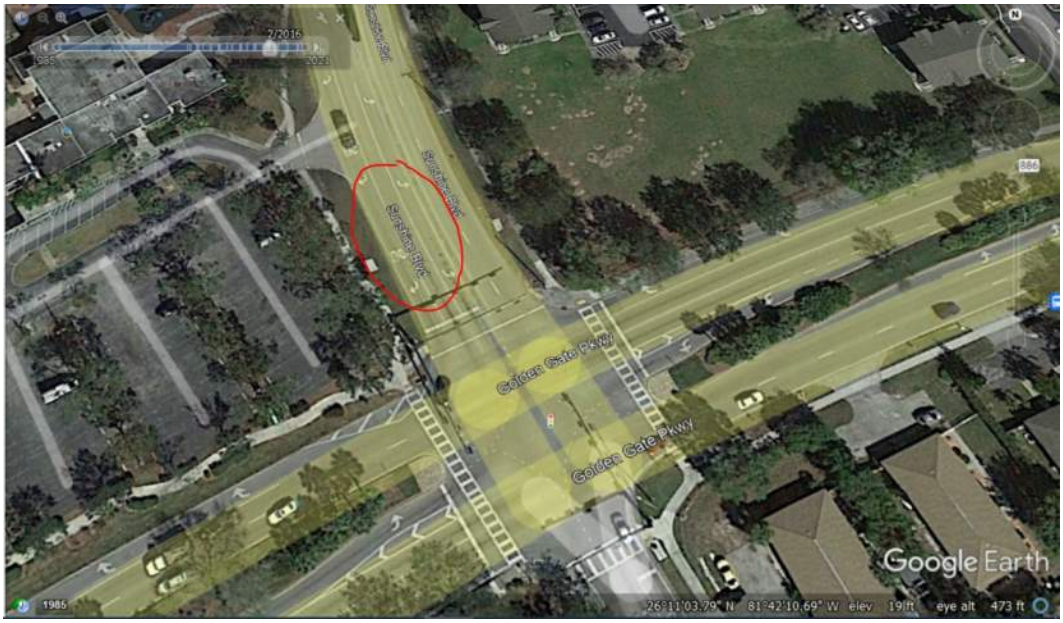


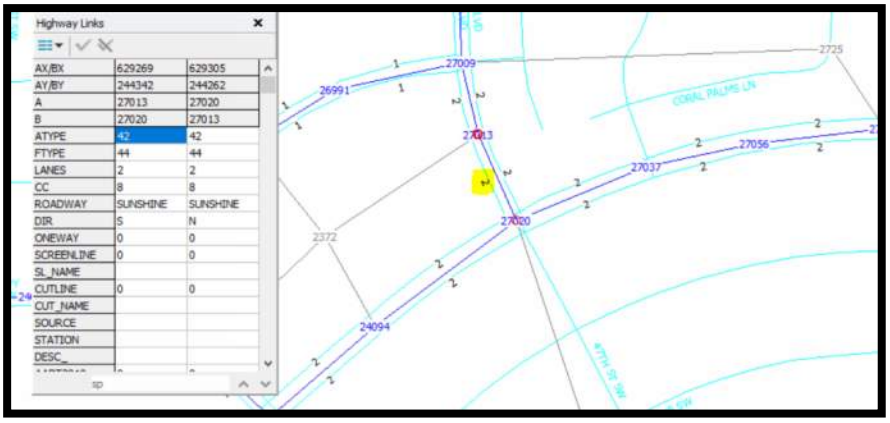
8. City Gate Dr, W of Collier Blvd



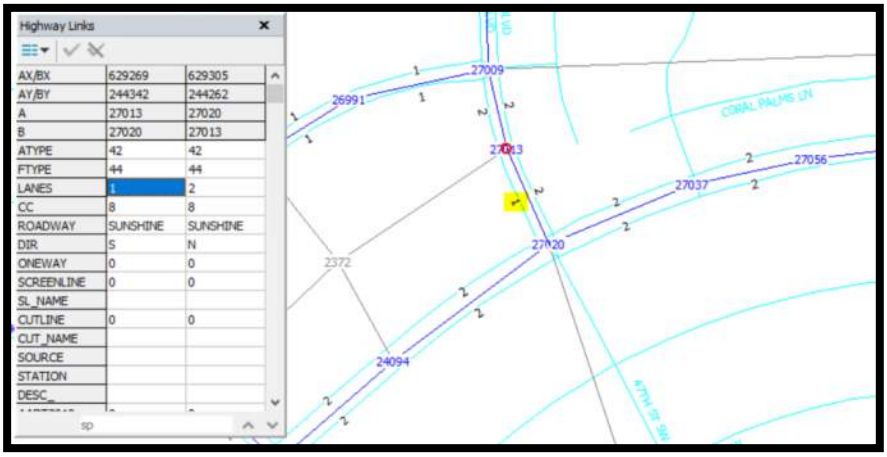
- Link update: Lanes=4 was changed to Lanes=3

9. Sunshine Blvd SB, N of Golden Gate Pkwy



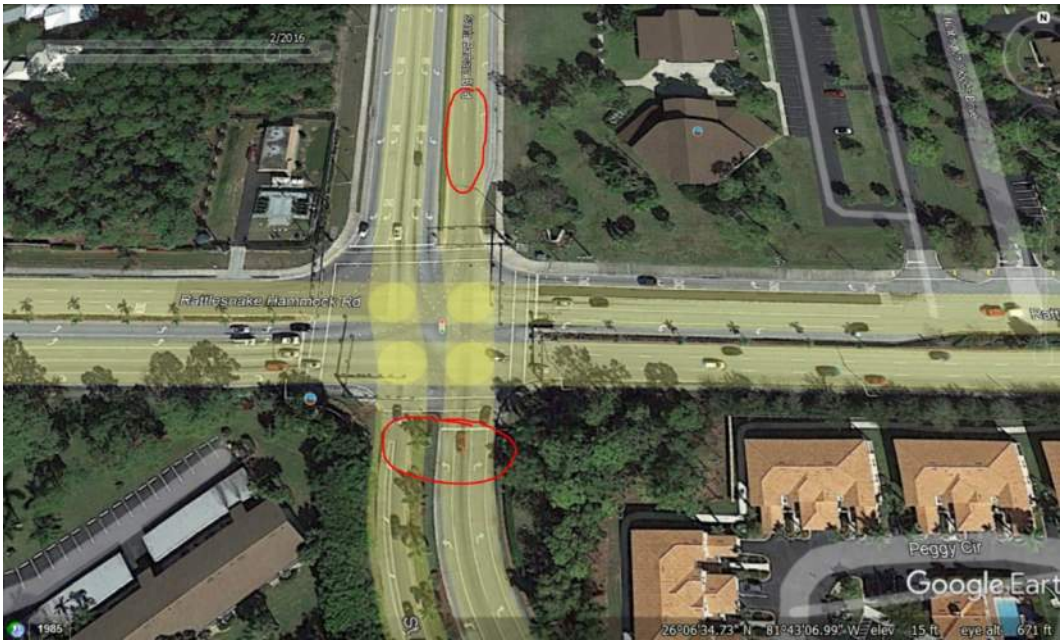


- Link update: Lanes=2 was changed to Lanes=1



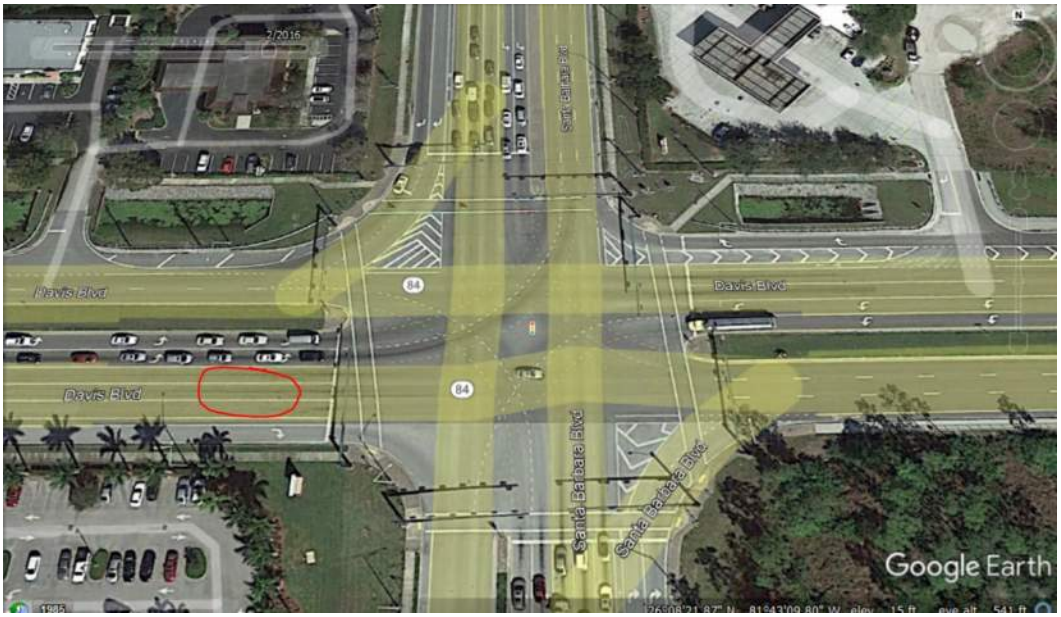
X

10. St Andrews Blvd at Rattlesnake Hammock Rd (North segment 2015 only)



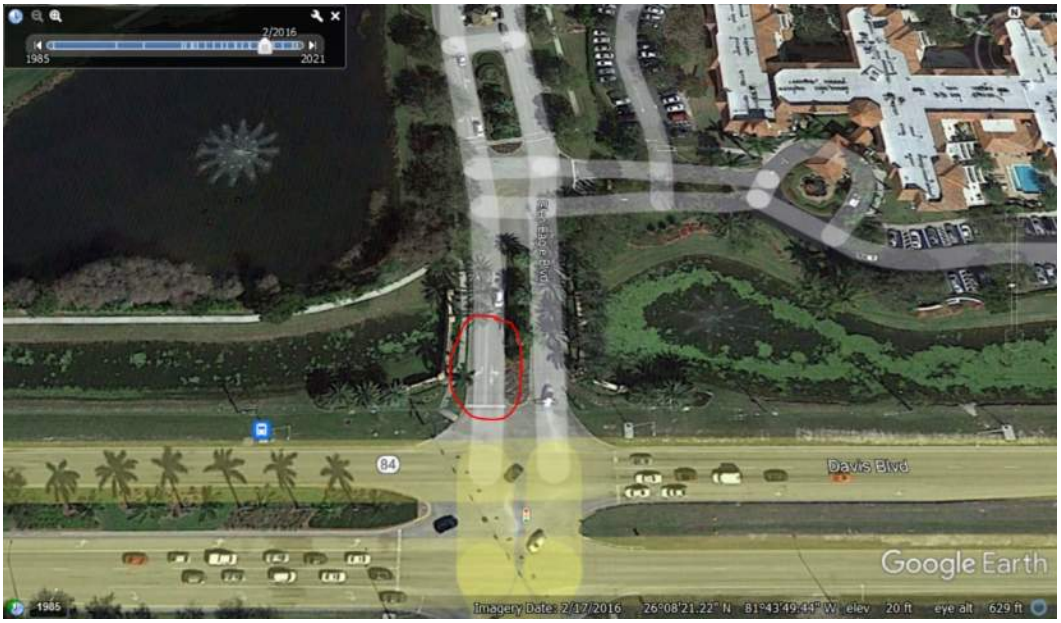
- Link update: Lanes=2 was changed to Lanes=1
- Link update: Lanes=1 was changed to Lanes=2

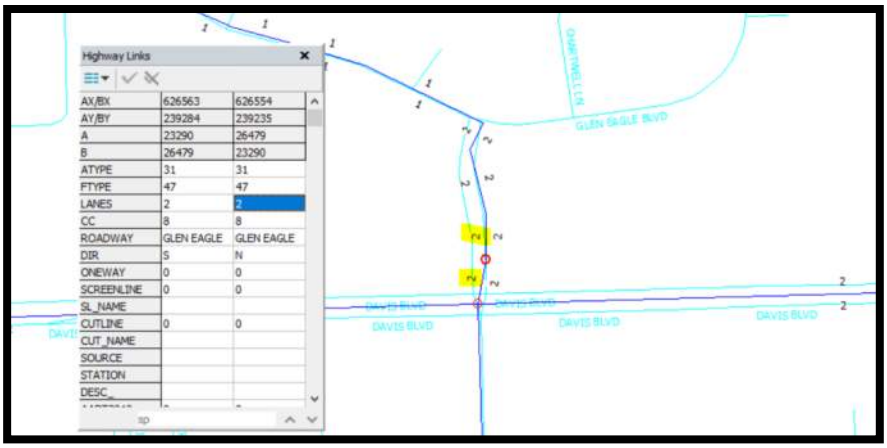
11. Davis Blvd EB, W of Santa Barbara Blvd



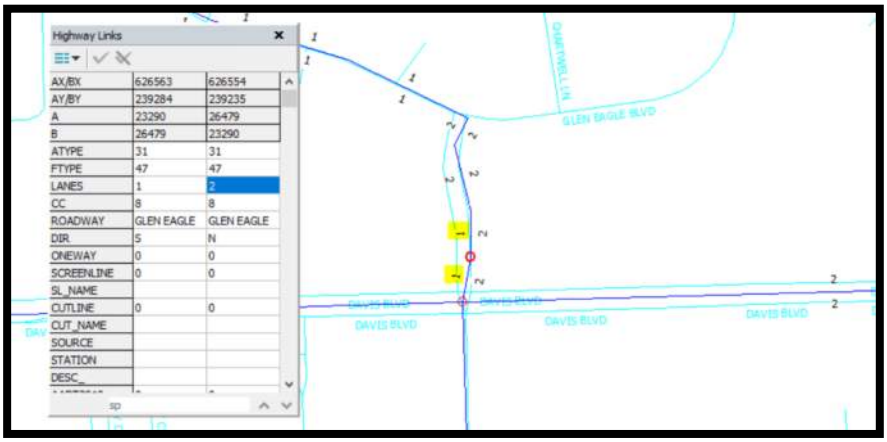
- Link update: Lanes=2 was changed to Lanes=3

12. Glen Eagle Blvd SB, N of Davis Blvd

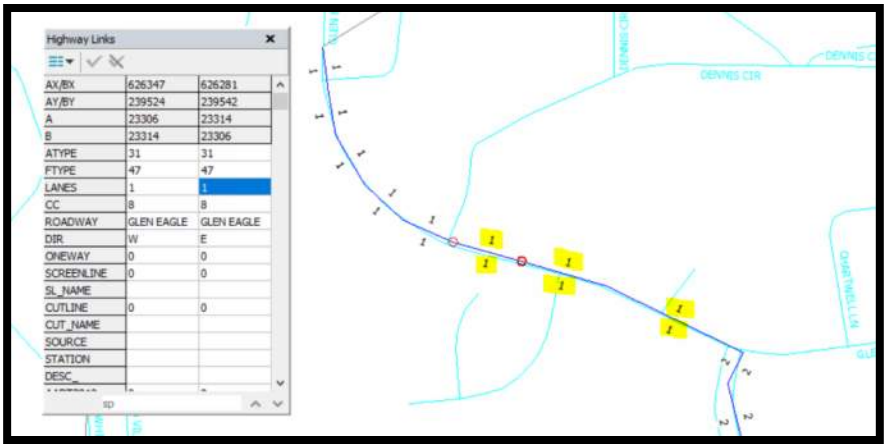




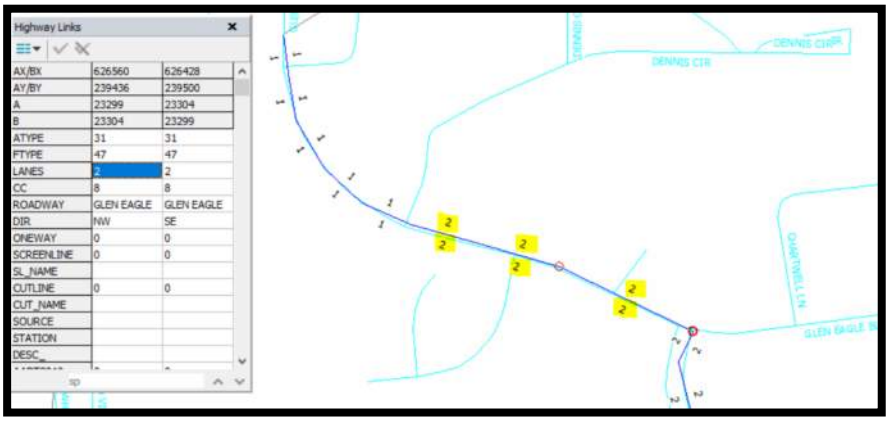
- Link update: Lanes=2 was changed to Lanes=1



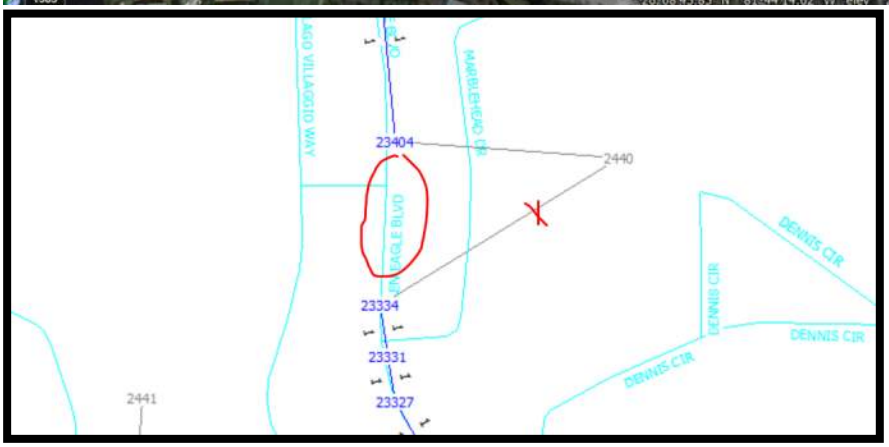
13. Glen Eagle Blvd EB &WB



- Link update: Lanes=2 was changed to Lanes=1

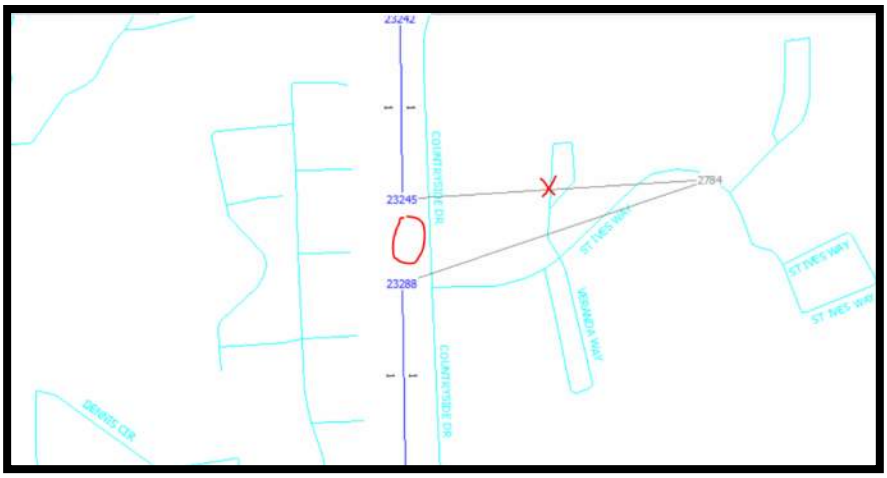


14. Glen Eagle Blvd around Dennies Cir

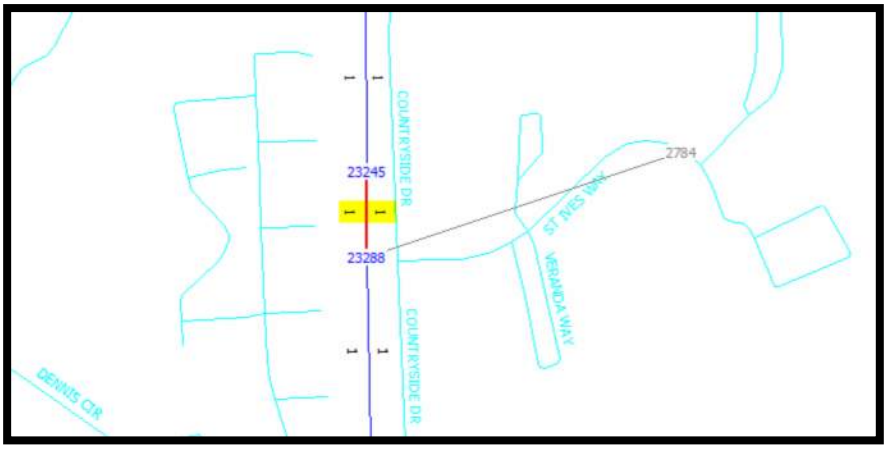


- Added a new link with Lanes=1
- Removed one CC

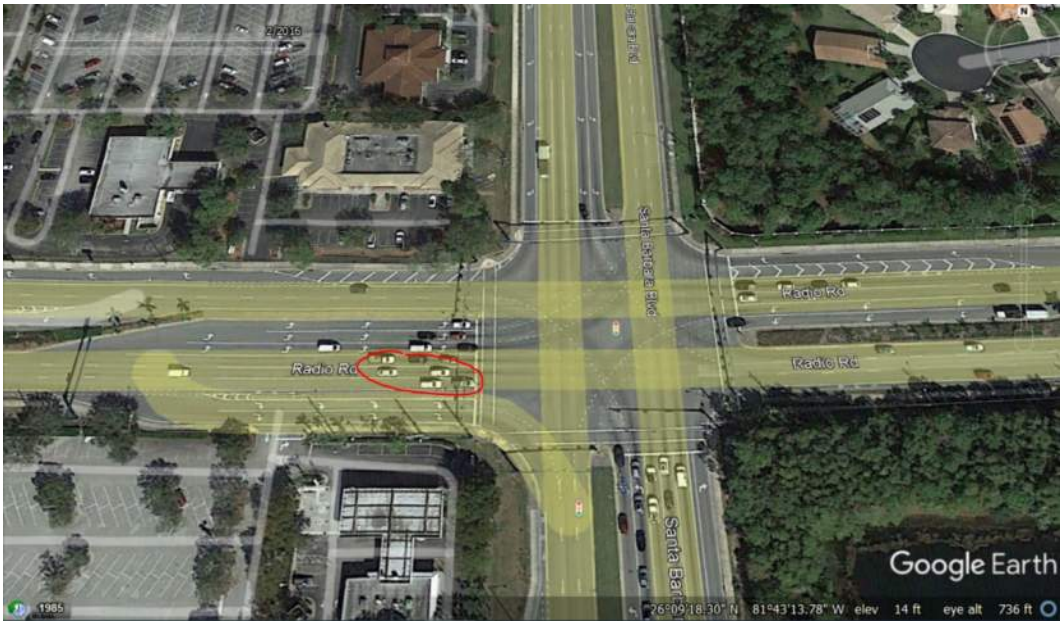
15. Countryside Dr at St Ives Way



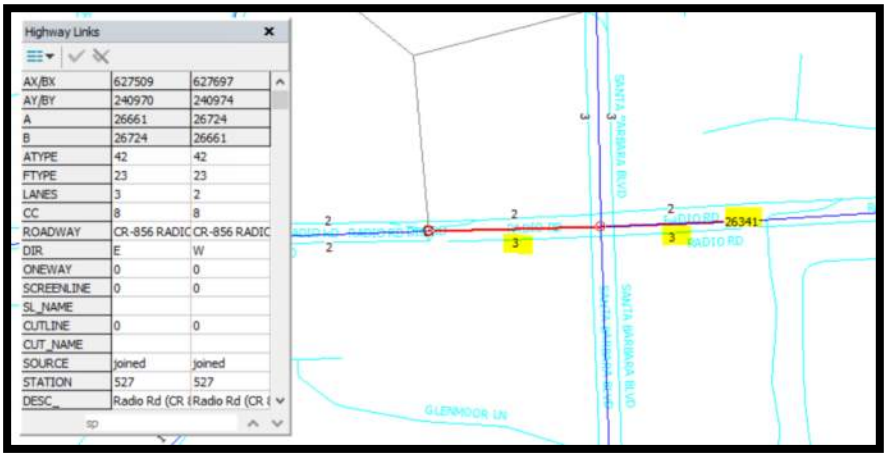
- Added a new link with Lanes=1
- Removed one CC



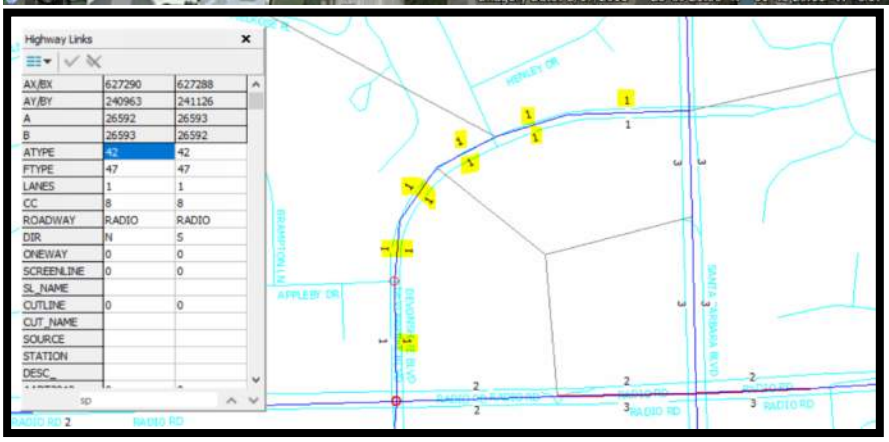
16. Radio Rd EB at Santa Barbara Blvd



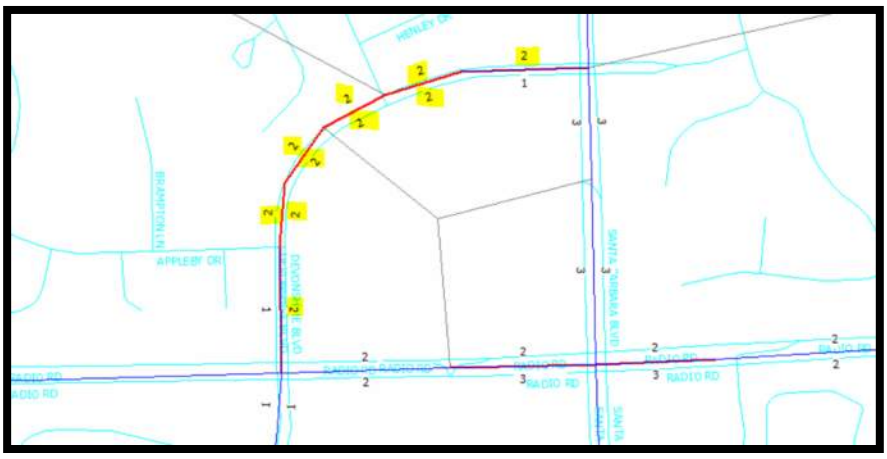
- Link update: Lanes=2 was changed to Lanes=3
- Split the link



17. Devonshire Blvd, N of Radio Rd

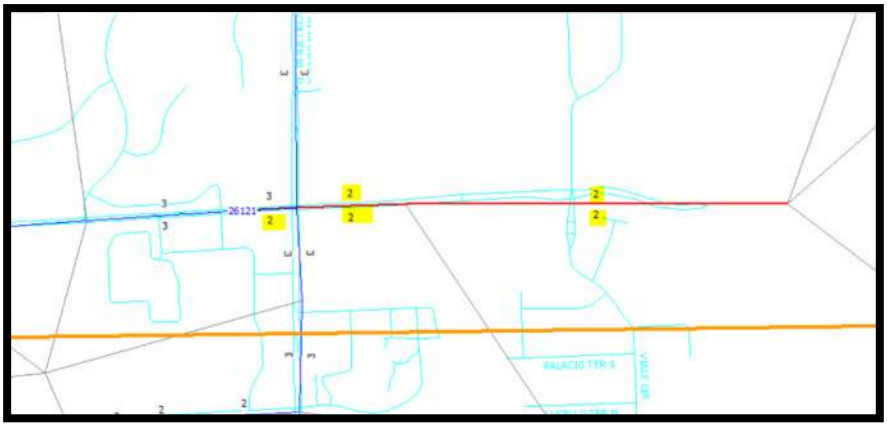


- Link update: Lanes=1 was changed to Lanes=2

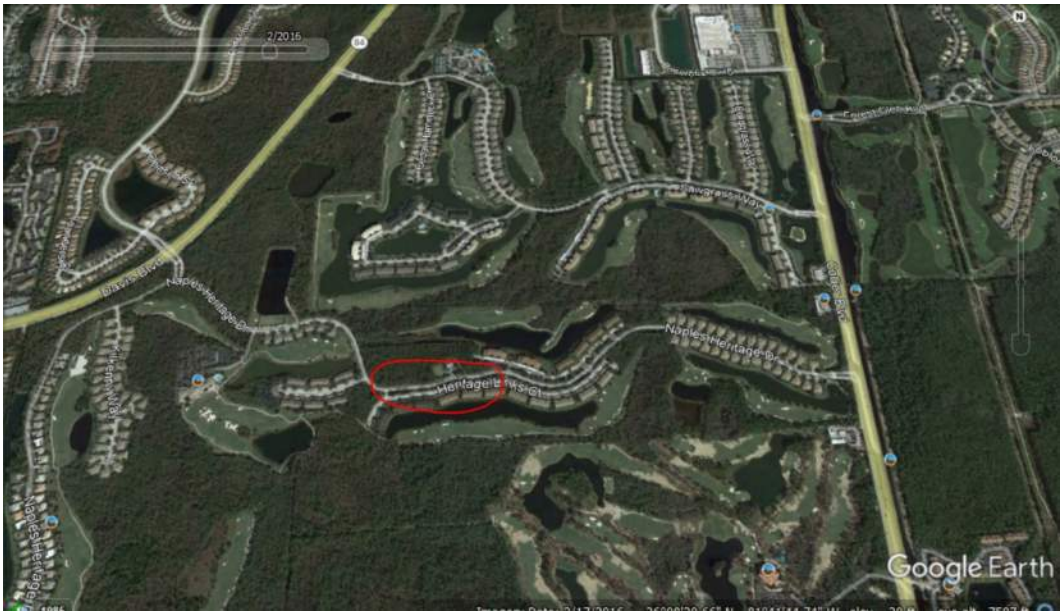


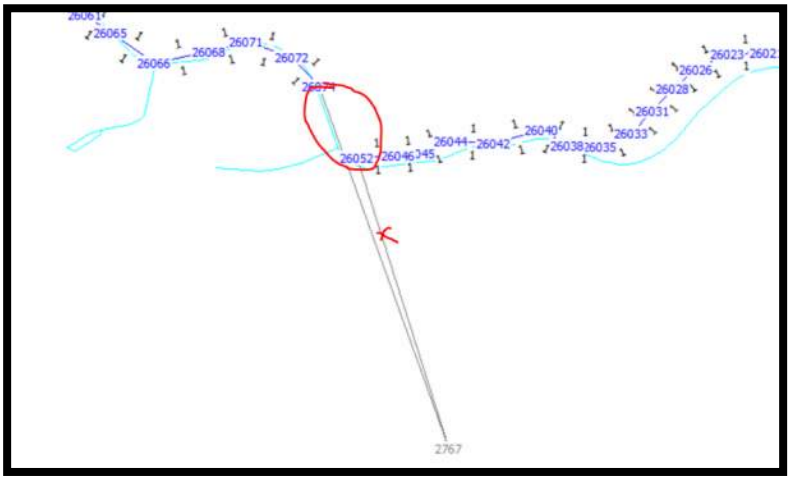
18. Rattlesnake Hammock Rd at Collier Blvd

- Link update: Lanes=3 was changed to Lanes=2
- Split the link
- Link update: Lanes=1 was changed to Lanes=2

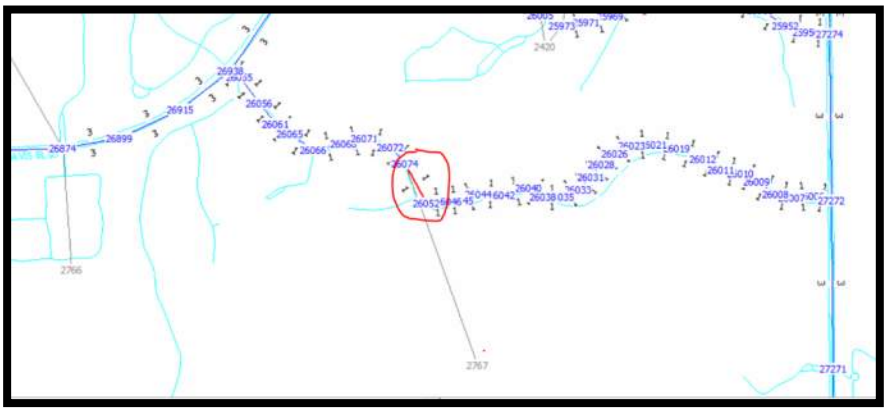


19. Naples Heritage Dr

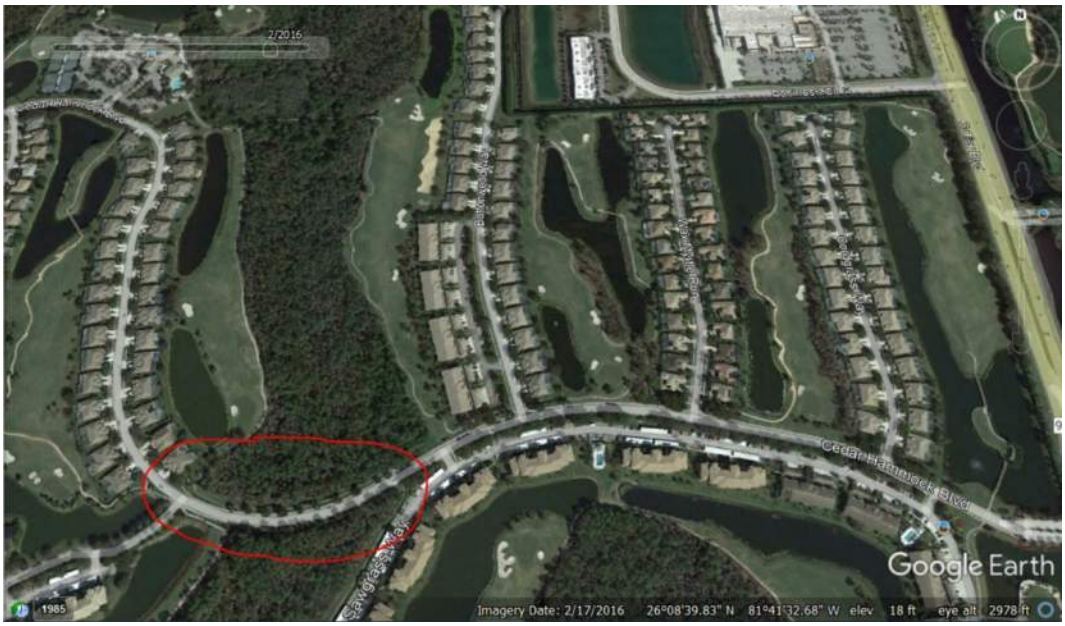


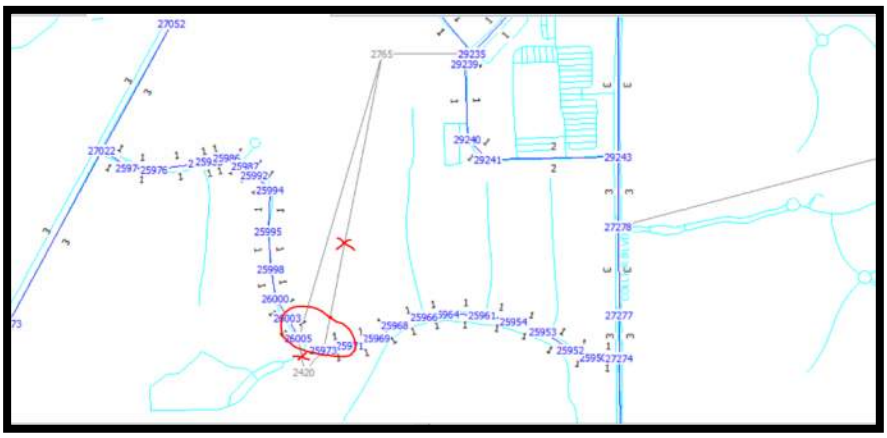


- Added a new link with Lanes=1
- Removed one CC

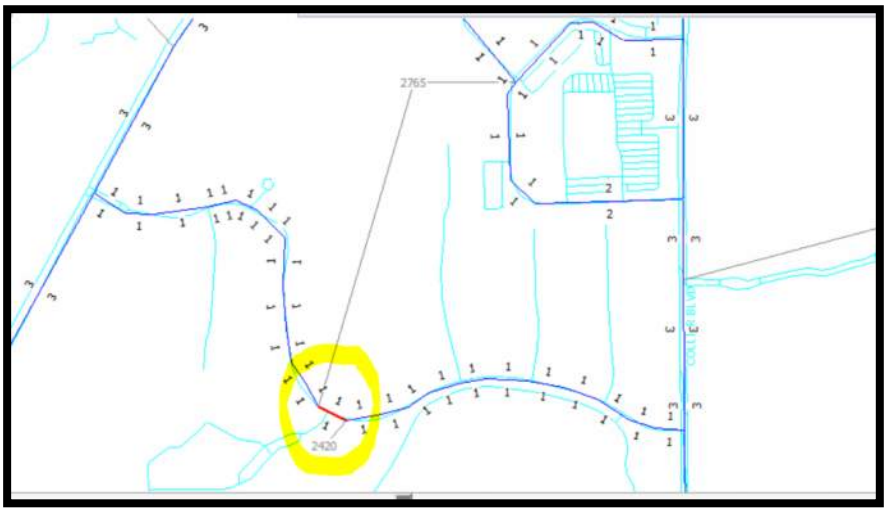


20. Cedar Hammock Blvd



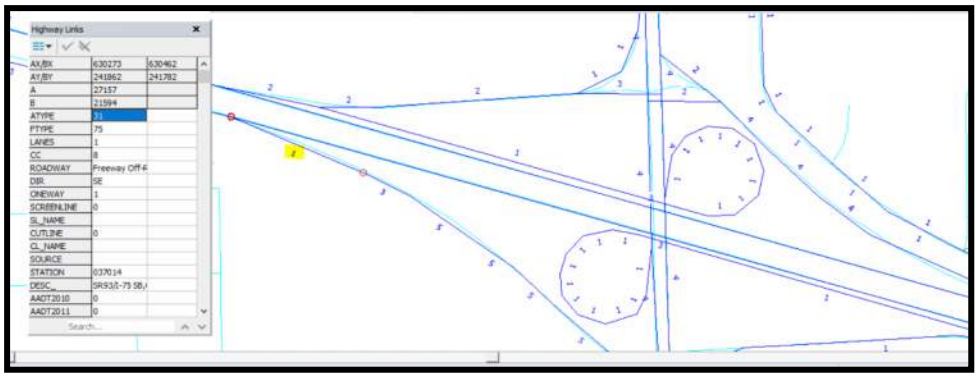


- Added a new link with Lanes=1
- Removed two CCs

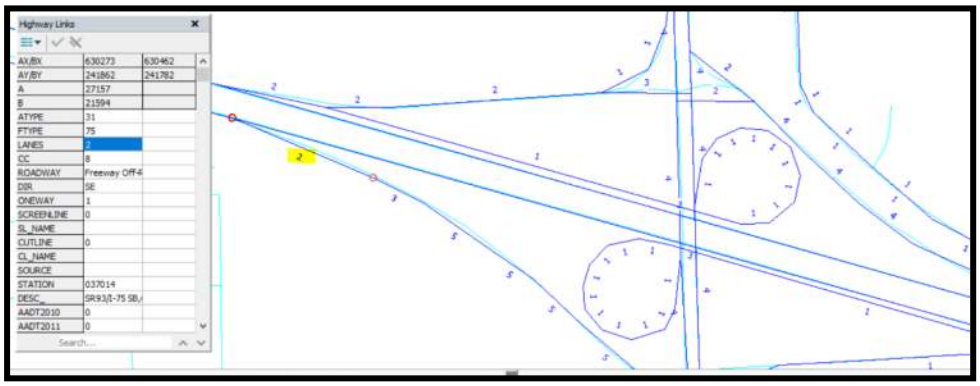


I-75 SB off-ramp to Collier Blvd SB (2045 network only)

2019-12-phase-iir-traffic-operations-concept-plan.pdf (swflroads.com)

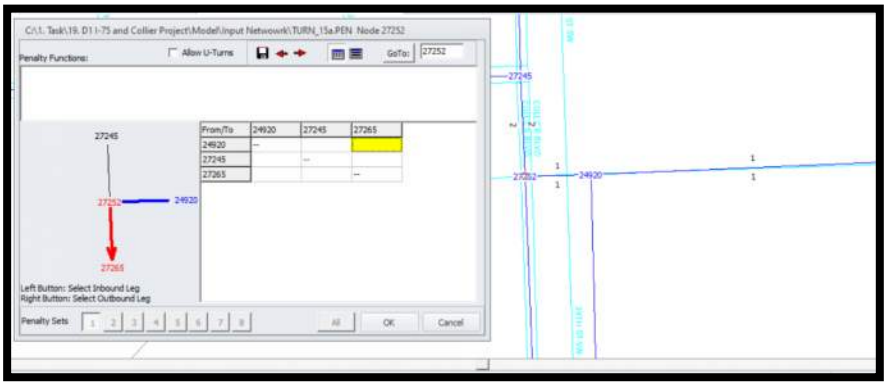


After (to match at least with the existing condition)

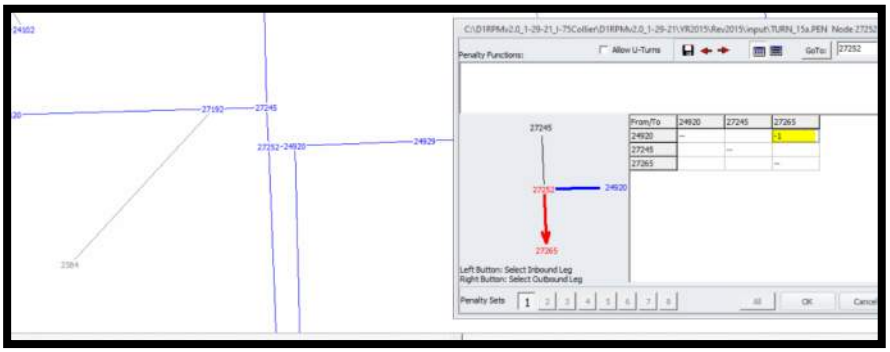


Turn Penalty Update

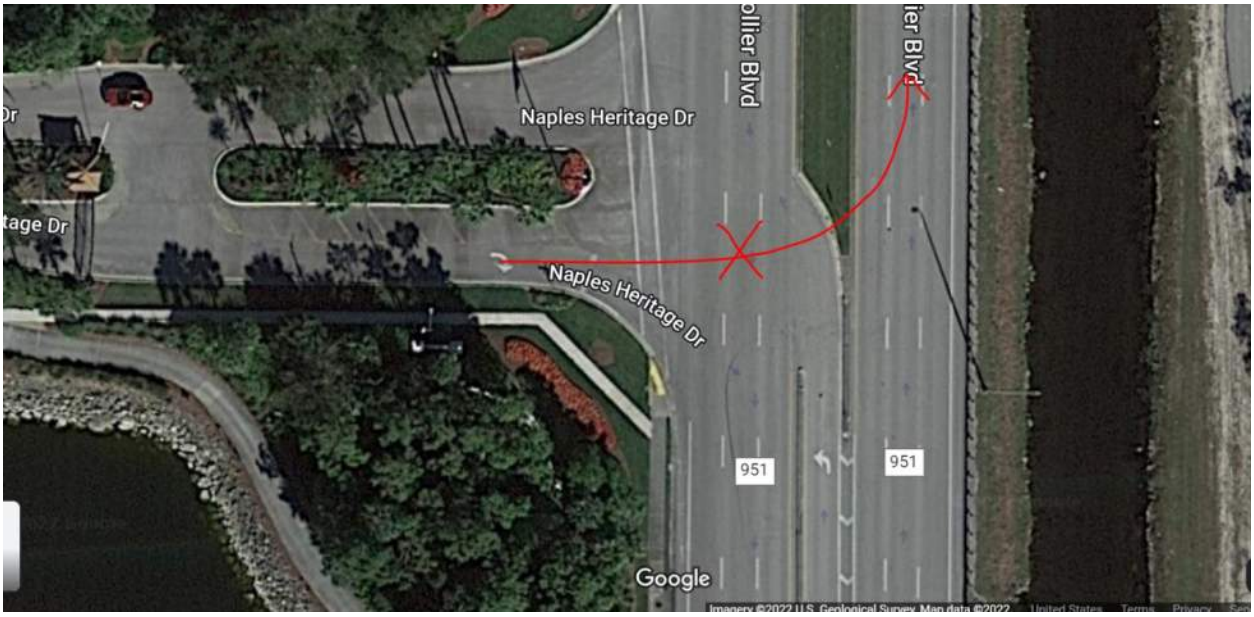
1. 25th Ave SW WB, W of Collier Blvd

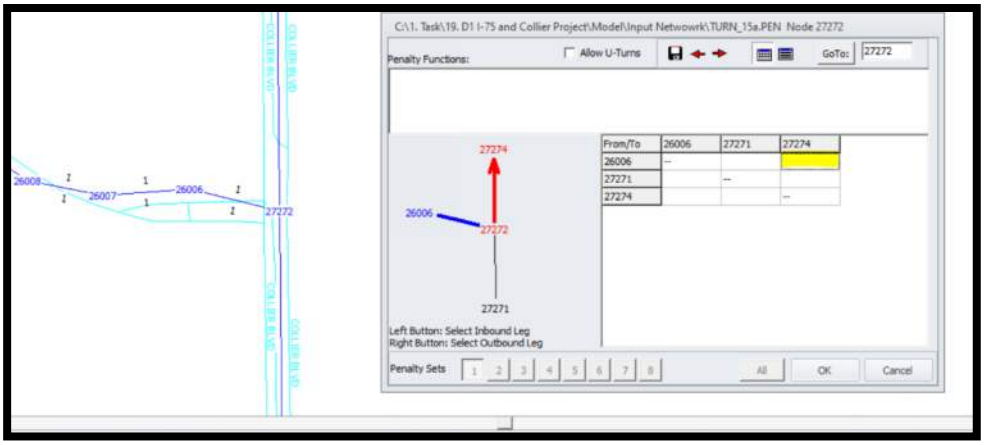


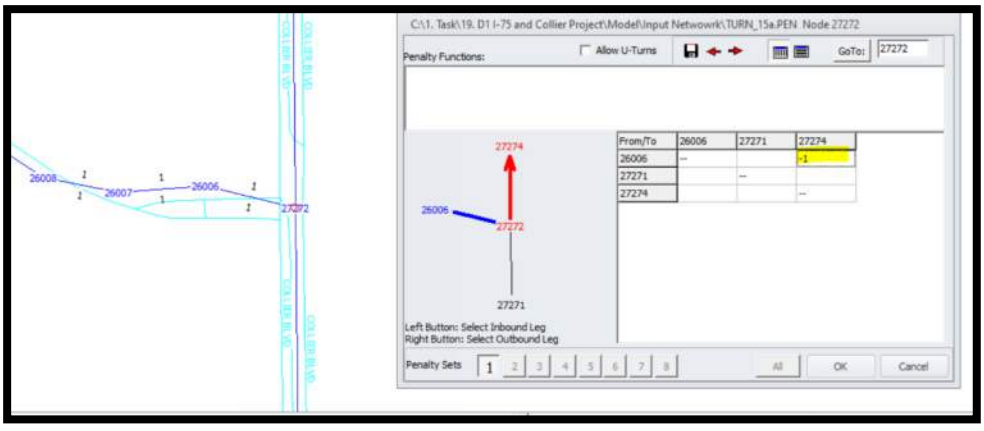
- 25th Ave SW cannot access the Collier Blvd SB



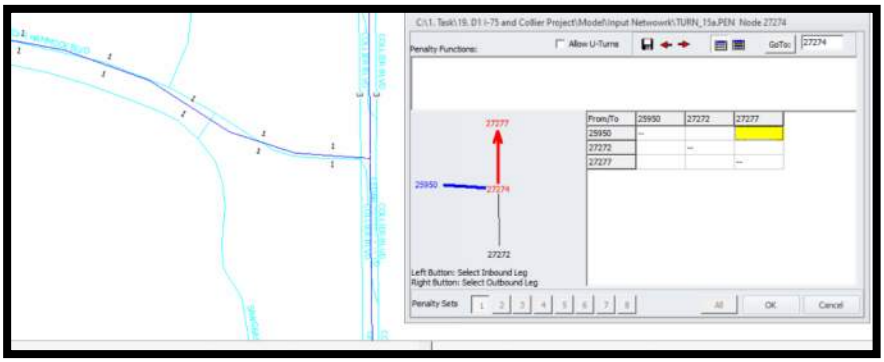
2. Naples Heritage Dr to Collier Blvd NB

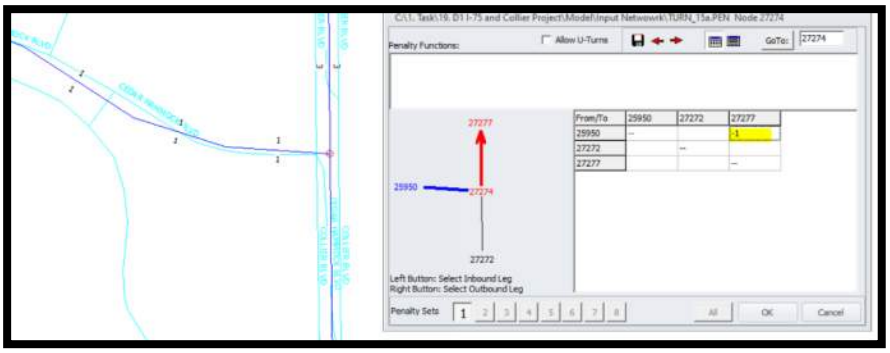




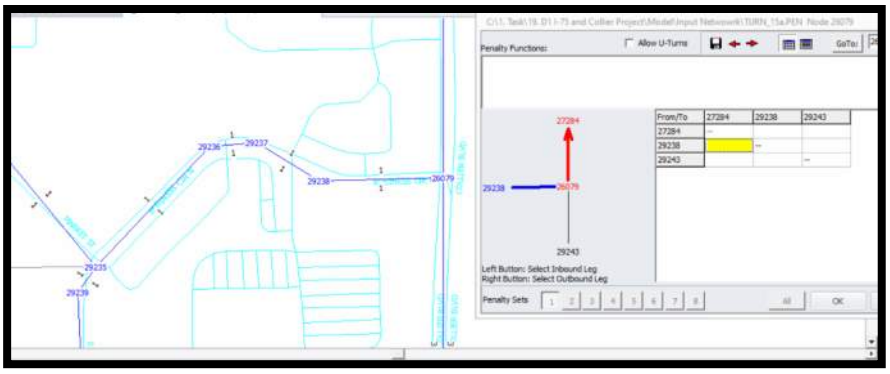


3. Cedar Hammock Blvd to Collier NB

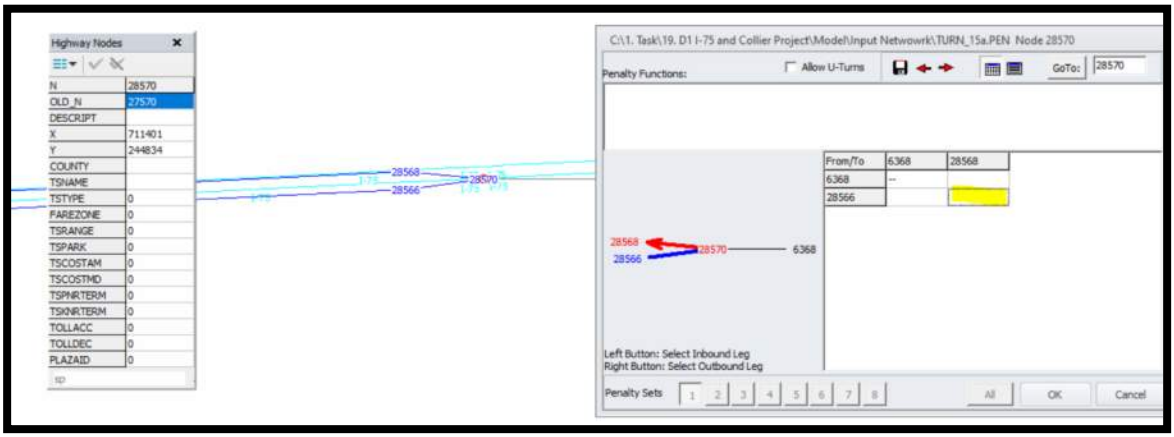




4. Business Cir N to Collier Blvd NB

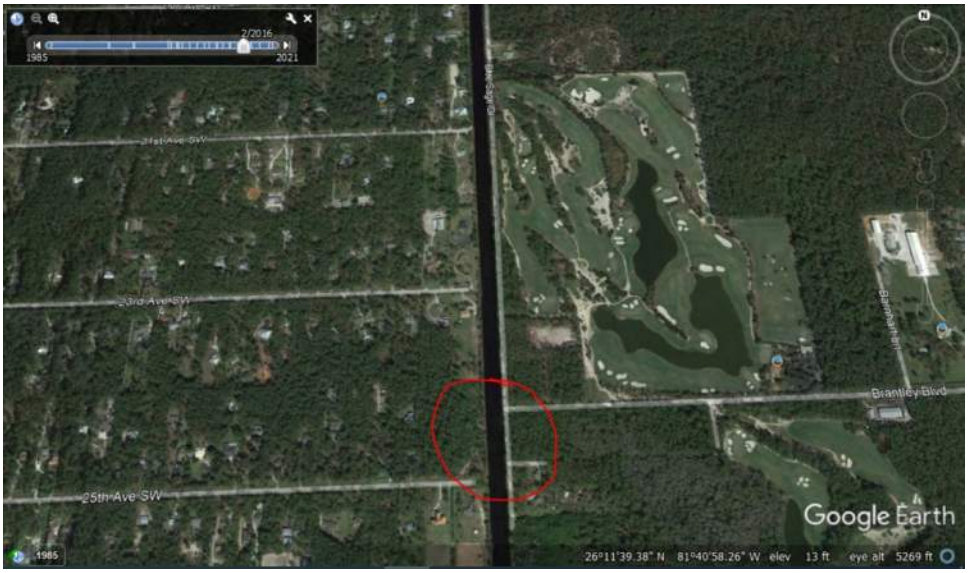


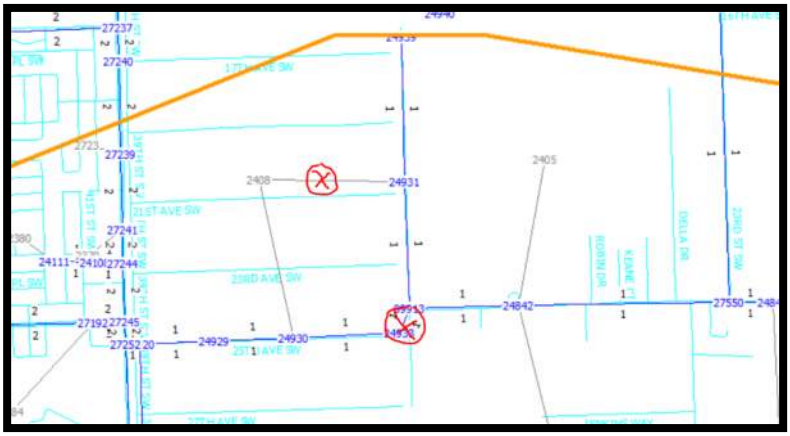
5. 6368 External



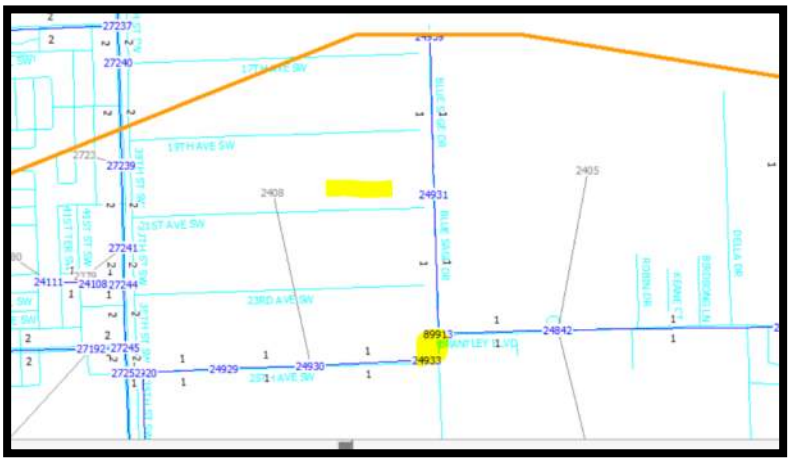
TAZ Centroid Connector Update

1. TAZ 2408: physical barrier - river

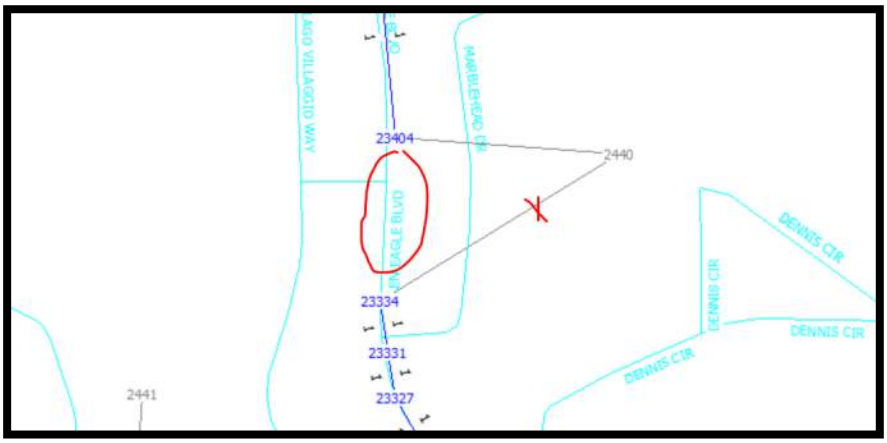




- 25th Ave SW should not be connected to Brantley Blvd (Deleted)
- TAZ 2048 cannot access Blue Sage Dr (Deleted)

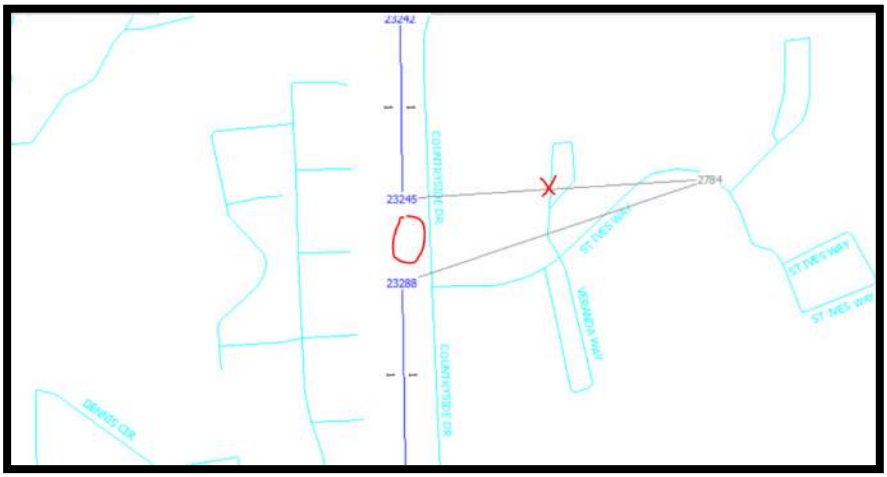


2. TAZ 2440

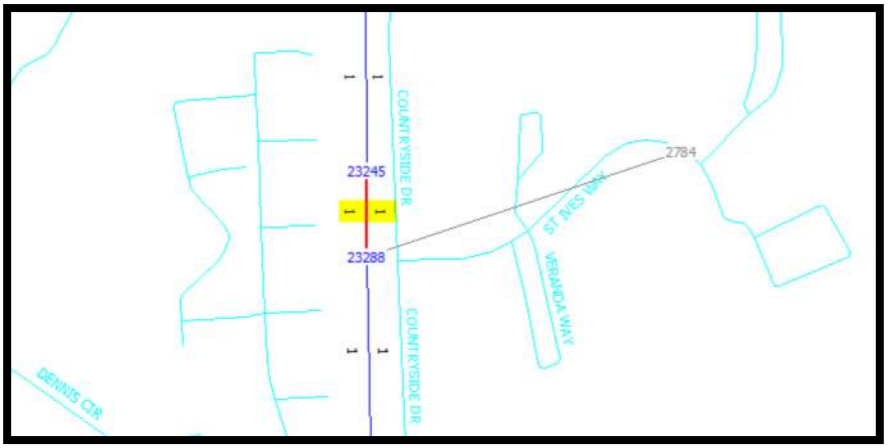


- Added a new link
- Removed one CC

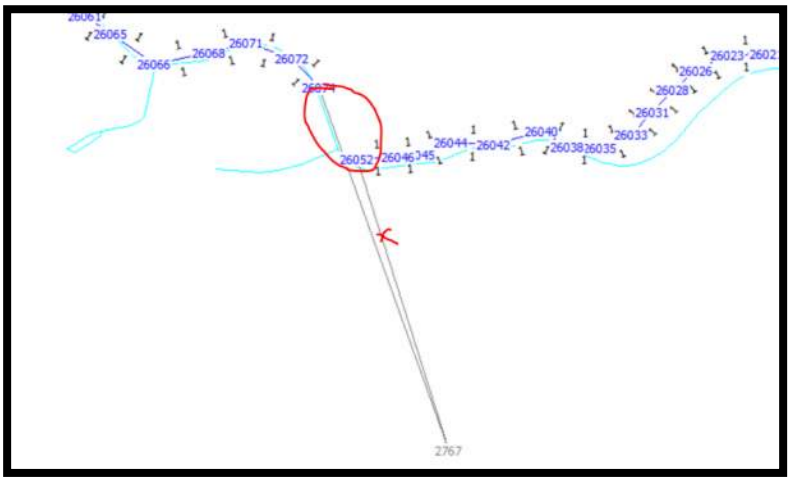
3. TAZ 2784



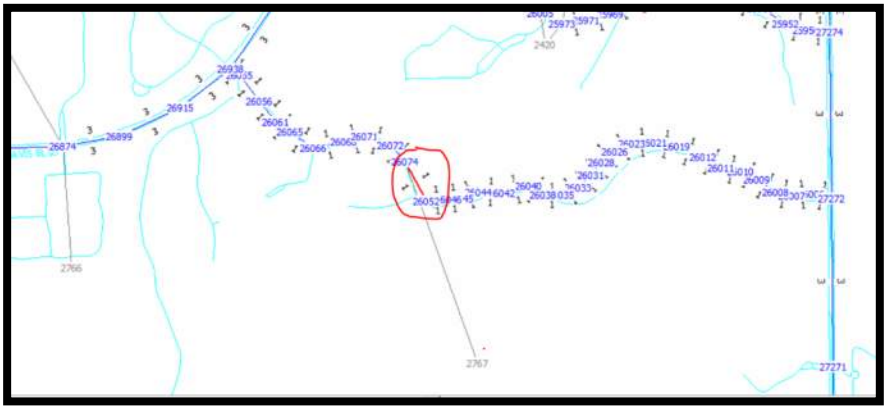
- Added a new link with Lanes=1
- Removed one CC



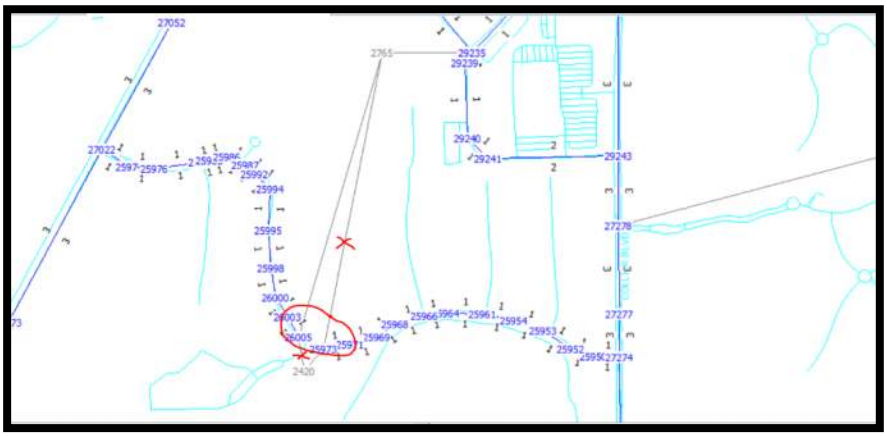
4. TAZ 2767



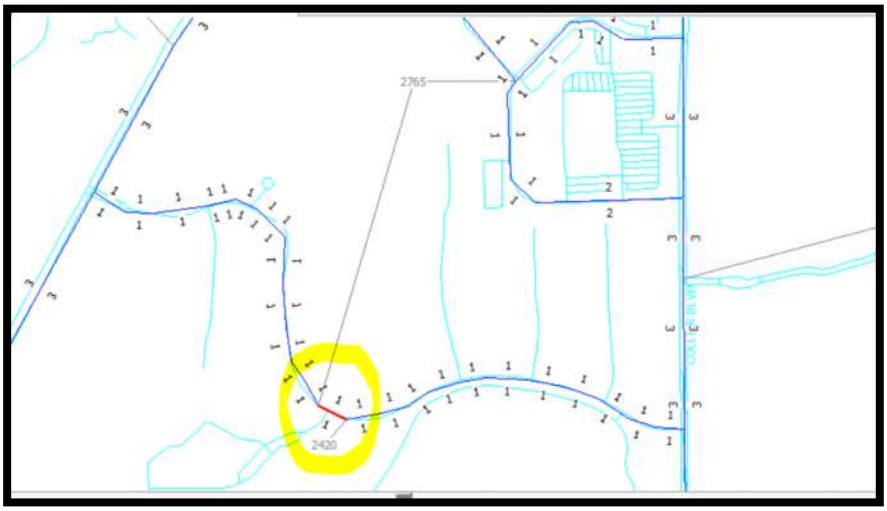
- Added a new link with Lanes=1
- Removed one CC



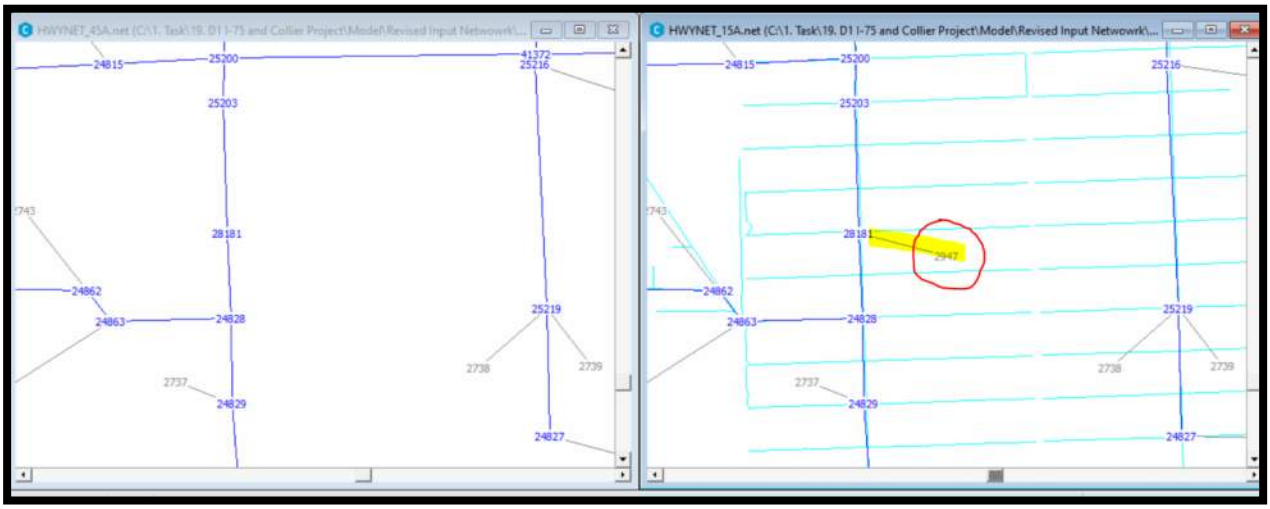
5. TAZ 2765 and TAZ 2420



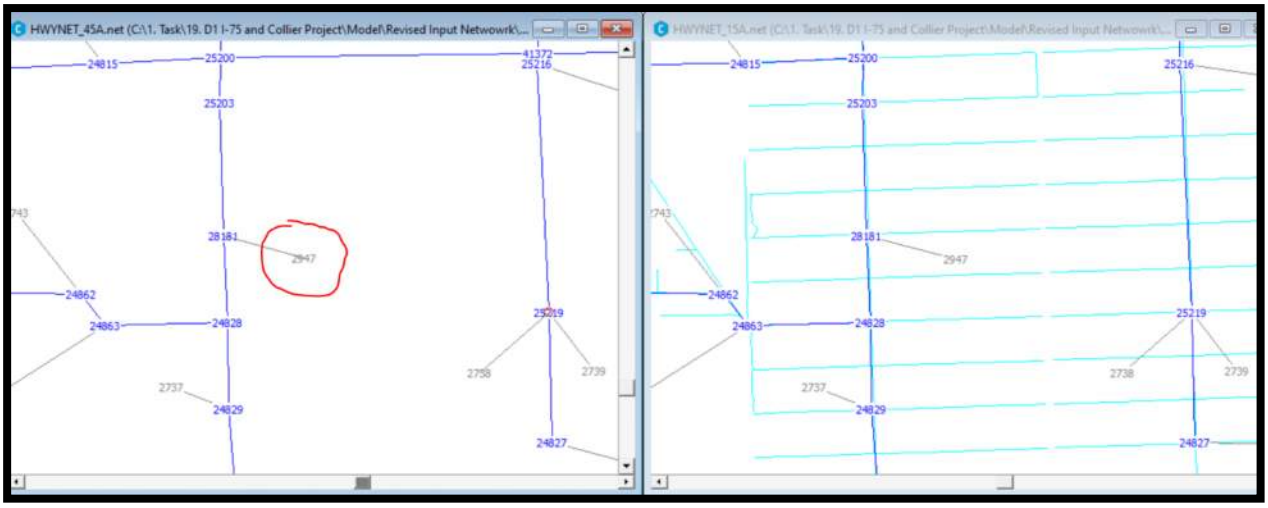
- Added a new link with Lanes=1
- Removed two CCs



6. TAZ 2947
   The Centroid node of 2947 was missing in the 2045 network.
   2045 zonal data file has the data for this TAZ.

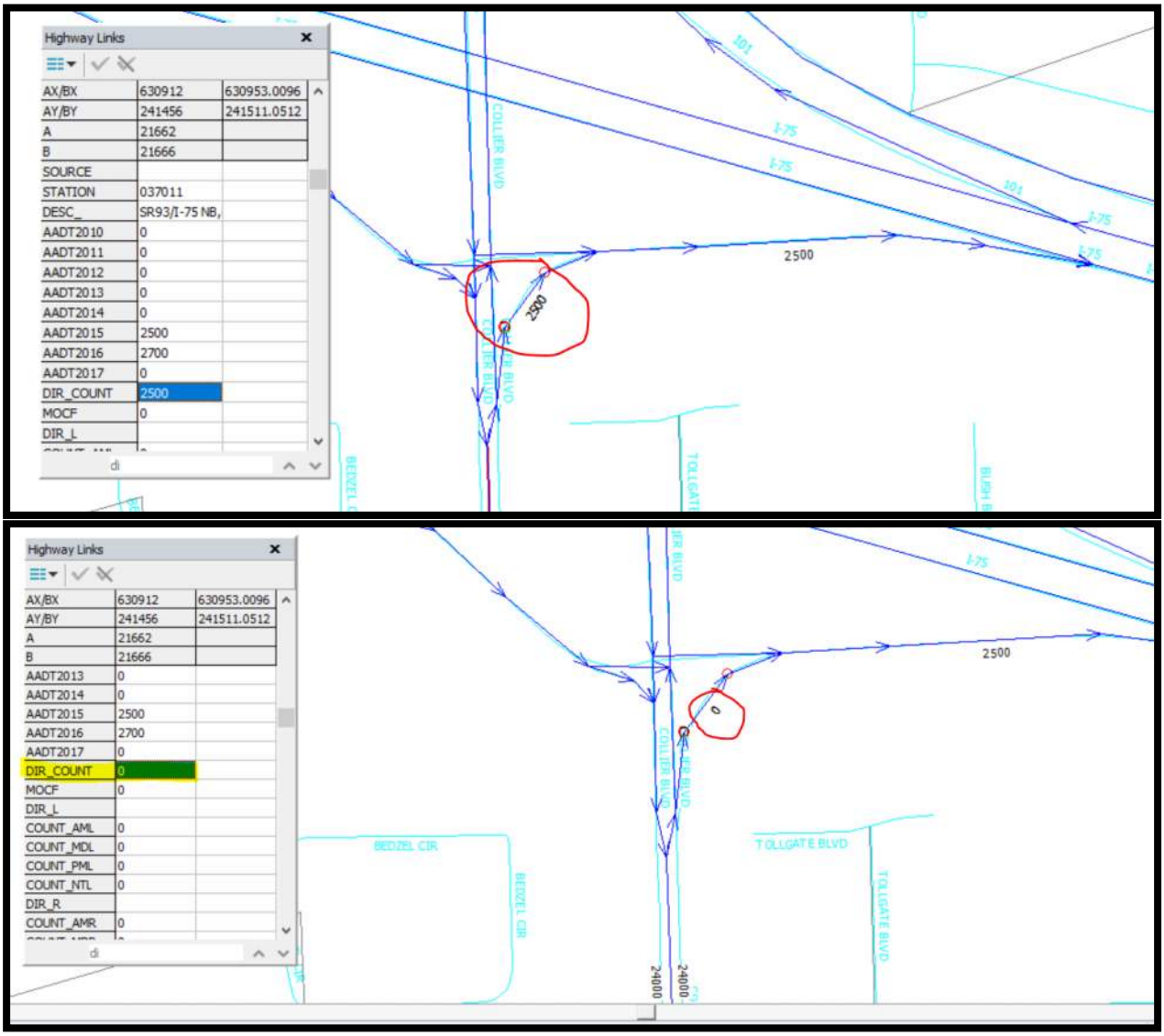


- Added the missing CC



2015 Count Update

1. Remove the “Dir_Count” on the ramp.



D1RPM 2015 Volume to Count by Facility Type

	As-is 2015				Revised 2015			
	Volume	Count	Volume/ Count	No. of Links	Volume	Count	Volume/ Count	No. of Links
12	4,077,062	3,895,149	1.05	98	4,093,785	3,895,149	1.05	98
16	16,806	13,100	1.28	2	19,575	13,100	1.49	2
21	628,634	542,160	1.16	60	627,683	542,160	1.16	60
22	2,196,596	2,096,287	1.05	198	2,195,702	2,096,287	1.05	198
23	12,401,336	13,245,821	0.94	917	12,419,770	13,259,041	0.94	919
24	4,437,909	4,742,096	0.94	323	4,437,717	4,742,096	0.94	323
25	2,030,193	2,210,537	0.92	170	2,043,172	2,210,537	0.92	170
29	172,803	164,316	1.05	26	172,876	164,316	1.05	26
31	609,949	585,800	1.04	128	614,998	585,800	1.05	128
32	511,130	531,082	0.96	94	520,542	531,082	0.98	94
33	227,345	308,499	0.74	43	230,557	308,499	0.75	43
34	90,170	128,672	0.7	12	99,050	128,672	0.77	12
35	1,358,568	1,435,604	0.95	386	1,355,805	1,435,604	0.94	386
36	286,796	307,404	0.93	66	286,583	307,404	0.93	66
37	95,026	141,892	0.67	30	98,315	141,892	0.69	30
38	13,569	20,642	0.66	8	13,632	20,642	0.66	8
39	101,029	125,530	0.8	42	101,110	125,530	0.81	42
41	2,069,404	1,989,847	1.04	323	2,079,111	2,008,279	1.04	325
42	1,192,857	1,245,762	0.96	316	1,189,951	1,245,762	0.96	316
43	2,742,320	2,663,336	1.03	964	2,756,728	2,663,336	1.04	964
44	507,552	504,440	1.01	173	505,833	504,440	1	173
45	314,557	343,244	0.92	141	314,300	343,244	0.92	141
46	1,163,974	1,147,232	1.01	645	1,166,541	1,147,232	1.02	645
47	190,228	171,428	1.11	78	192,500	171,428	1.12	78
48	24,152	48,386	0.5	20	25,720	48,386	0.53	20
52	662,240	641,356	1.03	70	662,251	641,356	1.03	70
61	78,605	78,500	1	6	78,529	78,500	1	6
62	378,787	369,800	1.02	30	380,327	369,800	1.03	30
63	121,352	126,300	0.96	9	123,864	126,300	0.98	9
64	126,822	135,600	0.94	10	129,250	135,600	0.95	10
65	62,442	60,100	1.04	7	57,254	60,100	0.95	7
71	690,364	571,346	1.21	86	689,545	568,846	1.21	85
72	124,992	130,900	0.95	15	127,164	130,900	0.97	15
73	57,881	38,500	1.5	9	58,129	38,500	1.51	9
75	640,972	534,200	1.2	69	645,061	534,200	1.21	69
76	78,666	70,900	1.11	8	77,429	70,900	1.09	8
77	64,895	41,600	1.56	9	64,518	41,600	1.55	9
79	63,070	56,200	1.12	8	63,049	56,200	1.12	8
92	38,097	43,626	0.87	4	38,110	43,626	0.87	4
93	278,472	254,570	1.09	24	277,264	254,570	1.09	24
97	62,713	51,450	1.22	24	62,607	51,450	1.22	24
98	59,470	43,350	1.37	22	59,632	43,350	1.38	22
99	147,533	116,400	1.27	9	147,979	116,400	1.27	9
	41,197,338	41,972,964	0.98	5,682	41,303,518	42,002,116	0.98337	5,685

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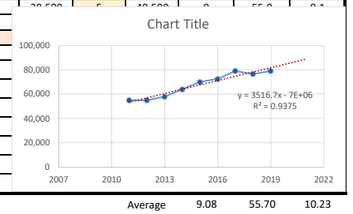
Appendix H: Historical Trendline Analysis

Historic Trendline Analysis by FDOT Count Station

Count station **032003** **Synopsis(2021)**

Year	AADT		DIRECTION 1		DIRECTION 2		*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	83,000	C	N	40,500	S	42,500	9	55.9	10.9	4.30%
2020	70,000	C	N	34,000	S	36,000	9	55.7	12.1	
2019	79,000	C	N	38,500	S	40,500	9	55	10.2	
2018	76,500	C	N	37,500	S	39,000	9	56	9.5	
2017	79,000	C	N							
2016	72,500	C	N							
2015	70,000	C	N							
2014	64,000	C	N							
2013	58,000	C	N							
2012	55,000	C	N							
2011	55,000	C	N							
2010	55,000	C	N							
2009	32,500	C	N							
2008	37,000	F	N							
2007	38,000	C	N							



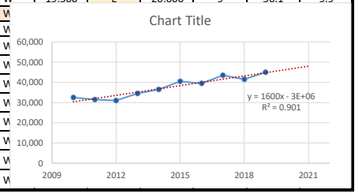
Average 9.08 55.70 10.23

Slope 3516.667
Intercept -7018417
Year 2019
Volume 81,733

Slope 3516.667
Intercept -7018417
Year 2045
Volume 173,167

Count station **032000** **Synopsis(2021)**

Year	AADT		DIRECTION 1		DIRECTION 2		*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	45,500	C	W	22,000	E	23,500	9	55.9	13.3	3.57%
2020	39,000	C	W	19,000	E	20,000	9	55.7	14.2	
2019	45,000	C	W	22,000	E	23,000	9	55	12	
2018	41,500	C	W	20,500	E	21,000	9	56	12.2	
2017	43,500	C	W	21,000	E	22,500	9	55.9	11.8	
2016	39,500	C	W	19.500	E	20.000	9	56.1	9.9	
2015	40,500	C	W							
2014	36,500	C	W							
2013	34,500	C	W							
2012	31,000	C	W							
2011	31,500	C	W							
2010	32,500	C	W							
2009	34,000	C	W							
2008	32,500	C	W							
2007	33,500	C	W							
2006	28,500	C	W							



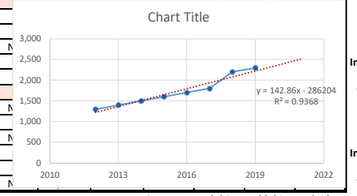
Average 9.06 55.46 12.48

Slope 1600
Intercept -3185600
Year 2019
Volume 44,800

Slope 1600
Intercept -3185600
Year 2045
Volume 86,400

Count station **037035** Ramp **Synopsis Not available**

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	2,200	T						6.42%
2020	2,200	S						
2019	2,300	F						
2018	2,200	C	N					
2017	1,800	T						
2016	1,700	S						
2015	1,600	F						
2014	1,500	C	N					
2013	1,400	F						
2012	1,300	C	N					
2011	5,800	S						
2010	5,700	F						
2009	5,800	C	N					



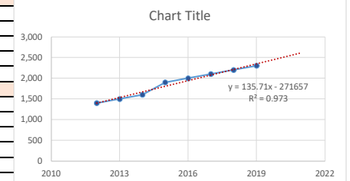
Average 9.04 99.91 9.18

Slope 142.8571
Intercept -286204
Year 2019
Volume 2,225

Slope 142.8571
Intercept -286204
Year 2045
Volume 5,939

Count station **037036** Ramp **Synopsis Not available**

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	2,200	T						5.78%
2020	2,200	S						
2019	2,300	F						
2018	2,200	C	S					
2017	2,100	S						
2016	2,000	F						
2015	1,900	C	S					
2014	1,600	S						
2013	1,500	F						
2012	1,400	C	S					
2011	1,400	S						
2010	1,400	F						
2009	1,400	C	S					



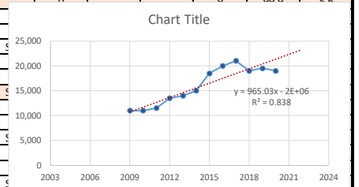
Average 9.04 99.91 9.32

Slope 135.7143
Intercept -271657.1
Year 2019
Volume 2,350

Slope 135.7143
Intercept -271657.1
Year 2045
Volume 5,879

Count station **037037** Ramp **Synopsis Not available**

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	19,000	T						4.72%
2020	19,000	S						
2019	19,500	F						
2018	19,000	C	S					
2017	21,000	S						
2016	20,000	F						
2015	18,500	C	S					
2014	15,000	S						
2013	14,000	F						
2012	13,500	C	S					
2011	11,500	S						
2010	11,000	F						
2009	11,000	C	S					



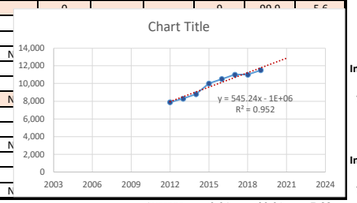
Average 9.04 99.91 6.90

Slope 965.035
Intercept -1927980
Year 2019
Volume 20,426

Slope 965.035
Intercept -1927980
Year 2045
Volume 45,517

Count station **037038** Ramp **Synopsis Not available**

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	11,000	T						4.63%
2020	11,000	S						
2019	11,500	F						
2018	11,000	C	N					
2017	11,000	S						
2016	10,500	F						
2015	10,000	C	N					
2014	8,800	S						
2013	8,300	F						
2012	7,900	C	N					
2011	3,800	S						
2010	3,700	F						
2009	3,800	C	N					



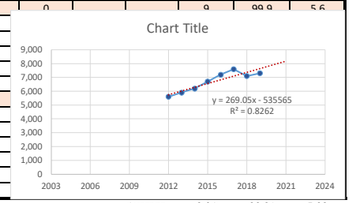
Average 9.04 99.91 7.66

Slope 545.2381
Intercept -1089052
Year 2019
Volume 11,783

Slope 545.2381
Intercept -1089052
Year 2045
Volume 25,960

Count station **037039** Ramp **Synopsis Not available**

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	7,200	T						3.52%
2020	7,100	S						
2019	7,300	F						
2018	7,100	C	N					
2017	7,600	S						
2016	7,200	F						
2015	6,700	C	N					
2014	6,200	S						
2013	5,900	F						
2012	5,600	C	N					
2011	6,600	S						
2010	6,400	F						
2009	6,500	C	N					



Average 9.04 99.91 5.93

Slope 269.0476
Intercept -535565.5
Year 2019
Volume 7,642

Slope 269.0476
Intercept -535565.5
Year 2045
Volume 14,637

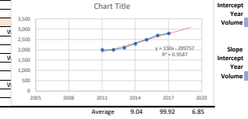
Historic Trendline Analysis by FDOT Count Station

Count station 037011 Ramp

Synopsis Not available

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	2,500	T	0		9	99.9	5.6	4.85%
2020	2,500	S	0		9	99.9	8.1	
2019	2,600	F	0		9	99.9	7.5	
2018	2,500	C						
2017	2,800	T						
2016	2,700	S						
2015	2,500	F						
2014	2,300	C						
2013	2,100	S						
2012	2,000	F						
2011	2,000	C						
2010	2,200	S						
2009	2,200	F						
2008	2,200	C						
2007	2,900	S						
2006	2,900	F						

Average 9.04 99.92 6.85



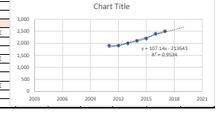
Slope 150
Intercept -299757
Year 2019
Volume 3,093

Slope 150
Intercept -299757
Year 2045
Volume 6,993

Count station 037012 Ramp

Synopsis Not available

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	2,200	T	0		9	99.9	5.6	4.00%
2020	2,200	S	0		9	99.9	8.1	
2019	2,300	F	0		9	99.9	7.5	
2018	2,200	C						
2017	2,500	T						
2016	2,400	S						
2015	2,200	F						
2014	2,100	C						
2013	2,000	S						
2012	1,900	F						
2011	1,900	C						
2010	2,000	S						
2009	2,000	F						
2008	2,000	C						
2007	3,200	S						
2006	3,200	F						



Slope 107.1429
Intercept -213642.9
Year 2019
Volume 2,679

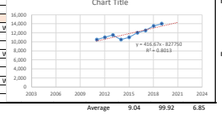
Slope 107.1429
Intercept -213642.9
Year 2045
Volume 5,464

Count station 037013 Ramp

Synopsis Not available

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	13,500	T	0		10.5	99.9	5.6	3.09%
2020	13,500	S	0		10.5	99.9	8.1	
2019	14,000	F	0		10.5	99.9	7.5	
2018	13,500	C						
2017	12,500	T						
2016	12,000	S						
2015	11,000	F						
2014	10,500	C						
2013	11,500	S						
2012	11,000	F						
2011	10,500	C						
2010	11,000	S						
2009	11,000	F						
2008	11,000	C						
2007	11,500	S						
2006	11,500	F						

Average 9.04 99.92 6.85



Slope 416.6667
Intercept -827750
Year 2019
Volume 13,500

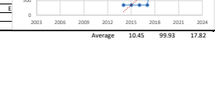
Slope 416.6667
Intercept -827750
Year 2045
Volume 24,333

Count station 037014 Ramp

Synopsis Not available

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	14,000	T	0	0	10.5	99.9	5.6	4.66%
2020	14,000	S	0	0	10.5	99.9	8.1	
2019	14,500	F	0	0	10.5	99.9	7.5	
2018	14,000	C						
2017	13,500	T						
2016	13,000	S						
2015	12,000	F						
2014	11,000	C						
2013	12,000	S						
2012	11,500	F						
2011	11,000	C						
2010	11,500	S						
2009	11,500	F						
2008	11,500	C						
2007	13,000	S						
2006	13,000	F						

Average 9.44 99.92 6.85



Slope 685.7143
Intercept -1369743
Year 2019
Volume 14,714

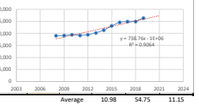
Slope 685.7143
Intercept -1369743
Year 2045
Volume 32,543

Count station 030351

Hourly Continuous Counts report is available

Year	AADT		DIRECTION 1		DIRECTION 2		*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	26,851	C	N	13,780	S	13,071	10.5	55.2	12.4	2.85%
2020	20,830	C	N	10,623	S	10,207	10.5	57	14.2	
2019	26,404	C	N	13,180	S	13,224	10.5	53.3	11.6	
2018	24,970	C	E							
2017	24,968	C	E							
2016	24,597	C	E							
2015	23,127	C	E							
2014	21,320	C	E							
2013	20,221	C	E							
2012	19,444	C	E							
2011	19,204	C	E							
2010	19,484	C	E							
2009	19,114	C	E							
2008	19,033	C	E							
2007	21,141	C	E							
2006	22,029	C	E							

Average 10.98 54.75 11.15



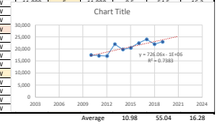
Slope 738.7622
Intercept -1465674
Year 2019
Volume 25,887

Slope 738.7622
Intercept -1465674
Year 2045
Volume 45,095

Count station 030173 Synopsis(2021)

Year	AADT		DIRECTION 1		DIRECTION 2		*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	23,500	C	W	11,500	E	12,000	10.5	55.5	17.1	3.05%
2020	22,000	F	W	11,000	E	11,000	10.5	56	17.1	
2019	23,000	C	W	11,500	E	11,500	10.5	54.2	17.1	
2018	22,000	C	W							
2017	24,000	C	W							
2016	22,500	C	W							
2015	20,500	C	W							
2014	19,800	C	W							
2013	22,000	C	W							
2012	17,100	C	W							
2011	17,200	C	W							
2010	17,500	C	W							
2009	16,000	C	W							
2008	17,500	C	W							
2007	18,700	C	W							
2006	19,700	C	W							

Average 10.98 55.04 16.28



Slope 726.0606
Intercept -1442089
Year 2019
Volume 23,827

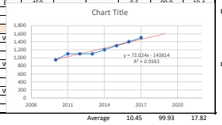
Slope 726.0606
Intercept -1442089
Year 2045
Volume 42,705

Count station 037001 Ramp

Synopsis Not available

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	450	T	0		10.5	99.9	15.1	4.49%
2020	450	S	0		10.5	99.9	14.7	
2019	450	F	0		10.5	99.9	18.4	
2018	450	C						
2017	1,500	T						
2016	1,400	S						
2015	1,300	F						
2014	1,200	C						
2013	1,100	S						
2012	1,100	F						
2011	1,100	C						
2010	950	S						
2009	1,000	F						
2008	1,100	C						
2007	1,000	S						
2006	1,000	F						

Average 10.45 99.93 17.82



Slope 72.02381
Intercept -143814
Year 2019
Volume 1,602

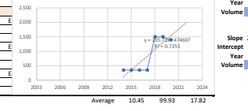
Slope 72.02381
Intercept -143814
Year 2045
Volume 3,475

Count station 037004 Ramp

Synopsis Not available

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	1,400	T	0		10.5	99.9	15.1	18.13%
2020	1,400	S	0		10.5	99.9	14.7	
2019	1,500	F	0		10.5	99.9	18.4	
2018	1,500	C						
2017	350	T						
2016	350	S						
2015	350	F						
2014	350	C						
2013	400	S						
2012	400	F						
2011	400	C						
2010	450	S						
2009	450	F						
2008	450	C						
2007	400	S						
2006	400	F						

Average 10.45 99.93 17.82



Slope 235.7143
Intercept -474607
Year 2019
Volume 1,300

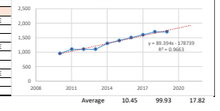
Slope 235.7143
Intercept -474607
Year 2045
Volume 7,429

Count station 037002 Ramp

Synopsis Not available

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	1,600	T	0		10.5	99.9	15.1	5.12%
2020	1,600	S	0		10.5	99.9	14.7	
2019	1,700	F	0		10.5	99.9	18.4	
2018	1,700	C						
2017	1,600	T						
2016	1,500	S						
2015	1,400	F						
2014	1,300	C						
2013	1,100	S						
2012	1,100	F						
2011	1,100	C						
2010	950	S						
2009	1,000	F						
2008	1,100	C						
2007	1,000	S						
2006	1,000	F						

Average 10.45 99.93 17.82



Slope 89.39394
Intercept -178739.1
Year 2019
Volume 1,747

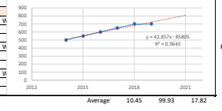
Slope 89.39394
Intercept -178739.1
Year 2045
Volume 4,072

Count station 037003 Ramp

Synopsis Not available

Year	AADT		DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR	Annual Growth Rate
2021	650	T	0		10.5	99.9	15.1	5.92%
2020	650	S	0		10.5	99.9	14.7	
2019	700	F	0		10.5	99.9	18.4	
2018	700	C						
2017	650	T						
2016	600	S						
2015	550	F						
2014	500	C						
2013	500	S						
2012	500	F						
2011	500	C						
2010	550	S						
2009	550	F						
2008	600	C						
2007	500	S						
2006	500	F						

Average 10.45 99.93 17.82



Slope 42.85714
Intercept -85804.8
Year 2019
Volume 724

Slope 42.85714
Intercept -85804.8
Year 2045
Volume 1,838

Appendix I: Traffic Analysis Output Reports

2025 RFP Traffic Analysis Output Reports

(AM Peak Hour)

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Project Description	RFP Alternative_EB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	13465	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2797	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1041
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.43

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	13.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2797	1663
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	3122	1812
Capacity (c_{md}), pc/h	7200	4000
Initial Adjusted Capacity (c_{mda}), pc/h	7200	-
Final Adjusted Capacity (c_{mda}), pc/h	7200	4000
Volume-to-Capacity Ratio (v/c)	0.43	0.45

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	720
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	2402	Outer Lanes Freeway Speed (S_O), mi/h	82.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	60.2
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	17.3
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	11.4

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	5095	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1134	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	633
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.26

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	8.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Merge Report

Project Information

Segment Number	4	Segment Name	SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1260
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1134	292
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1266	318
Capacity (c_{md}), pc/h	4800	2000
Adjusted Capacity (c_{mda}), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.33	0.16

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	67.0
Flow in Lanes 1 and 2 (v_{12}), pc/h	1266	Outer Lanes Freeway Speed (S_O), mi/h	75.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1584	Ramp Junction Speed (S), mi/h	67.0
Number of Outer Lanes on Freeway (N_O), ln	0	Average Density (D), pc/mi/ln	11.8
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	9.9

HCS Basic Freeway Report

Project Information

Segment Number	5	Segment Name	I-75 From SR 951 EB On Ramp to Everglades Blvd EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43780	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1426	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	796
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.33

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	10.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	RFP Alternative_EB Direction of Travel		

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 Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	12.38		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp	13465	3
2	Diverge	Diverge	SR 951 EB Off Ramp	1500	3
3	Basic	Basic	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp	5095	2
4	Merge	Merge	SR 951 EB On Ramp	1500	2
5	Basic	Basic	I-75 From SR 951 EB On Ramp to Everglades Blvd EB Off Ramp	43780	2

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	3122	7200	0.43	75.4	13.8	B

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	3122	1812	7200	4000	0.43	0.45	60.2	55.7	17.3	11.4	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1266	4800	0.26	75.3	8.4	A

Segment 4: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	1584	318	4800	2000	0.33	0.16	67.0	67.0	11.8	9.9	A

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1592	4800	0.33	75.4	10.6	A

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	5592	5292	0.88	22.01	74.5	11.6	10.9	10.00	B

Facility Overall Results

Space Mean Speed, mi/h	74.5	Average Density, veh/mi/ln	10.9
Average Travel Time, min	10.00	Average Density, pc/mi/ln	11.6
Total VMT, veh-mi	5592	Total VHD, veh-h	0.88
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	22.01

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Project Description	RFP Alternative_WB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	962	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	537
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.22

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	7.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	250
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	962	230
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1074	251
Capacity (c_{md}), pc/h	4800	2000
Initial Adjusted Capacity (c_{mda}), pc/h	4800	-
Final Adjusted Capacity (c_{mda}), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.22	0.13

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	1074	Outer Lanes Freeway Speed (S_O), mi/h	82.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	60.3
Number of Outer Lanes on Freeway (N_O), ln	0	Average Density (D), pc/mi/ln	8.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	11.2

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	2850	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	732	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	408
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.17

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	5.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	4	Segment Name	SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	980	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	732	634
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	817	691
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.21	0.35

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	9999.0	Flow Outer Lanes (v_{OA}), pc/h/ln	0
Downstream Equilibrium Distance (L_{EQ}), ft	9999.0	On-Ramp Influence Area Speed (S_R), mi/h	75.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	0	Outer Lanes Freeway Speed (S_O), mi/h	75.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	0	Ramp Junction Speed (S), mi/h	75.4
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	6.7
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	6.7

HCS Freeway Merge Report

Project Information

Segment Number	5	Segment Name	SR 951 WB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1250
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1366	832
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1525	907
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.34	0.45

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	592
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	66.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	933	Outer Lanes Freeway Speed (S_O), mi/h	75.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1840	Ramp Junction Speed (S), mi/h	68.6
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	11.8
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	11.6

HCS Basic Freeway Report

Project Information

Segment Number	6	Segment Name	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	12185	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2198	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	818
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.34

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	10.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	RFP Alternative_WB Direction of Travel		

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	6
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	11.90		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp	43840	2
2	Diverge	Diverge	SR 951 WB Off Ramp	1500	2
3	Basic	Basic	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	2850	2
4	Merge	Basic	SR 951 WB On Ramp Loop	980	3
5	Merge	Merge	SR 951 WB On Ramp	1500	3
6	Basic	Basic	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp	12185	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1074	4800	0.22	75.4	7.1	A

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	1074	251	4800	2000	0.22	0.13	60.3	60.3	8.9	11.2	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	817	4800	0.17	75.0	5.4	A

Segment 4: Merge

AP	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 Infl.	F	R Infl.	

1	0.95	0.95	0.943	0.966	1508	691	7200	2000	0.21	0.35	75.4	75.4	6.7	6.7	A

Segment 5: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2432	907	7200	2000	0.34	0.45	68.6	66.8	11.8	11.6	B

Segment 6: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2454	7200	0.34	75.4	10.8	A

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	3842	3563	0.46	11.54	74.7	8.2	7.7	9.60	A

Facility Overall Results

Space Mean Speed, mi/h	74.7	Average Density, veh/mi/ln	7.7
Average Travel Time, min	9.60	Average Density, pc/mi/ln	8.2
Total VMT, veh-mi	3842	Total VHD, veh-h	0.46
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	11.54

2025 RFP Traffic Analysis Output Reports

(PM Peak Hour)

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Project Description	RFP Alternative_EB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	13465	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2198	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	818
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.34

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	10.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2198	1307
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	2454	1424
Capacity (c_{md}), pc/h	7200	4000
Initial Adjusted Capacity (c_{mda}), pc/h	7200	-
Final Adjusted Capacity (c_{mda}), pc/h	7200	4000
Volume-to-Capacity Ratio (v/c)	0.34	0.36

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	566
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	56.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	1888	Outer Lanes Freeway Speed (S_O), mi/h	82.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	61.2
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	13.4
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	7.0

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	5095	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	891	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	498
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.21

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	6.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Merge Report

Project Information

Segment Number	4	Segment Name	SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1260
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	891	230
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	995	251
Capacity (c_{md}), pc/h	4800	2000
Adjusted Capacity (c_{mda}), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.26	0.13

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	67.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	995	Outer Lanes Freeway Speed (S_O), mi/h	75.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1246	Ramp Junction Speed (S), mi/h	67.2
Number of Outer Lanes on Freeway (N_O), ln	0	Average Density (D), pc/mi/ln	9.3
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	7.3

HCS Basic Freeway Report

Project Information

Segment Number	5	Segment Name	I-75 From SR 951 EB On Ramp to Everglades Blvd EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43780	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1121	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	626
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.26

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	8.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	RFP Alternative_EB Direction of Travel		

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 Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	12.38		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp	13465	3
2	Diverge	Diverge	SR 951 EB Off Ramp	1500	3
3	Basic	Basic	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp	5095	2
4	Merge	Merge	SR 951 EB On Ramp	1500	2
5	Basic	Basic	I-75 From SR 951 EB On Ramp to Everglades Blvd EB Off Ramp	43780	2

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2454	7200	0.34	75.4	10.8	A

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2454	1424	7200	4000	0.34	0.36	61.2	56.8	13.4	7.0	A

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	995	4800	0.21	75.3	6.6	A

Segment 4: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	1246	251	4800	2000	0.26	0.13	67.2	67.2	9.3	7.3	A

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1251	4800	0.26	75.4	8.3	A

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	4395	4159	0.64	16.09	74.6	9.1	8.5	10.00	A

Facility Overall Results

Space Mean Speed, mi/h	74.6	Average Density, veh/mi/ln	8.5
Average Travel Time, min	10.00	Average Density, pc/mi/ln	9.1
Total VMT, veh-mi	4395	Total VHD, veh-h	0.64
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	16.09

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Project Description	RFP Alternative_WB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1225	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	684
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.28

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	250
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1225	292
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1367	318
Capacity (c_{md}), pc/h	4800	2000
Initial Adjusted Capacity (c_{mda}), pc/h	4800	-
Final Adjusted Capacity (c_{mda}), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.28	0.16

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	1367	Outer Lanes Freeway Speed (S_O), mi/h	82.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	60.1
Number of Outer Lanes on Freeway (N_O), ln	0	Average Density (D), pc/mi/ln	11.4
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	13.8

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	2850	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	933	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	520
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.22

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	6.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	4	Segment Name	SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	980	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	933	806
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1041	878
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.27	0.44

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	9999.0	Flow Outer Lanes (v_{OA}), pc/h/ln	0
Downstream Equilibrium Distance (L_{EQ}), ft	9999.0	On-Ramp Influence Area Speed (S_R), mi/h	75.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	0	Outer Lanes Freeway Speed (S_O), mi/h	75.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	0	Ramp Junction Speed (S), mi/h	75.4
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	8.5
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	8.5

HCS Freeway Merge Report

Project Information

Segment Number	5	Segment Name	SR 951 WB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1250
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1739	1058
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1941	1153
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.43	0.58

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	753
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	66.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	1188	Outer Lanes Freeway Speed (S_O), mi/h	74.5
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2341	Ramp Junction Speed (S), mi/h	68.0
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	15.2
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	15.4

HCS Basic Freeway Report

Project Information

Segment Number	6	Segment Name	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	12185	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2797	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1041
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.43

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	13.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	RFP Alternative_WB Direction of Travel		

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	6
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	11.90		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp	43840	2
2	Diverge	Diverge	SR 951 WB Off Ramp	1500	2
3	Basic	Basic	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	2850	2
4	Merge	Basic	SR 951 WB On Ramp Loop	980	3
5	Merge	Merge	SR 951 WB On Ramp	1500	3
6	Basic	Basic	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp	12185	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1367	4800	0.28	75.4	9.1	A

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	1367	318	4800	2000	0.28	0.16	60.1	60.1	11.4	13.8	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1041	4800	0.22	74.9	6.9	A

Segment 4: Merge

AP	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 Infl.	F	R Infl.	

1	0.95	0.95	0.943	0.966	1919	878	7200	2000	0.27	0.44	75.4	75.4	8.5	8.5	A

Segment 5: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	3094	1153	7200	2000	0.43	0.58	68.0	66.2	15.2	15.4	B

Segment 6: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	3122	7200	0.43	75.4	13.8	B

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	4889	4536	0.62	15.48	74.7	10.5	9.9	9.60	A

Facility Overall Results

Space Mean Speed, mi/h	74.7	Average Density, veh/mi/ln	9.9
Average Travel Time, min	9.60	Average Density, pc/mi/ln	10.5
Total VMT, veh-mi	4889	Total VHD, veh-h	0.62
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	15.48

2025 D/B Traffic Analysis Output Reports

(AM Peak Hour)

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Project Description	DB Alternative_EB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	13465	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2797	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1041
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.43

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	13.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2797	1663
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	3122	1812
Capacity (c_{md}), pc/h	7200	4000
Initial Adjusted Capacity (c_{mda}), pc/h	7200	-
Final Adjusted Capacity (c_{mda}), pc/h	7200	4000
Volume-to-Capacity Ratio (v/c)	0.43	0.45

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	720
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	55.7
Flow in Lanes 1 and 2 (v_{12}), pc/h	2402	Outer Lanes Freeway Speed (S_O), mi/h	82.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	60.2
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	17.3
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	11.4

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	1840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1134	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	633
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.26

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	8.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	4	Segment Name	SR 951 EB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1134	78
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1266	85
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.19	0.04

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	9999.0	Flow Outer Lanes (v_{OA}), pc/h/ln	0
Downstream Equilibrium Distance (L_{EQ}), ft	9999.0	On-Ramp Influence Area Speed (S_R), mi/h	75.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	0	Outer Lanes Freeway Speed (S_O), mi/h	75.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	0	Ramp Junction Speed (S), mi/h	75.3
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	6.0
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	6.0

HCS Basic Freeway Report

Project Information

Segment Number	5	Segment Name	I-75 From SR 951 EB On Ramp Loop to SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	710	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1212	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	451
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.19

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	6.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Merge Report

Project Information

Segment Number	6	Segment Name	SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1360
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1212	214
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1353	233
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.22	0.12

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	520
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	67.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	833	Outer Lanes Freeway Speed (S_O), mi/h	75.3
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1066	Ramp Junction Speed (S), mi/h	69.9
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	7.6
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	5.2

HCS Basic Freeway Report

Project Information

Segment Number	7	Segment Name	I-75 from SR 951 EB On Ramp to EB Lane Drop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1426	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	531
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.22

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.6
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	7.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	8	Segment Name	I-75 From EB Lane Drop to Everglades Blvd EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43985	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1426	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	796
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.33

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	10.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	DB Alternative_EB Direction of Travel		

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	8
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	12.38		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp	13465	3
2	Diverge	Diverge	SR 951 EB Off Ramp	1500	3
3	Basic	Basic	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp	1840	2
4	Merge	Basic	SR 951 EB On Ramp Loop	1500	3
5	Basic	Basic	I-75 From SR 951 EB On Ramp Loop to SR 951 EB On Ramp	710	3
6	Merge	Merge	SR 951 EB On Ramp	1500	3
7	Basic	Basic	I-75 from SR 951 EB On Ramp to EB Lane Drop	840	3
8	Basic	Basic	I-75 From EB Lane Drop to Everglades Blvd EB Off Ramp	43985	2

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	3122	7200	0.43	75.4	13.8	B

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	3122	1812	7200	4000	0.43	0.45	60.2	55.7	17.3	11.4	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1266	4800	0.26	74.4	8.4	A

Segment 4: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	1351	85	7200	2000	0.19	0.04	75.3	75.4	6.0	6.0	A

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1353	7200	0.19	75.4	6.0	A

Segment 6: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	1586	233	7200	2000	0.22	0.12	69.9	67.5	7.6	5.2	A

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1592	7200	0.22	74.6	7.0	A

Segment 8: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1592	4800	0.33	75.4	10.6	A

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	5615	5315	0.84	21.00	74.6	11.3	10.6	10.00	B

Facility Overall Results

Space Mean Speed, mi/h	74.6	Average Density, veh/mi/ln	10.6
Average Travel Time, min	10.00	Average Density, pc/mi/ln	11.3
Total VMT, veh-mi	5615	Total VHD, veh-h	0.84
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	21.00

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Project Description	DB Alternative_WB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	962	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	537
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.22

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	7.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	250
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	962	230
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1074	251
Capacity (c_{md}), pc/h	4800	2000
Initial Adjusted Capacity (c_{mda}), pc/h	4800	-
Final Adjusted Capacity (c_{mda}), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.22	0.13

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	1074	Outer Lanes Freeway Speed (S_O), mi/h	82.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	60.3
Number of Outer Lanes on Freeway (N_O), ln	0	Average Density (D), pc/mi/ln	8.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	11.2

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	1700	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	732	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	408
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.17

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	5.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	4	Segment Name	SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	732	634
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	817	691
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.21	0.35

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	9999.0	Flow Outer Lanes (v_{OA}), pc/h/ln	0
Downstream Equilibrium Distance (L_{EQ}), ft	9999.0	On-Ramp Influence Area Speed (S_R), mi/h	75.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	0	Outer Lanes Freeway Speed (S_O), mi/h	75.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	0	Ramp Junction Speed (S), mi/h	75.3
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	6.7
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	6.7

HCS Basic Freeway Report

Project Information

Segment Number	5	Segment Name	I-75 from SR 951 WB On Ramp Loop to SR 951 WB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	600	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1366	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	508
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.21

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	6.7
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Merge Report

Project Information

Segment Number	6	Segment Name	SR 951 WB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1260
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1366	832
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1525	907
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.34	0.45

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	590
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	66.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	935	Outer Lanes Freeway Speed (S_O), mi/h	75.1
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1842	Ramp Junction Speed (S), mi/h	68.6
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	11.8
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	11.6

HCS Basic Freeway Report

Project Information

Segment Number	7	Segment Name	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	12210	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2198	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	818
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.34

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	10.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	DB Alternative_WB Direction of Travel		

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	7
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	11.90		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp	43840	2
2	Diverge	Diverge	SR 951 WB Off Ramp	1500	2
3	Basic	Basic	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	1700	2
4	Merge	Basic	SR 951 WB On Ramp Loop	1500	3
5	Basic	Basic	I-75 from SR 951 WB On Ramp Loop to SR 951 WB On Ramp	600	3
6	Merge	Merge	SR 951 WB On Ramp	1500	3
7	Basic	Basic	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp	12210	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1074	4800	0.22	75.4	7.1	A

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	1074	251	4800	2000	0.22	0.13	60.3	60.3	8.9	11.2	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	817	4800	0.17	74.3	5.4	A

Segment 4: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	1508	691	7200	2000	0.21	0.35	75.3	75.4	6.7	6.7	A

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1525	7200	0.21	75.4	6.7	A

Segment 6: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2432	907	7200	2000	0.34	0.45	68.6	66.8	11.8	11.6	B

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2454	7200	0.34	75.4	10.8	A

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	3879	3583	0.47	11.68	74.7	8.2	7.7	9.60	A

Facility Overall Results

Space Mean Speed, mi/h	74.7	Average Density, veh/mi/ln	7.7
Average Travel Time, min	9.60	Average Density, pc/mi/ln	8.2
Total VMT, veh-mi	3879	Total VHD, veh-h	0.47
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	11.68

2025 D/B Traffic Analysis Output Reports

(PM Peak Hour)

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	DB Alternative_EB Direction of Travel		

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	8
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	12.38		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp	13465	3
2	Diverge	Diverge	SR 951 EB Off Ramp	1500	3
3	Basic	Basic	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp	1840	2
4	Merge	Basic	SR 951 EB On Ramp Loop	1500	3
5	Basic	Basic	I-75 From SR 951 EB On Ramp Loop to SR 951 EB On Ramp	710	3
6	Merge	Merge	SR 951 EB On Ramp	1500	3
7	Basic	Basic	I-75 from SR 951 EB On Ramp to EB Lane Drop	840	3
8	Basic	Basic	I-75 From EB Lane Drop to Everglades Blvd EB Off Ramp	43985	2

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2454	7200	0.34	75.4	10.8	A

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2454	1424	7200	4000	0.34	0.36	61.2	56.8	13.4	7.0	A

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	995	4800	0.21	74.5	6.6	A

Segment 4: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	1063	68	7200	2000	0.15	0.03	75.3	75.4	4.7	4.7	A

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1064	7200	0.15	75.4	4.7	A

Segment 6: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	1247	183	7200	2000	0.17	0.09	70.0	67.6	5.9	3.5	A

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1251	7200	0.17	74.6	5.5	A

Segment 8: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1251	4800	0.26	75.4	8.3	A

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	4414	4177	0.61	15.32	74.6	8.8	8.3	10.00	A

Facility Overall Results

Space Mean Speed, mi/h	74.6	Average Density, veh/mi/ln	8.3
Average Travel Time, min	10.00	Average Density, pc/mi/ln	8.8
Total VMT, veh-mi	4414	Total VHD, veh-h	0.61
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	15.32

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Project Description	DB Alternative_WB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1225	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	684
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.28

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	250
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1225	292
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1367	318
Capacity (c_{md}), pc/h	4800	2000
Initial Adjusted Capacity (c_{mda}), pc/h	4800	-
Final Adjusted Capacity (c_{mda}), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.28	0.16

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	60.1
Flow in Lanes 1 and 2 (v_{12}), pc/h	1367	Outer Lanes Freeway Speed (S_O), mi/h	82.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	60.1
Number of Outer Lanes on Freeway (N_O), ln	0	Average Density (D), pc/mi/ln	11.4
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	13.8

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	1700	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	933	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	520
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.22

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	6.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	4	Segment Name	SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	933	806
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1041	878
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.27	0.44

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	9999.0	Flow Outer Lanes (v_{OA}), pc/h/ln	0
Downstream Equilibrium Distance (L_{EQ}), ft	9999.0	On-Ramp Influence Area Speed (S_R), mi/h	75.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	0	Outer Lanes Freeway Speed (S_O), mi/h	75.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	0	Ramp Junction Speed (S), mi/h	75.3
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	8.5
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	8.5

HCS Basic Freeway Report

Project Information

Segment Number	5	Segment Name	I-75 from SR 951 WB On Ramp Loop to SR 951 WB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	600	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1739	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	647
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.27

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	8.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Merge Report

Project Information

Segment Number	6	Segment Name	SR 951 WB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1260
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1739	1058
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1941	1153
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.43	0.58

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	751
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	66.3
Flow in Lanes 1 and 2 (v_{12}), pc/h	1190	Outer Lanes Freeway Speed (S_O), mi/h	74.5
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2343	Ramp Junction Speed (S), mi/h	68.1
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	15.1
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	15.4

HCS Basic Freeway Report

Project Information

Segment Number	7	Segment Name	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	12210	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2797	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1041
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.43

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	13.8
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2025
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	DB Alternative_WB Direction of Travel		

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	7
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	11.90		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp	43840	2
2	Diverge	Diverge	SR 951 WB Off Ramp	1500	2
3	Basic	Basic	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	1700	2
4	Merge	Basic	SR 951 WB On Ramp Loop	1500	3
5	Basic	Basic	I-75 from SR 951 WB On Ramp Loop to SR 951 WB On Ramp	600	3
6	Merge	Merge	SR 951 WB On Ramp	1500	3
7	Basic	Basic	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp	12210	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1367	4800	0.28	75.4	9.1	A

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	1367	318	4800	2000	0.28	0.16	60.1	60.1	11.4	13.8	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1041	4800	0.22	74.3	6.9	A

Segment 4: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	1919	878	7200	2000	0.27	0.44	75.3	75.4	8.5	8.5	A

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1941	7200	0.27	75.4	8.6	A

Segment 6: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	3094	1153	7200	2000	0.43	0.58	68.1	66.3	15.1	15.4	B

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	3122	7200	0.43	75.4	13.8	B

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	4936	4561	0.62	15.55	74.7	10.5	9.9	9.60	A

Facility Overall Results

Space Mean Speed, mi/h	74.7	Average Density, veh/mi/ln	9.9
Average Travel Time, min	9.60	Average Density, pc/mi/ln	10.5
Total VMT, veh-mi	4936	Total VHD, veh-h	0.62
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	15.55

2045 RFP Traffic Analysis Output Reports

(AM Peak Hour)

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Project Description	RFP Alternative_EB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	13465	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4586	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1706
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.71

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	69.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	24.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	4586	2419
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	5119	2636
Capacity (c_{md}), pc/h	7200	4000
Initial Adjusted Capacity (c_{mda}), pc/h	7200	-
Final Adjusted Capacity (c_{mda}), pc/h	7200	4000
Volume-to-Capacity Ratio (v/c)	0.71	0.66

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1366
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	53.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	3753	Outer Lanes Freeway Speed (S_O), mi/h	81.3
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	58.6
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	29.1
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	23.0

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	5095	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2167	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1210
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.50

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	16.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Merge Report

Project Information

Segment Number	4	Segment Name	SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1260
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2167	554
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	2419	604
Capacity (c_{md}), pc/h	4800	2000
Adjusted Capacity (c_{mda}), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.63	0.30

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	64.9
Flow in Lanes 1 and 2 (v_{12}), pc/h	2419	Outer Lanes Freeway Speed (S_O), mi/h	75.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3023	Ramp Junction Speed (S), mi/h	64.9
Number of Outer Lanes on Freeway (N_O), ln	0	Average Density (D), pc/mi/ln	23.3
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	20.9

HCS Basic Freeway Report

Project Information

Segment Number	5	Segment Name	I-75 From SR 951 EB On Ramp to Everglades Blvd EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43780	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2721	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1518
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.63

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	21.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	RFP Alternative_EB Direction of Travel		

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 Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	12.38		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp	13465	3
2	Diverge	Diverge	SR 951 EB Off Ramp	1500	3
3	Basic	Basic	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp	5095	2
4	Merge	Merge	SR 951 EB On Ramp	1500	2
5	Basic	Basic	I-75 From SR 951 EB On Ramp to Everglades Blvd EB Off Ramp	43780	2

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	5119	7200	0.71	69.7	24.5	C

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	5119	2636	7200	4000	0.71	0.66	58.6	53.2	29.1	23.0	C

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2419	4800	0.50	74.8	16.2	B

Segment 4: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	3023	604	4800	2000	0.63	0.30	64.9	64.9	23.3	20.9	C

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	3037	4800	0.63	72.3	21.0	C

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	10110	9567	8.51	212.76	70.9	21.9	20.7	10.50	C

Facility Overall Results

Space Mean Speed, mi/h	70.9	Average Density, veh/mi/ln	20.7
Average Travel Time, min	10.50	Average Density, pc/mi/ln	21.9
Total VMT, veh-mi	10110	Total VHD, veh-h	8.51
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	212.76

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Project Description	RFP Alternative_WB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2059	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1149
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.48

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	15.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	250
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2059	356
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	2298	388
Capacity (c_{md}), pc/h	4800	2000
Initial Adjusted Capacity (c_{mda}), pc/h	4800	-
Final Adjusted Capacity (c_{mda}), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.48	0.19

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	59.9
Flow in Lanes 1 and 2 (v_{12}), pc/h	2298	Outer Lanes Freeway Speed (S_O), mi/h	82.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	59.9
Number of Outer Lanes on Freeway (N_O), ln	0	Average Density (D), pc/mi/ln	19.2
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	21.8

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	2850	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1703	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	950
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.40

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	12.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	4	Segment Name	SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	980	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1703	990
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1901	1079
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.41	0.54

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	9999.0	Flow Outer Lanes (v_{OA}), pc/h/ln	0
Downstream Equilibrium Distance (L_{EQ}), ft	9999.0	On-Ramp Influence Area Speed (S_R), mi/h	75.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	0	Outer Lanes Freeway Speed (S_O), mi/h	75.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	0	Ramp Junction Speed (S), mi/h	75.4
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	13.2
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	13.2

HCS Freeway Merge Report

Project Information

Segment Number	5	Segment Name	SR 951 WB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1250
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2693	911
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	3006	993
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.56	0.50

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1166
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	65.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	1840	Outer Lanes Freeway Speed (S_O), mi/h	73.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2833	Ramp Junction Speed (S), mi/h	67.4
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	19.8
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	19.4

HCS Basic Freeway Report

Project Information

Segment Number	6	Segment Name	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	12185	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3604	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1341
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.56

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	18.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	RFP Alternative_WB Direction of Travel		

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	6
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	11.90		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp	43840	2
2	Diverge	Diverge	SR 951 WB Off Ramp	1500	2
3	Basic	Basic	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	2850	2
4	Merge	Basic	SR 951 WB On Ramp Loop	980	3
5	Merge	Merge	SR 951 WB On Ramp	1500	3
6	Basic	Basic	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp	12185	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2298	4800	0.48	75.1	15.3	B

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2298	388	4800	2000	0.48	0.19	59.9	59.9	19.2	21.8	C

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1901	4800	0.40	74.9	12.6	B

Segment 4: Merge

AP	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 Infl.	F	R Infl.	

1	0.95	0.95	0.943	0.966	2980	1079	7200	2000	0.41	0.54	75.4	75.4	13.2	13.2	B

Segment 5: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	3999	993	7200	2000	0.56	0.50	67.4	65.4	19.8	19.4	B

Segment 6: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	4023	7200	0.56	74.0	18.1	C

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	7481	7000	1.76	43.93	74.1	16.1	15.2	9.60	B

Facility Overall Results

Space Mean Speed, mi/h	74.1	Average Density, veh/mi/ln	15.2
Average Travel Time, min	9.60	Average Density, pc/mi/ln	16.1
Total VMT, veh-mi	7481	Total VHD, veh-h	1.76
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	43.93

2045 RFP Traffic Analysis Output Reports

(PM Peak Hour)

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Project Description	RFP Alternative_EB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	13465	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3604	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1341
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.56

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	18.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	3604	1901
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	4023	2071
Capacity (c_{md}), pc/h	7200	4000
Initial Adjusted Capacity (c_{mda}), pc/h	7200	-
Final Adjusted Capacity (c_{mda}), pc/h	7200	4000
Volume-to-Capacity Ratio (v/c)	0.56	0.52

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1074
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	54.9
Flow in Lanes 1 and 2 (v_{12}), pc/h	2949	Outer Lanes Freeway Speed (S_O), mi/h	82.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	60.3
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	22.2
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	16.1

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	5095	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.33
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1703	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	950
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.40

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	12.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Merge Report

Project Information

Segment Number	4	Segment Name	SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1260
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1703	436
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1901	475
Capacity (c_{md}), pc/h	4800	2000
Adjusted Capacity (c_{mda}), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.50	0.24

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	66.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	1901	Outer Lanes Freeway Speed (S_O), mi/h	75.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2376	Ramp Junction Speed (S), mi/h	66.2
Number of Outer Lanes on Freeway (N_O), ln	0	Average Density (D), pc/mi/ln	17.9
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	16.0

HCS Basic Freeway Report

Project Information

Segment Number	5	Segment Name	I-75 From SR 951 EB On Ramp to Everglades Blvd EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43780	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2139	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1194
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.50

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	15.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	RFP Alternative_EB Direction of Travel		

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 Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	12.38		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp	13465	3
2	Diverge	Diverge	SR 951 EB Off Ramp	1500	3
3	Basic	Basic	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp	5095	2
4	Merge	Merge	SR 951 EB On Ramp	1500	2
5	Basic	Basic	I-75 From SR 951 EB On Ramp to Everglades Blvd EB Off Ramp	43780	2

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	4023	7200	0.56	74.0	18.1	C

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	4023	2071	7200	4000	0.56	0.52	60.3	54.9	22.2	16.1	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1901	4800	0.40	75.3	12.6	B

Segment 4: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2376	475	4800	2000	0.49	0.24	66.2	66.2	17.9	16.0	B

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2388	4800	0.50	74.9	15.9	B

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	7948	7519	2.21	55.35	73.9	16.5	15.6	10.10	B

Facility Overall Results

Space Mean Speed, mi/h	73.9	Average Density, veh/mi/ln	15.6
Average Travel Time, min	10.10	Average Density, pc/mi/ln	16.5
Total VMT, veh-mi	7948	Total VHD, veh-h	2.21
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	55.35

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Project Description	RFP Alternative_WB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2621	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1463
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.61

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	20.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	250
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2621	454
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	2926	495
Capacity (c_{md}), pc/h	4800	2000
Initial Adjusted Capacity (c_{mda}), pc/h	4800	-
Final Adjusted Capacity (c_{mda}), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.61	0.25

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	59.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	2926	Outer Lanes Freeway Speed (S_O), mi/h	82.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	59.6
Number of Outer Lanes on Freeway (N_O), ln	0	Average Density (D), pc/mi/ln	24.5
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	27.2

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	2850	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2167	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1210
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.50

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.8
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	16.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	4	Segment Name	SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	980	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2167	1260
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	2419	1373
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.53	0.69

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	9999.0	Flow Outer Lanes (v_{OA}), pc/h/ln	0
Downstream Equilibrium Distance (L_{EQ}), ft	9999.0	On-Ramp Influence Area Speed (S_R), mi/h	74.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	0	Outer Lanes Freeway Speed (S_O), mi/h	75.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	0	Ramp Junction Speed (S), mi/h	74.5
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	17.0
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	17.0

HCS Freeway Merge Report

Project Information

Segment Number	5	Segment Name	SR 951 WB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1250
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	3427	1159
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	3825	1263
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.71	0.63

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1484
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	62.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	2341	Outer Lanes Freeway Speed (S_O), mi/h	71.9
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3604	Ramp Junction Speed (S), mi/h	65.2
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	26.0
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	25.2

HCS Basic Freeway Report

Project Information

Segment Number	6	Segment Name	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	12185	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4586	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1706
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.71

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	69.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	24.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	RFP Alternative_WB Direction of Travel		

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	6
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	11.90		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp	43840	2
2	Diverge	Diverge	SR 951 WB Off Ramp	1500	2
3	Basic	Basic	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	2850	2
4	Merge	Basic	SR 951 WB On Ramp Loop	980	3
5	Merge	Merge	SR 951 WB On Ramp	1500	3
6	Basic	Basic	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp	12185	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2926	4800	0.61	72.9	20.1	C

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2926	495	4800	2000	0.61	0.25	59.6	59.6	24.5	27.2	C

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2419	4800	0.50	74.8	16.2	B

Segment 4: Merge

AP	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 Infl.	F	R Infl.	

1	0.95	0.95	0.943	0.966	3792	1373	7200	2000	0.53	0.69	74.5	74.5	17.0	17.0	B

Segment 5: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	5088	1263	7200	2000	0.71	0.63	65.2	62.8	26.0	25.2	C

Segment 6: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	5119	7200	0.71	69.7	24.5	C

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	9522	8909	7.08	177.01	71.4	21.3	20.1	10.00	C

Facility Overall Results

Space Mean Speed, mi/h	71.4	Average Density, veh/mi/ln	20.1
Average Travel Time, min	10.00	Average Density, pc/mi/ln	21.3
Total VMT, veh-mi	9522	Total VHD, veh-h	7.08
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	177.01

2045 D/B Traffic Analysis Output Reports

(AM Peak Hour)

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Project Description	DB Alternative_EB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	13465	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4586	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1706
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.71

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	69.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	24.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	4586	2419
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	5119	2636
Capacity (c_{md}), pc/h	7200	4000
Initial Adjusted Capacity (c_{mda}), pc/h	7200	-
Final Adjusted Capacity (c_{mda}), pc/h	7200	4000
Volume-to-Capacity Ratio (v/c)	0.71	0.66

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1366
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	53.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	3753	Outer Lanes Freeway Speed (S_O), mi/h	81.3
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	58.6
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	29.1
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	23.0

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	1840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2167	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1210
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.50

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	16.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	4	Segment Name	SR 951 EB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2167	149
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	2419	162
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.36	0.08

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	9999.0	Flow Outer Lanes (v_{OA}), pc/h/ln	0
Downstream Equilibrium Distance (L_{EQ}), ft	9999.0	On-Ramp Influence Area Speed (S_R), mi/h	75.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	0	Outer Lanes Freeway Speed (S_O), mi/h	75.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	0	Ramp Junction Speed (S), mi/h	75.3
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	11.4
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	11.4

HCS Basic Freeway Report

Project Information

Segment Number	5	Segment Name	I-75 From SR 951 EB On Ramp Loop to SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	710	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2316	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	862
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.36

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	11.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Merge Report

Project Information

Segment Number	6	Segment Name	SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1360
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2316	405
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	2585	441
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.42	0.22

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	993
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	66.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	1592	Outer Lanes Freeway Speed (S_O), mi/h	73.6
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2033	Ramp Junction Speed (S), mi/h	68.9
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	14.6
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	12.7

HCS Basic Freeway Report

Project Information

Segment Number	7	Segment Name	I-75 from SR 951 EB On Ramp to EB Lane Drop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2721	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1012
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.42

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	13.4
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	8	Segment Name	I-75 From EB Lane Drop to Everglades Blvd EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43985	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2721	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1518
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.63

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.3
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	21.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	DB Alternative_EB Direction of Travel		

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	8
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	12.38		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp	13465	3
2	Diverge	Diverge	SR 951 EB Off Ramp	1500	3
3	Basic	Basic	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp	1840	2
4	Merge	Basic	SR 951 EB On Ramp Loop	1500	3
5	Basic	Basic	I-75 From SR 951 EB On Ramp Loop to SR 951 EB On Ramp	710	3
6	Merge	Merge	SR 951 EB On Ramp	1500	3
7	Basic	Basic	I-75 from SR 951 EB On Ramp to EB Lane Drop	840	3
8	Basic	Basic	I-75 From EB Lane Drop to Everglades Blvd EB Off Ramp	43985	2

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	5119	7200	0.71	69.7	24.5	C

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	5119	2636	7200	4000	0.71	0.66	58.6	53.2	29.1	23.0	C

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2419	4800	0.50	74.3	16.2	B

Segment 4: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2581	162	7200	2000	0.36	0.08	75.3	75.4	11.4	11.4	B

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2585	7200	0.36	75.4	11.4	B

Segment 6: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	3026	441	7200	2000	0.42	0.22	68.9	66.8	14.6	12.7	B

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	3037	7200	0.42	74.4	13.4	B

Segment 8: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	3037	4800	0.63	72.3	21.0	C

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	10155	9610	8.35	208.72	71.0	21.3	20.1	10.50	C

Facility Overall Results

Space Mean Speed, mi/h	71.0	Average Density, veh/mi/ln	20.1
Average Travel Time, min	10.50	Average Density, pc/mi/ln	21.3
Total VMT, veh-mi	10155	Total VHD, veh-h	8.35
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	208.72

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Project Description	DB Alternative_WB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2059	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1149
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.48

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.1
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	15.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	250
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2059	356
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	2298	388
Capacity (c_{md}), pc/h	4800	2000
Initial Adjusted Capacity (c_{mda}), pc/h	4800	-
Final Adjusted Capacity (c_{mda}), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.48	0.19

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	59.9
Flow in Lanes 1 and 2 (v_{12}), pc/h	2298	Outer Lanes Freeway Speed (S_O), mi/h	82.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	59.9
Number of Outer Lanes on Freeway (N_O), ln	0	Average Density (D), pc/mi/ln	19.2
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	21.8

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	1700	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1703	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	950
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.40

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.2
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	12.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	4	Segment Name	SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1703	990
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1901	1079
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.41	0.54

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	9999.0	Flow Outer Lanes (v_{OA}), pc/h/ln	0
Downstream Equilibrium Distance (L_{EQ}), ft	9999.0	On-Ramp Influence Area Speed (S_R), mi/h	75.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	0	Outer Lanes Freeway Speed (S_O), mi/h	75.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	0	Ramp Junction Speed (S), mi/h	75.3
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	13.2
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	13.2

HCS Basic Freeway Report

Project Information

Segment Number	5	Segment Name	I-75 from SR 951 WB On Ramp Loop to SR 951 WB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	600	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2693	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1002
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.42

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	13.3
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Merge Report

Project Information

Segment Number	6	Segment Name	SR 951 WB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1260
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2693	911
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	3006	993
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.56	0.50

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1163
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	65.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	1843	Outer Lanes Freeway Speed (S_O), mi/h	73.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	2836	Ramp Junction Speed (S), mi/h	67.4
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	19.8
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	19.3

HCS Basic Freeway Report

Project Information

Segment Number	7	Segment Name	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	12210	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3604	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1341
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.56

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	18.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	AM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	DB Alternative_WB Direction of Travel		

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	7
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	11.90		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp	43840	2
2	Diverge	Diverge	SR 951 WB Off Ramp	1500	2
3	Basic	Basic	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	1700	2
4	Merge	Basic	SR 951 WB On Ramp Loop	1500	3
5	Basic	Basic	I-75 from SR 951 WB On Ramp Loop to SR 951 WB On Ramp	600	3
6	Merge	Merge	SR 951 WB On Ramp	1500	3
7	Basic	Basic	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp	12210	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2298	4800	0.48	75.1	15.3	B

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2298	388	4800	2000	0.48	0.19	59.9	59.9	19.2	21.8	C

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1901	4800	0.40	74.2	12.6	B

Segment 4: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2980	1079	7200	2000	0.41	0.54	75.3	75.4	13.2	13.2	B

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	3006	7200	0.42	75.4	13.3	B

Segment 6: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	3999	993	7200	2000	0.56	0.50	67.4	65.4	19.8	19.3	B

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	4023	7200	0.56	74.0	18.1	C

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	7538	7030	1.77	44.29	74.1	16.1	15.2	9.60	B

Facility Overall Results

Space Mean Speed, mi/h	74.1	Average Density, veh/mi/ln	15.2
Average Travel Time, min	9.60	Average Density, pc/mi/ln	16.1
Total VMT, veh-mi	7538	Total VHD, veh-h	1.77
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	44.29

2045 D/B Traffic Analysis Output Reports

(PM Peak Hour)

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Project Description	DB Alternative_EB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	13465	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	-
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3604	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1341
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.56

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.0
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	18.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	2
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	1500
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided Two-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	3604	1901
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	4023	2071
Capacity (c_{md}), pc/h	7200	4000
Initial Adjusted Capacity (c_{mda}), pc/h	7200	-
Final Adjusted Capacity (c_{mda}), pc/h	7200	4000
Volume-to-Capacity Ratio (v/c)	0.56	0.52

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1074
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	54.9
Flow in Lanes 1 and 2 (v_{12}), pc/h	2949	Outer Lanes Freeway Speed (S_O), mi/h	82.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	60.3
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	22.2
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	16.1

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	1840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1703	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	950
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.40

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	12.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	4	Segment Name	SR 951 EB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1703	117
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	1901	127
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.28	0.06

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	9999.0	Flow Outer Lanes (v_{OA}), pc/h/ln	0
Downstream Equilibrium Distance (L_{EQ}), ft	9999.0	On-Ramp Influence Area Speed (S_R), mi/h	75.4
Flow in Lanes 1 and 2 (v_{12}), pc/h	0	Outer Lanes Freeway Speed (S_O), mi/h	75.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	0	Ramp Junction Speed (S), mi/h	75.3
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	9.0
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	9.0

HCS Basic Freeway Report

Project Information

Segment Number	5	Segment Name	I-75 From SR 951 EB On Ramp Loop to SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	710	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	1820	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	677
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.28

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	75.4
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	9.0
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Merge Report

Project Information

Segment Number	6	Segment Name	SR 951 EB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1360
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	1820	319
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	2032	348
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.33	0.17

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	780
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	67.2
Flow in Lanes 1 and 2 (v_{12}), pc/h	1252	Outer Lanes Freeway Speed (S_O), mi/h	74.4
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	1600	Ramp Junction Speed (S), mi/h	69.4
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	11.4
Level of Service (LOS)	A	Density in Ramp Influence Area (D_R), pc/mi/ln	9.3

HCS Basic Freeway Report

Project Information

Segment Number	7	Segment Name	I-75 from SR 951 EB On Ramp to EB Lane Drop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2139	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	796
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.33

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	10.6
Total Ramp Density Adjustment	-	Level of Service (LOS)	A
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	8	Segment Name	I-75 From EB Lane Drop to Everglades Blvd EB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43985	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2139	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1194
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.50

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	15.9
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	DB Alternative_EB Direction of Travel		

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	8
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	12.38		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 From CR 886 SB On Ramp to SR 951 EB Off Ramp	13465	3
2	Diverge	Diverge	SR 951 EB Off Ramp	1500	3
3	Basic	Basic	I-75 From SR 951 EB Off Ramp to SR 951 EB On Ramp	1840	2
4	Merge	Basic	SR 951 EB On Ramp Loop	1500	3
5	Basic	Basic	I-75 From SR 951 EB On Ramp Loop to SR 951 EB On Ramp	710	3
6	Merge	Merge	SR 951 EB On Ramp	1500	3
7	Basic	Basic	I-75 from SR 951 EB On Ramp to EB Lane Drop	840	3
8	Basic	Basic	I-75 From EB Lane Drop to Everglades Blvd EB Off Ramp	43985	2

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	4023	7200	0.56	74.0	18.1	C

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	4023	2071	7200	4000	0.56	0.52	60.3	54.9	22.2	16.1	B

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	1901	4800	0.40	74.4	12.6	B

Segment 4: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2028	127	7200	2000	0.28	0.06	75.3	75.4	9.0	9.0	A

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2032	7200	0.28	75.4	9.0	A

Segment 6: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2380	348	7200	2000	0.33	0.17	69.4	67.2	11.4	9.3	A

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2388	7200	0.33	74.5	10.6	A

Segment 8: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2388	4800	0.50	74.9	15.9	B

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	7984	7553	2.14	53.60	73.9	16.1	15.2	10.00	B

Facility Overall Results

Space Mean Speed, mi/h	73.9	Average Density, veh/mi/ln	15.2
Average Travel Time, min	10.00	Average Density, pc/mi/ln	16.1
Total VMT, veh-mi	7984	Total VHD, veh-h	2.14
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	53.60

HCS Basic Freeway Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Project Description	DB Alternative_WB Direction of Travel	Units	U.S. Customary
Segment Number	1	Segment Name	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	43840	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.00
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2621	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1463
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.61

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	72.9
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	20.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Diverge Report

Project Information

Segment Number	2	Segment Name	SR 951 WB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	2	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Deceleration Length (LD), ft	1500	250
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2621	454
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	2926	495
Capacity (c_{md}), pc/h	4800	2000
Initial Adjusted Capacity (c_{mda}), pc/h	4800	-
Final Adjusted Capacity (c_{mda}), pc/h	4800	2000
Volume-to-Capacity Ratio (v/c)	0.61	0.25

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	-
Downstream Equilibrium Distance (L_{EQ}), ft	-	Off-Ramp Influence Area Speed (S_R), mi/h	59.6
Flow in Lanes 1 and 2 (v_{12}), pc/h	2926	Outer Lanes Freeway Speed (S_O), mi/h	82.7
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	-	Ramp Junction Speed (S), mi/h	59.6
Number of Outer Lanes on Freeway (N_O), ln	0	Average Density (D), pc/mi/ln	24.5
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	27.2

HCS Basic Freeway Report

Project Information

Segment Number	3	Segment Name	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	2	Terrain Type	Level
Segment Length (L), ft	1700	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	2167	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1210
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.50

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.2
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	16.2
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Basic Freeway Report

Project Information

Segment Number	4	Segment Name	SR 951 WB On Ramp Loop
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	800
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	2167	1260
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	2419	1373
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.53	0.69

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	9999.0	Flow Outer Lanes (v_{OA}), pc/h/ln	0
Downstream Equilibrium Distance (L_{EQ}), ft	9999.0	On-Ramp Influence Area Speed (S_R), mi/h	74.5
Flow in Lanes 1 and 2 (v_{12}), pc/h	0	Outer Lanes Freeway Speed (S_O), mi/h	75.0
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	0	Ramp Junction Speed (S), mi/h	74.5
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	17.0
Level of Service (LOS)	B	Density in Ramp Influence Area (D_R), pc/mi/ln	17.0

HCS Basic Freeway Report

Project Information

Segment Number	5	Segment Name	I-75 from SR 951 WB On Ramp Loop to SR 951 WB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	600	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	3427	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1275
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.53

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	74.5
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	17.1
Total Ramp Density Adjustment	-	Level of Service (LOS)	B
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Merge Report

Project Information

Segment Number	6	Segment Name	SR 951 WB On Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

	Freeway	Ramp
Number of Lanes (N), ln	3	1
Free-Flow Speed (FFS), mi/h	75.4	35.0
Segment Length (L) / Acceleration Length (LA), ft	1500	1260
Terrain Type	Level	Level
Percent Grade, %	-	-
Segment Type / Ramp Type	Freeway	Right-Sided One-Lane

Adjustment Factors

Driver Population	All Familiar	All Familiar
Weather Type	Non-Severe Weather	Non-Severe Weather
Incident Type	No Incident	-
Proportion of CAVs in Traffic Stream	0	-
Final Speed Adjustment Factor (SAF)	1.000	1.000
Demand Adjustment Factor (DAF)	1.000	1.000
Capacity Adjustment Factor for CAVs, CAF_{CAV}	1.000	-
Final Capacity Adjustment Factor (CAF)	1.000	1.000

Demand and Capacity

Demand Volume (V_i), veh/h	3427	1159
Peak Hour Factor (PHF)	0.95	0.95
Total Trucks, %	6.00	3.50
Heavy Vehicle Adjustment Factor (f_{HV})	0.943	0.966
Flow Rate (v_i), pc/h	3825	1263
Capacity (c_{md}), pc/h	7200	2000
Adjusted Capacity (c_{mda}), pc/h	7200	2000
Volume-to-Capacity Ratio (v/c)	0.71	0.63

Speed and Density

Upstream Equilibrium Distance (L_{EQ}), ft	-	Flow Outer Lanes (v_{OA}), pc/h/ln	1480
Downstream Equilibrium Distance (L_{EQ}), ft	-	On-Ramp Influence Area Speed (S_R), mi/h	62.8
Flow in Lanes 1 and 2 (v_{12}), pc/h	2345	Outer Lanes Freeway Speed (S_O), mi/h	71.9
Flow Entering Ramp-Infl. Area (v_{R12}), pc/h	3608	Ramp Junction Speed (S), mi/h	65.2
Number of Outer Lanes on Freeway (N_O), ln	1	Average Density (D), pc/mi/ln	26.0
Level of Service (LOS)	C	Density in Ramp Influence Area (D_R), pc/mi/ln	25.2

HCS Basic Freeway Report

Project Information

Segment Number	7	Segment Name	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp
Analysis Period Number	1	Segment Analysis Period	07:00-07:15

Geometric Data

Number of Lanes (N), ln	3	Terrain Type	Level
Segment Length (L), ft	12210	Percent Grade, %	-
Measured or Base Free-Flow Speed	Measured	Grade Length, mi	-
Base Free-Flow Speed (BFFS), mi/h	-	Total Ramp Density (TRD), ramps/mi	0.50
Lane Width, ft	-	Free-Flow Speed (FFS), mi/h	75.4
Right-Side Lateral Clearance, ft	-		

Adjustment Factors

Driver Population	All Familiar	Final Speed Adjustment Factor (SAF)	1.000
Weather Type	Non-Severe Weather	Demand Adjustment Factor (DAF)	1.000
Incident Type	No Incident	Final Capacity Adjustment Factor (CAF)	1.000
Proportion of CAVs in Traffic Stream	0	Capacity Adj. Factor for CAVs, CAF_{CAV}	1.000

Demand and Capacity

Demand Volume (V), veh/h	4586	Heavy Vehicle Adjustment Factor (f_{HV})	0.943
Peak Hour Factor (PHF)	0.95	Flow Rate (v_p), pc/h/ln	1706
Total Trucks, %	6.00	Capacity (c), pc/h/ln	2400
Single-Unit Trucks (SUT), %	-	Initial Adjusted Capacity (c_{adj}), pc/h/ln	2400
Tractor-Trailers (TT), %	-	Final Adjusted Capacity (c_{adj}), pc/h/ln	2400
Passenger Car Equivalent (E_T)	2.00	Volume-to-Capacity Ratio (v/c)	0.71

Speed and Density

Lane Width Adjustment (f_{LW})	-	Average Speed (S), mi/h	69.7
Right-Side Lateral Clearance Adj. (f_{RLC})	-	Density (D), pc/mi/ln	24.5
Total Ramp Density Adjustment	-	Level of Service (LOS)	C
Adjusted Free-Flow Speed (FFS_{adj}), mi/h	75.4		

HCS Freeway Facilities Report

Project Information

Analyst	Pevida Highway Designers	Date	11/28/2022
Agency	Pevida Highway Designers	Analysis Year	2045
Jurisdiction	D1	Time Analyzed	PM Peak Hour
Facility Name	I-75 Mainline	Units	U.S. Customary
Project Description	DB Alternative_WB Direction of Travel		

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	7
Total Analysis Periods	1	Analysis Period Duration, min	15
Facility Length, mi	11.90		

Facility Segment Data

No.	Coded	Analyzed	Name	Length, ft	Lanes
1	Basic	Basic	I-75 from Everglades Blvd WB Off Ramp to SR 951 WB Off Ramp	43840	2
2	Diverge	Diverge	SR 951 WB Off Ramp	1500	2
3	Basic	Basic	I-75 from SR 951 WB Off Ramp to SR 951 WB On Ramp Loop	1700	2
4	Merge	Basic	SR 951 WB On Ramp Loop	1500	3
5	Basic	Basic	I-75 from SR 951 WB On Ramp Loop to SR 951 WB On Ramp	600	3
6	Merge	Merge	SR 951 WB On Ramp	1500	3
7	Basic	Basic	I-75 from SR 951 WB On Ramp to CR 886 NB Off Ramp	12210	3

Facility Segment Data

Segment 1: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2926	4800	0.61	72.9	20.1	C

Segment 2: Diverge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	2926	495	4800	2000	0.61	0.25	59.6	59.6	24.5	27.2	C

Segment 3: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	2419	4800	0.50	74.2	16.2	B

Segment 4: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	3792	1373	7200	2000	0.53	0.69	74.5	74.5	17.0	17.0	B

Segment 5: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	3825	7200	0.53	74.5	17.1	B

Segment 6: Merge

AP	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 Infl.	F	R Infl.	
1	0.95	0.95	0.943	0.966	5088	1263	7200	2000	0.71	0.63	65.2	62.8	26.0	25.2	C

Segment 7: Basic

AP	PHF	fHV	Flow Rate (pc/h)	Capacity (pc/h)	d/c Ratio	Speed (mi/h)	Density (pc/mi/ln)	LOS
1	0.95	0.943	5119	7200	0.71	69.7	24.5	C

Facility Analysis Results

AP	VMT veh-mi/AP	VMT-Demand veh-mi/AP	VHD veh-h/AP	Total Delay Cost $/AP	Speed mi/h	Density pc/mi/ln	Density veh/mi/ln	TT min	LOS
1	9594	8947	7.12	178.08	71.4	21.3	20.1	10.00	C

Facility Overall Results

Space Mean Speed, mi/h	71.4	Average Density, veh/mi/ln	20.1
Average Travel Time, min	10.00	Average Density, pc/mi/ln	21.3
Total VMT, veh-mi	9594	Total VHD, veh-h	7.12
Vehicle Value of Time (VOT), $/h	25.00	Total Delay Cost, $	178.08

Appendix J: Safety Analysis Output Reports

2045 RFP Safety Analysis Output Reports

Evaluation Site Summary

General Information

Project description:	D1 I-75 at SR 951 Interchange IMR Re-evaluation				
Analyst:	PHD	Date:	1/24/2023	Area type:	Urban
First year of analysis:	2022	Total length of freeway segments for Study Period (mi):		1.609	
Last year of analysis:	2045				

Site Description

Freeway Segments

Number	Lanes	Study Period Length (mi)	Study Period Description	
1	4	0.356	STA 245 (START) to STA 263+80 (SR 951 EB On Ramp)	
2	4	0.210	STA 263+80 (SR 951 EB On Ramp) to STA 275+00 (SR 951 WB Off Ramp)	
3	4	0.559	STA 275+00 (SR 951 WB Off Ramp) to STA 304+50 (SR 951 WB On Ramp Loop)	
4	5	0.147	STA 304+50 (SR 951 WB On Ramp Loop) to STA 312+25 (SR 951 WB On Ramp)	
5	5	0.045	STA 312+25 (SR 951 WB On Ramp) to STA 314+60 (SR 951 EB Off Ramp)	
6	6	0.292	STA 314+60 (SR 951 EB Off Ramp) to STA 330+00 (END)	
7	0	0.000	0	
8	0	0.000	0	
9	0	0.000	0	
10	0	0.000	0	
11	0	0.000	0	
12	0	0.000	0	
13	0	0.000	0	
14	0	0.000	0	
15	0	0.000	0	
16	0	0.000	0	
17	0	0.000	0	
18	0	0.000	0	
19	0	0.000	0	
20	0	0.000	0	

Ramp Segments

Number	Study Period Description		Number	Study Period Description	
1	0		21	0	
2	0		22	0	
3	0		23	0	
4	0		24	0	
5	0		25	0	
6	0		26	0	
7	0		27	0	
8	0		28	0	
9	0		29	0	
10	0		30	0	
11	0		31	0	
12	0		32	0	
13	0		33	0	
14	0		34	0	
15	0		35	0	
16	0		36	0	
17	0		37	0	
18	0		38	0	
19	0		39	0	
20	0		40	0	

Crossroad Ramp Terminals

Number	Config.	Control	Study Period Description	
1	0	0	0	
2	0	0	0	
3	0	0	0	
4	0	0	0	
5	0	0	0	
6	0	0	0	

Output Summary

General Information

Project description:	D1 I-75 at SR 951 Interchange IMR Re-evaluation				
Analyst:	PHD	Date:	1/24/2023	Area type:	Urban
First year of analysis:	2022				
Last year of analysis:	2045				

Crash Data Description

Freeway segments	Segment crash data available?	No	First year of crash data:	
	Project-level crash data available?	No	Last year of crash data:	
Ramp segments	Segment crash data available?	No	First year of crash data:	
	Project-level crash data available?	No	Last year of crash data:	
Ramp terminals	Segment crash data available?	No	First year of crash data:	
	Project-level crash data available?	No	Last year of crash data:	

Estimated Crash Statistics

Crashes for Entire Facility	**Total**	**K**	**A**	**B**	**C**	**PDO**
Estimated number of crashes during Study Period, crashes:	454.6	2.4	6.4	33.6	116.2	296.0
Estimated average crash freq. during Study Period, crashes/yr:	18.9	0.1	0.3	1.4	4.8	12.3

Crashes by Facility Component	**Nbr. Sites**	**Total**	**K**	**A**	**B**	**C**	**PDO**
Freeway segments, crashes:	6	454.6	2.4	6.4	33.6	116.2	296.0
Ramp segments, crashes:	0	0.0	0.0	0.0	0.0	0.0	0.0
Crossroad ramp terminals, crashes:	0	0.0	0.0	0.0	0.0	0.0	0.0

Crashes for Entire Facility by Year	**Year**	**Total**	**K**	**A**	**B**	**C**	**PDO**
Estimated number of crashes during the Study Period, crashes:	2022	18.9	0.1	0.3	1.4	4.8	12.3
	2023	18.9	0.1	0.3	1.4	4.8	12.3
	2024	18.9	0.1	0.3	1.4	4.8	12.3
	2025	18.9	0.1	0.3	1.4	4.8	12.3
	2026	18.9	0.1	0.3	1.4	4.8	12.3
	2027	18.9	0.1	0.3	1.4	4.8	12.3
	2028	18.9	0.1	0.3	1.4	4.8	12.3
	2029	18.9	0.1	0.3	1.4	4.8	12.3
	2030	18.9	0.1	0.3	1.4	4.8	12.3
	2031	18.9	0.1	0.3	1.4	4.8	12.3
	2032	18.9	0.1	0.3	1.4	4.8	12.3
	2033	18.9	0.1	0.3	1.4	4.8	12.3
	2034	18.9	0.1	0.3	1.4	4.8	12.3
	2035	18.9	0.1	0.3	1.4	4.8	12.3
	2036	18.9	0.1	0.3	1.4	4.8	12.3
	2037	18.9	0.1	0.3	1.4	4.8	12.3
	2038	18.9	0.1	0.3	1.4	4.8	12.3
	2039	18.9	0.1	0.3	1.4	4.8	12.3
	2040	18.9	0.1	0.3	1.4	4.8	12.3
	2041	18.9	0.1	0.3	1.4	4.8	12.3
	2042	18.9	0.1	0.3	1.4	4.8	12.3
	2043	18.9	0.1	0.3	1.4	4.8	12.3
	2044	18.9	0.1	0.3	1.4	4.8	12.3
	2045	18.9	0.1	0.3	1.4	4.8	12.3

Distribution of Crashes for Entire Facility

Crash Type	**Crash Type Category**	**Estimated Number of Crashes During the Study Period**					
		Total	**K**	**A**	**B**	**C**	**PDO**
Multiple vehicle	Head-on crashes:	1.2	0.0	0.0	0.2	0.6	0.4
	Right-angle crashes:	7.0	0.0	0.1	0.7	2.3	3.8
	Rear-end crashes:	225.9	1.2	3.3	17.1	59.3	145.0
	Sideswipe crashes:	75.9	0.3	0.8	4.2	14.4	56.2
	Other multiple-vehicle crashes:	8.1	0.0	0.1	0.7	2.3	4.9
	Total multiple-vehicle crashes:	318.1	1.6	4.3	22.8	79.0	210.3
Single vehicle	Crashes with animal:	2.0	0.0	0.0	0.0	0.1	1.8
	Crashes with fixed object:	98.0	0.5	1.5	7.7	26.8	61.5
	Crashes with other object:	14.8	0.0	0.1	0.6	2.0	12.1
	Crashes with parked vehicle:	2.0	0.0	0.0	0.2	0.5	1.3
	Other single-vehicle crashes	19.6	0.2	0.4	2.3	7.8	9.0
	Total single-vehicle crashes:	136.5	0.8	2.0	10.7	37.3	85.7
Total crashes:		454.6	2.4	6.4	33.6	116.2	296.0

Input Worksheet for Freeway Segments

Clear | Echo Input Values (View results in Column AV) | Check Input Values (View results in Advisory Messages)

		Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6	Segment 7	Segment 8	Segment 9	Segment 10	Segment 11	Segment 12	Segment 13	Segment 14	Segment 15	Segment 16	Segment 17	Segment 18	Segment 19	Segment 20
		Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period
Basic Roadway Data																					
Number of through lanes (n):		4	4	4	5	5	6														
Freeway segment description:		STA 245 (ST	STA 263+80	STA 275+00	STA 304+50	STA 312+25	STA 314+60 (SR 951 EB Off Ramp) to STA 330+00 (END)														
Segment length (L), mi:		0.356	0.21	0.559	0.147	0.0445	0.292														
Alignment Data																					
Horizontal Curve Data	← See note																				
1	Horizontal curve in segment?:	No	No	No	No	No	No														
	Curve radius (R_1), ft:																				
	Length of curve (L_{c1}), mi:																				
	Length of curve in segment ($L_{c1,seg}$), mi:																				
2	Horizontal curve in segment?:																				
	Curve radius (R_2), ft:																				
	Length of curve (L_{c2}), mi:																				
	Length of curve in segment ($L_{c2,seg}$), mi:																				
3	Horizontal curve in segment?:																				
	Curve radius (R_3), ft:																				
	Length of curve (L_{c3}), mi:																				
	Length of curve in segment ($L_{c3,seg}$), mi:																				
Cross Section Data																					
Lane width (W_l), ft:		12	12	12	12	12	12														
Outside shoulder width (W_s), ft:		10	10	10	10	10	10														
Inside shoulder width (W_{is}), ft:		12	12	11.5	12	12	5														
Median width (W_m), ft:		80	80	77	69	62	55														
Rumble strips on outside shoulders?:		Yes	Yes	Yes	Yes	Yes	Yes														
	Length of rumble strips for travel in increasing milepost direction, mi:	0.356	0.21	0.49	0.147	0.0445	0.292														
	Length of rumble strips for travel in decreasing milepost direction, mi:	0.356	0.21	0.49	0.147	0.0445	0.292														
Rumble strips on inside shoulders?:		Yes	Yes	Yes	Yes	Yes	Yes														
	Length of rumble strips for travel in increasing milepost direction, mi:	0.356	0.21	0.49	0.147	0.0445	0.292														
	Length of rumble strips for travel in decreasing milepost direction, mi:	0.356	0.21	0.49	0.147	0.0445	0.292														
Presence of barrier in median:		None	None	Some	Some	Some	Some														
1	Length of barrier ($L_{ib,1}$), mi:			0.08	0.1195	0.0445	0.047														
	Distance from edge of traveled way to barrier face ($W_{off,in,1}$), ft:			11.5	12	12	5														
2	Length of barrier ($L_{ib,2}$), mi:			0.197	0.0795	0.0445	0.292														
	Distance from edge of traveled way to barrier face ($W_{off,in,2}$), ft:			11.5	12	12	5														
3	Length of barrier ($L_{ib,3}$), mi:																				
	Distance from edge of traveled way to barrier face ($W_{off,in,3}$), ft:																				
4	Length of barrier ($L_{ib,4}$), mi:																				
	Distance from edge of traveled way to barrier face ($W_{off,in,4}$), ft:																				
5	Length of barrier ($L_{ib,5}$), mi:																				
	Distance from edge of traveled way to barrier face ($W_{off,in,5}$), ft:																				
Median barrier width (W_{ib}), ft:																					
Nearest distance from edge of traveled way to barrier face (W_{near}), ft:																					
Roadside Data																					
Clear zone width (W_{hc}), ft:		30	30	30	30	30	30														
Presence of barrier on roadside:		None	None	Some	None	None	None														
1	Length of barrier ($L_{ob,1}$), mi:			0.3096																	
	Distance from edge of traveled way to barrier face ($W_{off,o,1}$), ft:			10																	
2	Length of barrier ($L_{ob,2}$), mi:			0.267																	
	Distance from edge of traveled way to barrier face ($W_{off,o,2}$), ft:			10																	
3	Length of barrier ($L_{ob,3}$), mi:																				
	Distance from edge of traveled way to barrier face ($W_{off,o,3}$), ft:																				
4	Length of barrier ($L_{ob,4}$), mi:																				
	Distance from edge of traveled way to barrier face ($W_{off,o,4}$), ft:																				

5	Length of barrier ($L_{ob,5}$), mi:																						
	Distance from edge of traveled way to barrier face ($W_{off,o,5}$), ft:																						
Distance from edge of traveled way to barrier face, increasing milepost ($W_{off,inc}$), ft:																							
Distance from edge of traveled way to barrier face, decreasing milepost ($W_{off,dec}$), ft:																							
Ramp Access Data																							
Travel in Increasing Milepost Direction																							
Entrance	Ramp entrance in segment? (If yes, indicate type.):	No	No	No	Lane Add	S-C Lane	No																
Ramp	Distance from begin milepost to upstream entrance ramp gore ($X_{b,ent}$), mi:	999	999	999			999																
	Length of ramp entrance ($L_{en,inc}$), mi:					0.24																	
	Length of ramp entrance in segment ($L_{en,seg,inc}$), mi:					0.0445																	
	Entrance side?:					Right																	
Exit	Ramp exit in segment? (If yes, indicate type.):	No	S-C Lane	No	No	No	No																
Ramp	Distance from end milepost to downstream exit ramp gore ($X_{e,ext}$), mi:	999		999	999	999	999																
	Length of ramp exit ($L_{ex,inc}$), mi:		0.047																				
	Length of ramp exit in segment ($L_{ex,seg,inc}$), mi:		0.047																				
	Exit side?:		Right																				
Weave	Type B weave in segment?:	No	No	No	No	No	No																
	Length of weaving section ($L_{wev,inc}$), mi:																						
	Length of weaving section in segment ($L_{wev,seg,inc}$), mi:																						
Travel in Decreasing Milepost Direction																							
Entrance	Ramp entrance in segment? (If yes, indicate type.):	S-C Lane	No	No	No	No	No																
Ramp	Distance from end milepost to upstream entrance ramp gore ($X_{e,ent}$), mi:		999	999	999	999	999																
	Length of ramp entrance ($L_{en,dec}$), mi:	0.24																					
	Length of ramp entrance in segment ($L_{en,seg,dec}$), mi:	0.24																					
	Entrance side?:	Right																					
Exit	Ramp exit in segment? (If yes, indicate type.):	No	No	No	No	No	S-C Lane																
Ramp	Distance from begin milepost to downstream exit ramp gore ($X_{b,ext}$), mi:	999	999	999	999	999																	
	Length of ramp exit ($L_{ex,dec}$), mi:						0.05																
	Length of ramp exit in segment ($L_{ex,seg,dec}$), mi:						0.05																
	Exit side?:						Right																
Weave	Type B weave in segment?:	No	No	No	No	No	No																
	Length of weaving section ($L_{wev,dec}$), mi:																						
	Length of weaving section in segment ($L_{wev,seg,dec}$), mi:																						

Traffic Data	**Year**																						
Proportion of AADT during high-volume hours (P_{hv}):		0.95	0.95	0.95	0.95	0.95	0.95																
Freeway Segment Data	2022																						
Average daily traffic ($AADT_{fs}$) by year, veh/d:	2023																						
(enter data only for those years for which	2024																						
it is available, leave other years blank)	2025																						
	2026																						
	2027																						
	2028																						
	2029																						
	2030																						
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	2041																						
	2042																						
	2043																						
	2044																						
	2045	53000	47500	43000	55500	67000	91000																

Entrance Ramp Data for Travel in Increasing Milepost Dir.	**Year**

Average daily traffic ($AADT_{b,ent}$) by year, veh/d:	Year																				
(enter data only for those years for which it is available, leave other years blank)	2022																				
	2023																				
	2024																				
	2025																				
	2026																				
	2027																				
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	2042																				
	2043																				
	2044																				
	2045				12500	11500															
Exit Ramp Data for Travel in Increasing Milepost Direction	**Year**																				
Average daily traffic ($AADT_{e,ext}$) by year, veh/d:	2022																				
(enter data only for those years for which it is available, leave other years blank)	2023																				
	2024																				
	2025																				
	2026																				
	2027																				
	2028																				
	2029																				
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	2041																				
	2042																				
	2043																				
	2044																				
	2045		4500																		
Entrance Ramp Data for Travel in Decreasing Milepost Dir.	**Year**																				
Average daily traffic ($AADT_{e,ent}$) by year, veh/d:	2022																				
(enter data only for those years for which it is available, leave other years blank)	2023																				
	2024																				
	2025																				
	2026																				
	2027																				
	2028																				
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				2043																			
				2044																			
				2045	5500																		
Exit Ramp Data for Travel in Decreasing Milepost Direction				**Year**																			
Average daily traffic ($AADT_{b,ext}$) by year, veh/d:				2022																			
(enter data only for those years for which				2023																			
it is available, leave other years blank)				2024																			
				2025																			
				2026																			
				2027																			
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				2045						24000													

2045 D/B Safety Analysis Output Reports

Evaluation Site Summary

General Information

Project description:	D1 I-75 at SR 951 Interchange IMR Re-evaluation				
Analyst:	PHD	Date:	1/24/2023	Area type:	Urban
First year of analysis:	2022	Total length of freeway segments for Study Period (mi):		1.610	
Last year of analysis:	2045				

Site Description

Freeway Segments

Number	Lanes	Study Period Length (mi)	Study Period Description	
1	4	0.110	STA 245 (START) to STA 250+80 (I-75 EB Lane Drop)	
2	5	0.458	STA 250+80 (I-75 EB Lane Drop) to STA 275+00 (SR 951 EB On & WB Off Ramps)	
3	5	0.322	STA 275+00 (SR 951 EB On & WB Off Ramps) to STA 292+00 (SR 951 WB On Ramp Loop)	
4	6	0.085	STA 292+00 (SR 951 WB On Ramp Loop) to STA 296+50 (SR 951 EB On Ramp Loop)	
5	5	0.313	STA 296+50 (SR 951 EB On Ramp Loop) to STA 313+00 (SR 951 WB On Ramp)	
6	5	0.033	STA 313+00 (SR 951 WB On Ramp) to STA 314+75 (SR 951 EB Off Ramp)	
7	6	0.289	STA 314+75 (SR 951 EB Off Ramp) to STA 330+00 (END)	
8	0	0.000	0	
9	0	0.000	0	
10	0	0.000	0	
11	0	0.000	0	
12	0	0.000	0	
13	0	0.000	0	
14	0	0.000	0	
15	0	0.000	0	
16	0	0.000	0	
17	0	0.000	0	
18	0	0.000	0	
19	0	0.000	0	
20	0	0.000	0	

Ramp Segments

Number	Study Period Description		Number	Study Period Description	
1	0		21	0	
2	0		22	0	
3	0		23	0	
4	0		24	0	
5	0		25	0	
6	0		26	0	
7	0		27	0	
8	0		28	0	
9	0		29	0	
10	0		30	0	
11	0		31	0	
12	0		32	0	
13	0		33	0	
14	0		34	0	
15	0		35	0	
16	0		36	0	
17	0		37	0	
18	0		38	0	
19	0		39	0	
20	0		40	0	

Crossroad Ramp Terminals

Number	Config.	Control	Study Period Description	
1	0	0	0	
2	0	0	0	
3	0	0	0	
4	0	0	0	
5	0	0	0	
6	0	0	0	

Output Summary

General Information

Project description:	D1 I-75 at SR 951 Interchange IMR Re-evaluation				
Analyst:	PHD	Date:	1/24/2023	Area type:	Urban
First year of analysis:	2022				
Last year of analysis:	2045				

Crash Data Description

Freeway segments	Segment crash data available?	No	First year of crash data:	
	Project-level crash data available?	No	Last year of crash data:	
Ramp segments	Segment crash data available?	No	First year of crash data:	
	Project-level crash data available?	No	Last year of crash data:	
Ramp terminals	Segment crash data available?	No	First year of crash data:	
	Project-level crash data available?	No	Last year of crash data:	

Estimated Crash Statistics

Crashes for Entire Facility	**Total**	**K**	**A**	**B**	**C**	**PDO**
Estimated number of crashes during Study Period, crashes:	470.5	2.4	6.6	34.7	121.0	305.9
Estimated average crash freq. during Study Period, crashes/yr:	19.6	0.1	0.3	1.4	5.0	12.7

Crashes by Facility Component	**Nbr. Sites**	**Total**	**K**	**A**	**B**	**C**	**PDO**
Freeway segments, crashes:	7	470.5	2.4	6.6	34.7	121.0	305.9
Ramp segments, crashes:	0	0.0	0.0	0.0	0.0	0.0	0.0
Crossroad ramp terminals, crashes:	0	0.0	0.0	0.0	0.0	0.0	0.0

Crashes for Entire Facility by Year	**Year**	**Total**	**K**	**A**	**B**	**C**	**PDO**
Estimated number of crashes during the Study Period, crashes:	2022	19.6	0.1	0.3	1.4	5.0	12.7
	2023	19.6	0.1	0.3	1.4	5.0	12.7
	2024	19.6	0.1	0.3	1.4	5.0	12.7
	2025	19.6	0.1	0.3	1.4	5.0	12.7
	2026	19.6	0.1	0.3	1.4	5.0	12.7
	2027	19.6	0.1	0.3	1.4	5.0	12.7
	2028	19.6	0.1	0.3	1.4	5.0	12.7
	2029	19.6	0.1	0.3	1.4	5.0	12.7
	2030	19.6	0.1	0.3	1.4	5.0	12.7
	2031	19.6	0.1	0.3	1.4	5.0	12.7
	2032	19.6	0.1	0.3	1.4	5.0	12.7
	2033	19.6	0.1	0.3	1.4	5.0	12.7
	2034	19.6	0.1	0.3	1.4	5.0	12.7
	2035	19.6	0.1	0.3	1.4	5.0	12.7
	2036	19.6	0.1	0.3	1.4	5.0	12.7
	2037	19.6	0.1	0.3	1.4	5.0	12.7
	2038	19.6	0.1	0.3	1.4	5.0	12.7
	2039	19.6	0.1	0.3	1.4	5.0	12.7
	2040	19.6	0.1	0.3	1.4	5.0	12.7
	2041	19.6	0.1	0.3	1.4	5.0	12.7
	2042	19.6	0.1	0.3	1.4	5.0	12.7
	2043	19.6	0.1	0.3	1.4	5.0	12.7
	2044	19.6	0.1	0.3	1.4	5.0	12.7
	2045	19.6	0.1	0.3	1.4	5.0	12.7

Distribution of Crashes for Entire Facility

Crash Type	**Crash Type Category**	**Estimated Number of Crashes During the Study Period**					
		Total	**K**	**A**	**B**	**C**	**PDO**
Multiple vehicle	Head-on crashes:	1.3	0.0	0.0	0.2	0.6	0.4
	Right-angle crashes:	7.2	0.0	0.1	0.7	2.4	3.9
	Rear-end crashes:	233.0	1.2	3.4	17.6	61.6	149.3
	Sideswipe crashes:	78.1	0.3	0.8	4.3	15.0	57.7
	Other multiple-vehicle crashes:	8.4	0.0	0.1	0.7	2.4	5.0
	Total multiple-vehicle crashes:	328.0	1.7	4.5	23.5	82.0	216.4
Single vehicle	Crashes with animal:	2.1	0.0	0.0	0.0	0.1	1.9
	Crashes with fixed object:	102.4	0.6	1.5	8.0	28.0	64.2
	Crashes with other object:	15.4	0.0	0.1	0.6	2.0	12.6
	Crashes with parked vehicle:	2.1	0.0	0.0	0.2	0.6	1.4
	Other single-vehicle crashes	20.5	0.2	0.4	2.3	8.2	9.4
	Total single-vehicle crashes:	142.5	0.8	2.1	11.2	38.9	89.5
Total crashes:		470.5	2.4	6.6	34.7	121.0	305.9

Input Worksheet for Freeway Segments

Clear | Echo Input Values (View results in Column AV) | Check Input Values (View results in Advisory Messages)

		Segment 1	Segment 2	Segment 3	Segment 4	Segment 5	Segment 6	Segment 7	Segment 8	Segment 9	Segment 10	Segment 11	Segment 12	Segment 13	Segment 14	Segment 15	Segment 16	Segment 17	Segment 18	Segment 19	Segment 20
		Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period	Study Period
Basic Roadway Data																					
Number of through lanes (n):		4	5	5	6	5	5	6													
Freeway segment description:		STA 245 (ST	STA 250+80	STA 275+00	STA 292+00	STA 296+50	STA 313+00	STA 314+75 (SR 951 EB Off Ramp) to STA 330+00 (END)													
Segment length (L), mi:		0.11	0.458	0.322	0.085	0.313	0.033	0.289													
Alignment Data																					
Horizontal Curve Data	◄See note																				
1	Horizontal curve in segment?:	No	No	No	No	No	No	No													
	Curve radius (R_1), ft:																				
	Length of curve (L_{c1}), mi:																				
	Length of curve in segment ($L_{c1,seg}$), mi:																				
2	Horizontal curve in segment?:																				
	Curve radius (R_2), ft:																				
	Length of curve (L_{c2}), mi:																				
	Length of curve in segment ($L_{c2,seg}$), mi:																				
3	Horizontal curve in segment?:																				
	Curve radius (R_3), ft:																				
	Length of curve (L_{c3}), mi:																				
	Length of curve in segment ($L_{c3,seg}$), mi:																				
Cross Section Data																					
Lane width (W_l), ft:		12	12	12	12	12	12	12													
Outside shoulder width (W_s), ft:		10	10	10	10	10	10	10													
Inside shoulder width (W_{is}), ft:		12	12	12	9	12	12	5													
Median width (W_m), ft:		70	75	75	75	70	60	60													
Rumble strips on outside shoulders?:		Yes	Yes	Yes	Yes	Yes	Yes	Yes													
	Length of rumble strips for travel in increasing milepost direction, mi:	0.11	0.458	0.322	0.0462	0.313	0.033	0.289													
	Length of rumble strips for travel in decreasing milepost direction, mi:	0.11	0.458	0.322	0.0462	0.313	0.033	0.289													
Rumble strips on inside shoulders?:		Yes	Yes	Yes	Yes	Yes	Yes	Yes													
	Length of rumble strips for travel in increasing milepost direction, mi:	0.11	0.458	0.322	0.0462	0.313	0.033	0.289													
	Length of rumble strips for travel in decreasing milepost direction, mi:	0.11	0.458	0.322	0.0462	0.313	0.033	0.289													
Presence of barrier in median:		None	None	Some	Some	Some	Some	Some													
1	Length of barrier ($L_{ib,1}$), mi:			0.013	0.066	0.0795	0.033	0.045													
	Distance from edge of traveled way to barrier face ($W_{off,in,1}$), ft:			12	9	12	12	5													
2	Length of barrier ($L_{ib,2}$), mi:				0.064	0.03	0.033	0.289													
	Distance from edge of traveled way to barrier face ($W_{off,in,2}$), ft:				9	12	12	5													
3	Length of barrier ($L_{ib,3}$), mi:					0.255															
	Distance from edge of traveled way to barrier face ($W_{off,in,3}$), ft:					12															
4	Length of barrier ($L_{ib,4}$), mi:																				
	Distance from edge of traveled way to barrier face ($W_{off,in,4}$), ft:																				
5	Length of barrier ($L_{ib,5}$), mi:																				
	Distance from edge of traveled way to barrier face ($W_{off,in,5}$), ft:																				
Median barrier width (W_{ib}), ft:																					
Nearest distance from edge of traveled way to barrier face (W_{near}), ft:																					
Roadside Data																					
Clear zone width (W_{hc}), ft:		30	30	30	30	30	30	30													
Presence of barrier on roadside:		None	None	Some	Full	Some	None	None													
1	Length of barrier ($L_{ob,1}$), mi:			0.097		0.143															
	Distance from edge of traveled way to barrier face ($W_{off,o,1}$), ft:			10		10															
2	Length of barrier ($L_{ob,2}$), mi:			0.097		0.089															
	Distance from edge of traveled way to barrier face ($W_{off,o,2}$), ft:			10		10															
3	Length of barrier ($L_{ob,3}$), mi:																				
	Distance from edge of traveled way to barrier face ($W_{off,o,3}$), ft:																				
4	Length of barrier ($L_{ob,4}$), mi:																				
	Distance from edge of traveled way to barrier face ($W_{off,o,4}$), ft:																				

5	Length of barrier ($L_{ob,5}$), mi:																						
	Distance from edge of traveled way to barrier face ($W_{off,o,5}$), ft:																						
Distance from edge of traveled way to barrier face, increasing milepost ($W_{off,inc}$), ft:						10																	
Distance from edge of traveled way to barrier face, decreasing milepost ($W_{off,dec}$), ft:						10																	
Ramp Access Data																							
Travel in Increasing Milepost Direction																							
Entrance	Ramp entrance in segment? (If yes, indicate type.):	No	No	No	Lane Add	No	S-C Lane	No															
Ramp	Distance from begin milepost to upstream entrance ramp gore ($X_{b,ent}$), mi:	999	999	999		999		999															
	Length of ramp entrance ($L_{en,inc}$), mi:						0.2386																
	Length of ramp entrance in segment ($L_{en,seg,inc}$), mi:						0.033																
	Entrance side?:						Right																
Exit	Ramp exit in segment? (If yes, indicate type.):	No	S-C Lane	No	No	No	No	No															
Ramp	Distance from end milepost to downstream exit ramp gore ($X_{e,ext}$), mi:	999		999	999	999	999	999															
	Length of ramp exit ($L_{ex,inc}$), mi:		0.047																				
	Length of ramp exit in segment ($L_{ex,seg,inc}$), mi:		0.047																				
	Exit side?:		Right																				
Weave	Type B weave in segment?:	No	No	No	No	No	No	No															
	Length of weaving section ($L_{wev,inc}$), mi:																						
	Length of weaving section in segment ($L_{wev,seg,inc}$), mi:																						
Travel in Decreasing Milepost Direction																							
Entrance	Ramp entrance in segment? (If yes, indicate type.):	No	S-C Lane	No	Lane Add	No	No	No															
Ramp	Distance from end milepost to upstream entrance ramp gore ($X_{e,ent}$), mi:	999		999		999	999	999															
	Length of ramp entrance ($L_{en,dec}$), mi:		0.258																				
	Length of ramp entrance in segment ($L_{en,seg,dec}$), mi:		0.258																				
	Entrance side?:		Right																				
Exit	Ramp exit in segment? (If yes, indicate type.):	No	No	No	No	No	No	S-C Lane															
Ramp	Distance from begin milepost to downstream exit ramp gore ($X_{b,ext}$), mi:	999	999	999	999	999	999																
	Length of ramp exit ($L_{ex,dec}$), mi:							0.047															
	Length of ramp exit in segment ($L_{ex,seg,dec}$), mi:							0.047															
	Exit side?:							Right															
Weave	Type B weave in segment?:	No	No	No	No	No	No	No															
	Length of weaving section ($L_{wev,dec}$), mi:																						
	Length of weaving section in segment ($L_{wev,seg,dec}$), mi:																						
Traffic Data		**Year**																					
Proportion of AADT during high-volume hours (P_{hv}):			0.95	0.95	0.95	0.95	0.95	0.95	0.95														
Freeway Segment Data		2022																					
Average daily traffic ($AADT_{fs}$) by year, veh/d:		2023																					
(enter data only for those years for which		2024																					
it is available, leave other years blank)		2025																					
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		2045	53000	53000	44500	57000	55500	67000	91000														
Entrance Ramp Data for Travel in Increasing Milepost Dir.		**Year**																					

Average daily traffic ($AADT_{b,ent}$) by year, veh/d:			2022																					
(enter data only for those years for which			2023																					
it is available, leave other years blank)			2024																					
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			2045				12500		11500															
Exit Ramp Data for Travel in Increasing Milepost Direction			**Year**																					
Average daily traffic ($AADT_{e,ext}$) by year, veh/d:			2022																					
(enter data only for those years for which			2023																					
it is available, leave other years blank)			2024																					
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			2045		4500																			
Entrance Ramp Data for Travel in Decreasing Milepost Dir.			**Year**																					
Average daily traffic ($AADT_{e,ent}$) by year, veh/d:			2022																					
(enter data only for those years for which			2023																					
it is available, leave other years blank)			2024																					
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				2045		4000		1500															
Exit Ramp Data for Travel in Decreasing Milepost Direction				**Year**																			
Average daily traffic ($AADT_{b,ext}$) by year, veh/d:				2022																			
(enter data only for those years for which				2023																			
it is available, leave other years blank)				2024																			
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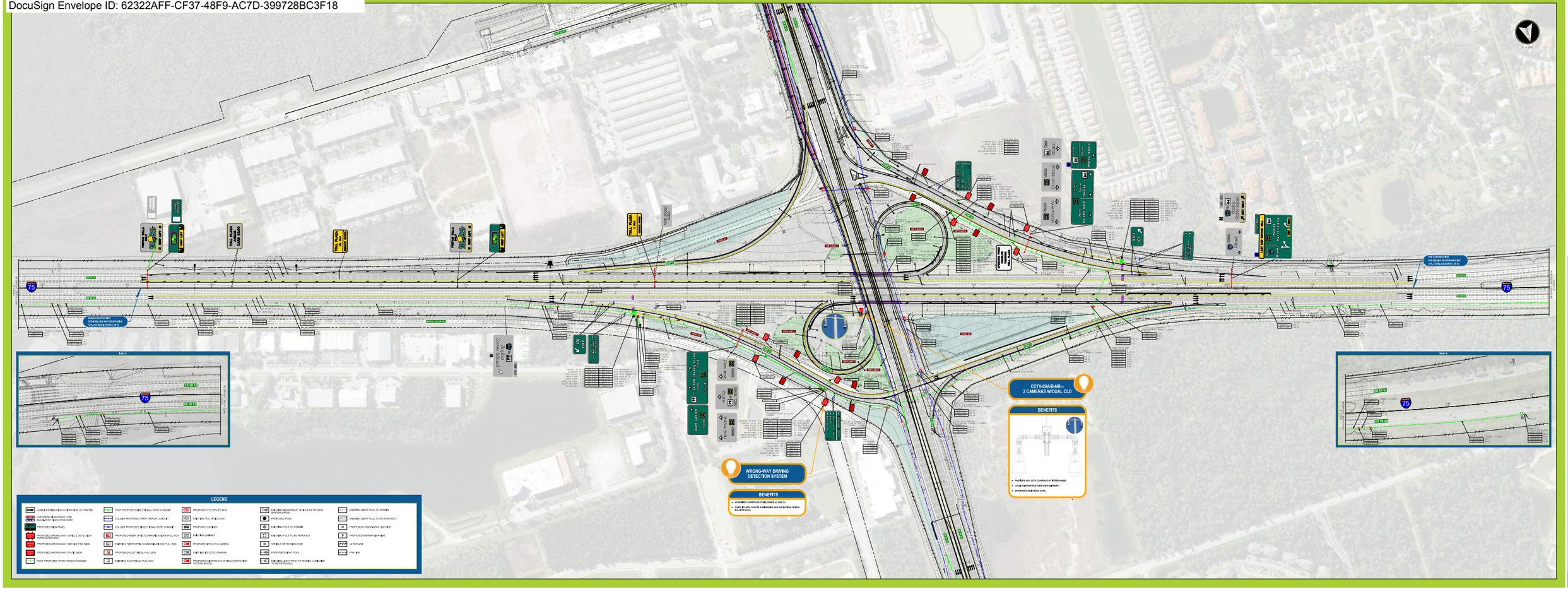
Appendix K: Conceptual Signing Plan



S&PM/ITS