Florida Department of
Transportation

Interchange Modification Report / Re-evaluation

I-95/SR-9
from South of Woolbright Road to North of Woolbright Road

FPID No. 437279-1

January 2023

STATE OF FLORIDA

DEPARTMENT OF TRANSPORTATION

OFFICE OF PLANNING AND ENVIRONMENTAL MANAGEMENT

INTERCHANGE MODIFICATION REPORT (IMR) RE-EVALUATION

I-95/SR 9 from South of Woolbright Road to North of Woolbright Road

PREPARED FOR:
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)
DISTRICT 4
3400 WEST COMMERCIAL BOULEVARD
FORT LAUDERDALE, FL 33309

January 2023

I-95/SR 9 at Woolbright Road from South of Woolbright Road to North of Woolbright Road

Interchange Modification Report Re-evaluation

FM 437279-1

FLORIDA DEPARTMENT OF TRANSPORTATION
DETERMINATION OF SAFETY, OPERATIONAL AND ENGINEERING ACCEPTABILITY

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

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	Dan Hurtado, PE Central Office	Date

SYSTEMS IMPLEMENTATION OFFICE

QUALITY CONTROL CERTIFICATION FOR INTERCHANGE ACCESS REQUEST SUBMITTAL

Submittal Date: January 26, 2023

FM Number: 437279-1

Project Title: I-95/SR 9 from South of Woolbright Road to North of Woolbright Road IMR Re-evaluation

District: Four

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Document Type: ☐ MLOU ☐ IJR ☐ IMR ☐ IOAR ☑ OTHER: IMR Re-evaluation

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

Draft Submittal

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: Humberto Arrieta F20CB13C158648D... Date: 01/31/2023 | 1:13 PM EST
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IRC DocuSigned by: Cesar Martinez DC7B7B72D0BD4A2... Date: 01/31/2023 | 1:14 PM EST
Cesar Martinez, PE

ENGINEER'S CERTIFICATION

I, John Arrieta, PE # 61370, certify that I currently hold an active Professional Engineer's License in the State of Florida; and I am competent through education or experience to provide engineering services in the civil and traffic engineering disciplines contained in this report. I also certify that I provide these services under, the firm Colliers Engineering & Design, Inc., which holds Vendor Number F22-2651610-001 from the Florida Department of Transportation. I further certify that this report was prepared by me or under my responsible charge as defined in Chapter 61G15-18.011 F.A.C. and that all statements, conclusions, and recommendations made herein are true and correct to the best of my knowledge and ability.

Study Information:
I-95/SR 9 from S of Woolbright Road to N of Woolbright Road IMR Re-evaluation
FPID No. 437279-1

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY

John Arrieta 2023.01.31 10:33:57 -05'00'

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

John Arrieta, P.E., PTOE
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January 26, 2023

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EXECUTIVE SUMMARY

The FDOT District Four has conducted an IMR as part of the Project Development and Environment Study (PD&E) for the interchange of I-95/SR 9 and Woolbright Road, dated June 2021. The study evaluated three (3) build alternatives to improve traffic operations and safety at this critical interchange in Palm Beach County: Build Alternative 1, Tight Diamond Interchange (TDI); Build Alternative 2, Diverging Diamond Interchange (DDI); and Build Alternative 3, Single-Point Urban Interchange (SPUI). Based on the comprehensive evaluation presented in the *June 2021 I-95/SR 9 at Woolbright Road IMR*, Build Alternative 1 with a TDI configuration was selected as the Preferred Alternative due to the traffic operational and safety benefits it provides compared to the other Alternatives. Build Alternative 1 also satisfies the purpose and need of this project and provides the highest benefit-cost ratio making it the most cost-effective alternative. This Alternative was the basis for comparison as the Approved Interchange Access Request (IAR) Alternative.

The project is currently in the final design phase, and a modified concept is proposed as an improvement over the Approved IAR Alternative. The improvements were presented at the September 2021 District Four Interchange Review Coordination Meeting. The modified concept maintains the TDI design concept at the interchange, but seeks to achieve the following project objectives:

1. Maintain or improve traffic operations and safety of the Approved IAR Alternative;
2. Reduce pedestrian/vehicular, vehicular merging and vehicular weaving conflicts due to off-ramp free-flow right-turning movements at the I-95/SR 9 ramp terminal intersections; and
3. Reduce major utility conflicts along the northwest quadrant at the intersection of Woodbright Road and SW 8th Street/Corporate Drive.

The Build Alternative reduces pedestrian/vehicular, vehicular merging and vehicular weaving conflicts due to off-ramp free-flow right-turning movements at the I-95/SR 9 ramp terminal intersections; reduces major utility conflicts along the northwest quadrant at the intersection of Woolbright Road and SW 8th Street/Corporate Drive; maintains or improves traffic operations LOS and safety; and meets FHWA interchange access policy. Therefore, the Build Alternative configuration is recommended for implementation including the following improvements:

1. Eliminate the proposed 4th WB through lane along Woolbright Road at SW 8th Street;
2. Introduce a 3rd SB left-turn lane along SW 8th Street at Woolbright Road;
3. Extend EB and WB left-turn lanes along Woolbright Road at SW 8th Street;
4. Extend the WB right-turn lane along Woolbright Road at SW 8th Street to the I-95/SR 9 SB Off-Ramp;
5. Introduce signalized double right-turn lanes at the I-95 SB and NB Off-Ramp Terminals;
6. Provide an acceleration lane for the EB right-turn lane to the I-95/SR 9 SB On-Ramp;
7. Provide a shared use path between SW 8th Street and SW 3rd Street; and
8. Provide Rectangular Rapid-Flashing Beacons (RRFB) at the I-95/SR 9 Free-Flow On-Ramp Right-Turn Lanes.

It is in the national interest to preserve and enhance the Interstate System to meet the needs of the 21st Century by assuring that it provides the highest level of service in terms of safety and mobility. Full control of access along the Interstate mainline and ramps, along with control of access on the crossroad at interchanges, is critical to providing such service. Therefore, the Federal Highway Administration's (FHWA) decision to approve new or revised access points to the Interstate System under Title 23, United States Code (U.S.C.), Section 111, must be supported by substantiated information justifying and documenting that decision. The FHWA's decision to approve a request is dependent on the proposal satisfying and documenting the following requirements:

Policy Point 1

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

The operational analysis conducted for this IMR Re-evaluation confirmed that the proposed interchange modifications are not expected to have any significant adverse impacts on safety and operations on the interstate facility, I-95/SR 9. When compared with the Approved IAR Alternative, the Build Alternative improves or maintains safety and operations along Woolbright Road and has no impacts along I-95/SR 9.

It should also be noted that the signalization control of the right-turn movements at the I-95/SR 9 Ramp Terminals will reduce pedestrian/vehicular conflicts. In addition, the signalization control of the SB right-turn movements at the I-95/SR 9 SB Ramp Terminal will reduce uncontrolled weaving movements and related vehicular merging and vehicular weaving conflicts. The safety analysis indicates that the Build Alternative will improve safety conditions. Based on the results of the Highway Safety Manual (HSM) analysis, the proposed condition would reduce the predicted total project life cycle crashes by a total of 87.47 crashes in comparison to the Approved IAR Alternative. Of the total 87.47 reduced crashes, 39.32 are predicted to be fatal/injury crashes.

Policy Point 2

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

This IMR Re-evaluation does not propose any new interchanges along I-95/SR 9. The existing interchange provides access to public roads only. The proposed improvements at the interchange will maintain full access to the existing cross street of Woolbright Road and accommodates all movements.

1 PROJECT OVERVIEW

1.1 Introduction

The FDOT District Four has conducted an IMR as part of the Project Development and Environment Study (PD&E) for the interchange of I-95/SR 9 and Woolbright Road, dated June 2021. The study evaluated three (3) build alternatives to improve traffic operations and safety at this critical interchange in Palm Beach County: Build Alternative 1, TDI; Build Alternative 2, Diverging Interchange (DDI); and Build Alternative 3, Single-Point Urban Interchange (SPUI). Based on the comprehensive evaluation presented in the *June 2021 I-95/SR 9 at Woolbright Road IMR*, Build Alternative 1 with a TDI configuration was selected as the Preferred Alternative due to the traffic operational and safety benefits it provides compared to the other Alternatives. Build Alternative 1 also satisfies the purpose and need of this project and provides the highest benefit-cost ratio making it the most cost-effective alternative. This Alternative will be the basis for comparison as the Approved IAR Alternative.

The project is currently in the final design phase, and a modified concept is proposed as an improvement over the Approved IAR Alternative. The improvements were presented at the September 2021 District Four Interchange Review Coordination Meeting. The modified concept maintains the TDI design concept at the interchange, but it introduces the following improvements:

1. Eliminates the proposed 4th Westbound (WB) Through Lane along Woolbright Road at SW 8th Street;
2. Introduces a 3rd SB Left-Turn Lane along SW 8th Street at Woolbright Road;
3. Extends Eastbound (EB) and WB Left-Turn Lanes along Woolbright Road at SW 8th Street;
4. Extends the WB Right-Turn along Woolbright Road at SW 8th Street to the I-95/SR 9 SB Off-Ramp;
5. Introduces signalized double Right-Turn Lanes at the I-95/SR 9 SB and NB Off-Ramp Terminals;
6. Provide an acceleration lane for the EB right-turn lane to the I-95/SR 9 SB On-Ramp;
7. Provide a shared use path between SW 8th Street and SW 3rd Street; and
8. Provide Rectangular Rapid-Flashing Beacons (RRFB) at the I-95/SR 9 Free-Flow On-Ramp Right-Turn Lanes.

This IMR Re-evaluation is focused on implementing the improvements identified along Woolbright Road by the modified design concept while maintaining or improving the projected LOS and safety operations under the Approved IAR Alternative. This IMR Re-evaluation assess the traffic operations of the Modified Build Concept developed as part of the design process. A Methodology Letter of Understanding (MLOU) between the Requestor, the FDOT District Four, and FDOT Central Office was executed for preparing this IMR Re-evaluation, and it is presented in **Appendix A** for ease of reference.

1.2 Purpose and Need for Project

The purpose of this project is to address the long-term needs of I-95/SR 9 including ramp terminal traffic spillback onto I-95/SR 9 mainline, reducing congestion on I-95/SR 9 and Woolbright Road, and improving operations and safety at the I-95/SR 9 and Woolbright Road interchange through the 2045 design year horizon as established in the *June 2021 I-95/SR 9 at Woolbright Road IMR*. This project will also be consistent with plans for the I-95/SR 9 mainline, including the extension of I-95/SR 9 Express Lanes throughout Palm Beach County.

This Re-evaluation analysis has the following project objectives:

1. Maintain or improve traffic operations and safety of the Approved IAR Alternative;
2. Reduce pedestrian/vehicular, vehicular merging and vehicular weaving conflicts due to off-ramp free-flow right-turning movements at the I-95/SR 9 ramp terminal intersections; and
3. Reduce major utility conflicts along the northwest quadrant at the intersection of Woolbright Road and SW 8th Street/Corporate Drive.

1.3 Project Location

The project area includes the I-95/SR 9 at Woolbright Road interchange (MP 13.853), in Palm Beach County, Florida. **Figure 1.1** provides a Project Location Map. This project entails providing improvements along Woolbright Road between SW 18th Street and west of SW 2nd Street.

1.4 Planned and Programmed Transportation Projects

The IMR improvements have been developed consistent with applicable plans. Relevant information related to this IMR Re-evaluation was extracted from these documents and presented in **Appendix B** for ease of reference. The Consistency Plan Review included the following documents:

- FDOT Five-Year Work Program (FY 2023/2027)
- Strategic Intermodal System (SIS) Funding Strategy First Five-Year Plan (FY 2022/2023 through 2026/2027)
- SIS Funding Strategy Second Five-Year Plan (FY 2027/2028 through 2031/2032)
- SIS Long Range Cost Feasible Plan (CFP) (FY 2029/2045)
- Palm Beach Transportation Planning Agency (TPA) 2045 Long Range Transportation Plan (LRTP) (Modified 01/07/2022)
- Palm Beach TPA Transportation Improvement Program (TIP) (FY 2022 through 2026, Amended 02/17/2022)
- City of Boynton Beach Comprehensive Plan

1.4.1 FDOT Plans and Projects

The I-95/SR 9 Project from south of Woolbright Road to north of Woolbright Road is included in both, the FDOT Five-Year Work Program and SIS Funding Strategy Plans, as FPID number 437279-1. In addition, coordination with other FDOT projects is under way to ensure compatibility with this project. A review of FDOT Project Suite Enterprise Edition (PSEE) database and documents listed above indicated the followings projects:

449254-1 I-95/SR 9 at Woolbright Road Interchange
Landscaping for Woolbright Road Interchange

449520-1 I-95/SR 9 Palm Beach County Advanced Wrong-Way Driving (WWD) Detection System
ITS Communication System

444202-1 I-95/SR 9 from Linton Boulevard to SR-80/Southern Boulevard
Managed Lanes

1.4.2 Palm Beach Transportation Planning Agency (TPA) Plans

The Palm Beach's TIP includes all highway, transit, bicycle and pedestrian projects committed for construction within the County's first five years of the LRTP Committed Plan to the year 2045. The Palm Beach TPA Commitment 2045 LRTP includes the I-95/SR 9 at Woolbright Road interchange modifications and I-95/SR 9 additional managed lanes from Linton Boulevard to Southern Boulevard as LRTP project numbers SIS020 and SIS025, respectively.

1.4.3 County and Local Agency Plans

Woolbright Road is under Palm Beach County jurisdiction. The Palm Beach County Capital Improvement Program shows resurfacing of Woolbright Road between Congress Avenue and Federal Highway. In addition, this IMR Re-evaluation is conducted in coordination with the ongoing intersection improvement at Woolbright Road at Seacrest Boulevard (Proj#2018106), which includes adding an eastbound right turn lane on Woolbright Road at Seacrest Boulevard. County coordination will also include potential implementation of advance queue detection and management for the WB and SB approaches at the intersections of Woolbright Road with SW 8th Street and I-95/SR 9 SB Off-Ramp, respectively.

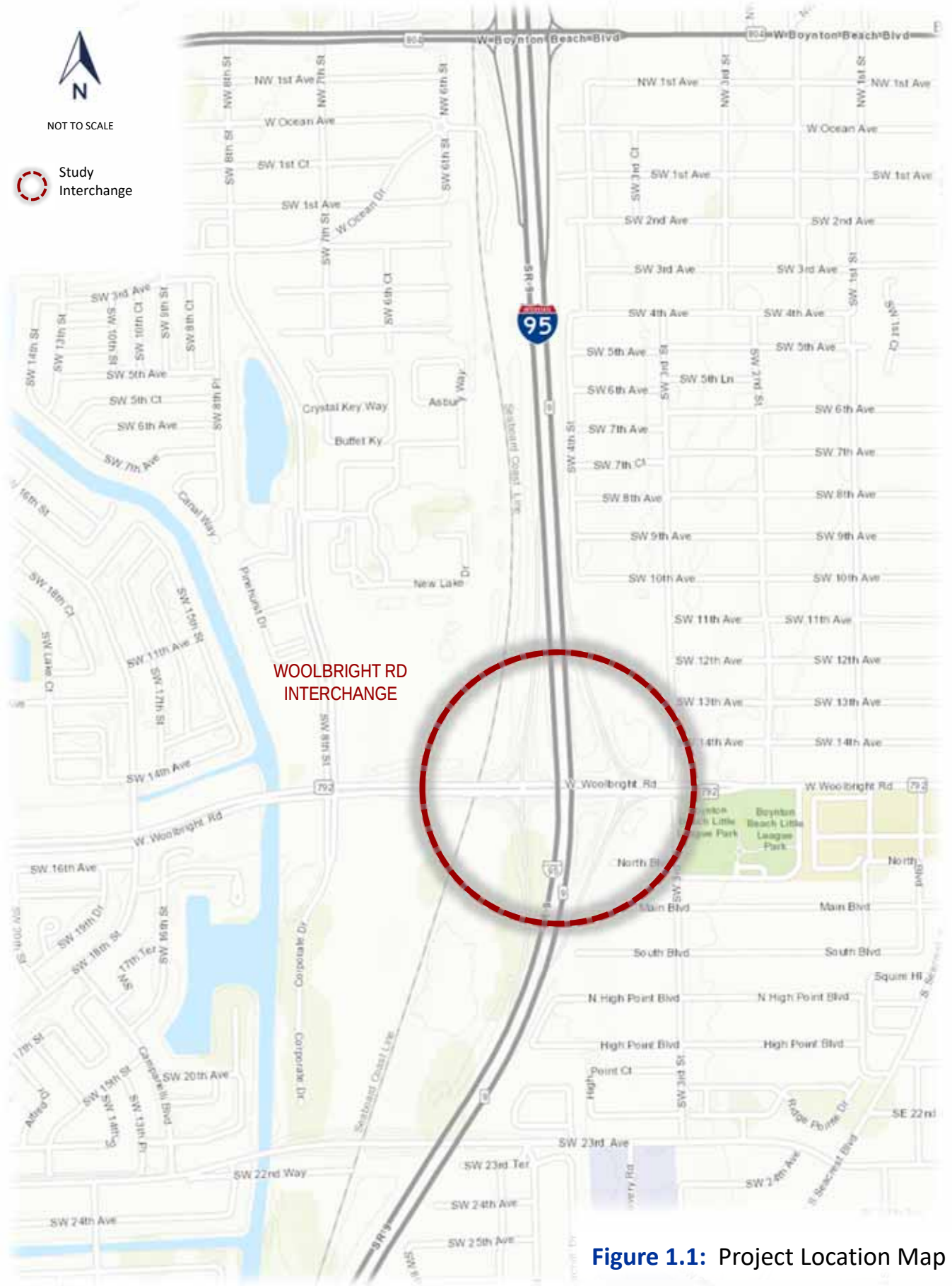

Figure 1.1: Project Location Map

1.5 Requestor Information

This I-95/SR 9 Interchange Modification Report has been prepared for the Florida Department of Transportation, District Four. For additional information on this IMR Re-evaluation, please contact the Department's Project Manager at the following address:

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2 METHODOLOGY

The methodology applied for the I-95/SR 9 IMR Re-evaluation is documented in the Methodology Letter of Understanding (MLOU), dated May 9, 2022. The MLOU was approved by FDOT District 4 and FDOT Central Office Systems Implementation Office. The MLOU outlines the criteria, assumptions, processes, analyses and documentation requirements for the project. The approved MLOU is included in Appendix A for ease of reference. The following summarizes some of the more prominent issues covered under the MLOU.

2.1 Area of Influence

In urban areas, the area of influence (AOI) as defined in the *2022 FDOT Interchange Access Request Users Guide* (IARUG) for IMRs, extends to the on- and off-ramp gore points of the adjacent interchanges and to include at least one signalized intersection in either direction within half-a-mile of the interchanges. However, these limits have been modified for the *June 2021 I-95/SR 9 at Woolbright Road IMR* and will remain the same for this Re-evaluation, as follows and are shown in **Figure 2.1**:

2.1.1 Along I-95/SR 9 Mainline

The AOI for I-95/SR 9 extends from just south of the Woolbright Road interchange to the Boynton Beach Boulevard northbound off-ramp and southbound on-ramp to the north, approximately 1.6 miles. The AOI along I-95/SR 9 does not extend south to the Atlantic Avenue interchange because it is over 3.5 miles south of the study interchange, and it was not considered to be impacted by the alternatives at the Woolbright Road interchange. The IMR Re-evaluation modifications are all located within Woolbright Road between SW 8th Street/Corporate Drive and west of SW 2nd Street; and the I-95/SR 9, mainline volumes and analysis in this Re-evaluation remain the same as the *June 2021 I-95/SR 9 at Woolbright Road IMR*. Therefore, no additional analysis has been performed for the mainline or merge/diverge segments under this re-evaluation. For further information related to the mainline analysis and conditions, please refer to the approved *June 2021 I-95/SR 9 at Woolbright Road IMR*.

2.1.2 Along Woolbright Road and Crossroads:

The AOI along Woolbright Road extends from SW 8th Street/Corporate Drive to west of SW 2nd Street, including the following signalized intersections:

1. Woolbright Road at SW 8th Street/Corporate Drive;
2. I-95/SR 9 SB Ramp Terminal at Woolbright Road; and
3. I-95/SR 9 NB Ramp Terminal at Woolbright Road.

It should be noted that the *June 2021 I-95/SR 9 at Woolbright Road IMR* concluded that the intersection of Woolbright Road and Seacrest Boulevard is outside the AOI; therefore, it has not been included in this Re-evaluation or project limits. In addition, Palm Beach County has developed improvements for this intersection to be implemented under County Project PBC No. 2018106. For further information related to the Woolbright Road at Seacrest Boulevard intersection analysis and conditions, please refer to the approved *June 2021 I-95/SR 9 at Woolbright Road IMR.*

2.2 Analysis Years

The analysis years for the project were determined as follows:

2.2.1 Travel Demand Model

- Base year 2010
- Horizon year 2040

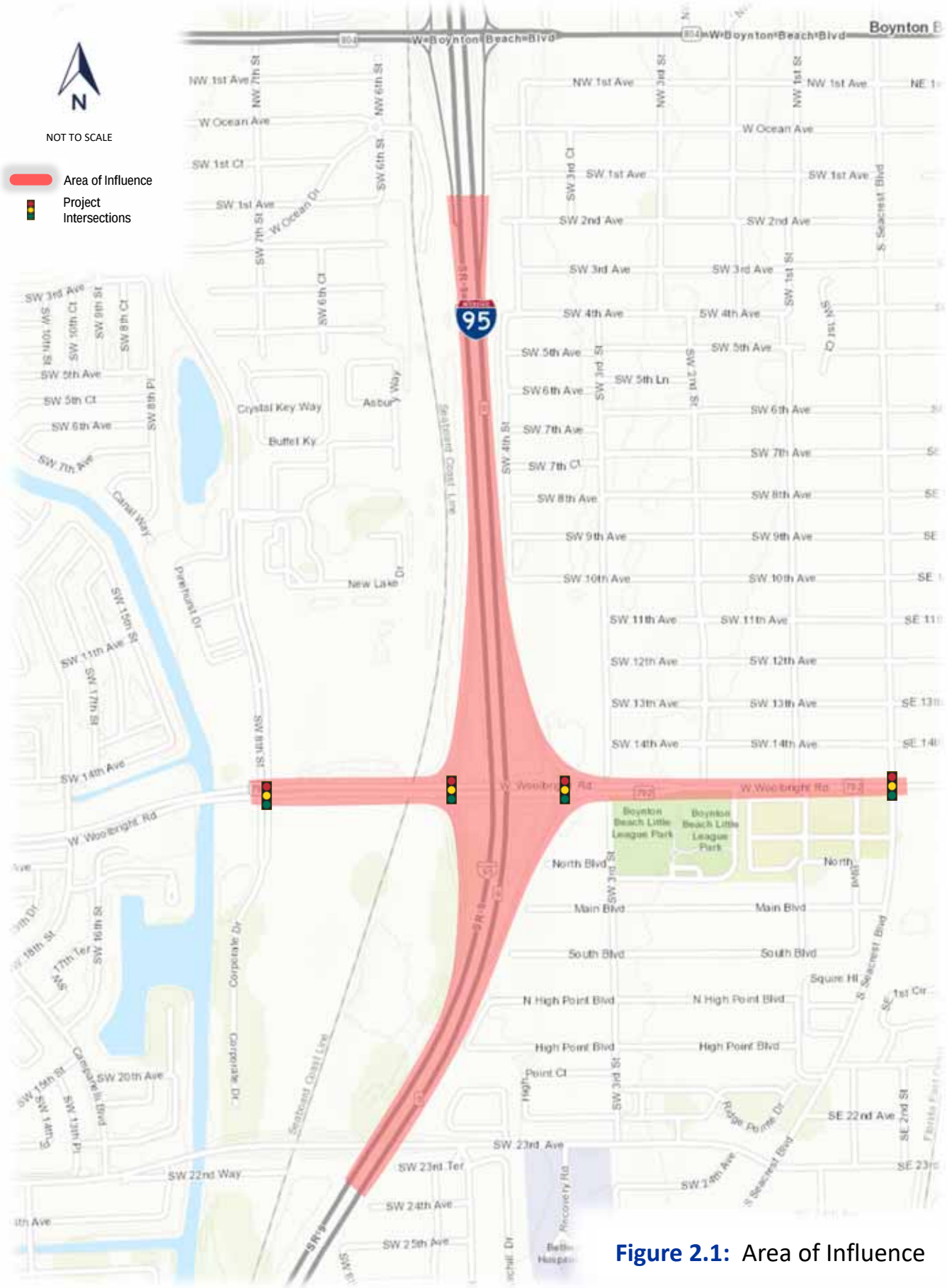


Figure 2.1: Area of Influence

2.2.2 Traffic Operational Analysis

- Existing year 2019 (No analysis required for an IMR Re-evaluation)
- Opening year 2025
- Design year 2045

2.3 Travel Demand Forecasting

The IMR Re-evaluation utilizes the travel demand forecast from the previously approved *June 2021 I-95/SR 9 at Woolbright Road IMR*. Per IARUG, a traffic validation has been conducted to ensure that the traffic volumes available from the original approved IMR still reflect the project area's travel conditions and patterns for the IMR Re-evaluation. The validation analysis compared historic growth, previous and latest adopted models to the forecasted volumes.

The traffic validation analysis indicates that the travel demand forecast from the previously approved *June 2021 I-95/SR 9 at Woolbright Road IMR* still reflects the project area's travel conditions and patterns. The validation analysis indicates a lower than 10% difference between the *June 2021 I-95/SR 9 at Woolbright Road IMR* approved volumes and the latest Southeast Regional Planning Model (SERPM) volumes. The analysis also indicates that original SERPM 7.062 and latest SERPM 8.513 have comparable volumes (including individual links with an IMR to model volume difference higher than 10%). The Traffic Validation Form was provided as Attachment A in the MLOU, which is presented in Appendix A for ease of reference.

2.3.1 Selected Travel Demand Model

The travel demand modeling selection and traffic forecasts for the *June 2021 I-95/SR 9 at Woolbright Road IMR* study were developed by the Department under a separate study – *Traffic Data Collection and Traffic Projections for I-95 at Woolbright Road, dated December 2017*. The SERPM model is based on the Florida Standard Urban Transportation Modeling Structure (FSUTMS). The SERPM 7.062 model was available at the initiation of the original IMR study and was reviewed and used to estimate future years daily forecasts for the study area. SERPM 7.062 model is validated to Year 2010 conditions and includes a future year 2040 scenario based on the adopted Cost Feasible plans from Miami-Dade Transportation Planning Organization (TPO), Broward Metropolitan Planning Organization (MPO), and Palm Beach Transportation Planning Agency (TPA). It is approved by the Regional Transportation Technical Advisory Committee - Modeling Subcommittee (RTTAC-MS) in South Florida for transportation engineering and planning studies. The RTTAC-MS comprises representatives from FDOT District 4, District 6, and the three planning agencies in South Florida.

2.3.2 Projected Traffic Forecast Development Methodology

As presented in the *June 2021 I-95/SR 9 at Woolbright Road IMR* study, the opening and design years are 2025 and 2045, respectively. AADT volumes were developed by interpolation for opening year and extrapolation for the design year of the IMR. The Directional Design Hourly Volumes (DDHVs) were calculated using FDOT's TM-Tool and application of exiting turning percentages and the Standard K and D factors discussed below. The DDHVs were balanced and adjusted so that the intersection turns balance with the ramp traffic. The volumes were then balanced along Woolbright Road. The traffic projections were also checked for reasonableness. Coordination was done with any other ongoing studies, to obtain any required data as well as to ensure that traffic volumes are consistent between the studies.

The base year model validation was performed by the Department and daily forecasts were provided for use in the PD&E Study and IMR. Modifications to the model were made as part of the travel demand forecasting effort performed in the *Traffic Data Collection and Traffic Projections for I-95/SR 9 at Woolbright Road* report. The future daily volumes and travel patterns were checked for reasonableness. The growth rates of historical counts, historical counts plus model projections, SERPM socioeconomic growth, and the comprehensive model to model projections methodology were summarized and compared with each other. Any changes made to the model volumes were submitted to the Department for review and approval.

The 2017 model volume was interpolated using 2010 and 2040 model volumes. Then, the percent differences of 2017 AADT and interpolated 2017 forecasted AADT from model were calculated. The recommended 2040 AADT were calculated by applying this percent difference to the 2040 SERPM 7.062 model volumes. For the roadway segments where the SERPM 7.062 2040 model volumes are lower than the SERPM 7.062 2010 model volumes, or are not included in the SERPM 7 network, the future 2020, 2030, and 2040 AADTs were calculated using 2017 AADT and a compound growth factor of 0.5%. For all the roadway links, the 2017 and 2040 AADT has been compared, and a minimum compound growth rate of 0.5% has been adopted. Then, the 2020 and 2045 volumes were interpolated and extrapolated using 2017 AADT and recommended 2040 volumes.

2.4 Traffic Factors

The *June 2021 I-95/SR 9 at Woolbright Road IMR* utilized the traffic factors shown on **Table 2.1** below.

Table 2.1 – Traffic Factors from the *June 2021 I-95/SR 9 at Woolbright Road IMR*

Roadway	K	D	T_{24}	DHT	PHF
Woolbright Road Ramps	9.0%	100%	4.6%	2.3%	0.95
Woolbright Road E of I-95/SR 9	9.0%	50.8-67.1%	5.2%	2.6%	0.92
Woolbright Road W of I-95/SR 9	9.0%	50.8-67.1%	3.3%	1.7%	0.92
SW 8th Street/Corporate Drive	9.0%	50.8-67.1%	4.6%	2.3%	0.92

Source: *June 2021 I-95/SR 9 at Woolbright Road IMR (2017 FDOT FTO and FDOT Project Traffic Forecasting Handbook)*

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.

The *June 2021 I-95/SR 9 at Woolbright Road IMR* states that the factors listed above were compared against the field count data and adjusted as necessary prior to their use in the study. K and D factors are mainly used to develop the traffic volume projections; therefore, they have remained the same since the *June 2021 I-95/SR 9 at Woolbright Road IMR* traffic projections have been validated and used for the IMR Re-evaluation. Based on a review of the *June 2021 I-95/SR 9 at Woolbright Road IMR* study, a design hour truck (DHT) percentage of 2% and a peak hour factor (PHF) of 0.95 have been used for the Opening and Design Year analyses on the IMR Re-evaluation.

2.5 Traffic Operational Analysis

Traffic operational analyses has been performed for the Approved IAR Alternative (which is the Preferred Alternative, Build Alternative 1, TDI developed by the *June 2021 I-95/SR 9 at Woolbright Road IMR*) and the Build Alternative modification developed as part of the on-going final design phase per IARUG procedures. A stand-alone TSM&O Alternative has not been developed. The implementation of TSM&O elements has been incorporated in the IAR Recommended Alternative. Development of the conceptual design alternative has followed Context Sensitive Solution and Complete Streets approaches. The analysis has been performed using Synchro version 11.1.2.9 since it became available after the approval of the MLOU as a software upgrade to version 11.1.1.6. Synchro analysis has been performed for the adjacent signalized intersection and interchange ramp terminal intersections.

The Synchro operations analysis has been performed for the following conditions:

- Opening Year 2025 for Approved IAR Alternative and Build Alternative, AM + PM conditions
- Design Year 2045 for Approved IAR Alternative and Build Alternative, AM + PM conditions

2.5.1 Measures of Effectiveness (MOE)

FDOT Topic No. 525-000-006-c provides LOS Targets for the State Highway System (SHS). The following LOS criteria are considered acceptable for the IMR.

- Urbanized Areas over 500,000
  - SIS Facilities – LOS D
  - Other State Roads – LOS D

*It should be noted that the traffic operational objectives are to **maintain or improve** operations on the Enhanced Design Build Concept from the Approved IAR Alternative*. The Approved IAR Alternative does not provide a LOS D for every condition; therefore, the Build Alternative may not meet the Department's target LOS D for urbanized areas because of the design constraints.

In addition to the signalized intersection LOS criteria stated above, operational criteria will also include the following for every movement at every study intersection:

- LOS
- Delay (seconds per vehicle)
- Maximum volume-to-capacity (v/c) ratio
  (Each intersection movement should have a v/c ratio of 1.0 or less)
- Interchange ramp queue length (feet)
  (Each ramp should have a storage capacity higher than the 95th percentile queue)

3 APPROVED IAR CONDITIONS: OPENING YEAR 2025 & DESIGN YEAR 2045

3.1 Approved IAR Alternative – Transportation Network

Per IARUG procedures for IAR Re-evaluations, a No-Build alternative nor a stand-alone TSM&O alternative are required to be analyzed. Instead, the Approved IAR Alternative is required to be used as basis for comparison for Opening and Design year analyzes. The Approved IAR Alternative is the Preferred Alternative (Build Alternative 1, TDI) developed by the *June 2021 I-95/SR 9 at Woolbright Road IMR*. The Approved IAR Alternative – Transportation Network for Opening Year 2025 and Design Year 2045 were found to be the same within the study area. **Figure 3.1** presents the Approved IAR Alternative Lane Configuration. The Approved IAR Alternative provides the following modifications over existing conditions along Woolbright Road between SW 18th Street and west of SW 2nd Street:

1) Provide EB and WB 3rd Through Lane between the Ramp Terminal Intersections
2) Expand Ramp Terminal Intersections to provide:
   2a. Triple left-turn lanes from I-95/SR 9
3) Expand SW 8th Street/Corporate Drive Intersection to provide:
   3a. Dual EB and WB Left-Turn Lanes
   3b. Additional (4th) WB Through Lane
4) Provide Bike Lanes between SW 18th Street and west of SW 8th Street
5) Provide Buffered Bike Lanes between SW 8th Street and west of SW 2nd Street

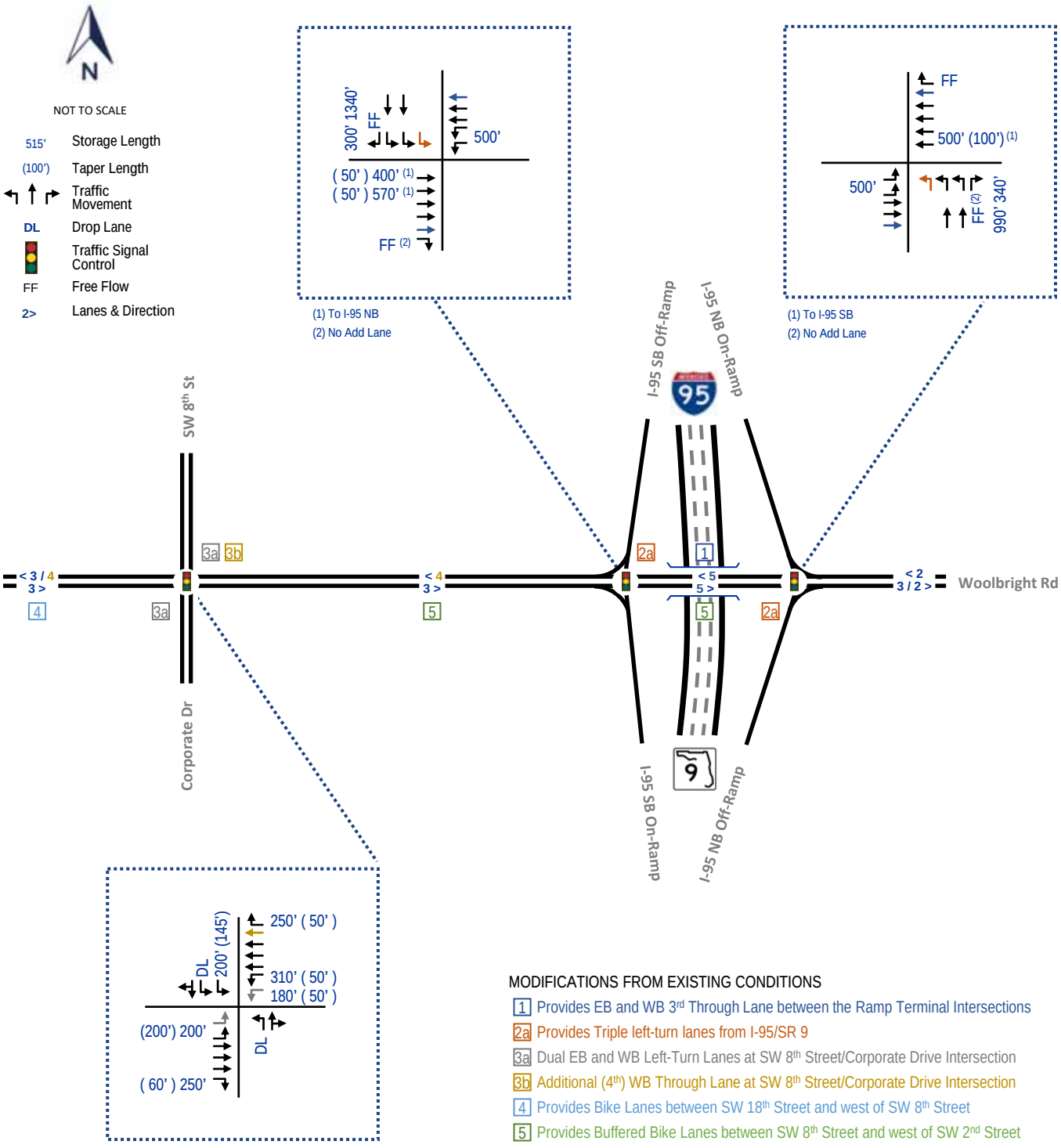
3.2 Approved IAR Alternative – Traffic Forecast

The IMR Re-evaluation utilizes the travel demand forecast from the previously approved *June 2021 I-95/SR 9 at Woolbright Road IMR*. Per IARUG, a traffic validation has been conducted to ensure that the traffic volumes available from the original approved IMR still reflect the project area's travel conditions and patterns for the IMR Re-evaluation. The validation analysis compared historic growth, previous and latest adopted models to the forecasted volumes. The traffic validation analysis indicates that the travel demand forecast from the previously approved *June 2021 I-95/SR 9 at Woolbright Road IMR* still reflects the project area's travel conditions and patterns.

AADT volumes were developed by interpolation for opening year and extrapolation for the design year of the IMR. The Directional Design Hourly Volumes (DDHVs) were calculated using FDOT's TM-Tool and application of exiting turning percentages and the Standard K and D factors previously discussed. The DDHVs were balanced and adjusted so that the intersection turns balance with the ramp traffic. The volumes were then balanced along Woolbright Road. The traffic projections were also checked for reasonableness. **Figures 3.2** and **3.3** present the Approved IAR Alternative Traffic Projection Volumes for Opening Year 2025 and Design Year 2045, respectively. **Appendix C** presents Project Traffic Volumes extracted from the *June 2021 I-95/SR 9 at Woolbright Road IMR* for ease of reference.

3.3 Approved IAR Alternative – Intersection Operational Analysis

Intersection operational analysis was conducted using Synchro to evaluate the Approved IAR Alternative conditions in the study area for Opening Year 2025 and Design Year 2045. Major analysis parameters include volume, DHT percentage, PHF and roadway geometry. Based on a review of the *June 2021 I-95/SR 9 at Woolbright Road IMR* study, a DHT of 2% and a PHF of 0.95 have been used for the Opening and Design Year analyses on this IMR Re-evaluation. The traffic operational target for this evaluation is LOS D.



MODIFICATIONS FROM EXISTING CONDITIONS

- [1] Provides EB and WB 3rd Through Lane between the Ramp Terminal Intersections
- [2a] Provides Triple left-turn lanes from I-95/SR 9
- [3a] Dual EB and WB Left-Turn Lanes at SW 8th Street/Corporate Drive Intersection
- [3b] Additional (4th) WB Through Lane at SW 8th Street/Corporate Drive Intersection
- [4] Provides Bike Lanes between SW 18th Street and west of SW 8th Street
- [5] Provides Buffered Bike Lanes between SW 8th Street and west of SW 2nd Street

FIGURE 3.1:
Approved IAR Alternative
Roadway and Intersection Lane Configuration
Opening Year 2025 & Design Year 2045

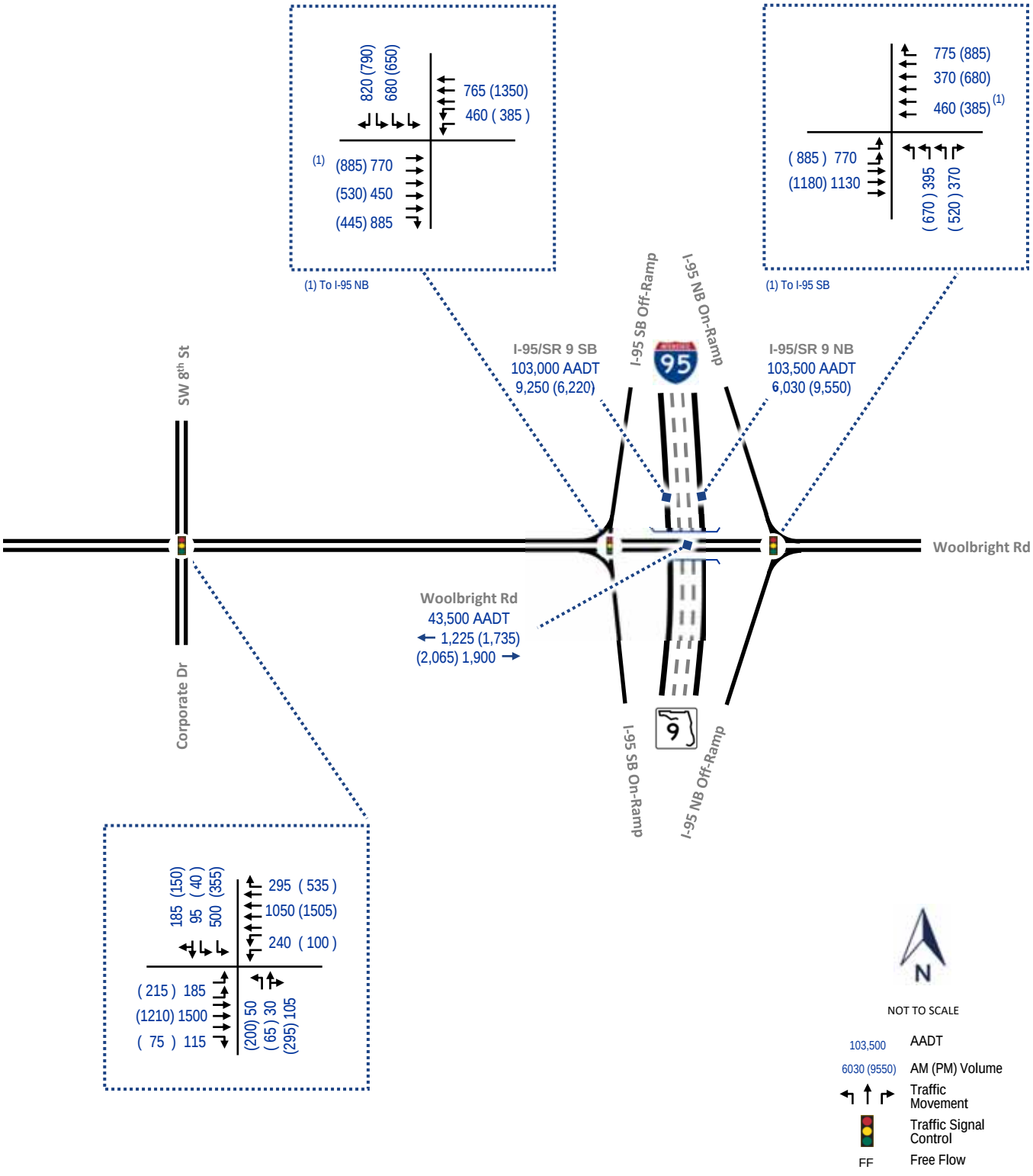


FIGURE 3.2:
Approved IAR Alternative
Traffic Volumes
Opening Year 2025

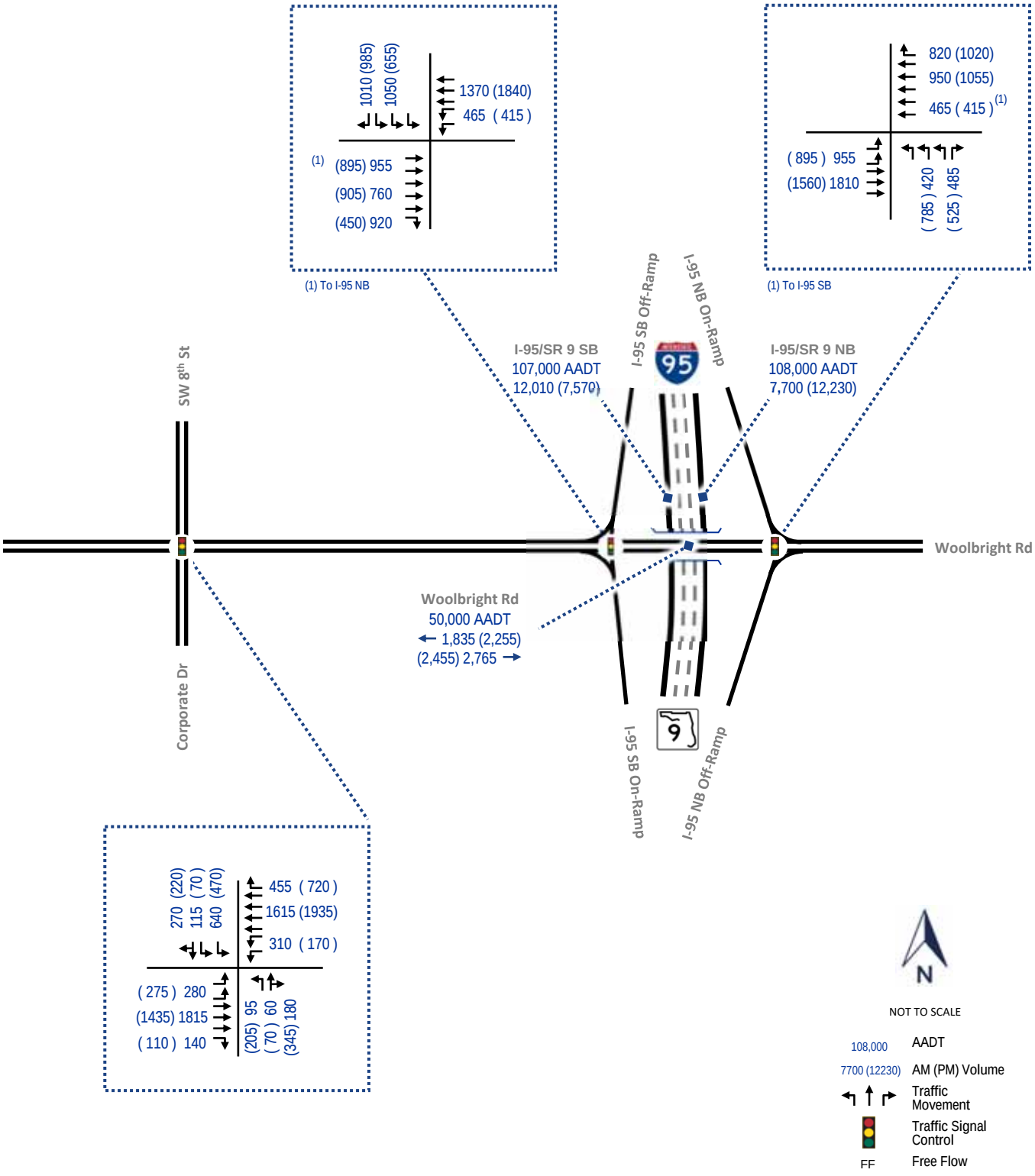


FIGURE 3.3:
Approved IAR Alternative
Traffic Volumes
Design Year 2045

In addition to the existing intersection control and lane geometry, the intersection operational analysis for the Approved IAR Alternative includes the implementation of the roadway improvements listed in Section 3.1 above. **Tables 3.1** and **3.2**, and **Figures 3.4** and **3.5** summarize the results of the signalized intersection analyses for the AM and PM peak hours for Opening Year 2025 and Design Year 2045, respectively. Documentation of the Approved IAR Alternative traffic intersection operational analysis is provided in **Appendix D**. The Design Year 2045 results indicate the following:

a) Intersection of Woolbright Road and SW 8th Street/Corporate Drive: The overall intersection would operate at LOS E (i.e., does not meet target LOS D) during the morning peak period.
b) Intersection of Woolbright Road and SW 8th Street/Corporate Drive: The WB through movement operates at LOS E during both, the AM and PM peak hour periods; even though, an additional through lane is proposed.
c) Intersection of Woolbright Road and SW 8th Street/Corporate Drive: The WB through movement queues approximately 600 feet during both peak hour periods causing conflicts with the vehicles exiting I-95/SR 9 SB Off-Ramp trying to make a subsequent left-turn into Corporate Drive. It should be noted that the I-95/SR 9 SB Off-Ramp right-turn movement is free-flow under existing and the Approved IAR Alternative.
d) Intersection of Woolbright Road and SW 8th Street/Corporate Drive: The SB approach operates at LOS F during the AM peak hour period due to the excessive delays and queuing for the SB left-turn movements.
e) Intersection of Woolbright Road and I-95/SR 9 SB Ramp Terminal: The EB right-turn (into I-95/SR 9 SB On-Ramp) queues are calculated to extend past the proposed storage capacity of approximately 400 feet and create conflicts with the EB through traffic. It should be noted that the Approved IAR Alternative does not provide an acceleration lane (i.e., this movement will not operate as free-flow).
f) Intersection of Woolbright Road and I-95/SR 9 NB Ramp Terminal: The EB left-turn (into I-95/SR 9 NB On-Ramp) queues are calculated (2045: #581' AM and #676' PM) to extend past the proposed storage capacity of approximately 500 feet. However, the analysis accounts for additional vehicles that may queue up in back while the front of the queue dissipates after the signal turns green due to progression. Therefore, there are no conflicts created with the I-95/SR 9 SB Off-Ramp left-turn movements.

Table 3.1 – Opening Year 2025: Approved IAR Alternative Intersection Operational Analysis Results

Woolbright Road Intersection with:	Control Type	AM		PM	
		Delay (sec)	LOS	Delay (sec)	LOS
SW 8th Street/Corporate Drive	Signal	39.6	D	43.4	D
I-95/SR 9 SB Ramp Terminal	Signal	26.7	C	23.7	C
I-95/SR 9 NB Ramp Terminal	Signal	19.7	B	30.3	C

Table 3.2 – Design Year 2045: Approved IAR Alternative Intersection Operational Analysis Results

Woolbright Road Intersection with:	Control Type	AM		PM	
		Delay (sec)	LOS	Delay (sec)	LOS
SW 8th Street/Corporate Drive	Signal	63.0	E	54.4	D
I-95/SR 9 SB Ramp Terminal	Signal	27.4	C	23.0	C
I-95/SR 9 NB Ramp Terminal	Signal	25.2	C	31.4	C

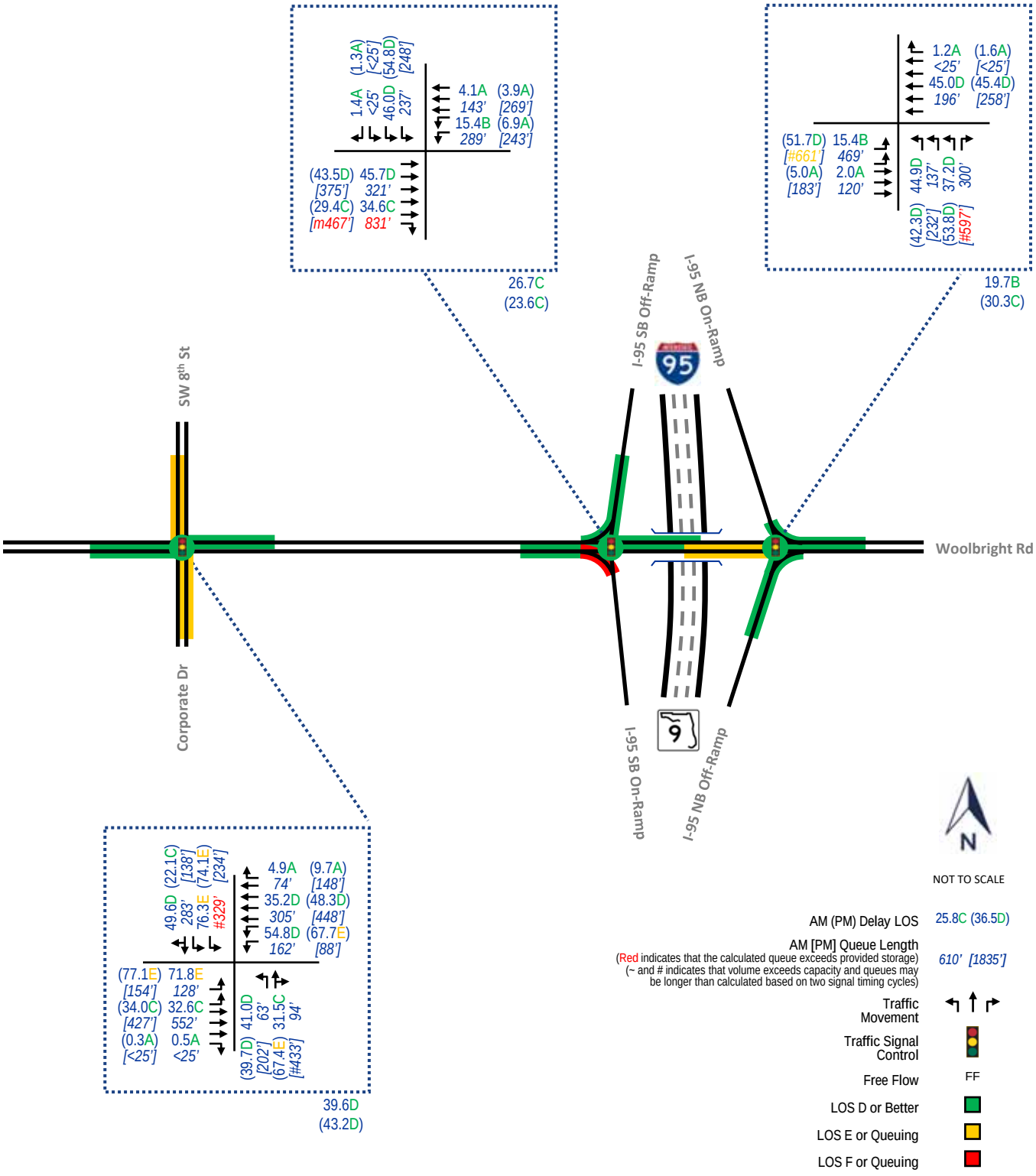


FIGURE 3.4:
Approved IAR Alternative
Intersection Operational Analysis Summary
Opening Year 2025

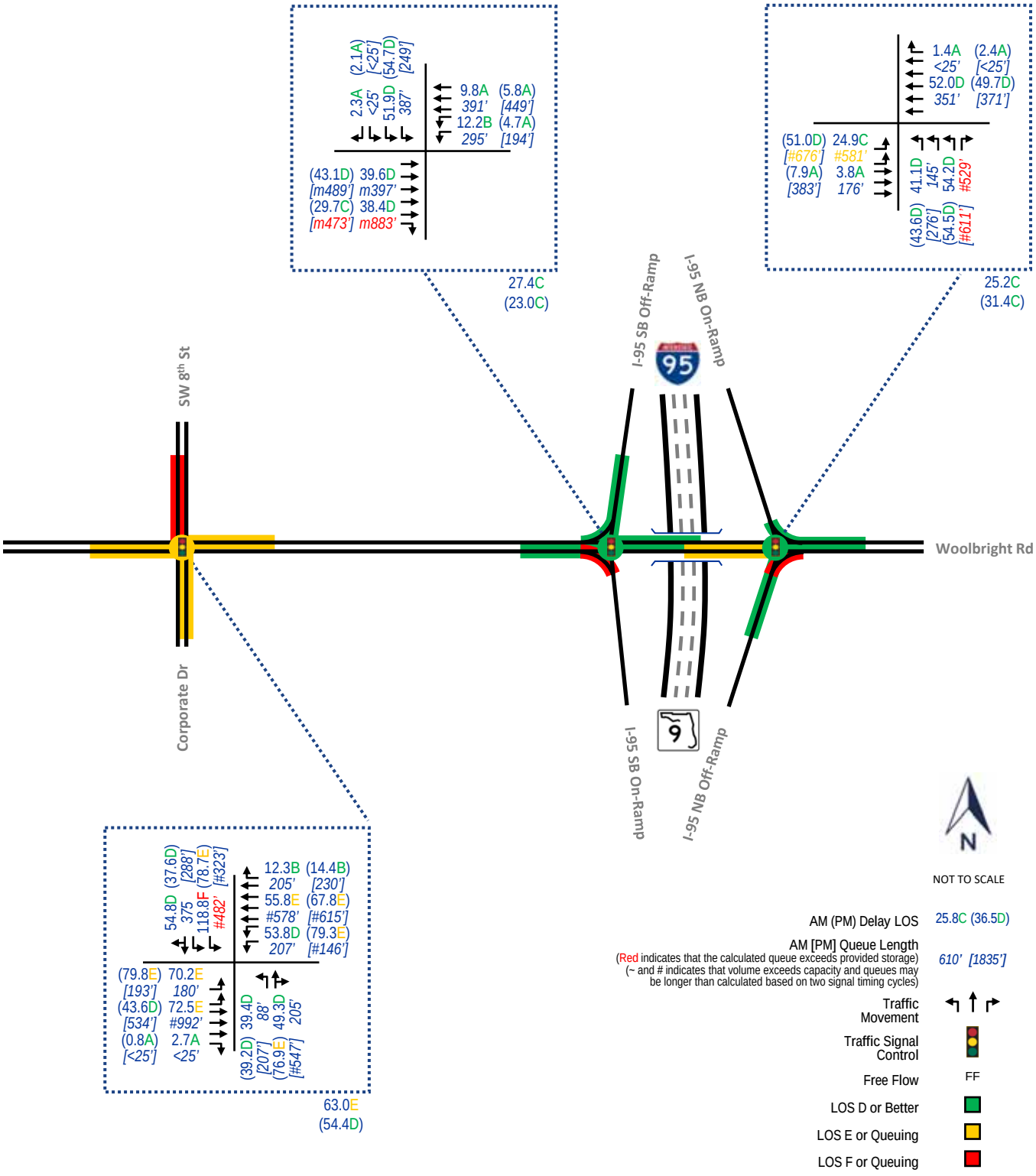


FIGURE 3.5:
Approved IAR Alternative
Intersection Operational Analysis Summary
Design Year 2045

Tables 3.3 and **3.4** summarize the results of the off-ramp signals back of queue analyses for the AM and PM peak hours. Queues were calculated using Synchro software based on HCM methodology. The results present the queue length in feet for each lane group movement. The analysis accounts for additional vehicles that may queue up in back while the front of the queue dissipates after the signal turns green. Therefore, the queue length results are not necessarily a multiple of 25 (length of vehicles including the space in between them). The maximum available storage length was calculated from the stop bar at the ramp terminal intersection to the gore with I-95/SR 9 mainline. Consideration was also given to the stopping sight distance of 730 feet (based on FDM 211.10.2). The distance from the painted gore to the stop bar on the I-95/SR 9 SB Off-Ramp is approximately 1,640 feet. Similarly, the distance from the painted gore to the stop bar on the I-95/SR 9 NB Off-Ramp is approximately 1,330 feet.

The analysis indicates that queues on the off-ramps would not back up to the I-95/SR 9 mainline through lanes. It should be noted that I-95/SR 9 NB to EB off-ramp queue is calculated to extend past the proposed storage capacity of approximately 340 feet and create conflicts with the NB left-turn traffic; even though, it will not reach I-95/SR 9 mainline through lanes as previously noted. However, the NB to EB off-ramp queue is calculated to extend into the 730-foot length reserved for stopping sight distance. It should be noted that the Approved IAR Alternative does not provide an acceleration lane for the NB to EB movement; therefore, it will not operate as free-flow.

Table 3.3 – Opening Year 2025: Approved IAR Alternative Off-Ramp Signal Queuing Analysis Results

I-95/SR 9	Movement	Available Storage (ft)(1)	Queue (ft)(2)	
			AM	PM
Southbound Ramp Terminal	SB to WB (R)	300	<25	<25
	SB to EB (L)	1,640	237	248
Northbound Ramp Terminal	NB to EB (R)	340	300	307
	NB to WB (L)	1,330	137	232

(1) The available storage length was calculated accounting for changes in number of lanes.
(2) The queuing distance was obtained by the 95th percentile Synchro queue length analysis.

Table 3.4 – Design Year 2045: Approved IAR Alternative Off-Ramp Signal Queuing Analysis Results

I-95/SR 9	Movement	Available Storage (ft)(1)	Queue (ft)(2)	
			AM	PM
Southbound Ramp Terminal	SB to WB (R)	300	<25	<25
	SB to EB (L)	1,640	387	249
Northbound Ramp Terminal	NB to EB (R)	340	#529(3)	#611(3)
	NB to WB (L)	1,330	145	276

(1) The available storage length was calculated accounting for changes in number of lanes.
(2) The queuing distance was obtained by the 95th percentile Synchro queue length analysis.
(3) # indicates that volume exceeds capacity and queues may be longer than calculated based on two signal timing cycles

4 BUILD CONDITIONS: OPENING YEAR 2025 & DESIGN YEAR 2045

4.1 Build Alternative – Transportation Network

The project is currently in the final design phase, and a modified concept (Build Alternative) is proposed as an improvement over the Approved IAR Alternative. The improvements were presented at the September 2021 District Four Interchange Review Coordination Meeting. The Re-evaluation analysis has the following project objectives:

- Maintain or improve traffic operations and safety of the Approved IAR Alternative;
- Reduce pedestrian/vehicular, vehicular merging and vehicular weaving conflicts due to off-ramp free-flow right-turning movements at the I-95/SR 9 ramp terminal intersections; and
- Reduce major utility conflicts along the northwest quadrant at the intersection of Woolbright Road and SW 8th Street/Corporate Drive.

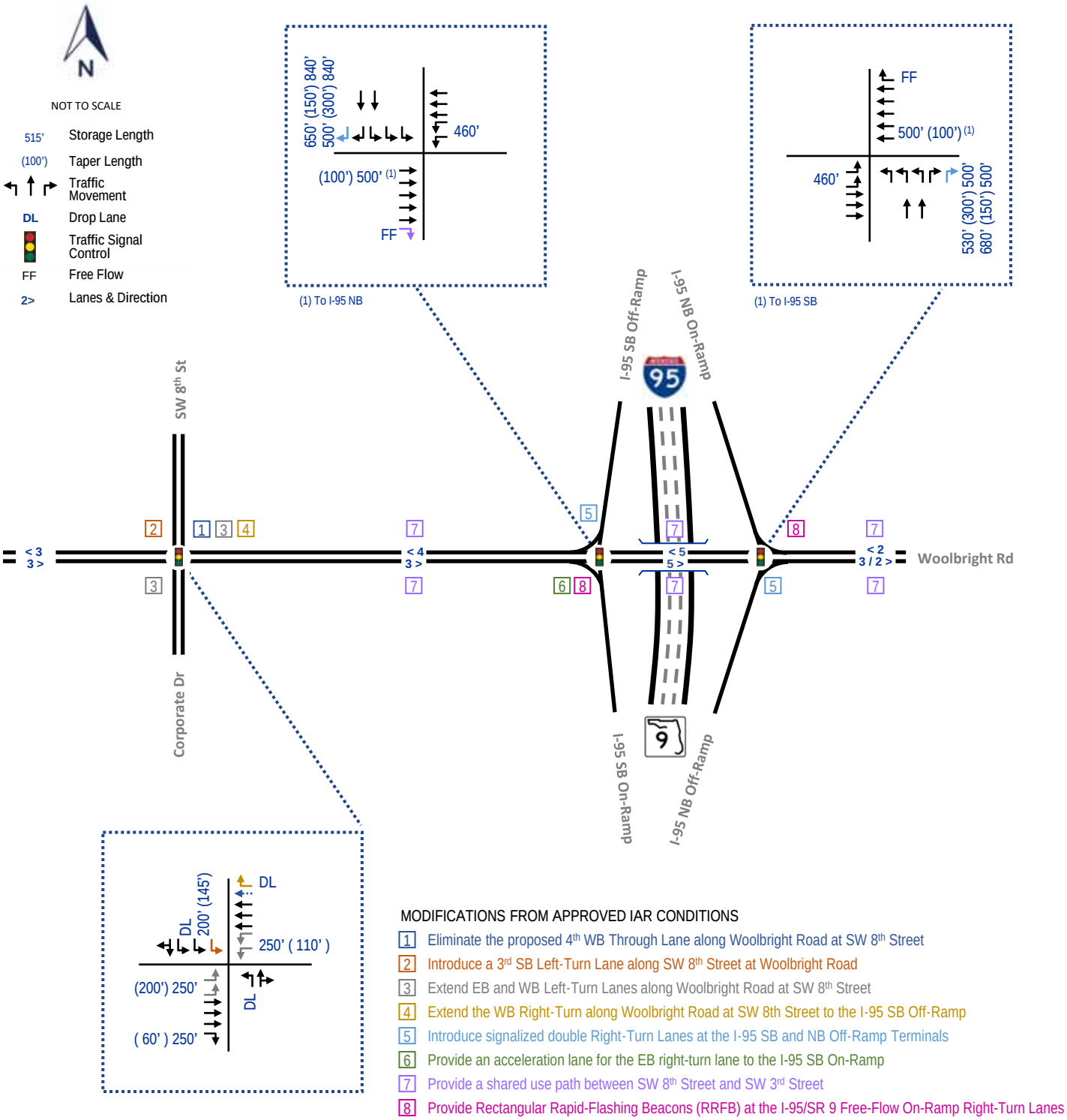
Accordingly, the Build Alternative maintains the TDI design concept at the interchange, but it introduces the following improvements from the Approved IAR Alternative.

1. Eliminate the proposed 4th WB through lane along Woolbright Road at SW 8th Street;
2. Introduce a 3rd SB left-turn lane along SW 8th Street at Woolbright Road;
3. Extend EB and WB left-turn lanes along Woolbright Road at SW 8th Street;
4. Extend the WB right-turn lane along Woolbright Road at SW 8th Street to the I-95/SR 9 SB Off-Ramp;
5. Introduce signalized double right-turn lanes at the I-95 SB and NB Off-Ramp Terminals;
6. Provide an acceleration lane for the EB right-turn lane to the I-95/SR 9 SB On-Ramp;
7. Provide a shared use path between SW 8th Street and SW 3rd Street; and
8. Provide Rectangular Rapid-Flashing Beacons (RRFB) at the I-95/SR 9 Free-Flow On-Ramp Right-Turn Lanes.

In addition, the following potential modifications to the Approved IAR Alternative were evaluated but not included as part of the Build Alternative for the following reasons:

- Create a drop right-turn lane to Little League Park – Extending the outer lane to the entrance of the park would extend the distance for merging traffic eastbound on the eastern side of the project limits. Unfortunately, the addition of a right turn lane requires right of way from the Little League Park. This is a Section 4(f) impact, which would change the class of action from a Type 1 Categorical Exclusion (CE) to a higher class of action. Instead, the NB to EB movement will be two-lane signal controlled and guided to the EB inside lanes; therefore, this movement will no longer require the merge area. In addition, the provided merge distance for the EB through movements from the intersection is anticipated to be adequate.
- Provide queue detection on the I-95/SR 9 Off-Ramps to avoid spill back into I-95/SR 9 Mainline – The Build conditions analysis does not indicate that off-ramp queues will reach I-95/SR 9 mainline; therefore, the implementation of this feature is not required at this time.
- Extend the existing raised median on the eastern side of the project, 300 feet to the east (to SW 2nd Street) – Extending the raised median could increase the proposed storage capacity on the westbound approach at the I-95/SR 9 NB Ramp Terminal. The analysis of the Build conditions does not indicate that additional storage is required; therefore, access modifications to the two properties on the northside of Woolbright Road are not justified at this time.

The Build Alternative – Transportation Network for Opening Year 2025 and Design Year 2045 were found to be the same within the study area. **Figure 4.1** presents the future Build Alternative Lane Configuration.



MODIFICATIONS FROM APPROVED IAR CONDITIONS

1. Eliminate the proposed 4th WB Through Lane along Woolbright Road at SW 8th Street
2. Introduce a 3rd SB Left-Turn Lane along SW 8th Street at Woolbright Road
3. Extend EB and WB Left-Turn Lanes along Woolbright Road at SW 8th Street
4. Extend the WB Right-Turn along Woolbright Road at SW 8th Street to the I-95 SB Off-Ramp
5. Introduce signalized double Right-Turn Lanes at the I-95 SB and NB Off-Ramp Terminals
6. Provide an acceleration lane for the EB right-turn lane to the I-95 SB On-Ramp
7. Provide a shared use path between SW 8th Street and SW 3rd Street
8. Provide Rectangular Rapid-Flashing Beacons (RRFB) at the I-95/SR 9 Free-Flow On-Ramp Right-Turn Lanes

FIGURE 4.1:
Build Alternative
Roadway and Intersection Lane Configuration
Opening Year 2025 & Design Year 2045

4.2 Build Alternative – Traffic Forecast

The IMR Re-evaluation utilizes the travel demand forecast from the previously approved *June 2021 I-95/ SR 9 at Woolbright Road IMR*. There are no variations between the traffic volumes presented in Section 3 for the Approved IAR Alternative and the traffic volumes utilized for the analysis of the Build Alternative in this section.

4.3 Build Alternative – Intersection Operational Analysis

Traffic operational analysis was conducted to evaluate the Build conditions in the study area for Opening Year 2025 and Design Year 2045. The evaluation of future Build arterial intersection operations was performed in a similar manner as for the Approved IAR conditions; except, the Right Turn Factor for the EBR at the SB Ramp Terminal intersection was modified from 0.85 to 1.00 for calibration to better represent free-flow conditions under the Build Alternative. The traffic operational target for this evaluation is LOS D.

The Build Alternative analysis includes the implementation of the modifications over the Approved IAR Alternative previously listed in Section 4.1 and presented in Figure 4.1. **Figures 4.2** and **4.3**, and **Tables 4.1** and **4.2** summarize the results of the Build Alternative signalized intersection analyses for the AM and PM peak hours for Opening Year 2025 and Design Year 2045, respectively. Documentation of the Build Alternative traffic intersection operational analysis is provided in **Appendix E**. The results indicate the following changes in comparison to the Approved IAR Alternative:

a) Intersection of Woolbright Road and SW 8th Street/Corporate Drive: overall intersection operations improve during the morning peak period from LOS E to LOS D (i.e., the target LOS D will be met with the proposed configuration modifications).
b) Intersection of Woolbright Road and SW 8th Street/Corporate Drive: The WB through movement operations improve from LOS E to LOS D or better during both, the AM and PM peak hour periods; even though, the additional through lane proposed in the Approved IAR Alternative is removed.
c) Intersection of Woolbright Road and SW 8th Street/Corporate Drive: The WB through movement queues increase to approximately #884 feet during PM peak hour period. Further review using the SimTraffic microsimulation tool indicated that the WB through movement queues will not be longer than calculated using the Synchro tool. Therefore, the WB through movement queues will not reach the I-95/SR 9 SB Off-Ramp Terminal. In addition, conflicts with the vehicles exiting I-95/SR 9 SB Off-Ramp trying to make a subsequent left-turn to Corporate Drive are reduced since the off-ramp right-turn movements are controlled by a traffic signal instead of free-flow. It should be noted that the I-95/SR 9 SB right-turn movement is free-flow under existing conditions and the Approved IAR Alternative.
d) Intersection of Woolbright Road and SW 8th Street/Corporate Drive: The SB approach operations improve from LOS F to LOS E during the AM peak hour period since a 3rd SB left-turn lane is provided.
e) Intersection of Woolbright Road and I-95/SR 9 SB Ramp Terminal: The EB right-turn (into I-95/SR 9 SB On-Ramp) queues are calculated to be reduced from approximately 880 feet to 90 feet by providing an acceleration lane on the SB On-Ramp. It should be noted that the Approved IAR Alternative does not provide an acceleration lane.
f) Intersection of Woolbright Road and I-95/SR 9 NB Ramp Terminal: The EB left-turn (into I-95/SR 9 NB On-Ramp) queues are still calculated (2045: 570' AM and 574' PM) to extend past the proposed storage capacity of approximately 460 feet. However, the analysis accounts for additional vehicles that may queue up in back while the front of the queue dissipates after the signal turns green due to progression similar to the Approve IAR Alternative. Therefore, there are no conflicts created with the I-95/SR 9 SB Off-Ramp left-turn movements. It should also be noted that the queuing distance is lower than the queuing distance on the Approved IAR Alternative (2045: #581' AM and #676' PM).

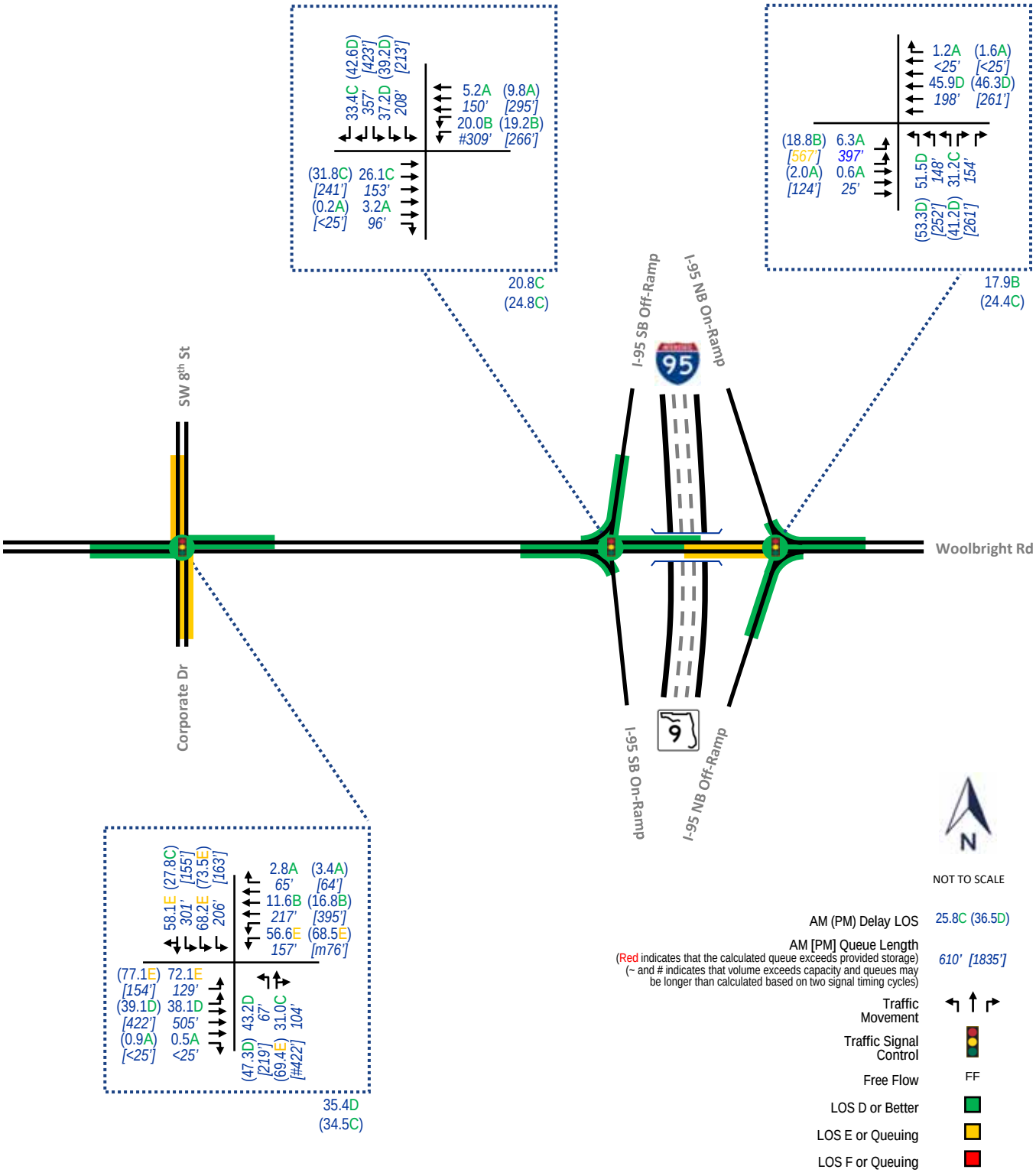


FIGURE 4.2:
Build Alternative
Intersection Operational Analysis Summary
Opening Year 2025

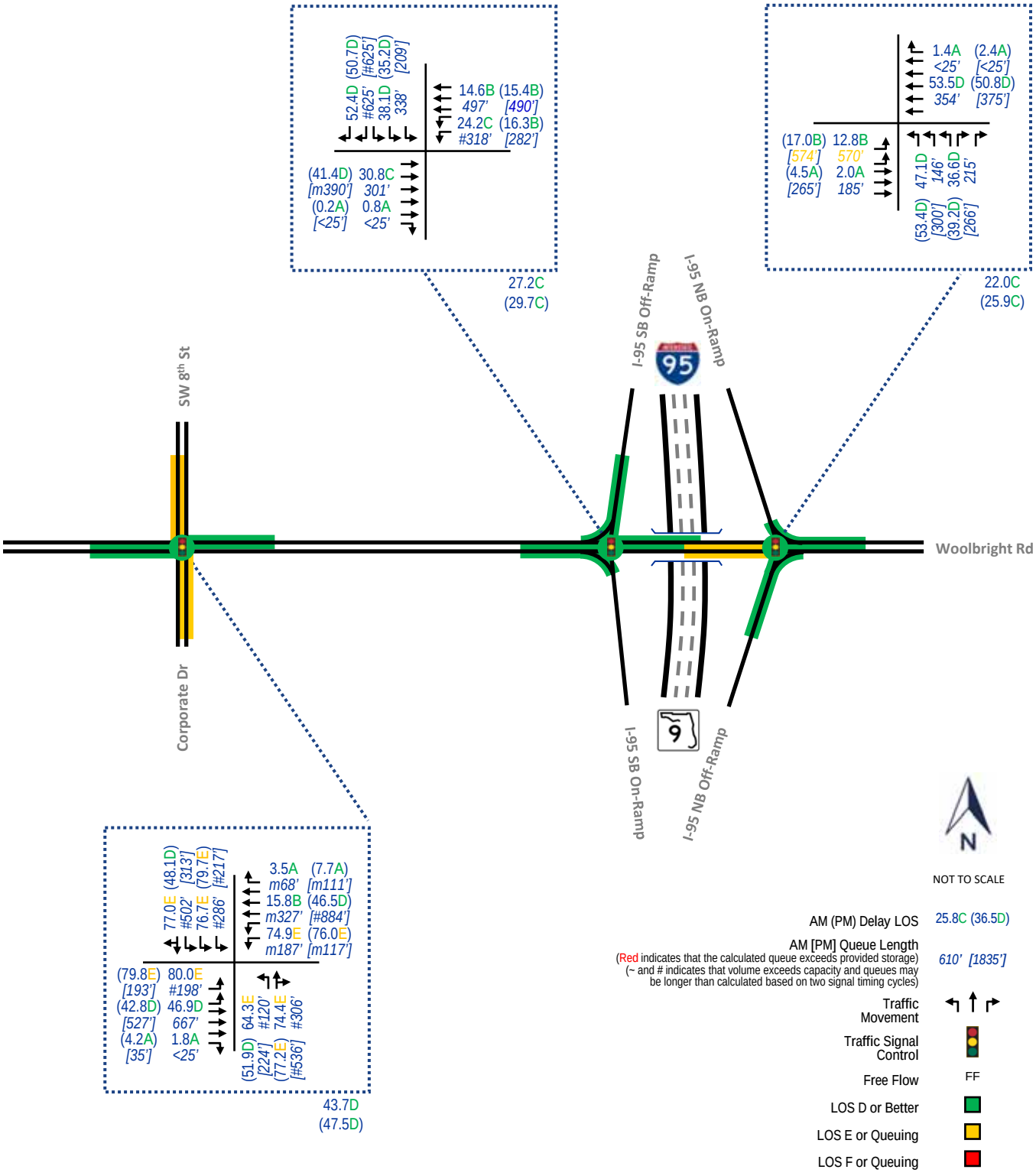


FIGURE 4.3:
Build Alternative
Intersection Operational Analysis Summary
Design Year 2045

Table 4.1 – Opening Year 2025: Build Alternative Intersection Operational Analysis Results

Woolbright Road Intersection with:	Control Type	AM		PM	
		Delay (sec)	LOS	Delay (sec)	LOS
SW 8th Street/Corporate Drive	Signal	35.5	D	34.5	C
I-95/SR 9 SB Ramp Terminal	Signal	21.6	C	24.8	C
I-95/SR 9 NB Ramp Terminal	Signal	19.2	B	24.4	C

Table 4.2 – Design Year 2045: Build Alternative Intersection Operational Analysis Results

Woolbright Road Intersection with:	Control Type	AM		PM	
		Delay (sec)	LOS	Delay (sec)	LOS
SW 8th Street/Corporate Drive	Signal	43.7	D	48.4	D
I-95/SR 9 SB Ramp Terminal	Signal	27.7	C	29.6	C
I-95/SR 9 NB Ramp Terminal	Signal	22.0	C	26.0	C

It should also be noted that the signalization control of the right-turn movements at the I-95/SR 9 Ramp Terminals will reduce pedestrian/vehicular conflicts. In addition, the signalization control of the SB right-turn movements at the I-95/SR 9 SB Ramp Terminal will reduce uncontrolled weaving movements and related vehicular merging and vehicular weaving conflicts. Similarly, eliminating the 4th WB through movement and providing a 3rd SB left-turn lane at the intersection of Woolbright Road and SW 8th Street/ Corporate Drive eliminates major utility conflicts, while maintaining or improving LOS.

Tables 4.3 and **4.4** summarize the results of the off-ramp signals back of queue analyses for the AM and PM peak hours. Queues were calculated using Synchro software based on HCM methodology. The results present the queue length in feet for each lane group movement. The analysis accounts for additional vehicles that may queue up in back while the front of the queue dissipates after the signal turns green. Therefore, the queue length results are not necessarily a multiple of 25 (length of vehicles including the space in between them).

The maximum available storage length was calculated from the stop bar at the ramp terminal intersection to the gore with I-95/SR 9 mainline. Consideration was also given to the stopping sight distance of 730 feet (based on FDM 211.10.2). The distance from the painted gore to the stop bar on the I-95/SR 9 SB Off-Ramp is approximately 1,640 feet. Similarly, the distance from the painted gore to the stop bar on the I-95/SR 9 NB Off-Ramp is approximately 1,330 feet. While these lengths are comparable to the Approved IAR Alternative, the corresponding storage capacity has been increased by adding right-turn lanes as well as extending the storage length on each auxiliary left-turn lane as shown in Figure 4.1.

Similarly, to the Approved IAR Alternative, the analysis of the Build Alternative indicates that queues on the off-ramps would not back up to the I-95/SR 9 mainline through lanes. With the proposed modifications, the I-95/SR 9 NB to EB off-ramp queue will not extend past the proposed storage capacity of approximately 500 feet per lane. Also, the calculated NB to EB off-ramp queue will no longer extend into the 730-foot length reserved for stopping sight distance.

Table 4.3 – Opening Year 2025: Build Alternative Off-Ramp Signal Queuing Analysis Results

I-95/SR 9	Movement	Available Storage (ft)(1)	Queue (ft)(2)	
			AM	PM
Southbound Ramp Terminal	SB to WB (R)	1,640	357	423
	SB to EB (L)	1,640	208	213
Northbound Ramp Terminal	NB to EB (R)	1,330	202	261
	NB to WB (L)	1,330	140	252

(1) The available storage length was calculated accounting for changes in number of lanes.
(2) The queuing distance was obtained by the 95th percentile Synchro queue length analysis.

Table 4.4 – Design Year 2045: Build Alternative Off-Ramp Signal Queuing Analysis Results

I-95/SR 9	Movement	Available Storage (ft)(1)	Queue (ft)(2)	
			AM	PM
Southbound Ramp Terminal	SB to WB (R)	1,640	#625(3,4)	572
	SB to EB (L)	1,640	338	202
Northbound Ramp Terminal	NB to EB (R)	1,330	215	266
	NB to WB (L)	1,330	146	300

(1) The available storage length was calculated accounting for changes in number of lanes.
(2) The queuing distance was obtained by the 95th percentile Synchro queue length analysis.
(3) # indicates that volume exceeds capacity and queues may be longer than calculated based on two signal timing cycles
(4) #625' per lane. The Build Concept provides two (2) SBR (650' each). Further review using the SimTraffic microsimulation tool indicated that the SB right-turn movement queues will not be longer than calculated using the Synchro tool. Therefore, SBR queues are not expected to reach or impact I-95/SR 9 SB mainline through traffic.

4.4 Build Alternative – Safety Analysis

It should be noted that the *June 2021 I-95/SR 9 at Woolbright Road IMR* analysis showed improved traffic operations and safety within the project study area when compared to the No-Build Alternative due to reduction in congestion and improved geometric design of the Approved IAR Alternative to improve safety. Therefore, the following safety analysis is focused on a comparison between the Approved IAR Alternative, and the improvements implemented as part of the proposed Build Alternative in accordance with the purpose and need for this project. Documentation of the Build Alternative safety analysis and supporting documentation is provided in **Appendix F**.

The safety analysis was conducted to evaluate the Build Alternative (versus the Approved IAR Alternative) for Opening Year 2025 and Design Year 2045. The quantitative safety analysis was conducted utilizing Safety Performance Functions (SPF) based on the *Highway Safety Manual* (HSM) procedures and the *2022 FDOT IARUG Safety Analysis Guidance* for the following intersections:

1. Woolbright Road at SW 8th Street/Corporate Drive;
2. I-95/SR 9 SB Ramp Terminal at Woolbright Road; and
3. I-95/SR 9 NB Ramp Terminal at Woolbright Road.

The safety analysis was divided into: 1) Intersection analysis (SW 8th Street/Corporate Drive); and 2) Freeway Ramp Terminal (I-95/SR 9 ramp terminal intersections). The safety analysis was conducted using the FDOT Safety Performance for Intersection Control Evaluation (SPICE) Tool (most current version v4.0.0 10/13/2021). The SPICE tool calculates crash frequency and severity by utilizing HSM strategies to perform a comparative predictive safety analysis of different intersection control strategies. This tool was developed by FHWA (and modified by FDOT) to automate the predictive analysis of intersections. This tool allows conducting intersection control evaluations by developing the appropriate Safety Performance Functions (SPFs) based on the Empirical Bayes (EB) method and implementation of Crash Modification Factor (CMF) as applicable. **Table 4.5** summarizes the results of the safety analyses for Opening Year 2025 and Design Year 2045.

Table 4.5 – Build Alternative Safety Analysis Results

Control Strategy	Location	Crash Type	Opening Year 2025	Design Year 2045	Total Crashes Project	Rank(1)	Source of Prediction
Approved IAR Alternative	SW 8th St / Corporate Drive	Total	21.58	23.59	474.46	2	SPF w/EB
		Fatal/Injury	5.22	5.76	115.34		
	I-95/SR 9 Ramp Terminals	Total	42.19	48.08	946.49	2	SPF no/EB
		Fatal/Injury	20.08	23.06	452.54		
	Total	**Total**	**63.77**	**71.67**	**1,420.95**	**2**	**N/A**
		Fatal/Injury	**25.30**	**28.82**	**567.88**		
Build Alternative	SW 8th St / Corporate Drive	Total	18.69	20.43	410.96	1	SPF w/EB
		Fatal/Injury	4.52	5.00	99.98		
	I-95/SR 9 Ramp Terminals	Total	41.28	46.67	922.52	1	SPF no/EB
		Fatal/Injury	19.18	21.65	428.58		
	Total	**Total**	**59.97**	**67.10**	**1,333.48**	**1**	**N/A**
		Fatal/Injury	**23.70**	**26.65**	**528.56**		

(1) A Ranking of 1 is given to the safest alternative.

The Intersection analysis followed the procedures in Chapter 12 of the HSM. The Approved IAR Alternative was labeled Traffic Signal; and the Build Alternative was labeled Traffic Signal (Alt). The intersection analysis was conducted for the intersection of Woolbright Road and SW 8th Street/Corporate Drive. The EB method was applied. A review of the FDOT State Safety Office Geographic Information System (SSOGis) indicated that crash data for SW 8th Street and Corporate Drive was not complete; therefore, the crash data was obtained from Signal 4 Analytics for the most recent five-year period of 2017 to 2021 (instead of 2016 to 2020 as expected in the approved MLOU). The crash database summary table and SPICE worksheet are presented in Appendix F.

A review of the crash data within the functional area of the intersection indicates that the crash frequency has been very consistent with an annual average of 24.6 crashes per year. The database indicates that there was a total of 20 crashes in 2017, 25 crashes in 2018, 27 crashes in 2019, 22 crashes in 2020, and 29 crashes in 2021, respectively. Therefore, no significant deviations were observed due to COVID19 pandemic.

A calibration factor of 1.00 was used for both Alternatives. All the inputs utilized were consistent for both alternatives except as follows:

- Number of Major Street Through Lanes: Approved IAR Alternative = 7; Build Alternative = 6
- Max # of Lanes Crossed by Pedestrians: Approved IAR Alternative = 10; Build Alternative = 9

The value differences on the Number of Major Street Through Lanes and Max # of Lanes Crossed by Pedestrians reflect the additional WB auxiliary through lane under the Approved IAR Alternative. The SPF calculation does not include the number of turn lanes as a variable; therefore, the safety benefits from the additional SB left-turn lane implemented on the Build Alternative are not included. The safety analysis indicates that the Build Alternative will produce approximately 63.50 less crashes than the Approved IAR Alternative at the intersection of Woolbright Road and SW 8th Street/Corporate Drive between Opening Year 2025 and Design Year 2045.

The Ramp Terminal Intersections analysis followed the procedures in Chapter 19 of the HSM 2014 Supplement. The Approved IAR Alternative was labeled Signalized Diamond; and the Build Alternative was labeled Signalized Diamond (Alt). The Ramp Terminal Intersections analysis was conducted for the I-95/SR 9 at Woolbright Road Ramp Terminal Intersections. The EB method was not applied since this segment of Woolbright Road will be modified from 4-lanes to 6-lanes under both Alternatives. The SPICE worksheet is presented in Appendix F.

A calibration factor of 1.00 was used for both Alternatives. All the inputs utilized were consistent for both alternatives except as follows:

- Effective Number of Lanes Serving Exit Ramp: Approved IAR Alternative = 3; Build Alternative = 4. It should be noted that these values reflect a methodology limitation to a maximum of 4-lanes. The actual proposed configuration is: Approved IAR Alternative = 4; Build Alternative = 5. For purpose of this analysis, one lane was subtracted from each configuration to maintain the net difference between the two Alternatives.
- The analysis considers the SB Exit Ramp Right Turn Control as Signal/Stop/Yield controlled based on field observations and the presence of Pedestrian Crossing Signs (W11-2 and W16-7P); even though, the right-turn lane has its own receiving lane. It should be noted that a Yield Sign (R1-2) and Advance Yield Sign (W3-2) were previously provided for this movement until 2016. The NB Exit Ramp Right Turn has (Exiting Conditions) and will maintain (Approved IAR Alternative) Yield Sign control.

Due to methodology limitations, the SPF calculation does not include the total number of Lanes Serving Exit Ramps; therefore, the safety benefits from the additional SB and NB right-turn lanes implemented on the Build Alternative are not included. The safety analysis indicates that the Build Alternative will produce approximately 23.97 less crashes than the Approved IAR Alternative at the I-95/SR 9 at Woolbright Road Ramp Terminal Intersections between Opening Year 2025 and Design Year 2045.

The safety analysis indicates that the Build Alternative will improve safety conditions. Based on the results of the HSM analysis, the proposed condition would reduce the predicted total project life cycle crashes by a total of 87.47 crashes. Of those 87.47 crashes, 39.32 are predicted to be fatal/injury crashes.

5 OTHER CONSIDERATIONS

5.1 Environmental Considerations

The consideration of social, economic, and environmental impacts discussed in the 2009 policy are removed from this policy, and they will be addressed under the National Environmental Policy Act and other statutes and regulations applicable to the approval process. FDOT has classified this project as a Type 1 CE class of action. At this time, no potential environmental considerations requiring a modification of the Build Alternative have been identified.

5.2 Anticipated Design Exceptions and Variations

The following design exception and variations are anticipated based on the preliminary design tasks conducted at this time. It should be noted that all variations and the exception would also have been needed with the Approved IAR Alternative. In addition, the vertical clearance and lateral offset railroad exception and variation were previously needed for the design build project (FPID: 231932-2) that widened the north side of the Woolbright Road bridge over CSX/SFRC Railroad. Additional survey is underway to finalize the variations and exception for this project. We anticipate the submittal to be in January 2023, subject to change based on updated survey information and approval.

- Vertical Clearance over Railroad Exception
  This exception applies to the Woolbright Road bridge over CSX/SFRC Railroad. The existing condition currently does not meet the minimum vertical clearance requirement of 24'-3" per FDM Table 260.6.1 and Corridor Clearance Policy for 25 kV service (Topic No. 000-725-003). In addition, the existing condition does not meet AREMA and AASHTO criteria of 23 feet. The proposed vertical clearance for the widening is unknown at this time since we do not have the railroad survey. The Exception will be to maintain the existing clearances. The survey is currently being performed.

- Median Width Variation
  This variation applies to Woolbright Road west of SW 8th Street (from MP 0.616 to 0.741). Per FDM Table 210.3.1, the required median width is 22 feet for a context classification of C4 with a design speed of 45 mph. On reconstruction projects where existing curb locations are fixed due to severe right of way constraints, the minimum median width may be reduced to 19.5 feet for design speeds = 45 mph. The existing median width varied from 7 feet to 22 feet, which does not meet criteria. The proposed median width varies from 15.5 feet to 29 feet. We are improving the median width, but some locations have constrained right of way and will not meet criteria (minimum width is 15.5 feet).

- Cross Slope Variation
  This variation applies to I-95/SR 9 only. Per FDM Figure 211.2.1, the maximum number of lanes sloping in one direction is three. The existing condition along I-95/SR 9 within the project limits are four lanes sloping in one direction. We are requesting a variation for the existing condition to remain.

- Superelevation Variation
  This applied to Woolbright Road west of SW 8th Street (from MP 0.642 to 0.765). Per FDM Table 210.9.2, the required superelevation rate is normal crown (2%) based on the horizontal alignment curve radius of 2350', not to exceed 5%, on a facility with 45 mph design speed. The existing superelevation rate varies from 2.3% to 6.4%. We are requesting a variation for the existing condition to remain.

- Lateral Offset for Railroad Variation
  This variation applies to the Woolbright Road bridge over CSX/SFRC Railroad. The existing condition does not meet the minimum lateral offset requirement of 18 feet with crash walls per FDM Table 220.3.1. The proposed lateral offset varies from 11'-4" to 17'-6". The proposed lateral offset is not finalized and is subject to change after coordination with the railroad and updated survey information.

5.3 Conceptual Signing Plan

A conceptual signing plan is provided in **Appendix G**. The conceptual signing plan indicates that it will be feasible to provide adequate signage for the Build Alternative.

5.4 Access Management Plan

The access management plan within the area of influence will not be changed by the proposed improvements to the interchange. It should be noted that extending the existing raised median on the eastern side of the project, 300 feet to the east (to SW 2nd Street) would require an Access Management Plan modification.

6 FHWA INTERSTATE ACCESS POLICY

It is in the national interest to preserve and enhance the Interstate System to meet the needs of the 21st Century by assuring that it provides the highest level of service in terms of safety and mobility. Full control of access along the Interstate mainline and ramps, along with control of access on the crossroad at interchanges, is critical to providing such service. Therefore, the Federal Highway Administration's (FHWA) decision to approve new or revised access points to the Interstate System under Title 23, United States Code (U.S.C.), Section 111, must be supported by substantiated information justifying and documenting that decision. The FHWA's decision to approve a request is dependent on the proposal satisfying and documenting the following requirements:

6.1 Policy Point 1

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

The operational analysis conducted for this IMR Re-evaluation confirmed that the proposed interchange modifications are not expected to have any significant adverse impacts on safety and operations on the interstate facility, I-95/SR 9. When compared with the Approved IAR Alternative, the Build Alternative improves or maintains safety and operations along Woolbright Road and has no impacts along I-95/SR 9.

It should also be noted that the signalization control of the right-turn movements at the I-95/SR 9 Ramp Terminals will reduce pedestrian/vehicular conflicts. In addition, the signalization control of the SB right-turn movements at the I-95/SR 9 SB Ramp Terminal will reduce uncontrolled weaving movements and related vehicular merging and vehicular weaving conflicts. The safety analysis indicates that the Build Alternative will improve safety conditions. Based on the results of the Highway Safety Manual (HSM) analysis, the proposed condition would reduce the predicted total project life cycle crashes by a total of 87.47 crashes in comparison to the Approved IAR Alternative. Of the total 87.47 reduced crashes, 39.32 are predicted to be fatal/injury crashes.

6.2 Policy Point 2

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

This IMR Re-evaluation does not propose any new interchanges along I-95/SR 9. The existing interchange provides access to public roads only. The proposed improvements at the interchange will maintain full access to the existing cross street of Woolbright Road and accommodates all movements.

7 CONCEPTUAL FUNDING

The current Budget Construction Year is 2027. However, this project is a candidate for Advanced Plans Production (APP) to allow for advancement of the letting date to June 2025. The construction schedule is not yet finalized; however, expectations are as follows:

- Contract Letting – July 2026
- Contract Execution – October 2026
- Open to Traffic – April 2029

The interchange has been added to the Strategic Intermodal System Funding Plan with FM number 437279-1. It has been added to the Work Program for funding of design, right of way and utility phases in FY 2022 through FY 2027. The environmental evaluation is on-going. The total estimated construction cost is $20.7 million. Cost estimates have been developed based on an engineer's opinion of probable cost using current FDOT Long Range Estimates (LRE) base costs. The current FDOT LRE dated April 29, 2022, is provided in **Appendix H** for ease of reference.

8 CONCLUSIONS AND RECOMMENDATIONS

The primary purpose of this IMR Re-evaluation is to update the analysis conducted as part of the *June 2021 I-95/SR 9 at Woolbright Road IMR* from North of Woolbright Road to South of Woolbright Road and develop a concept that meets the following project objectives:

- Maintain or improve traffic operations and safety of the Approved IAR Alternative;
- Reduce pedestrian/vehicular, vehicular merging and vehicular weaving conflicts due to off-ramp free-flow right-turning movements at the I-95/SR 9 ramp terminal intersections; and
- Reduce major utility conflicts along the northwest quadrant at the intersection of Woolbright Road and SW 8th Street/Corporate Drive.

The *June 2021 I-95/SR 9 at Woolbright Road IMR* did not have recommended improvements along I-95/SR 9. Based on the comprehensive evaluation presented in the *June 2021 I-95/SR 9 at Woolbright Road IMR*, Build Alternative 1 with a TDI configuration was selected as the Preferred Alternative due to the traffic operational and safety benefits it provides compared to the other Alternatives. Build Alternative 1 also satisfies the purpose and need of this project and provides the highest benefit-cost ratio making it the most cost-effective alternative.

The project is currently in the final design phase, and a modified concept is proposed as an improvement over the *June 2021 I-95/SR 9 at Woolbright Road IMR* Preferred Alternative. The improvements were presented at the September 2021 District 4 Interchange Review Coordination Meeting. Therefore, the operational and safety analysis of this IMR Re-evaluation focus on a comparison of the Approved IAR Alternative and the Build Alternative (Design Phase Modified Concept).

Table 8.1 presents a summary of Design Year 2045 intersection analysis results for the Approved IAR Alternative and Build Alternative for ease of reference and comparison. The Build Alternative intersection analysis includes the implementation of seven major modifications over the Approved IAR Alternative to address identified issues:

I. Eliminates the proposed 4th WB through lane along Woolbright Road at SW 8th Street;
II. Introduces a 3rd SB left-turn lane along SW 8th Street at Woolbright Road;
III. Extends EB and WB left-turn lanes along Woolbright Road at SW 8th Street;
IV. Extends the WB right-turn lane along Woolbright Road at SW 8th Street to the I-95 SB Off-Ramp;
V. Introduces signalized double right-turn lanes at the I-95 SB and NB Off-Ramp Terminals;
VI. Provides an acceleration lane for the EB right-turn lane to the I-95/SR 9 SB On-Ramp; and
VII. Provides a shared use path between SW 8th Street and SW 3rd Street.

Table 8.1 – Design Year 2045: Approved IAR and Build Alternatives Intersection Operational Analysis Results

Woolbright Road Intersection with:	Control Type	Approved IAR Alternative		Build Alternative	
		AM Delay/LOS	PM Delay/LOS	AM Delay/LOS	PM Delay/LOS
SW 8th Street/Corporate Drive	Signal	63.0 / E	54.4 / D	43.7 / D	48.4 / D
I-95/SR 9 SB Ramp Terminal	Signal	27.4 / C	23.0 / C	27.7 / C	29.6 / C
I-95/SR 9 NB Ramp Terminal	Signal	25.2 / C	31.4 / C	22.0 / C	26.0 / C

Tables 8.2 summarizes the results of the off-ramp signals back of queue analyses for the AM and PM peak hours. The analysis indicates that queues on the off-ramps would not back up to the I-95/SR 9 mainline through lanes for either alternative. However, It should be noted that the Approved IAR Alternative does not provide an acceleration lane for the NB to EB movement; therefore, it will not operate as free-flow. The Approved IAR Alternative I-95/ SR 9 NB to EB off-ramp queue is calculated to extend past the proposed storage and create conflicts with the NB left-turn traffic. In addition, the Approved IAR Alternative I-95/SR 9 NB to EB off-ramp queue is calculated to extend into the 730-foot length reserved for stopping sight distance.

Table 8.2 – Design Year 2045: Approved IAR and Build Alternatives Off-Ramp Signal Queuing Analysis Results

I-95/SR 9	Movement	Approved IAR Alternative			Build Alternative		
		Available Storage (ft)(1)	Queue (ft)(2)		Available Storage (ft)(1)	Queue (ft)(2)	
			AM	PM		AM	PM
Southbound Ramp Terminal	SB to WB (R)	300	<25	<25	1560	#1250(3,4)	1,144
	SB to EB (L)	2,120	1,161	747	2,060	1,014	606
Northbound Ramp Terminal	NB to EB (R)	340	#529(3)	#611(3)	1,200	430	532
	NB to WB (L)	1,600	435	828	1,700	438	900

(1) The available storage length was calculated accounting for changes in number of lanes.
(2) The queuing distance was obtained by multiplying the resulting queue per lane and number of lanes on the approach movement.
(3) # indicates that volume exceeds capacity and queues may be longer than calculated based on two signal timing cycles
(4) #625' per lane. The Build Concept provides two (2) SBR (650' each). Further review using the SimTraffic microsimulation tool indicated that the SB right-turn movement queues will not be longer than calculated using the Synchro tool. Therefore, SBR queues are not expected to reach or impact I-95/SR 9 SB mainline through traffic.

The quantitative safety analysis was conducted utilizing SPFs based on the HSM procedures and the *2022 FDOT IARUG Safety Analysis Guidance* for the intersections of Woolbright Road at SW 8th Street/Corporate Drive and the I-95/SR 9 SB Ramp Terminals at Woolbright Road. The safety analysis was conducted using the FDOT SPICE Tool (Most current version v4.0.0 10/13/2021). The SPICE tool calculates crash frequency and severity by utilizing HSM strategies to perform a comparative predictive safety analysis of different intersection control strategies. This tool was developed by FHWA (and modified by FDOT) to automate the predictive analysis of intersections. This tool allows conducting intersection control evaluations by developing the appropriate SPFs based on the EB method and implementation of CMF as applicable.

The safety analysis indicates that the Build Alternative will improve safety conditions. Based on the results of the HSM analysis, the proposed condition would reduce the predicted total project life cycle crashes by a total of 87.47 crashes. Of those 87.47 crashes, 39.32 are predicted to be fatal/injury crashes.

The analysis herein shows that the improvements included in the Build Alternative: maintain or improve traffic operations LOS and safety; and meet FHWA interchange access policy while reducing pedestrian/vehicular conflicts, vehicular merging and vehicular weaving conflicts due to off-ramp free-flow right-turning movements at the I-95/SR 9 ramp terminal intersections; and reducing utility conflicts at the intersection of Woolbright Road with SW 8th Street/Corporate Drive. Therefore, the Build Alternative configuration is recommended for implementation.

APPENDIX A

Interchange Modification Report (IMR) Re-evaluation Methodology Letter of Understanding (MLOU)

APPENDIX

A

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

Type of Request: ☐ IJR ☒ IMR ☐ IOAR ☐ SIMR

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

I-95/SR 9 from South of Woolbright Road to North of Woolbright Road

Interchange Modification Report (IMR) Re-evaluation

FPID: 437279-1

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: Humberto Arrieta F20CB13C158648D... Humberto Arrieta, PE Project Manager, District Four	5/9/2022 | 2:55 PM EDT Date
Interchange Review Coordinator	DocuSigned by: Cesar Martinez DC7B7B72D0BD4A2... Cesar Martinez, P.E. Project Development Manager, District Four	5/9/2022 | 2:59 PM EDT Date
Systems Management Administrator	DocuSigned by: Jenna Bowman 4AD03E6A337E4C1... Jenna Bowman, PE Systems Implementation Office, Central Office	5/9/2022 | 3:27 PM EDT Date
Federal Highway Administration (if applicable)	Not Applicable Choose an item. Choose an item.	Date

This document serves as the Methodology Letter of Understanding (MLOU) between the Requestor, the Florida Department of Transportation (FDOT) District Four, and FDOT Central Office for preparing the Interchange Modification Report (IMR) Re-evaluation for the I-95/SR 9 with Woolbright Road Interchange in Palm Beach County, Florida.

1.0 Project Description

Provide background or supporting information that explains the basis for the request.

The I-95/SR 9 at Woolbright Road interchange serves as an important access point for the City of Boynton Beach in Palm Beach County. The I-95/SR 9 at Woolbright Road interchange has a diamond type configuration. Within the project limits, I-95/SR 9 is classified as 'Urban Principal Arterial Interstate' and consists of eight (four on each direction) general use lanes and two (one on each direction) high occupancy lanes (HOV). Woolbright Road is classified as a 'Divided Urban Minor Arterial' with a posted speed limit of 40 mph. Woolbright Road consists of six (three on each direction) lanes between SW 18th Street and the I-95/SR 9 Southbound (SB) Ramp Terminal intersection; and a transition from the six-lane divided section to a five-lane roadway section (two lanes on each direction and a two-way left-turn lane on the center) to the east of the I-95/SR 9 Northbound (NB) Ramp Terminal intersection.

The Florida Department of Transportation (FDOT) District Four has conducted an Interchange Modification Report (IMR) as part of the Project Development and Environment Study (PD&E) for the interchange of I-95/SR 9 and Woolbright Road, dated June 2021. The study evaluated three (3) build alternatives to improve traffic operations and safety at this critical interchange in Palm Beach County: Build Alternative 1, Tight Diamond Interchange (TDI); Build Alternative 2, Diverging Interchange (DDI); and Build Alternative 3, Single-Point Urban Interchange (SPUI). Based on the comprehensive evaluation presented in the *June 2021 I-95/SR 9 at Woolbright Road IMR*, Build Alternative 1 with a TDI configuration was selected as the Preferred Alternative due to the traffic operational and safety benefits it provides compared to the other Alternatives. Build Alternative 1 also satisfies the purpose and need of this project and provides the highest benefit-cost ratio making it the most cost-effective alternative.

The project is currently in the final design phase, and a modified concept is proposed as an improvement over the *June 2021 I-95/SR 9 at Woolbright Road IMR* Preferred Alternative. The improvements were presented at the September 2021 District 4 Interchange Review Coordination Meeting. The modified concept maintains the TDI design concept at the interchange, but it introduces the following improvements:

1. Eliminates the proposed 4th Westbound (WB) Through Lane along Woolbright Road at SW 8th Street;
2. Introduces a 3rd SB Left-Turn Lane along SW 8th Street at Woolbright Road;
3. Extends Eastbound (EB) and WB Left-Turn Lanes along Woolbright Road at SW 8th Street;
4. Extends the WB Right-Turn along Woolbright Road at SW 8th Street to the I-95 SB Off-Ramp; and
5. Introduces signalized double Right-Turn Lanes at the I-95 SB and NB Off-Ramp Terminals.

A. *Purpose and Need Statement*

Provide the Purpose, the Need, and the Goals and Objectives.

The purpose of this project is to address the long-term needs of I-95/SR 9 including ramp terminal traffic spillback onto I-95 mainline, reducing congestion on I-95 and Woolbright Road, and improving operations and safety at the I-95/SR 9 and Woolbright Road interchange through the 2045 design year horizon. This project will also be consistent with plans for the I-95 mainline, including the extension of I-95 Express lanes throughout Palm Beach County.

The following information extracted from the *June 2021 I-95/SR 9 at Woolbright Road IMR* supports the Purpose and Need for this project:

- The 2019 Annual Average Daily Traffic (AADT) volume along I-95/SR 9 is projected to grow from 228,000 vehicles per day (vpd) – 237,000 vpd to 241,00 vpd – 261,000 vpd in 2045.
- Similarly, the 2019 Annual Average Daily Traffic (AADT) volume along Woolbright Road is projected to grow from 40,500 vpd – 42,500 vpd to 46,000 vpd – 52,000 vpd in 2045.
- The 2019 Annual Average Daily Truck Traffic (AADTT) volume along I-95/SR 9 is projected to increase from 13,900 truck trips per day (tpd) – 17,550 tpd to 14,700 tpd – 19,300 tpd in 2045 [assuming the percentage of trucks on the road remains the same as the base year percentage (I-95/SR 9 south of Woolbright Road – 6.1%, and I-95/SR 9 north of Woolbright Road – 7.4%)].
- Similarly, the 2019 Annual Average Daily Truck Traffic (AADTT) volume along Woolbright Road is projected to increase from 1,400 tpd – 2,100 tpd to 1,700 – 2,400 in 2045 [assuming the percentage of trucks on the road remains the same as the base year percentage (Woolbright Road east of I-95 – 5.2%, Woolbright Road west of I-95 – 3.3%)].
- The Palm Beach Transportation Planning Agency (TPA) 2040 Long Range Transportation Plan (LRTP), states that County population is forecasted to increase 27% (from 1.32 million in 2010 to 1.68 million in 2040). Similarly, County employment is forecasted to grow 44% (from 571,000 to 820,000 employees) in the same 30-year period.
- Interstate 95/SR 9 is part of the state's Strategic Intermodal System (SIS) and the National Highway System (NHS). A need exists to ensure that I-95/SR 9 continues to meet the minimum requirements as a component of those two systems. This project will help improve connectivity and capacity within the roadway network by addressing traffic spillback onto I-95/SR 9 and improving interchange connections.
- The safety analysis was completed for the I-95/SR 9 mainline, on- and off-ramps, and arterials in the study corridor. Crash data was obtained from FDOT's Crash Analysis Reporting System (CARS) for the most recent five-years of verified crash data at the time of the analysis (i.e., from January 2013 to December 2017). The analysis indicated the following:
  - Overall, there was a total of 1076 crashes along I-95 mainline, ramps and Woolbright Road during the 5-year period. Of the 1076 crashes reported, 341 crashes occurred along Woolbright Road.
  - Rear-end crashes (163/47.8%) was the predominant crash type along Woolbright Road, followed by angle crashes (76/22.3%) and sideswipe crashes (27/7.9%).
  - The percentage of nighttime crashes (73/21.4%) is lower than the 33% statewide average.
  - The percentage of on wet pavement crashes (52/15.2%) is slightly over the 15% statewide average.
- The proposed improvements under the preferred Build Alternative 1 – TDI configuration is anticipated to result in an overall crash reduction of approximately 1% compared to the No-Build Alternative due to the reduction in delays. This will enhance safety within the interchange area.
- Based on the traffic operational analysis, the I-95/SR 9 NB and SB ramp terminals will operate at LOS F during the AM and PM peak hours under the No-Build Alternative. The analysis also indicates that queues would back onto the I-95/SR 9 exit ramps during both peak periods.
- The analysis indicates that the preferred Build Alternative 1 – TDI configuration operates better than the No-Build Alternative for all future year scenarios, particularly for the I-95/SR 9 ramp terminal intersections, which are the primary focus for this project. Both I-95/SR 9 ramp terminals will operate at overall LOS D (desirable LOS standard) during both AM and PM peak hours for the 2045 design.
- The SB ramp terminal intersection will experience 66.6% and 69.7% reduction in delay for the AM and PM peak hours, respectively, whereas the NB ramp terminal will experience 58.2% and 75.5% reduction in delay during the AM and PM peak hours, respectively. However, the off-ramp right-turn movement remain as free-flow, which hinders pedestrian safety and downstream merging and weaving maneuvers.

- The analysis indicates that the intersection of Woodbright Road at SW 8th Street/Corporate Drive would operate at LOS E and D during the AM and PM peak periods, respectively. However, the resulting *June 2021 I-95/SR 9 at Woolbright Road IMR* concept will create significant utility conflicts.
- The analysis indicates that the intersection of Woodbright Road at Seacrest Boulevard is not within the Area of Influence of the interchange.

The Re-evaluation analysis has the following project objectives:

1. Maintain or improve traffic operations and safety of the preferred Build Alternative 1 – TDI;
2. Reduce pedestrian/vehicular, vehicular merging and vehicular weaving conflicts due to off-ramp free-flow right-turning movements at the I-95 ramp terminal intersections; and
3. Reduce utility conflicts at the intersection of Woodbright Road and SW 8th Street/Corporate Drive.

B. Project Location

Provide project description and a map of the IAR project location.

Exhibit A provides a Project Location map. This project entails providing the following improvements along Woolbright Road between SW 18th Street and west of SW 2nd Street:

1. Provide EB and WB 3rd Through Lane between the Ramp Terminal Intersections;
2. Expand Ramp Terminal Intersections;
3. Expand SW 8th Street/Corporate Drive Intersection;
4. Provide Bike Lanes between SW 18th Street and west of SW 8th Street;
5. Provide Buffered Bike Lanes between SW 8th Street and west of SW 2nd Street; and
6. Provide a Shared Use Path between SW 8th Street and SW 3rd Street.

C. Area of Influence

Provide a description of the area of influence along the main line and cross street.

Exhibit B summarizes the AOI. In urban areas, the area of influence (AOI) as defined in the *2020 FDOT Interchange Access Request Users Guide* (IARUG) for IMRs, extends to the on- and off-ramp gore points of the adjacent interchanges and to include at least one signalized intersection in either direction within half-a-mile of the interchanges. However, these limits have been modified for the *June 2021 I-95/SR 9 at Woolbright Road IMR* and will remain the same for the Re-evaluation, as follows:

Along mainline:

The AOI for I-95/SR 9 extends from just south of the Woolbright Road interchange to the Boynton Beach Boulevard northbound off-ramp and southbound on-ramp to the north, approximately 1.6 miles. The AOI along I-95 does not extend south to the Atlantic Boulevard interchange because it is over 3.5 miles south of the study interchange, and it was not considered to be impacted by the alternatives at the Woolbright Road interchange. The IMR Re-evaluation modifications are all located within Woolbright Road between SW 8th Street/Corporate Drive and west of SW 2nd Street; and the I-95/SR 9, mainline volumes and analysis in the re-evaluation remain the same as the *June 2021 I-95/SR 9 at Woolbright Road IMR*. Therefore, no additional analysis will be performed for the mainline or merge/diverge segments under this re-evaluation. For further information related to the mainline analysis and conditions, please refer to the approved *June 2021 I-95/SR 9 at Woolbright Road IMR*.

Along crossroads:

The AOI along Woolbright Road extends from SW 8th Street/Corporate Drive to west of SW 2nd Street, including the following signalized intersections (It should be noted that the *June 2021 I-95/SR 9 at Woolbright Road IMR* showed that the intersection of Woolbright Road and Seacrest Boulevard is outside the AOI; therefore, it is not included in this Re-evaluation or project limits. For further information related to the Woolbright Road at Seacrest Boulevard intersection analysis and conditions, please refer to the approved *June 2021 I-95/SR 9 at Woolbright Road IMR*):

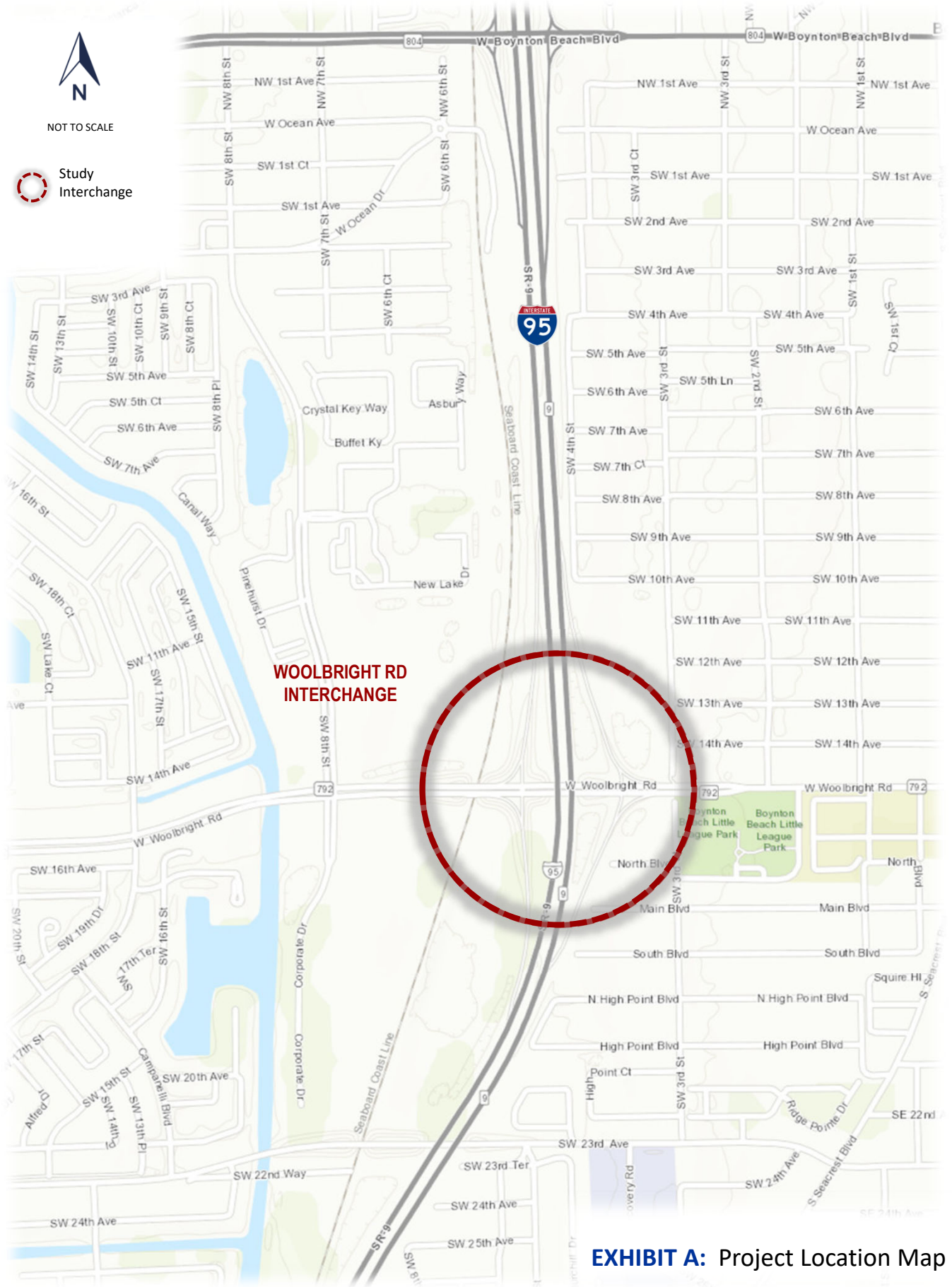


EXHIBIT A: Project Location Map

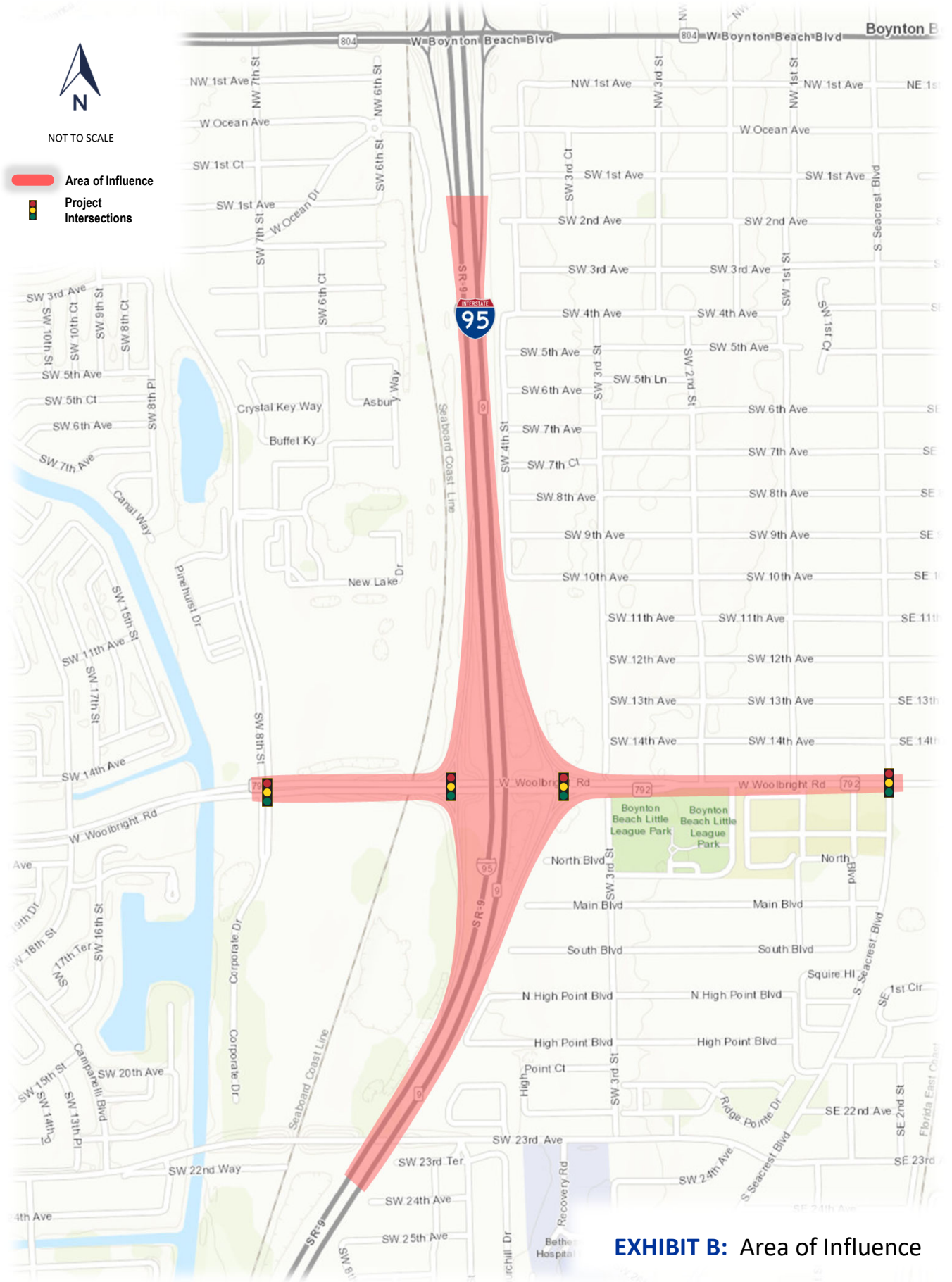


EXHIBIT B: Area of Influence

- Woolbright Road at SW 8th Street/Corporate Drive;
- I-95/SR 9 SB Ramp Terminal at Woolbright Road; and
- I-95/SR 9 NB Ramp Terminal at Woolbright Road.

D. Project Schedule

Identify the schedule of production activities consistent with a proposed conceptual funding plan and opening year.

The work program shows available construction funds for Fiscal Year (FY) 2027. The current start Construction Year is 2026. Scheduled Activities are as follows:

- Design Started FY 2022
- Production Date – FY 2025
- Letting Date – FY 2027

2.0 Analysis Years

A. Travel Demand Model

- Base year 2010
- Horizon year 2040

B. Traffic Operational Analysis

- Existing year 2019 (No analysis required for IMR Re-evaluation)
- Opening year 2025
- Design year 2045

This IMR Re-evaluation is required due to proposed improvements over the IAR approved concept during the on-going final design phase. A Traffic validation has been conducted for future traffic volumes per IARUG procedures. The validation analysis indicates that the traffic volumes available from the original approved IAR still reflect the project area's travel conditions and pattern; therefore, the original IMR volumes and analysis years will be used for this IMR Re-evaluation. **Attachment A** summarizes the Traffic Validation Form and Project Traffic Volumes extracted from the *June 2021 I-95/SR 9 at Woolbright Road IMR*.

3.0 Alternatives

The No-Build and Build alternatives shall be analyzed in the IAR. Details of all reasonable build alternatives considered, including those eliminated from further considerations, shall be documented. The documentation for the alternatives eliminated can be minimal like a summary of what was considered, reasons for elimination etc. Build Alternatives meeting purpose and need of the project shall have a more detailed description and evaluated in the IAR. The implementation of Transportation Systems Management and Operations (TSM&O) elements will be incorporated in the IAR Recommended Alternative.

Per IARUG procedures for IAR Re-evaluations, a No-Build alternative will not be analyzed. Instead, the approved IAR concept will be used as basis for comparison for Opening and Design year analyzes. The approved IAR concept is the Preferred Alternative (Build Alternative 1, Tight Diamond Interchange (TDI)) developed by the *June 2021 I-95/SR 9 at Woolbright Road IMR*, and it is shown in **Attachment B** for ease of reference. The Build alternative incorporates the proposed modified design improvements (developed during the on-going final design phase) over the IMR approved concept. **Attachment C** presents the Build alternative concept. A stand-alone TSM&O Alternative will not be developed. The implementation of TSM&O elements will be incorporated in the IAR Recommended Alternative. Development of the conceptual design alternative followed Context Sensitive Solution and Complete Streets approaches.

4.0 Data Collection

The type of data that may be used should be identified.

This IMR Re-evaluation will utilize data that was previously collected for the *June 2021 I-95/SR 9 at Woolbright Road IMR*. If needed and feasible, additional data would be collected from available sources.

A. Transportation System Data

- Roadway Characteristics Inventory Database
- FDOT Straight Line Diagrams
- FDOT Florida Traffic Online (FTO) Website
- Palm Beach County traffic signal timing data
- FDOT Crash Data (Crash Analysis Reporting System – CARS Online)
- University of Florida Signal Four Analytics
- Field visits to confirm geometry, storage lengths, signal phasing, operations.
- FDOT Five (5) Year Work Program (FY 2022/2027)
- Strategic Intermodal System (SIS) Funding Strategy First Five-Year Plan (FY 2021/2022 through 2025/2026)
- SIS Funding Strategy Second Five-Year Plan (FY 2026/2027 through 2030/2031)
- SIS Long Rang Cost Feasible Plan (FY 2029/2045)
- Palm Beach Transportation Planning Agency (TPA) 2045 Long Range Transportation Plan (LRTP) (Modified 01/07/2022)
- Palm Beach TPA Transportation Improvement Program (TIP) (FY 2022 through 20226, Amended 02/17/2022)
- FDOT Traffic Data Collection & Traffic Projections for I-95 at Woolbright Road PD&E Study, dated December 21, 2017
- SR-9/I-95 at Woolbright Road PD&E Study – Interchange Modification Report (IMR), dated June 2021 and supporting documents

B. Existing and Historical Traffic Data

The existing and historical traffic data has been provided by FDOT on the *June 2021 I-95/SR 9 at Woolbright Road IMR* and supporting documents. Traffic data includes:

- Arterial bi-directional counts in 15-minute increments
- 72-hours classification counts
- Weekday peak period (AM and PM) turning movement counts (TMCs) at AOI signalized intersections and on- and off-ramp terminal intersections. TMCs include passenger vehicles, heavy vehicles (including right-turn on red) and pedestrian/bicyclist counts where applicable.
- Determination of system-wide AM and PM peak hours from the traffic data and development of existing balanced peak hour volumes.
- The traffic data was supplemented with existing and historical traffic data (AADTs) from the FDOT Florida Traffic Online website and available previous studies.

C. Land Use Data

Land use data from the City of Boynton Beach will be reviewed and documented in the IMR Re-evaluation.

D. Environmental Data

Environmental data collection and analysis will be provided by FDOT as part of separate Environmental evaluation efforts. Environmental considerations (if any) will be used to prepare preliminary evaluations of the environmental impacts for the IMR Re-evaluation.

E. Planned and Programmed Projects

Applicable master plans, SIS Plans, FDOT's Five-Year Work Program, I-95/SR 9 corridor and interchange planning and safety studies performed by FDOT District Four, and Palm Beach TPA TIP and 2045 LRTP, and City of Boynton Beach comprehensive plan, will be reviewed and documented in the I-95/SR 9 from South of Woolbright Road to North of Woolbright Road IMR Re-evaluation. The IMR Re-evaluation improvements will be developed consistent with these plans or steps will be taken to achieve consistency.

5.0 Travel Demand Forecasting

The IMR Re-evaluation will utilize the travel demand forecast from the previously approved *June 2021 I-95/SR 9 at Woolbright Road IMR*. Per IARUG, a traffic validation has been conducted to ensure that the traffic volumes available from the original approved IMR still reflect the project area's travel conditions and pattern for the IMR Re-evaluation. The validation analysis compares historic growth, previous and latest adopted models to the forecasted volumes.

The traffic validation analysis indicates that the travel demand forecast from the previously approved *June 2021 I-95/SR 9 at Woolbright Road IMR* still reflect the project area's travel conditions and pattern. The validation analysis indicates a lower than 10% difference between the *June 2021 I-95/SR 9 at Woolbright Road IMR* approved volumes and the latest Southeast Regional Planning Model (SERPM) volumes. The analysis also indicates that original SERPM 7.062 and latest SERPM 8.513 have comparable volumes (specially on individual links with a IMR to model volume difference higher than 10%). As previously stated, Attachment A summarizes the Traffic Validation Form and Project Traffic Volumes extracted from the June 2021 I-95/SR 9 at Woolbright Road IMR.

A. *Selected Travel Demand Model(s)*

The travel demand modeling selection and traffic forecasts for the *June 2021 I-95/SR 9 at Woolbright Road IMR* study were developed by the Department under a separate study – *Traffic Data Collection and Traffic Projections for I-95 at Woolbright Road, dated December 2017*. The SERPM model is based on the Florida Standard Urban Transportation Modeling Structure (FSUTMS). The SERPM 7.062 model was available at the initiation of the original IMR study and was reviewed and used to estimate future years daily forecasts for the study area. SERPM 7.062 model is validated to Year 2010 conditions and includes a future year 2040 scenario based on the adopted Cost Feasible plans from Miami-Dade Transportation Planning Organization (TPO), Broward Metropolitan Planning Organization (MPO), and Palm Beach Transportation Planning Agency (TPA). It is approved by the Regional Transportation Technical Advisory Committee - Modeling Subcommittee (RTTAC-MS) in South Florida for transportation engineering and planning studies. The RTTAC-MS comprises representatives from FDOT District 4, District 6, and the three planning agencies in South Florida.

B. *Project Traffic Forecast Development Methodology*

Describe the methodology and assumptions in developing the future year traffic volumes, AADT and Directional Design Hour Volumes (DDHV)

As presented in the *June 2021 I-95/SR 9 at Woolbright Road IMR* study, the opening and design years are 2025 and 2045, respectively. AADT volumes were developed by interpolation for opening year and extrapolation for the design year of the IMR. The Directional Design Hourly Volumes (DDHVs) were calculated using FDOT's TM-Tool and application of exiting turning percentages and the Standard K and D factors discussed below. The resulting projected traffic volumes were reviewed for reasonableness and balanced within the study area.

The DDHV turning movements were developed by applying existing turning percentages to the intersection approach DDHVs. The DDHVs were balanced and adjusted so that the intersection turns balance with the ramp traffic. The volumes were then balanced along Woolbright Road. The traffic projections were also checked for reasonableness. Coordination was done with any other ongoing studies, to obtain any required data as well as to ensure that traffic volumes are consistent between the studies.

C. *Validation Methodology*

Describe the validation methodology using current FDOT procedures and data collection procedure Identify how modifications to the travel demand forecasting model will be made, including modifications to the facility type and area type for links, modifications to socio-economic data and all input and output modeling files for review.

The base year model validation was performed by the Department and daily forecasts were provided for use in the PD&E Study and IMR. Modifications to the model were made as part of the travel demand forecasting effort performed in the *Traffic Data Collection and Traffic Projections for I-95 at Woolbright Road* report. The future daily volumes and travel patterns were checked for reasonableness. The growth rates of historical counts, historical counts plus model projections, SERPM socioeconomic growth, and the comprehensive model to model projections methodology were summarized and compared with each other. Any changes made to the model volumes were submitted to the Department for review and approval.

D. *Adjustment Procedures*

Identify the process used to adjust modeled future year traffic to the defined analysis years. Discuss how trends/growth-rates will be factored into this, if applicable.

As presented in the *Traffic Data Collection and Traffic Projections for I-95 at Woolbright Road, dated December 2017*, the traffic forecasting methodology used for each approach of each intersection was based on the 2017 AADT (from field), and 2010 and 2040 SERPM 7.062 model volumes. The 2017 model volume was interpolated using 2010 and 2040 model volumes. Then, the percent differences of 2017 AADT and interpolated 2017 forecasted AADT from model were calculated. The recommended 2040 AADT were calculated by applying this percent difference to the 2040 SERPM 7.062 model volumes. For the roadway segments where the SERPM 7.062 2040 model volumes are lower than the SERPM 7.062 2010 model volumes, or are not included in the SERPM 7 network, the future 2020, 2030, and 2040 AADTs were calculated using 2017 AADT and a compound growth factor of 0.5%. For all the roadway links, the 2017 and 2040 AADT has been compared, and a minimum compound growth rate of 0.5% has been adopted. Then the 2020 and 2045 volumes were interpolated and extrapolated using 2017 AADT and recommended 2040 volumes.

E. *Traffic Factors*

- Utilizing recommended ranges identified in the *Project Traffic Forecasting Handbook* and Procedure (525-030-120).

- Utilizing other factors, identified below

  The *June 2021 I-95/SR 9 at Woolbright Road IMR* utilized the traffic factors shown on **Table 2** on the next page.

Table 2 – Traffic Factors from *June 2021 I-95/SR 9 at Woolbright Road IMR*

Roadway	K	D	T_{24}	DHT	PHF
Woolbright Road Ramps	9.0%	100%	4.6%	2.3%	0.95
Woolbright Road E of I-95	9.0%	50.8-67.1%	5.2%	2.6%	0.92
Woolbright Road W of I-95	9.0%	50.8-67.1%	3.3%	1.7%	0.92
Corporate Drive/SW 8th Street	9.0%	50.8-67.1%	4.6%	2.3%	0.92

Source: *June 2021 I-95/SR 9 at Woolbright Road IMR* (2017 FDOT FTO and FDOT Project Traffic Forecasting Handbook)

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.

The *June 2021 I-95/SR 9 at Woolbright Road IMR* states that the factors listed above were compared against the field count data and adjusted as necessary prior to their use in the study. K and D factors are mainly used to develop the traffic volume projections; therefore, they will remain the same since the *June 2021 I-95/SR 9 at Woolbright Road IMR* traffic projections have been validated and will be used for the IMR Re-evaluation. Based on a review of the *June 2021 I-95/SR 9 at Woolbright Road IMR* study, a DHT of 2% and a PHF of 0.95 will be used for the Opening and Design Year analyses on the IMR Re-evaluation.

6.0 Traffic Operational Analysis

The area type, traffic conditions, and analysis tools to be used are summarized in this section.

A. Existing Area Type/Traffic Conditions

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

B. Traffic Analysis Software Used

Software		System Component					
		Freeway				Crossroad	
Name	Version	Basic Segment	Weaving	Ramp Merge	Ramp Diverge	Arterial	Intersection
HCS		☐	☐	☐	☐	☐	☐
Synchro	11.1.1.6	☐	☐	☐	☐	☐	☒
Corsim		☐	☐	☐	☐	☐	☐
Vissim		☐	☐	☐	☐	☐	☐
Other		☐	☐	☐	☐	☐	☐

C. *Calibration Methodology*

- *Calibration methodology and parameters utilized will be documented.*
- *Calibration Measures of Effectiveness (MOEs) and calibration targets.*
  Calibration will be conducted and documented based on the guidelines presented on the *2021 FDOT Traffic Analysis Handbook*.

  The calibration process for Synchro intersection analysis will consist of comparing the queuing results and visual field audits. Reasonableness checks will be performed by comparing the synchro calculated queues and the queues observed along the arterial intersections. Special consideration will be given to 95th percentile queue lengths that are tagged with "#" or "m". These queue results will be examined for the extent of queuing problems. The "#" indicates that the volume for the 95th percentile cycle exceeds capacity. The "m" indicates that volume for the 95th percentile queue is metered by an upstream signal.

D. *Selection of Measures of Effectiveness*

- *The Level of Service criteria for each roadway classification, including mainline, ramps, ramp terminal intersections and the crossroad beyond the interchange ramp terminal intersections are identified below.*
  FDOT Topic No. 000-525-006-c provides LOS Targets for the State Highway System (SHS). The automobile mode LOS D target is considered applicable for this IMR Re-evaluation within an urbanized area.

- *In addition to the LOS criteria, state other operational MOEs to be utilized for the evaluation of alternatives.*
  Intersection (Synchro Intersection Report) Analysis MOEs:
  - LOS
  - Delay (seconds per vehicle)
  - Maximum volume-to-capacity (v/c) ratio
    (Each intersection movement should have a v/c ratio of 1.0 or less)
  - Interchange ramp queue length (feet)
    The 95th percentile queue length in feet, along with any special notes from Synchro, will be reported along with the available storage. The storage available for the turn movements, measured from the stop bar to the taper, will be clearly reported in tables for comparison with the queue length. The *2022 FDOT Design Manual* (FDM) will be referred to for further guidance on measuring storage length for turn lanes. At the off-ramp terminal intersections, the queue length will be reported in tables along with the storage length for the left and right turning lanes. In addition to the turn lane storage, the total ramp length, measured from the stop bar to the gore point with the freeway, will be discussed in the document.

7.0 Safety Analysis

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

Years: 2016, 2017, 2018, 2019 and 2020
Source: FDOT Safety Office / CAR Online

B. Identify the level of safety analysis to be performed, along with any software and tools to be used.
Crash data will be obtained from the FDOT Safety Office / CAR Online for the most recent five-year period (2016-2020) along Woolbright Road within the AOI (from SW 8th Street/Corporate Drive to I-95/SR 9 NB Ramp Terminal. The data collected will include the number, type, location, and severity of the crashes. The historic crash analysis will be used to inform the quantitative safety analysis of the future year alternatives utilizing Highway Safety Manual procedures. The safety analysis for the proposed conditions will document how the request will impact the facility's safety within the project study area. The quantitative safety analysis will comply with the guidelines of the *2020 FDOT IARUG Safety Analysis Guidance* to determine the estimated change in the expected number of crashes due to the proposed modifications of the project.

Qualitative safety analysis will only be selected if quantitative safety analysis cannot be performed. If a Crash Modification Factor (CMF) or Safety Performance Function (SPF) is available, a quantitative safety analysis should be performed. Depending on the proposed modification, the Countermeasure CMF methodology or HSM Part C methodology can be selected. If a CMF and SPF are available for the proposed modification, priority should be given to the application of the HSM Part C methodology over the Countermeasure CMF methodology.

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 Consistency Plan Review will include the following documents:

- FDOT Five-Year Work Program (FY 2022/2027)
- SIS Funding Strategy First Five-Year Plan (FY 2021/2022 through 2025/2026)
- SIS Funding Strategy Second Five-Year Plan (FY 2026/2027 through 2030/2031)
- SIS Long Range CFP (FY 2029/2045)
- Palm Beach Transportation Planning Agency (TPA) 2045 Long Range Transportation Plan (LRTP) (Modified 01/07/2022)
- Palm Beach TPA Transportation Improvement Program (TIP) (FY 2022 through 20226, Amended 02/17/2022)
- City of Boynton Beach Comprehensive Plan

B. Where the request is inconsistent with any plan, steps to bring the plan into 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: None at this time

9.0 Environmental Considerations

A. Status of Environmental Approval and permitting process.
The project has been determined to be a Categorical Exclusion Type 1 per (c)(3) on May 29, 2020. A re-evaluation is not required in accordance with 23 C.F.R. 771.129. Environmental permits will be applied for at the constructability plan submittal (date to be determined). All permits are required to be issued prior to Biddability Submittal (90% design plan submittal). Coordination will be maintained with the Planning and Environmental Office (PLEMO) for Environmental Certification.

B. *Identify the environmental considerations that could influence the outcome of the alternative development and selection process.*
Environmental considerations (if any as part of the on-going FDOT Environmental Re-evaluation efforts) will be used to prepare preliminary evaluations of the environmental impacts for the IMR Re-evaluation.

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 Request approval (final approval of National Environmental Policy Act (NEPA) document).
☒	☐	☐	Request will document the funding and phasing.

**Explain if No or Not Applicable (N/A) is checked*:

11.0 Anticipated Design Exceptions and Variations

☐ *Design exceptions/variations are not anticipated, but if an exception/variation should arise it will be processed per Federal Highway Administration (FHWA) and FDOT standards.*

☒ *The following exceptions/variations to FDOT, American Association of State Highway and Transportation Officials (AASHTO) or FHWA rules, policies, standards, criteria or procedures have been identified:*
The following potential for exceptions/variations have been identified based on a preliminary review of existing conditions and preparation of Typical Section Package:

- Cross Slope Variation
- Lateral Offset for Railroad Variation
- Median Width Variation
- Superelevation Variation
- Vertical Clearance over Railroad Exception

12.0 Conceptual Signing Plan

A conceptual signing and marking plan shall be prepared and included in the access request. The *Manual on Uniform Traffic Control Devices (MUTCD)* will serve as guidance for preparing the signing plan.

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 within the access request.

Attachment A

Traffic Validation Form
I-95/SR 9 at Woolbright Road IMR Volumes
SERPM 8.513 Volumes

Attachment A

Traffic Validation at SR 9/I-95 and Woolbright Rd Interchange

STA	Location	FDOT Traffic Count Year[1] 2015 AADT	FDOT Traffic Count Year[2] 2019 AADT	IAR Existing Year[3] 2019 AADT	Year[2] AADT vs. Year[3] AADT	IAR Design Year 2045 AADT	Original TDM SERPM 7.062 Horizon Year 2040 AADT	Current TDM SERPM 8.513 Horizon Year 2045 AADT	Current TDM vs. IAR Design Year 2045 AADT
93-2195	SR 9/I-95 N of Woolbrigth Rd	223000	237000	237000	0%	261000	256040	262780	1%
93-0198	SR 9/I-95 S of Woolbrigth Rd	195661	198560	228000	-15%	242000	247214	253394	5%
93-4111	SR 9/I-95 SB Off-Ramp to Woolbrigth Rd	16500	18000	18000	0%	24000	17229	18952	-21%
93-4110	SR 9/I-95 SB On-Ramp from Woolbrigth Rd	11000	12000	12000	0%	13500	12362	12993	-4%
93-4109	SR 9/I-95 NB On-Ramp from Woolbrigth Rd	15000	15000	15500	-3%	22000	16362	17218	-22%
93-4108	SR 9/I-95 NB Off-Ramp to Woolbrigth Rd	11500	12500	12500	0%	13500	12214	13792	2%
93-0302	Woolbrigth Rd W of SR 9/I-95	44000	46000	42500	8%	52000	30934	30991	-40%
93-0303	Woolbrigth Rd E of SR 9/I-95	42000	42500	40500	5%	46000	27171	48340	5%
	All Locations	558661	581560	606000	-4%	674000	619526	658460	-2%

Notes -

1) FDOT Traffic Count Year [1] AADT - This should be at least 5 years prior to the FDOT Traffic Count Year [2] AADT to understand historic growth, meaning 5 or more years of historic traffic data should be used.

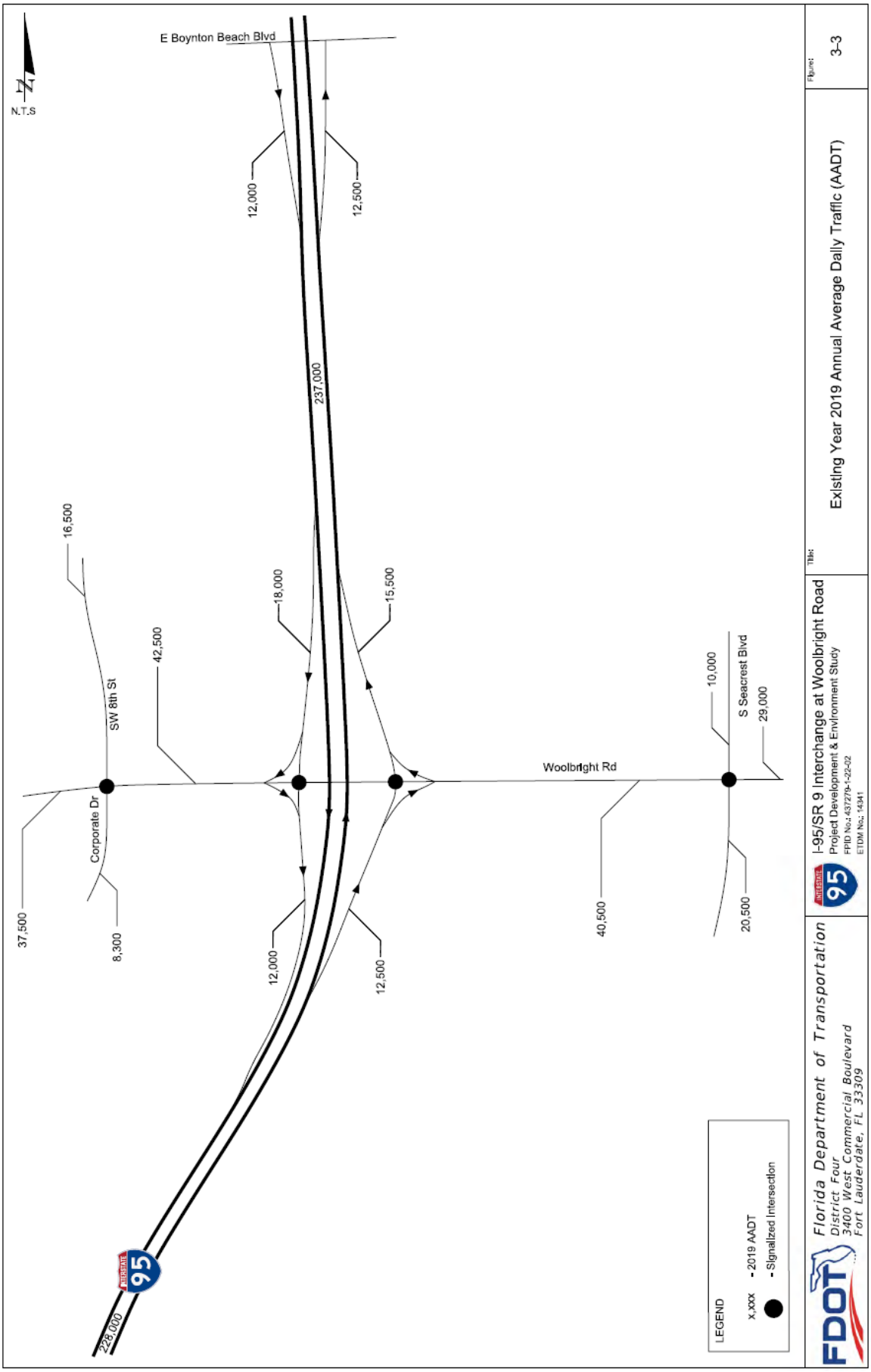
2) FDOT Traffic Count Year [2] AADT - Same year data as the IAR Existing Year [3] AADT

3) IAR Existing Year [3] AADT - This is the existing year AADT of the approved IAR

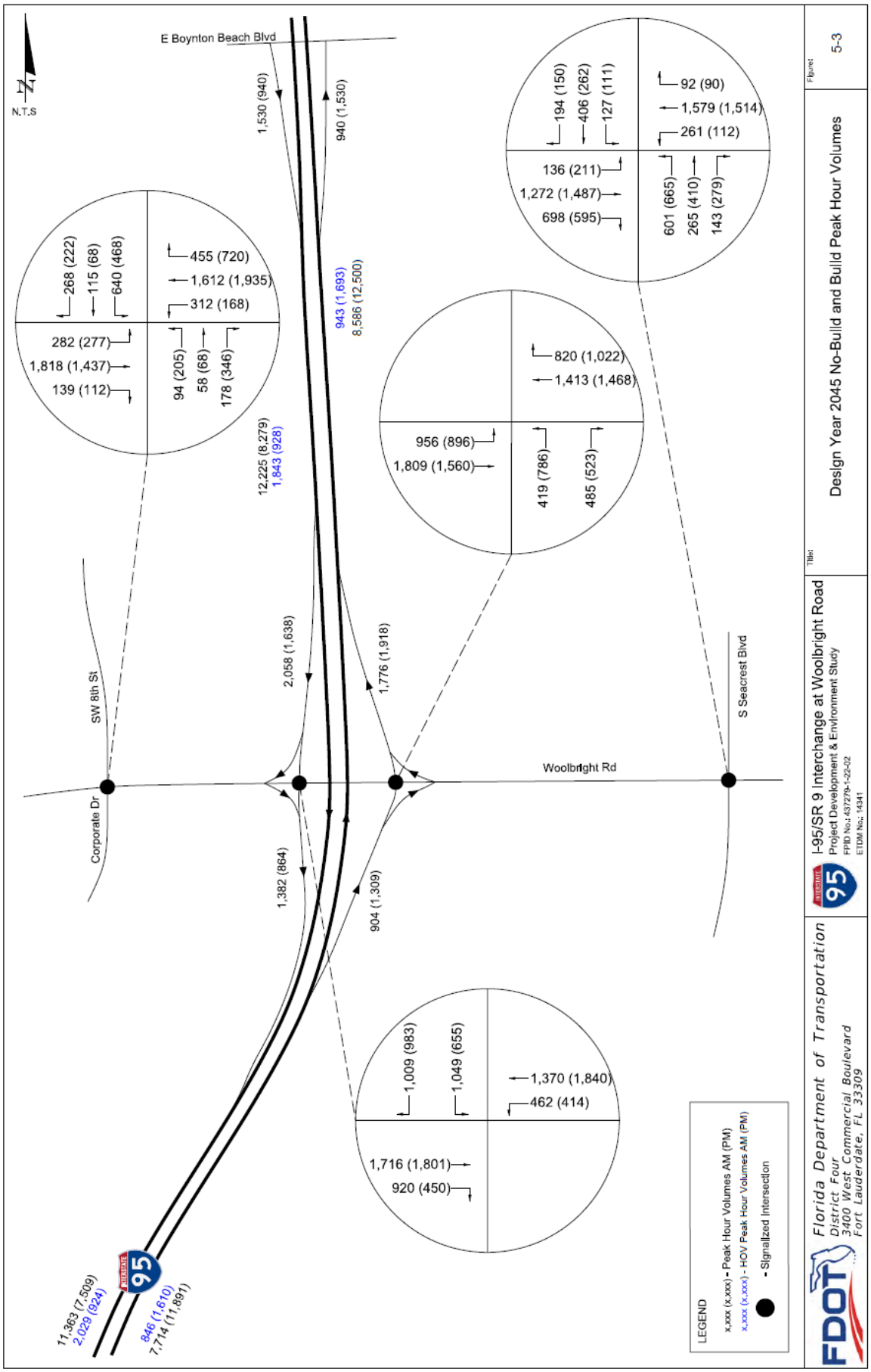
4) TDM - Current adopted Travel Demand Model

5) IAR Design Year AADT might need to be estimated if it doesn't match the horizon year of the TDM. For example, if approved IAR Design Year is 2035 and TDM horizon year is 2040, then the IAR AADT will need to be extrapolated to year 2040 for comparison

6) Year [2] AADT vs Year [3] AADT is the comparison between traffic count and IAR for the existing year in the approved IAR



I-95/SR 9 at Woolbright Road IMR Volumes



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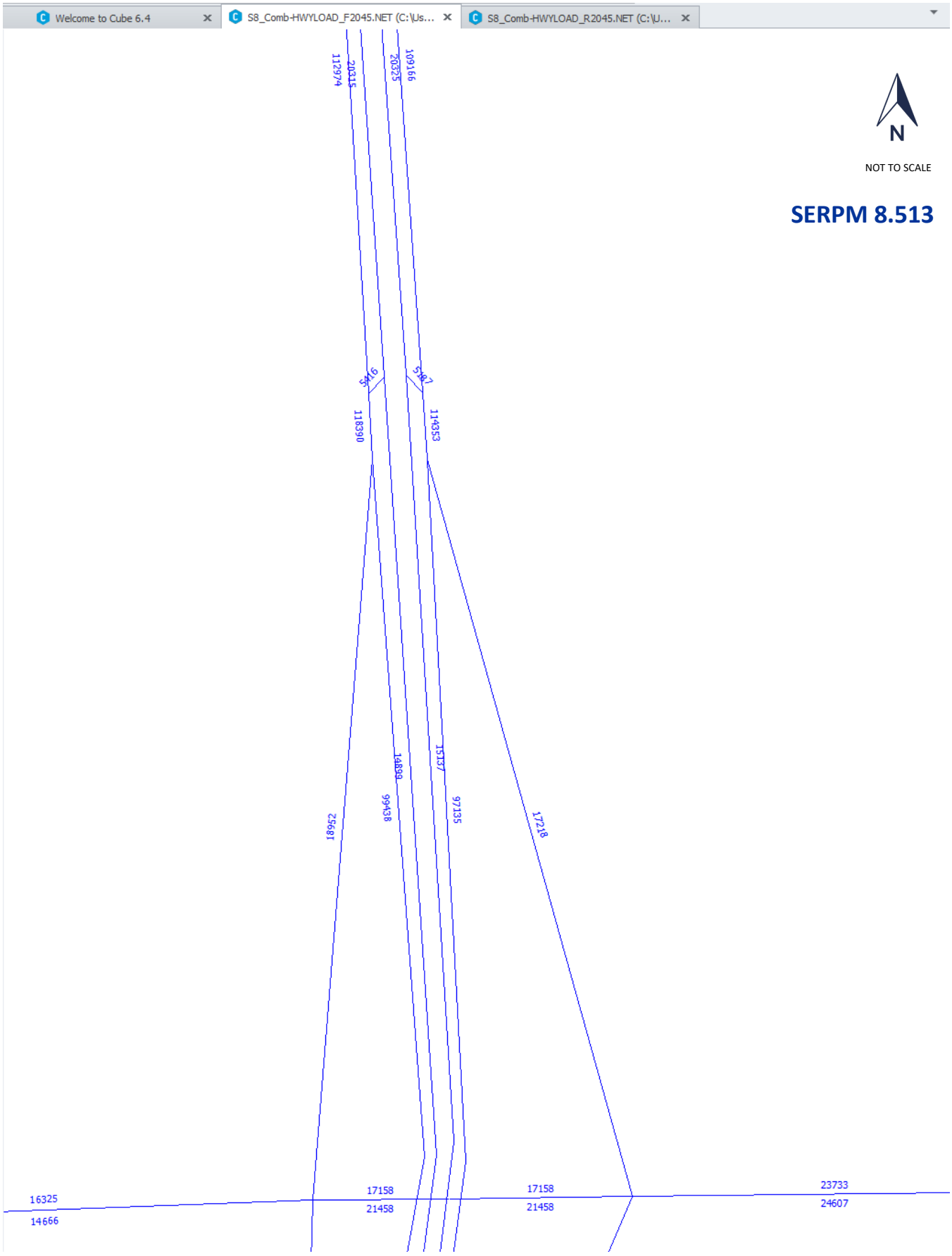
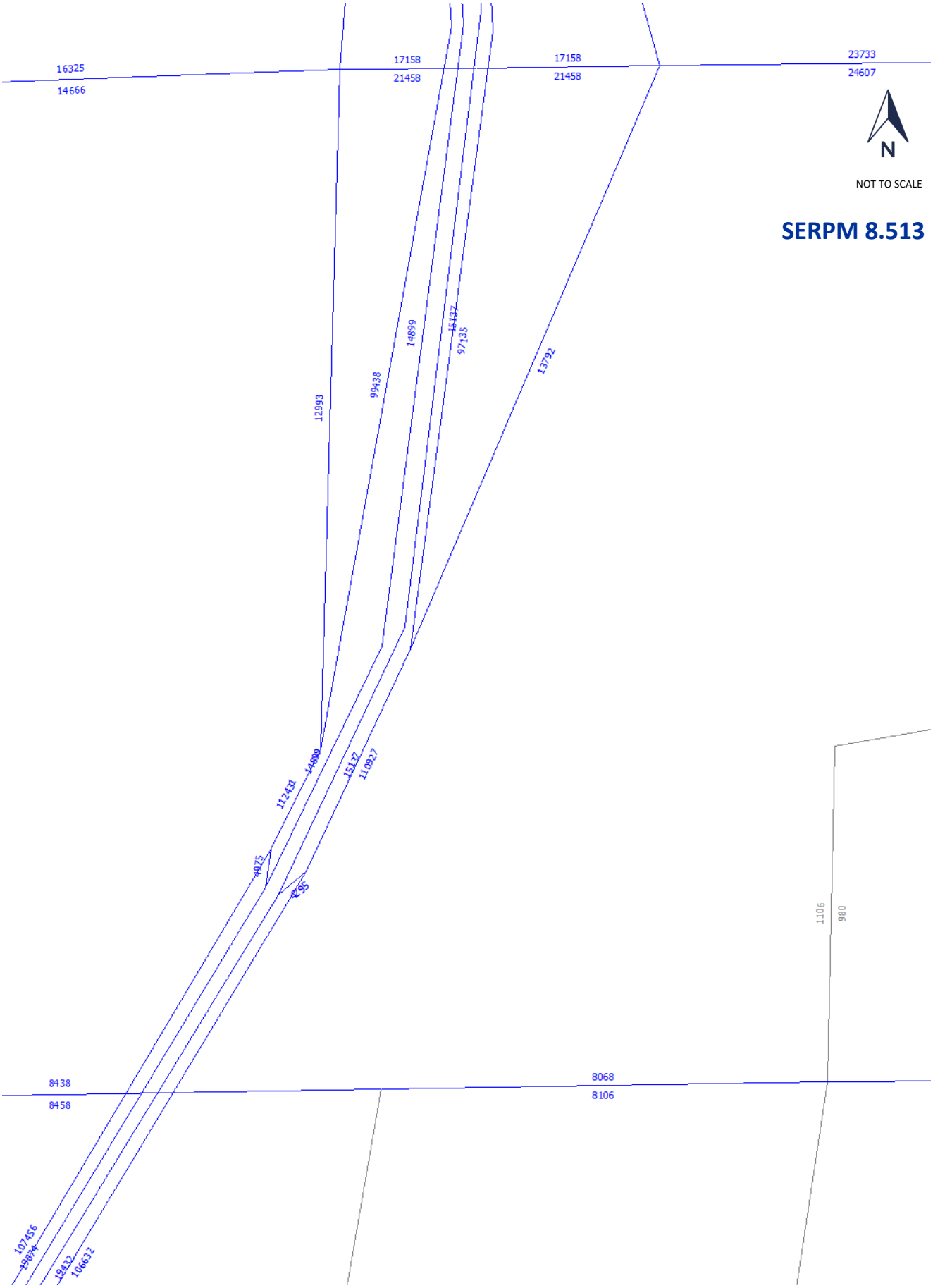


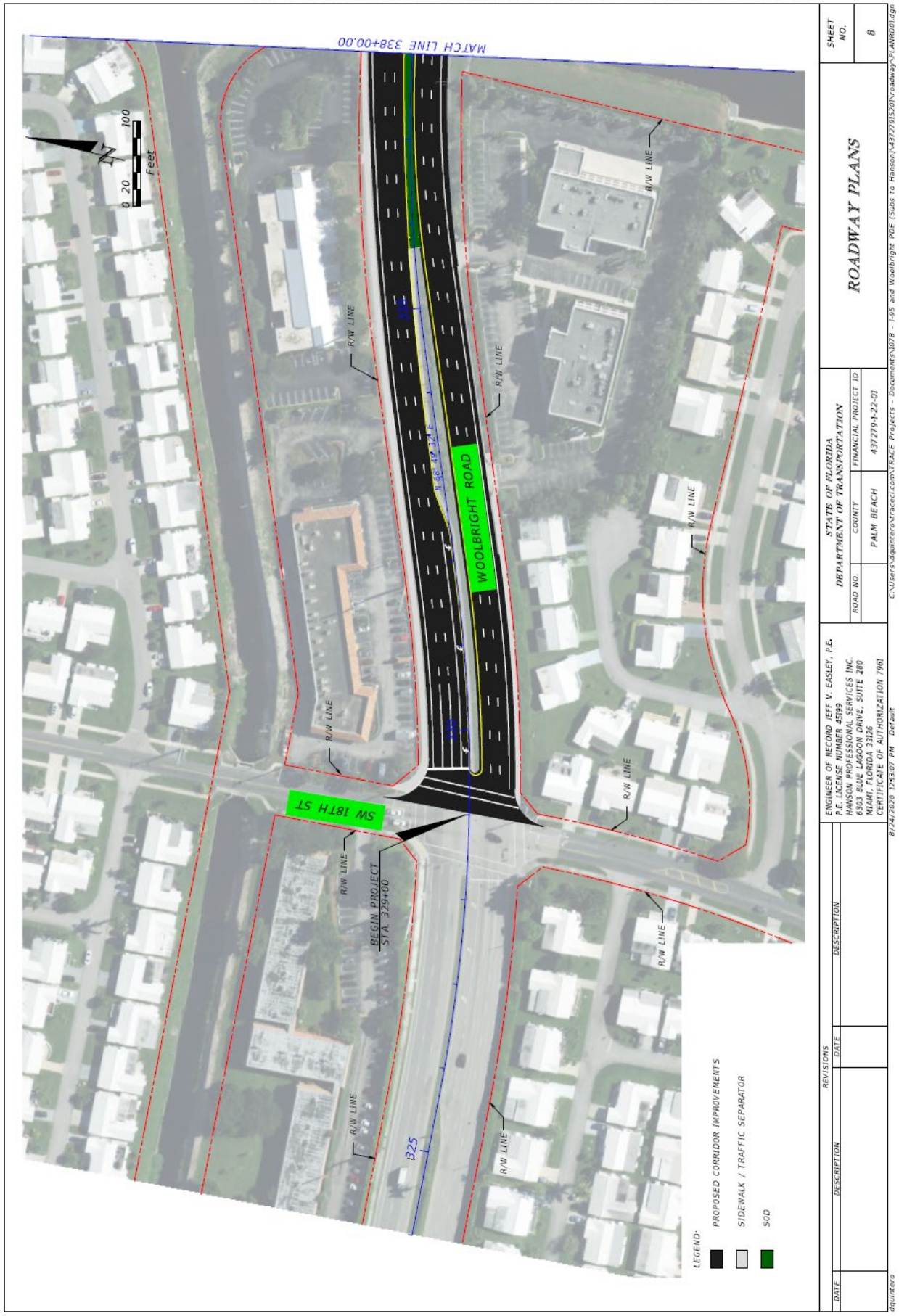


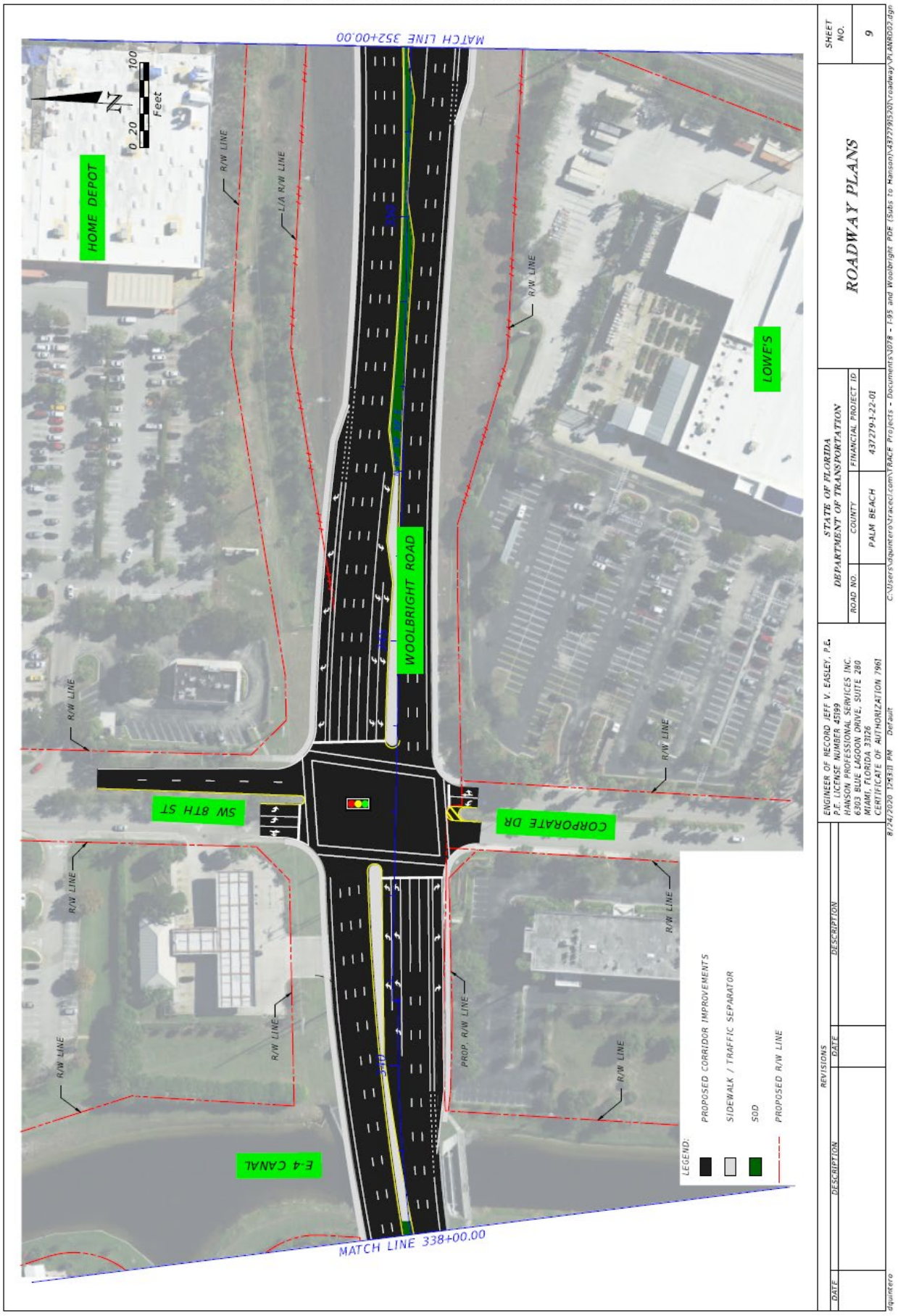
Attachment B

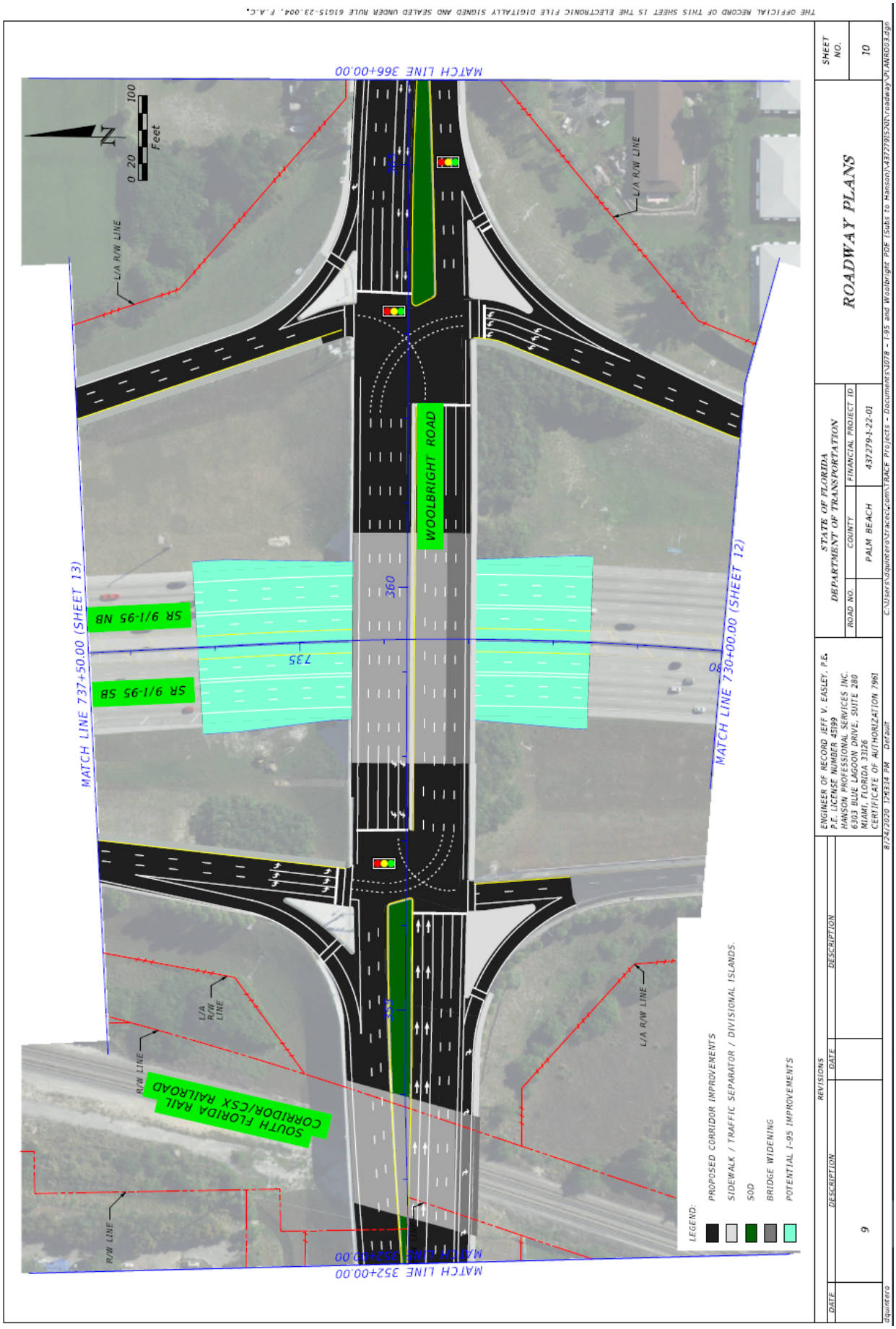
I-95/SR 9 at Woolbright Road IMR
NO-BUILD ALTERNATIVE CONCEPT

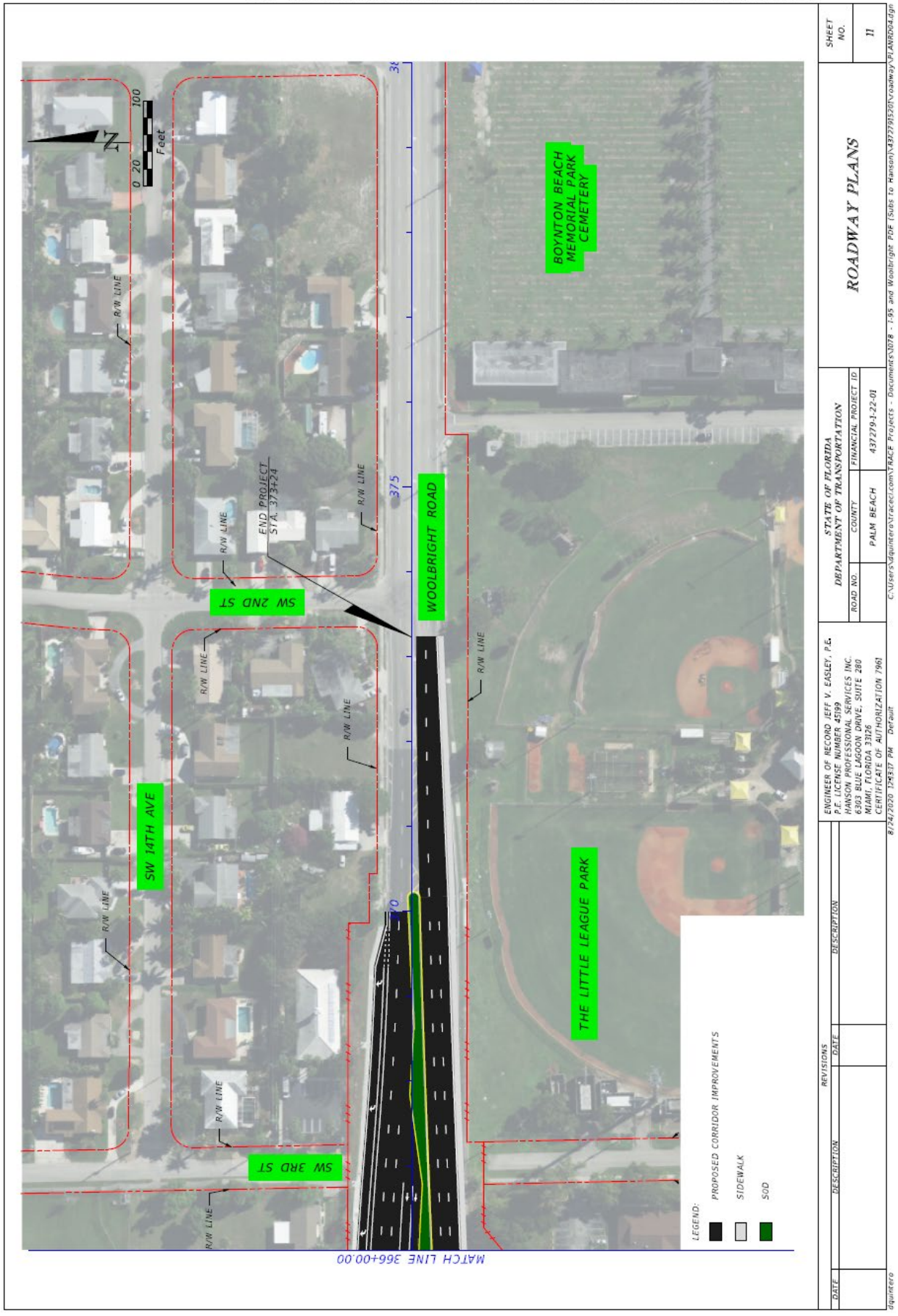
June 2021 I-95/SR 9 at Woolbright Road IMR
Preferred Build Alternative – 1 TDI

Attachment B





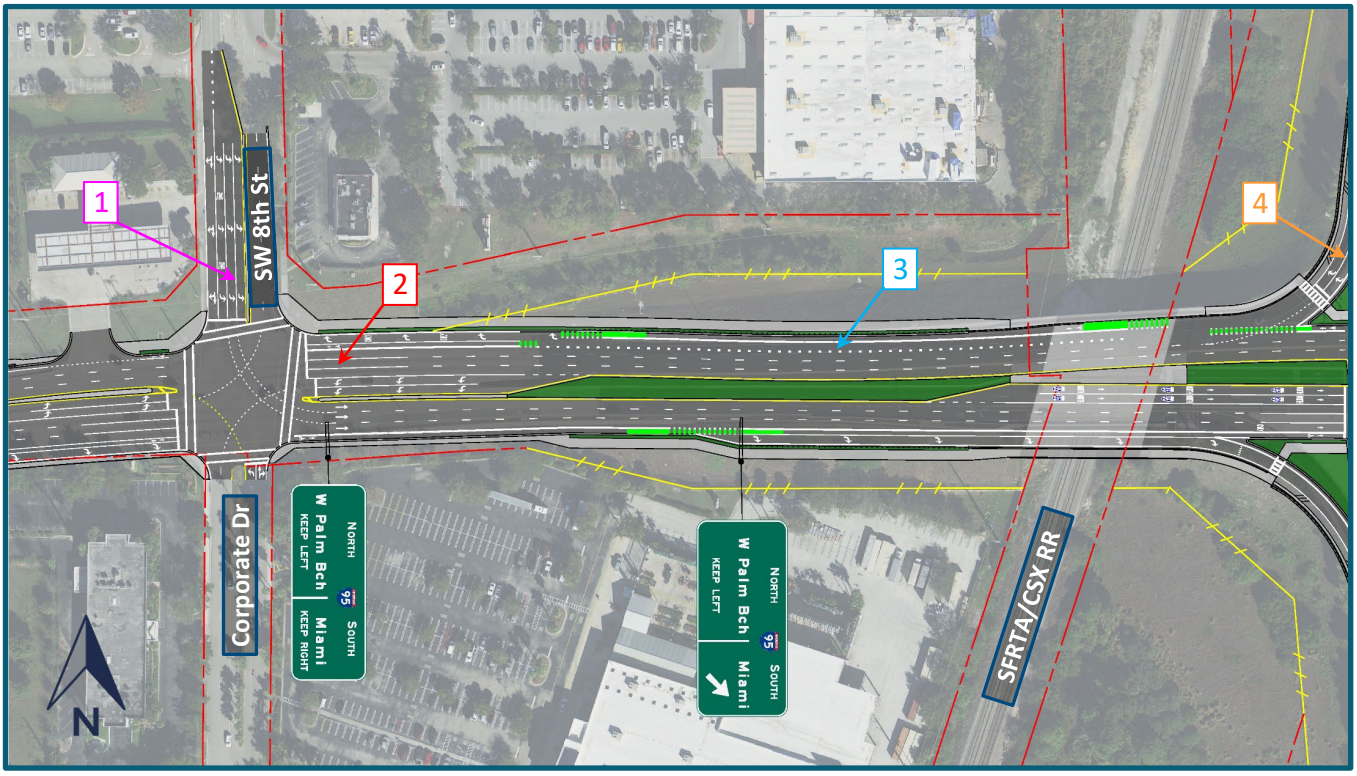


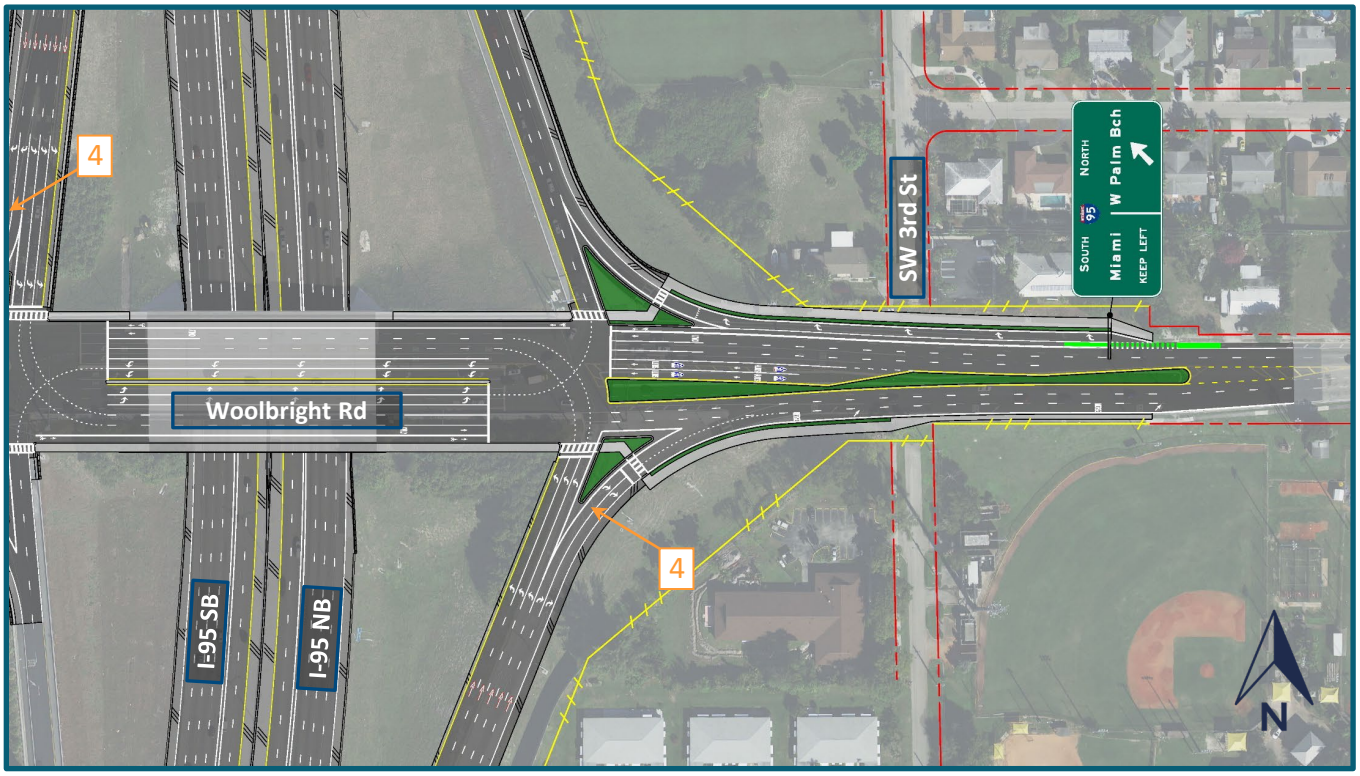


Attachment C

I-95/SR 9 at Woolbright Road IMR
BUILD ALTERNATIVE CONCEPT

Attachment C





The IMR Re-evaluation is required because of modifications to Original IMR Recommended Alternative:

- Expansion to Triple LTLs (one additional lane) in the SB Direction at SW 8th Street
- Elimination of the proposed 4th WB Through Lane along Woolbright Road
- Extension of the WB to NB RTL to the SB Exit Terminal to become a Right Turn Drop Lane at SW 8th Street
- Expansion and Signalization to Double RTLs at exit ramp terminals

APPENDIX B

Planned and Programmed Transportation Projects

FDOT Five-Year Work Program FY 2023-2027
FDOT 1st Five-Year Multi-Modal FY 2022-2027
FDOT 2nd Five-Year Multi-Modal FY 2027-2032
FDOT SIS LRCFP FY 2029-2045
Palm Beach TPA 2045 LRTP
Palm Beach County CIP FY 2018-2022

APPENDIX

B

BD	Name	Item Description	Item	Work Mix Description	Phase	Phase Description	BE	Category	Category Description	Funding Source	2023	2024	2025	2026	2027	Grand Total
04	PALM BEACH	SR-9/I-95 @ PGA BOULEVARD/CENTRAL BOULEVARD	413265-1	INTERCHANGE JUSTIFICA/MODIFICA	4B	ROW SERVICES	55100100	088853	RIGHT-OF-WAY SUPPORT	Federal		8,000				8,000
										R/W and Bridge Bonds	165,617					165,617
					C2	ENVIRO CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	15,000					15,000
		SR-9/I-95 @ SR-80/SOUTHERN BLVD. INTERCHG. ULTIM. IMPRVMT.	435516-1	INTERCHANGE - ADD LANES	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal			8,463,806			8,463,806
		SR-9/I-95 @ SR-804/BOYNTON BEACH BLVD INTERCHANGE	435804-1	INTERCHANGE JUSTIFICA/MODIFICA	43	ROW PURCHASE	55100100	088777	RIGHT-OF-WAY LAND ACQ	Federal	30,710	12,898,278				12,928,988
										R/W and Bridge Bonds	7,541,683					7,541,683
					45	ROW RELOCATE	55100100	088777	RIGHT-OF-WAY LAND ACQ	Federal	37,000					37,000
										R/W and Bridge Bonds	129,000					129,000
					4B	ROW SERVICES	55100100	088853	RIGHT-OF-WAY SUPPORT	R/W and Bridge Bonds	1,520,702					1,520,702
					52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal			6,908,199			6,908,199
										State 100%			23,892,000			23,892,000
					56	CONST UTILITY	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal		2,000,000				2,000,000
					57	CONST RAILROAD	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal		300,000				300,000
					58	CONST OTHER AGENCY	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal			50,000			50,000
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal			462,003			462,003
							55150200	088718	CONSTRUCT INSPECT CONSULT	Federal			1,940,626			1,940,626
										State 100%			2,172,000			2,172,000
		SR-9/I-95 @ SR-808/GLADES ROAD	412420-4	INTERCHANGE - ADD LANES	56	CONST UTILITY	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal	297,022					297,022
					5A	CONST CONTRACT BONUS	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%	880,000					880,000
		SR-9/I-95 AT BELVEDERE RD; SOUTHBOUND OFF RAMP	444121-1	INTERCHANGE JUSTIFICA/MODIFICA	52	CONST CONTRACT	55150200	085150	ARP - SHS PROJECTS	Federal	1,879,680					1,879,680
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	46,992					46,992
							55150200	085150	ARP - SHS PROJECTS	Federal	206,765					206,765
								088718	CONSTRUCT INSPECT CONSULT	State 100%	36,972					36,972
		SR-9/I-95 AT DONALD ROSS INTERCHANGE	449255-1	LANDSCAPING	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	222,026					222,026
					52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%			964,480			964,480
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%			38,579			38,579
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%			125,382			125,382
		SR-9/I-95 AT SR 804/BOYNTON BEACH BLVD	446152-1	LANDSCAPING	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%		250,000				250,000
					52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%					1,316,791	1,316,791
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%					32,920	32,920
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%					144,847	144,847
		SR-9/I-95 AT WOOLBRIGHT RD INTERCHANGE	449254-1	LANDSCAPING	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%			225,000			225,000
					52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%					1,226,098	1,226,098
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%					30,653	30,653
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%					134,870	134,870
		SR-9/I-95 FROM 6TH AVE SOUTH TO NORTH OF SR-704/OKEECHOBEE BLVD	444202-2	PD&E/EMO STUDY	22	PD&E CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	1,500,000	3,000,000				4,500,000
		SR-9/I-95 FROM BROWARD/PALM BEACH COUNTY LINE TO LINTON BLVD.	433109-3	LANDSCAPING	52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%	2,754,777					2,754,777
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	68,870					68,870
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%	303,026					303,026
		SR-9/I-95 FROM GATEWAY BOULEVARD TO LANTANA ROAD	427516-2	RESURFACING	52	CONST CONTRACT	55150200	088797	RESURFACING	Federal	197,670					197,670
		SR-9/I-95 FROM S OF 45TH STREET TO N OF 45TH ST	436519-1	INTERCHANGE - ADD LANES	42	ROW CONSULTANT	55100100	088853	RIGHT-OF-WAY SUPPORT	R/W and Bridge Bonds	432,840					432,840
					43	ROW PURCHASE	55100100	088777	RIGHT-OF-WAY LAND ACQ	Federal		6,293,445				6,293,445
					4B	ROW SERVICES	55100100	088853	RIGHT-OF-WAY SUPPORT	R/W and Bridge Bonds	498,000					498,000
					52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal				10,699,794		10,699,794
					56	CONST UTILITY	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal			1,115,000			1,115,000
					5A	CONST CONTRACT BONUS	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%					200,000	200,000
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal				160,497		160,497
							55150200	088718	CONSTRUCT INSPECT CONSULT	Federal				1,455,581		1,455,581
		SR-9/I-95 FROM S. OF 10TH AVE N. TO SR-882/FOREST HILL BOULEVARD	441776-1	SAFETY PROJECT	62	CONST SUP CONSULTANT	55150200	088718	CONSTRUCT INSPECT CONSULT	Federal	36,936					36,936
		SR-9/I-95 FROM SOUTH OF GLADES RD. TO SOUTH OF LINTON BLVD.	433109-5	ADD SPECIAL USE LANE	53	CONST PURCHASE	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%	524,692					524,692
					56	CONST UTILITY	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%	424,267					424,267
					58	CONST OTHER AGENCY	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%	200,000					200,000
					5A	CONST CONTRACT BONUS	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%	1,000,000					1,000,000
		SR-9/I-95 FROM SOUTH OF LINTON BLVD/CR-782 TO 6TH AVE SOUTH	444202-1	PD&E/EMO STUDY	22	PD&E CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	2,000,000					2,000,000
		SR9/I-95 FROM SOUTH OF PALM BEACH LAKES BLVD TO NORTH OF 45TH STREET	445623-1	LIGHTING	52	CONST CONTRACT	55150200	088796	HIWAY SAFETY CONSTR/GRANTS	Federal	672,991					672,991
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal	26,920					26,920
							55150200	088718	CONSTRUCT INSPECT CONSULT	Federal	94,219					94,219
		SR-9/I-95 FROM SOUTH OF SPANISH RIVER BLVD TO NORTH OF YAMATO ROAD	444344-1	LANDSCAPING	52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%		1,583,324				1,583,324
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%		39,583				39,583
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%		174,166				174,166
		SR-9/I-95 FROM SOUTH OF WOOLBRIGHT ROAD TO NORTH OF WOOLBRIGHT ROAD	437279-1	INTERCHANGE - ADD LANES	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal					1,207,468	1,207,468
					42	ROW CONSULTANT	55100100	088853	RIGHT-OF-WAY SUPPORT	R/W and Bridge Bonds	144,385					144,385
					43	ROW PURCHASE	55100100	088777	RIGHT-OF-WAY LAND ACQ	R/W and Bridge Bonds	174,663					174,663
					4B	ROW SERVICES	55100100	088853	RIGHT-OF-WAY SUPPORT	R/W and Bridge Bonds	70,000	96,000				166,000
					52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal					3,794,602	3,794,602
										State 100%					6,924,000	6,924,000
					56	CONST UTILITY	55150200	088716	INTRASTATE HIGHWAY CONSTR	Federal				200,000		200,000
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal					160,779	160,779
							55150200	088718	CONSTRUCT INSPECT CONSULT	Federal					1,393,418	1,393,418
		SR-9/I-95 FROM SR-706/INDIANTOWN RD TO PALM BEACH/MARTIN COUNTY LINE	434273-3	SAFETY PROJECT	52	CONST CONTRACT	55150200	088796	HIWAY SAFETY CONSTR/GRANTS	State 100%	192					192
		SR-9/I-95 NORTHBOUND OFF-RAMP AT INDIANTOWN ROAD	439758-1	INTERCHANGE - ADD LANES	42	ROW CONSULTANT	55100100	088853	RIGHT-OF-WAY SUPPORT	Local		336,026				336,026
					43	ROW PURCHASE	55100100	088777	RIGHT-OF-WAY LAND ACQ	Local	393,999	1,312,881				1,706,880
										State 100%	175,819					175,819
					4B	ROW SERVICES	55100100	088853	RIGHT-OF-WAY SUPPORT	Local	87,377					87,377
					52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	Local	1,767,092					1,767,092
										State 100%	4,622,444					4,622,444
								088797	RESURFACING	State 100%	509,313					509,313
					56	CONST UTILITY	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%	199,000					199,000
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	117,280					117,280
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%	820,984					820,984
		SR-A1A @ SLOANS CURVE	440009-2	MISCELLANEOUS CONSTRUCTION	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	154,149					154,149
					52	CONST CONTRACT	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%		651,126				651,126
					5A	CONST CONTRACT BONUS	55150200	088716	INTRASTATE HIGHWAY CONSTR	State 100%		70,000				70,000
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%		31,667				31,667
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%		118,752				118,752
		SR-A1A FROM N OF EMERALD BCH WAY TO SOUTH OF SR-704/ROYAL PALM WAY	446175-1	RESURFACING	52	CONST CONTRACT	55150200	088797	RESURFACING	State 100%		1,739,524				1,739,524
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%		37,344				37,344
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%		160,092				160,092
		SR-A1A FROM S OF JOHN D MACARTHUR ENTRANCE TO PORTAGE LANDING NORTH	446176-1	RESURFACING	52	CONST CONTRACT	55150200	088797	RESURFACING	State 100%		1,735,414				1,735,414
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%		36,375				36,375
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%		160,047				160,047
		SR-A1A FROM SOUTH OF GRAND CT TO SOUTH OF LINTON BLVD	444477-1	RESURFACING	52	CONST CONTRACT	55150200	088797	RESURFACING	Federal		4,872,263				4,872,263
										State 100%		2,173,876				2,173,876
					62	CONST SUP CONSULTANT	55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%		851,562				851,562
		SR-A1A/OCEAN BLVD FROM N OF IBIS WAY TO S OF SR-80/US-98/SOUTHERNBLVD	448417-1	RESURFACING	32	PE CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%	273,144					273,144
					52	CONST CONTRACT	55150200	088797	RESURFACING	State 100%				1,986,086		1,986,086
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	State 100%				49,652		49,652
							55150200	088718	CONSTRUCT INSPECT CONSULT	State 100%				218,469		218,469
		SYSTEMATIC INTERSECTION LIGHTING IMPROVEMENTS- PALM BEACH COUNTY	445628-1	LIGHTING	52	CONST CONTRACT	55150200	088796	HIWAY SAFETY CONSTR/GRANTS	Federal			468,427			468,427
					56	CONST UTILITY	55150200	088796	HIWAY SAFETY CONSTR/GRANTS	Federal			114,442			114,442
					62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal			36,116			36,116
							55150200	088718	CONSTRUCT INSPECT CONSULT	Federal			76,748			76,748
		TOWN OF JUPITER LANDSCAPE MAINT JPA	233978-1	ROUTINE MAINTENANCE	78	MAINT OTHER AGENCY	55150200	088712	HIGHWAY MAINTENANCE CONTR	State 100%	26,216	26,216	26,216	26,216	26,216	131,080
		TRAFFIC CALMING ENHANCEMENTS FOR INDIAN TRAIL IMPROVEMENT DISTRICT	440045-1	MISCELLANEOUS CONSTRUCTION	62	CONST SUP CONSULTANT	55100100	088849	PRELIMINARY ENGR CONSULT	Federal	18,953					18,953
		VILLAGE OF ROYAL PALM BEACH VARIOUS LOCATIONS	448305-1	SIDEWALK	58	CONST OTHER AGENCY	55150200	088717	ARTERIAL HIGHWAY CONSTR	Federal				531,262		531,262
								NSB	NOT STATE BUDGET	Local				113,932		113,932
					62	CONST SUP CONSULTANT	55150200	088718	CONSTRUCT INSPECT CONSULT	Federal				15,591		15,591
		WEST PALM BEACH SECTION 5309 TROLLEY BUSES	415158-1	PURCHASE VEHICLES/EQUIPMENT	94	CAPITAL GRANT	55100100	NSB	NOT STATE BUDGET	Federal	2,029,598					2,029,598
		WEST PALM BEACH SECTION 5309 TROLLEY SHELTER	421168-1	TRANSIT IMPROVEMENT	94	CAPITAL GRANT	55100100	NSB	NOT STATE BUDGET	Federal	247,500					247,500
		X10 DESIGN & CONSTRUCTION OF T-HANGARS	448098-1	AVIATION REVENUE/OPERATIONAL	94	CAPITAL GRANT	55100100	088719	AVIATION DEV/GRANTS	State 100%	837,000					837,000
	ST. LUCIE	95 EXPRESS NORTH OPERATING	449925-1	OPERATING FOR FIXED ROUTE	84	OPERATIONS GRANT	55100100	088774	PUBLIC TRANSIT DEV/GRANTS	State 100%	300,000					300,000
		BELL AVENUE FROM SOUTH 25TH STREET TO SUNRISE BLVD	446076-1	BIKE LANE/SIDEWALK	58	CONST OTHER AGENCY	55150200	088717	ARTERIAL HIGHWAY CONSTR	Federal	335,707					335,707
								NSB	NOT STATE BUDGET	Local	85,158					85,158
					62	CONST SUP CONSULTANT	55150200	088718	CONSTRUCT INSPECT CONSULT	Federal	11,394					11,394
		CITY OF FT. PIERCE JPA SIGNAL MAINTENANCE & OPERATIONS ON SHS	437975-1	TRAFFIC SIGNALS	88	OPERATIONS OTHR AGCY	55150200	088866	TRAFFIC ENGR CONSULTANTS	State 100%	200,871	206,696	212,897	219,497	226,521	1,066,482
		CITY OF PORT ST. LUCIE JPA SIGNAL MAINTENANCE & OPERATIONS ON SHS	437977-1	TRAFFIC SIGNALS	88	OPERATIONS OTHR AGCY	55150200	088866	TRAFFIC ENGR CONSULTANTS	State 100%	121,910	125,568	137,335	141,456	135,457	661,726
		FEC OVERPASS FROM SAVANNAS RECREATION AREA TO SOUTH OF SAVANNAH RD.	440032-1	BIKE PATH/TRAIL	43	ROW PURCHASE	55100100	088777	RIGHT-OF-WAY LAND ACQ	State 100%		34,401				34,401
					4B	ROW SERVICES	55100100	088853	RIGHT-OF-WAY SUPPORT	State 100%	14,250	4,750				19,000

Florida Department of

TRANSPORTATION

Web Application

Office of Work Program and Budget Cynthia Lorenzo - Director

Updated: 1/26/2023 12:37

Five Year Work Program

Selection Criteria	
District 04 **Palm Beach County** **Item Number:**449254-1	**2023-2027 AD** **Category:**Highways

Display current records in a Report Style
Display current records in an Excel Document

Project Summary

Transportation System: INTRASTATE INTERSTATE District 04 - Palm Beach County
Description: SR-9/I-95 AT WOOLBRIGHT RD INTERCHANGE
Type of Work: LANDSCAPING View Scheduled Activities
Item Number: 449254-1 **SIS**
Length: 1.208 View Map of Item

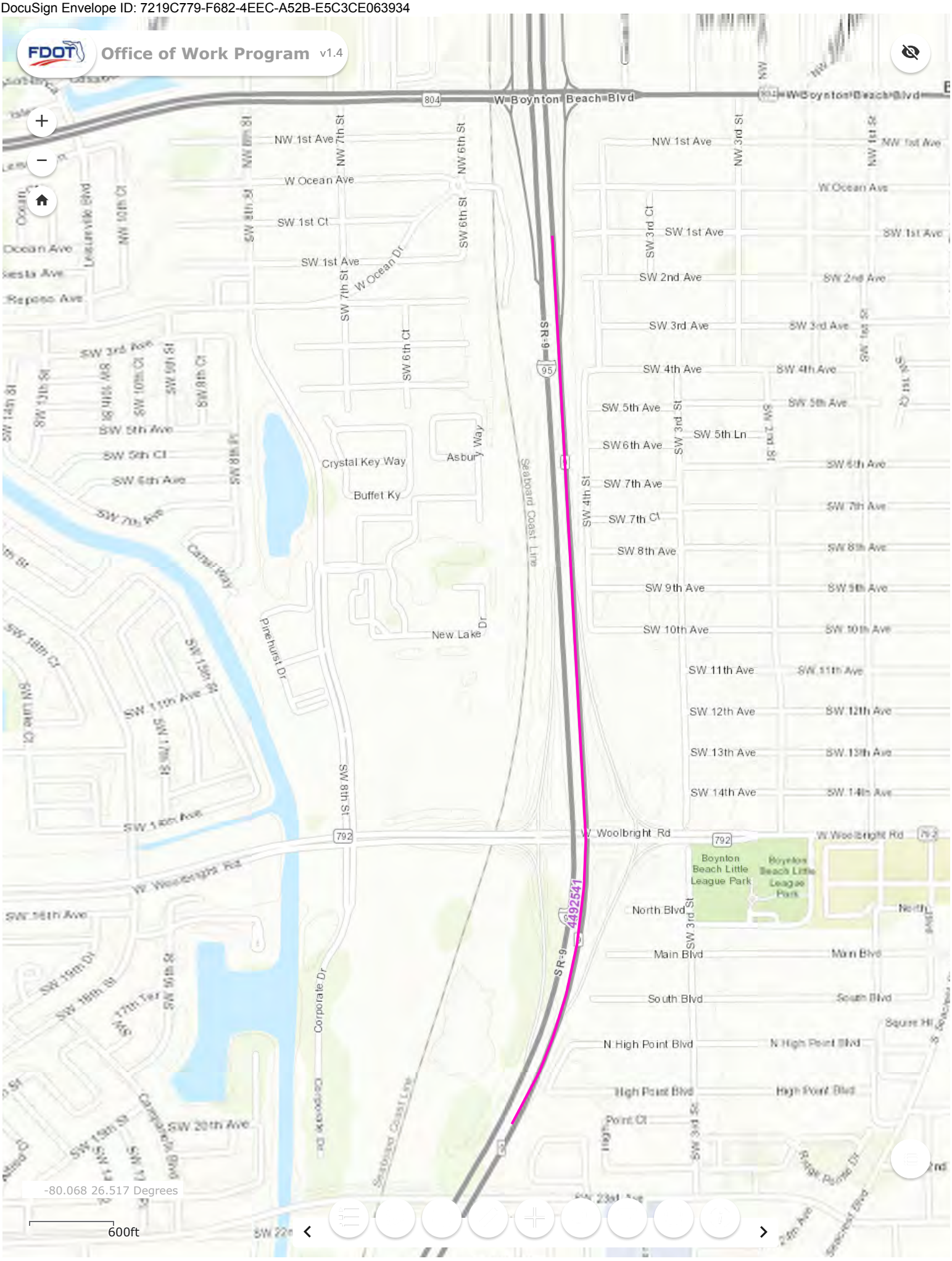
Project Detail

Fiscal Year:	**2023**	**2024**	**2025**	**2026**	**2027**
Highways/Preliminary Engineering					
Amount:			$246,250	$21,250	
Highways/Construction					
Amount:					$1,468,010
Item Total:			**$246,250**	**$21,250**	**$1,468,010**

This site is maintained by the Office of Work Program and Budget, located at 605 Suwannee Street, MS 21, Tallahassee, Florida 323

View Contact Information for Office of Work Program and Budget

Application Home: Work Program
Office Home: Office of Work Program and Budget



Florida Department of

TRANSPORTATION

Web Application

Office of Work Program and Budget

Cynthia Lorenzo - Director

Updated: 1/26/2023 12:3

Five Year Work Program

Selection Criteria	
District 04 **Palm Beach County** **Item Number:**437279-1	**2023-2027 AD** **Category:**Highways

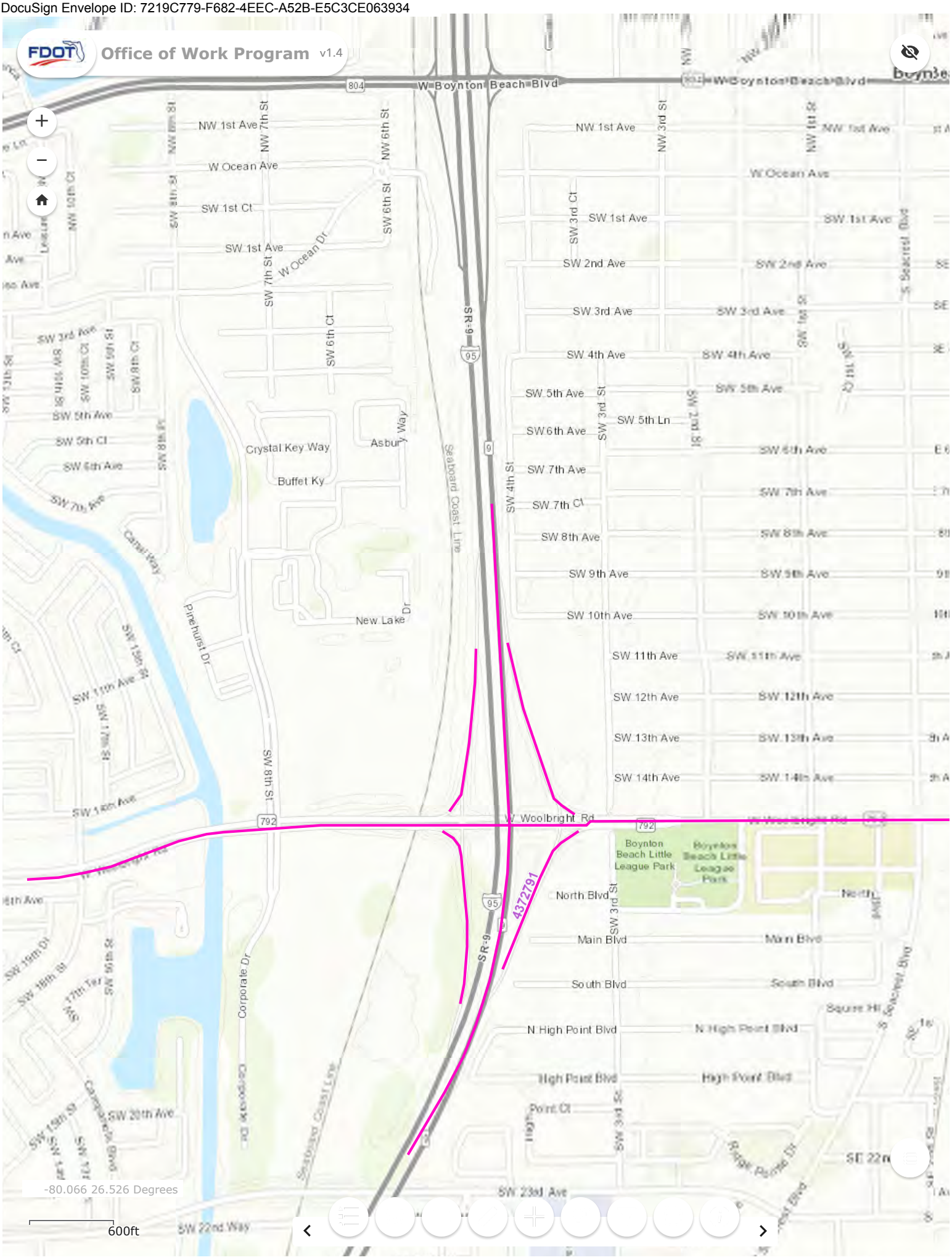
Display current records in a Report Style
Display current records in an Excel Document

Project Summary

Transportation System: INTRASTATE INTERSTATE — District 04 - Palm Beach County
Description: SR-9/I-95 FROM SOUTH OF WOOLBRIGHT ROAD TO NORTH OF WOOLBRIGHT ROAD
Type of Work: INTERCHANGE - ADD LANES — View Scheduled Activities
Item Number: 437279-1 — **SIS**
Length: 3.214 — View Map of Item

Project Detail

Fiscal Year:	**2023**	**2024**	**2025**	**2026**	**2027**
Highways/PD & E					***(On-Going)***
Amount:	$336				
Highways/Preliminary Engineering					***(On-Going)***
Amount:	$336,520				$83,594
Highways/Right of Way					
Amount:	$224,385	$619,989			
Highways/Railroad & Utilities					
Amount:				$200,000	
Highways/Construction					
Amount:					$26,560,732
Highways/Environmental					***(On-Going)***
Amount:	$22,087				
Item Total:	**$583,328**	**$619,989**		**$200,000**	**$26,644,326**


FDOT
Office of Work Program
v1.4
W Boynton Beach Blvd
804
NW 1st Ave
W Ocean Ave
SW 1st Ct
SW 1st Ave
SW 2nd Ave
SW 3rd Ave
SW 4th Ave
SW 5th Ave
SW 5th Ln
SW 6th Ave
SW 7th Ave
SW 7th Ct
SW 8th Ave
SW 9th Ave
SW 10th Ave
SW 11th Ave
SW 12th Ave
SW 13th Ave
SW 14th Ave
SR-9
95
Seaboard Coast Line
Crystal Key Way
Buffet Ky
New Lake Dr
Pinehurst Dr
Canal Way
W Woolbright Rd
792
Boynton Beach Little League Park
North Blvd
Main Blvd
South Blvd
N High Point Blvd
High Point Blvd
Point Ct
Corporate Dr
SW 20th Ave
SW 23rd Ave
SW 22nd Way
4372791
-80.066 26.526 Degrees
600ft

Florida Department of

TRANSPORTATION

Web Application

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Updated: 1/26/2023 12:3

Five Year Work Program

Selection Criteria
All in State
2023-2027 AD
Item Number:437279-1

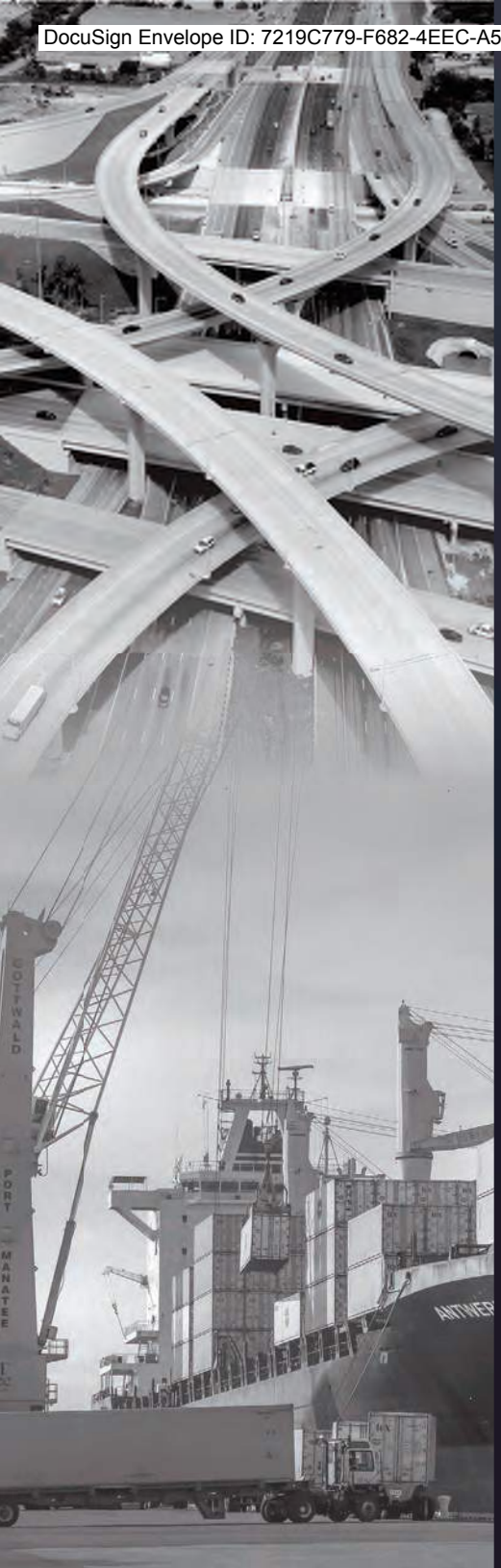
Scheduled Activities may or may not be confirmed dates and are subject to change without notice.
Please contact the Program Services Office at the appropriate District office for validation.

437279-1 SR-9/I-95 FROM SOUTH OF WOOLBRIGHT ROAD TO NORTH OF WOOLBRIGHT ROAD
District 04 - Palm Beach County **Project Manager:** ARRIETA

Type of Work: INTERCHANGE - ADD LANES

Activity	Description	Planned Start	Planned Finish
299010150	REQUEST FOR AUTHORIZATION	01/03/2017 A	01/03/2017 A
239990110	P.D.& E CONTRACT EXECUTED	07/27/2017 A	07/27/2017 A
700000000	ETDM/ETAT PROG. SCREEN START	10/09/2017 A	10/20/2017 A
224000000	ADVANCE NOTIFICATION	10/23/2017 A	12/08/2017 A
701000000	ETDM PROG PRELIM SUM REP PUB	02/05/2018 A	02/05/2018 A
323990700	RETENTION/MITIGAT R/W REQRMTS	02/05/2018 A	02/05/2018 A
155990250	UPDATE SCOPE OF WORK	03/13/2018 A	03/16/2018 A
155990350	UPDATE SCOPE OF WORK	04/06/2018 A	04/06/2018 A
705000000	PD&E ADVERTISEMENT	04/23/2018 A	04/23/2018 A
702000000	ETDM PROG FINAL SUM REP PUB	04/27/2018 A	04/27/2018 A
239990100	P.D.& E CONTRACT EXECUTED	11/15/2018 A	11/15/2018 A
234990150	NOTICE TO PROCEED	11/16/2018 A	11/16/2018 A
292000000	PUBLIC INFO MEETING	05/16/2019 A	05/16/2019 A
135018050	E.M.O. STUDY	10/07/2019 A	04/16/2020 A
751000000	SECTION 4(F)	06/22/2020 A	06/22/2020 A
759000000	TYPICAL SECTION SELECTION	06/22/2020 A	07/31/2020 A
711000000	ALTERNATIVES WORKSHOP	07/22/2020 A	07/22/2020 A

712000000	ALTERNATIVES DEVELOPMENT COMPL	07/31/2020 A	07/31/2020 A
250990150	P.E. BEGIN	10/09/2020 A	10/09/2020 A
335000000	PD&E NOISE STUDY COMPLETE	12/14/2020 A	12/22/2020 A
233990150	P.E. CONTRACT EXECUTED	05/28/2021 A	05/28/2021 A
161909500	INTERCHANGE MODIFY REPORT	08/02/2021 A	08/02/2021 A
298010150	R/W ESTIMATE UPDATE	02/11/2022 A	02/15/2022 A
298010250	R/W ESTIMATE UPDATE	02/15/2022 A	02/17/2022 A
235990250	SUBMIT PLANS FOR REVIEW	06/07/2022 A	06/07/2022 A
233990200	P.E. CONTRACT EXECUTED	07/01/2022 A	07/01/2022 A
322990150	R/W REQUIRE. TO R/W ENG.	08/19/2022	08/19/2022
292990150	PUBLIC INFO MEETING	11/16/2022	11/16/2022
298020150	R/W ESTIMATE UPDATE	12/20/2022	01/04/2023
298020250	R/W ESTIMATE UPDATE	01/05/2023	02/16/2023
138010150	R/W PRELIMINARY MAP	01/18/2023	01/18/2023
736000000	LDCA PUBLIC NOTICE	03/03/2023	03/03/2023
127901040	PH 42 ROW CONSULT CONTR EXECUT	03/03/2023	03/03/2023
268020150	DOCUMENTS TO R/W	03/16/2023	03/16/2023
120000100	APPRAISALS	03/17/2023	05/25/2023
349990200	PH 4B ROW SERVCE CONTRACT EXEC	04/07/2023	04/07/2023
142000100	SUBMIT PRE R/W REQUIREMENTS	05/16/2023	07/24/2023
268030150	DOCUMENTS TO R/W	06/14/2023	06/14/2023
122000100	CONDEMNATION	10/13/2023	Fiscal Year: 2025
121000200	NEGOTIATION	12/13/2023	Fiscal Year: 2025
349990300	PH 4B ROW SERVCE CONTRACT EXEC	04/05/2024	04/05/2024
235020350	SUBMIT PLANS FOR REVIEW	04/24/2024	04/24/2024
228010150	SUBMIT UTILITY DATA	Fiscal Year: 2025	Fiscal Year: 2025
134040850	LANDSCAPE PLANS	Fiscal Year: 2025	Fiscal Year: 2025
222010150	ALL PERMITS CLEAR	Fiscal Year: 2025	Fiscal Year: 2025
279010450	RAILROAD CLEAR	Fiscal Year: 2025	Fiscal Year: 2025
228010250	SUBMIT UTILITY DATA	Fiscal Year: 2025	Fiscal Year: 2025
266010150	UTILITIES CERTIFIED	Fiscal Year: 2025	Fiscal Year: 2025
235990350	SUBMIT PLANS FOR REVIEW	Fiscal Year: 2025	Fiscal Year: 2025
298030150	R/W ESTIMATE UPDATE	Fiscal Year: 2025	Fiscal Year: 2025
298030250	R/W ESTIMATE UPDATE	Fiscal Year: 2025	Fiscal Year: 2025
117010000	RIGHT OF WAY PARCEL VACATE	Fiscal Year: 2025	Fiscal Year: 2025
243000100	ALL R/W CLEARED	Fiscal Year: 2025	Fiscal Year: 2025
255000000	R/W CERTIFIED	Fiscal Year: 2025	Fiscal Year: 2025
204000000	PRODUCTION DATE	Fiscal Year: 2025	Fiscal Year: 2025
349990310	PH 4B ROW SERVCE CONTRACT EXEC	Fiscal Year: 2025	Fiscal Year: 2025
2220PID00	ALL PERMITS CLEAR	Fiscal Year: 2026	Fiscal Year: 2026
2660PID00	UTILITIES CERTIFIED	Fiscal Year: 2026	Fiscal Year: 2026
2359PID00	SUBMIT PLANS FOR REVIEW	Fiscal Year: 2026	Fiscal Year: 2026
201990100	PLANS COMPLETED	Fiscal Year: 2026	Fiscal Year: 2026
155990300	UPDATE SCOPE OF WORK	Fiscal Year: 2026	Fiscal Year: 2026
212010150	TRANSMIT PKG FOR LETTING	Fiscal Year: 2026	Fiscal Year: 2026
278010150	ADVERTISMENT FOR LETTING	Fiscal Year: 2026	Fiscal Year: 2026
233005060	P.E. CONTRACT EXECUTED	Fiscal Year: 2027	Fiscal Year: 2027
280010150	LETTING DATE	Fiscal Year: 2027	Fiscal Year: 2027
203990150	C.E.I. CONS. CONT. EXEC.	Fiscal Year: 2027	Fiscal Year: 2027
408001150	CEI ENCUMBERED	Fiscal Year: 2027	Fiscal Year: 2027
312990150	CONSTRUCTION	Fiscal Year: 2027	Fiscal Year: 2027
312990250	CONSTRUCTION	Fiscal Year: 2027	Fiscal Year: 2027



FDOT SIS Strategic Intermodal System

Strategic Intermodal System Funding Strategy

First Five Year Plan

MULTI-MODAL

FY 2022/2023 through FY 2026/2027

Capacity Projects on the Strategic Intermodal System

State of Florida Department of Transportation

SIS ADOPTED 1ST FIVE YEAR PROGRAM

District 4 Interstate Plan

MAP ID	FACILITY	DESCRIPTION	2023	2024	2025	2026	2027	TOTAL STATE MANAGED	TOTAL DISTRICT MANAGED	TOTAL LOCAL FUNDS	PD&E	PE	ENV	ROW	CON
4208093	I-595/SR-862/ P3 FROM E. OF I-75 TO W. OF I-95	MGLANE: Managed Lanes	$92,498	$96,848	$74,385	$75,349	$77,588	$286,753	$129,916	$0		●			●
4327091	I-75/SR-93 EAST SIDE RAMP IMPROVEMENTS AT GRIFFIN ROAD	M-INCH: Modify Interchange	$5	$335	$0	$0	$0	$0	$339	$0		●			
4226815	I-95 FROM HIGH MEADOWS TO MARTIN/ST. LUCIE COUNTY LINE	PDE: Project Dev. & Env.	$0	$550	$2,200	$0	$0	$2,750	$0	$0	●				
4132522	I-95 FROM INDIANTOWN ROAD TO MARTIN/PALM BEACH COUNTY LINE	PDE: Project Dev. & Env.	$0	$400	$725	$0	$0	$1,125	$0	$0	●				
4132532	I-95 FROM MARTIN/PALM BEACH COUNTY LINE TO CR-708/BRIDGE ROAD	PDE: Project Dev. & Env.	$0	$600	$1,600	$0	$0	$2,150	$50	$0	●				
4226816	I-95 FROM MARTIN/ST. LUCIE COUNTY LINE TO SR-70	PDE: Project Dev. & Env.	$0	$550	$2,110	$0	$0	$2,660	$0	$0	●				
4461681	SR-68/ORANGE AVE FROM SR-713/KINGS HWY TO E OF SR-9/I-95 SB RAMP	M-INCH: Modify Interchange	$10	$552	$552	$0	$0	$0	$1,114	$0	●	●	●	●	
4127331	SR-9/I-95 @ 10TH AVE NORTH	M-INCH: Modify Interchange	$91	$0	$0	$0	$0	$0	$91	$0		●			
4369631	SR-9/I-95 @ 6TH AVENUE SOUTH	M-INCH: Modify Interchange	$14,325	$1,411	$0	$0	$0	$15,684	$52	$0	●	●		●	●
4397591	SR-9/I-95 @ BELVEDERE RD NB OFF-RAMP	M-INCH: Modify Interchange	$2,444	$0	$0	$0	$0	$0	$2,444	$0		●			●
2319321	SR-9/I-95 @ GATEWAY BLVD. INTERCHANGE	M-INCH: Modify Interchange	$2,941	$626	$301	$0	$87,184	$89,028	$2,025	$0		●	●	●	●
4132571	SR-9/I-95 @ HYPOLUXO ROAD	M-INCH: Modify Interchange	$532	$2,347	$0	$260	$77,789	$80,928	$0	$0		●		●	●
4132581	SR-9/I-95 @ LANTANA ROAD	M-INCH: Modify Interchange	$1,967	$5,047	$3,294	$200	$0	$9,979	$529	$0		●		●	●
4353841	SR-9/I-95 @ LINTON BOULEVARD INTERCHANGE	M-INCH: Modify Interchange	$1,151	$2,468	$354	$0	$0	$4	$3,970	$0				●	●
4353842	SR-9/I-95 @ LINTON BOULEVARD INTERCHANGE	M-INCH: Modify Interchange	$700	$0	$0	$0	$0	$0	$700	$0		●			
4358031	SR-9/I-95 @ NORTHLAKE BOULEVARD INTERCHANGE	M-INCH: Modify Interchange	$1,855	$3,893	$0	$44,051	$93	$49,699	$192	$0		●		●	●
4130482	SR-9/I-95 @ OSLO ROAD INTERCHANGE	M-INCH: Modify Interchange	$66,953	$7,235	$0	$0	$0	$5,637	$66,550	$2,000		●		●	●
4132601	SR-9/I-95 @ PALM BEACH LAKES BLVD	M-INCH: Modify Interchange	$1,138	$94	$0	$50	$10,866	$11,954	$195	$0		●	●		●
4132651	SR-9/I-95 @ PGA BOULEVARD/CENTRAL BOULEVARD	M-INCH: Modify Interchange	$6,381	$6,677	$0	$0	$0	$13,041	$18	$0		●	●	●	
4355161	SR-9/I-95 @ SR-80/SOUTHERN BLVD. INTERCHG. ULTIM. IMPRVMT.	M-INCH: Modify Interchange	$0	$0	$8,728	$264	$0	$8,993	$0	$0		●			
4358041	SR-9/I-95 @ SR-804/BOYNTON BEACH BLVD INTERCHANGE	M-INCH: Modify Interchange	$9,604	$15,198	$35,579	$159	$0	$60,084	$456	$0		●		●	●
4369581	SR-9/I-95 @ SR-834/SAMPLE RD FR S OF NB EXIT RAMP TO N OF NB ENT. RAM	M-INCH: Modify Interchange	$33,935	$182	$0	$400	$0	$33,759	$758	$0				●	●
4355131	SR-9/I-95 @ SR-842/BROWARD BOULEVARD	M-INCH: Modify Interchange	$2,032	$581	$1,429	$500	$9,500	$3,024	$11,019	$0	●	●	●	●	
4355141	SR-9/I-95 @ SUNRISE BLVD. INTERCHANGE IMPROVEMENT	M-INCH: Modify Interchange	$2,070	$2,283	$28,892	$127	$0	$29,110	$4,263	$0		●		●	●
4441211	SR-9/I-95 AT BELVEDERE RD; SOUTHBOUND OFF RAMP	M-INCH: Modify Interchange	$2,254	$0	$0	$0	$0	$0	$2,253	$0		●			●
4391711	SR-9/I-95 AT DAVIE BOULEVARD	M-INCH: Modify Interchange	$510	$2,075	$0	$3,219	$11,481	$17,210	$75	$0	●	●	●	●	
4391721	SR-9/I-95 AT SR-816/OAKLAND PARK BOULEVARD	M-INCH: Modify Interchange	$510	$2,075	$0	$4,880	$286	$7,676	$75	$0	●	●	●		
4358083	SR-9/I-95 E OF 95 RAMPS T/FR COMMERCIAL BLVD N ANDREWS AV FRONTAGE	PDE: Project Dev. & Env.	$7	$0	$658	$1,252	$2,326	$273	$3,970	$0				●	
4369031	SR-9/I-95 FR MD/BROW LINE TO N OF SR-820/HOLLYWOOD BLVD	PDE: Project Dev. & Env.	$82	$0	$0	$0	$0	$0	$82	$0	●	●			
4331088	SR-9/I-95 FR MIAMI-DADE/BROWARD COUNTY LINE TO PALM BEACH COUNTY L	PE: Preliminary Engineering	$502	$250	$0	$0	$0	$0	$752	$0					●
4442022	SR-9/I-95 FROM 6TH AVE SOUTH TO NORTH OF SR-704/OKEECHOBEE BLVD	PDE: Project Dev. & Env.	$1,600	$3,000	$0	$0	$0	$0	$4,600	$0	●				
4132542	SR-9/I-95 FROM CR-708/BRIDGE ROAD TO HIGH MEADOWS	PDE: Project Dev. & Env.	$0	$550	$1,600	$0	$0	$2,150	$0	$0	●				
4391701	SR-9/I-95 FROM MIAMI-DADE/BROWARD COUNTY LINE TO NORTH OF GRIFFIN	M-INCH: Modify Interchange	$6,001	$0	$20	$50,020	$0	$56,041	$0	$0	●	●	●		
4365191	SR-9/I-95 FROM S OF 45TH STREET TO N OF 45TH ST	M-INCH: Modify Interchange	$1,034	$6,293	$1,115	$12,369	$255	$8,536	$12,531	$0		●		●	●
4358082	SR-9/I-95 FROM S OF COMMERCIAL BLVD. TO CYPRESS CREEK ROAD	M-INCH: Modify Interchange	$418	$344	$0	$0	$0	$0	$762	$0				●	
4358081	SR-9/I-95 FROM S. OF SR-870/COMMERCIAL BLVD. TO N. OF CYPRESS CREEK	PDE: Project Dev. & Env.	$213	$0	$0	$0	$0	$0	$213	$0		●			

All Values in Thousands of "As Programmed" Dollars

Project highlighted with dark gray background is no longer designated as SIS.

PD&E - Project Development & Environmental;
PE - Preliminary Engineering;
ENV - Environmental Mitigation;
ROW - Right-Of-Way;
CON - Construction & Support (may Include Grants);
TOTAL LOCAL FUNDS include all funds that start with LF fund code.

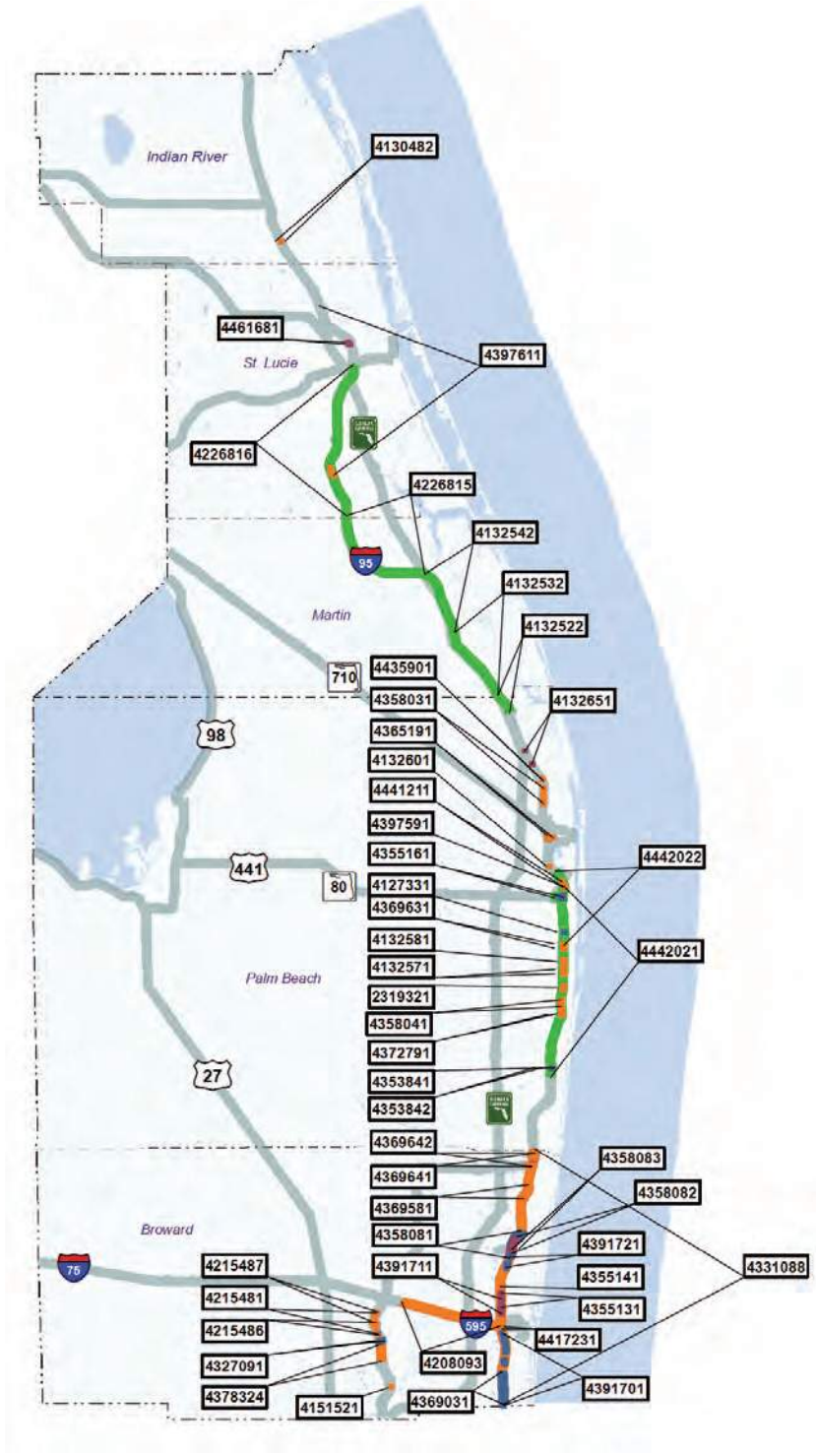
District 4 Interstate Plan

MAP ID	FACILITY	DESCRIPTION	2023	2024	2025	2026	2027	TOTAL STATE MANAGED	TOTAL DISTRICT MANAGED	TOTAL LOCAL FUNDS	PD&E	PE	ENV	ROW	CON
4442021	SR-9/I-95 FROM SOUTH OF LINTON BLVD/CR-782 TO 6TH AVE SOUTH	PDE: Project Dev. & Env.	$2,097	$0	$0	$0	$0	$0	$2,097	$0	●				
4369641	SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.	M-INCH: Modify Interchange	$18,003	$0	$0	$0	$0	$17,951	$52	$0				●	
4369642	SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.	M-INCH: Modify Interchange	$24,297	$690,272	$4,097	$2,733	$3,192	$721,592	$0	$3,000		●	●		●
4372791	SR-9/I-95 FROM SOUTH OF WOOLBRIGHT ROAD TO NORTH OF WOOLBRIGHT	M-INCH: Modify Interchange	$545	$96	$0	$200	$13,617	$14,458	$0	$0		●		●	●
4397611	SR-9/I-95 NORTHBOUND AND SOUTHBOUND OFF-RAMPS AT GATLIN BLVD.	M-INCH: Modify Interchange	$66	$0	$0	$0	$0	$0	$66	$0		●			●
4417231	SR-9/I-95 NORTHBOUND OFF-RAMP TO EASTBOUND I-595	A2-6: Add 2 To Build 6 Lanes	$664	$33	$2,952	$52	$0	$0	$3,701	$0		●			●
4435901	SR-9/I-95 SOUTH BOUND ON-RAMP FROM PGA BLVD - ADD AUXILIARY LANE	A1-AUX: Add 1 Auxiliary Lane	$69	$0	$0	$0	$0	$0	$69	$0					●
4378324	SR-93/I-75 FROM SHERIDAN STREET TO GRIFFIN RD. AUX LANES	A2-AUX: Add 2 Auxiliary Lanes	$14,860	$0	$0	$0	$0	$10,924	$3,936	$0		●			●
4151521	SR-93/I-75 INTRCHG@SR-820/PINESBLVD F N OF MIRAMARPKWY T N OF PINES	M-INCH: Modify Interchange	$112	$350	$0	$100	$0	$100	$462	$0		●	●		●
4215481	SR-93/I-75 INTRCHNG @ ROYAL PALM BLVD FR GRIFFIN RD TO N OF SW 14 ST	M-INCH: Modify Interchange	$10	$0	$0	$0	$0	$0	$10	$0		●			
4215486	SR-93/I-75 INTRCHNG @ROYAL PALM BLVD FR GRIFFIN RD TO ROYAL PALM BL	M-INCH: Modify Interchange	$0	$0	$13,382	$60	$0	$13,442	$0	$0					●
4215487	SR-93/I-75 INTRCHNG @ROYAL PALM BLVD FR S ROYAL PALM BLV TO S SW 14	M-INCH: Modify Interchange	$0	$0	$4,851	$16	$0	$4,867	$0	$0					●
		ANNUAL TOTALS	$314,486	$853,215	$188,824	$196,261	$294,177	$1,581,582	$260,387	$5,000					

All Values in Thousands of "As Programmed" Dollars

Project highlighted with dark gray background is no longer designated as SIS.

PD&E - Project Development & Environmental;
PE - Preliminary Engineering;
ENV - Environmental Mitigation;
ROW - Right-Of-Way;
CON - Construction & Support (may Include Grants);
TOTAL LOCAL FUNDS include all funds that start with LF fund code.



District 4

First Five Years Interstate Plan

STRATEGIC INTERMODAL SYSTEM

Capacity Improvement Projects

Adopted Work Program

FY 2022/2023 through FY 2026/2027
(as of July 1, 2022)

Legend

Project Phase

- Project Development & Environment
- Environmental Mitigation
- Preliminary Engineering
- Right-Of-Way
- Construction

Notes

Projects color coded by highest project phase.
Some projects may overlap on map.
Project costs are subject to change.

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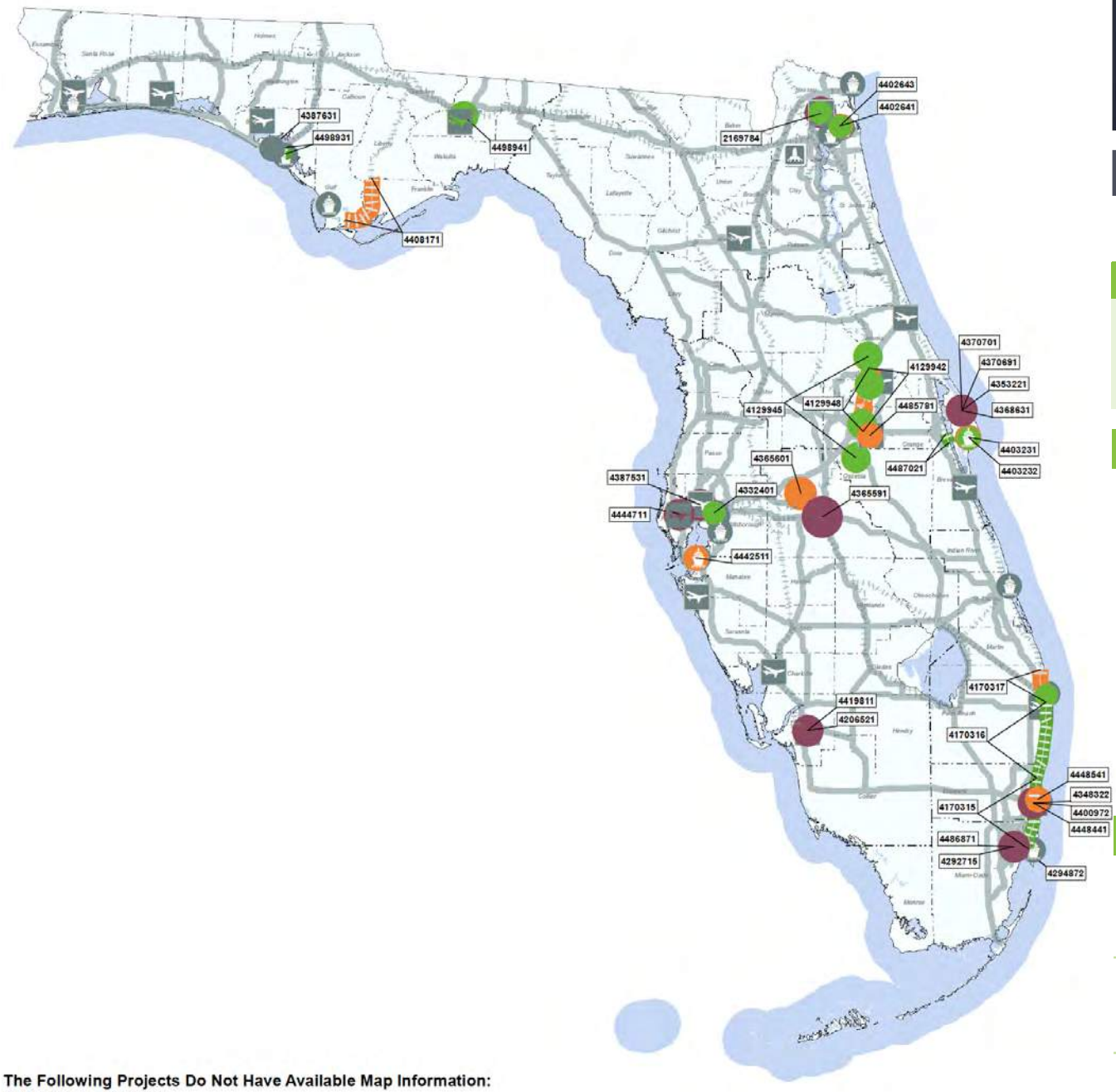
Miles

FDOT HIGHWAY



The Following Projects Do Not Have Available Map Information:
4167865 and 4153482

Statewide

First Five Years Modal Plan

STRATEGIC INTERMODAL SYSTEM

Capacity Improvement Projects

Adopted Work Program

FY 2022/2023 through FY 2026/2027
(as of July 1, 2022)

Legend

Project Phase

- 2021/2022 Projects
- 2022/2023 and 2023/2024 Projects
- 2024/2025 and 2025/2026 Projects

- 2021/2022 Projects
- 2022/2023 and 2023/2024 Projects
- 2024/2025 and 2025/2026 Projects

Notes

Projects color coded by highest project phase.
Some projects may overlap on map.
Project costs are subject to change.

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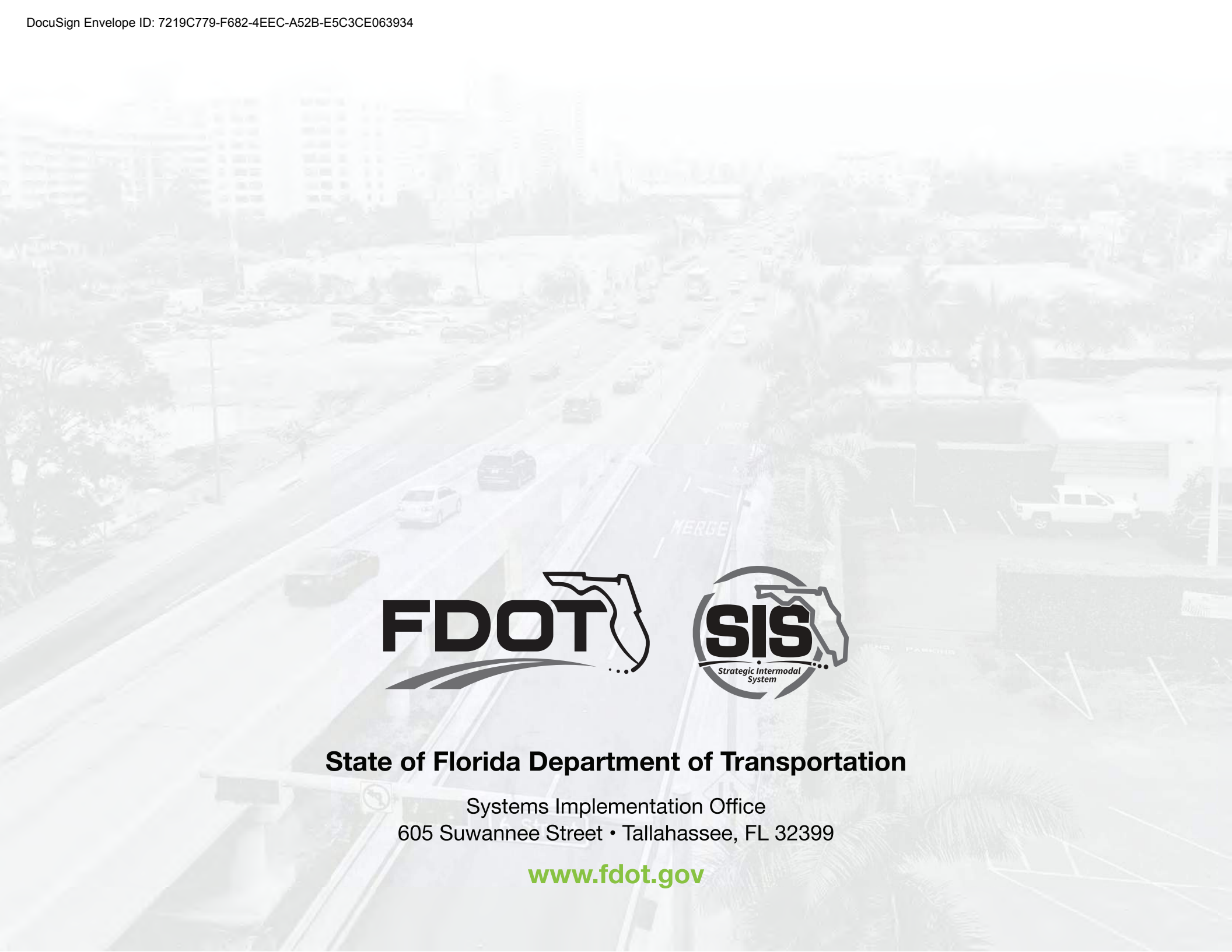
Miles

FDOT MODAL SIS



State of Florida Department of Transportation

Systems Implementation Office
605 Suwannee Street • Tallahassee, FL 32399

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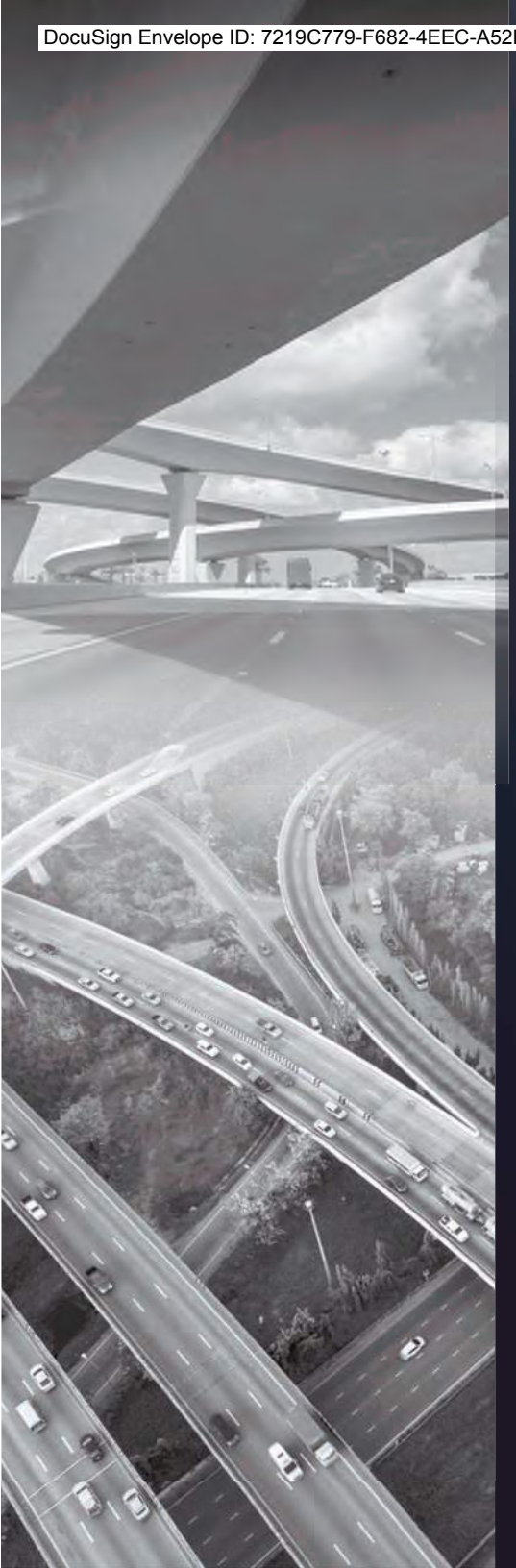
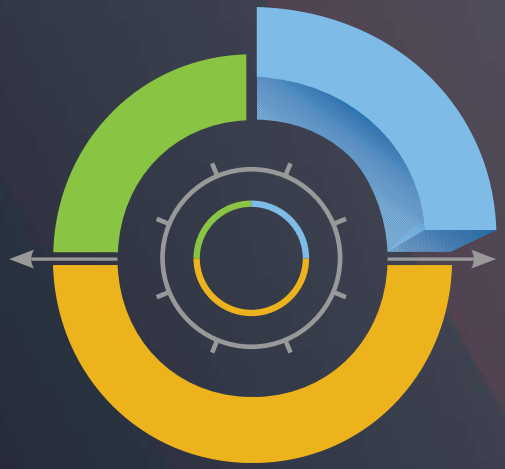


FDOT SIS Strategic Intermodal System

Strategic Intermodal System Funding Strategy



Second Five Year Plan

MULTI-MODAL

FY 2027/2028 through
FY 2031/2032

Capacity Projects on the Strategic Intermodal System

State of Florida Department of Transportation

District 4 Highway Plan

MAP ID	FACILITY	DESCRIPTION	2028	2029	2030	2031	2032	TOTAL STATE MANAGED	TOTAL DISTRICT MANAGED	TOTAL LOCAL FUNDS	PD&E	PE	ENV	ROW	CON
4208093	I-595/SR-862/ P3 FROM E. OF I-75 TO W. OF I-95	MGLANE: Managed Lanes	$109,794	$113,800	$116,798	$118,994	$119,221	$422,722	$155,885	$0		●			●
4327091	I-75/SR-93 EAST SIDE RAMP IMPROVEMENTS AT GRIFFIN ROAD	M-INCH: Modify Interchange	$17,528	$79	$0	$0	$0	$0	$17,607	$0					●
4369036	SR 824/PEMBROKE ROAD FROM PARK ROAD TO S 27TH AVE.	M-INCH: Modify Interchange	$0	$2,272	$2,131	$10,721	$6,008	$21,131	$0	$0				●	
4369035	SR820/HOLLYWOOD BLVD. FROM ENTRADA DRIVE TO E OF N 28TH AVE	M-INCH: Modify Interchange	$0	$1,517	$1,295	$8,072	$7,008	$17,892	$0	$0				●	
4398911	SR-869/SW 10TH ST FROM FL TURNPIKE/SAWGRASS EXPRESSWAY TO W OF I-	A2-6: Add 2 To Build 6 Lanes	$1,729	$1,825	$0	$0	$0	$3,554	$0	$0					●
4127331	SR-9/I-95 @ 10TH AVE NORTH	M-INCH: Modify Interchange	$0	$50	$12,045	$54	$0	$12,149	$0	$0					●
4358087	SR-9/I-95 @ FROM N OF COMMERCIAL BLVD. TO N OF CYPRESS CREEK ROAD	M-INCH: Modify Interchange	$0	$100	$21,759	$96	$0	$21,955	$0	$0					●
2319321	SR-9/I-95 @ GATEWAY BLVD. INTERCHANGE	M-INCH: Modify Interchange	$1,577	$0	$0	$0	$0	$1,577	$0	$0					●
4132571	SR-9/I-95 @ HYPOLUXO ROAD	M-INCH: Modify Interchange	$179	$0	$0	$0	$0	$179	$0	$0					●
4132581	SR-9/I-95 @ LANTANA ROAD	M-INCH: Modify Interchange	$0	$0	$0	$43,527	$193	$43,340	$380	$0					●
4353842	SR-9/I-95 @ LINTON BOULEVARD INTERCHANGE	M-INCH: Modify Interchange	$15,826	$612	$0	$0	$0	$0	$16,437	$0					●
4132601	SR-9/I-95 @ PALM BEACH LAKES BLVD	M-INCH: Modify Interchange	$49	$0	$0	$0	$0	$0	$49	$0					●
4132651	SR-9/I-95 @ PGA BOULEVARD/CENTRAL BOULEVARD	M-INCH: Modify Interchange	$0	$0	$250	$0	$0	$250	$0	$0					●
4355161	SR-9/I-95 @ SR-80/SOUTHERN BLVD. INTERCHG. ULTIM. IMPRVMT.	M-INCH: Modify Interchange	$0	$8,403	$0	$0	$0	$8,403	$0	$0				●	
4355131	SR-9/I-95 @ SR-842/BROWARD BOULEVARD	M-INCH: Modify Interchange	$0	$0	$0	$16,350	$0	$16,350	$0	$0					●
4391711	SR-9/I-95 AT DAVIE BOULEVARD	M-INCH: Modify Interchange	$7,650	$7,140	$0	$0	$0	$14,790	$0	$0				●	
4358083	SR-9/I-95 E OF 95 RAMPS T/FR COMMERCIAL BLVD N ANDREWS AV FRONTAGE	PDE: Project Dev. & Env.	$750	$0	$0	$0	$0	$0	$750	$0				●	
4358082	SR-9/I-95 FROM S OF COMMERCIAL BLVD. TO CYPRESS CREEK ROAD	M-INCH: Modify Interchange	$60	$50,403	$116	$0	$0	$50,579	$0	$0					●
4369642	SR-9/I-95 FROM SOUTH OF SW 10TH STREET TO NORTH OF HILLSBORO BLVD.	M-INCH: Modify Interchange	$3,100	$3,100	$0	$0	$0	$6,200	$0	$0					●
4372791	SR-9/I-95 FROM SOUTH OF WOOLBRIGHT ROAD TO NORTH OF WOOLBRIGHT	M-INCH: Modify Interchange	$139	$0	$0	$0	$0	$139	$0	$0		●			●
4369032	SR9/I-95 NB CD RD FR S OF HALLANDALE BEACH BLVD TO N OF HOLLYWOOD	BRIDGE: Bridge	$0	$957	$4,406	$2,863	$1,010	$9,236	$0	$0				●	
4369033	SR9/I-95 SB CD RD FR S OF HALLANDALE BEACH BLVD TO N OF HOLLYWOOD	BRIDGE: Bridge	$0	$1,651	$3,025	$14,872	$4,010	$23,559	$0	$0				●	
4151521	SR-93/I-75 INTRCHG@SR-820/PINESBLVD F N OF MIRAMARPKWY T N OF PINES	M-INCH: Modify Interchange	$109,769	$252	$0	$0	$0	$110,022	$0	$0					●
		ANNUAL TOTALS	$268,150	$192,161	$161,825	$215,549	$137,450	$784,027	$191,108	$0					

All Values in Thousands of "As Programmed" Dollars

Project highlighted with dark gray background is no longer designated as SIS.

PD&E - Project Development & Environmental;
PE - Preliminary Engineering;
ENV - Environmental Mitigation;
ROW - Right-Of-Way;
CON - Construction & Support (may Include Grants);
TOTAL LOCAL FUNDS include all funds that start with LF fund code.

District 4

Second Five Years

STRATEGIC INTERMODAL SYSTEM

Capacity Improvement Projects

Adopted Work Program

FY 2027/2028 through FY 2031/2032
(as of July 1, 2022)

Legend

Project Phase

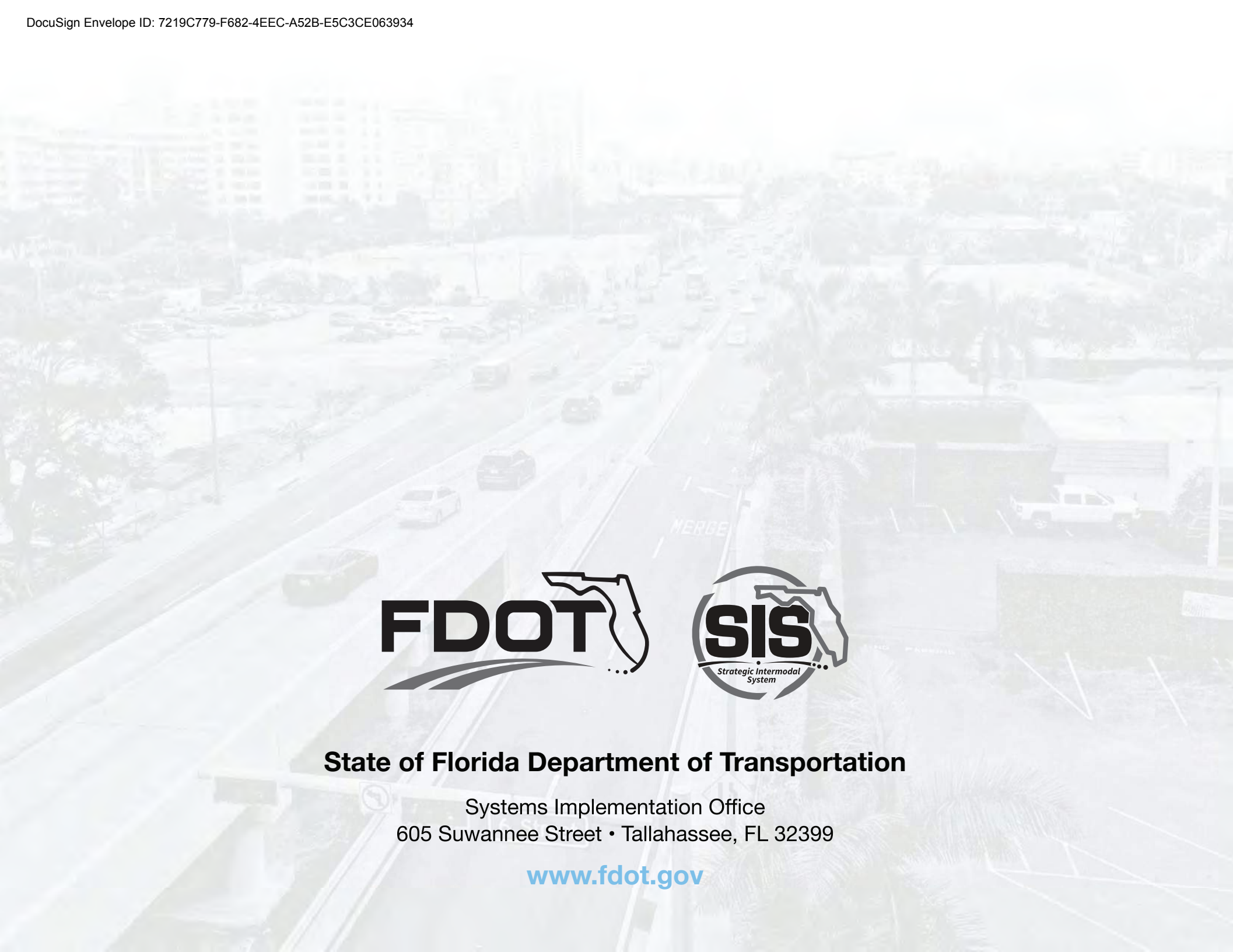
- Project Development & Environment
- Environmental Mitigation
- Preliminary Engineering
- Right-Of-Way
- Construction

Notes

Projects color coded by highest project phase.
Some projects may overlap on map.
Project costs are subject to change.

0 10 20 40
Miles

FDOT HIGHWAY SIS



State of Florida Department of Transportation

Systems Implementation Office
605 Suwannee Street • Tallahassee, FL 32399

www.fdot.gov

Strategic Intermodal System

Long Range Cost Feasible Plan

FY 2029·2045

FDOT SIS Strategic Intermodal System

PRESENT DAY COSTS

2018 EDITION

ID	FACILITY	FROM	TO	Design			Right of Way / Construction			P3 Funds			Other Funds	IMPRV TYPE
				PDE	PE	TOTAL	ROW	CON	TOTAL	COST	Begin Yr	#Yrs	TOTAL	
1107	I-595	I-75	SR-7							**1,169,242**	2029	16		MGLANE
3413	I-95	at Davie Boulevard						25,093	**25,093**					M-INCH
3409	I-95	S. of Hallandale Beach Boulevard	N. of Hollywood Boulevard				65,900	163,822	**229,722**					HWYCAP
3410	I-95	at Stirling Road						5,429	**5,429**					M-INCH
3415	I-95	S. of Commercial Boulevard	N. of Cypress Creek Road				58,300	97,561	**155,861**					HWYCAP
3414	I-95	at Oakland Park Boulevard					8,300	33,759	**42,059**					M-INCH
3412	I-95	S. of Sheridan Street	N. of Griffin Road					240,601	**240,601**					HWYCAP
3404	I-95	Becker Road	SR-70		10,000	**10,000**	10,000	104,813	**114,813**					HWYCAP
3399	I-95	Linton Boulevard	SR-80	6,000	15,000	**21,000**	5,000	416,201	**421,201**					MGLANE
3403	I-95	Martin/Palm Beach County Line	Becker Road		10,000	**10,000**	10,000	168,168	**178,168**					HWYCAP
3402	I-95	S. of Indiantown Road	Martin/Palm Beach County Line		2,815	**2,815**		28,290	**28,290**					HWYCAP
3400	I-95	SR 80	Congress Avenue (Overpass)	3,000	6,000	**9,000**	10,000	66,933	**76,933**					MGLANE
3416	I-95	at Belvedere Road		1,900	3,089	**4,989**	6,000	30,887	**36,887**					M-INCH
3401	I-95	Congress Avenue (Overpass)	Blue Heron Boulevard	4,000	10,000	**14,000**	5,000	139,730	**144,730**					MGLANE
3397	I-95	N. of Broward Boulevard	Sunrise Boulevard	1,919	3,837	**5,756**	2,000	38,564	**40,564**					HWYCAP
3398	I-95	SR-84	S. of Broward Boulevard	5,000	12,000	**17,000**	27,500	276,756	**304,256**					HWYCAP
3405	SR-710	Martin/Okeechobee County Line	Martin Powerplant Road		6,000	**6,000**	5,125	57,294	**62,419**					A2-4
3407	SR-710	Blue Heron Boulevard	Congress Avenue		1,295	**1,295**		13,014	**13,014**					HWYCAP
3417	SR-714/Monterey Road	at Florida East Coast Railway		2,100	2,212	**4,312**	14,969	22,116	**37,085**					GRASEP
3393	SR-80	W. of Binks Forest Drive	W. of Royal Palm Beach Boulevard	1,900	1,609	**3,509**	2,940	16,247	**19,187**					HWYCAP
3394	SR-80	W. of Royal Palm Beach Boulevard	I-95	6,000	15,000	**21,000**	200,332		**200,332**					HWYCAP
3396	SR-80	US-27	I-95		2,274	**2,274**		13,305	**13,305**					ITS
3395	SR-80	at SR-7		1,443	2,886	**4,329**		28,863	**28,863**					M-INCH
3392	US 27	Pembroke Road	SW 26th Street (N. of Griffin Road)	3,000	6,000	**9,000**	5,000	76,624	**81,624**					SERVE
3391	US 27 (Miami-Dade to Hendry)	Krome Avenue	Evercane Road		3,733	**3,733**		21,841	**21,841**					ITS
3389	US 27 (Miami-Dade, Broward)	Krome Avenue	Broward/Palm Beach County Line	5,000	12,000	**17,000**		286,337	**286,337**					FRTCAP
3390	US 27 (Palm Beach, Hendry)	Broward/Palm Beach County Line	Evercane Road	5,000	12,000	**17,000**	30,618	281,957	**312,575**					FRTCAP
Funded CFP Totals						**184,012**			**3,121,189**	**1,169,242**			**Total CFP Funds= 4,474,443**	

LEGEND

- FY 2028/2029 - 2034/2035
- FY 2035/2036 - 2039/2040
- FY 2040/2041 - 2044/2045
- Mega Projects Phased Over Time

NOTES

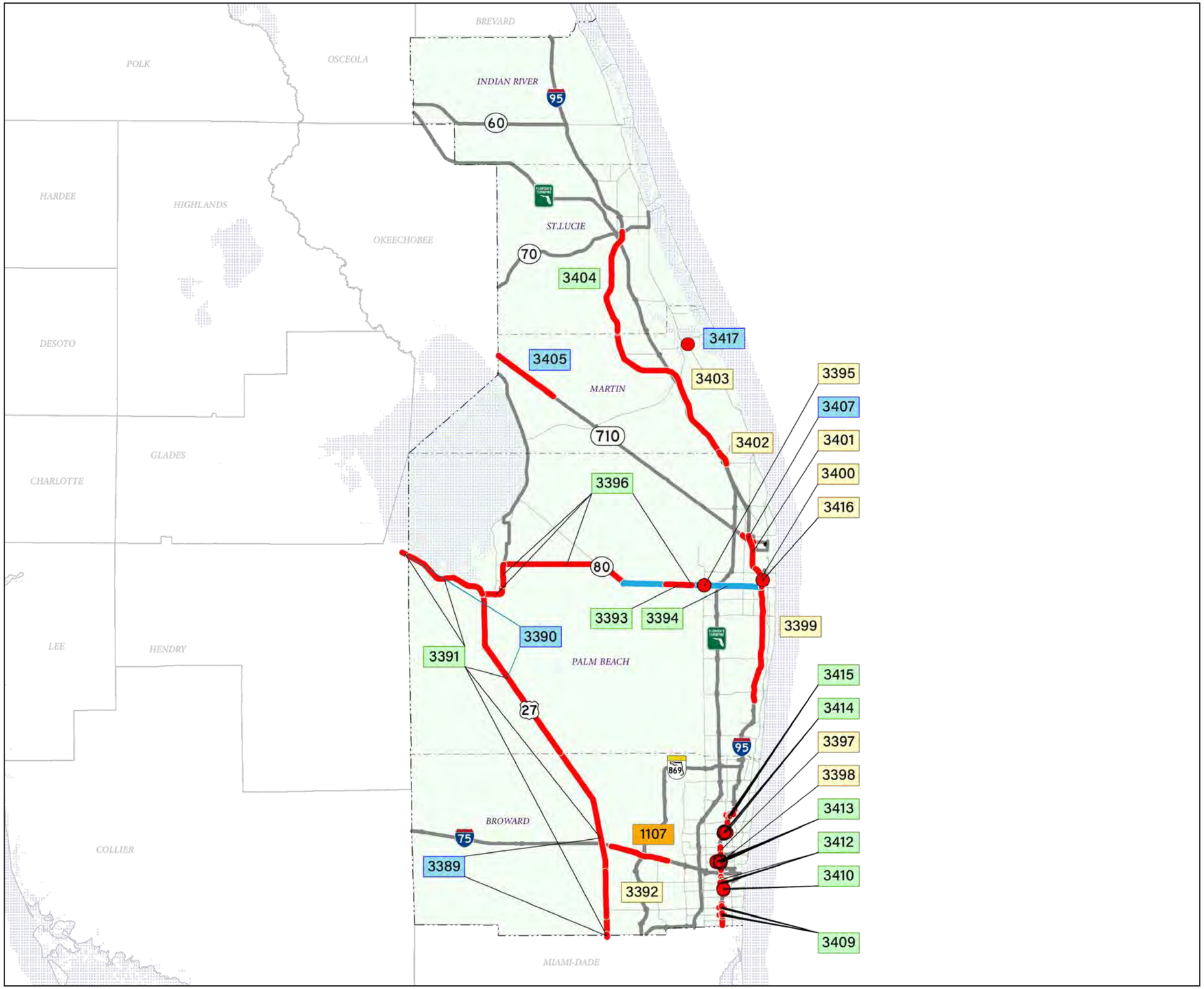
(1) All values in thousands of Present Day Dollars (2017).
(2) All phase costs shown as supplied by each District.
(3) CON includes both Construction (CON52) and Construction Support (CEI).
(4) ROW includes both Right-of-Way Acquisition/Mitigation (ROW43/45) and Right-of-Way Support.
(5) "P3 Funds" - Used to fund Public-Private Partnership projects over a specified number of years.
(6) Revenue forecast provides separate values for PDE and PE than for ROW and CON.
(7) Other Funds - assumed to be toll revenue or partner funded.

IMPROVEMENT TYPES

A1-3: Add 1 Lane to Build 3
A2-4: Add 2 Lanes to Build 4
A2-6: Add 2 Lanes to Build 6
A2-8: Add 2 Lanes to Build 8
A4-12: Add 4 Lanes to Build 12
A1-AUX: Add 1 Auxilliary Lane
A4-SUL: Add 4 Special Use Lanes

ACCESS: Access
BRIDGE: Bridge
FRTCAP: Freight Capacity
GRASEP: Grade Separation
HWYCAP: Highway Capacity
PTERM: Passenger Terminal
ITS: Intelligent Transp. Sys
MGLANE: Managed Lanes

M-INCH: Modify Interchange
N-INCH: New Interchange
NR: New Road
PDE: Project Dev. Env.
SERVE: Add Svc/Front/CD System
STUDY: Study
UP: Ultimate Plan



FDOT STRATEGIC INTERMODAL SYSTEM SIS

Long Range Cost Feasible Plan FY 2029•2045

District 4

LEGEND

Bridge, Interchange, Intersection Improvements (Project with highest phase funded)

- Construction & Mega Projects (CON)
- Right of Way (ROW)
- Preliminary Engineering (PE)
- Project Development and Environmental (PDE)

Add Lanes, New Roads, etc. Improvements (Project with highest phase funded)

- Construction & Mega Projects (CON)
- Right of Way (ROW)
- Preliminary Engineering (PE)
- Project Development and Environmental (PDE)

- 1234 Green Band - FY 2028/2029 to FY 2034/2035
- 1234 Yellow Band - FY 2035/2036 to FY 2039/2040
- 1234 Blue Band - FY 2040/2041 to FY 2044/2045
- 1234 Mega Projects Phased Over Time

- Interstate Highway
- U.S. Highway
- State Highway
- Toll Roads

Existing Conditions for SIS Highways

- SIS Highways
- Other State roads
- Planned Add

N W E S

0 10 20 40

Miles

State of Florida Department of Transportation

Systems Implementation Office
605 Suwannee Street • Tallahassee, FL 32399

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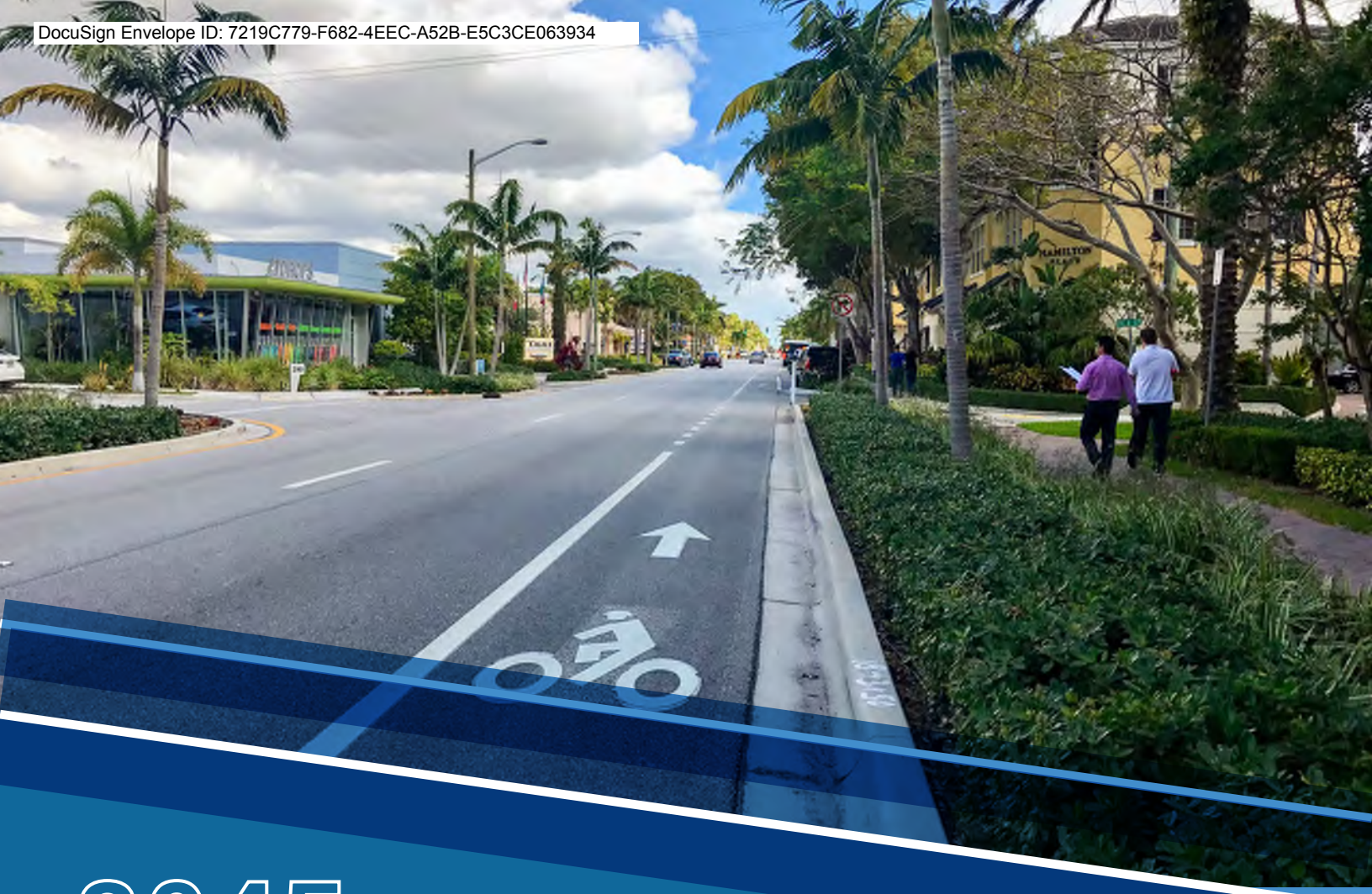


2045

Long Range Transportation Plan

CONNECTING COMMUNITIES

Adopted December 12, 2019

Administrative Modification January 7, 2022

PALM BEACH Transportation Planning Agency

Table 14. FDOT SIS Roadway Projects

LRTP#	Location	Description	2018 Present Day Costs (values in $1,000)				
			PD&E	PE	ROW	CST	Total
SIS001	Beeline Hwy/SR-710 from Blue Heron Blvd to Congress Ave	Intersection & TSMO Improvements		$1,295		$13,014	$14,309
SIS002	Beeline Hwy/SR-710 from Blue Heron Blvd to Northlake Blvd	Widen 4L to 6L		$2,022	$1,445	$119,775	$123,242
SIS003	I-95 @ 10th Ave North	Modify Interchange	$1,467	$2,650	$6,246	$23,142	$33,505
SIS004	I-95 @ 45th St	Construct Diverging Diamond Interchange	$1,846	$2,355	$2,488		$6,689
SIS005	I-95 @ 6th Ave South	Modify Interchange	$5	$30	$5,761	$11,251	$17,047
SIS006	I-95 @ Belvedere Rd	Add 2nd NB to EB right turn lane		$820		$3,126	$3,946
SIS007	I-95 @ Belvedere Rd	Modify Interchange - Southbound Ramp	$1,900	$3,444	$6,000	$30,887	$42,231
SIS008	I-95 @ Central Blvd	Construct New Interchange	$1,743	$4,475	$9,081	$63,038	$78,337
SIS021	I-95 @ Boynton Beach Blvd	Modify Interchange	$1,457	$3,830	$19,050	$37,294	$61,631
SIS009	I-95 @ Gateway Blvd	Modify Interchange	$3	$199	$10,416	$51,990	$62,608
SIS036	I-95 @ Glades Rd	Modify Interchange			$1,757	$1,529	$3,286
SIS010	I-95 @ Hypoluxo Rd	Modify Interchange	$6	$2,250	$948	$17,185	$20,389
SIS011	I-95 @ Indiantown Rd	Signalize NB Ramp, Add EB Lane on Indiantown		$472	$547	$7,229	$8,248
SIS012	I-95 @ Lantana Rd	Modify Interchange	$1,812	$2,030	$7,853	$19,986	$31,681
SIS013	I-95 @ Linton Blvd	Modify Interchange	$2	$46	$1,517	$972	$2,537
SIS014	I-95 @ Linton Blvd	Modify Interchange		$895		$12,030	$12,925
SIS015	I-95 @ Northlake Blvd	Add turn lanes, lengthen ramps, access mgmt		$138	$16,847	$37,556	$54,541
SIS016	I-95 @ Okeechobee Blvd	Add right turn from EB Okeechobee Blvd to SB I-95		$309		$1,148	$1,456
SIS017	I-95 @ Palm Beach Lakes Blvd	Modify Interchange	$100	$1,386		$12,993	$14,479
SIS018	I-95 @ PGA Blvd	Add Auxiliary Lane to SB on-ramp		$749		$6,802	$7,551
SIS019	I-95 @ Southern Blvd	Modify Interchange	$2,587	$7,750	$8,403	$106,923	$125,663
SIS020	I-95 @ Woolbright Rd	Modify Interchange	$1,439	$1,120	$24,808	$12,714	$40,081
SIS025	I-95 from Linton Blvd to Southern Blvd	Add managed lanes (potentially convert HOV, add 2 managed Lanes (12 total + aux)	$6,000	$15,000	$5,000	$416,201	$442,201

Map 37. Desires Plan – Roadway Capacity

Funding Source: State Transportation Revenues (primarily DDR and DS funds) and federal planning funds to fund PD&E studies. Funding for right-of-way and construction from competitive federal and state grants with local matches (not yet identified).
Funding Amount: $15.3M programmed for Project Development & Environmental (PD&E)
Project Location: State roadways
Project Selection: Corridors identified through multimodal demand analysis

Project Description: Enhanced transit and associated multimodal improvements, including premium transit shelters, off-board ticketing, signal prioritization, etc.

State Road Construction Projects

The Cost Feasible Plan funds the roadway capacity and expansion of major TPA roadway priorities: State Road 7 widening and extension, Atlantic Avenue widening, and US 27 connector.

Funding Source: State Transportation Revenues (primarily DDR and DS funds) and supplemented with a small portion of federal funding.
Funding Amount: $232 million programmed for completion of all projects.
Project Location: State roadways
Project Selection: Corridors identified through multimodal demand analysis and local priority.

Project Description: Six (6) total projects are funded for roadway capacity:

- Atlantic Ave from SR-7 to Lyons Rd - widen from 2 lanes to 4 lanes
- Atlantic Ave from Lyons Rd to Jog Rd – widen from 4 lanes to 6 lanes
- Hooker Hwy from SR 715 to SR 80 – widen from 2 lanes to 4 lanes
- US 27 Connector from US 27 to SR-715 – new 2 lane roadway
- SR-7 from Okeechobee Blvd to 60th St – widen from 2 lanes to 4 lanes
- SR-7 from 60th to Northlake Blvd – new 4 lane roadway

FDOT

FDOT leads the selection of projects on the SIS. These projects are funded with a combination of federal and state transportation revenues. The role of the TPA is to endorse, modify, or reject the projects selected by FDOT.

Strategic Intermodal System (SIS) Roadway and Freight

Although FDOT revenue sources may be used for multimodal facilities, the SIS Cost Feasible Plan has predominantly prioritized focused on roadway capacity. FDOT and modal partners have not been able to identify cost feasible projects beyond the FDOT work program sufficiently to include them in the SIS CFP. Other SIS projects include freight corridors and large-scale Intelligent Transportation Systems (ITS) infrastructure.
Funding Source: Federal Transportation Revenues primarily from National Highway Performance Program (NHPP), State Transportation Revenues primarily from statewide Interstate (DI), District Dedicated Revenue (DDR), Primary Highways & Public Transportation Office (DS) funds.
Funding Amount: $2.75 billion programmed towards projects
Project Location: SIS roadways
Project Selection: Identified at statewide-level by FDOT and adopted into FDOT's SIS Cost Feasible Plan.

Project Description: The SIS Cost Feasible Plan programs major roadway capacity expansions for all SIS roadways within the county. The TPA Cost Feasible Plan includes the following:

- Widening to 12 lanes with managed lanes to I-95 from Linton Blvd to Blue Heron Blvd
- I-95 highway capacity widening to 8 lanes from Indiantown Rd into Martin County
- 1 new interchange and 17 interchange modifications
- US 27 freight capacity from Broward County to Hendry County
- Beeline Hwy (SR 710) widening to 6 L from Blue Heron Blvd to Northlake Blvd
- SR-80 highway capacity widening to 8 lanes from Binks Forest Dr to Royal Palm Beach Blvd
- PD&E study for SR-80 highway capacity from Royal Palm Beach Blvd to I-95

Turnpike Roadway

FDOT's Florida Turnpike prioritizes Turnpike capacity improvements. These projects are funded by toll revenue collections.

Funding Source: Turnpike toll revenues
Funding Amount: $2.49 billion programmed towards projects
Project Location: Florida's Turnpike
Project Selection: Identified at statewide-level by Florida's Turnpike office

Project Description: Major Turnpike roadway capacity expansions are programmed in the TPA Cost Feasible plan, including:

- Widening to 10 lanes with managed lanes from Broward County to Boynton Beach Blvd
- Widening to 8 lanes with managed lanes from West Palm Beach Service Plaza to Beeline Hwy (SR 710)
- Widening to 8 lanes from Beeline Hwy (SR 710) to Indiantown Rd

Palm Beach County (County Roadways)

The County and municipalities lead the selection of projects on local facilities. **The role of the TPA is to support project selection through transportation-related policies (e.g. Complete Streets, Vision Zero, etc.) and to support project implementation through provision of project funding.** The project list only includes roadway segments programmed for widening.

Funding Source: Road impact fees and local gas taxes
Funding Amount: $854 million programmed
Project Location: County-maintained roadways
Project Selection: Identified through Palm Beach County and local municipalities. The County directly administers projects through the Palm Beach County 5-Year Road Program. The County's selection is independent of the Palm Beach TPA Cost Feasible Plan. The TPA adopted projects into the TPA Cost Feasible Plan that are consistent with the Mission and Vision of the TPA.

Project Description: The TPA Cost Feasible Plan includes 18 new roadway segments, 84 roadway widening projects, 15 larger intersection modifications, and a line item for smaller intersection projects countywide.

Map 38. Projects with Construction Funding through 2045

				Programming Tiers ->	FY 20-24 (TIP)				FY 25-30 (2030 Plan)				2031-2035 (2045 Plan)				2036-2045 (2045 Plan)			
LRTP#	FM	SIS	Location	Description	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST	PD&E	PE	ROW	CST
SIS018	4435901		I-95 @ PGA Blvd	Add Auxiliary Lane to SB on-ramp		$749		$250				$6,552								
SIS019	4355161		I-95 @ Southern Blvd	Modify Interchange		$7,775					$8,403									
SIS020	4372791		I-95 @ Woolbright Rd	Modify Interchange	$501	$1,120	$24,808					$12,714								
SIS025	4442021	3399	I-95 from Linton Blvd to Southern Blvd	Add managed lanes (potentially convert HOV, add 2 managed Lanes (12 total + aux)	$2,500									$15,000	$5,000					$745,416
SIS027	4442022	3400	I-95 from Southern to Congress Ave (overpass)	Add managed lanes (potentially convert HOV, add 2 managed Lanes (12 total + aux)	$5,400									$6,000	$10,000					$119,877
SIS037	4442023	3401	I-95 from Congress Ave (overpass) to Blue Heron Blvd	Add managed lanes (potentially convert HOV, add 2 managed Lanes (12 total + aux)									$4,000	$10,000					$5,000	$250,257
SIS026	4132522	3402	I-95 from S of Indiantown Rd to Martin County	Add highway capacity (potentially widen 6L to 8L)	$125				$575					$2,815						$50,667
SIS028	4378681		Southern Blvd @ SR-7	Add EB and WB Right & Left Turn Lanes		$599	$2,889					$5,411								
SIS029		3395	Southern Blvd @ SR-7	Modify Interchange									$1,443	$2,886						$51,693
SIS030	4363071		Southern Blvd @ Forest Hill Blvd	Add turn lane		$8		$304												
SIS038	4351581		Southern Blvd @ Sansbury Way	Modify Intersection		$1		$342												
SIS031		3396	Southern Blvd from US-27 to I-95	Corridor Management, ITS										$2,274		$19,612				
SIS032		3393	Southern Blvd from W of Binks Forest Drive to W of Royal Palm Beach Blvd	Add highway capacity (potentially widen 6L to 8L)									$1,900	$1,609	$2,940	$23,947				
SIS034		3390	US 27 from Broward County to Hendry County	Add freight roadway capacity									$5,000	$12,000					$30,618	$594,083
SIS035		3391	US 27 from Krome Avenue (Miami-Dade County) to Evercane Road (Hendry County)	Corridor Management, ITS										$3,733		$32,193				
				SIS Total	$9,065	$26,246	$111,653	$258,025	$575		$8,403	$232,743	$18,343	$60,701	$23,940	$75,752			$35,618	$1,894,731
				TPK Total	$2,000	$57,741	$4,611	$344,230		$3,000		$2,073,650								

Costs expressed in Year of Expenditure (YOE) dollars
Values in thousands (1,000s)

PD&E Project Development & Environmental - Determines the location and conceptual design of feasible build alternatives for improvements and their social, economic and environmental effects.

PE Preliminary Engineering

ROW Right-of-Way - Acquisition of necessary right-of-way (property), based on the construction plans

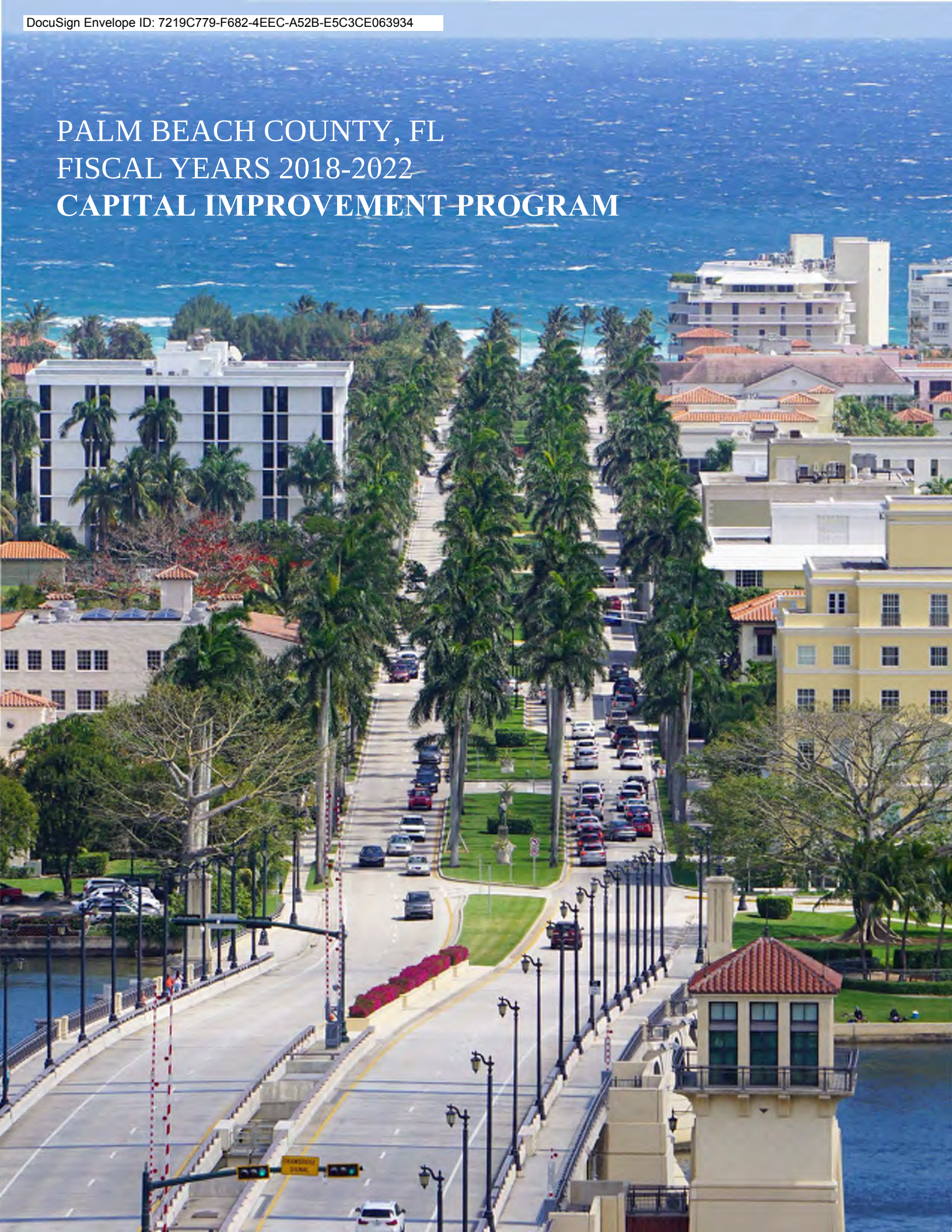
CST Construction - the project is awarded and is being built.

FDOT Prioritization from FDOT Work Program FY 2019/2020 through FY 2023/2024; FDOT, SIS First Five-Year Plan, FY 2019/20 through FY 2023/2024; FDOT, SIS Second Five-Year Plan, FY 2024/25 through FY 2028/2029; FDOT, SIS Long Range Cost Feasible Plan, FY 2029-2045

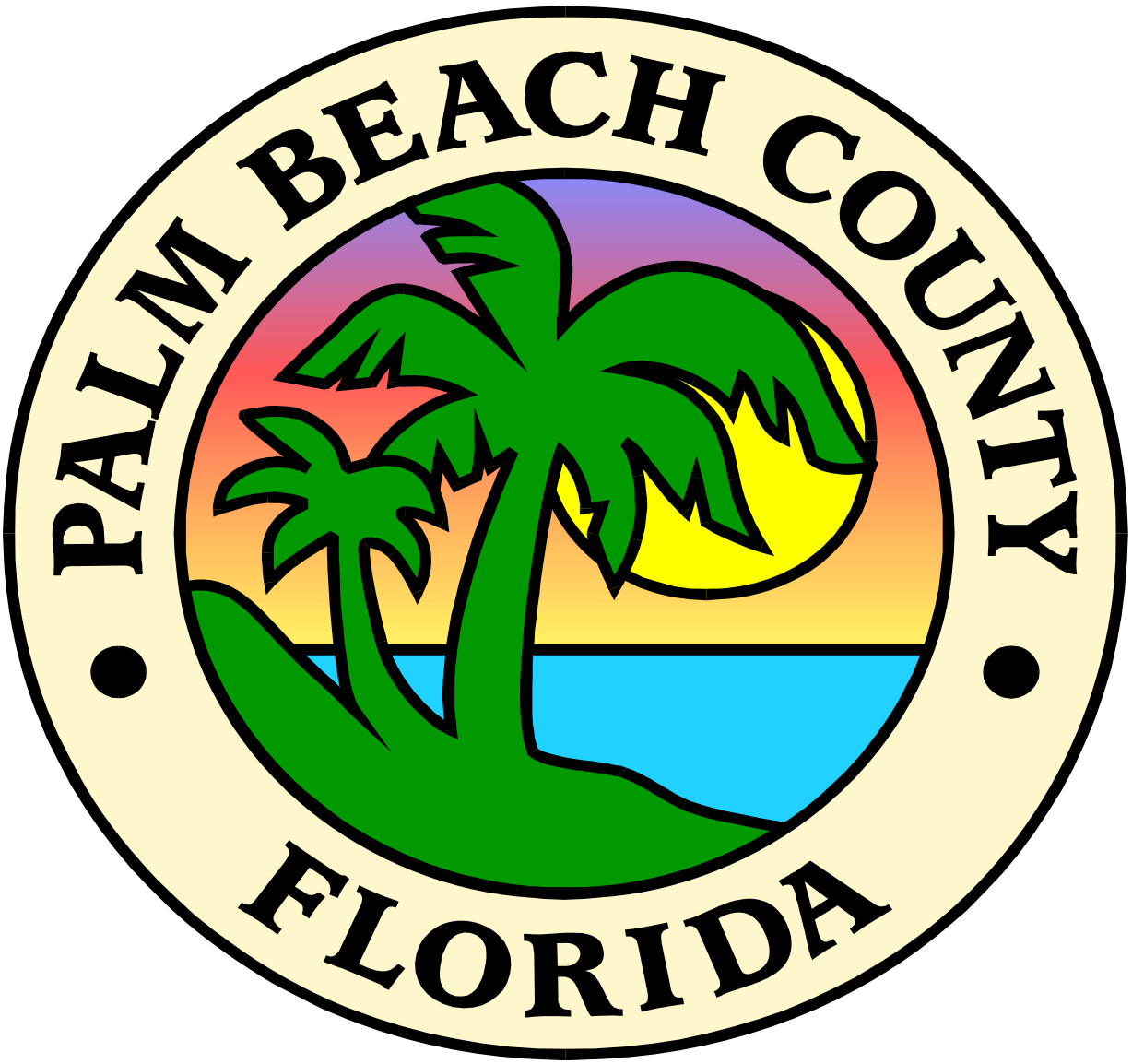
2045 Long Range Transportation Plan

PALM BEACH Transportation Planning Agency

PALM BEACH COUNTY, FL
FISCAL YEARS 2018-2022
CAPITAL IMPROVEMENT PROGRAM



CAPITAL IMPROVEMENT PROGRAM



FISCAL YEARS 2018 - 2022

PALM BEACH COUNTY
CAPITAL IMPROVEMENT PROGRAM
FISCAL YEARS 2018-2022
($ in 1,000)

Department: **Engineering and Public Works**

	Approved 2018	2019	2020	Estimated 2021	2022	Total 5 Years
Large Capital Projects						
Resurfacing-Okeechobee Blvd/SPW Rd to Royal Palm Beach Blvd	1,500	0	0	0	0	1,500
Resurfacing-Old Boynton Rd/Knuth Rd to Congress Ave	200	0	0	0	0	200
Resurfacing-Palm Beach Lakes Blvd/I-95 to US-1	0	0	0	0	700	700
Resurfacing-Palm Beach Lakes Blvd/Okeechobee Blvd to I-95	0	0	0	0	400	400
Resurfacing-Palmetto Park Rd/Glades Rd to Crawford Blvd	0	0	0	0	3,700	3,700
Resurfacing-Pinehurst Dr/Lake Worth Rd to Forest Hill Blvd	0	500	0	0	0	500
Resurfacing-Pipers Glen Blvd/Jog Rd to Military Trl	0	0	0	0	200	200
Resurfacing-Pratt Whitney Rd/Indiantown Rd to N. County Line	200	0	0	0	0	200
Resurfacing-Prosperity Farms Rd/Hood Rd to Donald Ross Rd	0	0	0	0	300	300
Resurfacing-Prosperity Farms/Northlake Blvd to Alamanda Dr	0	0	200	0	0	200
Resurfacing-Randolph Siding Rd/110th to Jupiter Farms Rd	200	0	0	0	0	200
Resurfacing-S.W. 18th St/SR7 to Boca Rio Rd	0	900	0	0	0	900
Resurfacing-S.W. 8th St/S.W. 65th Ave to Boca Rio Rd	0	0	0	0	400	400
Resurfacing-Sam Senter Rd/CR880 to Gator Blvd	200	0	0	0	0	200
Resurfacing-Sandy Run Rd/120th Place N. to Jupiter Farms Rd	0	0	0	0	300	300
Resurfacing-Seacrest Blvd/Gulfstream Blvd to Hypoluxo Rd	0	0	0	2,400	0	2,400
Resurfacing-Summit Blvd/Military Trl to Congress Ave	700	0	0	0	0	700
Resurfacing-Westgate Ave/Military Trl to Congress Ave	0	0	0	0	500	500
Resurfacing-Woolbright Rd/Congress Ave to Federal Hwy	0	0	0	600	0	600
Resurfacing-Woolbright Rd/Lawrence Rd to Congress Ave	0	200	0	0	0	200

PALM BEACH COUNTY
CAPITAL IMPROVEMENT PROGRAM
FISCAL YEARS 2018-2022
($ in 1,000)

Department: **Engineering and Public Works**

	Approved 2018	2019	2020	Estimated 2021	2022	Total 5 Years
Large Capital Projects						
Striping-Sections of Woolbright Rd	0	0	0	0	50	50
Striping-Sections of Yamato Rd	75	0	50	0	0	125
TOTAL PROJECTS	**25,550**	**13,900**	**9,792**	**33,360**	**24,020**	**106,622**

Palm Beach County Capital Improvement Program
FY 2018 - FY 2022 ($ in 1,000)
Capital Project Proposal

Project Title: Resurfacing-Woolbright Rd/Congress Ave to Federal Hwy **Fund #:** 3950 **Unit #:** 1668

Description: Resurfacing - Woolbright Road / Congress Avenue to Federal Hwy

COST PROJECTIONS:

Element	Spending Prior FY's	FY 2017 Current	FY 2018 Request	FY 2019	FY 2020	FY 2021	FY 2022	Beyond 2022	Total
Acquisition	0	0	0	0	0	0	0	0	0
Construction	0	0	0	0	0	600	0	0	600
Design	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**0**	**0**	**0**	**600**	**0**	**0**	**600**

Comprehensive Plan

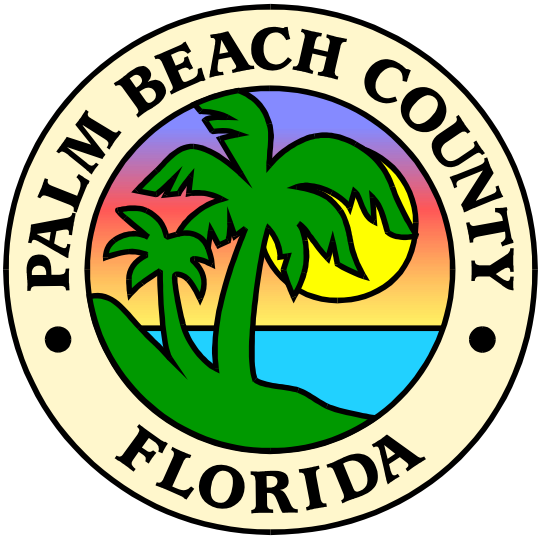
Comp Plan Element	TE
Policy Number	1.1
Project Category	2
Project Location	1
Special Y/N	N
High Hazard Area Y/N	Y

FUNDING PROJECTIONS:

Category	Funding Prior FY's	FY 2017 Current	FY 2018 Request (Funded)	FY 2019 (Unfunded)	FY 2020 (Unfunded)	FY 2021 (Unfunded)	FY 2022 (Unfunded)	Beyond 2022 (Unfunded)	Total
Ad Valorem	0	0	0	0	0	0	0	0	0
Bonds	0	0	0	0	0	0	0	0	0
Grants	0	0	0	0	0	0	0	0	0
Impact Fees	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
SurTax	0	0	0	0	0	600	0	0	600
Total	**0**	**0**	**0**	**0**	**0**	**600**	**0**	**0**	**600**

Operating Cost Projections

	1st Year	Annual Ongoing
F/Y		
Staff		
O & M		
Equipment		
Other		
Total	0	0
# of Positions		



APPENDIX C

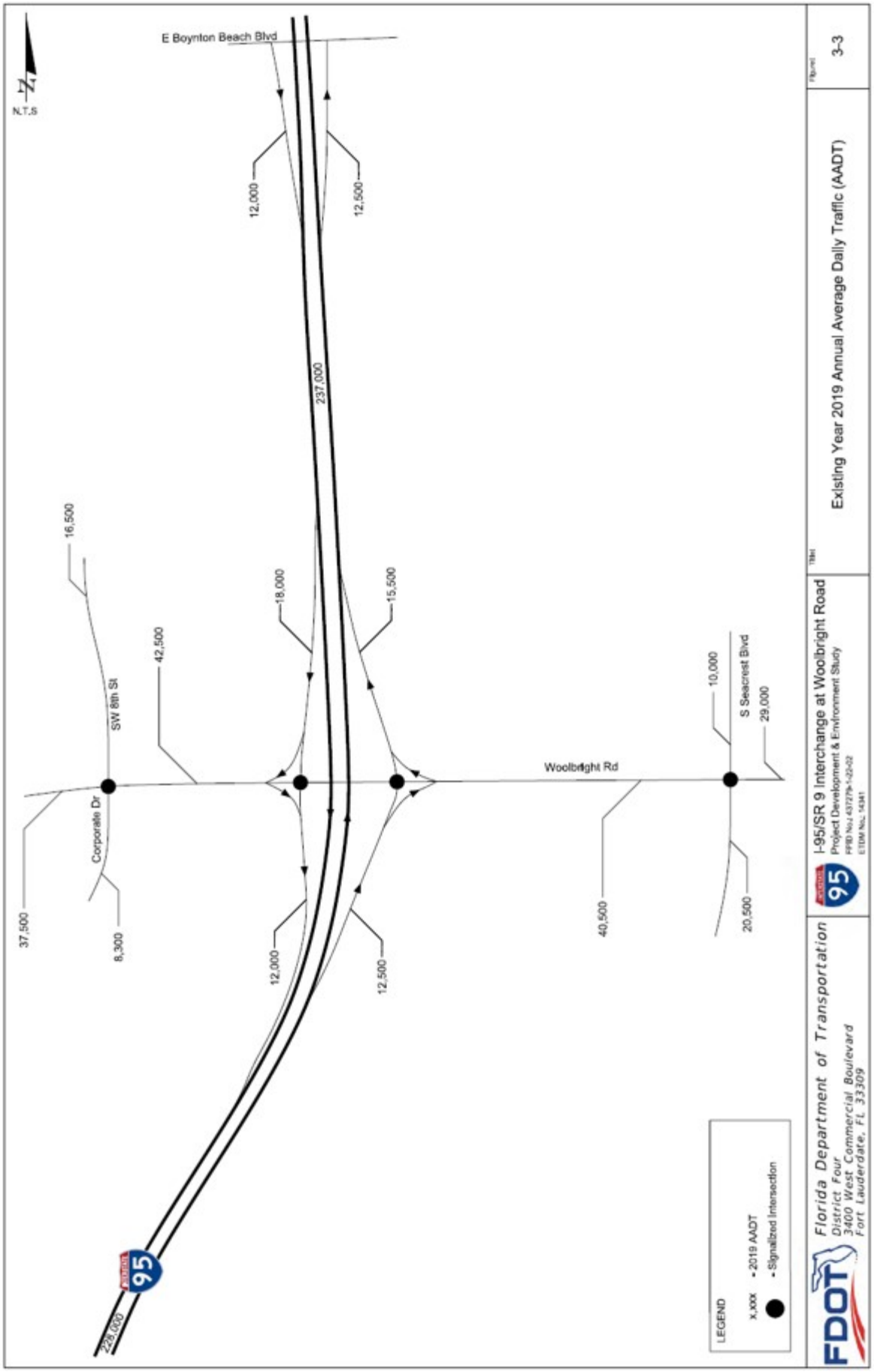
Project Traffic Volumes

I-95/SR-9 at Woolbright Road IMR Volumes

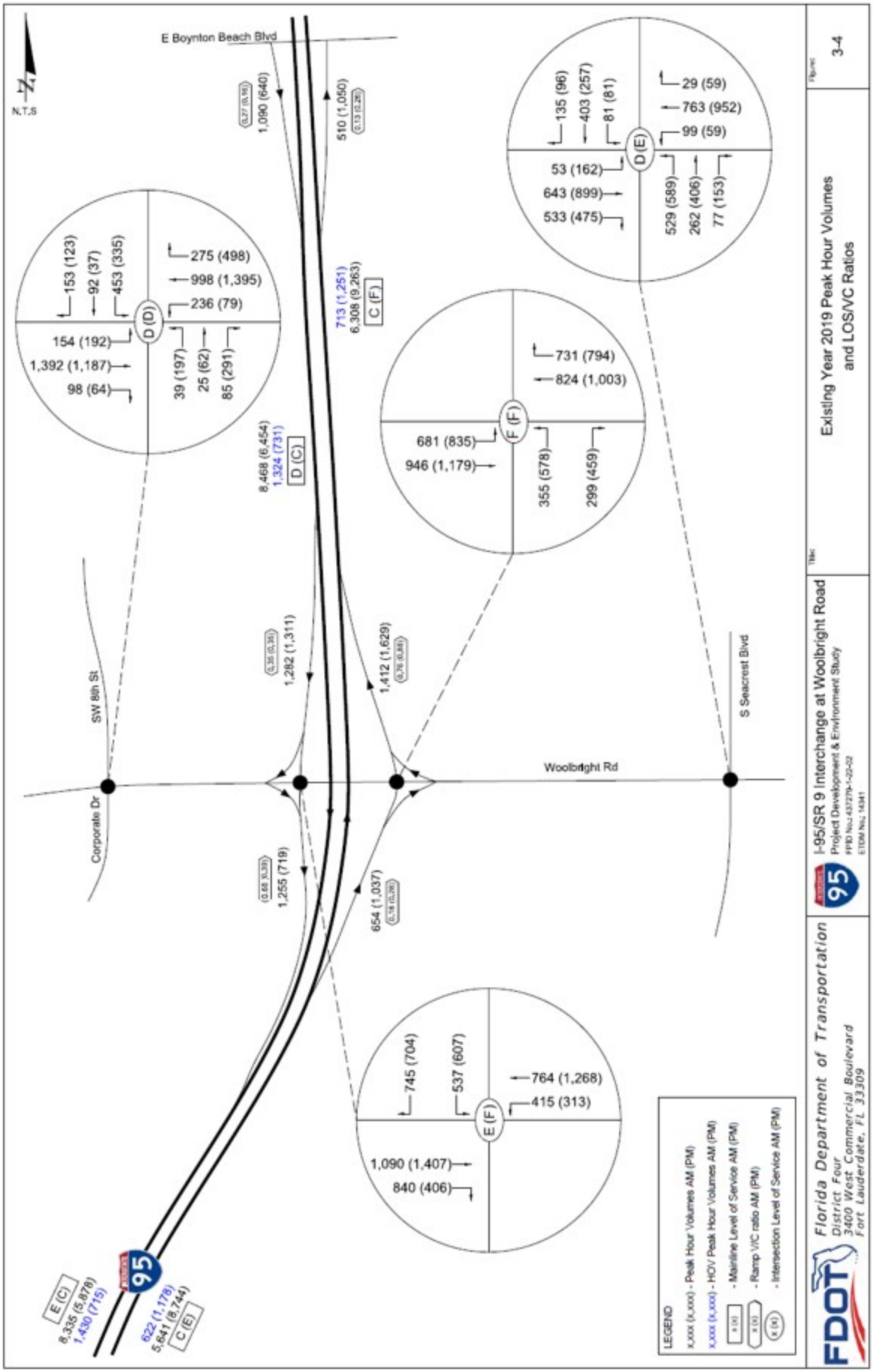
SERPM 8.513 Volumes

Traffic Validation Form

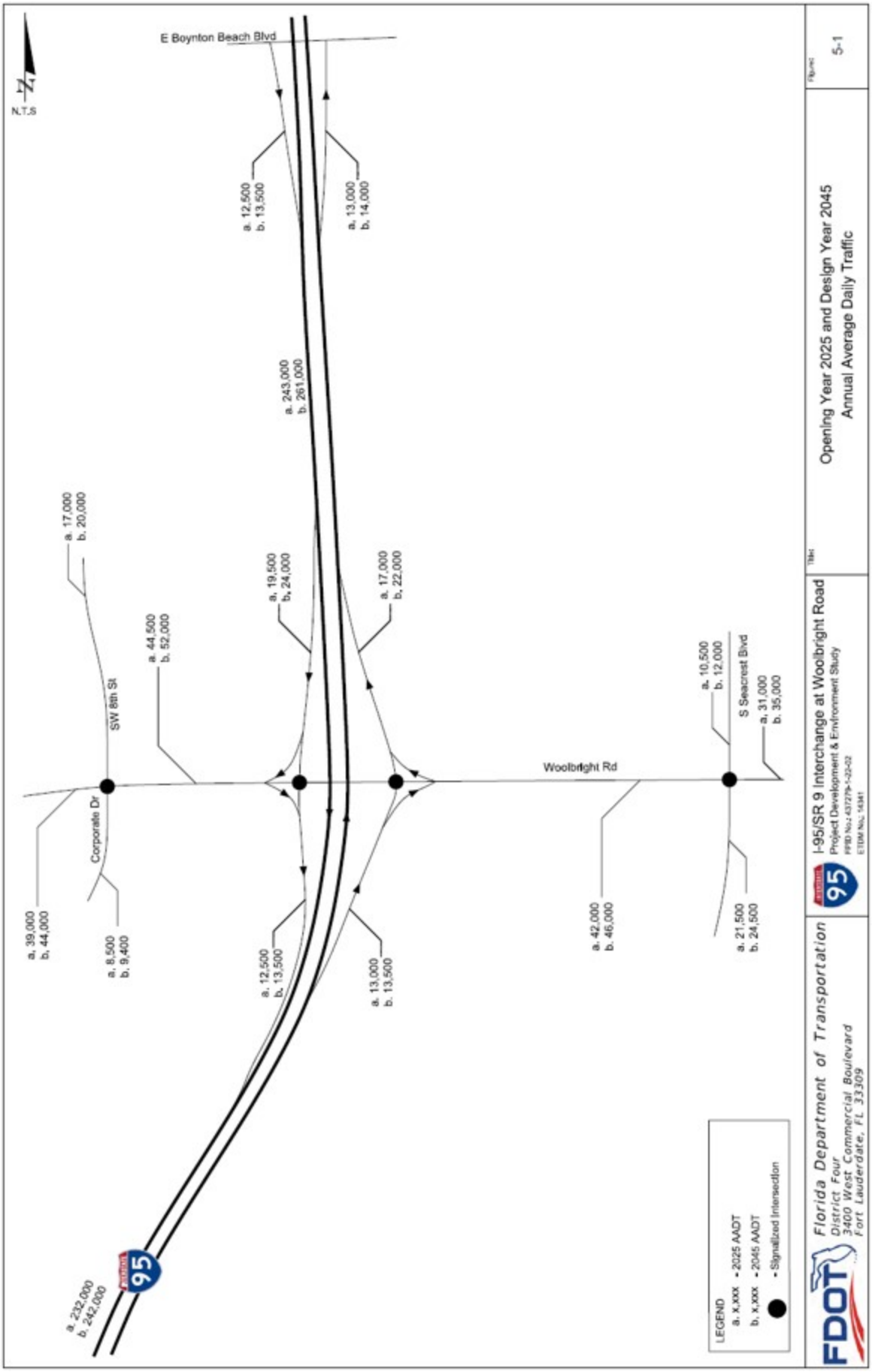
APPENDIX C



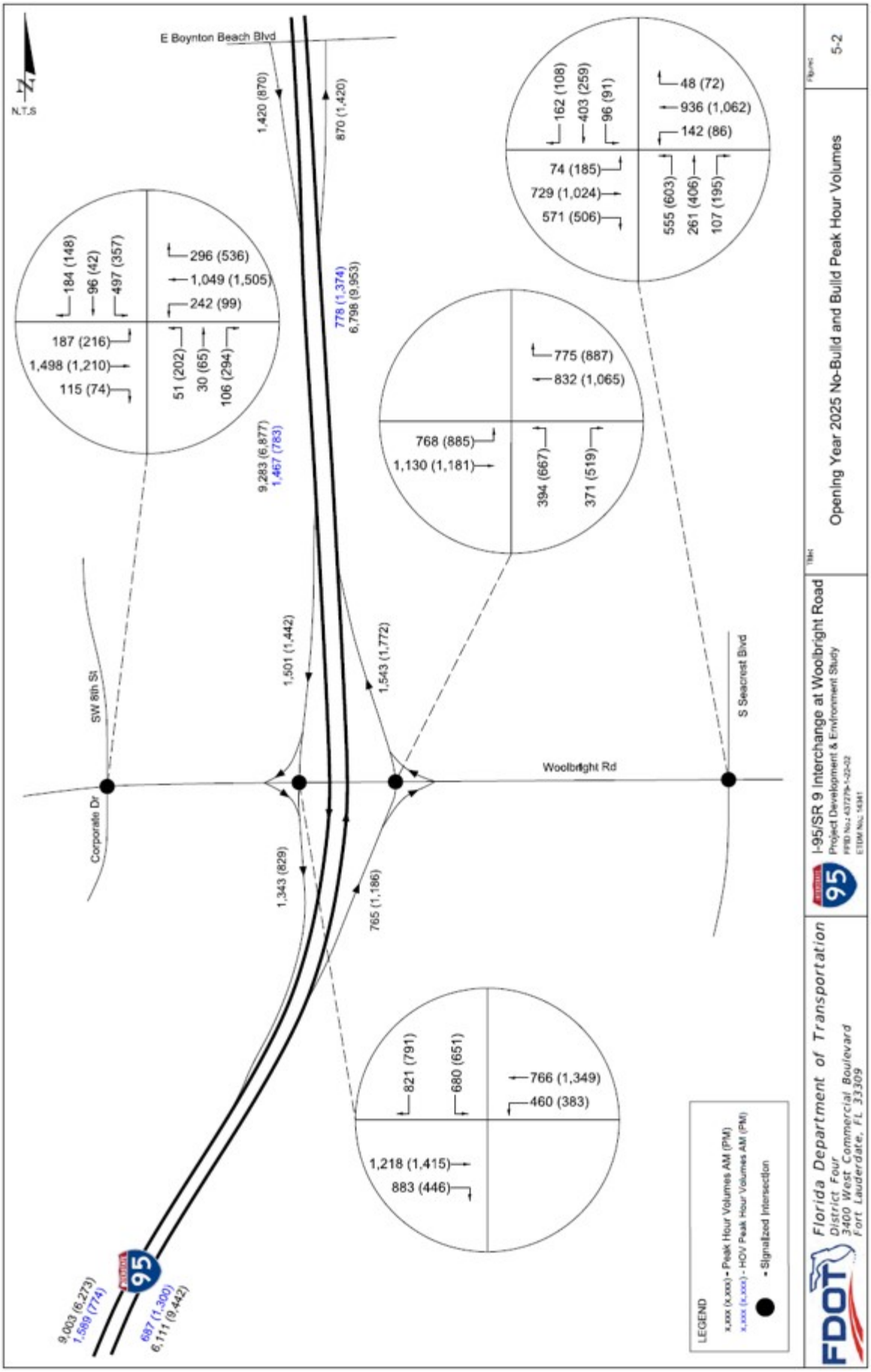
June 2021 I-95/SR 9 at Woolbright Road IMR Existing Year 2019 AADTs



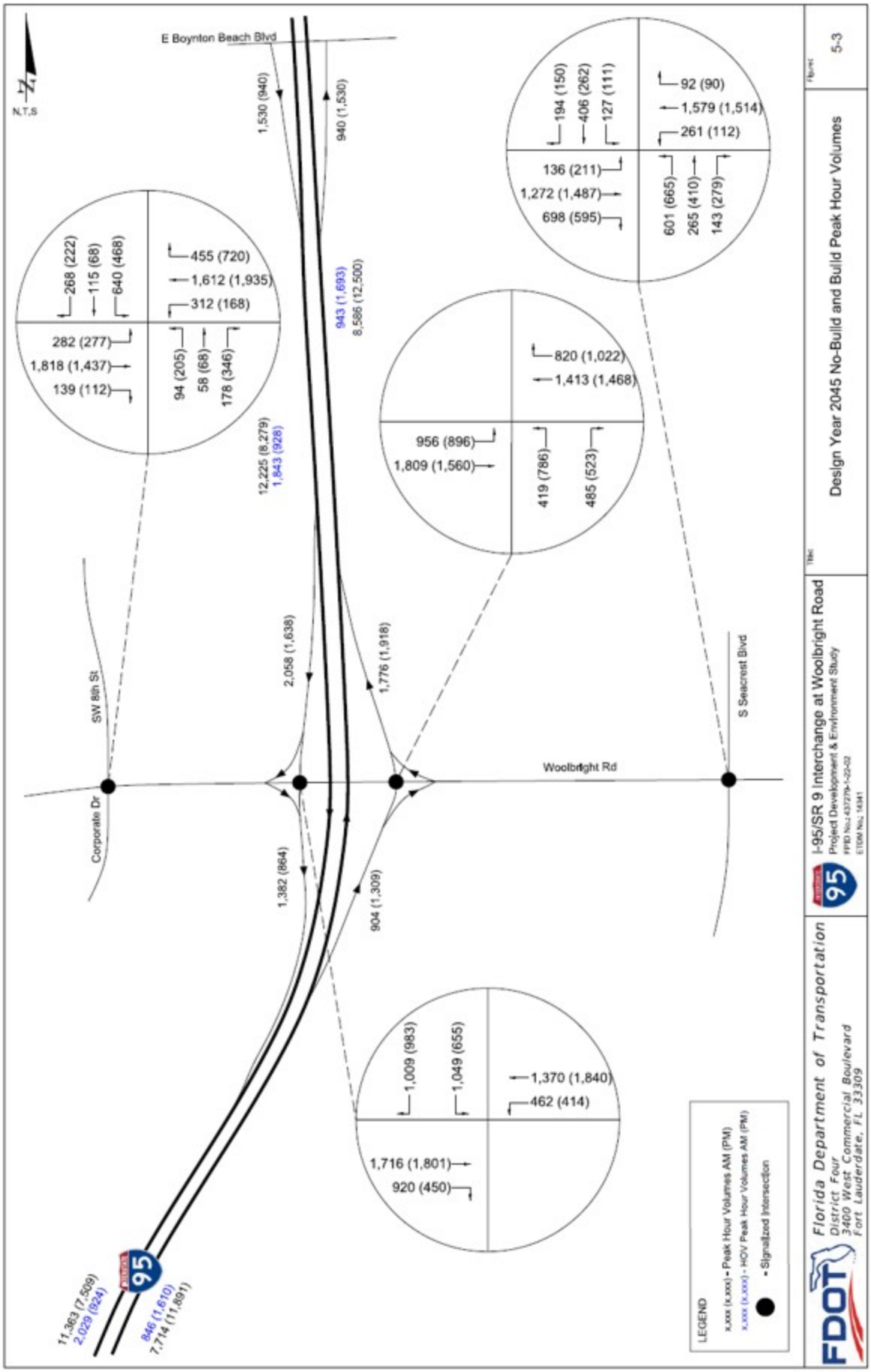
June 2021 I-95/SR 9 at Woolbright Road IMR Existing Year 2019 Peak hour Volumes and LOS/VC Ratios



June 2021 I-95/SR 9 at Woolbright Road IMR Opening Year 2025 and Design Year 2045 AADTs



June 2021 I-95/SR 9 at Woolbright Road IMR Opening Year 2025 Peak hour Volumes



June 2021 I-95/SR 9 at Woolbright Road IMR Design Year 2045 Peak hour Volumes

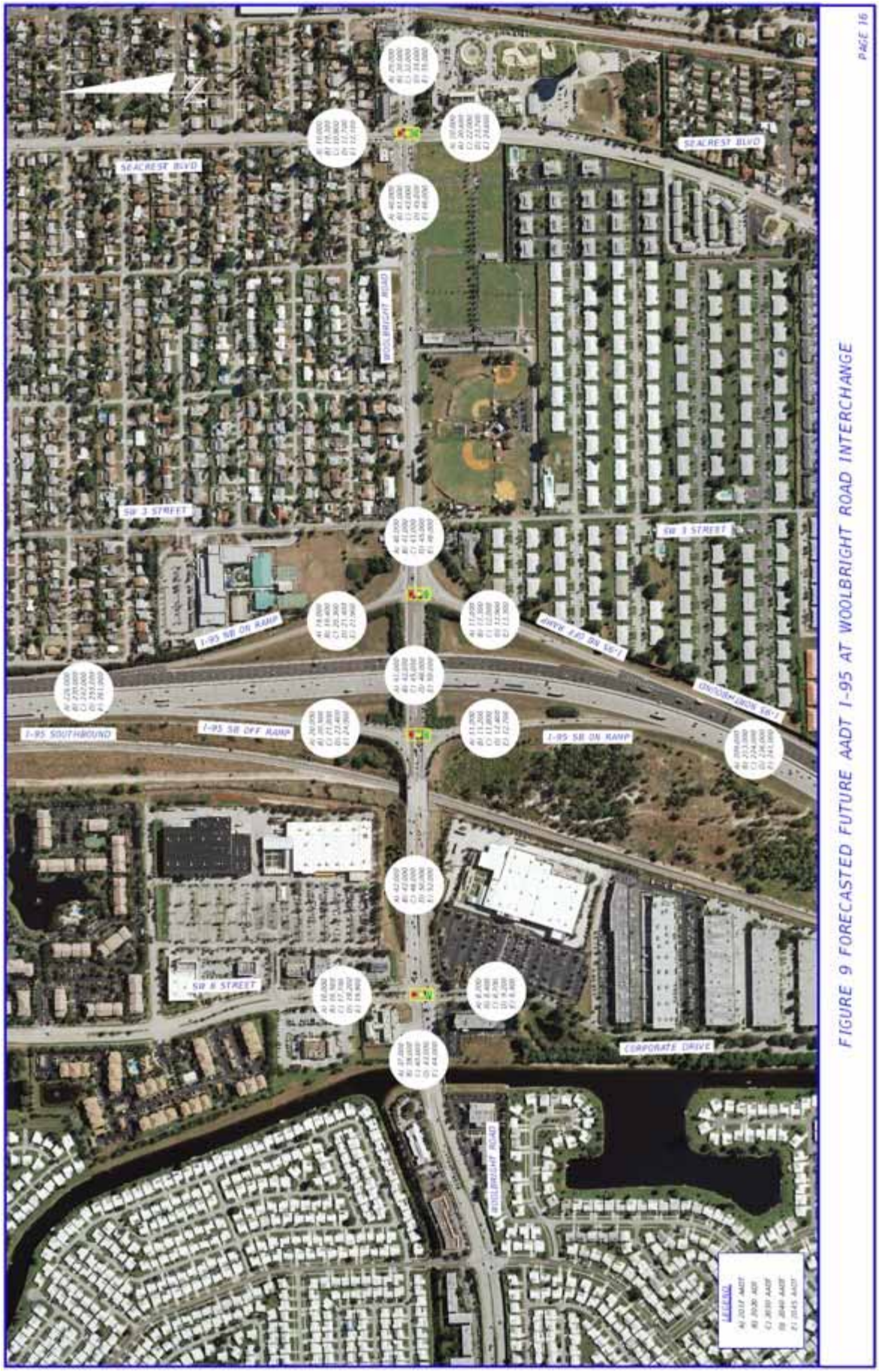


FIGURE 9 FORECASTED FUTURE AADT I-95 AT WOOLBRIGHT ROAD INTERCHANGE

June 2021 I-95/SR 9 at Woolbright Road IMR Appendix B – Traffic Data Collection & Projections (12/21/2017)

APPENDIX D

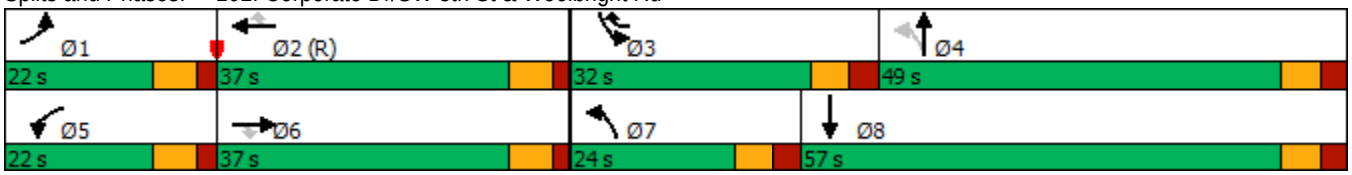
Approved IAR Alternative
Intersection Operational Analysis
Woolbright Road
Opening Year 2025
Design Year 2045

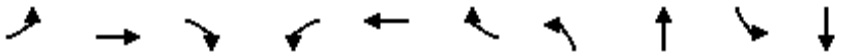
APPENDIX D

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	185	1500	115	240	1050	295	50	30	500	95
Future Volume (vph)	185	1500	115	240	1050	295	50	30	500	95
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	pm+pt	NA	Prot	NA
Protected Phases	1	6		5	2	3	7	4	3	8
Permitted Phases			6			2	4			
Detector Phase	1	6	6	5	2	3	7	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	20.0	20.0	4.0	20.0	4.0	4.0	6.0	4.0	6.0
Minimum Split (s)	11.5	26.5	26.5	11.5	26.5	12.0	12.0	24.0	12.0	24.0
Total Split (s)	22.0	37.0	37.0	22.0	37.0	32.0	24.0	49.0	32.0	57.0
Total Split (%)	15.7%	26.4%	26.4%	15.7%	26.4%	22.9%	17.1%	35.0%	22.9%	40.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	12.3	64.8	64.8	14.6	67.1	97.4	17.3	9.8	23.8	28.5
Actuated g/C Ratio	0.09	0.46	0.46	0.10	0.48	0.70	0.12	0.07	0.17	0.20
v/c Ratio	0.65	0.67	0.14	0.71	0.36	0.26	0.31	0.66	0.90	0.73
Control Delay	71.8	32.6	0.5	54.8	35.2	4.9	41.0	31.5	76.3	49.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.8	32.6	0.5	54.8	35.2	4.9	41.0	31.5	76.3	49.6
LOS	E	C	A	D	D	A	D	C	E	D
Approach Delay		34.6			32.5			34.1		66.7
Approach LOS		C			C			C		E

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 139 (99%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.90	
Intersection Signal Delay: 39.6	Intersection LOS: D
Intersection Capacity Utilization 80.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 101: Corporate Dr/SW 8th St & Woolbright Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	195	1579	121	253	1105	311	53	143	526	295
v/c Ratio	0.65	0.67	0.14	0.71	0.36	0.26	0.31	0.66	0.90	0.73
Control Delay	71.8	32.6	0.5	54.8	35.2	4.9	41.0	31.5	76.3	49.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	71.8	32.6	0.5	54.8	35.2	4.9	41.0	31.5	76.3	49.6
Queue Length 50th (ft)	90	395	0	119	248	40	36	29	242	196
Queue Length 95th (ft)	128	552	1	162	305	74	63	94	#329	283
Internal Link Dist (ft)		429			1266			315		1226
Turn Bay Length (ft)	200		200	250		350			200	
Base Capacity (vph)	382	2352	835	399	3071	1206	290	571	613	649
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.67	0.14	0.63	0.36	0.26	0.18	0.25	0.86	0.45

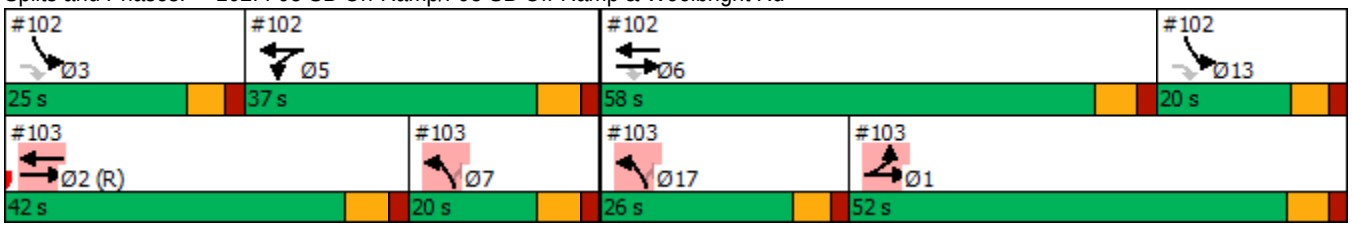
Intersection Summary

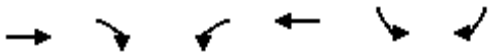
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR	Ø1	Ø2	Ø3	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	1220	885	460	765	680	820						
Future Volume (vph)	1220	885	460	765	680	820						
Turn Type	NA	custom	Prot	NA	Prot	Free						
Protected Phases	6		5	6 5	3 13		1	2	3	7	13	17
Permitted Phases		3 6 13				Free						
Detector Phase	6	3 6 13	5	6 5	3 13							
Switch Phase												
Minimum Initial (s)	10.0		6.0				6.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	17.0		13.0				13.0	17.0	13.0	13.0	12.0	12.0
Total Split (s)	58.0		37.0				52.0	42.0	25.0	20.0	20.0	26.0
Total Split (%)	41.4%		26.4%				37%	30%	18%	14%	14%	19%
Yellow Time (s)	4.5		4.5				4.5	4.5	4.0	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lead		Lag				Lag	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None				None	C-Max	None	None	None	None
Act Effct Green (s)	51.5	94.7	32.8	90.8	36.7	140.0						
Actuated g/C Ratio	0.37	0.68	0.23	0.65	0.26	1.00						
v/c Ratio	0.46	0.85	0.60	0.24	0.55	0.55						
Control Delay	45.7	34.6	15.4	4.1	46.0	1.4						
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0						
Total Delay	45.7	34.6	15.4	4.1	46.0	1.4						
LOS	D	C	B	A	D	A						
Approach Delay	41.0			8.3								
Approach LOS	D			A								

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 26.7	Intersection LOS: C
Intersection Capacity Utilization 96.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 102: I-95 SB On-Ramp/I-95 SB Off-Ramp & Woolbright Rd





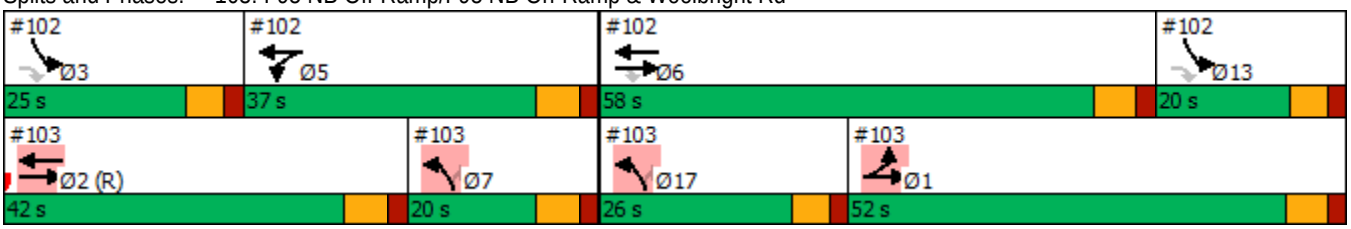
Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1284	932	484	805	716	863
v/c Ratio	0.46	0.85	0.60	0.24	0.55	0.55
Control Delay	45.7	34.6	15.4	4.1	46.0	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.7	34.6	15.4	4.1	46.0	1.4
Queue Length 50th (ft)	297	533	222	119	197	0
Queue Length 95th (ft)	321	831	289	143	237	0
Internal Link Dist (ft)	1266			595		
Turn Bay Length (ft)		400			300	250
Base Capacity (vph)	2775	1120	803	3296	1390	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.83	0.60	0.24	0.52	0.55

Intersection Summary

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR	Ø3	Ø5	Ø6	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	770	1130	830	775	395	370						
Future Volume (vph)	770	1130	830	775	395	370						
Turn Type	Prot	NA	NA	Free	Prot	Perm						
Protected Phases	1	1 2	2		7 17		3	5	6	7	13	17
Permitted Phases				Free		7 17						
Detector Phase	1	1 2	2		7 17	7 17						
Switch Phase												
Minimum Initial (s)	6.0		10.0				6.0	6.0	10.0	6.0	6.0	6.0
Minimum Split (s)	13.0		17.0				13.0	13.0	17.0	13.0	12.0	12.0
Total Split (s)	52.0		42.0				25.0	37.0	58.0	20.0	20.0	26.0
Total Split (%)	37.1%		30.0%				18%	26%	41%	14%	14%	19%
Yellow Time (s)	4.5		4.5				4.0	4.5	4.5	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lag		Lead				Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		C-Max				None	None	None	None	None	None
Act Effct Green (s)	52.2	94.2	35.5	140.0	32.8	32.8						
Actuated g/C Ratio	0.37	0.67	0.25	1.00	0.23	0.23						
v/c Ratio	0.63	0.35	0.46	0.52	0.36	0.77						
Control Delay	15.4	2.0	45.0	1.2	44.9	37.2						
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0						
Total Delay	15.4	2.0	45.0	1.2	44.9	37.2						
LOS	B	A	D	A	D	D						
Approach Delay		7.4	23.9									
Approach LOS		A	C									

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 19.7	Intersection LOS: B
Intersection Capacity Utilization 96.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 103: I-95 NB Off-Ramp/I-95 NB On-Ramp & Woolbright Rd



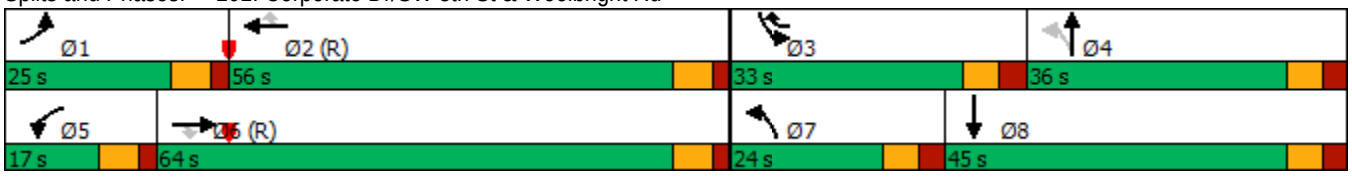
Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	811	1189	874	816	416	389
v/c Ratio	0.63	0.35	0.46	0.52	0.36	0.77
Control Delay	15.4	2.0	45.0	1.2	44.9	37.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.4	2.0	45.0	1.2	44.9	37.2
Queue Length 50th (ft)	403	37	166	0	112	189
Queue Length 95th (ft)	469	120	196	0	137	300
Internal Link Dist (ft)		595	645			
Turn Bay Length (ft)				575	340	255
Base Capacity (vph)	1280	3422	1912	1583	1407	572
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.63	0.35	0.46	0.52	0.30	0.68

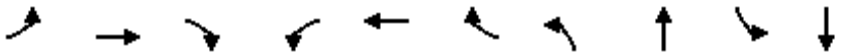
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	215	1210	75	100	1505	535	200	65	355	40
Future Volume (vph)	215	1210	75	100	1505	535	200	65	355	40
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	pm+pt	NA	Prot	NA
Protected Phases	1	6		5	2	3	7	4	3	8
Permitted Phases			6			2	4			
Detector Phase	1	6	6	5	2	3	7	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	20.0	20.0	4.0	20.0	4.0	4.0	6.0	4.0	6.0
Minimum Split (s)	11.5	26.5	26.5	11.5	26.5	12.0	12.0	24.0	12.0	24.0
Total Split (s)	25.0	64.0	64.0	17.0	56.0	33.0	24.0	36.0	33.0	45.0
Total Split (%)	16.7%	42.7%	42.7%	11.3%	37.3%	22.0%	16.0%	24.0%	22.0%	30.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	14.2	66.0	66.0	8.7	60.6	87.9	43.0	27.4	20.9	32.6
Actuated g/C Ratio	0.09	0.44	0.44	0.06	0.40	0.59	0.29	0.18	0.14	0.22
v/c Ratio	0.70	0.57	0.10	0.53	0.61	0.49	0.56	0.93	0.78	0.44
Control Delay	77.1	34.0	0.3	67.7	48.3	9.7	39.7	67.4	74.1	22.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.1	34.0	0.3	67.7	48.3	9.7	39.7	67.4	74.1	22.1
LOS	E	C	A	E	D	A	D	E	E	C
Approach Delay		38.5			39.6			57.5		56.0
Approach LOS		D			D			E		E

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 5 (3%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 43.2	Intersection LOS: D
Intersection Capacity Utilization 82.2%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 101: Corporate Dr/SW 8th St & Woolbright Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	226	1274	79	105	1584	563	211	379	374	200
v/c Ratio	0.70	0.57	0.10	0.53	0.61	0.49	0.56	0.93	0.78	0.44
Control Delay	77.1	34.0	0.3	67.7	48.3	9.7	39.7	67.4	74.1	22.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.1	34.0	0.3	67.7	48.3	9.7	39.7	67.4	74.1	22.1
Queue Length 50th (ft)	112	353	0	54	350	122	142	241	185	63
Queue Length 95th (ft)	154	427	0	88	448	148	202	#433	234	138
Internal Link Dist (ft)		429			1266			315		1226
Turn Bay Length (ft)	200		200	250		350			200	
Base Capacity (vph)	423	2238	796	240	2587	1179	395	434	595	506
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.57	0.10	0.44	0.61	0.48	0.53	0.87	0.63	0.40

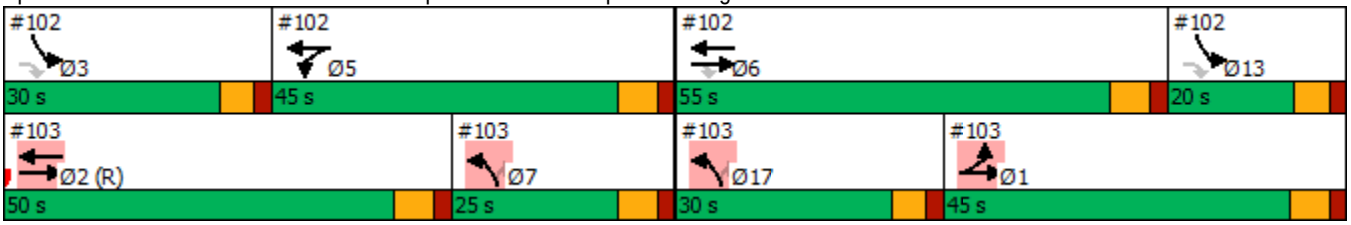
Intersection Summary

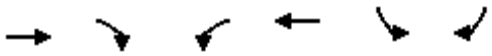
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR	Ø1	Ø2	Ø3	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	1415	445	385	1350	650	790						
Future Volume (vph)	1415	445	385	1350	650	790						
Turn Type	NA	custom	Prot	NA	Prot	Free						
Protected Phases	6		5	6 5	3 13		1	2	3	7	13	17
Permitted Phases		3 6 13				Free						
Detector Phase	6	3 6 13	5	6 5	3 13							
Switch Phase												
Minimum Initial (s)	10.0		6.0				6.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	17.0		13.0				13.0	17.0	13.0	13.0	12.0	12.0
Total Split (s)	55.0		45.0				45.0	50.0	30.0	25.0	20.0	30.0
Total Split (%)	36.7%		30.0%				30%	33%	20%	17%	13%	20%
Yellow Time (s)	4.5		4.5				4.5	4.5	4.0	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lead		Lag				Lag	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None				None	C-Max	None	None	None	None
Act Effct Green (s)	48.5	88.4	49.1	104.1	33.4	150.0						
Actuated g/C Ratio	0.32	0.59	0.33	0.69	0.22	1.00						
v/c Ratio	0.61	0.47	0.36	0.40	0.62	0.53						
Control Delay	43.5	29.4	6.9	3.8	54.8	1.3						
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0						
Total Delay	43.5	29.4	6.9	3.9	54.8	1.3						
LOS	D	C	A	A	D	A						
Approach Delay	40.1			4.6								
Approach LOS	D			A								

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 23.6	Intersection LOS: C
Intersection Capacity Utilization 66.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 102: I-95 SB On-Ramp/I-95 SB Off-Ramp & Woolbright Rd





Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1489	468	405	1421	684	832
v/c Ratio	0.61	0.47	0.36	0.40	0.62	0.53
Control Delay	43.5	29.4	6.9	3.8	54.8	1.3
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	43.5	29.4	6.9	3.9	54.8	1.3
Queue Length 50th (ft)	336	369	101	230	215	0
Queue Length 95th (ft)	375	m467	243	269	248	0
Internal Link Dist (ft)	1266			595		
Turn Bay Length (ft)		400			300	250
Base Capacity (vph)	2439	1091	1124	3530	1463	1583
Starvation Cap Reductn	0	0	0	669	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.43	0.36	0.50	0.47	0.53

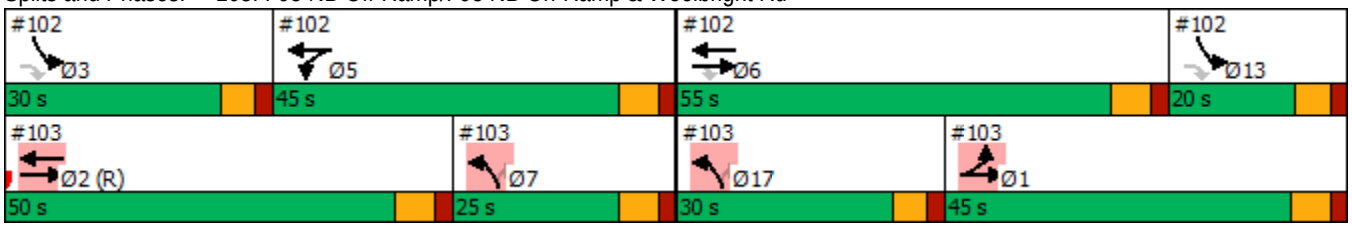
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR	Ø3	Ø5	Ø6	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	885	1180	1065	885	670	520						
Future Volume (vph)	885	1180	1065	885	670	520						
Turn Type	Prot	NA	NA	Free	Prot	Perm						
Protected Phases	1	1 2	2		7 17		3	5	6	7	13	17
Permitted Phases				Free		7 17						
Detector Phase	1	1 2	2		7 17	7 17						
Switch Phase												
Minimum Initial (s)	6.0		10.0				6.0	6.0	10.0	6.0	6.0	6.0
Minimum Split (s)	13.0		17.0				13.0	13.0	17.0	13.0	12.0	12.0
Total Split (s)	45.0		50.0				30.0	45.0	55.0	25.0	20.0	30.0
Total Split (%)	30.0%		33.3%				20%	30%	37%	17%	13%	20%
Yellow Time (s)	4.5		4.5				4.0	4.5	4.5	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lag		Lead				Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		C-Max				None	None	None	None	None	None
Act Effct Green (s)	40.4	90.4	43.5	150.0	46.6	46.6						
Actuated g/C Ratio	0.27	0.60	0.29	1.00	0.31	0.31						
v/c Ratio	1.01	0.41	0.51	0.59	0.45	0.91						
Control Delay	51.7	5.0	45.4	1.6	42.3	53.8						
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0						
Total Delay	51.7	5.0	45.4	1.6	42.3	53.8						
LOS	D	A	D	A	D	D						
Approach Delay		25.0	25.5									
Approach LOS		C	C									

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 30.3	Intersection LOS: C
Intersection Capacity Utilization 66.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 103: I-95 NB Off-Ramp/I-95 NB On-Ramp & Woolbright Rd



Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	932	1242	1121	932	705	547
v/c Ratio	1.01	0.41	0.51	0.59	0.45	0.91
Control Delay	51.7	5.0	45.4	1.6	42.3	53.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.7	5.0	45.4	1.6	42.3	53.8
Queue Length 50th (ft)	~525	200	226	0	192	378
Queue Length 95th (ft)	#661	183	258	0	232	#597
Internal Link Dist (ft)		595	645			
Turn Bay Length (ft)				575	340	255
Base Capacity (vph)	924	3064	2187	1583	1613	622
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.01	0.41	0.51	0.59	0.44	0.88

Intersection Summary

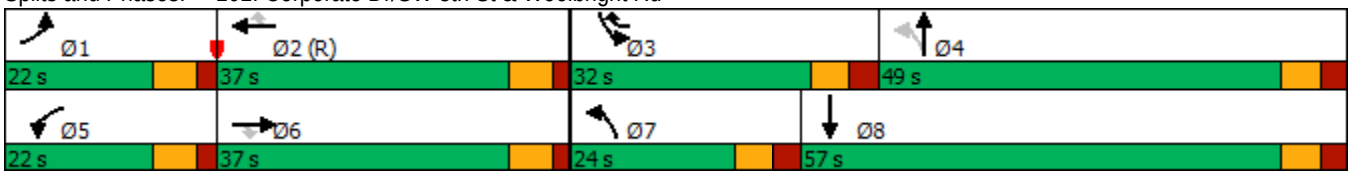
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

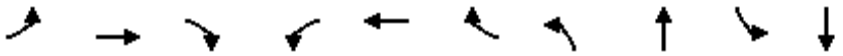
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	280	1815	140	310	1615	455	95	60	640	115
Future Volume (vph)	280	1815	140	310	1615	455	95	60	640	115
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	pm+pt	NA	Prot	NA
Protected Phases	1	6		5	2	3	7	4	3	8
Permitted Phases			6			2	4			
Detector Phase	1	6	6	5	2	3	7	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	20.0	20.0	4.0	20.0	4.0	4.0	6.0	4.0	6.0
Minimum Split (s)	11.5	26.5	26.5	11.5	26.5	12.0	12.0	24.0	12.0	24.0
Total Split (s)	22.0	37.0	37.0	22.0	37.0	32.0	24.0	49.0	32.0	57.0
Total Split (%)	15.7%	26.4%	26.4%	15.7%	26.4%	22.9%	17.1%	35.0%	22.9%	40.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	16.5	51.0	51.0	18.1	52.6	84.1	28.7	18.9	25.0	34.1
Actuated g/C Ratio	0.12	0.36	0.36	0.13	0.38	0.60	0.20	0.14	0.18	0.24
v/c Ratio	0.73	1.03	0.21	0.74	0.71	0.42	0.51	0.79	1.10	0.85
Control Delay	70.2	72.5	2.7	53.8	55.8	12.3	39.4	49.3	118.8	54.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.2	72.5	2.7	53.8	55.8	12.3	39.4	49.3	118.8	54.8
LOS	E	E	A	D	E	B	D	D	F	D
Approach Delay		67.8			47.2			46.5		94.8
Approach LOS		E			D			D		F

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 139 (99%), Referenced to phase 2:WBT, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 63.0	Intersection LOS: E
Intersection Capacity Utilization 98.9%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 101: Corporate Dr/SW 8th St & Woolbright Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	295	1911	147	326	1700	479	100	252	674	405
v/c Ratio	0.73	1.03	0.21	0.74	0.71	0.42	0.51	0.79	1.10	0.85
Control Delay	70.2	72.5	2.7	53.8	55.8	12.3	39.4	49.3	118.8	54.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.2	72.5	2.7	53.8	55.8	12.3	39.4	49.3	118.8	54.8
Queue Length 50th (ft)	135	~642	0	155	443	70	62	130	~357	284
Queue Length 95th (ft)	180	#992	23	207	#578	205	88	205	#482	375
Internal Link Dist (ft)		429			1266			315		1226
Turn Bay Length (ft)	200		200	250		350			200	
Base Capacity (vph)	425	1851	698	453	2406	1141	287	572	613	655
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.69	1.03	0.21	0.72	0.71	0.42	0.35	0.44	1.10	0.62

Intersection Summary

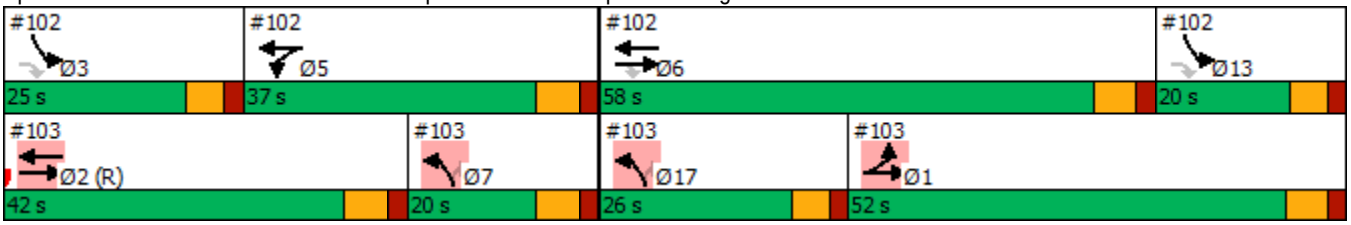
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

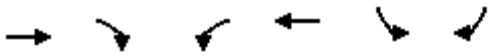
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR	Ø1	Ø2	Ø3	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	1715	920	465	1370	1050	1010						
Future Volume (vph)	1715	920	465	1370	1050	1010						
Turn Type	NA	custom	Prot	NA	Prot	Free						
Protected Phases	6		5	6 5	3 13		1	2	3	7	13	17
Permitted Phases		3 6 13				Free						
Detector Phase	6	3 6 13	5	6 5	3 13							
Switch Phase												
Minimum Initial (s)	10.0		6.0				6.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	17.0		13.0				13.0	17.0	13.0	13.0	12.0	12.0
Total Split (s)	58.0		37.0				52.0	42.0	25.0	20.0	20.0	26.0
Total Split (%)	41.4%		26.4%				37%	30%	18%	14%	14%	19%
Yellow Time (s)	4.5		4.5				4.5	4.5	4.0	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lead		Lag				Lag	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None				None	C-Max	None	None	None	None
Act Effct Green (s)	51.5	97.0	30.5	88.5	39.0	140.0						
Actuated g/C Ratio	0.37	0.69	0.22	0.63	0.28	1.00						
v/c Ratio	0.65	0.86	0.65	0.45	0.79	0.67						
Control Delay	39.6	38.4	12.2	9.8	51.9	2.3						
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0						
Total Delay	39.6	38.4	12.2	9.8	51.9	2.3						
LOS	D	D	B	A	D	A						
Approach Delay	39.2			10.4								
Approach LOS	D			B								

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 27.4	Intersection LOS: C
Intersection Capacity Utilization 105.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 102: I-95 SB On-Ramp/I-95 SB Off-Ramp & Woolbright Rd





Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1805	968	489	1442	1105	1063
v/c Ratio	0.65	0.86	0.65	0.45	0.79	0.67
Control Delay	39.6	38.4	12.2	9.8	51.9	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.6	38.4	12.2	9.8	51.9	2.3
Queue Length 50th (ft)	414	710	228	355	332	0
Queue Length 95th (ft)	m397	m883	295	391	387	0
Internal Link Dist (ft)	1266			595		
Turn Bay Length (ft)		400			300	250
Base Capacity (vph)	2775	1120	747	3214	1390	1583
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.65	0.86	0.65	0.45	0.79	0.67

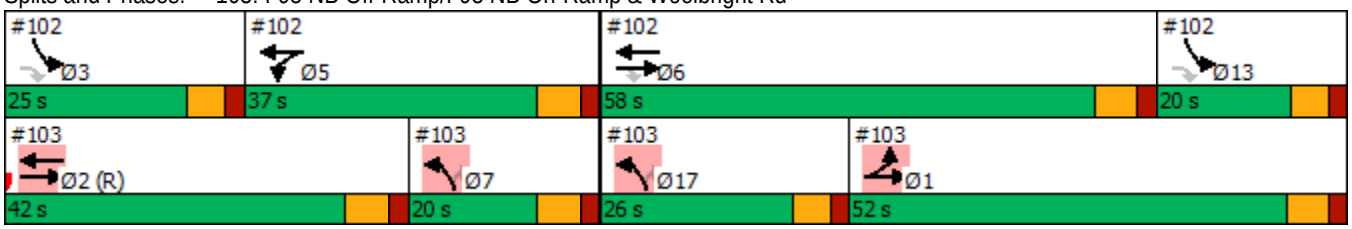
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR	Ø3	Ø5	Ø6	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	955	1810	1415	820	420	485						
Future Volume (vph)	955	1810	1415	820	420	485						
Turn Type	Prot	NA	NA	Free	Prot	Perm						
Protected Phases	1	1 2	2		7 17		3	5	6	7	13	17
Permitted Phases				Free		7 17						
Detector Phase	1	1 2	2		7 17	7 17						
Switch Phase												
Minimum Initial (s)	6.0		10.0				6.0	6.0	10.0	6.0	6.0	6.0
Minimum Split (s)	13.0		17.0				13.0	13.0	17.0	13.0	12.0	12.0
Total Split (s)	52.0		42.0				25.0	37.0	58.0	20.0	20.0	26.0
Total Split (%)	37.1%		30.0%				18%	26%	41%	14%	14%	19%
Yellow Time (s)	4.5		4.5				4.0	4.5	4.5	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lag		Lead				Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		C-Max				None	None	None	None	None	None
Act Effct Green (s)	46.8	88.8	35.5	140.0	38.2	38.2						
Actuated g/C Ratio	0.33	0.63	0.25	1.00	0.27	0.27						
v/c Ratio	0.88	0.59	0.78	0.55	0.33	0.92						
Control Delay	24.9	3.8	52.0	1.4	41.1	54.2						
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0						
Total Delay	24.9	3.8	52.0	1.4	41.1	54.2						
LOS	C	A	D	A	D	D						
Approach Delay		11.1	33.4									
Approach LOS		B	C									

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 25.2	Intersection LOS: C
Intersection Capacity Utilization 105.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 103: I-95 NB Off-Ramp/I-95 NB On-Ramp & Woolbright Rd



Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	1005	1905	1489	863	442	511
v/c Ratio	0.88	0.59	0.78	0.55	0.33	0.92
Control Delay	24.9	3.8	52.0	1.4	41.1	54.2
Queue Delay	0.0	0.1	0.0	0.0	0.0	0.0
Total Delay	24.9	3.8	52.0	1.4	41.1	54.2
Queue Length 50th (ft)	502	213	313	0	112	315
Queue Length 95th (ft)	#581	176	351	0	145	#529
Internal Link Dist (ft)		595	645			
Turn Bay Length (ft)				575	340	255
Base Capacity (vph)	1148	3227	1912	1583	1407	572
Starvation Cap Reductn	0	219	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.63	0.78	0.55	0.31	0.89

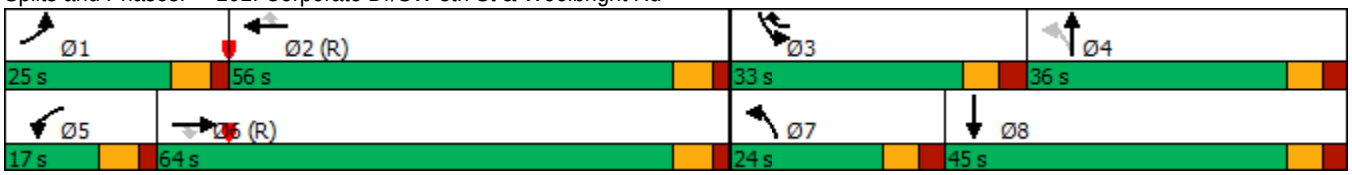
Intersection Summary

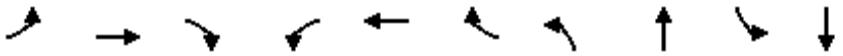
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	275	1435	110	170	1935	720	205	70	470	70
Future Volume (vph)	275	1435	110	170	1935	720	205	70	470	70
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	pm+pt	NA	Prot	NA
Protected Phases	1	6		5	2	3	7	4	3	8
Permitted Phases			6			2	4			
Detector Phase	1	6	6	5	2	3	7	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	20.0	20.0	4.0	20.0	4.0	4.0	6.0	4.0	6.0
Minimum Split (s)	11.5	26.5	26.5	11.5	26.5	12.0	12.0	24.0	12.0	24.0
Total Split (s)	25.0	64.0	64.0	17.0	56.0	33.0	24.0	36.0	33.0	45.0
Total Split (%)	16.7%	42.7%	42.7%	11.3%	37.3%	22.0%	16.0%	24.0%	22.0%	30.0%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	16.2	57.8	57.8	10.2	51.8	82.9	45.6	30.4	24.6	39.8
Actuated g/C Ratio	0.11	0.39	0.39	0.07	0.35	0.55	0.30	0.20	0.16	0.27
v/c Ratio	0.78	0.77	0.16	0.77	0.92	0.69	0.61	0.98	0.88	0.60
Control Delay	79.8	43.6	0.8	79.3	67.8	14.4	39.2	76.9	78.7	37.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.8	43.6	0.8	79.3	67.8	14.4	39.2	76.9	78.7	37.6
LOS	E	D	A	E	E	B	D	E	E	D
Approach Delay		46.5			54.9			64.4		63.0
Approach LOS		D			D			E		E

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 5 (3%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.98	
Intersection Signal Delay: 54.4	Intersection LOS: D
Intersection Capacity Utilization 96.7%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 101: Corporate Dr/SW 8th St & Woolbright Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	289	1511	116	179	2037	758	216	437	495	306
v/c Ratio	0.78	0.77	0.16	0.77	0.92	0.69	0.61	0.98	0.88	0.60
Control Delay	79.8	43.6	0.8	79.3	67.8	14.4	39.2	76.9	78.7	37.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.8	43.6	0.8	79.3	67.8	14.4	39.2	76.9	78.7	37.6
Queue Length 50th (ft)	143	473	0	93	507	154	140	~315	244	180
Queue Length 95th (ft)	193	534	3	#146	#615	230	207	#547	#323	288
Internal Link Dist (ft)		429			1266			315		1226
Turn Bay Length (ft)	200		200	250		350			200	
Base Capacity (vph)	423	1960	719	240	2211	1102	373	446	595	511
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.77	0.16	0.75	0.92	0.69	0.58	0.98	0.83	0.60

Intersection Summary

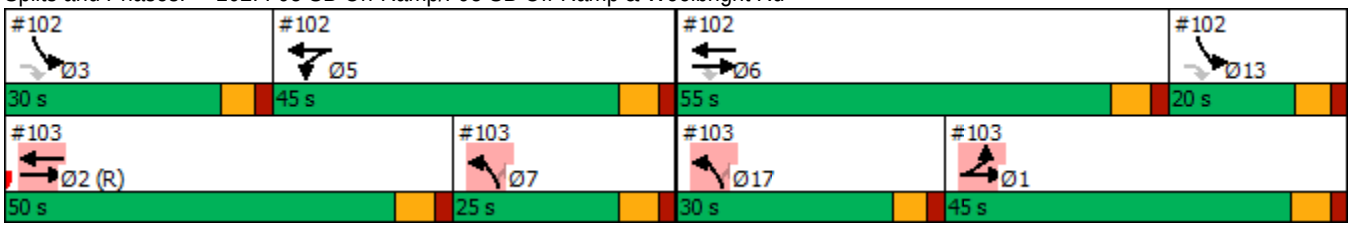
~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

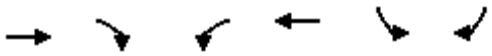
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR	Ø1	Ø2	Ø3	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	1800	450	415	1840	655	985						
Future Volume (vph)	1800	450	415	1840	655	985						
Turn Type	NA	custom	Prot	NA	Prot	Free						
Protected Phases	6		5	6 5	3 13		1	2	3	7	13	17
Permitted Phases		3 6 13				Free						
Detector Phase	6	3 6 13	5	6 5	3 13							
Switch Phase												
Minimum Initial (s)	10.0		6.0				6.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	17.0		13.0				13.0	17.0	13.0	13.0	12.0	12.0
Total Split (s)	55.0		45.0				45.0	50.0	30.0	25.0	20.0	30.0
Total Split (%)	36.7%		30.0%				30%	33%	20%	17%	13%	20%
Yellow Time (s)	4.5		4.5				4.5	4.5	4.0	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lead		Lag				Lag	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None				None	C-Max	None	None	None	None
Act Effct Green (s)	48.5	88.5	49.0	104.0	33.5	150.0						
Actuated g/C Ratio	0.32	0.59	0.33	0.69	0.22	1.00						
v/c Ratio	0.78	0.48	0.39	0.55	0.62	0.66						
Control Delay	43.1	29.7	4.7	5.7	54.7	2.1						
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0						
Total Delay	43.1	29.7	4.7	5.8	54.7	2.1						
LOS	D	C	A	A	D	A						
Approach Delay	40.4			5.6								
Approach LOS	D			A								

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 23.0	Intersection LOS: C
Intersection Capacity Utilization 73.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 102: I-95 SB On-Ramp/I-95 SB Off-Ramp & Woolbright Rd





Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1895	474	437	1937	689	1037
v/c Ratio	0.78	0.48	0.39	0.55	0.62	0.66
Control Delay	43.1	29.7	4.7	5.7	54.7	2.1
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0
Total Delay	43.1	29.7	4.7	5.8	54.7	2.1
Queue Length 50th (ft)	470	380	46	393	217	0
Queue Length 95th (ft)	m489	m473	194	449	249	0
Internal Link Dist (ft)	1266			595		
Turn Bay Length (ft)		400			300	250
Base Capacity (vph)	2439	1083	1121	3526	1463	1583
Starvation Cap Reductn	0	0	0	510	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.44	0.39	0.64	0.47	0.66

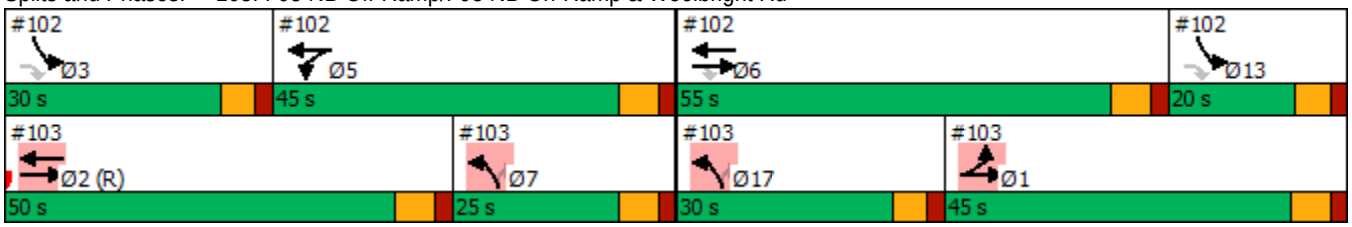
Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR	Ø3	Ø5	Ø6	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	895	1560	1470	1020	785	525						
Future Volume (vph)	895	1560	1470	1020	785	525						
Turn Type	Prot	NA	NA	Free	Prot	Perm						
Protected Phases	1	1 2	2		7 17		3	5	6	7	13	17
Permitted Phases				Free		7 17						
Detector Phase	1	1 2	2		7 17	7 17						
Switch Phase												
Minimum Initial (s)	6.0		10.0				6.0	6.0	10.0	6.0	6.0	6.0
Minimum Split (s)	13.0		17.0				13.0	13.0	17.0	13.0	12.0	12.0
Total Split (s)	45.0		50.0				30.0	45.0	55.0	25.0	20.0	30.0
Total Split (%)	30.0%		33.3%				20%	30%	37%	17%	13%	20%
Yellow Time (s)	4.5		4.5				4.0	4.5	4.5	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lag		Lead				Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		C-Max				None	None	None	None	None	None
Act Effct Green (s)	40.0	90.0	43.5	150.0	47.0	47.0						
Actuated g/C Ratio	0.27	0.60	0.29	1.00	0.31	0.31						
v/c Ratio	1.03	0.54	0.71	0.68	0.53	0.91						
Control Delay	51.0	7.7	49.7	2.4	43.6	54.5						
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0						
Total Delay	51.0	7.9	49.7	2.4	43.6	54.5						
LOS	D	A	D	A	D	D						
Approach Delay		23.6	30.3									
Approach LOS		C	C									

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 31.4	Intersection LOS: C
Intersection Capacity Utilization 73.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 103: I-95 NB Off-Ramp/I-95 NB On-Ramp & Woolbright Rd



Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	942	1642	1547	1074	826	553
v/c Ratio	1.03	0.54	0.71	0.68	0.53	0.91
Control Delay	51.0	7.7	49.7	2.4	43.6	54.5
Queue Delay	0.0	0.2	0.0	0.0	0.0	0.0
Total Delay	51.0	7.9	49.7	2.4	43.6	54.5
Queue Length 50th (ft)	~538	354	335	0	232	386
Queue Length 95th (ft)	#676	383	371	0	276	#611
Internal Link Dist (ft)		595	645			
Turn Bay Length (ft)				575	340	255
Base Capacity (vph)	916	3051	2187	1583	1613	622
Starvation Cap Reductn	0	594	0	0	0	0
Spillback Cap Reductn	0	0	0	0	1	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.03	0.67	0.71	0.68	0.51	0.89

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

APPENDIX E

Build Alternative
Intersection Operational Analysis
Woolbright Road
Opening Year 2025
Design Year 2045

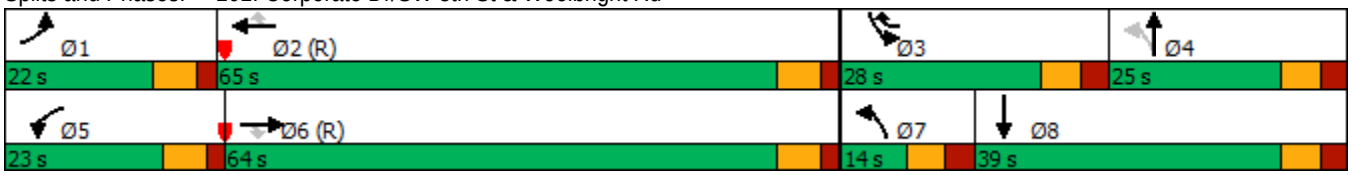
APPENDIX

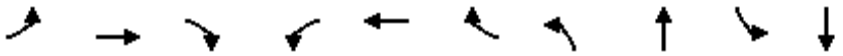
E

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	185	1500	115	240	1050	295	50	30	500	95
Future Volume (vph)	185	1500	115	240	1050	295	50	30	500	95
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	pm+pt	NA	Prot	NA
Protected Phases	1	6		5	2	3	7	4	3	8
Permitted Phases			6			2	4			
Detector Phase	1	6	6	5	2	3	7	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	20.0	20.0	4.0	20.0	4.0	4.0	6.0	4.0	6.0
Minimum Split (s)	11.5	26.5	26.5	11.5	26.5	12.0	12.0	24.0	12.0	24.0
Total Split (s)	22.0	64.0	64.0	23.0	65.0	28.0	14.0	25.0	28.0	39.0
Total Split (%)	15.7%	45.7%	45.7%	16.4%	46.4%	20.0%	10.0%	17.9%	20.0%	27.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	Max	C-Max	None	None	None	None	None
Act Effct Green (s)	12.2	57.5	57.5	24.8	70.1	95.2	18.6	12.1	18.6	26.6
Actuated g/C Ratio	0.09	0.41	0.41	0.18	0.50	0.68	0.13	0.09	0.13	0.19
v/c Ratio	0.65	0.76	0.16	0.42	0.43	0.26	0.33	0.61	0.79	0.80
Control Delay	72.1	38.1	0.5	56.6	11.6	2.8	43.2	31.0	68.2	58.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.1	38.1	0.5	56.6	11.6	2.8	43.2	31.0	68.2	58.1
LOS	E	D	A	E	B	A	D	C	E	E
Approach Delay		39.2			16.8			34.3		64.6
Approach LOS		D			B			C		E

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 34 (24%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 35.4	Intersection LOS: D
Intersection Capacity Utilization 78.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 101: Corporate Dr/SW 8th St & Woolbright Rd





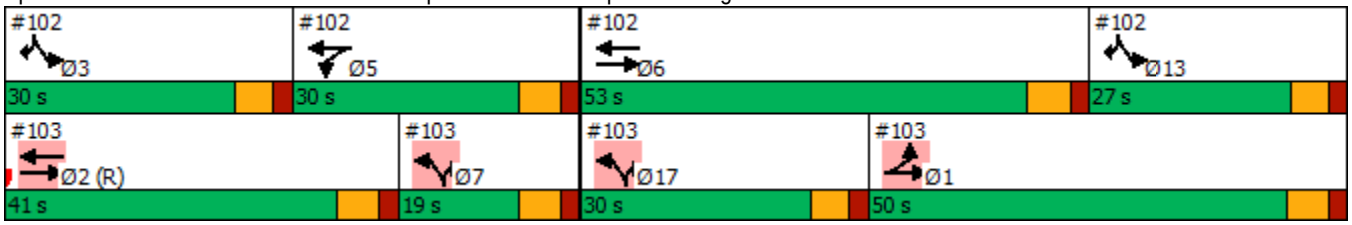
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	195	1579	121	253	1105	311	53	143	526	295
v/c Ratio	0.65	0.76	0.16	0.42	0.43	0.26	0.33	0.61	0.79	0.80
Control Delay	72.1	38.1	0.5	56.6	11.6	2.8	43.2	31.0	68.2	58.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.1	38.1	0.5	56.6	11.6	2.8	43.2	31.0	68.2	58.1
Queue Length 50th (ft)	90	445	0	96	167	34	36	36	166	209
Queue Length 95th (ft)	129	505	1	157	217	65	67	104	206	301
Internal Link Dist (ft)		429			1266			315		1227
Turn Bay Length (ft)	200		200	250		350			200	
Base Capacity (vph)	380	2088	762	607	2546	1197	167	300	748	433
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.76	0.16	0.42	0.43	0.26	0.32	0.48	0.70	0.68

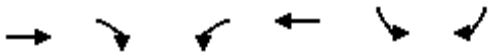
Intersection Summary

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR	Ø1	Ø2	Ø3	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	1220	885	460	765	680	820						
Future Volume (vph)	1220	885	460	765	680	820						
Turn Type	NA	Free	Prot	NA	Prot	custom						
Protected Phases	6		5	6 5	3 13	3 13	1	2	3	7	13	17
Permitted Phases		Free										
Detector Phase	6		5	6 5	3 13	3 13						
Switch Phase												
Minimum Initial (s)	10.0		6.0				6.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	17.0		13.0				13.0	17.0	13.0	13.0	12.0	12.0
Total Split (s)	53.0		30.0				50.0	41.0	30.0	19.0	27.0	30.0
Total Split (%)	37.9%		21.4%				36%	29%	21%	14%	19%	21%
Yellow Time (s)	4.5		4.5				4.5	4.5	4.0	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lead		Lag				Lag	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None				None	C-Max	None	None	None	None
Act Effct Green (s)	45.7	140.0	29.1	81.4	46.1	46.1						
Actuated g/C Ratio	0.33	1.00	0.21	0.58	0.33	0.33						
v/c Ratio	0.52	0.50	0.68	0.27	0.44	0.78						
Control Delay	26.1	3.2	20.0	5.2	37.2	33.4						
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0						
Total Delay	26.1	3.2	20.0	5.2	37.2	33.4						
LOS	C	A	B	A	D	C						
Approach Delay	16.4			10.7								
Approach LOS	B			B								

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 20.8	Intersection LOS: C
Intersection Capacity Utilization 56.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 102: I-95 SB On-Ramp/I-95 SB Off-Ramp & Woolbright Rd





Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1284	932	484	805	716	863
v/c Ratio	0.52	0.50	0.68	0.27	0.44	0.78
Control Delay	26.1	3.2	20.0	5.2	37.2	33.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.1	3.2	20.0	5.2	37.2	33.4
Queue Length 50th (ft)	136	82	228	123	179	282
Queue Length 95th (ft)	153	96	#309	150	208	357
Internal Link Dist (ft)	1266			595		
Turn Bay Length (ft)		700			500	650
Base Capacity (vph)	2505	1863	714	2983	1844	1204
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.50	0.68	0.27	0.39	0.72

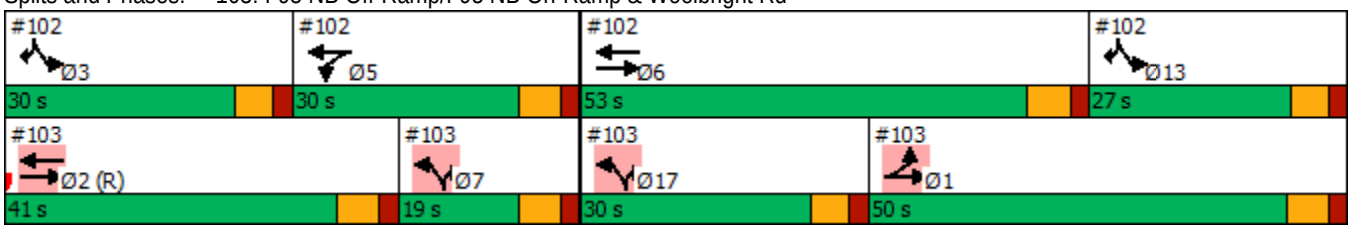
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR	Ø3	Ø5	Ø6	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	770	1130	830	775	395	370						
Future Volume (vph)	770	1130	830	775	395	370						
Turn Type	Prot	NA	NA	Free	Prot	custom						
Protected Phases	1	1 2	2		7 17	7 17	3	5	6	7	13	17
Permitted Phases				Free								
Detector Phase	1	1 2	2		7 17	7 17						
Switch Phase												
Minimum Initial (s)	6.0		10.0				6.0	6.0	10.0	6.0	6.0	6.0
Minimum Split (s)	13.0		17.0				13.0	13.0	17.0	13.0	12.0	12.0
Total Split (s)	50.0		41.0				30.0	30.0	53.0	19.0	27.0	30.0
Total Split (%)	35.7%		29.3%				21%	21%	38%	14%	19%	21%
Yellow Time (s)	4.5		4.5				4.0	4.5	4.5	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lag		Lead				Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		C-Max				None	None	None	None	None	None
Act Effct Green (s)	59.5	100.5	34.5	140.0	26.5	26.5						
Actuated g/C Ratio	0.42	0.72	0.25	1.00	0.19	0.19						
v/c Ratio	0.56	0.33	0.47	0.52	0.44	0.58						
Control Delay	6.3	0.6	45.9	1.2	51.5	31.2						
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0						
Total Delay	6.3	0.6	45.9	1.2	51.5	31.2						
LOS	A	A	D	A	D	C						
Approach Delay		2.9	24.3									
Approach LOS		A	C									

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 17.9	Intersection LOS: B
Intersection Capacity Utilization 56.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 103: I-95 NB Off-Ramp/I-95 NB On-Ramp & Woolbright Rd



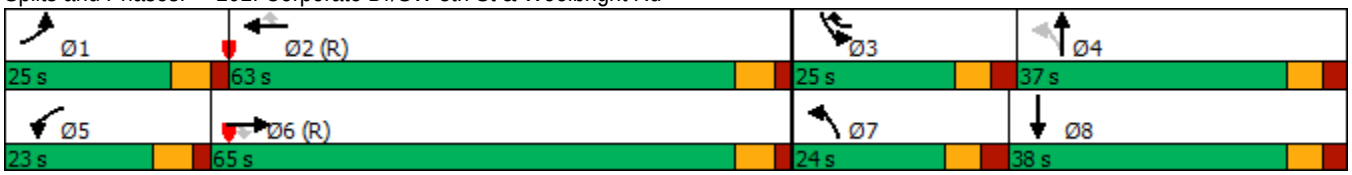
Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	811	1189	874	816	416	389
v/c Ratio	0.56	0.33	0.47	0.52	0.44	0.58
Control Delay	6.3	0.6	45.9	1.2	51.5	31.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.3	0.6	45.9	1.2	51.5	31.2
Queue Length 50th (ft)	261	0	168	0	121	101
Queue Length 95th (ft)	397	25	198	0	148	154
Internal Link Dist (ft)		595	645			
Turn Bay Length (ft)				575	500	500
Base Capacity (vph)	1460	3651	1859	1583	1514	967
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.56	0.33	0.47	0.52	0.27	0.40

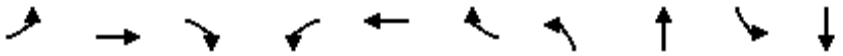
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	215	1210	75	100	1505	535	200	65	355	40
Future Volume (vph)	215	1210	75	100	1505	535	200	65	355	40
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	pm+pt	NA	Prot	NA
Protected Phases	1	6		5	2	3	7	4	3	8
Permitted Phases			6			2	4			
Detector Phase	1	6	6	5	2	3	7	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	20.0	20.0	4.0	20.0	4.0	4.0	6.0	4.0	6.0
Minimum Split (s)	11.5	26.5	26.5	11.5	26.5	12.0	12.0	24.0	12.0	24.0
Total Split (s)	25.0	65.0	65.0	23.0	63.0	25.0	24.0	37.0	25.0	38.0
Total Split (%)	16.7%	43.3%	43.3%	15.3%	42.0%	16.7%	16.0%	24.7%	16.7%	25.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	Max	C-Max	None	None	None	None	None
Act Effct Green (s)	14.2	58.5	58.5	22.1	66.4	88.4	42.7	26.8	15.5	26.5
Actuated g/C Ratio	0.09	0.39	0.39	0.15	0.44	0.59	0.28	0.18	0.10	0.18
v/c Ratio	0.70	0.64	0.11	0.21	0.70	0.50	0.64	0.94	0.72	0.52
Control Delay	77.1	39.1	0.9	68.5	16.8	3.4	47.3	69.4	73.5	27.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.1	39.1	0.9	68.5	16.8	3.4	47.3	69.4	73.5	27.8
LOS	E	D	A	E	B	A	D	E	E	C
Approach Delay		42.6			15.9			61.5		57.6
Approach LOS		D			B			E		E

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 48 (32%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 34.5	Intersection LOS: C
Intersection Capacity Utilization 86.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 101: Corporate Dr/SW 8th St & Woolbright Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	226	1274	79	105	1584	563	211	379	374	200
v/c Ratio	0.70	0.64	0.11	0.21	0.70	0.50	0.64	0.94	0.72	0.52
Control Delay	77.1	39.1	0.9	68.5	16.8	3.4	47.3	69.4	73.5	27.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.1	39.1	0.9	68.5	16.8	3.4	47.3	69.4	73.5	27.8
Queue Length 50th (ft)	112	369	0	49	225	45	152	241	127	73
Queue Length 95th (ft)	154	422	5	m76	395	64	219	#422	163	155
Internal Link Dist (ft)		429			1266			315		1227
Turn Bay Length (ft)	200		200	250		350			200	
Base Capacity (vph)	423	1983	694	506	2251	1152	341	437	598	429
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.64	0.11	0.21	0.70	0.49	0.62	0.87	0.63	0.47

Intersection Summary

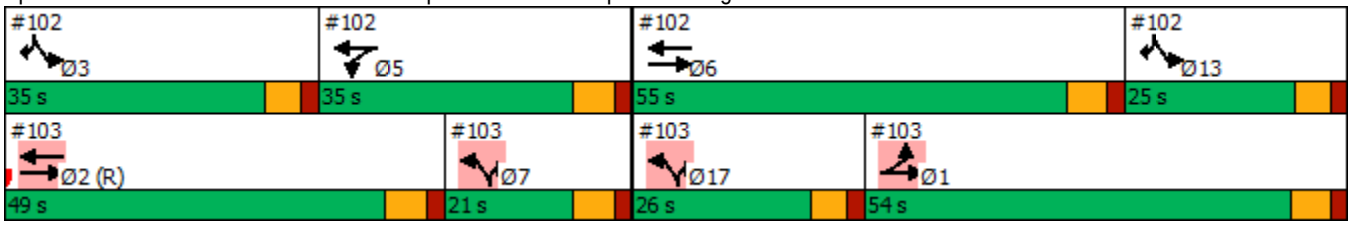
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

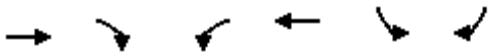
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR	Ø1	Ø2	Ø3	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	1415	445	385	1350	650	790						
Future Volume (vph)	1415	445	385	1350	650	790						
Turn Type	NA	Free	Prot	NA	Prot	custom						
Protected Phases	6		5	6 5	3 13	3 13	1	2	3	7	13	17
Permitted Phases		Free										
Detector Phase	6		5	6 5	3 13	3 13						
Switch Phase												
Minimum Initial (s)	10.0		6.0				6.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	17.0		13.0				13.0	17.0	13.0	13.0	12.0	12.0
Total Split (s)	55.0		35.0				54.0	49.0	35.0	21.0	25.0	26.0
Total Split (%)	36.7%		23.3%				36%	33%	23%	14%	17%	17%
Yellow Time (s)	4.5		4.5				4.5	4.5	4.0	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lead		Lag				Lag	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None				None	C-Max	None	None	None	None
Act Effct Green (s)	48.5	150.0	32.7	87.7	49.8	49.8						
Actuated g/C Ratio	0.32	1.00	0.22	0.58	0.33	0.33						
v/c Ratio	0.61	0.25	0.54	0.48	0.41	0.80						
Control Delay	31.8	0.2	19.2	9.5	39.2	42.6						
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0						
Total Delay	31.8	0.2	19.2	9.8	39.2	42.6						
LOS	C	A	B	A	D	D						
Approach Delay	24.2			11.9								
Approach LOS	C			B								

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 24.8	Intersection LOS: C
Intersection Capacity Utilization 66.6%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 102: I-95 SB On-Ramp/I-95 SB Off-Ramp & Woolbright Rd





Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1489	468	405	1421	684	832
v/c Ratio	0.61	0.25	0.54	0.48	0.41	0.80
Control Delay	31.8	0.2	19.2	9.5	39.2	42.6
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0
Total Delay	31.8	0.2	19.2	9.8	39.2	42.6
Queue Length 50th (ft)	228	0	202	261	179	339
Queue Length 95th (ft)	241	m0	266	295	213	423
Internal Link Dist (ft)	1266			595		
Turn Bay Length (ft)		700			500	650
Base Capacity (vph)	2439	1863	748	2973	1796	1108
Starvation Cap Reductn	0	0	0	742	0	0
Spillback Cap Reductn	23	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.25	0.54	0.64	0.38	0.75

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

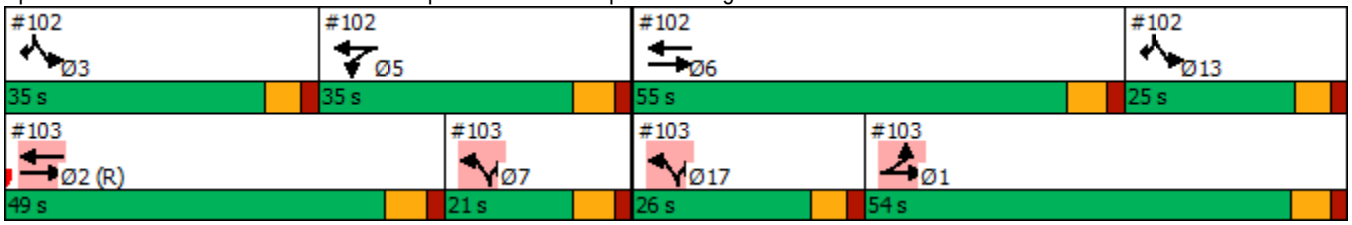
103: I-95 NB Off-Ramp/I-95 NB On-Ramp & Woolbright Rd
Lanes, Volumes, v/c, Delays, LOS and Queues

Build Alternative
Opening Year 2025, PM Pk Hr

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR	Ø3	Ø5	Ø6	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	885	1180	1065	885	670	520						
Future Volume (vph)	885	1180	1065	885	670	520						
Turn Type	Prot	NA	NA	Free	Prot	custom						
Protected Phases	1	1 2	2		7 17	7 17	3	5	6	7	13	17
Permitted Phases				Free								
Detector Phase	1	1 2	2		7 17	7 17						
Switch Phase												
Minimum Initial (s)	6.0		10.0				6.0	6.0	10.0	6.0	6.0	6.0
Minimum Split (s)	13.0		17.0				13.0	13.0	17.0	13.0	12.0	12.0
Total Split (s)	54.0		49.0				35.0	35.0	55.0	21.0	25.0	26.0
Total Split (%)	36.0%		32.7%				23%	23%	37%	14%	17%	17%
Yellow Time (s)	4.5		4.5				4.0	4.5	4.5	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lag		Lead				Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		C-Max				None	None	None	None	None	None
Act Effct Green (s)	53.1	102.1	42.5	150.0	34.9	34.9						
Actuated g/C Ratio	0.35	0.68	0.28	1.00	0.23	0.23						
v/c Ratio	0.77	0.36	0.52	0.59	0.61	0.71						
Control Delay	18.1	2.0	46.3	1.6	53.3	41.2						
Queue Delay	0.6	0.0	0.0	0.0	0.0	0.0						
Total Delay	18.8	2.0	46.3	1.6	53.3	41.2						
LOS	B	A	D	A	D	D						
Approach Delay		9.2	26.0									
Approach LOS		A	C									

Intersection Summary		
Cycle Length: 150		
Actuated Cycle Length: 150		
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green		
Natural Cycle: 70		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.80		
Intersection Signal Delay: 24.4	Intersection LOS: C	
Intersection Capacity Utilization 66.6%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 103: I-95 NB Off-Ramp/I-95 NB On-Ramp & Woolbright Rd



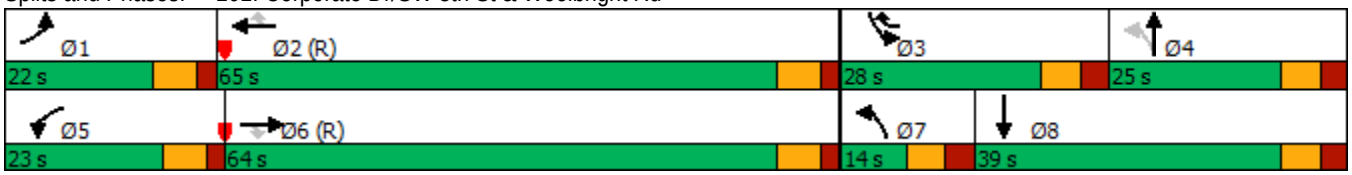
Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	932	1242	1121	932	705	547
v/c Ratio	0.77	0.36	0.52	0.59	0.61	0.71
Control Delay	18.1	2.0	46.3	1.6	53.3	41.2
Queue Delay	0.6	0.0	0.0	0.0	0.0	0.0
Total Delay	18.8	2.0	46.3	1.6	53.3	41.2
Queue Length 50th (ft)	485	46	229	0	220	200
Queue Length 95th (ft)	567	124	261	0	252	261
Internal Link Dist (ft)		595	645			
Turn Bay Length (ft)				575	500	500
Base Capacity (vph)	1214	3459	2137	1583	1347	872
Starvation Cap Reductn	76	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.36	0.52	0.59	0.52	0.63

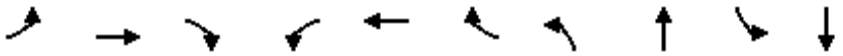
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	280	1815	140	310	1615	455	95	60	640	115
Future Volume (vph)	280	1815	140	310	1615	455	95	60	640	115
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	pm+pt	NA	Prot	NA
Protected Phases	1	6		5	2	3	7	4	3	8
Permitted Phases			6			2	4			
Detector Phase	1	6	6	5	2	3	7	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	20.0	20.0	4.0	20.0	4.0	4.0	6.0	4.0	6.0
Minimum Split (s)	11.5	26.5	26.5	11.5	26.5	12.0	12.0	24.0	12.0	24.0
Total Split (s)	22.0	64.0	64.0	23.0	65.0	28.0	14.0	25.0	28.0	39.0
Total Split (%)	15.7%	45.7%	45.7%	16.4%	46.4%	20.0%	10.0%	17.9%	20.0%	27.9%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	Max	C-Max	None	None	None	None	None
Act Effct Green (s)	14.7	57.5	57.5	18.0	60.8	88.0	23.9	16.9	20.7	30.5
Actuated g/C Ratio	0.10	0.41	0.41	0.13	0.43	0.63	0.17	0.12	0.15	0.22
v/c Ratio	0.82	0.92	0.19	0.74	0.77	0.43	0.71	0.91	0.92	0.96
Control Delay	80.0	46.9	1.8	74.9	15.8	3.5	64.3	74.4	76.7	77.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.0	46.9	1.8	74.9	15.8	3.5	64.3	74.4	76.7	77.0
LOS	E	D	A	E	B	A	E	E	E	E
Approach Delay		48.2			21.1			71.5		76.8
Approach LOS		D			C			E		E

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 34 (24%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 110	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.96	
Intersection Signal Delay: 43.7	Intersection LOS: D
Intersection Capacity Utilization 94.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 101: Corporate Dr/SW 8th St & Woolbright Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	295	1911	147	326	1700	479	100	252	674	405
v/c Ratio	0.82	0.92	0.19	0.74	0.77	0.43	0.71	0.91	0.92	0.96
Control Delay	80.0	46.9	1.8	74.9	15.8	3.5	64.3	74.4	76.7	77.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.0	46.9	1.8	74.9	15.8	3.5	64.3	74.4	76.7	77.0
Queue Length 50th (ft)	137	595	0	150	253	52	65	151	217	302
Queue Length 95th (ft)	#198	667	17	m187	m327	m68	#120	#306	#286	#502
Internal Link Dist (ft)		429			1266			315		1227
Turn Bay Length (ft)	200		200	250		350			200	
Base Capacity (vph)	380	2088	762	440	2208	1119	141	289	748	441
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.78	0.92	0.19	0.74	0.77	0.43	0.71	0.87	0.90	0.92

Intersection Summary

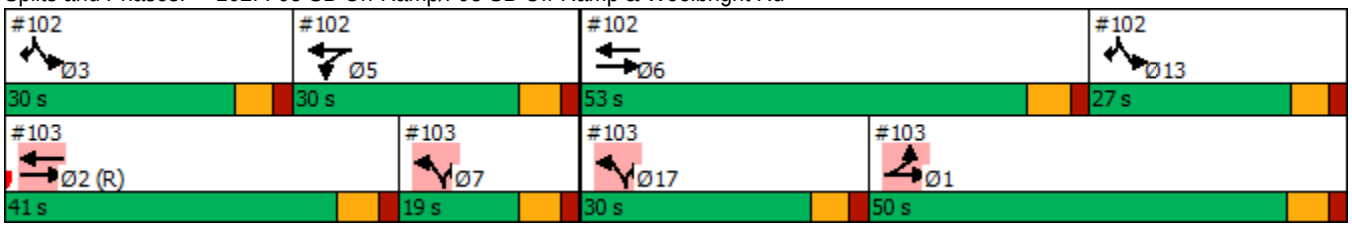
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

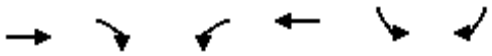
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR	Ø1	Ø2	Ø3	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	1715	920	465	1370	1050	1010						
Future Volume (vph)	1715	920	465	1370	1050	1010						
Turn Type	NA	Free	Prot	NA	Prot	custom						
Protected Phases	6		5	6 5	3 13	3 13	1	2	3	7	13	17
Permitted Phases		Free										
Detector Phase	6		5	6 5	3 13	3 13						
Switch Phase												
Minimum Initial (s)	10.0		6.0				6.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	17.0		13.0				13.0	17.0	13.0	13.0	12.0	12.0
Total Split (s)	53.0		30.0				50.0	41.0	30.0	19.0	27.0	30.0
Total Split (%)	37.9%		21.4%				36%	29%	21%	14%	19%	21%
Yellow Time (s)	4.5		4.5				4.5	4.5	4.0	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lead		Lag				Lag	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None				None	C-Max	None	None	None	None
Act Effct Green (s)	46.5	140.0	23.5	76.5	51.0	51.0						
Actuated g/C Ratio	0.33	1.00	0.17	0.55	0.36	0.36						
v/c Ratio	0.72	0.52	0.85	0.52	0.61	0.94						
Control Delay	30.8	0.8	24.2	14.6	38.1	52.4						
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0						
Total Delay	30.8	0.8	24.2	14.6	38.1	52.4						
LOS	C	A	C	B	D	D						
Approach Delay	20.3			17.0								
Approach LOS	C			B								

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 27.2	Intersection LOS: C
Intersection Capacity Utilization 72.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 102: I-95 SB On-Ramp/I-95 SB Off-Ramp & Woolbright Rd





Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1805	968	489	1442	1105	1063
v/c Ratio	0.72	0.52	0.85	0.52	0.61	0.94
Control Delay	30.8	0.8	24.2	14.6	38.1	52.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.8	0.8	24.2	14.6	38.1	52.4
Queue Length 50th (ft)	237	0	241	356	290	463
Queue Length 95th (ft)	301	m0	#318	497	338	#625
Internal Link Dist (ft)	1266			595		
Turn Bay Length (ft)		700			500	650
Base Capacity (vph)	2505	1863	576	2778	1817	1126
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.72	0.52	0.85	0.52	0.61	0.94

Intersection Summary

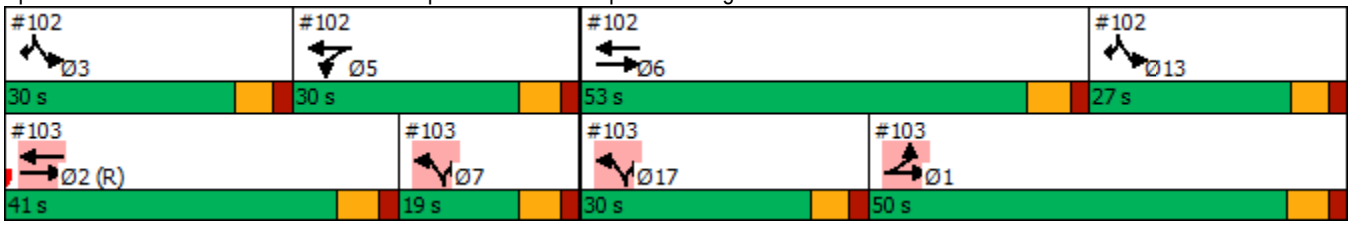
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR	Ø3	Ø5	Ø6	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	955	1810	1415	820	420	485						
Future Volume (vph)	955	1810	1415	820	420	485						
Turn Type	Prot	NA	NA	Free	Prot	custom						
Protected Phases	1	1 2	2		7 17	7 17	3	5	6	7	13	17
Permitted Phases				Free								
Detector Phase	1	1 2	2		7 17	7 17						
Switch Phase												
Minimum Initial (s)	6.0		10.0				6.0	6.0	10.0	6.0	6.0	6.0
Minimum Split (s)	13.0		17.0				13.0	13.0	17.0	13.0	12.0	12.0
Total Split (s)	50.0		41.0				30.0	30.0	53.0	19.0	27.0	30.0
Total Split (%)	35.7%		29.3%				21%	21%	38%	14%	19%	21%
Yellow Time (s)	4.5		4.5				4.0	4.5	4.5	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lag		Lead				Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		C-Max				None	None	None	None	None	None
Act Effct Green (s)	55.1	96.1	34.5	140.0	30.9	30.9						
Actuated g/C Ratio	0.39	0.69	0.25	1.00	0.22	0.22						
v/c Ratio	0.74	0.55	0.80	0.55	0.40	0.68						
Control Delay	12.8	2.0	53.5	1.4	47.1	36.6						
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0						
Total Delay	12.8	2.0	53.5	1.4	47.1	36.6						
LOS	B	A	D	A	D	D						
Approach Delay		5.8	34.3									
Approach LOS		A	C									

Intersection Summary	
Cycle Length: 140	
Actuated Cycle Length: 140	
Offset: 0 (0%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 90	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.94	
Intersection Signal Delay: 22.0	Intersection LOS: C
Intersection Capacity Utilization 72.2%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 103: I-95 NB Off-Ramp/I-95 NB On-Ramp & Woolbright Rd



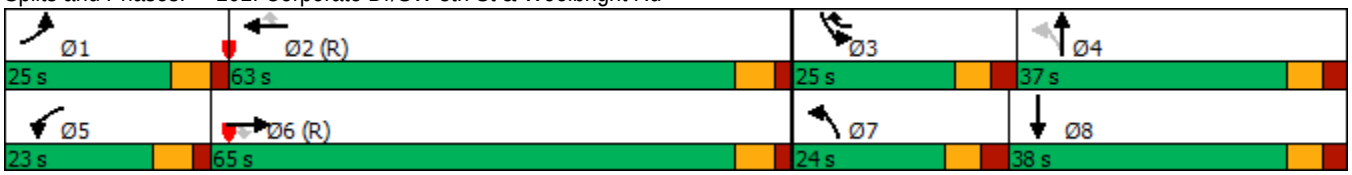
Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	1005	1905	1489	863	442	511
v/c Ratio	0.74	0.55	0.80	0.55	0.40	0.68
Control Delay	12.8	2.0	53.5	1.4	47.1	36.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.8	2.0	53.5	1.4	47.1	36.6
Queue Length 50th (ft)	425	15	316	0	123	163
Queue Length 95th (ft)	570	185	354	0	146	215
Internal Link Dist (ft)		595	645			
Turn Bay Length (ft)				575	500	500
Base Capacity (vph)	1351	3490	1859	1583	1514	967
Starvation Cap Reductn	0	49	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.74	0.55	0.80	0.55	0.29	0.53

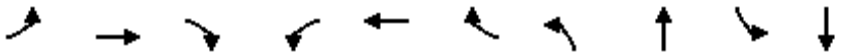
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	275	1435	110	170	1935	720	205	70	470	70
Future Volume (vph)	275	1435	110	170	1935	720	205	70	470	70
Turn Type	Prot	NA	Perm	Prot	NA	pm+ov	pm+pt	NA	Prot	NA
Protected Phases	1	6		5	2	3	7	4	3	8
Permitted Phases			6			2	4			
Detector Phase	1	6	6	5	2	3	7	4	3	8
Switch Phase										
Minimum Initial (s)	4.0	20.0	20.0	4.0	20.0	4.0	4.0	6.0	4.0	6.0
Minimum Split (s)	11.5	26.5	26.5	11.5	26.5	12.0	12.0	24.0	12.0	24.0
Total Split (s)	25.0	65.0	65.0	23.0	63.0	25.0	24.0	37.0	25.0	38.0
Total Split (%)	16.7%	43.3%	43.3%	15.3%	42.0%	16.7%	16.0%	24.7%	16.7%	25.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	4.5	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.5	6.5	6.5	6.5	7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	C-Max	Max	C-Max	None	None	None	None	None
Act Effct Green (s)	16.2	58.5	58.5	16.8	59.1	83.0	45.9	30.2	17.5	32.0
Actuated g/C Ratio	0.11	0.39	0.39	0.11	0.39	0.55	0.31	0.20	0.12	0.21
v/c Ratio	0.78	0.76	0.17	0.47	1.02	0.70	0.74	0.98	0.85	0.72
Control Delay	79.8	42.8	4.2	76.0	46.5	7.7	51.9	77.2	79.7	48.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.8	42.8	4.2	76.0	46.5	7.7	51.9	77.2	79.7	48.1
LOS	E	D	A	E	D	A	D	E	E	D
Approach Delay		46.1			38.3			68.9		67.6
Approach LOS		D			D			E		E

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 51 (34%), Referenced to phase 2:WBT and 6:EBT, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.02	
Intersection Signal Delay: 47.5	Intersection LOS: D
Intersection Capacity Utilization 101.6%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 101: Corporate Dr/SW 8th St & Woolbright Rd





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	289	1511	116	179	2037	758	216	437	495	306
v/c Ratio	0.78	0.76	0.17	0.47	1.02	0.70	0.74	0.98	0.85	0.72
Control Delay	79.8	42.8	4.2	76.0	46.5	7.7	51.9	77.2	79.7	48.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.8	42.8	4.2	76.0	46.5	7.7	51.9	77.2	79.7	48.1
Queue Length 50th (ft)	143	467	0	88	~768	87	152	305	170	199
Queue Length 95th (ft)	193	527	35	m117	#884	m111	224	#536	#217	313
Internal Link Dist (ft)		429			1266			315		1227
Turn Bay Length (ft)	200		200	250		350			200	
Base Capacity (vph)	423	1983	694	384	2002	1083	306	445	598	426
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.76	0.17	0.47	1.02	0.70	0.71	0.98	0.83	0.72

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

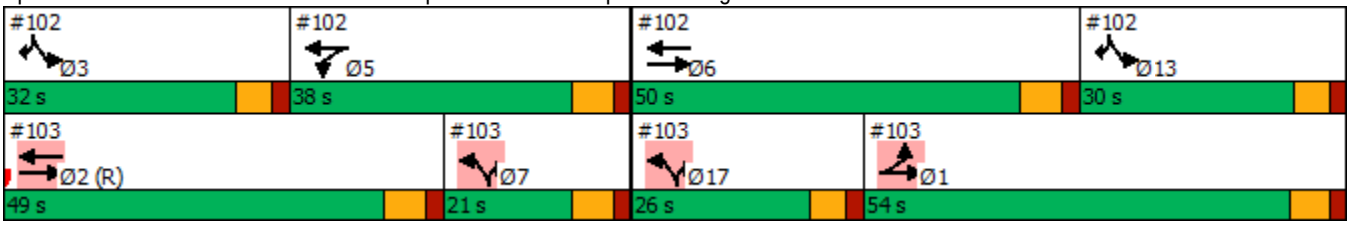
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

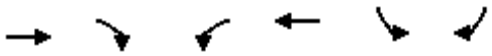
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR	Ø1	Ø2	Ø3	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	1800	450	415	1840	655	985						
Future Volume (vph)	1800	450	415	1840	655	985						
Turn Type	NA	Free	Prot	NA	Prot	custom						
Protected Phases	6		5	6 5	3 13	3 13	1	2	3	7	13	17
Permitted Phases		Free										
Detector Phase	6		5	6 5	3 13	3 13						
Switch Phase												
Minimum Initial (s)	10.0		6.0				6.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	17.0		13.0				13.0	17.0	13.0	13.0	12.0	12.0
Total Split (s)	50.0		38.0				54.0	49.0	32.0	21.0	30.0	26.0
Total Split (%)	33.3%		25.3%				36%	33%	21%	14%	20%	17%
Yellow Time (s)	4.5		4.5				4.5	4.5	4.0	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lead		Lag				Lag	Lead	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		None				None	C-Max	None	None	None	None
Act Effct Green (s)	43.5	150.0	32.1	82.1	55.4	55.4						
Actuated g/C Ratio	0.29	1.00	0.21	0.55	0.37	0.37						
v/c Ratio	0.87	0.25	0.60	0.70	0.37	0.92						
Control Delay	41.3	0.2	16.3	14.6	35.2	50.7						
Queue Delay	0.1	0.0	0.0	0.9	0.0	0.0						
Total Delay	41.4	0.2	16.3	15.4	35.2	50.7						
LOS	D	A	B	B	D	D						
Approach Delay	33.1			15.6								
Approach LOS	C			B								

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 148 (99%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 29.7	Intersection LOS: C
Intersection Capacity Utilization 80.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 102: I-95 SB On-Ramp/I-95 SB Off-Ramp & Woolbright Rd





Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1895	474	437	1937	689	1037
v/c Ratio	0.87	0.25	0.60	0.70	0.37	0.92
Control Delay	41.3	0.2	16.3	14.6	35.2	50.7
Queue Delay	0.1	0.0	0.0	0.9	0.0	0.0
Total Delay	41.4	0.2	16.3	15.4	35.2	50.7
Queue Length 50th (ft)	310	0	218	424	173	476
Queue Length 95th (ft)	m390	m0	282	490	209	#625
Internal Link Dist (ft)	1266			595		
Turn Bay Length (ft)		700			500	650
Base Capacity (vph)	2187	1863	733	2782	1862	1143
Starvation Cap Reductn	0	0	0	498	0	0
Spillback Cap Reductn	10	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.25	0.60	0.85	0.37	0.91

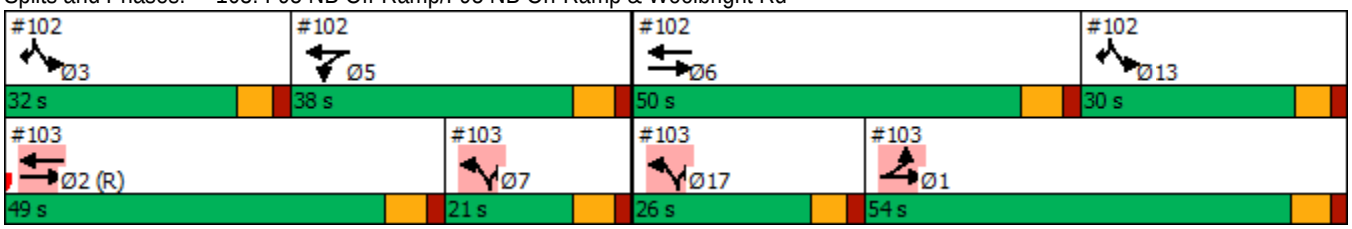
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBR	Ø3	Ø5	Ø6	Ø7	Ø13	Ø17
Lane Configurations												
Traffic Volume (vph)	895	1560	1470	1020	785	525						
Future Volume (vph)	895	1560	1470	1020	785	525						
Turn Type	Prot	NA	NA	Free	Prot	custom						
Protected Phases	1	1 2	2		7 17	7 17	3	5	6	7	13	17
Permitted Phases				Free								
Detector Phase	1	1 2	2		7 17	7 17						
Switch Phase												
Minimum Initial (s)	6.0		10.0				6.0	6.0	10.0	6.0	6.0	6.0
Minimum Split (s)	13.0		17.0				13.0	13.0	17.0	13.0	12.0	12.0
Total Split (s)	54.0		49.0				32.0	38.0	50.0	21.0	30.0	26.0
Total Split (%)	36.0%		32.7%				21%	25%	33%	14%	20%	17%
Yellow Time (s)	4.5		4.5				4.0	4.5	4.5	4.5	4.0	4.0
All-Red Time (s)	2.0		2.0				2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0		0.0									
Total Lost Time (s)	6.5		6.5									
Lead/Lag	Lag		Lead				Lead	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?	Yes		Yes				Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None		C-Max				None	None	None	None	None	None
Act Effct Green (s)	50.5	99.5	42.5	150.0	37.5	37.5						
Actuated g/C Ratio	0.34	0.66	0.28	1.00	0.25	0.25						
v/c Ratio	0.81	0.49	0.72	0.68	0.66	0.68						
Control Delay	16.8	4.4	50.8	2.4	53.2	39.2						
Queue Delay	0.2	0.1	0.0	0.0	0.2	0.0						
Total Delay	17.0	4.5	50.8	2.4	53.4	39.2						
LOS	B	A	D	A	D	D						
Approach Delay		9.1	30.9									
Approach LOS		A	C									

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 148 (99%), Referenced to phase 2:EBWB, Start of Green	
Natural Cycle: 80	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 25.9	Intersection LOS: C
Intersection Capacity Utilization 80.4%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 103: I-95 NB Off-Ramp/I-95 NB On-Ramp & Woolbright Rd



Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	942	1642	1547	1074	826	553
v/c Ratio	0.81	0.49	0.72	0.68	0.66	0.68
Control Delay	16.8	4.4	50.8	2.4	53.2	39.2
Queue Delay	0.2	0.1	0.0	0.0	0.2	0.0
Total Delay	17.0	4.5	50.8	2.4	53.4	39.2
Queue Length 50th (ft)	506	248	338	0	257	197
Queue Length 95th (ft)	574	265	375	0	300	266
Internal Link Dist (ft)		595	645			
Turn Bay Length (ft)				575	500	500
Base Capacity (vph)	1156	3374	2137	1583	1347	872
Starvation Cap Reductn	21	606	0	0	0	0
Spillback Cap Reductn	0	0	0	0	105	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.59	0.72	0.68	0.67	0.63

Intersection Summary

APPENDIX F

Build Alternative
Safety Analysis
Woolbright Road
Opening Year 2025
Design Year 2045

APPENDIX

F

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	At-Grade Intersections	
Analysis Year	Opening and Design Year	
Opening Year	2025	
Design Year	2045	
Facility Type	On Urban and Suburban Arterial	For more information on how to determine these values, see the "Definitions" worksheet
Number of Legs	4-leg	
1-Way/2-Way	2-way Intersecting 2-way	
# of Major Street Lanes (both directions)	6 or more	
Major Street Approach Speed	Less than 55 mph	
Opening Year - Major Road AADT	44,500	
Opening Year - Minor Road AADT	17,000	
Design Year - Major Road AADT	52,000	
Design Year - Minor Road AADT	20,000	

Control Strategy	**Include**	**Base Intersection**	
Traffic Signal	Yes	--	
Traffic Signal (Alternative Configuration)	Yes	--	
Minor Road Stop	No	--	SPF Development Range
All Way Stop	No	--	No SPF Available
1-Lane Roundabout	No	--	SPF Development Range
2-Lane Roundabout	No	--	SPF Development Range
Displaced Left Turn (DLT)	No	Traffic Signal	
Median U-Turn (MUT)	No	Traffic Signal	
Signalized Restricted Crossing U-Turn (RCUT)	No	--	
Unsignalized Restricted Crossing U-Turn (RCUT)	No	--	SPF Development Range
Signalized Thru-Cut*	No	--	*Available*
Unsignalized Thru-Cut*	No	--	*Available*
Continuous Green-T Intersection	No	Traffic Signal	
Jughandle	No	Traffic Signal	
Other 1*	No	Traffic Signal	*Please Select*
Other 2*	No	Traffic Signal	*Please Select*

At-Grade Intersection Inputs

Provide inputs needed to compute and apply Part C CMFs.

Input		Control Strategy	
		Traffic Signal	Traffic Signal (Alt)
Opening Year Major Road AADT	Optional AADT Overrides	44500	44500
Opening Year Minor Road AADT		17000	17000
Design Year Major Road AADT		52000	52000
Design Year Minor Road AADT		20000	20000
Number of Approaches with Left-Turn Lanes	Additional Required Control Strategy Inputs	4	4
Number of Approaches with Right-Turn Lanes		2	2
Number of Uncontrolled Approaches with Left-Turn Lanes			
Number of Uncontrolled Approaches with Right-Turn Lanes			

Keep default values below here for planning-level analysis, override with actual values for full HSM Analysis

	Part C CMFS Optional For Stage 1 ICE, Required for Stage 2 ICE		
Skew Angle	A yellow cell indicates the value may be used in the SPF computation	N/A	N/A
Lighting Present		Yes	Yes
# of Approaches Permissive LT Signal Phasing		0	0
# of Approaches Perm/Prot LT Signal Phasing		1	1
# of Approaches Protected LT Signal Phasing		3	3
Number of Approaches with Right-Turn-on-Red Prohibited		0	0
Red Light Cameras Present		No	No
Number of Major Street Through Lanes		7	6
Number of Minor Street Lanes		3	3
# of Major St Approaches w/ Right-Turn Channelization		0	0
Number of Approaches with U-Turn Prohibited		0	0
Pedestrian Volume by Activity Level		Low (50)	Low (50)
User Specified Sum of all daily pedestrian crossing volumes		50	50
Max # of Lanes Crossed by Pedestrians		10	9
Number of Bus Stops within 1000' of Intersection		0	0
Schools within 1000' of intersection		No	No
Number of Alcohol Sales Establishments within 1000' of Intersection		1	1

Historical Crash Data Input

Note: In order to use Empirical Bayes (EB), the historical intersection type must be a traffic signal or a minor road stop. Additionally, this alternative must be selected to be included in the analysis, and the historical intersection specified below. Up to 10 years of historical data can be used to perform the EB adjustment.

Is historical crash data available?	Yes			
Number of years available:	5	(Up to 10)	First Year Data is available:	2017
Historical Intx Type:	4SG			

Historical Crash Counts		Year										
		2017	2018	2019	2020	2021	--	--	--	--	--	Total
Combined	Total	20	25	27	22	29	--	--	--	--	--	123
	Fatal/Injury	3	5	5	6	7						26
	PDO	17	20	22	16	22						97
Single-Vehicle	Total											
	Fatal/Injury											
	PDO											
Multiple-Vehicle	Total											
	Fatal/Injury											
	PDO											
Veh-Ped	Fatal/Injury	0	0	0	0	0						0
Veh-Bike	Fatal/Injury	0	0	0	0	0						0
Total	All	20	25	27	22	29	--	--	--	--	--	123

Federal Highway Administration (FHWA)
Safety Performance for Intersection Control Evaluation Tool
Results
Summary of crash prediction results for each alternative

Project Information

Project Name:	I-95/SR-9 @ Woolbright Rd IMR Re-evaluation	**Intersection Type**	At-Grade Intersections
Intersection:	Woolbright Rd at SW 8th Street/Corporate Drive	**Opening Year**	2025
Agency:	FDOT 4	**Design Year**	2045
Project Reference:	FPID No. 437279-1	**Facility Type**	On Urban and Suburban Arterial
City:	Boynton Beach	**Number of Legs**	4-leg
State:	Florida	**1-Way/2-Way**	2-way Intersecting 2-way
Date:	8/15/2022	**# of Major Street Lanes (both directions)**	6 or more
Analyst:	CED (JA)	**Major Street Approach Speed**	Less than 55 mph

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Crash Prediction Rank	AADT Within SPF Prediction Range?	Source of Prediction	SSI Score		
								Open Year	Design Year	Rank
Traffic Signal	Total	21.58	23.59	474.46	2	Yes	Uncalibrated SPF	53	42	1
	Fatal & Injury	5.22	5.76	115.34						
Traffic Signal (Alt)	Total	18.69	20.43	410.96	1	Yes	Uncalibrated SPF	53	42	1
	Fatal & Injury	4.52	5.00	99.98						

ANNUAL COUNT	REPORT NUMBER	CRASH YEAR	CRASH DATE AND TIME	FORM TYPE	TOTAL No. OF VEH	ON STREET / ROAD / HIGHWAY	FEET FROM INT	DIR FROM INT	WEATHER CONDITION	RD SURFACE CONDITION	SCHOOL BUS RELATED	JUNCTION FLAG	S4 CRASH TYPE SIMPLIFIED	S4 CRASH SEVERITY	S4 DAY OR NIGHT	S4 AGGRESS DRIVING	S4 ALCOHOL RELATED	S4 DISTRACTED	S4 DRUG RELATED	S4 HIT AND RUN	S4 INTERS RELATED	S4 LN DEPART RELATED	S4 SPEEDING RELATED	S4 PED INVOLVED	S4 BICYCLIST INVOLVED	S4 TOTAL DAMAGE $
	86401799	2017	1/4/2017 16:08	L	2	W WOOLBRIGHT ROAD	0		Clear	Dry	N	Non-Junction	Rear End	Injury	DAY	N	N	N	N	N	N	Y	N	N	N	4000
	86925480	2017	1/24/2017 11:49	S	2	SW 8TH ST	299	North	Clear	Dry		Non-Junction	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	0
	86925695	2017	2/14/2017 17:15	S	3	W WOOLBRIGHT ROAD	253	West	Clear	Dry		Non-Junction	Rear End	No Injury	DAY	N	N	Y	N	N	N	N	N	N	N	0
	86925849	2017	3/1/2017 7:24	S	2	8TH ST SW	20	North	Clear	Dry		Non-Junction	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	0
	86925979	2017	3/14/2017 17:27	L	3	WOOLBRIGHT RD	0		Clear	Dry	N	Non-Junction	Rear End	No Injury	DAY	N	N	N	N	Y	N	N	N	N	N	2000
	86926000	2017	3/18/2017 6:10	S	2	W WOOLBRIGHT RD	98	West	Clear	Dry		Driveway/Alley Access Related	Other	No Injury	NIGHT	N	N	N	N	N	N	N	N	N	N	0
	86926017	2017	3/19/2017 14:12	S	2	SW 8TH ST	49	North	Clear	Dry		Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	0
	86926029	2017	3/21/2017 7:58	S	2	SW 8TH ST	10	North	Clear	Dry		Other	Angle	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	0
	86926336	2017	4/24/2017 13:15	S	2	SW 8TH ST	200	North	Clear	Dry		Through Roadway	Angle	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	0
	86926382	2017	4/29/2017 9:00	S	2	W WOOLBRIGHT RD	0		Clear	Dry		Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	0
	86926433	2017	5/5/2017 9:37	S	2	8TH ST SW	49	North	Cloudy	Dry		Driveway/Alley Access Related	Left Turn	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	0
1	86926439	2017	5/5/2017 13:29	L	2	W. WOOLBRIGHT RD	0		Rain	Wet	N	Intersection	Left Turn	Serious Injury	DAY	N	N	N	N	N	Y	N	N	N	N	13000
	86926542	2017	5/15/2017 9:03	S	2	WEST WOOLBRIGHT RD	253	West	Clear	Dry		Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	500
2	86926633	2017	5/15/2017 18:20	S	2	W WOOLBRIGHT RD	0		Clear	Dry		Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	0
	86926581	2017	5/18/2017 13:53	S	2	W. WOOLBRIGHT RD.	0		Clear	Dry		Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	0
3	86926591	2017	5/19/2017 6:22	L	2	W. WOOLBRIGHT ROAD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	NIGHT	N	N	N	N	N	Y	N	N	N	N	5500
4	86926599	2017	5/19/2017 8:00	L	2	WOOLBRIGHT RD W	0		Clear	Dry	N	Intersection-Related	Sideswipe	No Injury	DAY	N	N	N	N	Y	Y	N	N	N	N	2000
	86926609	2017	5/20/2017 15:15	S	2	WOOLBRIGHT RD	305	West	Clear	Dry		Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	0
5	86926628	2017	5/22/2017 16:48	L	2	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Other	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	7000
6	81531974	2017	5/22/2017 16:48	L	2	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Other	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	7000
	86926658	2017	5/26/2017 10:26	S	2	SW 8TH STREET	200	North	Clear	Dry		Other	Left Turn	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	0
7	86926763	2017	6/7/2017 16:40	S	2	W WOOLBRIGHT RD	0		Cloudy	Dry		Intersection-Related	Rear End	No Injury	DAY	N	N	Y	N	N	Y	N	N	N	N	0
8	81531685	2017	6/22/2017 12:57	S	2	WOOLBRIGHT RD W	49	West	Clear	Dry		Intersection	Sideswipe	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	0
	81531863	2017	7/12/2017 8:39	S	2	WEST WOOLBRIGHT RD	0		Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	3500
9	81531957	2017	7/24/2017 8:35	S	2	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	0
10	81532108	2017	8/4/2017 15:54	S	2	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1200
	81532348	2017	9/6/2017 10:23	S	2	WOOLBRIGHT ROAD	0		Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	4000
11	81532350	2017	9/6/2017 12:58	L	3	WEST WOOLBRIGHT ROAD	0		Clear	Dry	N	Intersection	Left Turn	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	34000
	81532399	2017	9/13/2017 14:18	L	3	SW 8TH ST	98	North	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	13000
	81532644	2017	10/13/2017 7:09	S	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Non-Junction	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	1000
12	81532688	2017	10/17/2017 7:55	S	2	W WOOLBRIGHT RD	10	East	Clear	Dry	N	Intersection	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1250
	81532846	2017	10/19/2017 8:03	L	3	WEST WOOLBRIGHT ROAD	200	West	Clear	Dry	N	Through Roadway	Sideswipe	Injury	DAY	N	N	N	N	N	N	Y	N	N	N	2500
13	81532725	2017	10/20/2017 10:24	S	2	W WOOLBRIGHT RD	3	West	Rain	Wet	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1000
	81532832	2017	11/2/2017 14:23	S	2	W WOOLBRIGHT RD	253	West	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	1000
14	81532907	2017	11/10/2017 15:08	L	2	SW 8TH ST	151	North	Clear	Dry	N	Intersection-Related	Rear End	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	3000
15	81532929	2017	11/12/2017 16:46	L	1	SW 8TH STREET	0		Clear	Dry	N	Intersection	Other	No Injury	DAY	N	Y	N	Y	N	Y	N	N	N	N	1000
16	81532936	2017	11/13/2017 15:46	S	2	SOUTHWEST 8TH STREET	7	North	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1000
17	81533118	2017	12/4/2017 15:12	S	2	SW 8TH ST	0		Clear	Dry	N	Intersection	Other	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	2000
18	81533160	2017	12/8/2017 8:46	L	2	CORPORATE DR	200	South	Clear	Dry	N	Intersection	Angle	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	10000
19	81533167	2017	12/8/2017 17:00	L	2	CORPORATE DR	10	South	Clear	Dry	N	Intersection-Related	Unknown	No Injury	DAY	N	N	N	N	Y	Y	N	N	N	N	500
20	81533356	2017	12/26/2017 1:29	S	2	SW 8TH ST	0		Rain	Wet	N	Intersection-Related	Off Road	No Injury	NIGHT	N	N	N	N	N	Y	N	N	N	N	2000
1	81533437	2018	1/4/2018 14:17	S	2	WEST WOOLBRIGHT ROAD	0		Clear	Dry	N	Intersection	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	5000
	81533440	2018	1/4/2018 18:45	L	2	WOOLBRIGHT RD	0		Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	2000
2	81533631	2018	1/25/2018 7:16	S	2	8TH ST SW	49	North	Clear	Dry	N	Intersection	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	4000
	81533634	2018	1/25/2018 14:45	L	3	W WOOLBRIGHT RD	7	West	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	Y	N	N	N	N	N	N	Y	N	N	15000
3	81533638	2018	1/26/2018 14:27	S	2	SOUTHWEST 8TH STREET	151	North	Clear	Dry	N	Intersection-Related	Angle	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	2000
	81533689	2018	2/1/2018 11:06	L	2	W WOOLBRIGHT RD	98	West	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	Y	N	Y	N	N	N	200
4	81533898	2018	2/22/2018 13:05	S	2	SW 8TH ST	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	4000
	81533958	2018	2/28/2018 15:50	S	3	WOOLBRIGHT RD W	0		Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	6000
5	81534022	2018	3/6/2018 10:58	S	2	8TH ST SW	98	North	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	8000
6	81534035	2018	3/8/2018 14:30	L	2	8TH ST SW	49	North	Clear	Dry	N	Intersection-Related	Right Turn	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	7000
7	81534062	2018	3/12/2018 8:59	L	2	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	Serious Injury	DAY	N	N	N	N	N	Y	N	N	N	N	22000
8	81534113	2018	3/18/2018 13:51	S	2	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection-Related	Sideswipe	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1200
	81534240	2018	4/2/2018 15:24	S	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	1000
	81534298	2018	4/9/2018 10:40	L	2	WOOLBRIGHT RD W	0		Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	500
	81534297	2018	4/9/2018 14:02	L	2	WOOLBRIGHT RD	0		Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	4500
	81534324	2018	4/12/2018 8:19	S	2	WOOLBRIGHT RD E	0		Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	2000
9	81534638	2018	5/8/2018 9:59	L	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	15000
	81534624	2018	5/12/2018 12:30	S	2	WOOLBRIGHT RD W	0		Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	2000
	81534631	2018	5/13/2018 10:13	S	2	WOOLBRIGHT RD W	20	West	Rain	Wet	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	1000
10	81534704	2018	5/26/2018 10:41	L	2	WOOL BRIGHT RD	0		Rain	Wet	N	Intersection	Angle	No Injury	DAY	N	N	N	N	Y	Y	N	N	N	N	400
	81534744	2018	6/1/2018 10:57	L	2	WOOLBRIGHT RD	0		Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	2000
11	81534747	2018	6/1/2018 16:23	S	2	WEST WOOLBRIGHT ROAD	0		Clear	Dry	N	Intersection	Other	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1000
12	81534787	2018	6/8/2018 10:18	S	2	SOUTHWEST 8TH STREET	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1000
13	81534802	2018	6/10/2018 12:35	S	2	SW 8TH ST	20	North	Cloudy	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	250
14	81534893	2018	6/21/2018 13:48	S	3	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	10000
	81534988	2018	7/3/2018 7:43	L	3	WEST WOOLBRIGHT ROAD	98	West	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	10100
15	81535027	2018	7/7/2018 18:30	S	2	SW 8TH ST	10	North	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	200
	81535114	2018	7/17/2018 7:50	L	2	8TH ST SW	49	North	Clear	Dry	N	Driveway/Alley Access Related	Unknown	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	6000

ANNUAL COUNT	REPORT NUMBER	CRASH YEAR	CRASH DATE AND TIME	FORM TYPE	TOTAL No. OF VEH	ON STREET / ROAD / HIGHWAY	FEET FROM INT	DIR FROM INT	WEATHER CONDITION	RD SURFACE CONDITION	SCHOOL BUS RELATED	JUNCTION FLAG	S4 CRASH TYPE SIMPLIFIED	S4 CRASH SEVERITY	S4 DAY OR NIGHT	S4 AGGRESS DRIVING	S4 ALCOHOL RELATED	S4 DISTRACTED	S4 DRUG RELATED	S4 HIT AND RUN	S4 INTERS RELATED	S4 LN DEPART RELATED	S4 SPEEDING RELATED	S4 PED INVOLVED	S4 BICYCLIST INVOLVED	S4 TOTAL DAMAGE $
16	81535158	2018	7/21/2018 12:27	L	2	WOOLBRIGHT RD W	0		Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	Y	N	N	Y	N	N	N	N	10000
17	81535194	2018	7/26/2018 13:19	L	2	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	5000
18	81535293	2018	8/7/2018 11:46	L	2	SW 8TH ST	49	North	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	600
19	81535493	2018	8/29/2018 17:45	S	2	W WOOLBRIGHT RD	0		Rain	Wet	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1000
20	81535606	2018	9/11/2018 10:55	S	2	WOOLBRIGHT RD W	0		Cloudy	Dry	N	Intersection-Related	Sideswipe	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1500
	81535717	2018	9/25/2018 22:14	S	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Through Roadway	Rear End	No Injury	NIGHT	N	N	N	N	N	N	N	N	N	N	1500
21	81535777	2018	10/1/2018 16:10	L	2	WOOLBRIGHT RD W	0		Clear	Dry	Y	Intersection-Related	Sideswipe	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1000
22	81535817	2018	10/6/2018 11:13	L	2	WOOLBRIGHT RD	20	East	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	7000
	81535957	2018	10/23/2018 11:15	S	2	S.W. 8TH STREET	0		Clear	Dry	N	Non-Junction	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	998
	81536097	2018	11/7/2018 18:31	L	2	W WOOLBRIGHT RD	154	West	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	Y	N	N	N	N	N	N	N	4000
23	81536128	2018	11/10/2018 14:57	L	3	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	13000
	81536174	2018	11/16/2018 11:29	L	2	WEST WOOLBRIGHT ROAD	53	West	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	6000
	81536177	2018	11/16/2018 15:00	L	2	SW 8TH STREET	49	North	Clear	Dry	N	Through Roadway	Other	Injury	DAY	N	N	N	N	N	N	N	N	N	N	2000
	81536260	2018	11/27/2018 10:20	S	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	1300
	86926876	2018	12/4/2018 8:30	L	2	WEST WOOLBRIGHT RD	453	West	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	3000
24	86927158	2018	12/12/2018 7:15	L	2	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	9000
25	86927074	2018	12/21/2018 19:38	L	3	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	NIGHT	N	N	N	N	N	Y	N	N	N	N	16000
	86927147	2018	12/29/2018 10:58	S	2	SW 8TH STREET	30	North	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	6500
1	86927193	2019	1/3/2019 22:12	S	2	W. WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Other	No Injury	NIGHT	N	N	N	N	N	Y	N	N	N	N	10000
2	86927196	2019	1/4/2019 14:39	L	2	W WOOLBRIGHT RD	453	West	Clear	Dry	N	Intersection-Related	Rear End	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	10000
3	86927292	2019	1/15/2019 15:35	S	2	CORPORATE DR	151	South	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	6000
4	86927304	2019	1/16/2019 12:53	S	2	WOOLBRIGHT RD W	16	East	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	700
5	87337055	2019	1/24/2019 16:20	S	2	SW 8TH STREET	75	North	Cloudy	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1100
	87337096	2019	1/29/2019 12:00	S	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	2500
6	87337107	2019	1/31/2019 15:59	L	3	SOUTHWEST 8TH STREET	49	North	Rain	Dry	N	Intersection-Related	Sideswipe	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	5500
7	87337164	2019	2/5/2019 12:10	L	3	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	31000
8	87337168	2019	2/6/2019 14:55	S	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	4000
9	87337212	2019	2/12/2019 15:56	S	2	W WOOLBRIGHT ROAD	67	West	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	3000
10	87337323	2019	2/23/2019 10:25	S	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	700
	87337351	2019	2/26/2019 12:45	S	2	WEST WOOLBRIGHT RD	409	East	Clear	Wet	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	998
11	87337354	2019	2/26/2019 21:36	L	2	W WOOLBRIGHT RD	45	West	Rain	Wet	N	Intersection	Other	No Injury	NIGHT	N	N	N	N	N	Y	N	N	N	N	4000
12	87337362	2019	2/27/2019 19:27	L	2	SW 8TH ST	0		Cloudy	Wet	N	Intersection	Left Turn	Injury	NIGHT	N	Y	Y	N	Y	Y	N	N	N	N	4000
	87337488	2019	3/15/2019 17:55	L	2	SW 8TH ST	101	North	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	Y	N	Y	N	N	N	2500
13	87337514	2019	3/18/2019 23:07	S	2	WEST WOOLBRIGHT RD	55	East	Rain	Wet	N	Intersection-Related	Sideswipe	No Injury	NIGHT	N	N	N	N	N	Y	N	N	N	N	1000
14	87337598	2019	3/20/2019 17:48	L	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	5500
	87337839	2019	4/24/2019 8:58	S	2	W WOOLBRIGHT RD	94	East	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	2000
15	87337932	2019	5/3/2019 17:44	S	2	W WOOLBRIGHT RD	58	East	Rain	Wet	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	550
16	87337954	2019	5/6/2019 9:15	S	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	5000
17	87338029	2019	5/14/2019 12:16	S	2	W WOOLBRIGHT RD	23	West	Clear	Dry	N	Intersection-Related	Right Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	8000
18	87338040	2019	5/15/2019 10:16	S	2	W WOOLBRIGHT ROAD	0		Clear	Dry	N	Intersection	Sideswipe	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	700
	87338225	2019	6/6/2019 16:58	L	2	SW 8TH ST	190	North	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	7000
19	87338230	2019	6/7/2019 17:03	L	2	SW 8TH ST	36	North	Cloudy	Wet	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	Y	Y	N	N	N	N	1000
	87338245	2019	6/11/2019 12:00	L	2	WEST WOOLBRIGHT ROAD	159	West	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	Y	N	Y	N	N	N	2000
20	87338412	2019	7/3/2019 8:11	S	2	W WOOLBRIGHT RD	77	East	Clear	Dry	N	Intersection-Related	Sideswipe	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	3000
21	87338506	2019	7/18/2019 10:24	L	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	12000
22	87338541	2019	7/23/2019 16:40	L	2	W WOOLBRIGHT RD	0		Rain	Wet	N	Intersection	Left Turn	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	18000
23	87338688	2019	8/15/2019 15:19	L	3	WEST WOOLBRIGHT RD	194	East	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	4500
24	87338869	2019	9/10/2019 15:53	L	2	WEST WOOLBRIGHT ROAD	0		Clear	Dry	N	Intersection	Angle	Injury	DAY	N	N	Y	N	N	Y	N	N	N	N	7000
	87338975	2019	9/14/2019 20:20	S	2	W WOOLBRIGHT RD	214	West	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	NIGHT	N	N	N	N	N	N	Y	N	N	N	1000
25	87339105	2019	10/7/2019 22:20	S	2	W WOOLBRIGHT RD	67	West	Rain	Wet	N	Intersection-Related	Rear End	No Injury	NIGHT	Y	N	N	N	N	Y	N	Y	N	N	1200
	87339317	2019	11/1/2019 22:05	L	2	SW 15TH AVE	264	East	Cloudy	Wet	N	Through Roadway	Rear End	No Injury	NIGHT	N	N	N	N	N	N	N	N	N	N	15000
	87339323	2019	11/2/2019 13:55	S	2	SW 8TH ST	74	North	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	Y	N	N	N	N	N	N	N	1000
	87339497	2019	11/21/2019 19:33	L	2	SW 8TH ST	197	North	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	NIGHT	N	N	N	N	N	N	Y	N	N	N	3000
26	87339525	2019	11/24/2019 11:17	L	2	SW 15TH AVE	0		Rain	Wet	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	25000
27	87340018	2019	12/13/2019 11:45	L	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	11000
1	87339916	2020	1/4/2020 15:06	L	3	W WOOLBRIGHT AVE	0		Clear	Dry	N	Intersection	Left Turn	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	14000
2	89873537	2020	1/17/2020 6:40	L	2	WOOLBRIGHT ROAD	0		Cloudy	Wet	N	Intersection	Left Turn	Injury	NIGHT	N	N	N	N	N	Y	N	N	N	N	7000
3	89873589	2020	1/22/2020 19:02	L	2	W WOOLBRIGHT RD	0		Rain	Wet	N	Intersection	Rear End	No Injury	NIGHT	N	N	N	N	Y	Y	N	N	N	N	200
4	89873599	2020	1/23/2020 11:55	L	2	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	13000
	89873699	2020	2/1/2020 12:58	L	2	SW 8TH ST	301	North	Cloudy	Dry	N	Through Roadway	Rear End	No Injury	DAY	Y	N	N	N	N	N	N	Y	N	N	6000
	89873778	2020	2/11/2020 14:32	S	2	W WOOLBRIGHT RD	366	West	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	1400
	89873809	2020	2/13/2020 8:37	L	2	SW 8TH ST	201	North	Clear	Dry	N	Driveway/Alley Access Related	Unknown	No Injury	DAY	N	N	N	N	Y	N	N	N	N	N	2000
	89873831	2020	2/15/2020 13:08	S	3	SW 8TH ST	97	North	Rain	Wet	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	1000
	89873872	2020	2/19/2020 14:40	S	2	SW 8TH ST	161	North	Clear	Dry	N	Through Roadway	Other	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	5200
	89873914	2020	2/24/2020 8:40	S	2	W WOOLBRIGHT ROAD	301	East	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	750
5	89874003	2020	3/3/2020 19:06	L	2	SW 15TH AVE	0		Clear	Dry	N	Intersection	Left Turn	No Injury	NIGHT	N	N	N	N	N	Y	N	N	N	N	6000
6	89874014	2020	3/4/2020 14:58	S	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Sideswipe	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	2500
	89874041	2020	3/6/2020 11:17	S	2	SW 8TH ST	77	North	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	3000
7	89874042	2020	3/6/2020 11:55	S	2	CORPORATE DR	76	South	Cloudy	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	Y	N	N	Y	N	N	N	N	3500

ANNUAL COUNT	REPORT NUMBER	CRASH YEAR	CRASH DATE AND TIME	FORM TYPE	TOTAL No. OF VEH	ON STREET / ROAD / HIGHWAY	FEET FROM INT	DIR FROM INT	WEATHER CONDITION	RD SURFACE CONDITION	SCHOOL BUS RELATED	JUNCTION FLAG	S4 CRASH TYPE SIMPLIFIED	S4 CRASH SEVERITY	S4 DAY OR NIGHT	S4 AGGRESS DRIVING	S4 ALCOHOL RELATED	S4 DISTRACTED	S4 DRUG RELATED	S4 HIT AND RUN	S4 INTERS RELATED	S4 LN DEPART RELATED	S4 SPEEDING RELATED	S4 PED INVOLVED	S4 BICYCLIST INVOLVED	S4 TOTAL DAMAGE $
8	89874436	2020	5/17/2020 12:29	L	2	SW 15TH AVE	0		Clear	Dry	N	Intersection	Angle	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	4000
	89874537	2020	6/4/2020 12:56	S	2	W WOOLBRIGHT RD	36	West	Rain	Wet	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	2000
9	89874593	2020	6/11/2020 14:10	S	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection-Related	Other	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1000
	89874758	2020	7/4/2020 18:54	L	1	SW 8TH ST	145	North	Rain	Wet	N	Other	Off Road	Injury	DAY	N	N	N	N	N	N	N	N	N	N	3200
10	89874772	2020	7/7/2020 9:55	L	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	9500
11	89874861	2020	7/22/2020 16:41	S	2	WEST WOOLBRIGHT ROAD	85	West	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1500
	89874915	2020	7/31/2020 8:40	S	2	SW 8TH ST	173	North	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	1000
12	89874933	2020	8/1/2020 14:21	L	1	SOUTHWEST 8TH STREET	0		Clear	Dry	N	Intersection-Related	Off Road	No Injury	DAY	N	N	N	N	Y	Y	N	N	N	N	6500
13	89874955	2020	8/5/2020 9:20	L	2	W WOOLBRIGHT RD	0		Rain	Wet	N	Intersection	Left Turn	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	35000
	89875004	2020	8/14/2020 9:30	S	2	SW 15TH AVE	374	East	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	1000
14	89875135	2020	8/28/2020 9:40	L	2	WOOLBRIGHT ROAD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	4000
15	89875182	2020	9/10/2020 8:55	S	2	W WOOLBRIGHT RD	67	West	Clear	Dry	N	Intersection-Related	Rear End	Injury	DAY	N	N	Y	N	N	Y	N	N	N	N	700
16	89875357	2020	10/8/2020 7:27	L	2	WOOLBRIGHT ROAD	54	West	Rain	Wet	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	10000
17	89875434	2020	10/21/2020 8:45	L	2	W WOOLBRIGHT RD	0		Rain	Wet	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	11000
18	89875480	2020	10/27/2020 16:50	S	2	SW 8TH ST	75	North	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	500
19	89875605	2020	11/14/2020 17:20	L	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	35000
20	89875731	2020	11/21/2020 12:40	L	2	SW 8TH ST	73	North	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	Y	Y	N	N	N	N	200
21	89875664	2020	11/23/2020 16:42	L	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Unknown	Injury	DAY	N	N	N	N	Y	Y	N	N	N	N	5000
	89875810	2020	12/10/2020 18:12	S	2	SW 15TH AVE	247	East	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	2000
22	89875861	2020	12/16/2020 17:40	S	2	W WOOLBRIGHT RD	56	East	Clear	Dry	N	Intersection-Related	Other	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	2550
	89875943	2020	12/27/2020 17:48	S	2	W WOOLBRIGHT RD	54	West	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	1700
	89875947	2020	12/28/2020 15:41	S	2	SW 8TH ST	201	North	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	1000
	88434366	2020	12/29/2020 17:51	S	2	SW 8TH ST	49	North	Clear	Dry	N	Non-Junction	Other	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	2000
1	89876034	2021	1/8/2021 7:06	L	2	SW 15TH AVE	0		Clear	Dry	N	Intersection	Other	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	14000
2	89876124	2021	1/24/2021 11:00	L	2	SW 8TH ST	100	North	Clear	Dry	N	Intersection-Related	Rear End	Injury	DAY	N	N	N	N	Y	Y	N	N	N	N	400
3	89876198	2021	2/2/2021 9:55	S	2	CORPORATE DR	0		Clear	Dry	N	Intersection	Other	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	2000
4	89876199	2021	2/2/2021 11:33	L	1	SW 15TH AVE	59	East	Clear	Dry	N	Intersection-Related	Off Road	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	9000
5	89876249	2021	2/5/2021 6:00	L	2	W WOOLBRIGHT RD	43	West	Clear	Dry	N	Intersection-Related	Other	Injury	NIGHT	N	N	Y	N	N	Y	N	N	N	N	9000
6	89876374	2021	2/23/2021 13:03	S	2	CORPORATE DR	22	South	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	500
7	89876423	2021	3/2/2021 16:52	L	2	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	10000
8	24434158	2021	3/23/2021 18:12	S	2	W WOOLBRIGHT RD	93	West	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	4000
9	24434202	2021	3/28/2021 14:37	L	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	6000
	24434258	2021	4/4/2021 19:00	L	3	W WOOLBRIGHT RD	226	West	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	NIGHT	N	N	N	N	N	N	Y	N	N	N	2000
10	24434274	2021	4/7/2021 7:10	L	2	CORPORATE DR	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	15000
11	24434425	2021	4/8/2021 16:25	L	2	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	10000
12	24434350	2021	4/15/2021 17:05	S	2	W WOOLBRIGHT RD	159	West	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1000
13	24434424	2021	4/23/2021 14:31	S	2	CORPORATE DR	0		Clear	Dry	N	Intersection	Right Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	8000
	24434557	2021	5/9/2021 17:20	L	1	SW 8TH ST	120	North	Clear	Dry	N	Through Roadway	Off Road	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	5001
14	24434566	2021	5/10/2021 14:39	S	2	CORPORATE DR	117	South	Clear	Dry	N	Intersection-Related	Sideswipe	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1500
15	24434601	2021	5/12/2021 8:57	L	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Other	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	7000
16	24434782	2021	6/4/2021 12:00	S	2	WOOLBRIGHT RD	30	West	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	600
17	24434815	2021	6/8/2021 16:16	L	2	W WOOLBRIGHT RD	20	West	Clear	Dry	N	Intersection-Related	Rear End	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	11000
18	24434819	2021	6/8/2021 16:41	L	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	10000
19	24434948	2021	6/23/2021 21:36	S	2	SW 8TH ST	0		Clear	Dry	N	Intersection	Right Turn	No Injury	NIGHT	N	N	N	N	N	Y	N	N	N	N	800
20	24435121	2021	7/17/2021 16:39	S	2	W WOOLBRIGHT RD	54	East	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	8000
	24435163	2021	7/24/2021 15:03	S	2	W WOOLBRIGHT RD	111	West	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	7000
21	24435174	2021	7/26/2021 9:04	S	2	SW 8TH ST	99	North	Clear	Dry	N	Intersection-Related	Rear End	No Injury	DAY	N	N	Y	N	N	Y	N	N	N	N	300
22	24435181	2021	7/26/2021 22:22	L	2	W WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Rear End	No Injury	NIGHT	N	N	N	N	N	Y	N	N	N	N	15000
23	24435289	2021	8/10/2021 10:45	L	2	CORPORATE DR	46	South	Clear	Dry	N	Intersection-Related	Rear End	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1200
	24435557	2021	9/14/2021 14:15	S	2	W WOOLBRIGHT RD	75	East	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	1000
24	24435564	2021	9/15/2021 15:54	S	2	CORPORATE DR	44	South	Clear	Dry	N	Intersection-Related	Left Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	1500
	24435774	2021	10/9/2021 18:45	S	2	SW 8TH ST	156	North	Clear	Wet	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	9000
	24435901	2021	10/25/2021 9:45	S	2	SW 8TH ST	94	North	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	2000
	24435980	2021	11/4/2021 12:32	S	2	WOOLBRIGHT RD	0		Clear	Dry	N	Non-Junction	Other	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	200
	24435989	2021	11/5/2021 9:42	S	3	W WOOLBRIGHT RD	195	East	Rain	Wet	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	5000
	24436002	2021	11/6/2021 12:37	S	2	W WOOLBRIGHT RD	171	West	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	1500
	24436108	2021	11/18/2021 7:36	S	2	SW 15TH AVE	263	West	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	1600
	24436110	2021	11/18/2021 10:25	S	2	CORPORATE DR	34	South	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	500
25	24436153	2021	11/22/2021 16:30	S	2	SW 8TH ST	0		Clear	Dry	N	Intersection	Right Turn	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	4000
26	24436157	2021	11/23/2021 12:32	L	3	WOOLBRIGHT RD	0		Clear	Dry	N	Intersection	Unknown	Injury	DAY	N	N	N	N	N	Y	N	N	N	N	11000
27	24436163	2021	11/24/2021 23:20	S	2	W. WOOLBRIGHT ROAD	0		Clear	Wet	N	Intersection-Related	Rear End	No Injury	NIGHT	N	N	N	N	N	Y	N	N	N	N	750
	24436185	2021	11/26/2021 16:15	L	2	SW 8TH ST	85	North	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	Y	N	Y	N	N	N	1000
	24436307	2021	12/9/2021 11:59	S	2	WOOLBRIGHT RD	74	West	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	2000
28	24436360	2021	12/14/2021 17:26	S	2	SW 15TH AVE	0		Clear	Dry	N	Intersection	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	400
	24436423	2021	12/20/2021 13:30	S	2	W. WOOLBRIGHT RD	114	West	Clear	Dry	N	Through Roadway	Rear End	No Injury	DAY	N	N	N	N	N	N	N	N	N	N	1000
29	24436490	2021	12/27/2021 15:18	S	2	SW 15TH AVE	0		Clear	Dry	N	Intersection	Rear End	No Injury	DAY	N	N	N	N	N	Y	N	N	N	N	11000
30	24436505	2021	12/29/2021 1:21	L	1	SW 8TH ST	142	North	Clear	Dry	N	Intersection-Related	Off Road	No Injury	NIGHT	N	N	N	N	N	Y	N	N	N	N	3100
	24436521	2021	12/31/2021 18:23	S	2	W WOOLBRIGHT RD	193	West	Clear	Dry	N	Through Roadway	Sideswipe	No Injury	DAY	N	N	N	N	N	N	Y	N	N	N	1000

Control Strategy Selection and Inputs

Specify the Facility Level Inputs and the Control Strategies to be included in the SPICE Analysis.

Intersection Type	Ramp Terminal Intersections	
Analysis Year	Opening and Design Year	
Opening Year	2025	
Design Year	2045	
Freeway Orientation	North-South	
Area Type	Urban	

Opening Year AADT	**NB Ramp Terminal**	**SB Ramp Terminal**
Crossroad - Inside Leg	43500	43500
Crossroad - Outside Leg	42000	44500
Exit Ramp	13000	19500
Entrance Ramp	17000	12500
Design Year AADT	**NB Ramp Terminal**	**SB Ramp Terminal**
Crossroad - Inside Leg	50000	50000
Crossroad - Outside Leg	46000	52000
Exit Ramp	13500	24000
Entrance Ramp	22000	13500

Ramp Terminal Intersections			
Traffic Control (both intersections)	**Include**	**Base Intersection**	
Signalized Diamond	Yes	--	
Signalized Diamond (Alt)	Yes	--	
Diverging Diamond	No	--	
Single-Point Diamond	No	--	
Unsignalized Diamond	No	--	
1-lane Roundabout	No	--	
2-lane Roundabout	No	--	
Signalized Tight Diamond Interchange	No	--	
Other 1	No	Signalized Diamond	*Please Select
Other 2	No	Unsignalized Diamond	*Please Select

Ramp Terminal Inputs

Provide inputs needed to compute and apply Part C CMFs.

Alternative	Signalized Diamond		Signalized Diamond (Alt)	
	4 Leg Terminal w/ Diagonal Ramps (D4)		4 Leg Terminal w/ Diagonal Ramps (D4)	
Ramp Terminal	**NB Ramp Terminal**	**SB Ramp Terminal**	**NB Ramp Terminal**	**SB Ramp Terminal**
Opening Year AADT Crossroad - Inside Leg	43500	43500	43500	43500
Opening Year AADT Crossroad - Outside Leg	42000	44500	42000	44500
Opening Year AADT Exit Ramp	13000	19500	13000	19500
Opening Year AADT Entrance Ramp	17000	12500	17000	12500
Design Year AADT Crossroad - Inside Leg	50000	50000	50000	50000
Design Year AADT Crossroad - Outside Leg	46000	52000	46000	52000
Design Year AADT Exit Ramp	13500	24000	13500	24000
Design Year AADT Entrance Ramp	22000	13500	22000	13500
Number of Crossroad Lanes	6	6	6	6
Number of through traffic lanes that oppose the left-turn movement on the inside crossroad leg	3	3	3	3
Number of through traffic lanes that oppose the left-turn movement on the outside crossroad leg	3	3	3	3
Number of free-flow right turns from exit ramp to crossroad	N/A	N/A	N/A	N/A

CMF Inputs	**Part C CMFs Optional For Stage 1 ICE, Required for Stage 2 ICE**			
Exit Ramp Skew Angle	N/A	N/A	N/A	N/A
Is a non-ramp public street leg present?	No	No	No	No
Exit ramp right turn control	Signal/Stop/yield-controlled	Signal/Stop/yield-controlled	Signal/Stop/yield-controlled	Signal/Stop/yield-controlled
Effective number of lanes serving exit ramp	3	3	4	4
Number of unsignalized driveways on the outside crossroad leg within 250' of the interchange	0	0	0	0
Distance (mi) to the adjacent ramp terminal	0.13	0.13	0.13	0.13
Distance (mi) to the next public street intersection on the outside crossroad leg	0.45	0.25	0.45	0.25
# of unsignalized public street approaches on the outside crossroad leg within 250' (<0.05 mi) of the interchange	0	0	0	0
Median Width (ft)	50.00	50.00	50.00	50.00
Presence of right-turn lane/bay on outside crossroad leg	Yes	Yes	Yes	Yes
Presence of left-turn lane/bay on inside crossroad leg	Yes	Yes	Yes	Yes
Left-turn lane/bay Width for inside crossroad leg	24.00	24.00	24.00	24.00
Protected Left-turn operation for inside crossroad leg	Yes	Yes	Yes	Yes
Right turn channelization for outside crossroad leg	Yes	Yes	Yes	Yes
Right turn channelization for exit ramp	Yes	Yes	Yes	Yes

Federal Highway Administration (FHWA)

Safety Performance for Intersection Control Evaluation Tool

Results

Summary of crash prediction results for each alternative

Project Information

Project Name:	I-95/SR-9 @ Woolbright Rd IMR Re-evaluation	**Intersection Type**	Ramp Terminal Intersections
Intersection:	I-95 at Woolbright Rd NB & SB Ramp Terminals	**Opening Year**	2025
Agency:	FDOT 4	**Design Year**	2045
Project Reference:	FPID No. 437279-1	**Area Type**	Urban
City:	Boynton Beach		
State:	Florida		
Date:	8/15/2022		
Analyst:	CED (JA)		

Crash Prediction Summary

Control Strategy	Crash Type	Opening Year	Design Year	Total Project Life Cycle	Rank	AADT Within range?	SSI Score		
							Open	Design	Rank
Signalized Diamond	Total	42.19	48.08	946.49	2	Yes	32	21	1
	Fatal & Injury	20.08	23.06	452.54					
Signalized Diamond (Alt)	Total	41.28	46.67	922.52	1	Yes	32	21	1
	Fatal & Injury	19.18	21.65	428.58					

APPENDIX G

Build Alternative
Conceptual Signing Plan

APPENDIX G

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR-9	PALM BEACH	437279-1-52-01

SR-9/I-95 AT WOOLBRIGHT RD. INTERCHANGE - CONCEPTUAL SIGNING PLAN

SHEET NO.

APPENDIX H

Build Alternative
Long Range Estimate (LRE)
Cost Estimate

APPENDIX

H

Date: 4/29/2022 10:44:30 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 437279-1-52-01 **Letting Date:** 07/2026

Description: SR-9/I-95 FROM SOUTH OF WOOLBRIGHT ROAD TO NORTH OF WOOLBRIGHT ROAD

District: 04 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English
Contract Class: 1 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 3.214 MI

Project Manager: ARRIETA

Version 12 Project Grand Total **$20,679,799.02**
Description: Initial Engineering

Sequence: 1 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.168 MI 887 LF

Description: Woolbright Road from SW 18th Street to Bridge #934461 (Woolbright Road over LWDD E-4 Canal)

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	10.00 / 15.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.168
Top of Structural Course For Begin Section	103.00
Top of Structural Course For End Section	103.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Existing Outside Shoulder Cross Slope L/R	5.00 % / 5.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	5.00 % / 5.00 %
Outside Shoulder Cross Slope L/R	5.00 % / 5.00 %
Roadway Cross Slope L/R	5.00 % / 5.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.51	AC	$33,000.00	$16,830.00
120-1	REGULAR EXCAVATION	364.01	CY	$19.50	$7,098.20
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	3,063.24	CY	$45.00	$137,845.80
	Earthwork Component Total				$161,774.00

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	36.00 / 36.00
Structural Spread Rate	110

Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	6.00 / 6.00
Widened Inside Pavement Width L/R	2.00 / 2.00
Widened Structural Spread Rate	110
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,594.10	SY	$11.00	$28,535.10
285-709	OPTIONAL BASE,BASE GROUP 09	1,707.06	SY	$25.00	$42,676.50
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	7,096.32	SY	$2.85	$20,224.51
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	86.73	TN	$160.00	$13,876.80
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	585.45	TN	$165.00	$96,599.25
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	130.10	TN	$165.00	$21,466.50

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	891.20	SY	$23.50	$20,943.20
	Comment: RT Side - 243.2 SY (Sidewalk, Driveway and C&G (median included)) LT Side - 648.1 SY (Sidewalk, Driveway and C&G (median included))				
339-1	MISCELLANEOUS ASPHALT PAVEMENT	2.30	TN	$290.00	$667.00
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	260.00	LF	$22.00	$5,720.00
536-6	PIPE RAIL FOR GUARDRAIL	106.00	LF	$19.00	$2,014.00
536-8-112	GUARDRA CONN TO RIGID BA, F&I, N APPR 3	1.00	EA	$3,500.00	$3,500.00
536-73	GUARDRAIL REMOVAL	190.00	LF	$2.40	$456.00
536-85-24	GUARDRAIL END TREATMENT-PARA APP TERM	1.00	EA	$3,000.00	$3,000.00

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	113.00	EA	$3.92	$442.96
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.67	NM	$4,100.00	$2,747.00
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.67	GM	$380.01	$254.61
711-12-131	THERMOPLASTIC, REFURB, WHITE, SKIP, 6"	0.67	GM	$875.24	$586.41
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.67	GM	$4,481.00	$3,002.27
	Roadway Component Total				$266,712.11

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	4.25 / 4.25
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Sidewalk Width L/R	0.00 / 0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	394.24	SY	$3.00	$1,182.72

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	611.00	LF	$30.00	$18,330.00
	Comment: 268' (RT) + 343' (LT)				
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	114.00	SY	$47.00	$5,358.00
	Comment: 13 SY (RT) + 101 SY (LT)				

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,774.08	LF	$2.00	$3,548.16
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	16.80	LF	$8.50	$142.80
104-18	INLET PROTECTION SYSTEM	8.00	EA	$115.00	$920.00
107-1	LITTER REMOVAL	1.46	AC	$35.00	$51.10
107-2	MOWING	1.46	AC	$50.00	$73.00
	Shoulder Component Total				$29,605.78

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	1.30

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	128.13	SY	$3.00	$384.39

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,118.00	LF	$30.00	$33,540.00
	Median Component Total				$33,924.39

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	2.00	EA	$6,000.00	$12,000.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-365	INLETS, CURB, TYPE P-6, PARTIAL	1.00	EA	$4,000.00	$4,000.00
430-175-118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	40.00	LF	$120.00	$4,800.00
	Drainage Component Total				$20,800.00

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$371.26	$1,485.04
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,253.67	$1,253.67
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$286.06	$286.06
700-1-60	SINGLE POST SIGN, REMOVE	4.00	AS	$29.87	$119.48
	Signing Component Total				$3,144.25

Sequence 1 Total $515,960.53

Sequence: 2 MIS - Miscellaneous Construction **Net Length:** 0.089 MI 470 LF

Description: Bridges #934461, #930300, & #930301 (Woolbright Road over LWDD E-4 Canal, over CSX, and over I-95)

BRIDGES COMPONENT

Bridge 934461

Description	Value
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	60.00
Width (LF)	43.00
Type	Medium Level, Widen
Cost Factor	2.62
Structure No.	
Removal of Existing Structures area	1,675.00
Default Cost per SF	$65.00
Factored Cost per SF	$170.30
Final Cost per SF	**$199.14**
Basic Bridge Cost	**$439,374.00**
Description	WIDENING BRIDGE # 934461, WOOLBRIGHT ROAD OVER THE E-4 CANAL, TO THE NORTH TO ACCOMODATE THE ADDITION OF EB LEFT TURN LANE AT SW 8TH STREET AND BICYCLE LANES.

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	1,675.00	SF	$65.00	$108,875.00

400-2-10	CONC CLASS II, APPROACH SLABS	95.56 CY	$560.00	$53,513.60
415-1-9	REINF STEEL- APPROACH SLABS	16,723.00 LB	$1.25	$20,903.75
	Bridge 934461 Total			$622,666.35

Bridge 930300

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	143.00
Width (LF)	62.00
Type	Medium Level, Widen
Cost Factor	2.62
Structure No.	
Removal of Existing Structures area	4,367.00
Default Cost per SF	$65.00
Factored Cost per SF	$170.30
Final Cost per SF	**$182.40**
Basic Bridge Cost	**$1,509,879.80**
Description	WIDENING BRIDGE #930300, WOOLBRIGHT ROAD OVER THE CSX RAILROAD, TO THE SOUTH.

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	4,367.00	SF	$65.00	$283,855.00
400-2-10	CONC CLASS II, APPROACH SLABS	137.78	CY	$560.00	$77,156.80
415-1-9	REINF STEEL- APPROACH SLABS	24,111.50	LB	$1.25	$30,139.38
	Bridge 930300 Total				$1,901,030.98

Bridge 930301

Description	**Value**
Estimate Type	SF Estimate
Primary Estimate	YES
Length (LF)	271.00
Width (LF)	52.00
Type	Medium Level, Widen
Cost Factor	2.62
Structure No.	
Removal of Existing Structures area	2,360.00
Default Cost per SF	$65.00
Factored Cost per SF	$170.30
Final Cost per SF	**$176.69**
Basic Bridge Cost	**$2,399,867.60**
Description	WIDENING BRIDGE #930301, WOOLBRIGHT ROAD OVER I-95, TO THE SOUTH.

Bridge Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-3	REMOVAL OF EXISTING STRUCTURES/BRIDGES	2,360.00	SF	$65.00	$153,400.00
400-2-10	CONC CLASS II, APPROACH SLABS	115.56	CY	$560.00	$64,713.60
415-1-9	REINF STEEL- APPROACH SLABS	20,223.00	LB	$1.25	$25,278.75

Bridge 930301 Total	$2,643,259.95
Bridges Component Total	$5,166,957.28
Sequence 2 Total	$5,166,957.28

Sequence: 3 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.333 MI 1,758 LF

Description: Woolbright Road east of Bridge #934461 (Woolbright Road over LWDD E-4 Canal) to west of Bridge #930301 (Woolbright Road over I-95) (not including Bridge #930300: Woolbright Road over CSX)

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	30.00 / 25.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.258
Top of Structural Course For Begin Section	104.00
Top of Structural Course For End Section	104.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	4.00 % / 4.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.22	AC	$33,000.00	$73,260.00
120-1	REGULAR EXCAVATION	2,773.92	CY	$19.50	$54,091.44
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	18,268.14	CY	$45.00	$822,066.30

Earthwork Component Total $949,417.74

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	43.00 / 43.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	2.00 / 36.00
Widened Inside Pavement Width L/R	15.00 / 2.00
Widened Structural Spread Rate	110
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	12,760.92	SY	$11.00	$140,370.12
285-709	OPTIONAL BASE,BASE GROUP 09	11,002.68	SY	$25.00	$275,067.00
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	16,800.96	SY	$2.85	$47,882.74
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	590.96	TN	$160.00	$94,553.60
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	1,386.08	TN	$165.00	$228,703.20
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	886.45	TN	$165.00	$146,264.25

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	3,715.80	SY	$23.50	$87,321.30
	Comment: RT Side - 1760.2 SY (Sidewalk and C&G (median included)) LT Side - 1955.6 SY (Sidewalk and C&G (median included))				
339-1	MISCELLANEOUS ASPHALT PAVEMENT	12.40	TN	$290.00	$3,596.00
400-0-11	CONC CLASS NS, GRAVITY WALL	10.00	CY	$780.00	$7,800.00
515-2-311	PED/BICYCLE RAILING, ALUM,42" TYPE 1	150.00	LF	$100.00	$15,000.00
521-6-11	CONC PARAPET, PED/BIKE, 27"	210.00	LF	$150.00	$31,500.00
521-72-43	SHLDR CONC BARRIER, CURB AND GUTTER BARR	572.00	LF	$220.00	$125,840.00
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	850.00	LF	$22.00	$18,700.00
536-6	PIPE RAIL FOR GUARDRAIL	75.00	LF	$19.00	$1,425.00
536-7-2	SPECIAL GUARDRAIL POST- SP STEEL POST CM	8.00	EA	$250.00	$2,000.00
536-8-112	GUARDRA CONN TO RIGID BA, F&I, N APPR 3	3.00	EA	$3,500.00	$10,500.00
536-73	GUARDRAIL REMOVAL	1,057.00	LF	$2.40	$2,536.80
536-85-20	GUARDRAIL END TREAT-TRAILING ANCHORAGE	1.00	EA	$1,400.00	$1,400.00
536-85-24	GUARDRAIL END TREATMENT-PARA APP TERM	3.00	EA	$3,000.00	$9,000.00
536-85-26	GUARDRAIL END TREATMENT-TYPE CRT	1.00	EA	$1,951.33	$1,951.33

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	225.00	EA	$3.92	$882.00
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	1.33	NM	$4,100.00	$5,453.00
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	1.33	GM	$380.01	$505.41
711-12-131	THERMOPLASTIC, REFURB, WHITE, SKIP, 6"	1.33	GM	$875.24	$1,164.07
711-15-101	THERMOPLASTIC, STD-OP,	1.33	GM	$4,481.00	$5,959.73

WHITE, SOLID, 6"

Roadway Component Total $1,265,375.55

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	10.25 / 10.25
Total Outside Shoulder Perf. Turf Width L/R	8.00 / 8.00
Sidewalk Width L/R	0.00 / 0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	3,125.76	SY	$3.00	$9,377.28

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-7	CONCRETE CURB & GUTTER, TYPE E	488.00	LF	$27.50	$13,420.00
520-1-10	CONCRETE CURB & GUTTER, TYPE F	2,353.00	LF	$30.00	$70,590.00
	Comment: 1052' (RT) + 1301' (LT)				
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,100.00	SY	$47.00	$51,700.00
	Comment: 770 SY (RT) + 330 SY (LT)				
527-2	DETECTABLE WARNINGS	350.00	SF	$30.00	$10,500.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,516.48	LF	$2.00	$7,032.96
104-11	FLOATING TURBIDITY BARRIER	33.30	LF	$13.00	$432.90
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	33.30	LF	$8.50	$283.05
104-18	INLET PROTECTION SYSTEM	16.00	EA	$115.00	$1,840.00
107-1	LITTER REMOVAL	2.90	AC	$35.00	$101.50
107-2	MOWING	2.90	AC	$50.00	$145.00

Shoulder Component Total $165,422.69

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	2.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-5-41	TRAF SEP CONC-TYPE IV, 4' WIDE	550.00	LF	$55.00	$30,250.00
570-1-2	PERFORMANCE TURF, SOD	390.72	SY	$4.65	$1,816.85

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	2,704.00	LF	$30.00	$81,120.00
	Median Component Total				$113,186.85

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	8.00	EA	$6,000.00	$48,000.00
425-1-451	INLETS, CURB, TYPE J-5, <10'	4.00	EA	$9,000.00	$36,000.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	184.00	LF	$180.00	$33,120.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	56.00	LF	$200.00	$11,200.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00	EA	$6,000.00	$12,000.00
425-1-882	INLETS, BARRIER WALL, RIG, C&G, >10'	4.00	EA	$16,385.09	$65,540.36
425-2-41	MANHOLES, P-7, <10'	2.00	EA	$5,500.00	$11,000.00
425-2-43	MANHOLES, P-7, PARTIAL	4.00	EA	$3,500.00	$14,000.00
430-175-118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	504.00	LF	$120.00	$60,480.00
430-982-133	MITERED END SECT, OPTIONAL RD, 30" CD	4.00	EA	$3,000.00	$12,000.00
	Drainage Component Total				$303,340.36

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	20.00	AS	$371.26	$7,425.20
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	4.00	AS	$1,253.67	$5,014.68
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$286.06	$286.06
700-1-60	SINGLE POST SIGN, REMOVE	8.00	AS	$29.87	$238.96
700-2-14	MULTI- POST SIGN, F&I GM, 31-50 SF	2.00	AS	$4,885.09	$9,770.18
700-2-60	MULTI- POST SIGN, REMOVE	2.00	AS	$808.92	$1,617.84

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-112	OH STATIC SIGN STR, F&I, C 21-30 FT	1.00	EA	$75,000.00	$75,000.00
700-4-610	OH STATIC SIGN STR, REMOVE, CANT	1.00	EA	$6,500.00	$6,500.00
	Signing Component Total				$105,852.92

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	Woolbright Road at SW 8th Street/Corporate Drive

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$11.00	$7,700.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$25.00	$7,500.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,593.39	$5,593.39
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$777.88	$17,113.36
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$3,009.98	$3,009.98
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.85	$351.00
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,700.00	$1,700.00
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	1.00	EA	$1,450.00	$1,450.00
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	4.00	EA	$75,000.00	$300,000.00
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$1,100.00	$22,000.00
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$700.00	$5,600.00
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00	EA	$378.52	$7,570.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00	AS	$1,103.75	$22,075.00
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	8.00	EA	$1,527.02	$12,216.16
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	2.00	AS	$37,092.36	$74,184.72
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$305.92	$1,223.68
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	8.00	EA	$3,000.00	$24,000.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
660-4-11	VEHICLE DETECTION SYSTEM-VIDEO, CABINET	4.00	EA	$5,466.98	$21,867.92
660-4-12	VEHICLE DETECTION SYSTEM-VIDEO, ABOVE G	4.00	EA	$3,675.12	$14,700.48

Signalization 2

Description	Value
Type	6 Lane Mast Arm
Multiplier	1
Description	SB Ramp Terminal

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$11.00	$7,700.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$25.00	$7,500.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,593.39	$5,593.39

635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$777.88	$17,113.36
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$3,009.98	$3,009.98
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.85	$351.00
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,700.00	$1,700.00
646-1-11	ALUMINUM SIGNALS POLE, PEDESTAL	8.00	EA	$1,450.00	$11,600.00
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00	EA	$75,000.00	$450,000.00
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$1,100.00	$22,000.00
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$700.00	$5,600.00
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00	EA	$378.52	$7,570.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00	AS	$1,103.75	$22,075.00
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	8.00	EA	$1,527.02	$12,216.16
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$37,092.36	$37,092.36
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$305.92	$1,223.68
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	4.00	EA	$3,000.00	$12,000.00
	Signalizations Component Total				$1,174,201.42

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,758.24	LF	$11.00	$19,340.64
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	348.98	LF	$25.00	$8,724.50
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00	EA	$777.88	$9,334.56
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	6,421.57	LF	$2.75	$17,659.32
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	12.00	EA	$6,000.00	$72,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	12.00	EA	$615.90	$7,390.80
	Subcomponent Total				$134,449.82
	Lighting Component Total				$134,449.82

RETAINING WALLS COMPONENT

Retaining Wall 1

Description	Value
Length	250.00
Begin height	25.00
End Height	31.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	7,000.00	SF	$40.92	$286,440.00

Retaining Wall 2

Description	Value
Length	105.00
Begin height	20.00
End Height	10.00
Multiplier	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
548-12	RET WALL SYSTEM, PERM, EX BARRIER	1,575.00	SF	$40.92	$64,449.00

Retaining Walls Component Total $350,889.00

Sequence 3 Total $4,562,136.35

Sequence: 4 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.207 MI 1,093 LF

Description: Woolbright Road east of Bridge #930301 (Woolbright Road over I-95)

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	45.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.207
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	3 to 1 / 3 to 1
Existing Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	3 to 1 / 3 to 1
Median Shoulder Cross Slope L/R	0.00 % / 0.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	2.38	AC	$33,000.00	$78,540.00
120-1	REGULAR EXCAVATION	1,343.94	CY	$19.50	$26,206.83
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	5,410.56	CY	$45.00	$243,475.20

Earthwork Component Total $348,222.03

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	60.00 / 33.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	2.00 / 30.00
Widened Inside Pavement Width L/R	13.00 / 2.00
Widened Structural Spread Rate	110
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	6,960.94	SY	$11.00	$76,570.34
285-709	OPTIONAL BASE,BASE GROUP 09	5,867.98	SY	$25.00	$146,699.50
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	11,293.92	SY	$2.85	$32,187.67
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	313.92	TN	$160.00	$50,227.20
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	931.75	TN	$165.00	$153,738.75
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	470.88	TN	$165.00	$77,695.20

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-4-10	REMOVAL OF EXIST CONC	1,055.60	SY	$23.50	$24,806.60
	Comment: RT Side - 666.7 SY (Sidewalk and C&G (median included)) LT Side - 388.9 SY (Sidewalk and C&G (median included))				
339-1	MISCELLANEOUS ASPHALT PAVEMENT	4.30	TN	$290.00	$1,247.00
400-0-11	CONC CLASS NS, GRAVITY WALL	40.00	CY	$780.00	$31,200.00
515-2-311	PED/BICYCLE RAILING, ALUM,42" TYPE 1	125.00	LF	$100.00	$12,500.00
	Comment: Along the Gravity Wall				
521-72-43	SHLDR CONC BARRIER, CURB AND GUTTER BARR	93.00	LF	$220.00	$20,460.00
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	260.00	LF	$22.00	$5,720.00
536-6	PIPE RAIL FOR GUARDRAIL	260.00	LF	$19.00	$4,940.00
536-7-2	SPECIAL GUARDRAIL POST- SP STEEL POST CM	4.00	EA	$250.00	$1,000.00
536-8-112	GUARDRA CONN TO RIGID BA, F&I, N APPR 3	1.00	EA	$3,500.00	$3,500.00
536-85-24	GUARDRAIL END TREATMENT-PARA APP TERM	1.00	EA	$3,000.00	$3,000.00

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

706-1-3	RAISED PAVMT MARK, TYPE B	140.00	EA	$3.92	$548.80
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.83	NM	$4,100.00	$3,403.00
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.83	GM	$380.01	$315.41
711-12-131	THERMOPLASTIC, REFURB, WHITE, SKIP, 6"	0.83	GM	$875.24	$726.45
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.83	GM	$4,481.00	$3,719.23
	Roadway Component Total				$654,205.15

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	12.25 / 6.25
Total Outside Shoulder Perf. Turf Width L/R	10.00 / 4.00
Sidewalk Width L/R	0.00 / 0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
570-1-1	PERFORMANCE TURF	1,700.16	SY	$3.00	$5,100.48

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	1,485.00	LF	$30.00	$44,550.00
	Comment: 785' (LT) + 700' (RT)				
522-1	CONCRETE SIDEWALK AND DRIVEWAYS, 4"	1,945.00	SY	$47.00	$91,415.00
	Comment: 1158 SY (LT) + 787 SY (RT)				
527-2	DETECTABLE WARNINGS	200.00	SF	$30.00	$6,000.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	2,185.92	LF	$2.00	$4,371.84
104-11	FLOATING TURBIDITY BARRIER	20.70	LF	$13.00	$269.10
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	20.70	LF	$8.50	$175.95
104-18	INLET PROTECTION SYSTEM	10.00	EA	$115.00	$1,150.00
107-1	LITTER REMOVAL	1.81	AC	$35.00	$63.35
107-2	MOWING	1.81	AC	$50.00	$90.50
	Shoulder Component Total				$153,186.22

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	22.00
Performance Turf Width	0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-5-41	TRAF SEP CONC-TYPE IV, 4' WIDE	340.00	LF	$55.00	$18,700.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	2,002.00	LF	$30.00	$60,060.00

Median Component Total $78,760.00

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	6.00	EA	$6,000.00	$36,000.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	40.00	LF	$200.00	$8,000.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-361	INLETS, CURB, TYPE P-6, <10'	2.00	EA	$6,000.00	$12,000.00
425-1-881	INLETS, BARRIER WALL, RIG, C&G, <=10'	6.00	EA	$8,000.00	$48,000.00
425-2-41	MANHOLES, P-7, <10'	4.00	EA	$5,500.00	$22,000.00
430-175-118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	304.00	LF	$120.00	$36,480.00
430-982-125	MITERED END SECT, OPTIONAL RD, 18" CD	2.00	EA	$2,000.00	$4,000.00

Drainage Component Total $166,480.00

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	5.00	AS	$371.26	$1,856.30
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,253.67	$1,253.67
700-1-50	SINGLE POST SIGN, RELOCATE	5.00	AS	$286.06	$1,430.30
700-1-60	SINGLE POST SIGN, REMOVE	5.00	AS	$29.87	$149.35

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-4-112	OH STATIC SIGN STR, F&I, C 21-30 FT	1.00	EA	$75,000.00	$75,000.00
700-4-610	OH STATIC SIGN STR, REMOVE, CANT	1.00	EA	$6,500.00	$6,500.00

Signing Component Total $86,189.62

SIGNALIZATIONS COMPONENT

Signalization 1

Description	Value
Type	6 Lane Mast Arm

Multiplier	1
Description	NB Ramp Terminal Intersection

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	700.00	LF	$11.00	$7,700.00
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	300.00	LF	$25.00	$7,500.00
632-7-1	SIGNAL CABLE- NEW OR RECO, FUR & INSTALL	1.00	PI	$5,593.39	$5,593.39
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	22.00	EA	$777.88	$17,113.36
639-1-112	ELECTRICAL POWER SRV,F&I,OH,M,PUR BY CON	1.00	AS	$3,009.98	$3,009.98
639-2-1	ELECTRICAL SERVICE WIRE, F&I	60.00	LF	$5.85	$351.00
641-2-11	PREST CNC POLE,F&I,TYP P-II,PEDESTAL	1.00	EA	$1,700.00	$1,700.00
646-1-12	ALUMINUM SIGNALS POLE, PED DETECT POST	8.00	EA	$1,400.00	$11,200.00
649-21-21	STEEL MAST ARM ASSEMBLY, F&I, 78'	6.00	EA	$75,000.00	$450,000.00
650-1-14	VEH TRAF SIGNAL,F&I ALUMINUM, 3 S 1 W	20.00	AS	$1,100.00	$22,000.00
653-1-11	PEDESTRIAN SIGNAL, F&I LED COUNT, 1 WAY	8.00	AS	$700.00	$5,600.00
660-1-102	LOOP DETECTOR INDUCTIVE, F&I, TYPE 2	20.00	EA	$378.52	$7,570.40
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	20.00	AS	$1,103.75	$22,075.00
665-1-12	PEDESTRIAN DETECTOR, F&I, ACCESSIBLE	8.00	EA	$1,527.02	$12,216.16
670-5-111	TRAF CNTL ASSEM, F&I, NEMA, 1 PREEMPT	1.00	AS	$37,092.36	$37,092.36
700-3-101	SIGN PANEL, F&I GM, UP TO 12 SF	4.00	EA	$305.92	$1,223.68
700-5-21	INTERNAL ILLUM SIGN, F&I OM, UP TO 12 SF	4.00	EA	$3,000.00	$12,000.00
	Signalizations Component Total				$623,945.33

LIGHTING COMPONENT

Conventional Lighting Subcomponent

Description	Value
Spacing	MIN

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	1,092.96	LF	$11.00	$12,022.56
630-2-12	CONDUIT, F& I, DIRECTIONAL BORE	216.94	LF	$25.00	$5,423.50
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	8.00	EA	$777.88	$6,223.04
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	3,991.79	LF	$2.75	$10,977.42
715-4-13	LIGHT POLE COMPLETE, F&I-STD, 40'	8.00	EA	$6,000.00	$48,000.00
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	8.00	EA	$615.90	$4,927.20
	Subcomponent Total				$87,573.72
	Lighting Component Total				$87,573.72

Sequence 4 Total $2,198,562.07

Sequence: 5 WUR - Widen/Resurface, Undivided, Rural **Net Length:** 0.301 MI 1,589 LF

Description: NB On-Ramp

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.301
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.82	AC	$33,000.00	$60,060.00
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	4,659.53	CY	$45.00	$209,678.85
	Earthwork Component Total				$269,738.85

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Existing Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	165
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 24.00
Widened Structural Spread Rate	110
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	6,357.12	SY	$11.00	$69,928.32
285-709	OPTIONAL BASE,BASE GROUP 09	4,296.35	SY	$25.00	$107,408.75
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	4,238.08	SY	$3.00	$12,714.24
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	233.09	TN	$160.00	$37,294.40
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	349.64	TN	$165.00	$57,690.60
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	349.64	TN	$165.00	$57,690.60

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	10.00	TN	$290.00	$2,900.00
520-6	SHOULDER GUTTER- CONCRETE	500.00	LF	$45.00	$22,500.00
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	483.00	LF	$22.00	$10,626.00
536-73	GUARDRAIL REMOVAL	330.00	LF	$2.40	$792.00
536-85-20	GUARDRAIL END TREAT-TRAILING ANCHORAGE	1.00	EA	$1,400.00	$1,400.00
536-85-24	GUARDRAIL END TREATMENT-PARA APP TERM	1.00	EA	$3,000.00	$3,000.00

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	163.00	EA	$3.92	$638.96
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.60	NM	$4,100.00	$2,460.00
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.60	GM	$380.01	$228.01
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.60	GM	$4,481.00	$2,688.60
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.60	GM	$1,648.53	$989.12
	Roadway Component Total				$390,949.60

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	10.00 / 10.00
New Total Outside Shoulder Width L/R	0.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 2.00
Existing Paved Outside Shoulder Width L/R	8.00 / 8.00
New Paved Outside Shoulder Width L/R	0.00 / 10.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,824.14	SY	$25.00	$45,603.50
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	2,825.39	SY	$2.85	$8,052.36
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	97.12	TN	$160.00	$15,539.20
337-7-83	ASPH CONC FC,TRAFFIC C,FC-	9.62	TN	$165.00	$1,587.30

	12.5,PG 76-22				
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	0.30	GM	$2,000.00	$600.00
570-1-1	PERFORMANCE TURF	353.17	SY	$3.00	$1,059.51

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	3,655.34	LF	$2.00	$7,310.68
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	30.10	LF	$8.50	$255.85
104-18	INLET PROTECTION SYSTEM	1.00	EA	$115.00	$115.00
107-1	LITTER REMOVAL	0.73	AC	$35.00	$25.55
107-2	MOWING	0.73	AC	$50.00	$36.50
	Shoulder Component Total				$80,185.45

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	48.00	LF	$200.00	$9,600.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-701	INLETS, GUTTER, TYPE S, <10'	3.00	EA	$5,500.00	$16,500.00
430-175-118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	56.00	LF	$120.00	$6,720.00
	Drainage Component Total				$32,820.00

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	5.00	AS	$371.26	$1,856.30
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,253.67	$2,507.34
700-1-60	SINGLE POST SIGN, REMOVE	5.00	AS	$29.87	$149.35
700-2-13	MULTI- POST SIGN, F&I GM, 21-30 SF	1.00	AS	$4,958.08	$4,958.08
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$808.92	$808.92
	Signing Component Total				$10,279.99

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	12

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,400.00	LF	$11.00	$26,400.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00	EA	$777.88	$9,334.56

715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	7,200.00 LF	$2.75	$19,800.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	12.00 EA	$7,030.30	$84,363.60
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	12.00 EA	$615.90	$7,390.80
	Subcomponent Total			$147,288.96
	Lighting Component Total			$147,288.96

Sequence 5 Total $931,262.85

Sequence: 6 WUR - Widen/Resurface, Undivided, Rural **Net Length:** 0.141 MI 744 LF

Description: NB Off-Ramp

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	52.00 / 44.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.141
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	6 to 1 / 6 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.64	AC	$33,000.00	$54,120.00
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	3,152.73	CY	$45.00	$141,872.85
	Earthwork Component Total				$195,992.85

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Existing Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	165
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	24.00 / 12.00
Widened Structural Spread Rate	110
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount

160-4	TYPE B STABILIZATION	4,632.32 SY	$11.00	$50,955.52
285-709	OPTIONAL BASE,BASE GROUP 09	3,032.52 SY	$25.00	$75,813.00
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	1,985.28 SY	$3.00	$5,955.84
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	163.79 TN	$160.00	$26,206.40
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	163.79 TN	$165.00	$27,025.35
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	245.68 TN	$165.00	$40,537.20

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	76.00 EA	$3.92	$297.92
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.28 NM	$4,100.00	$1,148.00
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.28 GM	$380.01	$106.40
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.28 GM	$4,481.00	$1,254.68
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.28 GM	$1,648.53	$461.59
	Roadway Component Total			$229,761.90

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	10.00 / 10.00
New Total Outside Shoulder Width L/R	8.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	4.00 / 2.00
Existing Paved Outside Shoulder Width L/R	5.00 / 10.00
New Paved Outside Shoulder Width L/R	4.00 / 10.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	1

Pay Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	1,212.68 SY	$25.00	$30,317.00
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	1,240.80 SY	$2.85	$3,536.28
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	63.69 TN	$160.00	$10,190.40
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	9.01 TN	$165.00	$1,486.65
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	0.14 GM	$2,000.00	$280.00

570-1-1	PERFORMANCE TURF	496.32	SY	$3.00	$1,488.96

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,712.30	LF	$2.00	$3,424.60
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	14.10	LF	$8.50	$119.85
104-18	INLET PROTECTION SYSTEM	1.00	EA	$115.00	$115.00
107-1	LITTER REMOVAL	0.34	AC	$35.00	$11.90
107-2	MOWING	0.34	AC	$50.00	$17.00
	Shoulder Component Total				$50,987.64

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	24.00	LF	$200.00	$4,800.00
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	2.00	EA	$2,000.00	$4,000.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-523	INLETS, DT BOT, TYPE C,J BOT, <10'	1.00	EA	$7,000.00	$7,000.00
430-175-230	PIPE CULV, OPT MATL, OTHER, 30"S/CD	24.00	LF	$190.00	$4,560.00
	Drainage Component Total				$20,360.00

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$371.26	$1,485.04
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	1.00	AS	$1,253.67	$1,253.67
700-1-50	SINGLE POST SIGN, RELOCATE	1.00	AS	$286.06	$286.06
700-1-60	SINGLE POST SIGN, REMOVE	4.00	AS	$29.87	$119.48
700-2-13	MULTI- POST SIGN, F&I GM, 21-30 SF	2.00	AS	$4,958.08	$9,916.16
700-2-60	MULTI- POST SIGN, REMOVE	2.00	AS	$808.92	$1,617.84
	Signing Component Total				$14,678.25

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	12

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,400.00	LF	$11.00	$26,400.00

635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00 EA	$777.88	$9,334.56
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	7,200.00 LF	$2.75	$19,800.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	12.00 EA	$7,030.30	$84,363.60
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	12.00 EA	$615.90	$7,390.80
	Subcomponent Total			$147,288.96
	Lighting Component Total			$147,288.96

Sequence 6 Total $659,069.60

Sequence: 7 WUR - Widen/Resurface, Undivided, Rural **Net Length:** 0.336 MI 1,774 LF

Description: SB Off-Ramp

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	60.00 / 50.00
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.336
Top of Structural Course For Begin Section	105.00
Top of Structural Course For End Section	105.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	2 to 1 / 3 to 1
Existing Outside Shoulder Cross Slope L/R	6.00 % / 6.00 %
Front Slope L/R	2 to 1 / 3 to 1
Outside Shoulder Cross Slope L/R	6.00 % / 5.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	4.48	AC	$33,000.00	$147,840.00
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	7,598.98	CY	$45.00	$341,954.10
	Earthwork Component Total				$489,794.10

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	3
Existing Roadway Pavement Width L/R	12.00 / 12.00
Structural Spread Rate	165
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 24.00
Widened Structural Spread Rate	110
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	10,447.36	SY	$11.00	$114,920.96
285-709	OPTIONAL BASE,BASE GROUP 09	4,795.93	SY	$25.00	$119,898.25
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	4,730.88	SY	$3.00	$14,192.64
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	260.20	TN	$160.00	$41,632.00
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	390.30	TN	$165.00	$64,399.50
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	390.30	TN	$165.00	$64,399.50

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
339-1	MISCELLANEOUS ASPHALT PAVEMENT	30.00	TN	$290.00	$8,700.00
520-1-10	CONCRETE CURB & GUTTER, TYPE F	104.00	LF	$30.00	$3,120.00
520-6	SHOULDER GUTTER- CONCRETE	1,595.00	LF	$45.00	$71,775.00
536-1-1	GUARDRAIL- ROADWAY, GEN TL-3	1,654.00	LF	$22.00	$36,388.00
536-73	GUARDRAIL REMOVAL	1,367.00	LF	$2.40	$3,280.80
536-85-20	GUARDRAIL END TREAT-TRAILING ANCHORAGE	2.00	EA	$1,400.00	$2,800.00
536-85-24	GUARDRAIL END TREATMENT-PARA APP TERM	2.00	EA	$3,000.00	$6,000.00

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	Y
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	1
Solid Stripe No. of Stripes	2
Skip Stripe No. of Paint Applications	1
Skip Stripe No. of Stripes	2

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	181.00	EA	$3.92	$709.52
710-11-111	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.67	NM	$4,100.00	$2,747.00
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.67	GM	$380.01	$254.61
711-15-101	THERMOPLASTIC, STD-OP, WHITE, SOLID, 6"	0.67	GM	$4,481.00	$3,002.27
711-15-131	THERMOPLASTIC, STD-OP, WHITE, SKIP, 6"	0.67	GM	$1,648.53	$1,104.52
	Roadway Component Total				$559,324.57

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	10.00 / 10.00
New Total Outside Shoulder Width L/R	15.50 / 13.50
Total Outside Shoulder Perf. Turf Width L/R	1.00 / 1.00
Existing Paved Outside Shoulder Width L/R	8.00 / 8.00
New Paved Outside Shoulder Width L/R	8.00 / 6.00

Structural Spread Rate	110
Friction Course Spread Rate	165
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	1

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
285-709	OPTIONAL BASE,BASE GROUP 09	2,889.78	SY	$25.00	$72,244.50
327-70-6	MILLING EXIST ASPH PAVT,1 1/2" AVG DEPTH	3,153.92	SY	$2.85	$8,988.67
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	151.78	TN	$160.00	$24,284.80
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	21.47	TN	$165.00	$3,542.55
546-72-1	GROUND-IN RUMBLE STRIPS, 16"	0.34	GM	$2,000.00	$680.00
570-1-1	PERFORMANCE TURF	394.24	SY	$3.00	$1,182.72

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	4,080.38	LF	$2.00	$8,160.76
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	33.60	LF	$8.50	$285.60
104-18	INLET PROTECTION SYSTEM	1.00	EA	$115.00	$115.00
107-1	LITTER REMOVAL	0.81	AC	$35.00	$28.35
107-2	MOWING	0.81	AC	$50.00	$40.50
	Shoulder Component Total				$119,553.45

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-174-124	PIPE CULV, OPT MATL, ROUND,24"SD	56.00	LF	$200.00	$11,200.00
430-175-136	PIPE CULV, OPT MATL, ROUND, 36"S/CD	24.00	LF	$200.00	$4,800.00
430-984-129	MITERED END SECT, OPTIONAL RD, 24" SD	6.00	EA	$2,000.00	$12,000.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	4.00	EA	$6,000.00	$24,000.00
425-1-701	INLETS, GUTTER, TYPE S, <10'	6.00	EA	$5,500.00	$33,000.00
430-175-118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	200.00	LF	$120.00	$24,000.00
	Drainage Component Total				$109,000.00

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	10.00	AS	$371.26	$3,712.60
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,253.67	$2,507.34

700-1-50	SINGLE POST SIGN, RELOCATE	2.00	AS	$286.06	$572.12
700-1-60	SINGLE POST SIGN, REMOVE	12.00	AS	$29.87	$358.44
700-2-13	MULTI- POST SIGN, F&I GM, 21-30 SF	1.00	AS	$4,958.08	$4,958.08
700-2-60	MULTI- POST SIGN, REMOVE	1.00	AS	$808.92	$808.92
	Signing Component Total				$12,917.50

LIGHTING COMPONENT

Rural Lighting Subcomponent

Description	Value
Multiplier (Number of Poles)	12

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
630-2-11	CONDUIT, F& I, OPEN TRENCH	2,400.00	LF	$11.00	$26,400.00
635-2-11	PULL & SPLICE BOX, F&I, 13" x 24"	12.00	EA	$777.88	$9,334.56
715-1-13	LIGHTING CONDUCTORS, F&I, INSUL, NO.4-2	7,200.00	LF	$2.75	$19,800.00
715-4-14	LIGHT POLE COMPLETE, F&I-STD, 45'	12.00	EA	$7,030.30	$84,363.60
715-500-1	POLE CABLE DIST SYS, CONVENTIONAL	12.00	EA	$615.90	$7,390.80
	Subcomponent Total				$147,288.96

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
715-11-211	LUMINAIRE ,F&I-REP EXIST, RDWY, COBRA H	6.00	EA	$1,299.55	$7,797.30
	Lighting Component Total				$155,086.26

Sequence 7 Total $1,445,675.88

Sequence: 8 RSD - Resurfacing, Divided **Net Length:** 0.300 MI 1,584 LF

Description: I-95 from South of Woolbright Road to North of Woolbright Road

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Roadway Pavement Width L/R	76.00 / 76.00
Structural Spread Rate	165
Friction Course Spread Rate	80

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-11	MILLING EXIST ASPH PAVT,2 1/4" AVG DEPTH	26,752.00	SY	$3.00	$80,256.00
334-1-15	SUPERPAVE ASPHALTIC CONC, TRAFFIC E	2,207.04	TN	$155.00	$342,091.20
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	1,070.08	TN	$165.00	$176,563.20

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	202.00	EA	$3.92	$791.84
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	2.40	GM	$1,011.41	$2,427.38
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	2.40	GM	$380.01	$912.02
	Roadway Component Total				$603,041.64

SHOULDER COMPONENT

User Input Data

Description	Value
Total Outside Shoulder Width L/R	12.00 / 12.00
Total Outside Shoulder Perf. Turf Width L/R	2.00 / 2.00
Paved Outside Shoulder Width L/R	10.00 / 10.00
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	O
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	3,520.00	SY	$4.00	$14,080.00
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	193.60	TN	$160.00	$30,976.00
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	9.29	TN	$165.00	$1,532.85
570-1-1	PERFORMANCE TURF	704.00	SY	$3.00	$2,112.00

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-11	FLOATING TURBIDITY BARRIER	30.00	LF	$13.00	$390.00
104-12	STAKED TURBIDITY BARRIER-NYL REINF PVC	30.00	LF	$8.50	$255.00
107-1	LITTER REMOVAL	2.18	AC	$35.00	$76.30
107-2	MOWING	2.18	AC	$50.00	$109.00
	Shoulder Component Total				$49,531.15

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	32.00
Performance Turf Width	0.00
Total Median Shoulder Width L/R	14.50 / 14.50
Paved Median Shoulder Width L/R	14.50 / 14.50
Structural Spread Rate	110
Friction Course Spread Rate	80
Total Width (T) / 8" Overlap (O)	T
Rumble Strips ï¿½No. of Sides	0

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	5,104.00	SY	$4.00	$20,416.00
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	280.72	TN	$160.00	$44,915.20
337-7-25	ASPH CONC FC,INC BIT,FC-5,PG76-22	204.16	TN	$165.00	$33,686.40
	Median Component Total				$99,017.60

Sequence 8 Total $751,590.39

Sequence: 9 WDU - Widen/Resurface, Divided, Urban **Net Length:** 0.072 MI 380 LF

Description: SW 8th Street

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	7.00 / 12.50
Incidental Clearing and Grubbing Area	0.00
Alignment Number	1
Distance	0.072
Top of Structural Course For Begin Section	102.00
Top of Structural Course For End Section	102.00
Horizontal Elevation For Begin Section	100.00
Horizontal Elevation For End Section	100.00
Existing Front Slope L/R	6 to 1 / 6 to 1
Existing Median Shoulder Cross Slope L/R	2.00 % / 2.00 %
Existing Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Front Slope L/R	6 to 1 / 6 to 1
Median Shoulder Cross Slope L/R	2.00 % / 2.00 %
Outside Shoulder Cross Slope L/R	2.00 % / 2.00 %
Roadway Cross Slope L/R	2.00 % / 2.00 %

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.17	AC	$33,000.00	$5,610.00
120-1	REGULAR EXCAVATION	609.38	CY	$19.50	$11,882.91
120-2-2	BORROW EXCAVATION, TRUCK MEASURE	720.33	CY	$45.00	$32,414.85
	Earthwork Component Total				$49,907.76

ROADWAY COMPONENT

User Input Data

Description	Value
Number of Lanes	6
Existing Roadway Pavement Width L/R	33.50 / 30.00
Structural Spread Rate	110
Friction Course Spread Rate	165
Widened Outside Pavement Width L/R	0.00 / 4.00
Widened Inside Pavement Width L/R	7.00 / 8.50
Widened Structural Spread Rate	110
Widened Friction Course Spread Rate	165

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,150.62	SY	$11.00	$12,656.82
285-709	OPTIONAL BASE,BASE GROUP 09	865.50	SY	$25.00	$21,637.50
327-70-8	MILLING EXIST ASPH PAVT,2 1/2" AVG DEPTH	2,682.24	SY	$3.00	$8,046.72
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	147.52	TN	$160.00	$23,603.20
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C	45.30	TN	$160.00	$7,248.00
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	221.28	TN	$165.00	$36,511.20
337-7-83	ASPH CONC FC,TRAFFIC C,FC-12.5,PG 76-22	67.95	TN	$165.00	$11,211.75

Pavement Marking Subcomponent

Description	Value
Include Thermo/Tape/Other	N
Pavement Type	Asphalt
Solid Stripe No. of Paint Applications	2
Solid Stripe No. of Stripes	4
Skip Stripe No. of Paint Applications	2
Skip Stripe No. of Stripes	4

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
706-1-3	RAISED PAVMT MARK, TYPE B	49.00	EA	$3.92	$192.08
710-11-101	PAINTED PAVT MARK,STD,WHITE,SOLID,6"	0.58	GM	$1,011.41	$586.62
710-11-131	PAINTED PAVT MARK,STD,WHITE,SKIP, 6"	0.58	GM	$380.01	$220.41
	Roadway Component Total				$121,914.30

SHOULDER COMPONENT

User Input Data

Description	Value
Existing Total Outside Shoulder Width L/R	0.00 / 0.00
New Total Outside Shoulder Width L/R	0.00 / 8.25
Total Outside Shoulder Perf. Turf Width L/R	0.00 / 6.00
Sidewalk Width L/R	0.00 / 0.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	380.16	LF	$30.00	$11,404.80
570-1-1	PERFORMANCE TURF	253.44	SY	$3.00	$760.32

Erosion Control

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	760.32	LF	$2.00	$1,520.64
104-18	INLET PROTECTION SYSTEM	4.00	EA	$115.00	$460.00
107-1	LITTER REMOVAL	0.63	AC	$35.00	$22.05
107-2	MOWING	0.63	AC	$50.00	$31.50

Shoulder Component Total $14,199.31

MEDIAN COMPONENT

User Input Data

Description	Value
Total Median Width	25.00
Performance Turf Width	3.00

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-5-11	TRAF SEP CONC-TYPE I, 4' WIDE	223.00	LF	$47.00	$10,481.00
570-1-1	PERFORMANCE TURF	126.72	SY	$3.00	$380.16

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
520-1-10	CONCRETE CURB & GUTTER, TYPE F	102.00	LF	$30.00	$3,060.00

Median Component Total $13,921.16

DRAINAGE COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-351	INLETS, CURB, TYPE P-5, <10'	1.00	EA	$6,000.00	$6,000.00
430-175-124	PIPE CULV, OPT MATL, ROUND, 24"S/CD	8.00	LF	$180.00	$1,440.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
425-1-355	INLETS, CURB, TYPE P-5, PARTIAL	1.00	EA	$6,100.00	$6,100.00
425-1-361	INLETS, CURB, TYPE P-6, <10'	1.00	EA	$6,000.00	$6,000.00
430-175-118	PIPE CULV, OPT MATL, ROUND, 18"S/CD	8.00	LF	$120.00	$960.00

Drainage Component Total $20,500.00

SIGNING COMPONENT

Pay Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	4.00	AS	$371.26	$1,485.04
700-1-60	SINGLE POST SIGN, REMOVE	4.00	AS	$29.87	$119.48
	Signing Component Total				$1,604.52

Sequence 9 Total $222,047.05

Date: 4/29/2022 10:44:32 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 437279-1-52-01 **Letting Date:** 07/2026

Description: SR-9/I-95 FROM SOUTH OF WOOLBRIGHT ROAD TO NORTH OF WOOLBRIGHT ROAD

District: 04 **County:** 93 PALM BEACH **Market Area:** 12 **Units:** English
Contract Class: 1 **Lump Sum Project:** N **Design/Build:** N **Project Length:** 3.214 MI

Project Manager: ARRIETA

Version 12 Project Grand Total **$20,679,799.02**
Description: Initial Engineering

Project Sequences Subtotal **$16,453,262.00**

102-1	Maintenance of Traffic	10.00 %	$1,645,326.20
101-1	Mobilization	8.00 %	$1,447,887.06

Project Sequences Total **$19,546,475.26**

Project Unknowns		5.00 %	$977,323.76
Justification for high %:	5% For Changes in Quantities and Prices		
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-16	PARTNERING (DO NOT BID)	2.00	LS	$3,000.00	$6,000.00
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$150,000.00	$150,000.00
Project Non-Bid Subtotal					**$156,000.00**

Version 12 Project Grand Total **$20,679,799.02**

Florida Department of Transportation, District 4

3400 W Commercial Boulevard, Fort Lauderdale, Florida 33309