

1.0 INTRODUCTION

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1.1 Background

The Applicant, Florida Department of Transportation (FDOT) District Two, requests the Federal Highway Administration (FHWA) approval of a re-evaluation of the approved July 2021 I-95 from International Golf Parkway (IGP) to Atlantic Boulevard Systems Interchange Modification Report (SIMR) Re-evaluation. The only interchange being re-evaluated in this study is the First Coast Expressway (FCE) interchange with I-95 and, therefore, is the primary focus of this SIMR Re-evaluation. The design modifications proposed at the I-95 and FCE interchange require a re-evaluation of the previously approved July 2021 SIMR Re-evaluation. The changes to the FCE interchange have been analyzed and compared with the previously approved 2021 SIMR Re-evaluation. This SIMR Re-evaluation has been developed in accordance with FDOT Policy No. 000-525-015: Approval of New or Modified Access to Limited Access Highways on the State Highway System (SHS), FDOT Procedure No. 525-030-160: New or Modified Interchanges, 2020 Interchange Access Request User's Guide (IARUG) and the 2019 FDOT Traffic Forecasting Handbook (Procedure No. 525-030-120).

This study area has been evaluated in four previously approved IARs, which include: 1) I-95 at FCE Interchange Justification Report (IJR) approved in 2012, 2) I-95 Express Phase 1: IGP to I-295 SIMR approved in October 2016, 3) I-95 Express Lanes Analysis: I-295 to Atlantic Boulevard SIMR approved in September 2018 and 4) I-95 from IGP to Atlantic Boulevard SIMR Re-evaluation approved in July 2021. The most recently approved SIMR Re-evaluation approved in July 2021 is provided in **Appendix A**.

The I-95 capacity improvements and new interchange with the FCE interchange are included in the North Florida Transportation Planning Organization's (TPO) Long Range Transportation Plan (LRTP). An Efficient Transportation Decision Making (ETDM) process has been completed for the project.

1.2 Purpose and Need

The purpose and need for this SIMR Re-evaluation are consistent with the purpose and need from the approved 2021 SIMR.

The purpose of this SIMR is to perform the safety, operations, and engineering (SO&E) analysis for adding capacity along I-95 from IGP to the Atlantic Boulevard interchange, which is required for obtaining FHWA approval. In addition, it is the purpose of this re-evaluation to ensure the proposed modifications to the FCE interchange do not adversely impact the operations of I-95 and surrounding interchanges.

The need for this SIMR Re-evaluation remains consistent with the approved July 2021 SIMR. In 2019, I-95 carried an Annual Average Daily Traffic (AADT) volume of 85,000 vehicles south of IGP; 100,400 vehicles south of SR 9B; 133,000 vehicles north of I-295; 155,000 vehicles north of SR 202 (Butler Boulevard); and 135,000 vehicles north of Emerson Street. Due to high peak period volumes, pockets of congestion exist along the facility.

Substantial population increases in St. Johns and Duval Counties have occurred since 1970, as shown in **Table 1-1**. This trend is expected to continue and add a significant number of trips to the existing roadway network. The proposed improvements on I-95 will provide additional capacity on the constrained roadway network which is anticipated to alleviate congestion and improve traffic safety.

Table 1-1 Regional Population Growth

County	1970	1980	1990	2000	2010 (Census)
St. Johns	31,065	51,303	83,829	123,135	190,039
Duval	528,865	571,003	672,971	778,879	864,263

Source: St. John's River Crossing Environmental Impact Statement

Interstate-95, a north/south facility, is an integral part of the Strategic Intermodal System (SIS) providing for high-speed and high-volume traffic movements within the state of Florida. Interstate-95 is mainly a six-lane facility within the area of influence.

In addition, typical driver expectations place ramps on the right side of the roadway. To meet this expectation, operational and safety analysis of a right side ramp has been initiated.

1.3 Project Location

The proposed I-95 mainline modifications are located in Duval County and St. Johns County, Florida from south of the IGP interchange on the southern end of the project and the Atlantic Boulevard interchange on the northern end of the project (which covers 26 miles). However, for this SIMR Re-evaluation, the proposed modifications are at the I-95 at FCE interchange located in St. Johns County, Florida. As a result, this SIMR Re-evaluation will focus on I-95 from south of the IGP interchange to north of the CR 210 interchange; a distance of approximately 8.3 miles. The location of the project is shown in **Figure 1-1**.

1.4 Reason for Re-evaluation

The primary reason for this re-evaluation is due to a design modification to the I-95 at FCE interchange concept. This re-evaluation proposes one design change. The design change recommends the access ramps be moved from the left side of the I-95 mainline northbound to the right side at the I-95 and FCE interchange. Per the 2020 IARUG, the re-evaluation shall show that the revised concept satisfies the safety, operational and engineering (SO&E) acceptability requirements and FHWA's policy points. This means the re-evaluation shall demonstrate that the proposed concept satisfies the MOEs used in the evaluation of the approved 2021 SIMR Re-evaluation concept.

To be consistent with the 2020 IARUG Chapter 4, the following alternatives have been evaluated:

Alternative 1 – 2021 SIMR Concept: The first alternative is the same as the approved 2021 SIMR Re-evaluation concept. At the FCE interchange, the northbound access ramps to/from I-95 and FCE are located on the left side of the I-95 mainline.

Alternative 2 – FCE SIMR Concept: This SIMR Re-evaluation is the same as the approved SIMR Re-evaluation concept except for the design change at the FCE interchange. At the FCE interchange, the proposed design change relocates the FCE northbound access ramps from the left side of the I-95 mainline to the right side of the I-95 mainline. There are no other modifications to the previously approved July 2021 SIMR Concept.

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The primary reason for this re-evaluation is due to a design modification to the approved I-95 at FCE interchange concept. The approved 2021 SIMR Concept has the northbound access ramps to/from I-95 and FCE being located on the left side of the I-95 mainline. The design change, in this re-evaluation, recommends the access ramps be moved from the left side of the I-95 mainline to the right side. Per the 2020 IARUG, the re-evaluation shall show that the revised concept satisfies the SO&E acceptability requirements and FHWA's policy points. In addition to the new design change, the need for this SIMR Re-evaluation remains consistent with the approved July 2021 SIMR Re-evaluation.

In addition, typical driver expectations place ramps on the right side of the roadway. To meet this expectation, operational and safety analysis of a right side ramp has been initiated.