1.0 INTRODUCTION

INTRODUCTION 1.0

Background 1.1

The Applicant, Florida Department of Transportation (FDOT) District 2, requests the Federal Highway Administration (FHWA) approval of a Systems Interchange Modification Report (SIMR) for the re-evaluation of I-95 from the International Golf Parkway interchange to the Atlantic Boulevard interchange in St. Johns and Duval Counties. This SIMR 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 and the 2019 FDOT Traffic Forecasting Handbook (Procedure No. 525-030-120).

FDOT is conducting this SIMR re-evaluation to evaluate a build alternative consisting of general use lane widening on I-95 from International Golf Parkway to Atlantic Boulevard, compared to the previously approved express lane concepts.

This study has been evaluated in two previously approved SIMRs, which include: 1) I-95 Express Phase 1: International Golf Parkway to I-295 SIMR and 2) I-95 Express Lanes Analysis: I-295 to Atlantic Boulevard SIMR. Project Development and Environment (PD&E) studies are ongoing for the following project areas: 1) I-95 between International Golf Parkway and First Coast Expressway and between First Coast Expressway and I-295, 2) St. Johns River Crossing Project, 3) I-95 between I-295 and SR 202 (J. Turner Butler Boulevard or Butler Boulevard), and 4) I-95 between Butler Boulevard and Atlantic Boulevard. The I-95 capacity improvements 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.

It should be noted that this SIMR will evaluate improvements at the SR 202/Butler Boulevard at Belfort Road interchange and re-evaluates the I-95 at First Coast Expressway interchange, which will add a system interchange between International Golf Parkway and CR 210. The following construction projects are encompassed by the study area for this SIMR:

- I-95 between International Golf Parkway and First Coast Expressway (422938-9)
- SR 23 (First Coast Expressway) from I-95 to East of CR 16A (422938-8)
- I-95 between First Coast Expressway and Duval/St. Johns County Line (424026-4)
- I-95 between St. Johns County/Duval County Line and I-295 (424026-5)
- I-95 between I-295 and Baymeadows Road (435577-2) •
- I-95 between Baymeadows Road and SR 202/Butler Boulevard (446153-1)
- I-95 between SR 202/Butler Boulevard and Atlantic Boulevard (432259-2)
- SR 202/Butler Boulevard at Belfort Road (446386-1) •

Purpose and Need 1.2

The purpose of this SIMR is to perform the safety, operations, and engineering analysis for adding capacity along I-95 from International Golf Parkway to the Atlantic Boulevard interchange, which are required for obtaining FHWA approval.

In 2019, I-95 carried an Annual Average Daily Traffic (AADT) volume of 85,000 vehicles south of International Golf Parkway; 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. The purpose of this project is to improve safety and traffic operations through the study area with the objective of improving capacity along the I-95 facility.

The Florida Department of Transportation has initiated this SIMR re-evaluation to investigate alternatives for the I-95 facility that will help alleviate congestion and improve safety and mobility in the area.

1.3 **Project Location**

The proposed I-95 mainline modifications are located in St. Johns County and Duval County, Florida from south of the International Golf Parkway interchange on the southern end of the project to the Atlantic Boulevard interchange on the northern end of the project; the location of the project is shown in Figure 1-1. The area of influence is from the northerly ramps of the SR 16 interchange with I-95 to north of the Palm Avenue interchange with I-95, and on I-295 from west of the SR 13 (San Jose Boulevard) interchange to east of the Philips Highway (US 1) interchange with I-295.

1.4 Applicant Information

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4.0 NEED

4.0 NEED

Interstate-95, a six lane north/south facility, is an integral part of the SIS providing for high-speed and highvolume traffic movements within the State. In recent years, congestion on I-95 has increased and is expected to continue to increase in the future. Due to high peak period volume (northbound in the AM peak period and southbound in the PM peak period), pockets of congestion exist along the facility. Traffic conditions are expected to worsen as growth continues to occur leading to worsening of the existing operational issues.

The capacity provided by the proposed Modified Build Alternative is expected to reduce density on the I-95 mainline by providing additional capacity on the mainline (in the form of additional through lanes and auxiliary lanes). In addition, various interchange-level improvements are proposed which will provide better operations on the arterials within the study area, preventing excessive queueing on the off-ramps and providing faster, more reliable travel to and from the I-95 mainline. A major benefit for the Modified Build is that all of the facility improvements can occur for the Opening Year 2030, while the Original Build cannot implement all of the improvements until several years later due to the higher construction costs.

It should be noted that this proposed capacity improvement on I-95 may be the last project that can be accommodated within the existing right-of-way. Although previous studies presented express lane capacity as a viable alternative, it has been determined that additional general use lane capacity can provide similar operational benefits while maximizing the utilization of the additional lanes. This is because the general use lanes are available to all drivers (as opposed to only drivers who are willing to pay a toll and who take trips that effectively coincide with the provided managed lane access points). The general use lane alternative will not experience the potential incident management issues that are evident with barrier separated express lanes that limit express lane access for emergency or incident response vehicles. Therefore, the additional capacity presented in the Modified Build of this SIMR will be more accessible while also being more cost-effective to construct, maintain and operate. Since I-95 within the study area is expected to experience significantly worsened travel conditions in the future, and available right-of-way for future expansion is limited, making the most of the additional capacity proposed in this SIMR is a high priority.