

1 Introduction

Florida Department of Transportation (FDOT) District 3 is seeking to enhance the traffic operation and safety at the interchange of SR 8 (I-10) and SR 10 (US 90A/Nine Mile Road). The directionality of both SR 8 and SR 10 is east-west. For this report, the directionality of SR 8 will be referred to as north-south and SR 10 will be referred to as east-west. The interchange is in Escambia County to the west of the SR 8 and Pine Forest Road interchange. An assessment of the interchange was initiated by the Department in January of 2017 via a Traffic Operations Study Report (TOSR) regarding operations. The TOSR identified deficiencies, and to address these concerns, FDOT initiated this Interchange Operational Analysis Report (IOAR) to assess alternatives for improving traffic operations. The IOAR was prepared to document the need to support the implementation of operational improvements at this interchange.

Overall, these IOAR improvements are intended to provide short-term relief for the interchange. Long term improvements will be identified as part of FDOT's Project Development and Environment (PD&E) Study planned SR 8 from west of SR 10 to west of SR 95 (US29). This PD&E Study is funded for fiscal year 2018 under Work Program Item 437905.

1.1 Project Need

During a site visit conducted on January 4, 2017, spillback was observed on the SR 8 northbound off-ramp during the morning rush hour. Additionally, queuing from the westbound traffic which merges down to one (1) lane west of the intersection caused northbound left turning vehicles to delay entering the intersection.

Construction of dual northbound left turn lanes on the SR 8 northbound off-ramp at SR 10 to provide additional vehicular storage and construction of a dedicated northbound channelized right-turn lane on SR 8 northbound off-ramp at SR 10 to provide additional vehicular storage were analyzed.

Proposed improvements are noted below.

- a) Construct at least 435-foot dual northbound left turn lanes on SR 8 northbound off-ramp at SR 10.
- b) Construct a dedicated minimum 275-foot northbound channelized right-turn lane on SR 8 northbound off-ramp at SR 10.

2 Project Location

SR 10 is an east-west arterial within Escambia County. An interchange is provided at SR 8 that provides access to the east-west interstate facility even though at this location SR 8 runs north-south. The project location is depicted in Figure 1.