

1. PROJECT OVERVIEW

1.1 Introduction

The intent of this project is to address existing capacity conditions of the southbound (SB) Alton Road to westbound (WB) I-195 single-lane on-ramp. This Interchange Operational Analysis Report (IOAR) has been prepared to evaluate the impact of widening the SB Alton Road to WB I-195 on-ramp from one to two lanes. The Florida Department of Transportation (FDOT), District 6 is the Requestor seeking approval of this IOAR that presents the necessary documentation for such improvements.

The State of Florida established the Strategic Intermodal System (SIS), which consists of high priority transportation facilities and services of statewide and interregional significance. These SIS facilities are critical to the movement of people and goods in Florida, and their function is considered to be vital to Florida's economic competitiveness.

I-195, which is a designated SIS facility is an east-west roadway that connects SR A1A and Miami Beach with I-95 (North-South Expressway) and SR 112 to Miami International Airport. It is vital thoroughfare that links multi-modal hubs to facilitate the safe and efficient movement of goods and people. The interchange of I-195 at Alton Road is significant for passenger movements.

This IOAR is seeking approval from the Chief Engineer, FDOT Central Office for the Requestor, FDOT District 6, for the proposed improvements to the on-ramp at I-195 WB and Alton Road SB in Miami-Dade County. This IOAR has been developed in accordance with the FDOT Policy No. 000-525-015: Approval of New or Modified Access to Limited Access Highways on the Strategic Highway System (SHS), FDOT Procedure No. 525-030-160: New or Modified Interchange, IARUG, and the FDOT Traffic Forecasting Handbook (Procedure No. 525-030-120).

1.2 Purpose and Need for Project

The main purpose of this IOAR is to document the safety, operational and engineering acceptability of an additional lane on the SB Alton Road to WB I-195 on-ramp. With the proposed improvements, it's anticipated that the widening of the WB on-ramp from one lane to two lanes will provide congestion relief and improve safety conditions in the study area.

The need for this project stems from a previous study performed in April 2016. As part of this study, the SB Alton Road to WB I-195 on-ramp was studied for operational and safety improvements as part of an intersection analysis study for SR 907/Alton Road at 43rd Street intersection. The field review and analysis results from the study revealed that the congestion and delays experienced at the intersection during the PM peak period were largely due to the spillback of queues from the I-195 WB on-ramp.

In addition, the existing safety analysis provided in **Section 3.9** shows that the on-ramp merge area is a high crash location within the study area. The actual crash rate is higher than the statewide average. The increased traffic volumes, queuing of vehicles on the on-ramp and high travel speeds along I-195 create an environment that is prone to crashes.

1.3 Project Location

The interchange at I-195 and Alton Road is located within the city limits of Miami Beach, located approximately 0.5 miles east of the bridge crossing Biscayne Bay. The project location map is shown in **Figure 1-1**.