SR 9 (I-95) Interchange Modification Report Re-Evaluation - Glades Road (SR 808), Palm Beach County, Florida

1 PROJECT OVERVIEW

1.1 Introduction

At the request of the Florida Department of Transportation (FDOT), and as part of Financial Project ID 412420-4-52-01, a traffic analysis was undertaken to re-evaluate operational needs and address the changes in traffic volumes and design standards when considering alternative improvements at the SR-808/Glades Road study corridor. The study area is located within the City of Boca Raton, Florida. The study area extends along SR-808/Glades Road between Butts Road on the west most limit and W University Drive on the east most limit. The study limits are shown on Figure 1.1.

The SR-808/Glades Road at SR-9/I-95 interchange located within the study area experiences recurring congestion during the peak periods causing safety, operational and engineering issues. The I-95 ramp movements experience deficient Level of Service (LOS) and long vehicular queues during both peak periods. A PD&E study was conducted in 2007 to address potential traffic improvements for the Glades Road corridor between Butts Road and W. University Drive/NW 10th Avenue. The preferred concept from the 2007 PD&E study, referred to as the modified partial cloverleaf interchange in the PD&E and as the RFP concept in the body of this report, involved implementing four (4) lanes along the eastbound and westbound directions of Glades Road from Butts Road to W University Drive. However, the City of Boca Raton and the Palm Beach Transportation Planning Authority (TPA) do not support converting Glades Road into an eight (8) lane corridor between Butts Road and W University Drive.

In 2019, the Department approved the investigation of an Alternative Technical Concept (ATC), which proposed a Diverging Diamond Interchange (DDI) at the Glades Road (SR 808) interchange. The performance of the RFP concept developed in the 2018 approved IMR will be compared against the DDI concept in this re-evaluation.

1.2 Purpose and Need for Project

The primary purpose of this IMR re-evaluation is to obtain safety, operational and engineering acceptability of the Diverging Diamond Interchange alternative, proposed during the design-build process. The 2018 IMR was an update of the 2007 PD&E study for I-95 from south of Glades Road to north of Yamato Road. This IMR re-evaluation is focused on identifying the long-term needs through the year 2040 and to develop design concepts to address traffic operational deficiencies along the Glades Road corridor between Butts Road and W University Drive, including traffic spillbacks onto I-95, improve interchange ramp terminal intersection operations, reduce congestion, and enhance safety at the study interchange at Glades Road (SR 808).

1.3 Project Location

The project area is a portion of the Glades Road (SR 808) corridor between Butts Road and W University Drive in Palm Beach County, Florida. Figure 1.1 provides a project location map.