

EXECUTIVE SUMMARY

This Executive Summary presents the key findings of the analysis supporting the proposed interchange modification for the SR-9/I-95 at Northlake Boulevard Interchange in Palm Beach County, Florida, and a discussion of the eight Federal Highway Administration (FHWA) Policy Points.

1. Project Background

The Florida Department of Transportation (FDOT) District 4 completed the I-95 Interchange Master Plan Study for Palm Beach County in December 2014 to identify the short-term and long-term needs for the I-95 Interchanges within the County. The purpose of the I-95 Interchange Master Plan Study was to develop design concepts to address traffic spillback onto I-95, improve interchange operations, reduce congestion, and enhance safety at these interchanges through the year 2040. A total of 17 interchange locations were studied as part of the I-95 Interchange Master Plan including the SR-9/I-95 at Northlake Boulevard (CR 809A) interchange.

The Concept Development Report prepared for the I-95 Interchange at Northlake Boulevard in Palm Beach County identified several preliminary short-term and long-term improvements based on the traffic operations analysis conducted for the SR-9/I-95 at Northlake Boulevard interchange and adjacent signalized intersections. The preliminary improvements at this location were recommended to be further evaluated as part of the next phase of the project.

In July 2015, FDOT District 4 initiated the SR-9/I-95 at Northlake Boulevard Interchange Project Development and Environment (PD&E) Study. This Interchange Modification Report (IMR) prepared as part of the PD&E Study will focus on the development and evaluation of alternatives for the proposed improvements at the SR-9/I-95 at Northlake Boulevard interchange. This IMR has been developed in accordance with FDOT's Policy No. 000-525-015 and Procedure No. 525-030-160, including the FDOT Publication: Interchange Access Request User's Guide, March 2015. It outlines the technical procedures, assumptions, traffic data, analyses and documentation required for this process.

2. Project Description, Purpose & Need

The SR-9/I-95 at Northlake Boulevard interchange is located along SR-9/I-95 (MP 34.34 to MP 34.776) between the Blue Heron Boulevard (SR 708) interchange (1.76 miles to the south) and the PGA Boulevard (SR 786) interchange (1.73 miles to the north) within the City of Palm Beach Gardens in eastern Palm Beach County. The interchange is a conventional diamond configuration.

The purpose of the project is to enhance overall traffic operations at the existing interchange of SR-9/I-95 and Northlake Boulevard by providing improvements to achieve acceptable Levels of Service (LOS) at the interchange in the future condition (2040 Design Year). Conditions along Northlake Boulevard are anticipated to deteriorate below acceptable LOS standards if no improvements occur by 2040; the interchange will have insufficient capacity to accommodate the projected travel demand.

The need for the project is based primarily on capacity/transportation demand and growth management. Over the past 20 years, the area has experienced rapid development with associated transportation improvements trying to keep pace. This growth within the study area has burdened the arterial system and the existing interchanges along I-95 to a point where current capacity is beginning to limit mobility. Future travel demand projections indicate that the population and employment within the vicinity of the interchange is anticipated to increase within a 2-mile buffer of the interchange location. As such, the proposed improvements at this interchange location will be critical in supporting growth within the vicinity of the interchange and the overall vision of the City of Palm Beach Gardens and Palm Beach County.

3. Methodology

The methodology applied in this IMR is based on the Methodology Letter of Understanding (MLOU) dated October 2015. The MLOU is a companion document to this IMR Study and was approved by FDOT District 4 and FDOT Central Office. The MLOU outlines the criteria, assumptions, processes, analyses and documentation requirements for the project. A copy of the approved MLOU is provided in **Appendix A**. The MLOU was prepared in accordance with the FDOT's Interchange Access Request Users Guide.

4. Existing Traffic Conditions

The segment of I-95 in the vicinity of the Northlake Boulevard interchange is a ten-lane north-south divided facility and is functionally classified as an urban principal arterial interstate. It is also designated as a Strategic Intermodal System (SIS) corridor. Northlake Boulevard in the vicinity of I-95 is a six-lane divided east-west roadway classified as an urban principal arterial and maintained by Palm Beach County.

The existing (2015) annual average daily traffic (AADT) along SR 9/I-95 is approximately 166,000 vehicles per day. Along Northlake Boulevard the existing AADT ranges from 40,000 to 62,000 vehicles per day. The existing AM and PM peak hour operating conditions for the ramps merge