I-95 at Central Boulevard/PGA Boulevard IJR Re-Evaluation (Ramp A)

1. INTRODUCTION

In 2015, the Florida Department of Transportation evaluated a new interchange access connection to I-95 at Central Boulevard in Palm Beach County, Florida. Currently, Central Boulevard crosses over, but does not provide access to, I-95. The proposed interchange project will improve regional mobility in northern Palm Beach County and provide congestion relief to adjacent interchanges. At the time of the original interchange justification report (IJR), an interchange at this location was in the 2035 LRTP Needs Plan, as well as the 2040 LRTP Cost Feasible Plan. Ultimately, the I-95 at Central Boulevard IJR was approved by Federal Highway Administration (FHWA) in November 2015.

The proposed Central Boulevard interchange is approximately one mile north of the existing SR 809/Military Trail partial interchange, and two miles south of the existing Donald Ross Road interchange. The project location is depicted in **Figure 1**.

As the interchange proceeded into the design phase, a design modification to the I-95 southbound on-ramp from the proposed new interchange (identified as Ramp A) was recommended primarily to address safety concerns. The approved 2015 design concept includes a tapered merge lane along I-95 that may not be desirable from a safety perspective. In the proposed redesign of Ramp A, this tapered merge lane is eliminated providing a safer merge condition. As a result, a re-evaluation of the IJR was needed.

This proposed design modification involves merging the two lanes on Ramp A to a single lane prior to drivers entering the weaving section on southbound I-95 between Central Boulevard and PGA Boulevard. It is intended to provide a safer merge and weaving condition for drivers attempting to enter the I-95 southbound traffic flow from Ramp A. No other geometric modifications are proposed to the interchange design or arterial network.

The analysis will focus on the two-lane portion of Ramp A south of where Ramp A1 diverges, including the section of Ramp A that reduces to a single lane and where Ramp A joins with southbound I-95 to form a weaving section between Central Boulevard and PGA Boulevard. A schematic of the original design for Ramp A, known herein as the No Build condition, is included in Appendix A.

All work for the redesign of the ramp is contained within the current interchange footprint. Therefore, there will be no additional environmental impacts resulting from the proposed design modifications. This report provides a traffic operations and safety analysis of the proposed modified design concept of Ramp A.

Appendix A - Methodology Letter of Understanding (MLOU)

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access request process will be maintained throughout the evaluation process.

Full compliance with all MLOU requirements does not obligate the Acceptance Authorities to

accept/approve the interchange access request.

1.0 Introduction and Project Description

A. Provide background or supporting information that explains the basis for the request. The Florida Department of Transportation (Requestor) is preparing an Interchange Justification Report (IJR) for the consideration of a proposed interchange with Interstate 95 (I-95) and Central Blvd. located in the City of Palm Beach Gardens, Palm Beach County, Florida. The purpose of this study is to establish the need and justification for the proposed interchange through the preparation of an IJR.

This document will serve as the Methodology Letter of Understanding (MLOU) between the Florida Department of Transportation (FDOT) District Four Interchange Review Committee (DIRC), and the Federal Highway Administration (FHWA). The MLOU has been developed in accordance with the FDOT Policy No. 000-525-015-g: Approval of New or Modified Access to Limited Access Facilities on the Strategic Intermodal System (SIS), FDOT Procedure No. 525-030-160-i: New or Modified Interchanges, and the FDOT Traffic Forecasting Handbook.

B. Purpose and Need Statement

Provide the Purpose, the Need, and the Goals and Objectives.

The purpose of the project is to improve regional mobility and overall traffic operations by examining improvements at the existing interchanges between Northlake Boulevard and Donald Ross Road along I-95, including at SR 786 (PGA Boulevard), as well as consideration of new interchange access within these limits, with focus on Central Boulevard and I-95, or Hood Road and I-95. The purpose is to achieve acceptable (LOS D) regional Levels of Service (LOS) in the future condition. The need for the project is based on the following primary and secondary criteria:

PRIMARY CRITERIA

CAPACITY/TRANSPORTATION DEMAND: Improve Operational Capacity and Overall Traffic Operations (Level of Service)

The project is anticipated to improve traffic operations at the PGA Boulevard interchange and study area roadways/intersections by implementing regional operational and capacity improvements to meet the future travel demand projected as a result of Palm Beach County population and employment growth. According to traffic data presented in the I-95 Area Wide Mobility Study, the northbound I-95 ramp terminal intersection at PGA Boulevard is currently operating at LOS E/F (AM/PM Peak Hours) and the intersection of PGA Boulevard at Military Trail is currently operating at LOS E (AM/PM Peak Hours). By year 2035, if no improvements occur, several additional locations are projected to deteriorate to unacceptable conditions, including the southbound I-95 ramp terminal intersection at PGA Boulevard to LOS F (PM Peak Hour), the intersection of PGA Boulevard and Central Boulevard to LOS F (AM/PM Peak Hours) and the intersection of PGA Boulevard at Florida's Turnpike to LOS F (AM/PM Peak Hours).

An Interchange Justification Report for a new interchange at Central Boulevard was completed in 2009 by Palm Beach County. It recommended the construction of a new