

I-95 at Hypoluxo Road Interchange Modification Report

5) I-95 Managed Lanes Project (FPID #444202-1).

1.1 Purpose and Needs

The purpose of preparing the Interchange Modification Report (IMR) for the I-95 at Hypoluxo Road Interchange is to improve the interchange operations, and to improve safety and reduce congestion of the interchange and the adjacent intersections.

As indicated in the ICDR, the study intersections near the interchange termini are operating at level of service (LOS) D or better during the AM peak hour. However, During the AM peak hour, as indicated in the ICDR, the eastbound left-turn lane from eastbound Hypoluxo Road to I-95 northbound on-ramp, and westbound left-turn lane from westbound Hypoluxo Road to I-95 southbound on-ramp experienced longer queues. During the PM peak hour, the I-95 southbound and northbound ramps termini intersections are operating at LOS F and LOS E during the PM peak hour, respectively. The southbound off-ramp, westbound and northbound approaches at the intersection of Hypoluxo Road and I-95 northbound ramp experienced long queues.

The short-term improvements identified in the ICDR were recently partially implemented under the Interim Interchange Improvement Project (FPID #413257-2). However, the ramp terminals at the I-95 at Hypoluxo Road Interchange are still over capacity after construction. The I-95 northbound off-ramp, I-95 southbound off-ramp, and eastbound left-turn from eastbound Hypoluxo Road to the northbound I-95 on-ramp are experiencing excessive delays during the AM and PM peak hours. The southbound ramp terminal is operating at LOS D during the AM period and LOS C during the PM peak period. The northbound ramp terminal is currently operating at LOS E during the AM peak period. Moreover, the I-95 northbound ramp terminal is operating at LOS F during the PM peak period. The I-95 northbound left-turn is also experiencing significant delays during the PM peak period. The intersections of Hypoluxo Road at High Ridge Road and at Seacrest Boulevard/S 14th Street are currently operating at LOS D during the AM and PM peak periods. The northbound and southbound movements are operating at LOS E. These delays are expected to worsen in the future with the projected growth of traffic in the area.

The proposed improvements in IMR are designed to meet the long-term transportation needs at the interchange and to support the anticipated population/employment growth and economic

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development. The goal of this study is to conduct a comprehensive analysis of the impacts of these improvements, recommend additional improvements or alternatives if necessary, and to seek approval of safety, operational, and engineering (SO&E) acceptability for implementation.

The primary need for this project is to alleviate existing and future traffic congestion thereby improving safety at the interchange. If no improvements are made to the interchange, traffic operations and safety within the interchange area will continue to deteriorate as traffic volumes increase. The ICDR also identified operational deficiencies at the terminal intersections and adjacent intersections at the I-95 at Hypoluxo Road Interchange and determined there is a need for improvements.

1.2 Project Location

Figure 1 shows the project location of the I-95 at Hypoluxo Road Interchange and the surrounding area. The I-95 at Hypoluxo Road Interchange is located in Central Palm Beach at the southwest corner of the Town of Lantana. It is approximately 1.03 miles south of the I-95 at Lantana Road Interchange and 1.5 miles north of the I-95 at Gateway Boulevard Interchange. The I-95/Hypoluxo Road is currently a Tight Urban Diamond Interchange. The intersections of Hypoluxo Road at High Ridge Road, and Hypoluxo Road at Seacrest Boulevard/S 14th Street immediately west and east of the interchange, are signalized intersections within the half-mile influencing area of the interchange.