

EXECUTIVE SUMMARY

The primary purpose of the IOAR is to perform an analysis of the performance of the proposed interchange modifications in comparison to the No-Build scenario. The Florida Department of Transportation (FDOT) completed a safety study in July 2016 that evaluated safety improvements at the intersections of Hollywood Boulevard and the northbound I-95 off-ramp, and Hollywood Boulevard and 28th Avenue. This safety study found that there was a high incidence of rear end crashes on the northbound off-ramp. It was then recommended that a second right-turn lane on the northbound off-ramp was added, as well as signalizing the turning movement. This IOAR advances the project to the design phase and final implementation.

A Methodology Letter of Understanding (MLOU) was prepared to document the methodology for the safety and traffic analyses included in this IOAR. The MLOU was approved by the FDOT District 4 Interchange Review Coordinator and the Central Office Systems Management Administrator in July 2020. Traffic data was collected in 2016 by FDOT for typical weekday AM and PM peak periods (6-9 AM, 4-7 PM) as part of the PD&E Study work efforts. SERPM 7.061 was used for the travel demand forecast.

The traffic analysis in this IOAR includes the northbound I-95 weaving segment between Pembroke Road and Hollywood Boulevard and the following signalized intersections:

- Hollywood Boulevard and SB I-95 Ramps
- Hollywood Boulevard and NB I-95 Ramps
- Hollywood Boulevard and 28th Avenue

The traffic operational analysis found that there will be an approximate 8 second reduction in delay during the PM peak hour for the intersection at Hollywood Boulevard and northbound I-95 Ramps in the design year 2040, which represents a 17% reduction. The other intersections have an unchanged level of delay. The Build Alternative does not change the performance of the freeway weaving area.

Crash data was collected from the FDOT Crash Analysis Reporting System (CAR Online) for the five most recent years (January 2013 to December 2017) at the study intersections. Crash summaries were developed for the five years based on the crash data. Review of the crash summaries provides insight into the historical crash patterns at the study intersections. A summary of the crashes within the entire study area is shown in Table 8. There was a total of 408 crashes within the study area from 2013 to 2017, an average of 82 per year. The data shows the following:

- 57% of crashes were rear end incidents, and 22% were angle impacts
- 77% of crashes resulted in property damage only
- 69% of crashes occurred during the daytime
- 86% of crashes occurred during dry road conditions

FDOT SR 9 (1-95) Interchange Operational Analysis Report – Hollywood Boulevard (SR 820), Broward County, Florida

The safety analysis for future conditions found that a 5% total crash reduction is estimated due to the proposed improvements in the study area. This includes approximately 15% reduction in fatal crashes, and 12% reduction in injury crashes.

The Federal Highway Administration (FHWA) Interchange Access Policy was checked to ensure that an adequate level of service is provided in terms of safety and mobility. The proposed Build Alternative does not modify any current access arrangements.

Based on the conclusions above, the proposed Build Alternative will provide both safety and performance improvements to the road network within the study area.