

I-95 is the primary north-south interstate facility that links all major cities along the Atlantic Seaboard and is one of the most important transportation systems in southeast Florida. I-95 is one of the two major expressways, Florida's Turnpike being the other, that connect the major employment centers and residential areas within the South Florida tri-county area. I-95 is part of the state's SIS and the National Highway System (NHS). In addition, I-95 is designated as an evacuation route along the east coast of Florida.

I-95, within the project limits, currently has six general purpose lanes (three in each direction) and two High Occupancy Vehicle (HOV) lanes (one in each direction). This segment of I-95 is functionally classified as a Divided Urban Principal Arterial Interstate and has a posted speed limit of 65 miles per hour (mph). The access management classification for this corridor is Class 1.2, Freeway in an existing urbanized area with limited access. There are two full interchanges within the project limits located at SR 870/Commercial Boulevard and Cypress Creek Road, as well as entry ramps from N. Andrews Avenue and from Cypress Creek Park and Ride Lot to I-95 southbound.

The proposed improvements will be compatible with the proposed I-95 Express Lanes Phase 3 Project, which will introduce two tolled, express lanes in place of the existing HOV lanes from Broward Boulevard in Broward County to Linton Boulevard in Palm Beach County. Phase 3A, which extends from Broward Boulevard to south of SW 10 Street and includes the limits of the proposed interchange improvements, began construction in early 2016.

1.3 Purpose and Need

The primary need for this project is to increase capacity and improve traffic operations on I-95 and at the Cypress Creek Road/I-95 and (SR 870) Commercial Boulevard/I-95 interchanges. The project is also intended to improve safety within the vicinity, including access to I-95 and the arterial intersections. Secondary considerations for the purpose and need of this project include system linkage, modal interrelationships, transportation demand, social demands and economic development, and evacuation.

I-95 within the project limits currently operates at Level of Service (LOS) F. Additionally, SR 870/Commercial Boulevard operates at LOS E east of I-95 and LOS F west of I-95, while Cypress Creek Road operates at LOS E on both sides of I-95. Without improvements, the driving conditions will continue to deteriorate well below acceptable LOS standards. The I-95 Express Phase 3 improvements will help maintain or slightly improve the I-95 corridor LOS by adding one travel lane in each direction in the form of an Express Lane. The improvements proposed as part of this project will complement the I-95 Express Lanes improvements.

The existing Cypress Creek Park and Ride southbound on ramp and SR 870/Commercial Boulevard southbound on ramp provide less than 500 feet of merge distance before the acceleration lane drops and merges with the general purpose traffic. This forces commuters to merge with the general purpose traffic while accelerating, which is an unsafe maneuver.

The proposed modifications will improve the safety of the project corridor. The buses travelling onto I-95 from the Cypress Creek Park and Ride will be provided greater distance prior to merging with I-95 southbound traffic. Additionally, the existing

substandard vertical clearance of the North Andrews Avenue Bridge over I-95 will be resolved with the bridge replacement.

The project is anticipated to improve emergency evacuation capabilities by enhancing connectivity and accessibility to major arterials designated on the state evacuation route. I-95, SR 870/Commercial Boulevard, and Cypress Creek Road serve as part of the emergency evacuation route network designated by the Florida Division of Emergency Management and by Broward County. SR 870/Commercial Boulevard and Cypress Creek Road move traffic from the east to I-95. I-95 is critical in facilitating traffic during emergency evacuation periods as it connects to other major arterials and highways of the state evacuation route network (i.e., I-595 and the Florida's Turnpike).

The Cypress Creek Road Interchange Project is included in the Broward County Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP) for Fiscal Years (FY) 2016-2020, the FDOT Work Program FY 2017- 2021, the FDOT State TIP FY 2016-2020, and the FDOT SIS Five Year Plan FY 2016-2020 for PD&E Phase in FY 2016.

The Broward County MPO 2035 Long Range Transportation Plan (LRTP) included improvements to all I-95 interchanges in Broward County under Illustrative Roadway Projects. Illustrative projects are those that cannot be included in the cost feasible plan due to financial constraints but would be included in a future approved TIP.

2 Methodology

A Methodology Letter of Understanding (MLOU) was developed and approved by the Florida Department of Transportation (FDOT) District Four Interchange Review Committee (DIRC) and the FDOT Central Office on July 2016 for the I-95 from south of Commercial Boulevard to north of Cypress Creek Road PD&E study Systems Interchange Modification Report (SIMR). The approved MLOU is provided in **Appendix A**.

2.1 Project Location and Description

Figure 2.1 shows the overall project limits and location in Broward County, Florida. The project limits include Commercial Boulevard from NW 12 Avenue to N. Andrews Avenue, Cypress Creek Road from N. Andrews Avenue to the I-95 northbound ramp terminal, and I-95 from south of Commercial Boulevard to north of Cypress Creek Road. The I-95/Commercial Boulevard interchange is located 1.64 miles north of the I-95/Oakland Park Boulevard interchange and 1.19 miles south of the I-95/Cypress Creek Road interchange. The I-95/Cypress Creek Road interchange is 2.11 miles south of the I-95/Atlantic Boulevard interchange. The project also includes proposed improvements along Powerline Road and Andrews Avenue. The project limits on Powerline Road extend from NW 47th Street (MP 3.331) to NW 53rd Court (MP 3.869), a distance of 0.538 miles. The project limits on Andrews Avenue extend from N Andrews Way (MP 0.954) to NE 1st Avenue (MP 1.270), a distance of 0.316 miles. The study area also includes an area of influence outside the project limits.