

1.0 Introduction

1.1 Project Overview

The Florida Department of Transportation (FDOT) District Seven has prepared an Interchange Operational Analysis Report (IOAR) to identify improvements that can mitigate existing operational deficiencies and safety concerns at the I-275 and Hillsborough Avenue interchange in Hillsborough County.

Interstate 275 (I-275/SR 93) is a major interstate highway that is part of Florida's Strategic Intermodal System (SIS) and plays a major role in the economy and mobility of the Tampa Bay area. Operating north-south along west Florida, it serves a key role in the movement of people, freight, and goods between its southern terminus in Palmetto, Florida (Manatee County) and its northern terminus on the Hillsborough and Pasco County line, both termini ending at I-75. The I-275 and Hillsborough Avenue (US 92/SR 600) interchange serves as a major access point to both the Seminole Heights and Tampa Heights communities. Originally constructed in 1966, the I-275 at Hillsborough Avenue interchange has never been substantially modified. In recent years, Hillsborough County has been experiencing growth rates that consistently outpace the statewide average. In response to this growth, it is necessary to improve safe access to sustain economic viability, mobility, and emergency evacuation for the surrounding communities.

The FDOT District Seven conducted an Interchange Needs Evaluation on I-275 (SR 93) from SR 574 (Dr. Martin Luther King Jr. Boulevard) to south of I-275/I-75 (SR 93A) Apex, dated December 2016. Based on the results of the study, District Seven has identified the need for an additional left-turn lane from eastbound Hillsborough Avenue to northbound I-275. The inclusion of the additional eastbound left-turn lane will require the installation of a signal to control the previously uncontrolled movement, necessitating the evaluation of the interchange operations. Additionally, the I-275 (SR 93) Project Development and Environment (PD&E) Study from north of SR 574 (Dr. Martin Luther King Jr. Boulevard) to north of Bearss Avenue (SR 678/CR 582) (WPI Segment No.: 431821-1), dated October 2019, recommended the removal of the free flow northbound I-275 to westbound Hillsborough Avenue movement and placement of this movement under signal control with the addition of a second right-turn lane.

1.2 Purpose and Need

The primary purpose of this IOAR is to utilize the efforts conducted under the I-275 PD&E Study Project Traffic Analysis Report (PTAR), dated June 2019, to identify safety, operational, and geometric improvements to mitigate the existing safety and operational deficiencies for the I-275 and Hillsborough Avenue interchange. The current operational and safety issues of greatest concern at the I-275 and Hillsborough Avenue interchange, identified by the I-275 PD&E Study (WPI Segment No. 431821-1) are as follows:

- The high frequency of angle crashes and queue spillback at the westbound left-turn to southbound I-275;
- Operational deficiencies due to the stop-controlled operation of the I-275 northbound to eastbound off-ramp;

- The queue spillback on eastbound Hillsborough Avenue caused by the yield-controlled operation of the eastbound left-turn to northbound I-275 movement; and
- The queue spillback of the southbound off-ramp into the I-275 southbound mainline.

1.3 Project Location

The I-275 and Hillsborough Avenue interchange is located in Hillsborough County, approximately 1.0 mile north of the Dr. Martin Luther King Jr. Boulevard (SR 574) interchange and 1.0 mile south of the Sligh Avenue interchange. Hillsborough Avenue connects I-275 with BUS US 41/Florida Avenue (0.35 miles to the west) and US 41/Nebraska Avenue (0.16 miles to the east) and is depicted in **Figure 1.1**. The western quadrants of the interchange provide access to the Seminole Heights community and Hillsborough High School to the south. The northeast quadrant is occupied by the Zeko's restaurant, an Enterprise car lot, and a connection to Miami Avenue via a shared access to the northbound on-ramp. The southeast quadrant of the interchange is predominately occupied by the Seminole Heights Baptist Church which does not have a driveway located along Hillsborough Avenue, but does have one way exit access to the northbound ramp terminal access via Taliaferro Avenue. The church has recently been demolished and will be replaced by a free-standing emergency room for Memorial Hospital of Tampa.

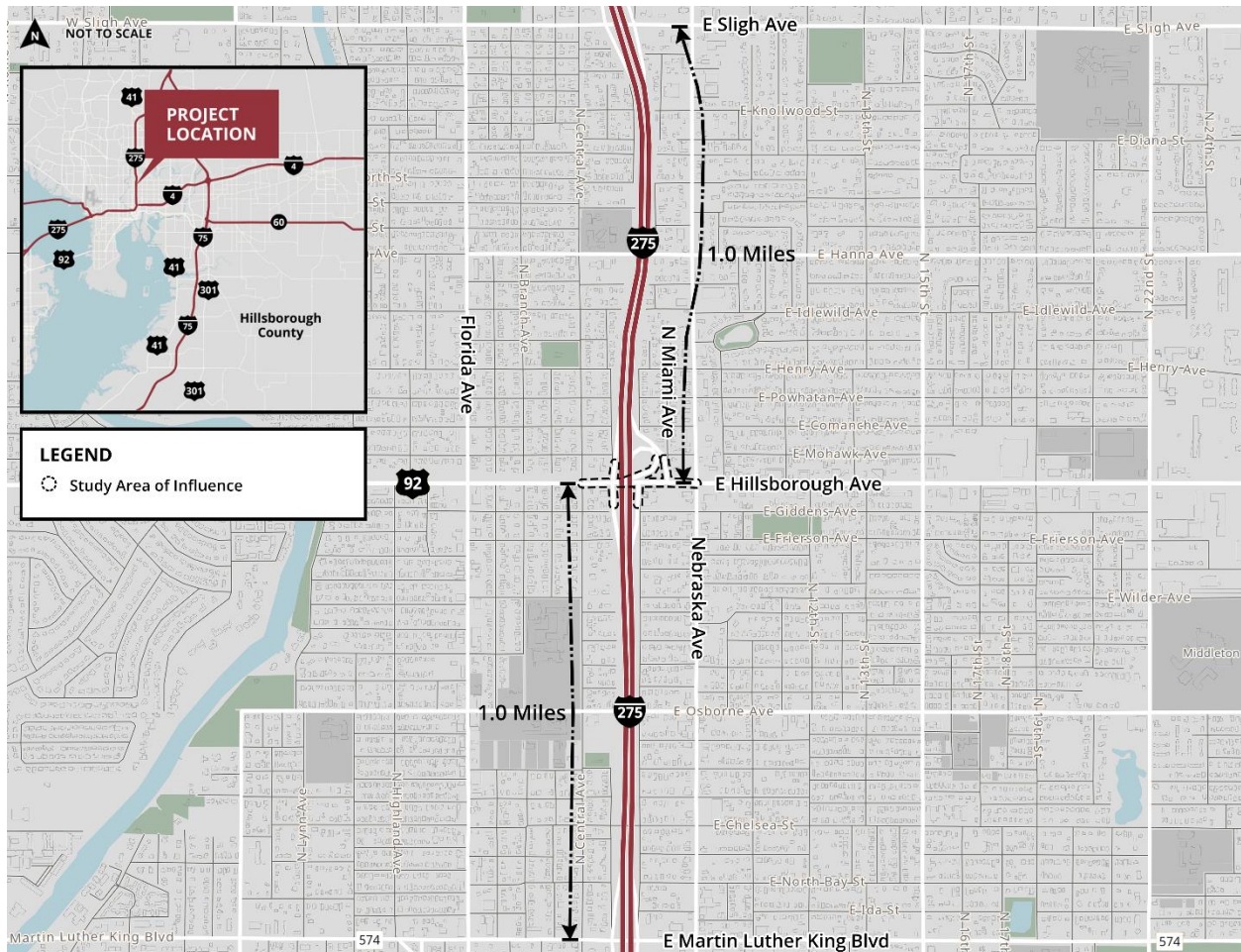


Figure 1.1: Project Location Map