## 1.0 Introduction

## 1.1 Project Overview

The Florida Department of Transportation (FDOT) District Seven conducted an Interchange Modification Report (IMR) to identify improvements that can mitigate existing operational deficiencies and safety concerns at the I-75 at Gibsonton Drive interchange. I-75 is a major north-south interstate highway that is part of the Strategic Intermodal System (SIS) from its southern terminus in South Florida (SR 826/Palmetto Expressway) to the Georgia State line in the north.

Hillsborough County has been experiencing significant population growth in recent years with growth rates that consistently outpace the statewide average. Much of this growth has been centered in southern Hillsborough County as communities in Riverview and Lithia continue to thrive and expand. Due to this growth, it is imperative to provide regional access to these communities for sustained economic viability, mobility, and emergency evacuation. As the area surrounding the Gibsonton Drive interchange has continued to grow and evolve, the interchange itself has not kept pace with these changes and currently fails to operate at current Level of Service (LOS) targets.

The Gibsonton Drive and Fern Hill Drive intersection, located immediately east of the interchange, was recently signalized in 2018. The signalization of the intersection was implemented to better accommodate truck traffic from Ring Power/Caterpillar, located on Fern Hill Drive, south of Gibsonton Drive. In keeping with the need to serve not only vehicular, but freight and goods traffic in a safe and effective manner, the impacts of truck traffic played a key role in the operations of the I-75 and Gibsonton Drive interchange and were accommodated as such in the development of the proposed alternatives.

## 1.2 Purpose and Need

The primary purpose of this IMR is to identify safety, operational, and engineering improvements needed for the I-75 and Gibsonton Drive interchange, that would not only provide for immediate relief to existing traffic congestion and highway safety deficiencies, but also allow for added highway capacity to support future growth and economic development. This IMR is developed following FDOT Procedure Topic No. 525-030-160 (New or Modified Interchanges) in accordance with the Florida Department of Transportation's (FDOT's) *Interchange Access Request User's Guide* (IARUG) prepared by the Systems Implementation Office (SIO). The need for this project is based on the following list of identified deficiencies:

- Significant AM congestion is present along Gibsonton Drive with vehicles attempting to access the northbound I-75 on-ramp from both the eastbound and westbound directions. Thereby, causing competition between both sides of Gibsonton Drive to use the on-ramp.
- In the PM, the drop lane condition at the southbound I-75 off-ramp to Gibsonton Drive is combined with significant southbound left turning demand at the ramp terminal, which leads to significant I-75 mainline queuing. Under typical conditions, congestion experienced due to the operation of the southbound off-ramp begins nearly 3.0 miles upstream of the diverge, at the start of the auxiliary lane. This poses not only an operational concern, but a significant safety problem during the PM peak as speed differential between the auxiliary lane and general-purpose lanes can contribute to erratic driving behavior and resulting collisions.

- I-75 and Gibsonton Drive are prioritized hurricane evacuation routes, causing concern for the safety of motorists during an evacuation event.
- The poor LOS at the subject interchange during peak travel periods does not support the economic development and prosperity of the rapidly growing study area. These shortcomings will be further exacerbated with the onset of new developments planned in the area.

## **1.3 Project Location**

The I-75 at Gibsonton Drive interchange is in southern Hillsborough County, 4.2 miles north of CR 672 (Big Bend Road) and 3.6 miles south of US 301. The I-75 and Gibsonton Drive interchange serves as a major access point from I-75 to the unincorporated communities of Gibsonton, Riverview, Lithia, Boyette, Bloomingdale, and Fish Hawk in the greater Tampa Bay Region. The western quadrants of the interchange provide access to residential properties, a Walmart Supercenter, and serve as an access to several existing and planned developments. The northeast quadrant is occupied by RaceTrac, Florida Super Wash, and residential properties of The Preserve. The southeast quadrant of the interchange is predominantly occupied by Ring Power, Caterpillar and Lennar Development.

Gibsonton Drive also connects I-75 with US 41 (2.2 miles to the west) and US 301 (1.3 miles to the east) and is depicted in **Figure 1.1**.

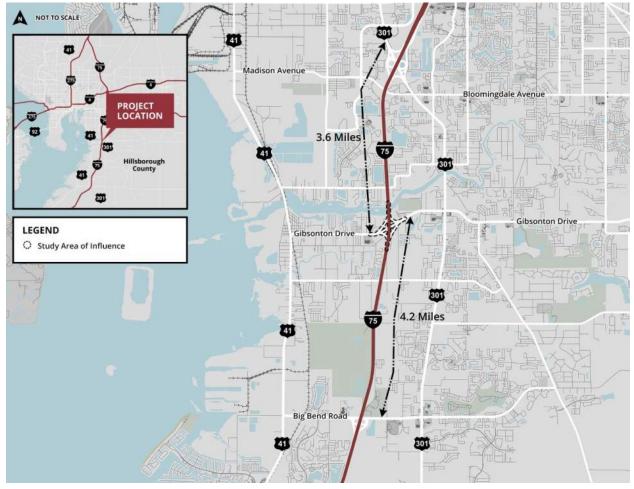


Figure 1.1: Project Location Map