

# 1. Introduction

## 1.1 Project Description

The Central Florida Expressway Authority (CFX) has conducted a Project Development and Environmental (PD&E) study (CFX Project No.: 516-236; 516-237; 516-238) to evaluate the Lake Orange County Connector (SR 516) from US 27 in south Lake County to SR 429 in west Orange County. The project study area is shown in **Figure 1**. SR 516 will provide a new limited-access, direct connection expressway in the east-west direction. This project has been identified as a need in several local comprehensive plans, long-range transportation plans and expressway authority master plans, listed below:

- MetroPlan Orlando 2045 Metropolitan Transportation Plan (MTP) Cost Feasible Plan
- CFX 2045 Master Plan
- CFX Five-Year Work Plan (2023-2027)
- Lake-Sumter MPO 2045 Long Range Transportation Plan (LRTP)

Segment 1 (from US 27 to Cook Road) of SR 516 consists of a four-lane rural expressway within 330 feet of right-of-way and will feature grade separations to maintain local roadway access. Segment 2 (from Cook Road to the Lake/Orange County Line) also consists of a four-lane rural expressway within 330 feet of right-of-way. The alignment shifts in this segment to minimize impacts to the Cemex Four Corners Sand Mine. There will be an interchange provided at the proposed CR 455 Extension to maintain local access. Segment 3 (from the Lake/Orange County Line to the SR 429 and Schofield Road interchange) will consist of the same four-lane rural expressway within 330 feet of right-of-way. There will be a partial interchange at the proposed Valencia Parkway providing access to/from the west. At the existing Schofield Road interchange with SR 429, direct connect ramps will provide access to/from northbound and southbound SR 429. The purpose of this report is to evaluate the operations and impacts of the Build alternatives for the new SR 516 and US 27 interchange, across from Lake Louisa State Park.

As developed in the PD&E study, the primary purposes of the new SR 516 corridor are to expand regional system linkage and connectivity in Lake and Orange Counties, enhance mobility between US 27 and SR 429, and accommodate the expected increase in traffic due to population and employment growth within the study area while being consistent with accepted local and regional plans. The needs for the project are to provide improved system connectivity/linkage, accommodate anticipated transportation demand, provide consistency with local and regional plans, support economic viability and job creation, support intermodal opportunities, and enhance evacuation and emergency service.