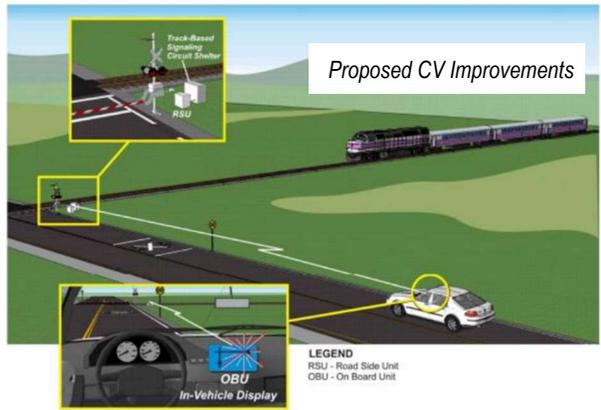


RAILROAD CROSSING SAFETY IMPROVEMENTS AND MONITORING SYSTEMS (FPID# 453453-1)

Project Description

This project will bring a mix of the latest in technology and proven strategies to improve safety at highway rail crosses across Central Florida. Seven (7) intersections which will see higher speed and higher volumes of traffic with Brightline service started up have been identified for implementation of: pre-signals and queue cutters.

Additionally at 26 at-grade state-owned rail crossings either on major state routes or located near interstate ramps will be instrumented to improve awareness of crossing status. Information will be provided via connected vehicle (CV) Roadside Units, FDOT's 511 system, FDOT's 3rd party data feed, and navigation applications like Waze. The system will be monitored by FDOT 24/7 Regional Transportation Management Center and confirmed via camera, quickly identifying faulty crossing gates that are not re-opening. This quick action will avoid traffic congestion by lessening the malfunction delay time and activating pre-determined incident traffic signal timing plans to effectively reroute traffic leveraging



Project Benefits

The project addresses the largest safety and operational impacts from highway rail crossings in Central Florida.

Pre-signals and queue cutters are proven safety measures that reduced stopped vehicles on tracks, preventing the blocking of high-speed rail traffic at key crossings. Both are featured in NCHRP Synthesis 271, *Traffic Signal Operations Near Highway-Rail Grade Crossings*.

Currently the average response time from the maintaining railroad agency to a faulty railroad crossing signal is **four (4) hours and 22 minutes**, not including the malfunction repair time. The primary cause is the time it takes to identify an issue.

Other benefits include, but are not limited to:

- Improving road user travel time reliability
- Enhancing overall operations and safety on arterials and interstates close to at-grade railroad crossings

Grant Opportunity | Consolidated Rail Infrastructure Safety Improvements (CRISI). Track 3 – Final Design (FD)/Construction Fall 2023

Grant Agency | USDOT/FRA

Applicant | FDOT District #5, TSM&O

Total Project Cost | \$5.4 million

Grant Request | \$3.45 million (64%)

Other Federal Funds | \$0.0 million (0%)

State Match | \$1.95 million (36%)

Project Location | Rural and Urban, District 5-Wide, Florida.

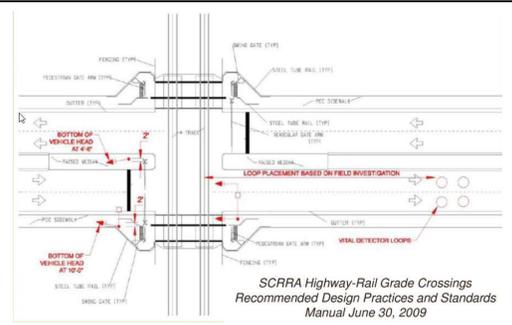
Congressional Member(s) | Michael Waltz, District 6, Cory Mills, District 7, Bill Posey, District 8, Darren Soto, District 9, Maxwell Frost, District 10

Previous Federal Discretionary Grant Application | No

Project Schedule |

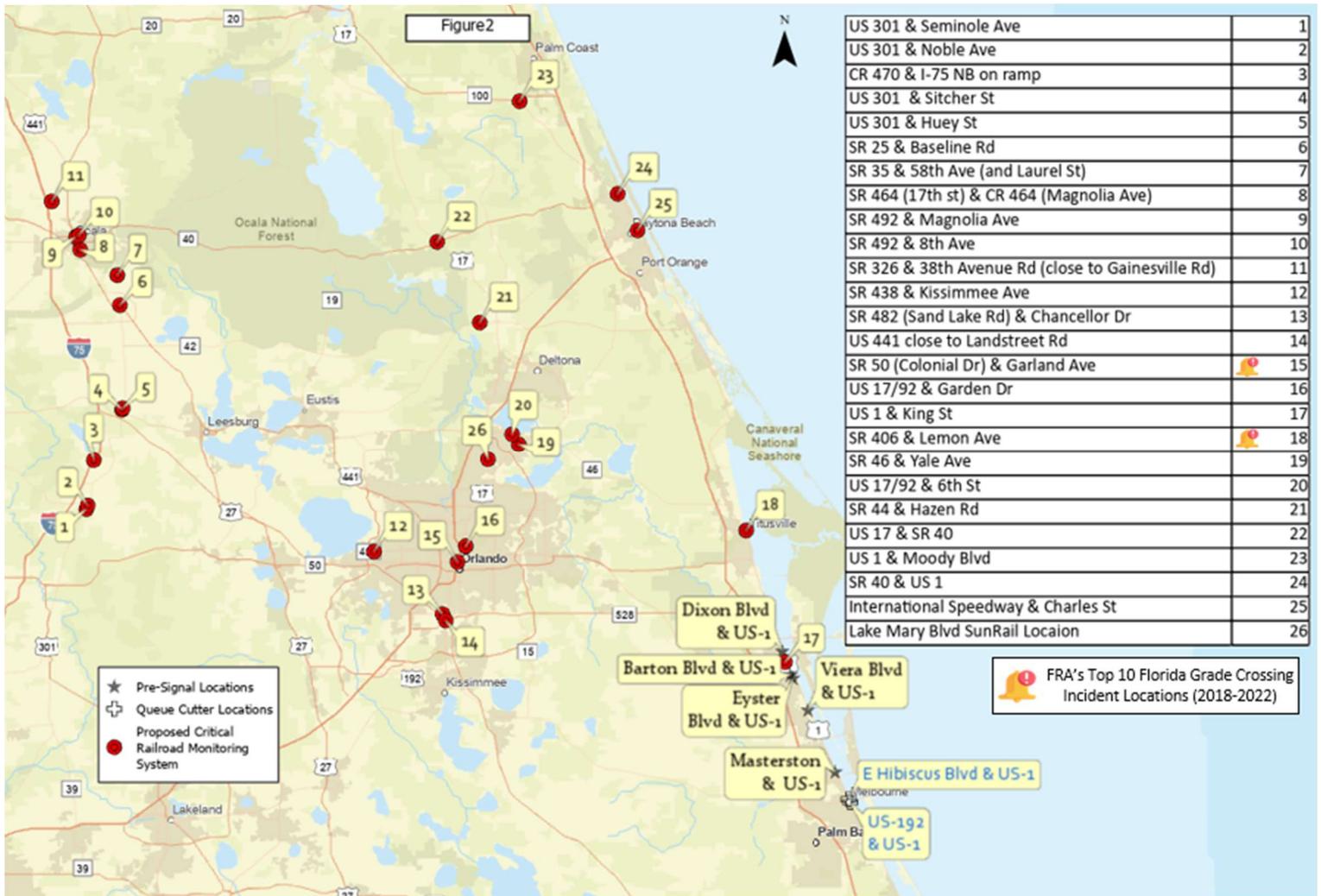


Source: FHWA.gov (Travel Time Reliability)



RAILROAD CROSSING SAFETY IMPROVEMENTS AND MONITORING SYSTEMS (FPID# 453453-1)

Project Location Map



Stakeholders

FDOT will perform all tasks required for the project through a coordinated process, which will involve the affected tenant railroads, contract operators, the local jurisdictions, and federal funding partner including, but not limited to: Federal Railroad Administration (FRA), CSX Transportation, Florida East Coast Railroad (FEC), Florida Central Railroad (FCEN), Central Florida Rail Corridor (CFRC/Sunrail), City of Ocala, City of Titusville, City of Orlando, City of Winter Park, City of Daytona Beach, City of Palm Coast, Marion County, Sumter County, Volusia County, Seminole County, and Orange County.

