



SW 10th Street Transportation Systems Management and Operations (TSM&O) Project – 439891-5

Project Information Session

January 25, 2022

Ground Rules

- Please mute microphone
- Hold all questions until the end of the presentation
- Raise hand for questions and wait to be recognized

Presentation Outline

- SW 10th Connector Improvements- Achieving FDOT Priorities and Objectives
- Safety Initiative Slide-Move Over Law
- DBE/SB Program
- SW 10th St Connector – Overall Program Summary
- SW 10th St TSM&O Project (439891-5)
 - Project Objectives
 - Programmed Funding
 - Agency Coordination
 - Summary of Planned Improvements
 - FDOT District 4 TSM&O Scope Summary
 - Broward County Scope Summary
- Next Steps for Project Implementation

SW 10th Street Connector Improvements Achieve FDOT Priorities And Objectives

- Focus on the Vital Few
 - Improve Safety
 - Enhance Mobility
 - Inspire Innovation
- SW 10th Street Improvement Projects
 - Expand Mobility and Transportation Options
- Work Zone Safety – a focus area from Central Office to the District
 - Work zone Safety is one of the emphasis areas of the Florida Strategic Highway Safety Plan
 - Using ITS and CAV technologies in and around work zones has been a focus area identified by both CO and D4



VITAL FEW

Top 3 Safety Emphasis Areas of Florida's Strategic Highway Safety Plan and FDOT's Vital Few Safety Focus



LANE DEPARTURES

Lane departures represent **33% of all CRASHES** yet result in **44% of all DEATHS**



INTERSECTIONS

Florida saw a **26% INCREASE** in fatalities & **3% DECREASE** in serious injuries at intersections between 2015 and 2019

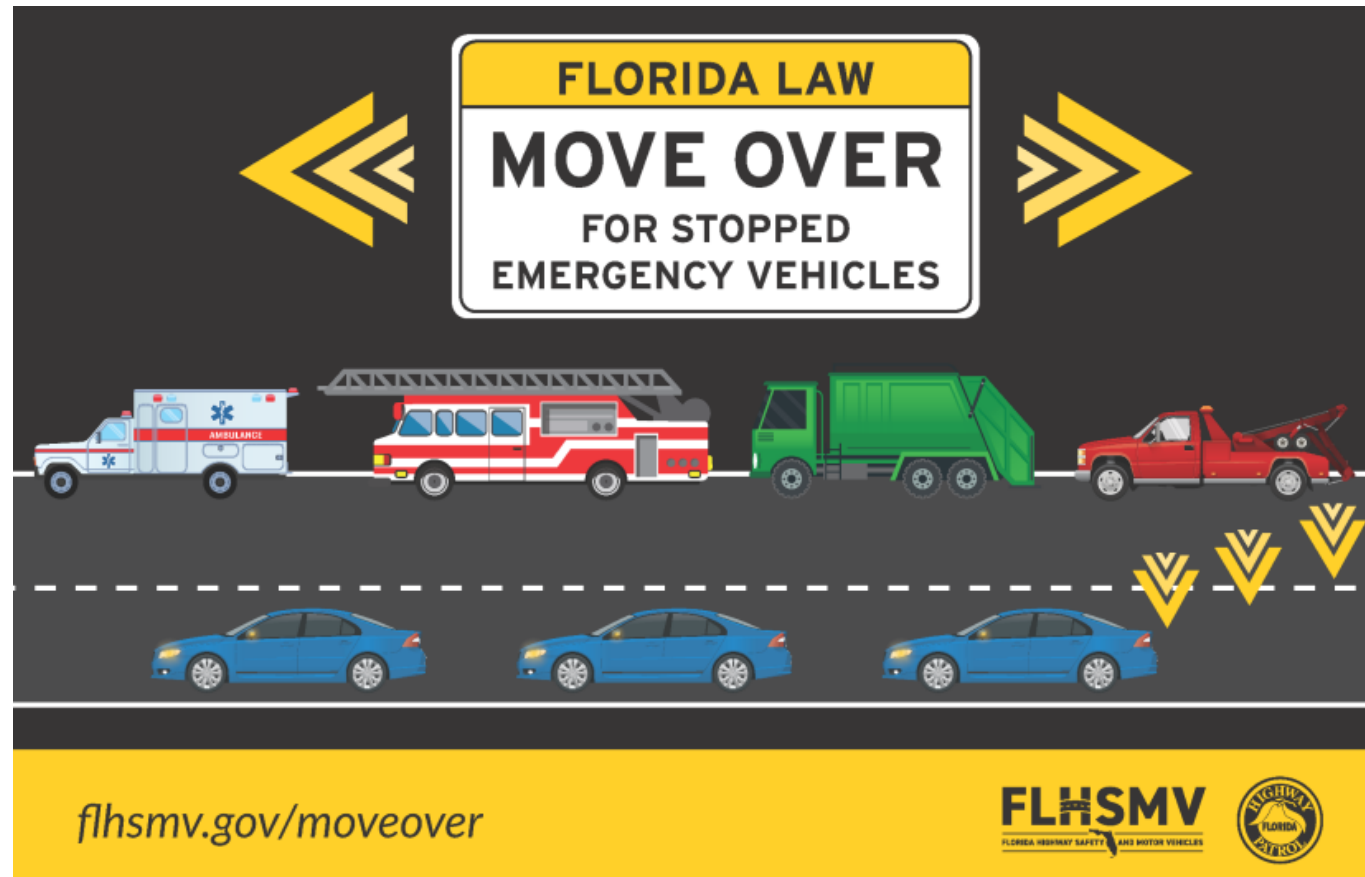


PEDESTRIANS AND BICYCLISTS

Nationally, Florida had the **HIGHEST NUMBER OF BICYCLIST FATALITIES** in 2018. Pedestrians account for more than **22%** of traffic fatalities in Florida.

Florida Move Over Law

- **Move Over** a lane – when you can safely do so – for:
 - Stopped law enforcement
 - Emergency, sanitation, and utility service vehicles
 - Tow trucks or wreckers
 - Maintenance or construction vehicles with displayed warning lights
- If you can't move over – or when on a two-lane road – slow to a speed that is 20 mph less than the posted speed limit
- Slow down to 5 mph when the posted speed is 20 mph or less



DBE/SB Program

Assisting Small and Disadvantaged Businesses

FDOT Support Services Programs

Thomas Huggins, DBE Coordinator

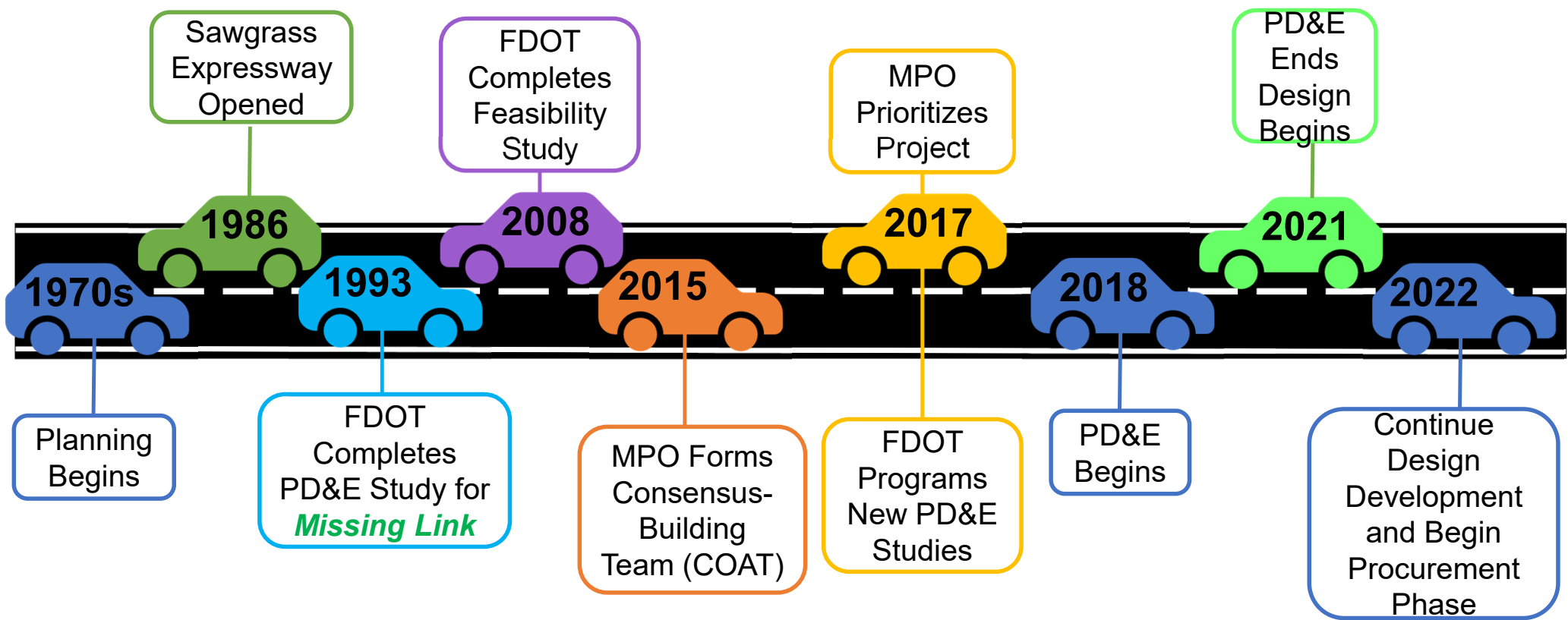
Moya Bailey, Field Consultant DBE Support Services Program

Mark Jackel, Field Consultant DBE Support Services Program



SW 10th St Connector – Overall Program Summary

SW 10th Street Project History



SW 10th St Connector – Overall Program Summary

Purpose and Need

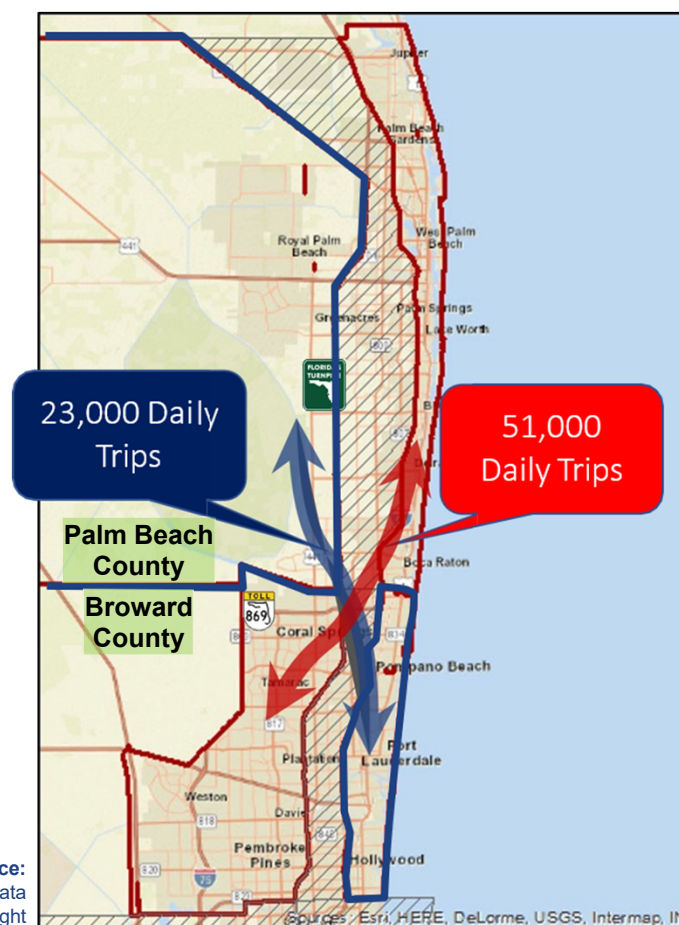
- Improve Connectivity of Strategic Intermodal System (SIS) and Limited Access Facilities (SR 869/Sawgrass Exp. with I-95)
- Address Local SW 10th Street Mobility Needs
- Enhance Social Demand, Intermodal connectivity, and Economic Development
- Address Safety and Operational Issues Caused by Congestion
- Enhance Emergency Response Times and Evacuation Operations



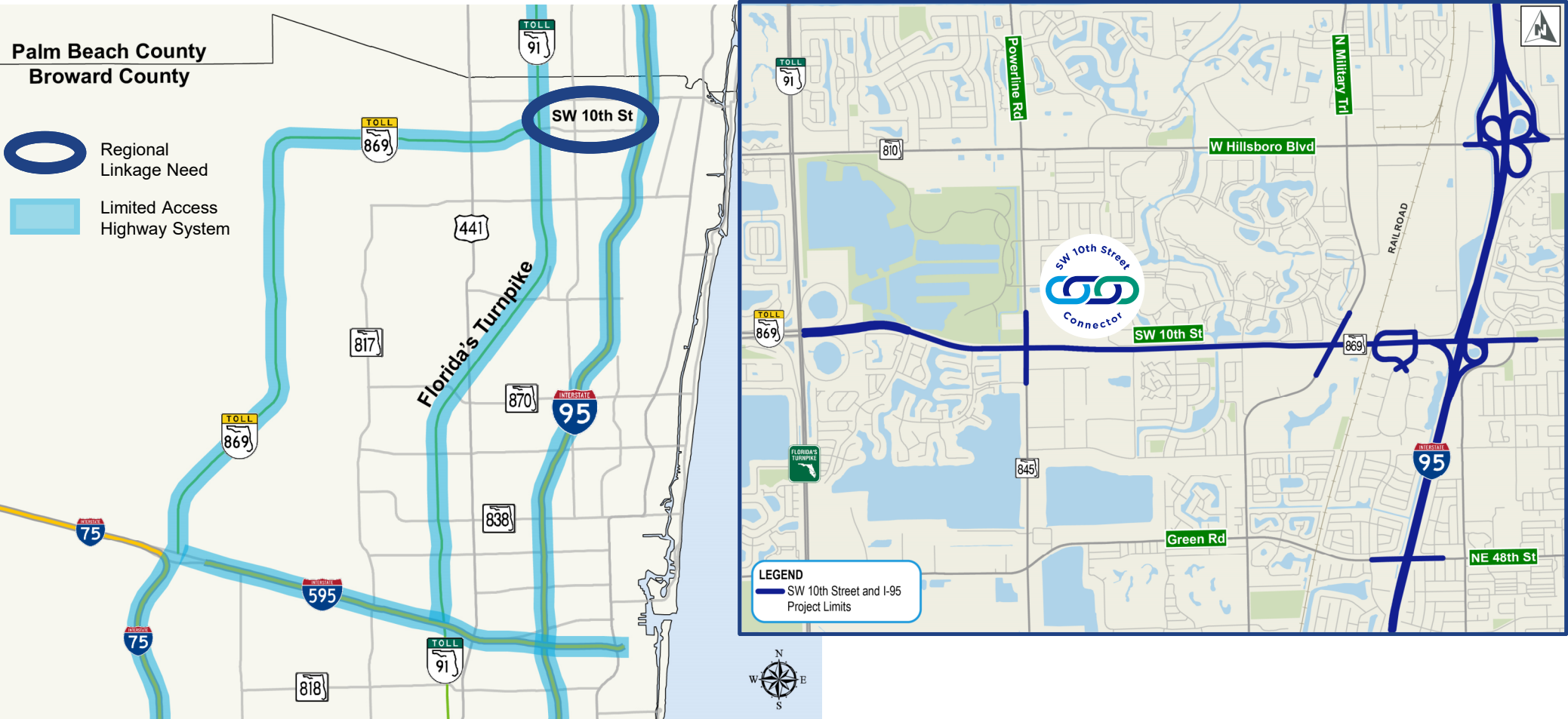
SW 10th St Connector – Overall Program Summary

Regional Importance and Travel Demand

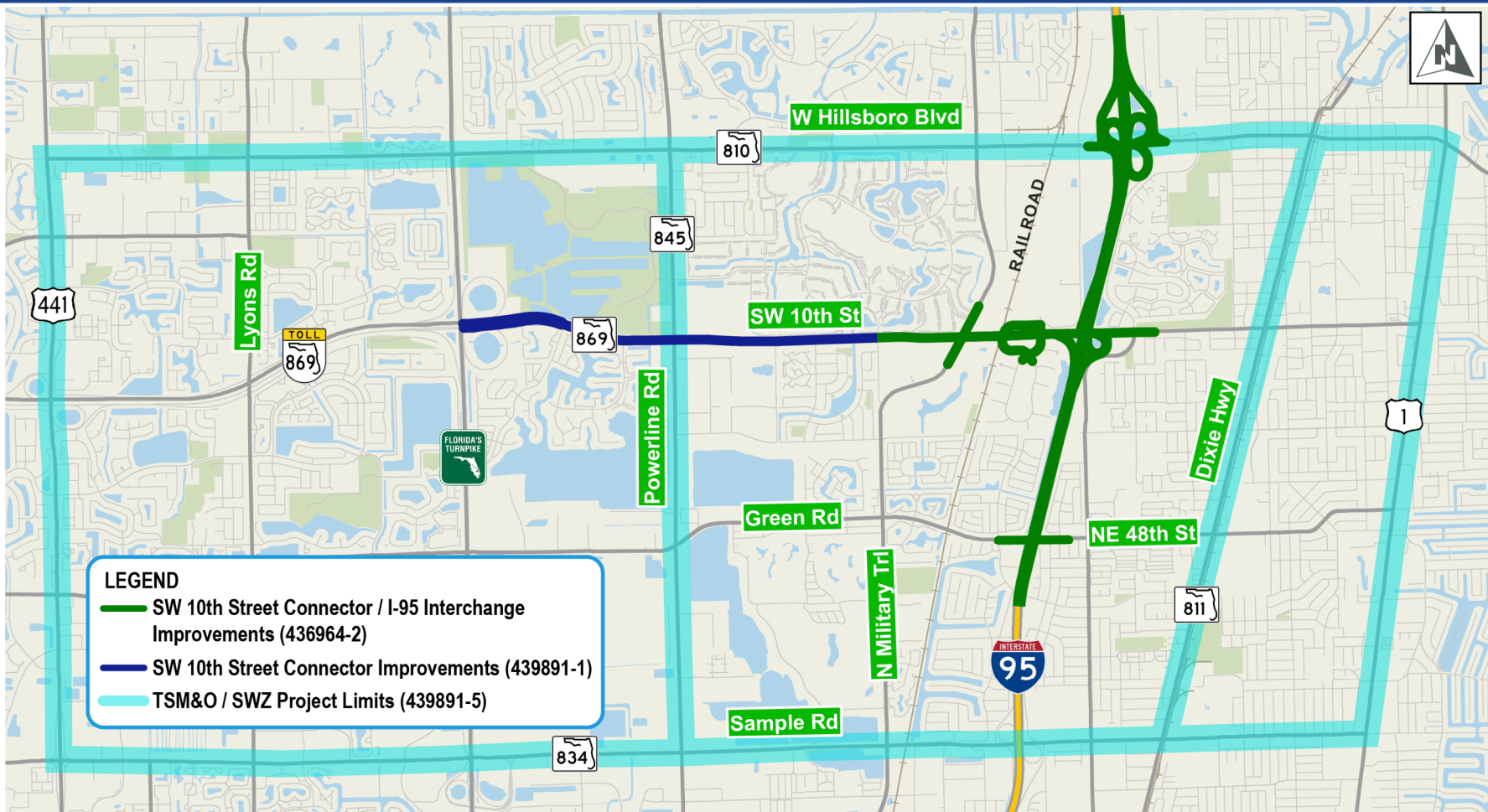
- “Missing Link” on Regional Limited Access Network
- Regional Weekday Daily Trip Flows
 - Commuter trips
 - Broward, west of Turnpike to/from Palm Beach, east of I-95: **51,000 daily trips**
 - Palm Beach, west of Turnpike to/from Broward, east of I-95: **23,000 daily trips**



SW 10th St Connector – Overall Program Summary



SW 10th St Connector – Overall Program Summary



SW 10th Street TSM&O Project (439891-5)

Project Objectives

- Enhance work zone safety and mobility, throughout and beyond construction limits of SW10th Street Connector Projects
- Continued support of the regional traffic operations after construction
- Enhance infrastructure readiness for future technology expansion, including use of scalable Connected Vehicles systems
- Expansion of Regional network coverage of Advanced Transportation Management System corridors in Broward County

SW 10th Street TSM&O Project (439891-5)

Construction Funding

- 439891-5-52-01 – approximately \$23.8M
- 439891-5-52-02 – approximately \$6.8M



SW 10th Street TSM&O Project (439891-5)

Agency Coordination

- FDOT District 4
- Broward County
- Florida's Turnpike Enterprise



SW 10th Street TSM&O Project (439891-5)

Summary of Planned Improvements

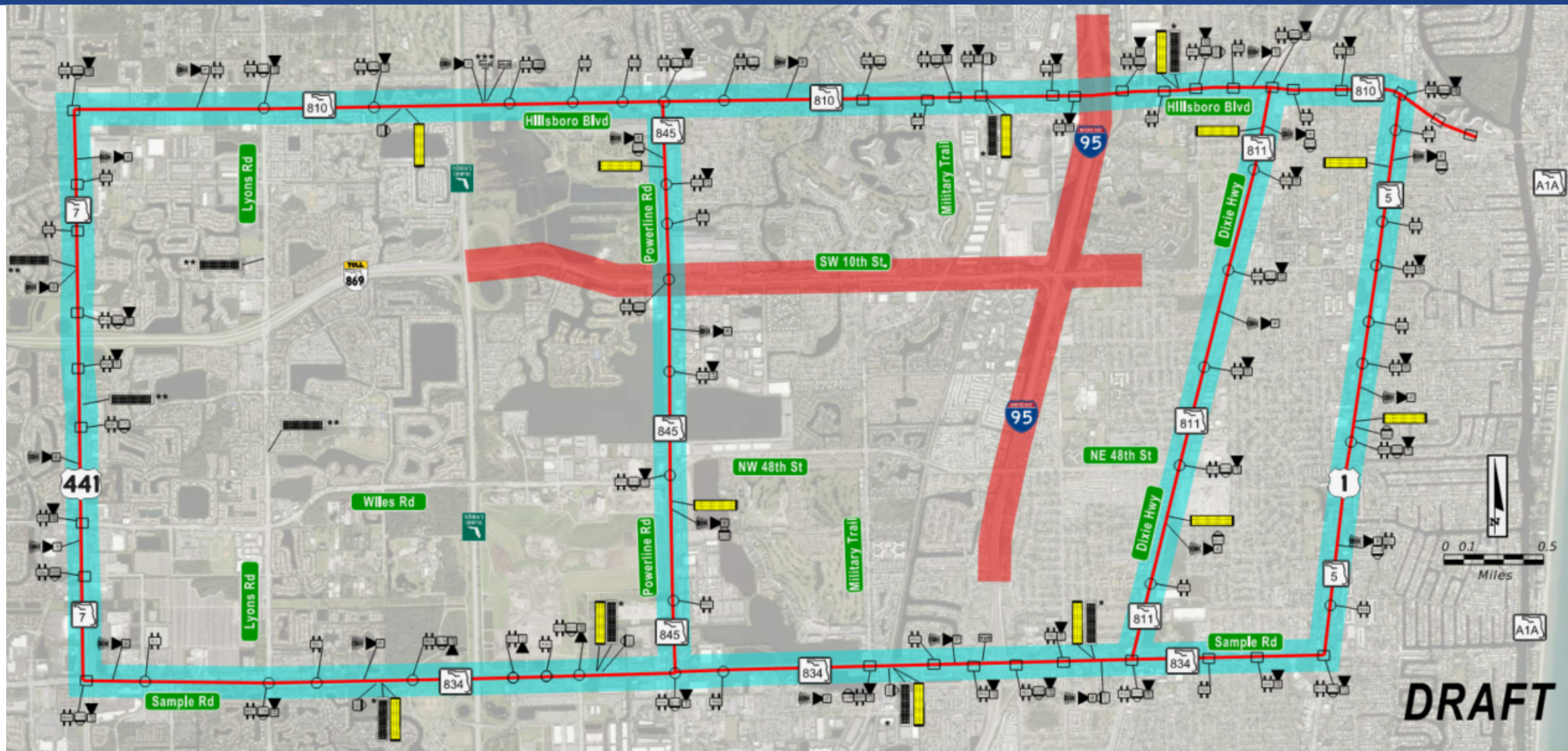
- **Arterial ATMS deployments on these six state road corridors**
 - SR 810 (Hillsboro Boulevard) from SR 7 to US 1
 - SR 834 (Sample Road) from SR 7 to US 1
 - SR 7 (US 441) from SR 810 to SR 834
 - SR 845 (Powerline Rd) from SR 810 to SR 834
 - SR 811 (Dixie Highway) from SR 810 to SR 834
 - SR 5 (US 1) from SR 810 to SR 834

SW 10th Street TSM&O Project (439891-5)

Summary of Planned Improvements

- Communications subsystem – 144 SMFOC, new Hub Shelters, L2/L3 Switches, etc.
- Power subsystem – electrical service points, UPS in the device cabinet, permanent generators, etc.
- CCTV Cameras – approximately 45
- Arterial DMS – approximately 13
 - Including 2 ADMS which will be integrated into FTE system
- Vehicle Detection System – both MVDS and Bluetooth detectors – approximately 60

SW 10th Street TSM&O Project (439891-5)

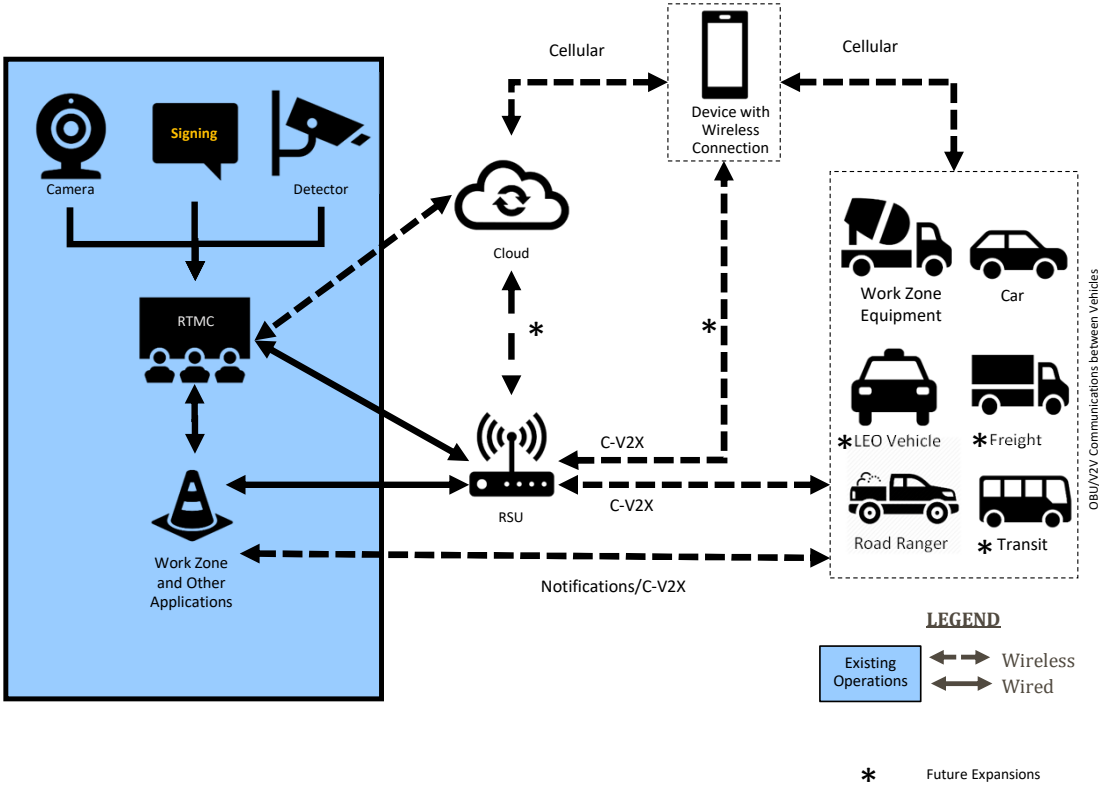


SW 10th Street TSM&O Project (439891-5)

Summary of Planned Improvements

- **Connected Vehicle scope will consist of**
 - Roadside units field deployment – approximately 75
 - Onboard Units deployment on designated vehicles – approximately 100
 - Smartphone applications development and integration/deployment
 - CV central software/platform development

SW 10th Street TSM&O Project (439891-5)

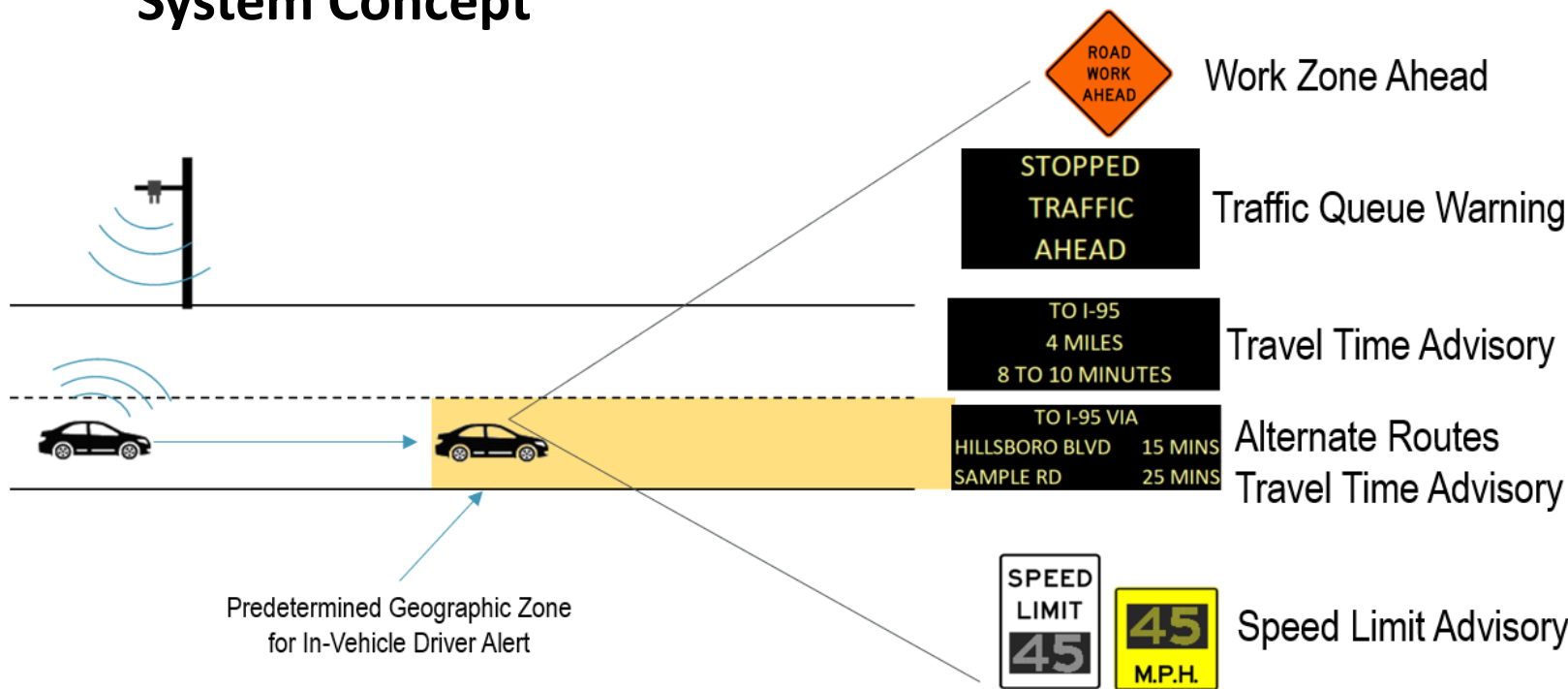


Connected Vehicle System Concept

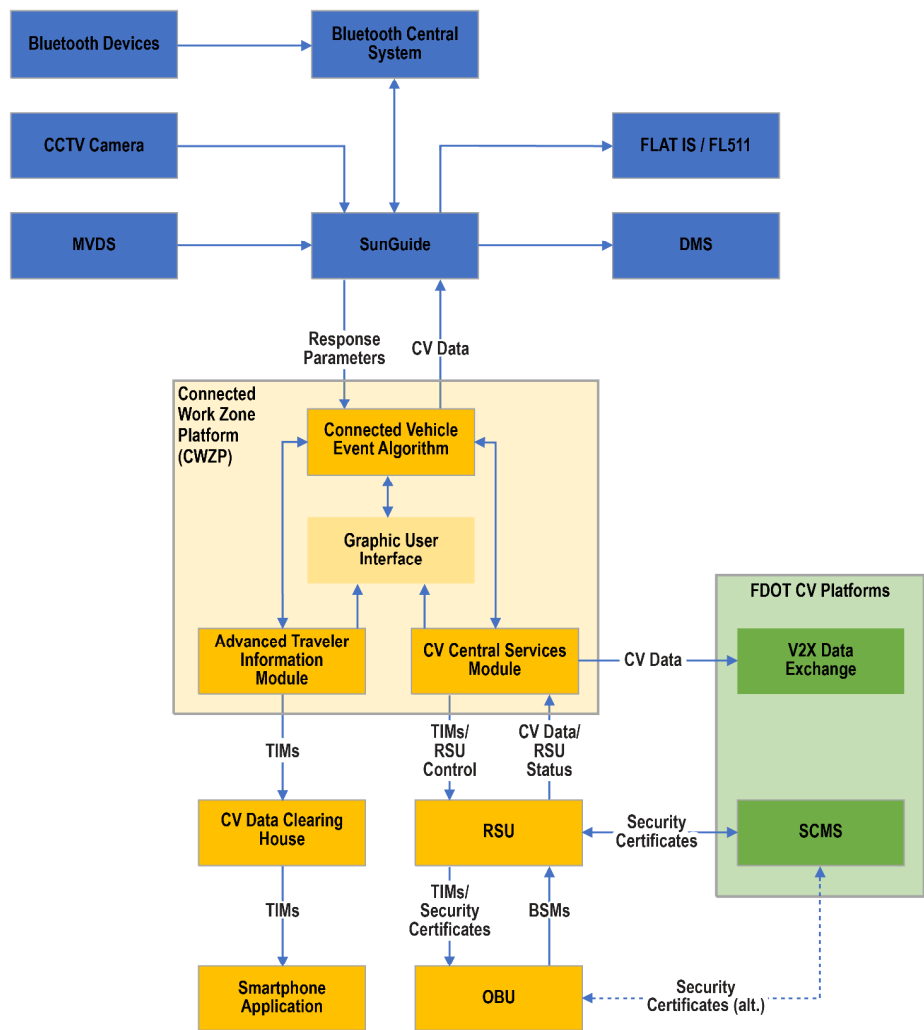
SW 10th Street TSM&O Project (439891-5)

Connected Vehicle System Concept

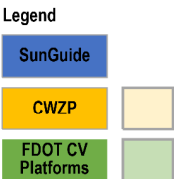
Sample In-Vehicle Driver Alerts



SW 10th Street TSM&O Project (439891-5)



Connected Vehicle System Architecture



SW 10th Street TSM&O Project (439891-5)

Summary of Planned Improvements

- **Traffic signal interconnection fiber optic cable deployment limits**
 - SR 810 (Hillsboro Boulevard) from SR 7 to Military Trail and from US 1 to Riverview Road
 - SR 834 (Sample Road) from SR 7 to US 1
 - SR 845 (Powerline Rd) from SR 810 to SR 834
 - SR 811 (Dixie Highway) from SR 810 to SR 834
 - SR 5 (US 1) from SR 810 to SR 834

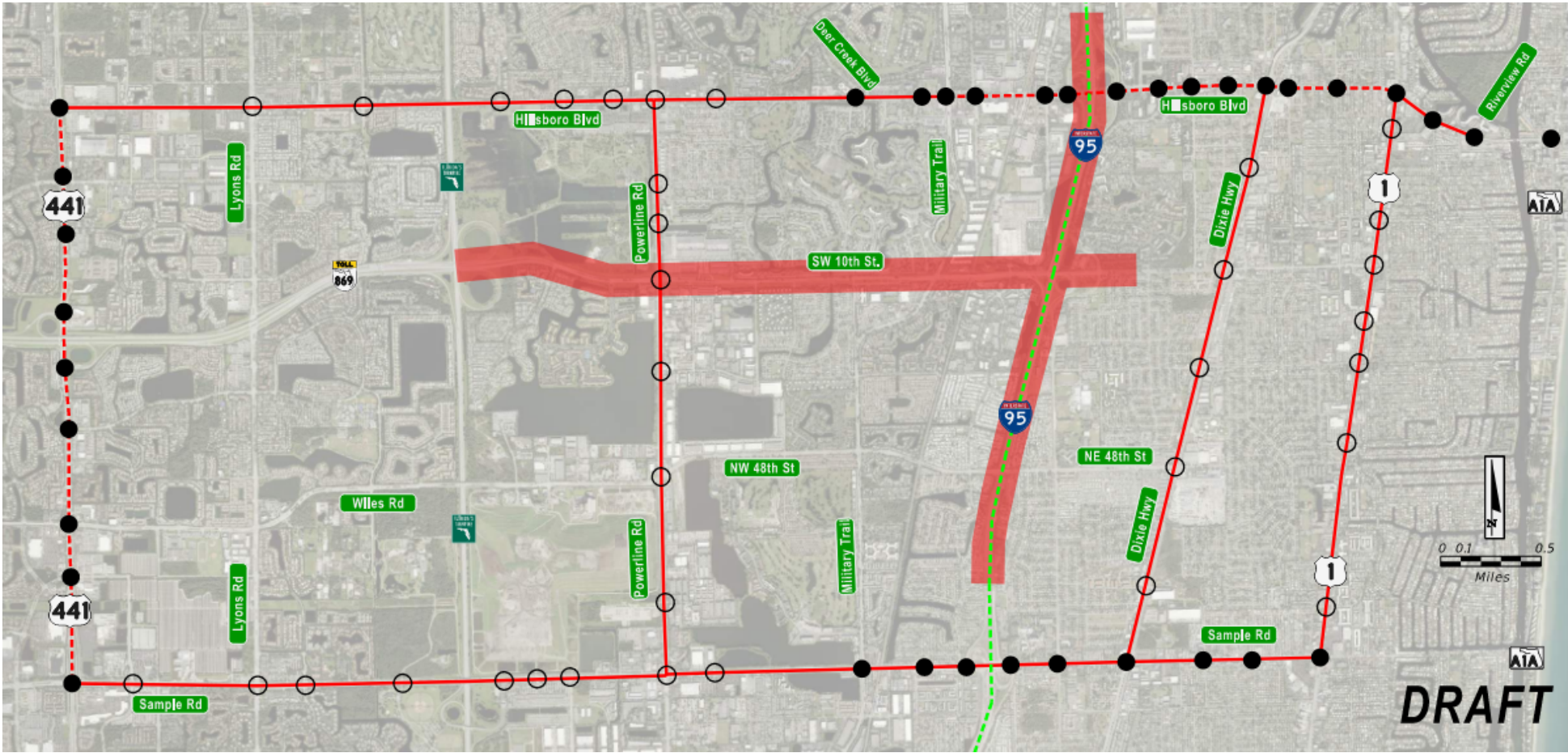
SW 10th Street TSM&O Project (439891-5)

Summary of Planned Improvements

- **Adaptive Traffic Control System (ATCS) deployment limits (35 intersections) –**
 - SR 810 (Hillsboro Boulevard) from Deer Creek Boulevard to SR A1A
 - SR 834 (Sample Road) from Military Trail to US 1
 - SR 7 (US 441) from SR 810 to SR 834



SW 10th Street TSM&O Project (439891-5)



Next Steps for Project Implementation

- TSM&O Schedule (439891-5)
 - RFP Development Ongoing
 - In-Person Industry Forum March 2022
 - Advertisement May 2022
 - Shortlisting July 2022
 - Letting February 2023



Next Steps for Project Implementation

- Adjusted Score Design-Build
- Standard FDOT Two-Phase DB Approach
- Phase I – Expanded Letter of Interest
- Phase II – Technical Proposal
 - Alternative Technical Concept (ATC) Meetings
 - Page Turn Meeting
 - Question & Answer Session
- Price Proposal
- Final Selection Formula (Adjusted Score)
 - Bid Price Proposal/Technical Score

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Questions