



TSM&O Strategic Plan; STAMP Action Plan: Implementation Focus

Florida Section ITE & ITS Florida Annual Meeting, November 1-3, 2017



Agenda

1. TSM&O Strategic Plan Implementation
2. Statewide Arterial Management Program Action Plan
3. Florida Design Manual Updates Chapter 233

TSM&O Strategic Plan Timeline

- First Draft → Dec 2016
- Second Draft, Executive Leadership Presentation → Jan 2017
- Industry Review Draft → Feb 2017
- Pre-Final Draft → Apr 2017
- Draft Final → Jun 2017
- Statewide Directors Meeting Presentation → Jul 31, 2017
- Executive Leadership Team ~ Plan Adoption → Aug 16, 2017



Strategic Plan – Final Outline

Executive Summary

- I. Vision, Mission, and Goals
 - II. Strategic Plan Development and Background
 - III. TSM&O Snapshot – Where We Are Today
 - IV. Challenges and Opportunities
 - V. Roadmap to Achieving TSM&O Goals
 - VI. TSM&O Resources
 - VII. Next Steps and Action Plans
- Appendix A. TSM&O Strategy Toolbox
- Appendix B. RITIS Performance Measurement Tools
- Appendix C. Acronyms
- Appendix D. Strategic Plan Development Process



TSM&O Vision and Mission

A. TSM&O Vision and Mission

The vision and mission for the Florida statewide TSM&O *Strategic Plan* are:

VISION: to increase the delivery rate of fatality-free and congestion-free transportation systems supporting the FDOT vision and Florida Transportation Plan goals.

MISSION: to identify, prioritize, develop, implement, operate, maintain, and update TSM&O strategies and measure their effectiveness for improved safety and mobility.

TSM&O Goals and Performance Measures

Goals

Districts and the Central Office TSM&O Division will use a process to establish **Goals** within two years for the following ***outcome-based performance measures***:

- Mobility
 - Improve travel time reliability
 - Reduce all lanes cleared time
 - Throughput increase
 - Delay reduction
- Safety
 - Secondary crash rates
- ITS/communication network maintenance
 - District uptime availability
 - Statewide uptime availability

Goals and Performance Measurement Time Line

FY 17/18 to FY 18/19

- Identify priority corridors
- Identify priority segments
- Identify real-time data sources
- Begin outcome-based assessment
- Real-time data sources
- Begin performance assessment
- Define performance baselines
- Set Goals and Performance Enhancement Goals

FY 19/20 and Beyond

- Assess performance relative to Goals
- Identify tools to improve outcomes
- Set Project-Performance Enhancement Goals
- Implement tools to improve outcomes

Goals and Performance Measurement Status to Date

- Identify Priority Routes/Corridors
 - All Interstate and Toll Highways - Done
 - Priority arterials, Routes of Significance, coordination with Locals and planning organizations
 - Significant progress by Districts
- Identify Priority Route Segments
 - In progress by Districts
- Identify Data Sources
 - Freeways: Detectors, HERE probe data, Regional Integrated Traffic Information System (RITIS), SunGuide® → Mature
 - Arterials: Detectors, BlueTooth® devices, Automated Traffic Signal Performance Measures
 - Significant progress by Districts and signal maintaining agencies
- Begin Performance Assessment
 - Freeways → Significant progress; Arterials → Gaining momentum

Priority Focus Areas

- Six TSM&O Priority Focus Areas
 - Mainstreaming
 - Freeway management
 - Arterial management
 - Express lanes
 - Connected vehicles
 - Information systems



Active Traffic Management
Integrated Corridor Management

Priority Focus Areas – Mainstreaming Progress

- Significant on-going progress
- Integration of TSM&O within transportation project development
 - Planning, PD&E, Design, Construction, Maintenance, Work Program
- Continue cross functional area coordination and collaboration
- Develop TSM&O manuals and guides
- Update guides, standards and specifications with TSM&O content
- Supports the Executive Innovators Team Idea 653
 - TSM&O Mainstreaming
 - Suggested by Districts
- TSM&O program outreach

Priority Focus Areas – Freeway/Arterial Management Progress

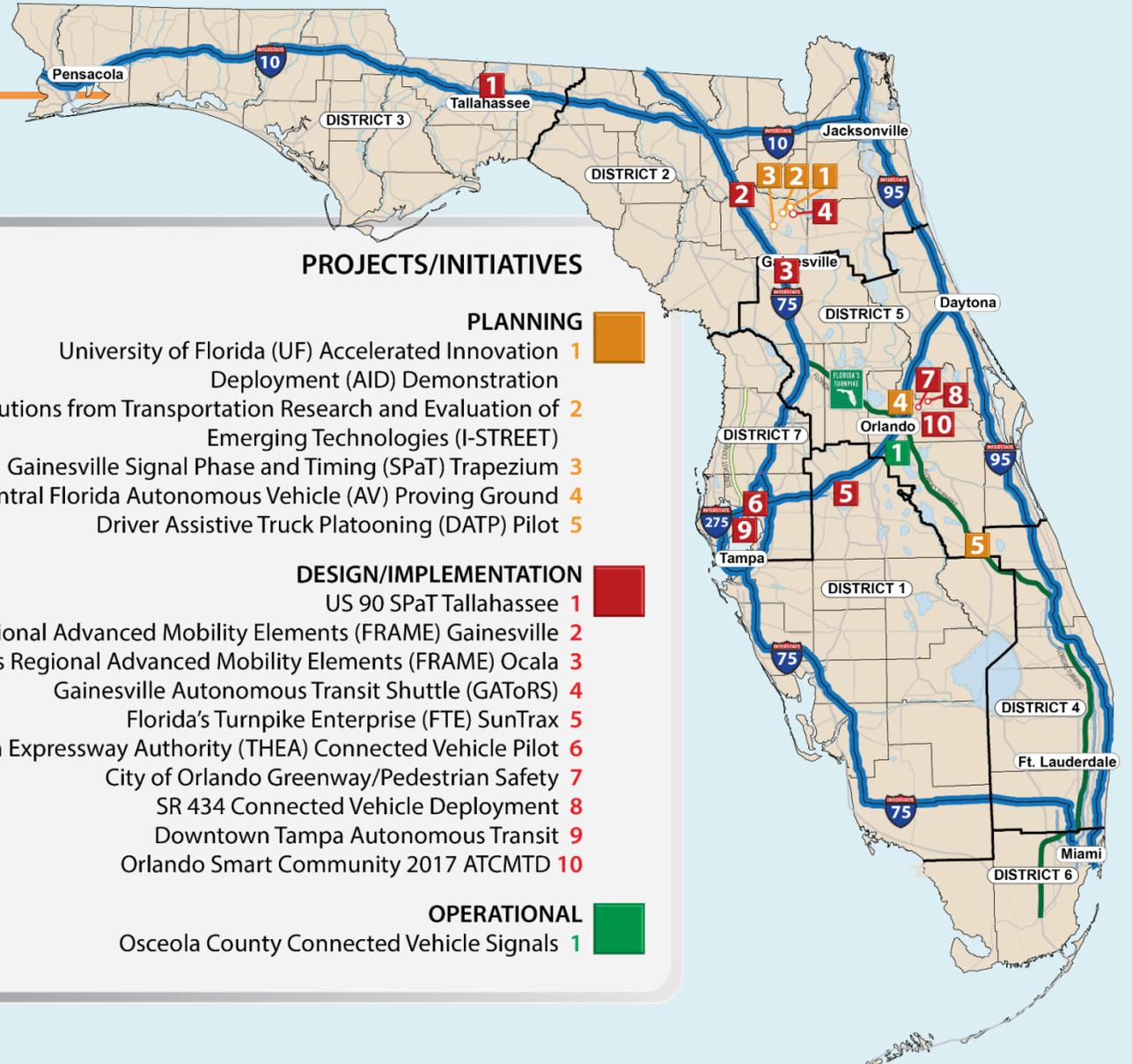
- Statewide freeway management systems
- Arterial management
 - Gaining momentum, major growth area statewide
 - ATSPM
 - Adaptive traffic signal control
 - See STAMP slides for more
- Express lanes → Significant on-going progress, Districts 2, 4, 5, 6, 7 and FTE

Priority Focus Areas – Connected Vehicles Progress

- Connected vehicles (CV) →
 - 16 CV projects in development and planned statewide, to date
 - Signal Phase and Timing (SPaT),
 - Dedicated short-range communication (DSRC)
 - Pedestrian safety systems

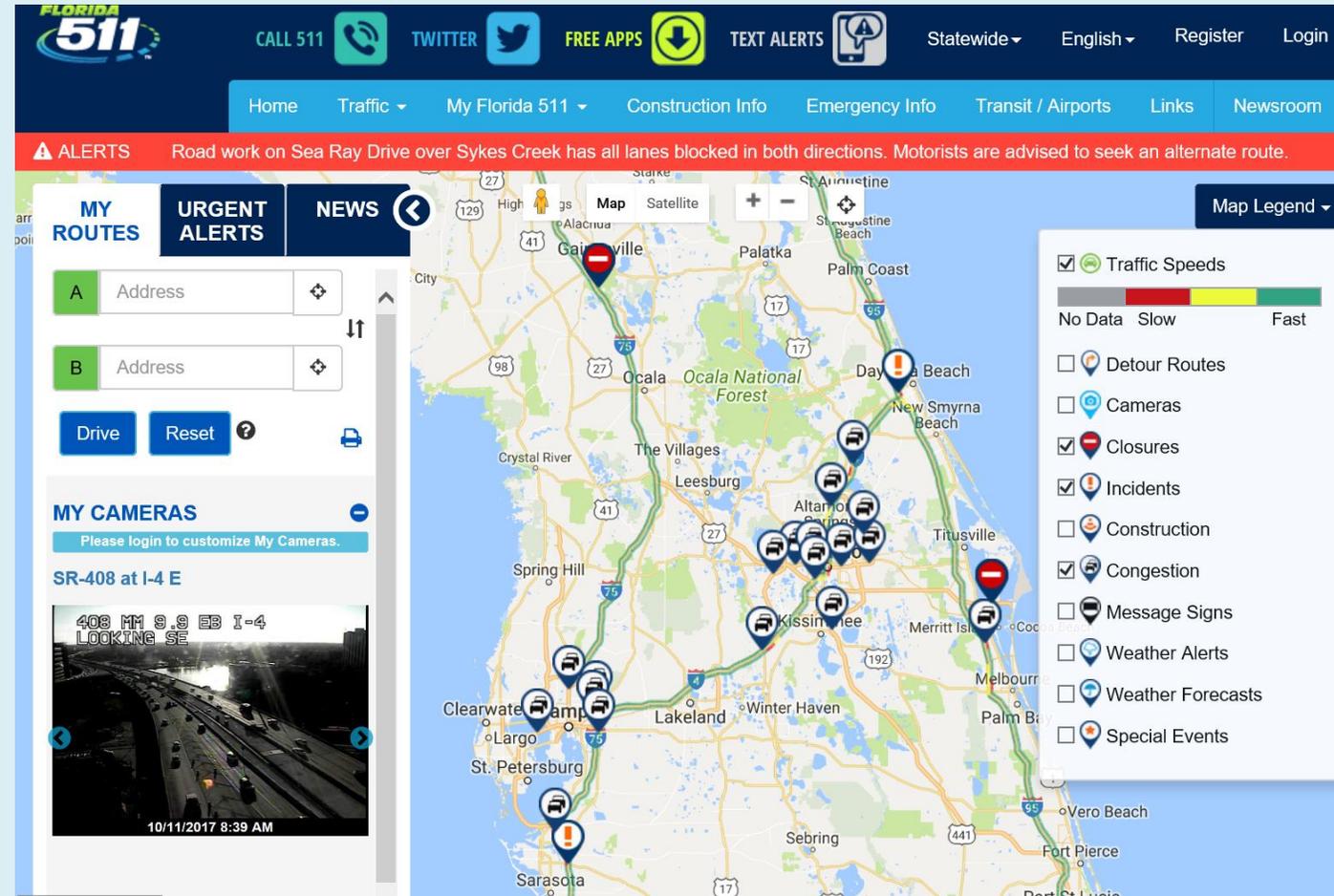
Connected Vehicle Website:

http://www.fdot.gov/traffic/ITS/Projects_Deploy/CV/Connected_Vehicles.shtm



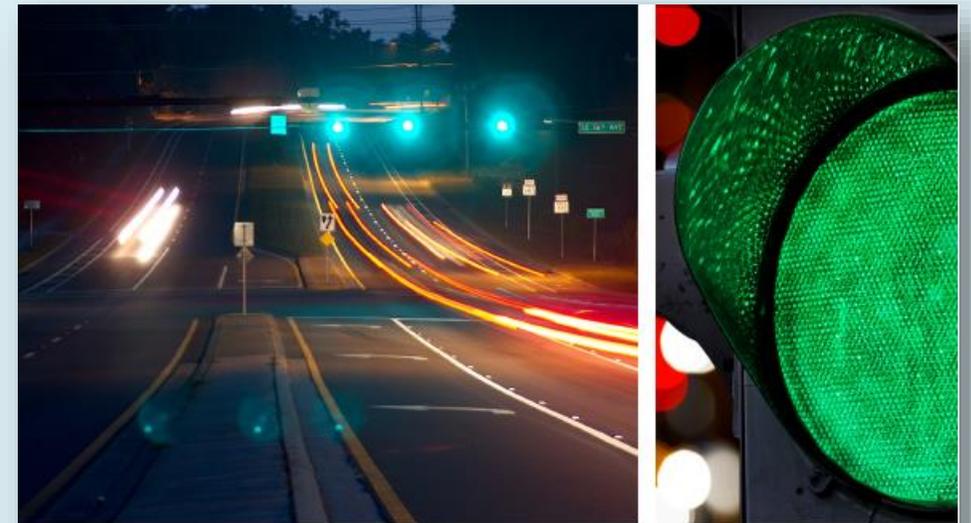
Priority Focus Areas – Information Systems Progress

- Information systems
 - SunGuide® Ver 7.1 in testing
 - Next Generation FL511 implemented
 - Data Integration and Video Aggregation System (DIVAS) in development, beta testing steaming video sharing



Traffic Signals Training

- Developed by FDOT
 - Modules A-F
- Delivered by UF T2 Center
 - Module A: Introduction to Traffic Signals
 - Module B: Traffic Signal Warrants
 - Module C: Traffic Signal Design
- Leveraging Local Technical Assistance Program funds
- Over 90 attendees registered
- Part of the Statewide TSM&O Excellence Program (STEP)



TRAFFIC SIGNALS TRAINING

In conjunction with Florida Section ITE & ITS-FL Annual Meeting
[Meeting Registration Here](#)
Brought to you by: FDOT & UF T2 Center

Training Overview

This training provides fundamental concepts in traffic signals and warrants, traffic signal design, and introduces traffic signal timing and coordination, traffic controllers technologies, and multi-modalism.

Sign Up Today!

11/1/2017
8:30AM-12:00PM
Seating Limit: 30

11/2/2017
1:30PM-5:00PM
Seating Limit: 30

[Register for Traffic Signals Training Here!](#)



Traffic Engineering and Operations Office (TEOO)
Local Technical Assistance Program (LTAP)

Public agencies are encouraged to attend this
LTAP supported training.

Statewide Arterial Management Program (STAMP)

- Mission: to deliver the TSM&O Strategic Plan's vision, mission, and goals for arterials
- STAMP Action Plan
 - Builds upon TSM&O Strategic Plan
 - Arterial Management is one of the six priority focus areas of Strat Plan
 - Develops a comprehensive approach to arterial management
 - Focuses on action for the next 3 years

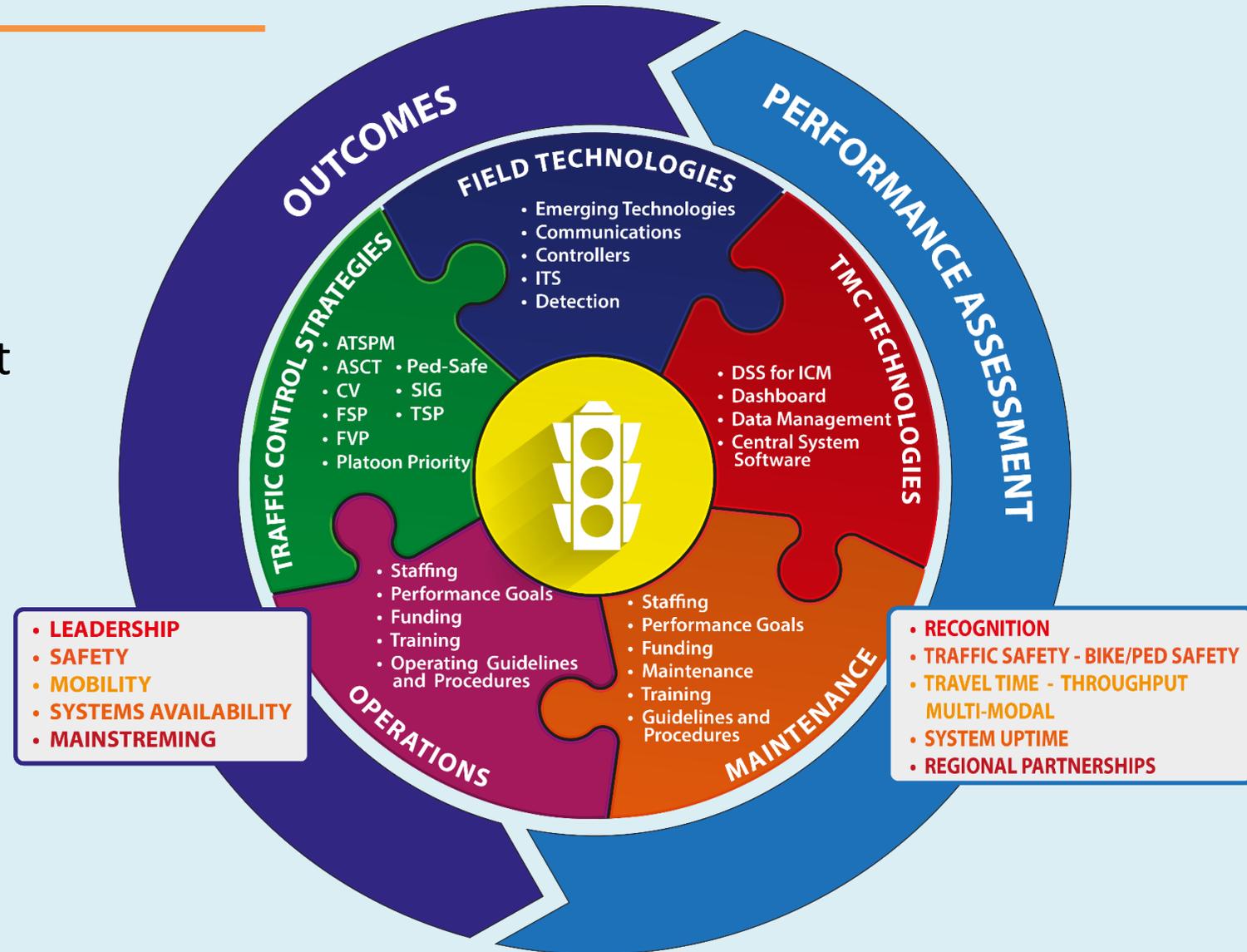


MOVE THE NEEDLE PROJECT

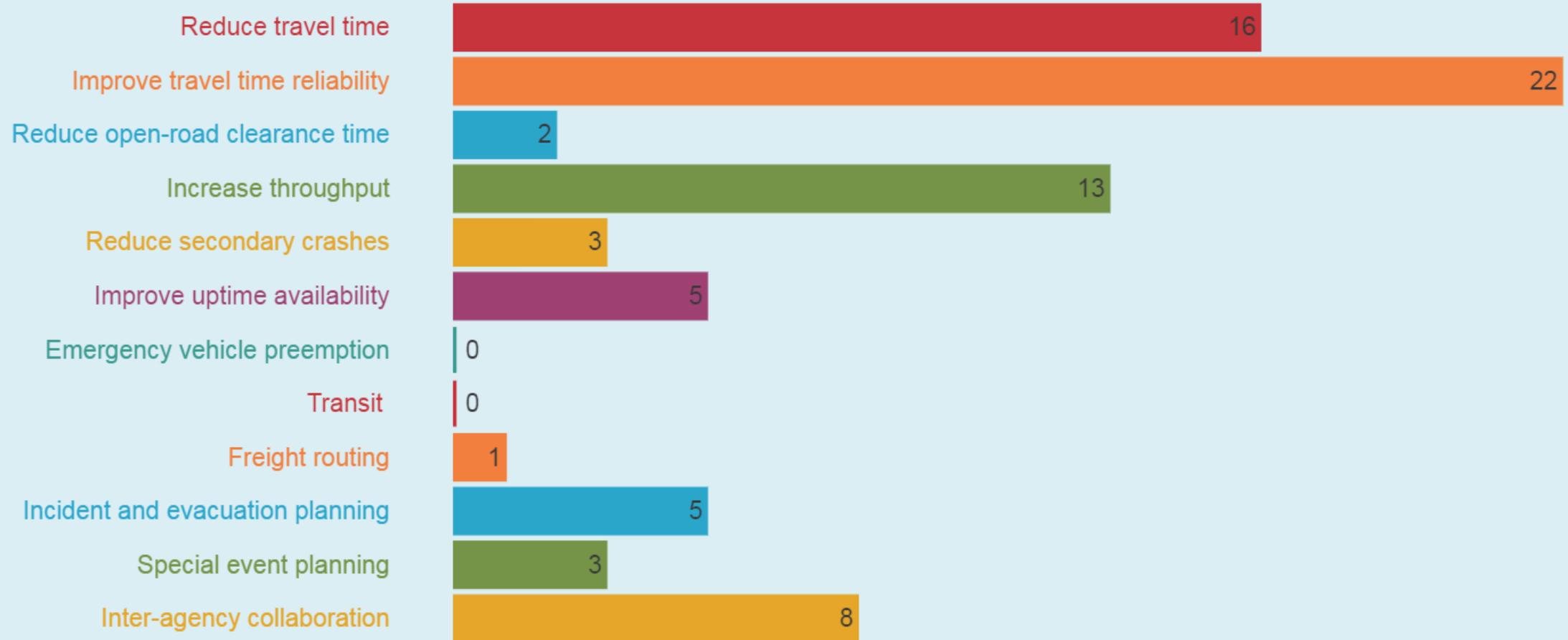


Action Plan Outline

- Focus on **needle movers** – action items that make a noticeable difference in the program to take it to the next level
- Districts and locals providing input
- STAMP Action Plan will be time-bound action with a focus on:
 - Quick results (low-hanging fruits)
 - Short-term goals (focus on needle movers)
 - Mid-term objectives (focus on needle movers)
 - Long-term vision



Arterial Performance Measures

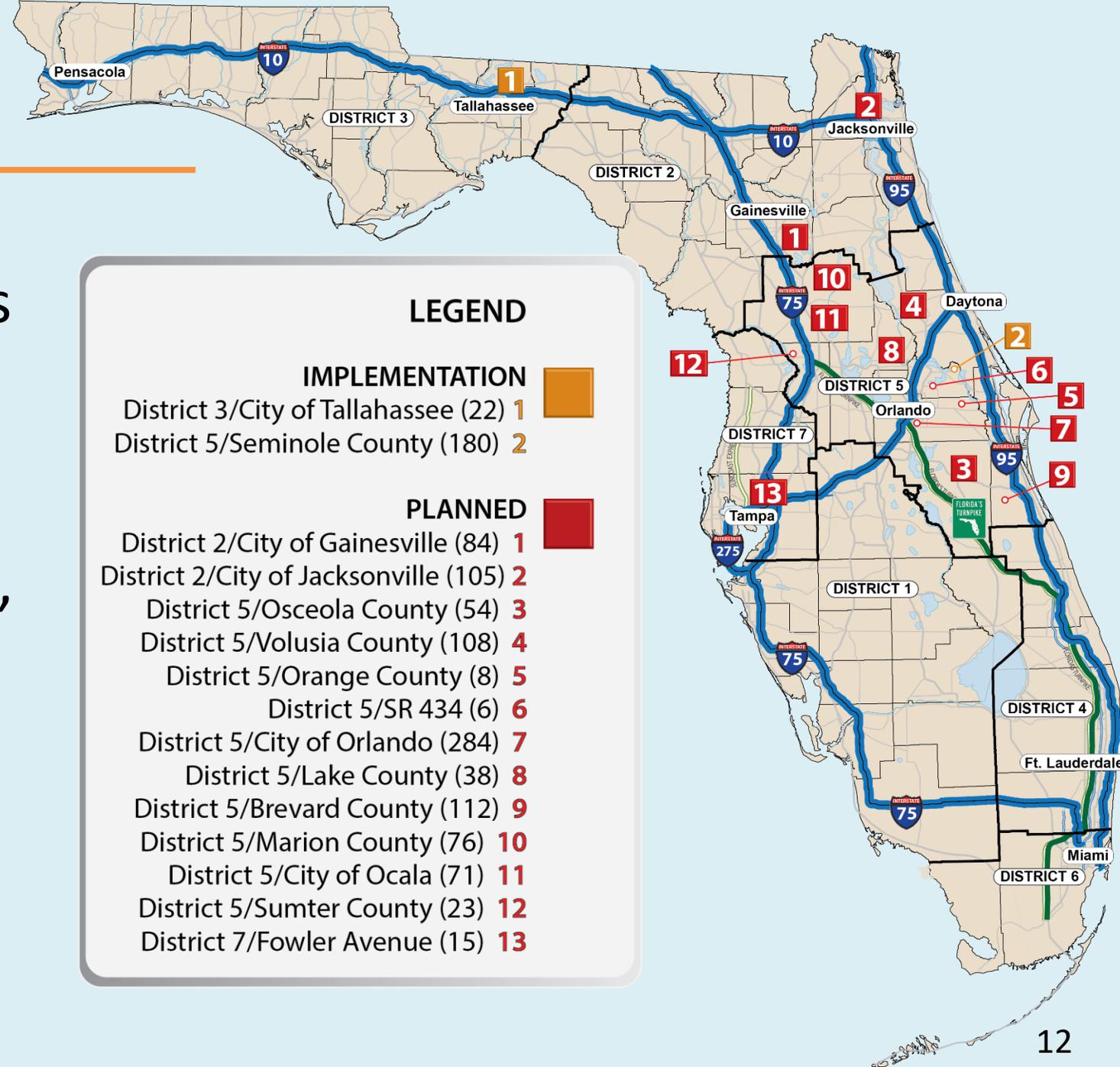


STAMP Action Plan Schedule



Automated Traffic Signal Performance Measures Map

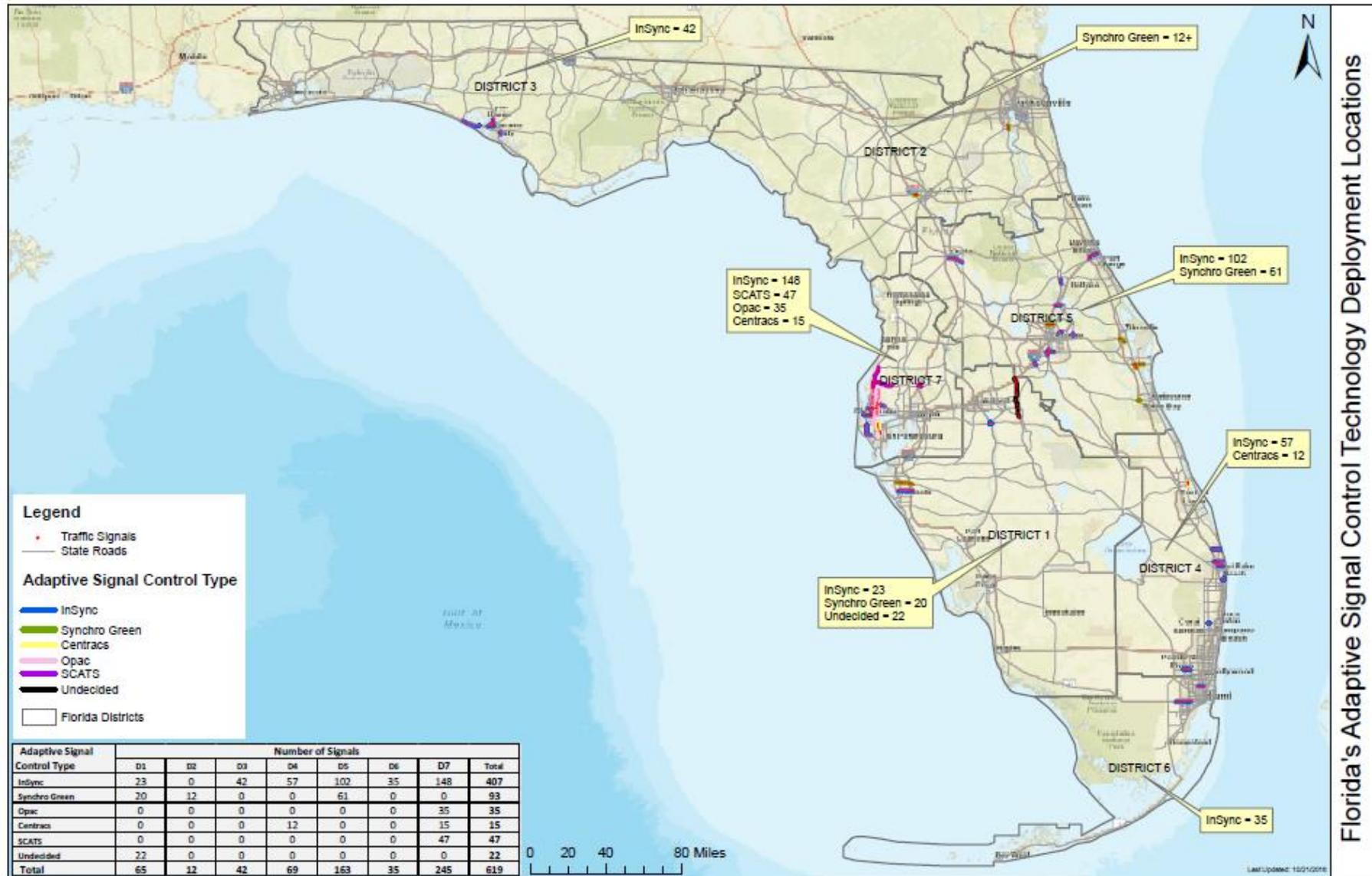
- ATSPM is a part of FHWA's Every Day Counts (EDC-4)
- ATSPM deployed in Seminole Co., Tallahassee, and D7
- Planned deployments in D2, D3 and D5



USDOT ATSPM Video



Advanced Signal Control Technology (ASCT)



Florida Design Manual (FDM) Update

- Design updates for Intelligent Transportation Systems (ITS):
 - Plans Preparations Manual (PPM) is being reformatted and renamed FDOT Design Manual (FDM)
 - 2017 PPM is the current manual
 - 2018 DRAFT FDM is being developed
 - Chapter 233 updates will be distributed via a bulletin
 - Design Standards being renumbered (re-indexed) and renamed Standard Plans
 - Some Standard Indexes for ITS will be updated and/or consolidated

FDM – Upcoming Significant Changes

- 233.1 – General (additional references, content for Express Lanes, FTE, Utility Coordination, NEPA, etc.)
- 233.2 – additional Design Criteria
- 233.3 – ITS Power Design – **Substantial addition, including AC, DC, Battery, and Generator Power Systems**
- 233.5 – Fiber Optics and Network Design
- 233.6 – ITS Poles and Structures
- 233.8 – Communication and Networking Devices (additional information for MFES and Wireless Communications)
- 233.9 – Vehicle Detection Systems – **Substantial addition**
- 233.10 – Video Equipment
- 233.11 – Motorist Information Systems
- 233.12 – Other ITS Devices
- 233.13 – Maintenance of Communication (ensuring uptime of existing systems)



Thank you!

Raj Ponnaluri, PhD, P.E., PTOE
 State Arterial Management Systems Engineer
 Transportation Systems Management and Operations Office
 Florida Department of Transportation
Raj.Ponnaluri@dot.state.fl.us

Central Office

Trey Tillander
 Alan El-Urfali
 Derek Vollmer
 Elizabeth Birriel
 Fred Heery
 Jeff Frost
 Jennifer Fortunas
 Russell Allen

District Traffic Operations Engineers

D1: Keith Slater
 D2: Jerry Ausher
 D3: Steve Benak
 D4: Mark Plass

District Traffic Operations Engineers

D5: Jim Stroz
 D6: Omar Meitin
 D7: Ron Chin
 FTE: John Easterling

District TSM&O Engineers

D1: Mark Mathes
 D2: Peter Vega
 D3: Vacant
 D4: Melissa Ackert

District TSM&O Engineers

D5: Jeremy Dilmore
 D6: Javier Rodriguez
 D7: Chester Chandler
 FTE: Eric Gordin

