

Transportation Planning for the Palm Beaches

Transportation Systems Management & Operations

FDOT Statewide Strategic Plan & District 4 Master Plan



Transportation Systems Management and Operations (TSM&O)

Practice involves "taking back" capacity lost to:

- Congestion

- Construction

- Incidents

- Weather

Traffic control delay

Examples of TSM&O:

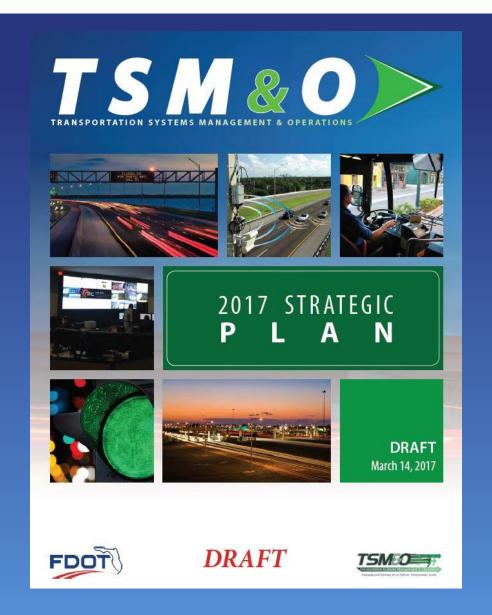
- Traffic condition monitoring
- Active traffic signal management
- Transit signal priority
- Managed lanes



FDOT Statewide TSM&O Strategic Plan

Mission: Identify, prioritize, develop, implement, operate, maintain, and update TSM&O strategies and measure their effectiveness for improved safety and mobility

- 3 5 year time horizon
- Mobility issues can't be fully addressed without TSM&O
- Move TSM&O towards an optimized mainstreamed program delivering systemwide safety and mobility benefits





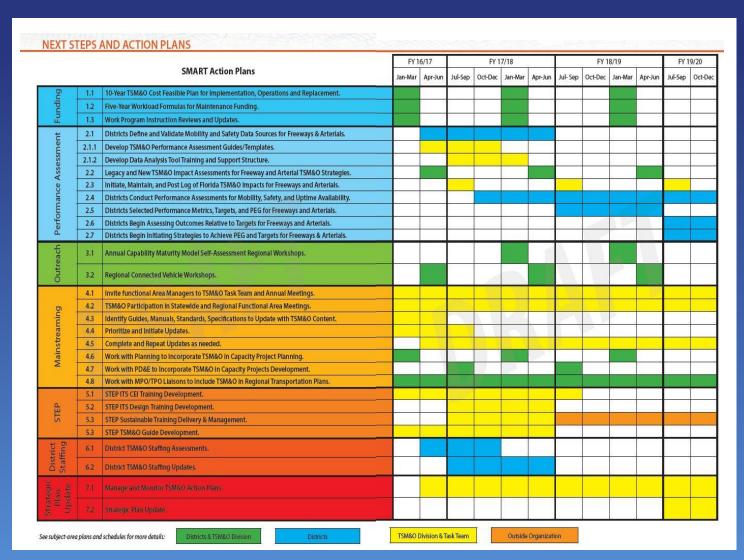
FDOT Statewide TSM&O Strategic Plan

Strategic Plan supported by the Smart Action Plan

High level document

Not project specific

The Action Plan will move FDOT closer to a fully mainstreamed outcome-based TSM&O program





TSM&O FDOT District 4 Master Plan

Includes Palm Beach & Broward Counties

Purpose: Identify corridors and strategies to promote inclusion of TSM&O consideration in development

Timeframes:

Short-Term (2017-2025)

Mid-Term (2026-2035)

Long-Term (2036-2045)

MPO Role: Critical in identify and prioritizing TSM&O projects based on regional needs

Transportation System Management & Operations (TSM&O) Master Plan



Transportation Systems Management and Operations (TSM&O) is a philosophy of operating and managing the transportation network with technology strategies and clear performance measures to optimize performance outcomes. TSM&O practices involve "taking back" the capacity lost to congestion, incidents, construction, weather, and traffic control delay. Examples are: traffic condition monitoring, active traffic signal management,, incident management and road rangers

Why Prepare a TSM&O Master Plan?

Due to increasing travel demands and limited resources and right-of-way, mobility issues cannot be fully addressed without actively implementing TSM&O solutions. The Florida Department of Transportation (FDOT) District Four is leading an effort to leverage the existing Intelligent Transportation System/Advanced Transportation Management System (ITS/ATMS) network and capabilities, and build on opportunities from Metropolitan/Transportation Planning Organizations (M/TPOs) and local partners to improve reliability. safety, and efficiency for all modes. The purpose of the master plan is to identify corridors and TSM&O sarety, and efficiency for all modes. The purpose of the master plan is to literary controls and foliate strategies to promote inclusion of TSM&O consideration in all development cycle phases. The first phase addresses Broward and Palm Beach Counties and additional efforts will incorporate Martin, St. Lucie, and

Where Do We Need TSM&O Projects?

This step identified emphasis corridors "where" TSM&O projects can help improve mobility, safety, or transit service. Five variables were evaluated to determine "needs" locations where TSM&O improvements might be appropriate. The existing ATMS/ITS network was used as the basis and it was extended to link these "needs" locations. Opportunities listed in various plans, such as MPO long range transportation plans (LRTPs), were used to further refine the network, adding or removing connecting roadway segments to create the TSM&O

"Opportunities" Ratio Trans. Improvement Plan/Work Program Signal Density Bottlenecks Transportation Plan ransit Ridershir Transit Develop, Plani Major Activity Center

What TSM&O Projects Do We Need?

This part of the plan assigns TSM&O projects/service areas ("what") to corridors in the TSM&O strategic network with the guidance of the FDOT Districts Four and Six Regional ITS Architecture (RITSA). Corridors with the highest transit ridership are identified for transit strategies; corridors with the highest crash density are identified for safety or emergency management improvements; and the most congested corridors as identified jointly by volume/capacity, signal density, and bottlenecks are targeted for traffic management strategies. Installing fiber optics on the strategic network also is encouraged to support communications and future improvements.



January 17, 2017



TSM&O District 4 Master Plan: Goals

Address mobility – where capacity improvements are not possible

Create a TSM&O network

- Identify needs and strategies
- Prioritize improvements

Encourage locally driven projects

Manage and leverage existing network and ITS infrastructure

Serve as resource for (SEFTC) 2045 RTP





TSM&O District 4 Master Plan

Next Steps:

Finalize Master Plan including corridors

Add TSM&O considerations into every project

Identify funding for construction operations and maintenance of projects