

# In MOTION

## A Practical Perspective on Transportation Systems Management and Operations

by R. Trent Ebersole, P.E., Regional Operations Manager

Transportation Systems Management and Operations (TSM&O) is an emerging approach to increasing transportation capacity within the existing roadway infrastructure. Many Urban Areas, including parts of South Florida, have expanded the roadway network to near "buildout". With the exception of a few roadway links on long-range plans, there are few roads remaining to be built. These built-out networks consist of heavily traveled arterial roadways that have been expanded to 6- or 8-lane divided facilities consuming all of the available right-of-way. The Florida Department of Transportation, District 4 is, therefore, working to maximize the capacity of the existing network using several strategies. Melissa Ackert, E.I. (District 4 Traffic Operations), has taken the lead on several TSM&O initiatives and has become a great resource due to her practical application of this relatively new program for District 4. The following *overview* is from information provided by Ms. Ackert.

TSM&O is a program that promotes safety and mobility through active management of the multimodal transportation network. District 4 has been putting significant effort into research and data collection in the past couple of years. Programs nationwide, as well as in other districts of the State of Florida, have provided relevant information.

The role District 4 is taking is that of determining networks that could benefit from active management, identifying the tools that could be used, working with the operating/maintaining agencies to develop strategies, and coordinating the implementation when solutions might cross jurisdictional boundaries. Examples of ongoing efforts include the facilitation of bi-monthly Task Team meetings for the Broward County TSM&O stakeholders. Coordination with the local agencies is crucial, for example BCT strives to maintain the predictability of its

schedules and all operations activities that target travel time reduction should consider this. The City of Hallandale is another stakeholder that has been a regular attendee of the meetings as they are seeking solutions for the congested Hallandale Beach Boulevard corridor. There are opportunities to upgrade the technology in the corridor to improve signal progression. The corridor is a state-maintained major arterial that runs through the City of Hallandale with a signal system maintained by Broward County. District 4 is also assisting St. Lucie County to develop an Advanced Transportation Management System (ATMS) Master Plan specific to the County. Coordination issues are also anticipated for this plan, as the County roadway network has signal systems maintained by three agencies, including the County, the City of Fort Pierce, and the City of Port St. Lucie.

In addition to signal progression improvements, Ms. Ackert emphasized opportunities for transportation system improvements, such as incident management, transit prioritization, and truck prioritization in corridors serving sea ports.

Achievements completed at the time of this article include the development of a One-Year Master Plan and a Five-Year Plan for the District's TSM&O program. District 4 continues to increase the ability for real-time data collection and facilitate TSM&O coordination, as they move from the research and planning phases into the real-time operation.



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