AGENCY IMPROVEMENT: USE OF CAPABILITY MATURITY MODEL (CMM) ELEMENTS TO IMPROVE AN AGENCY’S TSMO CAPABILITIES

By: MetroPlan Orlando

IN THIS CASE STUDY YOU WILL LEARN:
1. The benefits of partnering with other organizations to meet mobility demands and safety concerns in corridors.
2. A methodology for exercising TSMO in a Mega-Region.
3. How to implement CMM in a Mega-Region.

BACKGROUND

MetroPlan Orlando, the Metropolitan Planning Organization (MPO) for the Orlando Urbanized Area, is applying the Capability Maturity Model (CMM) to enhance the role and presence of TSMO at five other MPOs in Central Florida. It is anticipated that this effort will result in implementing TSMO strategies in the corridor to: meet mobility demands and safety concerns; cultivate a culture at the MPOs to enable a methodology for implementing TSMO projects; and address integration of multi-jurisdictional coordination and planning of TSMO strategies into agency practices and procedures. This work will showcase the benefits of exercising TSMO in a Mega-Region.

A Regional Transportation Systems Management and Operations (TSMO) arrangement has been formed to facilitate cooperation and coordination of TSMO along the Interstate Four (I-4) corridor of Central Florida. This concept was established in October 2018. This corridor qualifies as a Mega-Region according to the report, defined by criteria of U.S. Mega-Regions on the Federal Highway Administration’s (FHWA) website. The partnership is between each of the five Metropolitan Planning Organizations (MPO) and the three Florida Department of Transportation (FDOT) districts.

Residents, daily commuters and visitors traveling in the I-4 corridor are directly impacted by both daily congestion and incident-related congestion on I-4 and surface roadways in the corridor. When incidents occur on I-4 blocking lanes, arterial roadways are flooded with cars and trucks trying to find a way around the delay. This bypassing traffic causes congestion, delay, safety and environmental problems within the corridor on parallel roads impacting the local communities. The following are key issues that require immediate attention.

1. OPERATIONAL ISSUES:
   - One full closure every six days
   - An average of three lane closing events per day

2. SAFETY ISSUES
   - Referred to as the “most dangerous highway in America” – ABC News, November 2017
   - Segment limits: west side of Tampa to I-4 Ultimate Improvement Project in Orlando
   - Experiences an average of 17 fatal crashes per year

3. ECONOMIC ISSUES
   - Florida experienced record tourism in 2017 with over 116.5 million visitors, most of whom visit the Orlando and Tampa areas - a four percent increase from 2016
   - Florida's major tourism is along I-4 which includes theme parks and beach activities in Tampa, Orlando, Cocoa Beach, and Daytona Beach.
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TSMO PLANNING, STRATEGY, AND DEPLOYMENT

As a three county MPO, MetroPlan Orlando has been active in deploying TSMO strategies for several years. This has been accomplished by establishing TSMO as a business unit, enriching staff’s abilities to integrate TSMO alternative investments, maintaining a formal TSMO Committee represented by planners and traffic engineers in the planning area, allocating resources and $4.2 million in Surface Transportation Program funds to deploy projects in our Transportation Improvement Program (TIP), and mainstreaming TSMO in the transportation planning process. Additionally, we have been successful in educating our stakeholders on TSMO applications and benefits and to develop champions on our Policy Board and among our state and federal legislatures. MetroPlan Orlando staff recognized the knowledge transfer opportunity in creating an innovative relationship between MetroPlan Orlando and MPOs in FDOT districts in the corridor to develop or enhance the application of TSMO strategies. For this to happen, MetroPlan Orlando suggested that each MPO/TPO complete an evaluation of their TSMO status using the Capability Maturity Model (CMM). Also, as the lead agency, MetroPlan Orlando is proposing a cooperative agreement between the agencies that participate, to modify the position of Eric Hill, Director of TSMO for MetroPlan Orlando, to work with each MPO to advance their TSMO planning activities.

COMMUNICATIONS PLANNING AND EXECUTION

MetroPlan Orlando along with the other transportation jurisdictions in FDOT District 5 participated in a CMM Workshop in March 2014. This provided a regional assessment of our capabilities to advance TSMO in District 5. To start the assessment, a memorandum was provided to each MPO/TPO with guidance on completing the CMM online. This document served as a briefing on the use of the CMM in advancing TSMO by transportation agencies.

Beyond just identifying the opportunities to enhance TSMO, the CMM Evaluation will be used to assist staff in the following areas:

- **Policy Board Support** – This will be accomplished through staff discussions with board members or presentations on the benefits from TSMO strategies, programs and projects.
- **Development of TSMO Programs** – This will enable MPO directors and staff to agree on a TSMO program; development of a framework that is strategic, programmatic, and tactical.
- **Formalize Interagency Agreement with MetroPlan Orlando** – Review and discuss continuing roles for the director, including: agreements; logistics; allocation of time; level of responsibility; reporting arrangement; term length; resources, accountability, evaluation, etc.
- **Management/Implementation** – Based on recommendations from CMM.
- **Evaluation** – Developed under CMM. A separate evaluation of the Regional TSMO Program will be conducted by a panel of three MPO/TPO executive directors.

OUTCOMES, BENEFITS AND LEARNINGS

To date, except for the Polk County TPO, the director has participated in board and committee meetings at the other planning agencies and he recently served as a panelist in a TSMO workshop at the Sarasota/Manatee MPO to discuss advancing TSMO. The Pasco County MPO is the only MPO to execute the MOU and complete the online evaluation. It was completed separately by the executive director and staff. It has been provided to representatives of FDOT District 7 and the leadership of the Pasco County transportation staff responsible for TSMO. A meeting is scheduled for October 2019 to review and discuss the outcome of the evaluations; propose an action plan, by which the agency can identify specific areas that can be improved with the overall payoff of enhanced TSMO performance. A meeting was also planned for October 2019 with the Hillsborough County MPO staff to complete the CMM online. It is anticipated that a similar process that was used to apply the CMM with Pasco County MPO will be practiced with the Hillsborough County MPO and the other MPOs.

FURTHER INFORMATION

MetroPlan Orlando TSMO Website
NOCoE Knowledge Center: https://transportationops.org/knowledge-center