

Federal Highway Administration (FHWA) Organizing and Planning for Operations—Current Program Activities

New Projects

National Highway Institute (NHI) Web-Based Training on TSMO 101, the Capability Maturity Model (CMM), and Operations Benefit-Cost Analysis—This project will develop three NHI online training sources. One will be an introductory course for transportation professionals and other stakeholders who may not be familiar with transportation systems management and operations (TSMO). The second will be a course on the CMM that targets State and local TSMO champions who wish to better understand the CMM and conduct a self-assessment within their agency. The third will be a course focused on conducting benefit-cost analysis for operations.

Expected completion: Spring 2024

For more information, contact Joe Gregory (joseph.gregory@dot.gov, (202) 366-0610).

The Role of Operations in Complete Streets—This project will develop a primer and brochure to help illustrate the role of operations in Complete Streets projects and initiatives. The primer and brochure will frame potential operations impacts on different street users and show how operations strategies, such as parking management, traffic signal timing, real-time information, and multimodal strategies, can be leveraged to enhance Complete Streets concepts.

Expected completion: June 2024

For more information, contact Jim Hunt (jim.hunt@dot.gov, (202) 680-2679).

Use of Real-Time Operations Strategies and Data for Proactive Safety Intervention—This project will synthesize the availability of real-time operations strategies and data to support dynamic safety countermeasures. Recognizing that safety analysis often relies on historical data and implementing countermeasures retroactively, this project will advance the use of short-term safety intervention based on real-time and forecasted conditions.

Expected completion: August 2024

For more information, contact Jim Hunt (jim.hunt@dot.gov, (202) 680-2679).

Toolkit and Case Studies for Improving Equity in Transportation Operations—This project will develop a basic set of technical resources that transportation professionals can use to ensure that transportation operations improvements, strategies, and services are implemented with transportation equity considerations in mind. Resources will include case studies of current innovative practices and an online practitioner toolbox.

Expected completion: Fall 2024

For more information, contact Joe Gregory (joseph.gregory@dot.gov, (202) 366-0610).

Develop a Framework for Integrating Emerging Trends and Technologies to Advance TSMO Programs in Local Agencies—This project will develop a flexible framework to help agencies assess and integrate emerging trends and technologies in the TSMO efforts of transportation stakeholders, with an emphasis on local agencies. The end product will include examples showcasing the framework and how it could be applied.

Expected completion: December 2024

For more information, contact Joe Gregory (joseph.gregory@dot.gov, (202) 366-0610).

Ongoing Projects

Advancing TSMO Through Organizational Structures—This publication applies concepts of organizational theory, specifically related to organizational structure, to explore how organizational models and structural mechanisms can be used to advance TSMO within departments of transportation (DOTs). It includes several case studies of organizational structures in DOTs across the Nation and looks at how DOTs have used their structures to mainstream TSMO.

Expected completion: Spring 2023

For more information, contact Joe Gregory (joseph.gregory@dot.gov, (202) 366-0610).

Influence of Operational Strategies on PM3 and Other Travel Time-Based Measures—This project will develop operational strategy evaluation approaches, including before and after evaluations, and will look for and define relationships between these outcomes and the third performance management rule, or PM3. This project focuses on recurring congestion operational strategies—freeway and arterial operations. A second project, focusing on non-recurring congestion operational strategies, is also underway. The ultimate deliverable will be a primer on these concepts as well as a marketing and outreach/training plan for distributing this information to users.

Expected completion: Spring 2023 (recurring); Summer 2023 (non-recurring)

For more information, contact Rich Taylor (rich.taylor@dot.gov, (202) 366-1327).

Presentation Slides on Connecting TSMO with Other Disciplines—This is a set of presentation slide decks, each exploring ways that TSMO can collaborate with 1 of 10 other key disciplines in a transportation agency. The slides build on previously published TSMO Fact Sheets to provide more in-depth information about the relationship between TSMO and the respective discipline. Each presentation will be available for download as a PowerPoint® file so that TSMO professionals can modify and use them for presentations to their colleagues in other disciplines.

Expected completion: Fall 2022 to Spring 2023

For more information, contact Joe Gregory (joseph.gregory@dot.gov, (202) 366-0610).

Applying Transportation Asset Management Plans (TAMPs) Performance Requirements to Pavement and Bridge Conditions—TAMPs are required to improve or preserve the condition of assets and performance of the system and, at a minimum, must include pavements and bridges on the National Highway System. Here, “system performance” refers to the safe and efficient movement of people and goods, which can be affected by physical assets. This project will identify and communicate the linkages between the state of good repair for pavements and bridges and system performance and how the physical condition of pavements and bridges impacts the safety, mobility, and reliability of the transportation system. This project also includes three sample TAMP chapters that highlight this connection.

Expected completion: July 2023

For more information, contact Joe Gregory (joseph.gregory@dot.gov, (202) 366-0610).

Connecting TSMO and Transportation Equity—This project will explore opportunities for State and local transportation agencies to advance TSMO while simultaneously considering and supporting transportation equity. This project presents an opportunity to advance TSMO programs and projects in ways that can support equity goals.

Expected completion: February 2023

For more information, contact Joe Gregory (joseph.gregory@dot.gov, (202) 366-0610).

Planning for Operations Web-Based and Web-Conference Training—The FHWA Office of Operations is collaborating with NHI to transition two workshops—one on planning for operations and one on planning for reliability—to NHI. The new training will be available through a combination of web-based (independent, asynchronous) and web-conference (facilitator-led) courses and modules. This training will enhance the ability of agencies to further integrate TSMO into transportation planning and project development contexts.

Expected completion: February 2023

For more information, contact Jim Hunt (jim.hunt@dot.gov, (202) 680-2679).

Mainstreaming TSMO—This project identifies elements that play a key role in mainstreaming TSMO in transportation agencies and examples from transportation and other industries. Successes and lessons learned will be synthesized into a set of materials to help State and local agencies advance and mainstream TSMO.

Expected completion: March 2023

For more information, contact Tracy Scriba (tracy.scriba@dot.gov, (202) 366-0855).

Connecting TSMO and Safety—This project aims to advance the integration of TSMO and safety by providing a summary of current practices, identifying opportunities for considering TSMO and safety more holistically, and offering recommendations to better integrate TSMO and safety in State and regional planning efforts, as well as in ongoing systems. The project will include a summary report, case studies, and a webinar.

Expected completion: March 2023

For more information, contact Jim Hunt (jim.hunt@dot.gov, (202) 680-2679).

TSMO Strategy Toolkit—This project is creating a TSMO Strategy Toolkit that will serve as a one-stop shop for the collection of TSMO strategies. The toolkit is intended to help practitioners understand the range of TSMO strategies, identify which strategies might be most useful for their situation or issue, and easily connect with existing resources to help them apply the strategies. The toolkit will include a strategy matrix, fact sheets, and tips for using it.

Expected completion: March 2023

For more information, contact Tracy Scriba (tracy.scriba@dot.gov, (202) 366-0855).

Update and Expand Model Plans for TSMO Desk Reference—This project will update and expand upon the technical material in the Advancing Metropolitan Planning for Operations: The Building Blocks of a Model Transportation Plan Incorporating Operations - A Desk Reference to reflect recent noteworthy practices, make it consistent with other FHWA materials, validate and revise technical references, and add more recent examples of TSMO integration into planning. It will also present illustrations of how TSMO might be reflected in other stages of the project lifecycle beyond the long-range transportation plan.

Expected completion: March 2023

For more information, contact Jim Hunt (jim.hunt@dot.gov, (202) 680-2679).

Regional Operations Leadership Forums—This 2.5D structured peer exchange helps develop TSMO champions from key managers and leaders. The forums enable program leaders at public agencies to build knowledge in TSMO while also developing a strong network of TSMO peers. The forum covers core TSMO topics such as business processes, culture, and workforce, as well as some technical topics based on the needs of the group. FHWA and the American Association of State Highway and Transportation Officials are working together to deliver the forum to every region of the country. Participants in these events have valued the dialogue among States and other agencies and found that they have spurred efforts to advance TSMO within their agencies.

Expected completion: Ongoing

For more information, contact Tracy Scriba (tracy.scriba@dot.gov, (202) 366-0855).
