

Research Notes

Program Steering Committee (PSC): Transportation Safety & Mobility

June 2014

Title: Traffic Management Center (TMC) Consortium

Task Number: 0230, Pooled Fund Study - SPR-2(207) and TPF-5(052)

Task Start Date: February 1, 2000

Task Completion Date: December 31, 2020

Product Category: New or improved business practice, procedure, or process

Task Manager:

Melissa Clark, Transportation Engineer (Electrical)

melissa.clark@dot.ca.gov

TITLE:

TMC Consortium – Pooled Fund Study

WHAT IS THE NEED?

TMCs require dedicated management and staff with specialized skills and training. TMCs rely on advanced technologies, which require dedicated operating and capital funding. They face complex institutional issues in coordinating with service providers in response to incidents, and functions within a time critical environment which is a culture that is drastically different than most agencies are accustomed to. These demands and constraints present challenges that agencies face on a daily basis without the benefit of having the necessary resources, experience, skills and training. These are challenges that agencies continually face which impacts their ability to efficiently and effectively manage and operate TMCs.

Meeting these challenges and customers' expectations requires pursuing a wide variety of both proven and innovative strategies to realize the full potential of the investment that has and will continue to make in TMCs. Investments that will allow agencies to proactively manage and control traffic in a manner that optimizes the performance and investment that has, and will continue to be made, in the surface transportation system. To deal with limited resources and the increasing complexity involved in managing and operating TMCs, it is essential that practitioners have access to the technical guidance, best practice, training, innovative techniques and technologies, and fact-based tools to assist them in improving the performance and their services.

WHAT ARE WE DOING?

This pooled fund research is intended to provide a forum for participants to identify and address operational and human centered issues that are common among agencies that manage and operate TMCs. TMCs are a key tool that is needed by public agencies to monitor and report on roadway and travel conditions, coordinate with local interests in response to changing conditions, and proactively manage and control traffic to mitigate the impacts of congestion and improve the reliability of travel.

Researchers will assemble regional, state, and local transportation management agencies and the Federal Highway Administration (FHWA) to (1) identify human-centered and operational issues; (2) suggest approaches to addressing identified issues; (3) initiate and monitor projects intended to address identified issues; (4) provide guidance and recommendations and disseminate results; (5) provide leadership and coordinate with others with TMC interests; and (6) promote and facilitate technology transfer related to TMC issues nationally.

WHAT IS OUR GOAL?

The goal is to build upon and leverage investments that the pooled fund study has made in previously completed and initiated projects, and overcome the TMC challenges Caltrans is facing and to improve the current state-of-practice.

WHAT IS THE BENEFIT?

The Department can potentially benefit from the outcome of this research by having TMCs monitor and report on roadway and travel conditions, coordinate with local interests in response to changing conditions, and proactively manage and control traffic to mitigate the impacts of congestion and improve the reliability of travel.

WHAT IS THE PROGRESS TO DATE?

Plans for initiating projects that were selected at the annual meeting in May 2013 were discussed by stakeholders. Members reviewed the scopes of the projects and discussed additional issues and topics to be included, and determined the priority for moving them forward. Surveys of travelers in four metropolitan areas were completed. A webinar was conducted in December where preliminary results were presented and discussed. A literature review report was delivered. A webinar was held in November to review the literature review report and discuss project progress. A report for the literature review and best practices case study investigation for the Roles of TMCs in Incident Management on Managed Lanes project was submitted in October. Review comments were provided to the contractor. A literature review report and a draft annotated outline for the Guidebook were submitted in November. Comments on the two deliverables were provided to the contractor. A draft Statement of Work (SOW) for the Next Generation Traveler Information Systems: A 5-Year Outlook was developed. The SOW will be finalized in January 2014 and an RFP will be issued in February 2014.

IMAGES

<http://tmcpfs.ops.fhwa.dot.gov/>



TMC Pooled-Fund Study

Search TMC:

- Home
- Overview
- Membership
- Projects
- Related Links
- Contact Us

TMC Pooled-Fund Study

Welcome to the Transportation Management Center (TMC) Pooled-Fund Study (PFS) web page! You will find a wealth of information about the TMC PFS and its many activities. This site is the primary source to provide access to information on the most recent activities of the TMC PFS. The TMC PFS is intended to identify and address the key issues and challenges that are common among TMCs. Any agency or authority responsible for managing travel on portions of the surface transportation system is eligible to join and participate in the PFS.

What's New

- [Travel Time on Arterials and Rural Highways: State-of-the-Practice Synthesis on Rural Data Collection Technology](#) - Travel time to a destination is a key piece of information that motorists want and need, and is vital for good decision-making by travelers. Technology now makes it feasible to provide drivers with real-time information about how long it takes to reach a given destination. The collection of travel time data is a challenging problem that deserves a systematic review. The purpose of this project was to identify, review, and synthesize information on current and potential future efforts in real-time travel time on rural highways. The current report focuses on rural highway travel time data technology considerations and is not a primer for general travel time best practices. (7/24/2013)
- [Travel Time on Arterials and Rural Highways: State-of-the-Practice Synthesis on Arterial Data Collection Technology](#) - Travel time to a destination is a key piece of information that motorists want and need, and is vital for good decisionmaking by travelers. Technology now makes it feasible to provide drivers with real-time information about how long it takes to reach a given destination. The collection of travel time data is a challenging problem that deserves a systematic review. The purpose of this project was to identify, review, and synthesize information on current and potential future efforts in real-time travel time on arterials. The current report focuses on arterial highway travel time data technology considerations and is not a primer for general travel time best practices. (7/24/2013)
- [Transportation Management Center Data Capture for Performance and Mobility Measures Guidebook](#) (5/29/2013)
- [Transportation Management Center Data Capture for Performance and Mobility Measures Manual](#) (5/29/2013)
- [Impact of Technology Advancement on Transportation Management Center Operations](#) - The report is to identify and analyze potential impacts on TMC operations due to technology advancements in the next 10 years. This will also include identifying, researching, and synthesizing the current, emerging and future trends in technological advancements related to transportation management and operations. (4/1/2013)

About TMC Pooled-Fund Study

- [Overview](#) - Charter, study activities, latest status report, and membership information.
- [Membership](#) - How to join and a list of members.