

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date: 4/18/2023

Lead Agency (FHWA or State DOT): FHWA

INSTRUCTIONS:

Project Managers and/or research project investigators should complete a quarterly progress report for each calendar quarter during which the projects are active. Please provide a project schedule status of the research activities tied to each task that is defined in the proposal; a percentage completion of each task; a concise discussion (2 or 3 sentences) of the current status, including accomplishments and problems encountered, if any. List all tasks, even if no work was done during this period.

Transportation Pooled Fund Program Project # <i>(i.e., SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX))</i> TPF-5(487)		Transportation Pooled Fund Program - Report Period: <input checked="" type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 2 (April 1 – June 30) <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> Quarter 4 (October 1 – December 31)	
Project Title: Traffic Management Center Pooled Fund Study			
Name of Project Manager(s): Jon Obenberger	Phone Number: 202-493-3265	E-Mail jon.obenberger@dot.gov	
Lead Agency Project ID: DTFH61-06-D-0004-T-11008	Other Project ID (i.e., contract #):	Project Start Date: Feb. 1, 2000	
Original Project End Date: Sept. 30, 2010	Current Project End Date: Apr. 16, 2027	Number of Extensions: 4	

Project schedule status:

On schedule
 On revised schedule
 Ahead of schedule
 Behind schedule

Overall Project Statistics:

Total Project Budget	Total Cost to Date for Project	Percentage of Work Completed to Date
\$ 5,748,774	\$ 4,439,467	85

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$ 284,012	\$ 284,012	

Project Description:

The Transportation Management Center (TMC) Pooled Fund Study (PFS) serves as a forum to identify and address issues that are common among agencies that manage and operate TMCs and provides an opportunity for agencies to collectively take on those key issues and challenges. The TMC PFS also provides an opportunity to facilitate the interaction, sharing of information and successful practices with a broader audience to advance and improve upon the current state-of-the-practice related to the management, operation, and performance of TMCs.

The goal of the TMC PFS is to assemble regional, state, and local transportation management agencies and the Federal Highway Administration (FHWA) to:

- Identify human-centered and operational issues;
- Suggest approaches to addressing identified issues;
- Initiate and monitor projects intended to address identified issues;
- Provide guidance and recommendations and disseminate results;
- Provide leadership and coordinate with others with TMC interests; and
- Promote and facilitate technology transfer related to TMC issues nationally.

Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):

The following is the progress achieved on current TMC PFS projects:

Information and Analysis of TMC Staff and Staffing Contracts:

- The final report was submitted 3/20/23.
- The final presentation was submitted 3/20/23.

Traffic Management System (TMS) Asset Management Planning and Life Cycle Cost Analysis:

- The final report was submitted on 3/24/23.
- The final presentation was submitted on 3/24/23.

Inventorying, Documenting and Configuring TMC Assets & Resources:

- The Task 2 draft and final report were submitted on 1/17/23 and 3/10/23, respectively.
- The Task 3 final outline and draft report were submitted on 1/13/23 and 3/21/23, respectively.
- The Task 4 initial draft and revised draft report was submitted on 1/13/23 and 3/22, respectively.

Applying Predictive Analytics into the real-time management and operation of traffic management systems (TMSs):

- The draft technical report was submitted on 2/25/23; the revised final report was submitted on 3/29/23.
- The draft and revised final presentation was submitted on 2/28/23 and 3/29/23.

Sharing Information on TMS Emerging Topics

- Topic 1 (Locating Incidents Outside Surveillance)
 - White paper: Final submitted 2/9/23.
 - Factsheet: Draft submitted 3/2/23.
 - Presentation: Draft submitted 3/15/23
- Topic 2 (Establishing Geofence Locations)
 - White paper: Final submitted 2/9/23.
 - Factsheet: Draft submitted 3/15/23.
 - Presentation: Draft submitted 3/15/23
- Topic 3 (Realtime Information Sharing for Statewide Incident Management)
 - White paper: Final submitted 2/9/23.
 - Factsheet: Draft submitted 3/2/23.
 - Presentation: Draft submitted 3/16/23

Sharing and Using Different Types of Data in Traffic Management Systems (TMS)

- Developed list of interview questions, interviews scheduled, and conducted with stakeholders 3/31/2023.

Planning to Frame the Strategic Direction and Future Investments in TMS

- Final white paper submitted 1/30/23 and initial outline for report submitted 2/6/2023.

Using Social Media Information to Improve TMS Operations

- Developed list of interview questions, interviews scheduled, and conducted with stakeholders 3/31/2023.

A quarterly conference call was conducted on 3/1/23. During the meeting, members reviewed current progress on projects, and listened to presentations on current TMC PFS-funded projects.

The PFS held a Virtual Technical Exchange amongst members on 2/2/22 on *ATMS Software Functions and Features (Part II)*. These meetings are held quarterly to provide a forum for members to exchange information on technical topics of interest.

Anticipated work next quarter:

TMC PFS Meetings: The TMC PFS Annual In-person meeting is scheduled for May 10-12, 2023, at the Tennessee Department of Transportation. Key discussion topics will include member updates, a review of progress on current projects with contractors, and the selection of new projects to be initiated in 2023. Additionally, the next TMC PFS Virtual Technical exchange on *Data-Driven CMS Protection Messages - Queue and Weather* is scheduled for April 5, 2023.

Traffic Management System (TMS) Asset Management Planning and Life Cycle Cost Analysis:

- Updates will be made to the final technical report and presentation (as needed) and submitted into the FHWA Publication review and approval process.

Inventorying, Documenting, Configuring, and Assessing Traffic Management Systems (TMSs):

- The revised draft final technical report (Task 3) is expected to be submitted in June.
- The draft technical presentations are expected to be submitted in June 2023.

Sharing Information on TMS Emerging Topics

- Topics selected for topics 6, 7, and 8 in Q2.
- Final fact sheet and technical presentations expected to be submitted for topics 1, 2, and 3 in Q2.
- White paper, draft factsheet, and draft technical presentations expected to be submitted for topics 4 & 5 in Q2.

Sharing and Using Different Types of Data in Traffic Management Systems (TMS)

- Draft white paper expected in Q2.

Planning to Frame the Strategic Direction and Future Investments in TMS

- Initial outline for the technical report expected in Q2.

Using Social Media Information to Improve TMS Operations

- Draft white paper expected in Q2.

The PFS will be advancing the following two projects in 2023 which will involve preparing the scopes of work, procurement documents, and initiate the procurement process to retain a company to perform the work:

1. Developing or Updating Staffing Plans for TMS and Methods to Identify Staffing Needs
2. Enabling the Sharing and Use of Open-Source or Agency Owned Software and Application Programming Interfaces

Significant Results:

The projects on *Information and Analysis of TMC Staff and Staffing Contracts*, *Applying Predictive Analytics into the Real-time Management and Operation of TMS*, and *Managing TMS Assets* projects ended on 3/28/2023. The final reports and presentations for each of these projects will be posted on FHWA's website in the coming months.

Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might affect the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).

No issues have been identified or encountered to date.

Potential Implementation:

The scope of work and procurement documents will be developed in the first quarter to initiate the new projects selected to be advanced in 2023.