TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Date: 10/8/2024

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.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)		Transportation Pooled Fund Program - Report Period:	
		□Quarter 1 (January 1 – March 31)	
TPF-5(487) (Initial Phase <u>TPF-5(319)</u>)		□Quarter 2 (April 1 – June 30)	
		⊠Quarter 3 (July 1 – September 30)	
		□Quarter 4 (October 1 – December 31)	
Project Title:			
Traffic Management Center Pooled Fund Study Phase II ((TPF-5(487) and TPF-5(319) – Initial or Phase I)			
Name of Project Manager(s): Phone Numb		ber:	E-Mail
Jon Obenberger	202-493-3265		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		Ahead of schedule	☐ Behind schedule
Overall Project Statistics:			
Total Project Budget	Total Project Budget Total Cost		Percentage of Work Completed to Date
\$ 7,500,569 (Commitment Total for 2 Phases) \$ 5,528,327 \$ 4,025,000 (Commitment for TPF-487)		7 (Total for 2 Phases)	70 (Total for 2 Phases)
Quarterly Project Statistics:			
Total Project Expenses	Total Amount of Funds		Total Percentage of
and Percentage This Quarter	Expended This Quarter		Time Used to Date
\$ 167,305	\$ 167,305		

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:

Sharing Information on TMS Emerging Topics

- Topic 1 (Locating Incidents Outside of Surveillance Areas): Fact sheet published on 5/29/24.
- Topic 2 (Establishing Geofence Locations): Fact sheet <u>published</u> on 5/14/24. Webinar held 4/17/24; recording and slides available on NOCoE's website.
- Topic 3 (TMSs Sharing Incident Information Within Agency): Fact sheet <u>published</u> on 5/14/24. Webinar held 6/26/24, recording and slides posted on <u>NOCoE's website</u>.
- Topic 4 (Using Variable Speed Limits (VSL) During Adverse Weather): Webinar held 8/21/24; recording and slides available on NOCoE's website. Final factsheet published on 9/3/24; final presentation published 9/11/24.
- Topic 5 (TMSs Actively Managing and Operating Part-time Shoulder Use): Fact sheet <u>published</u> on 10/15/24, presentation <u>published</u> on 10/11/24, and webinar <u>conducted</u> on 10/16/2024.
- Topic 6 (Methods and Tools to Estimate Staffing Needs): Draft fact sheet submitted 10/3/24; draft presentation submitted 10/3/24.
- Topic 7 (TMSs Actively Managing the Display of Queue Warning Messages): Initial draft fact sheet submitted 9/12/24; initial draft presentation submitted 9/12/24.
- Selected topics 9-12 during TMC PFS in-person meeting 05/09/24, assigned to contractor to initiate work 9/30/24.

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

- Sharing Data. Initial draft technical report submitted 9/27/24.
- Using Data. Final annotated outline submitted 7/1/24.

Planning to Frame the Strategic Direction and Future Investments in TMS

• Continued to work on the final technical report, revised draft fact sheet and revised draft presentation.

Using Social Media Information to Improve TMS Operations

• Continued to work on the revised draft technical report.

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

- Final technical report on *Inventorying, Documenting, and Configuring TMS Assets and Resources* submitted into the publication process on 8/23/24.
- Presentation on *Establishing and Using a Traffic Management System Inventory* submitted into the publication process on 9/24/24.
- Presentation on *Documenting and Configuring a Traffic Management System Inventory* submitted into the publication process on 9/25/24.
- Presentation on Assessing and Reporting on TMS Capabilities and Performance submitted on 9/30/24.

Methods to Identify Staffing Needs and Developing or Updating Staffing Plans for TMSs

- Identifying Staffing Needs. Final annotated outline submitted 9/30/24.
- Developing or Updating Staffing Plans. Final white paper submitted 7/15/24. Draft annotated outline submitted 9/9/24.

Sharing and Using Software and Application Programming Interfaces (APIs) for TMS

• Draft annotated outline of the technical report submitted 9/3/24.

A Virtual Technical Exchange exploring *Specifications and Approved Products for TMS Assets* was held on 8/7/24. The Florida DOT provided an overview and discussed the inclusion of TMS assets into their agencies *Specifications*, *Approved Product List, and Resources*. These quarterly meetings provide a forum for TMC PFS members to exchange information on key technical topics of interest.

During the quarter, proposals were received, reviewed, ranked, contractors selected, and task orders awarded under the FHWA Operations Indefinite Quantities Contract (OPS V BPA) for the following projects being funded by the PFS:

- Classifying, Measuring, Collecting, and Using Information on the Conditions of TMS Assets. Awarded on 9/17/24; Period of Performance: 10/25/24 04/24/27.
- Locating and Placing TMS Devices. Awarded on 9/17/24; Period of Performance: 10/25/24 04/24/27.

Anticipated work next quarter:

TMC PFS Virtual Technical Exchange. The next virtual technical exchange on Implications of Resale of Video Feeds/Other Data is scheduled for November 6, 2024. The Minnesota DOT will highlight the experiences of their TMS collecting, recording, and sharing video.

TMS PFS Quarterly Meeting. The next quarterly meeting with members to review progress on all of the current and planned TMC PFS projects and activities is scheduled for December 4, 2024.

Sharing Information on TMS Emerging Topics

- Topic 5 (TMCs Actively Managing and Operating Part-time Shoulder Use): Fact sheet <u>published</u> on 10/15/24, presentation <u>published</u> on 10/11/24, and webinar conducted to be posted on NOCoE website.
- Topic 6 (Methods and Tools to Estimate Staffing Needs): Final fact sheet and presentation expected in Q4 2024.
 Webinar scheduled for 12/11/24.
- Topic 7 (TMCs Actively Managing Use of Queue Warning Messages on Freeways): Final fact sheet and presentation expected in Q4 2024. Webinar scheduled for 2/5/25.
- Topic 8 (Performance of TMC Operators): Draft white paper expected in Q4 2024
- Topics 9, 10, 11, and 12 assigned to contractor to begin working in Q4.

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

- Initial draft technical report for Using Data expected in Q4 2024.
- Revised draft technical report for Sharing Data expected in Q4 2024.

Planning to Frame the Strategic Direction and Future Investments in TMS

- Final technical report expected in Q4 2024.
- Revised draft fact sheet and presentation expected in Q4 2024.

Using Social Media Information to Improve TMS Operations

• Revised draft of the technical report expected in Q4 2024.

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

• Final report and presentations expected to be published in Q4 2024.

Methods to Identify Staffing Needs and Developing or Updating Staffing Plans for TMSs

- Identifying Staffing Needs. Initial draft technical report expected in Q4 2024.
- Developing or Updating Staffing Plans. Final annotated outline for the technical report expected in Q4 2024.

Sharing and Using Software and Application Programming Interfaces (APIs) for TMS

• Final annotated outline for the technical report expected in Q4 2024.

Classifying, Measuring, Collecting, and Using Information on the Conditions of TMS Assets

• Kick-off meeting to occur in Q4 2024.

Locating and Placing Traffic Management System Field Devices

• Kick-off meeting to occur in Q4 2024.

Significant Results:

The following reports from completed TMC PFS-funded projects were published in Q3 2024, shared with members, and available to access on the TMC PFS website:

- 1. Inventorying, Documenting, and Configuring Traffic Management System Assets and Resources Current Practices (FHWA-HTR-24-145).
- 2. Webinar was conducted on Traffic Management Systems Managing the Use of Variable Speed Limits (VSL) During Adverse Weather) on 8/21/24. Recording and slides available on NOCoE's website. Final factsheet published on 9/3/24; final presentation published 9/11/24.

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 later in 2024 to initiate in 2025 the new projects selected to be advanced at the 2024 In-Person Meeting.