TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Date: <u>7/10/2024</u>

Lead Agency (FHWA or State DOT): <u>FHWA</u>

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)* TPF-5(487) (Initial Phase <u>TPF-5(319)</u>)	Transportation Pooled Fund Program - Report Period: ☐ Quarter 1 (January 1 – March 31) ☒ 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 <u>TPF-5(319) – Initial or Phase I</u>)		
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
$ 7,125,569 (Commitment Total for 2 Phases) $ 3,650,000 (Commitment for TPF-487)	$ 5,361,022 (Total for 2 Phases)	69 (Total for 2 Phases)

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
$ 91,197	$ 91,197	

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 published 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 published on 5/14/24. Webinar held 6/26/24, recording and slides forthcoming on NOCoE's website.
- Topic 4 (Using Variable Speed Limits (VSL) During Adverse Weather): Final fact sheet submitted 6/20/24; final presentation submitted 6/4/24. Webinar scheduled for 8/21/24.
- Topic 5 (TMCs Actively Managing and Operating Part-time Shoulder Use): Initial fact sheet submitted 5/29/24.
- Topic 6 (Methods and Tools to Estimate Staffing Needs): Final white paper submitted 4/15/24. Initial fact sheet submitted 5/29/24.
- Topic 7 (TMSs Actively Managing the Display of Queue Warning Messages): Draft white paper submitted 5/6/24; final white paper submitted 6/21/24.
- Selected topics 9–12 during TMC PFS in-person meeting on May 8-9, 2024 and task order modified adding funding.

Sharing and Using Different Types of Data in Traffic Management Systems (TMS)
- Final annotated outline submitted on Sharing Data on 6/19/24; final annotated outline on Using Data submitted on 7/1.

Planning to Frame the Strategic Direction and Future Investments in TMS
- Revised draft technical report submitted on 5/7/24 and initial draft of fact sheet and presentation submitted 6/14/24.

Using Social Media Information to Improve TMS Operations
- Initial draft of technical report was submitted on 4/5/24.

Inventorying, Documenting, and Configuring Traffic Management Systems (TMSs)
- The drafts of the three technical presentations were submitted on 5/30/24.
- The final task 2 technical report was submitted on 5/30/24.

Methods to Identify Staffing Needs and Developing or Updating Staffing Plans for TMSs
- Identifying Staffing Needs
  - Final white paper submitted 4/3/24.
  - Draft annotated outline of the technical report submitted on 6/3/24.
- Developing or Updating Staffing Plans
  - Updated list of references submitted 5/1/24.
  - Draft white paper submitted 5/6/24.

Sharing and Using Software and Application Programming Interfaces (APIs) for TMS
- Final white paper submitted on 5/31/24.
- Draft annotated outline of the technical report submitted on 6/28/24.

A Virtual Technical Exchange exploring *Reporting on Agreements/MOUs for APIs and Configurations for Sharing Information* was held on 4/3/24. These quarterly meetings provide a forum for TMC PFS members to exchange information on key technical topics of interest.

Twenty-three (23) agencies participated in the 2024 In-Person Meeting held May 8-10, 2024 at the KC Scout facilities in Kansas City, Missouri. Key agenda items included a tour of their TMC and a demo of a MoDOT Emergency Response Vehicle equipped with Julie's Automated Waste-Removal System (JAWS), a presentation on KC Scout's recent cyberattack and lessons learned, member roundtables, selection of new projects to be initiated in 2024 using PFS funds, and identification of possible topics for future Virtual Technical Exchanges and future Emerging Topics webinars.

During the quarter, Request for Proposals (RFPs) were released under the FHWA Operations Indefinite Quantities Contract (OPS V BPA) for the following task order(s) being funded by the PFS:
1. Classifying, Measuring, Collecting, and Using Information on the Conditions of TMS Assets (RFP released 6/25/24 and proposals due 7/24/24)
2. Locating and Placing Traffic Management System Field Devices (RFP released 6/25/24 and proposals due 7/24/24)

Anticipated work next quarter:

TMC PFS Virtual Technical Exchange. The next virtual technical exchange on *Specifications and Approved Products for TMS Assets* is scheduled for August 7, 2024.

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 September 4, 2024.

Sharing Information on TMS Emerging Topics
- Topic 4 (Using Variable Speed Limits (VSL) During Adverse Weather): Presentation and fact sheet expected to be published in Q3 2024. Webinar scheduled for 8/21/24.
- Topic 5 (TMCs Actively Managing and Operating Part-time Shoulder Use): Presentation and fact sheet expected to be published in Q3 2024. Webinar scheduled for 10/16/24.
- Topic 6 (Methods and Tools to Estimate Staffing Needs): Final fact sheet and presentation expected in Q3 2024.
- Topic 7 (TMCs Actively Managing Use of Queue Warning Messages on Freeways): Draft fact sheet and presentation expected in Q3 2024.
- Topic 8 (Performance of TMC Operators): Draft white paper expected in Q3 2024
- Topics 9, 10, 11, and 12 assigned to contractor to begin working in Q3.

Sharing and Using Different Types of Data in Traffic Management Systems (TMS)
- Initial draft technical report for Using Data expected in Q3 2024.
- Initial draft technical report for Sharing Data expected in Q3 2024.

Planning to Frame the Strategic Direction and Future Investments in TMS
- Final technical report expected in Q3 2024.
- Draft fact sheet and presentation expected in Q3 2024.

Using Social Media Information to Improve TMS Operations
- Revised draft of the technical report expected in Q3 2024.

Inventorying, Documenting, and Configuring Traffic Management Systems (TMSs)
- Final report expected to be submitted into publication process in Q3 2024.
- Final three technical presentations expected to be submitted into publication process in Q3 2024.

Methods to Identify Staffing Needs and Developing or Updating Staffing Plans for TMSs
- Identifying Staffing Needs
  o Final annotated outline for the technical report expected in Q3 2024.
- Developing or Updating Staffing Plans
  o Final white paper and initial annotated outline for the technical report expected in Q3 2024.

Sharing and Using Software and Application Programming Interfaces (APIs) for TMS
- Draft annotated outline for the technical report expected in Q3 2024.

Classifying, Measuring, Collecting, and Using Information on the Conditions of TMS Assets
- Contractor selected, start notice issued, and kick-off meeting scheduled in Q3 2024.

Locating and Placing Traffic Management System Field Devices
- Contractor selected, start notice issued, and kick-off meeting scheduled in Q3 2024.

Significant Results:

Louisiana DOT joined as a new member in May 2024, bringing total membership up to 24 agencies.

The following reports from completed TMC PFS-funded projects were published in Q2 2024, shared with members, and available to access on the TMC PFS website:
1. Performance Measures and Health Index of Intelligent Transportation Systems Assets (FHWA-HOP-20-025)
2. Aligning Transportation Management Center Staffing Capabilities for the Future of Systems Operations (FHWA-HRT-24-079)
3. Predictive Analytics for Traffic Management Systems (FHWA-HRT-24-091)
4. Managing Traffic Management Systems Assets (FHWA-HRT-24-088)
5. Assessing and Reporting on TMS Capabilities and Performance – Current Practices (FHWA-HRT-24-099)

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 the new projects selected to be advanced at the 2024 In-Person Meeting.