TRANSPORTATION POOLED FUND PROGRAM
QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT):   Michigan DOT

INSTRUCTIONS:
Lead Agency contacts 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.

<table>
<tr>
<td>Transportation Pooled Fund Program Project #
<i>(i.e, SPR-2(XXX), SPR-3(XXX) or TPF-5(XXX)</i>

<center><i>TPF-5(490)</i></center></td>
<td colspan="2">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)</td>
</tr>
<tr>
<td colspan="3">TPF Study Number and Title:
TPF-5(490) ENTERPRISE-Phase III (Phase II Continuation)</td>
</tr>
<tr>
<td>Lead Agency Contact:
Michigan Department of Transportation</td>
<td>Lead Agency Phone Number:
517-636-0036</td>
<td>Lead Agency E-Mail
SpinksM@michigan.gov</td>
</tr>
<tr>
<td>Lead Agency Project ID:
OR22-204</td>
<td>Other Project ID (i.e., contract #):
2024-0826</td>
<td>Project Start Date:
3/6/2023</td>
</tr>
<tr>
<td>Original Project Start Date:
3/6/2023</td>
<td>Original Project End Date:
9/30/2028</td>
<td>If Extension has been requested, updated project End Date:
Click or tap to enter a date.</td>
</tr>
</table>

Project schedule status:

☒On schedule	☐On revised schedule	☐Ahead of schedule	☐ Behind schedule

Overall Project Statistics:

Total Project Budget	Total Funds Expended This Quarter	Percentage of Work Completed to Date
$1,286,145.00	$46,998.66	58%

Project Description:

TPF-5(490) is a continuation of TPF-5(359) led by the Michigan Department of Transportation. This pooled fund federal project originated under the project titled "ENTERPRISE Group" that was established in 1991. Each year, partner members contribute funds in support of ITS projects of mutual interest.

Selected research studies/projects typically involve private sector partners contracted to work with designated member agencies. An administrative contract, currently with CTC & Associates LLC, covers project management, meeting planning, website and other tasks. Over time ENTERPRISE has grown into a multi-national consortium dedicated to the advancement of ITS. The consortium provides a focus for coordinating ITS developments and sharing results within and outside the ENTERPRISE program.

Primary Focus:
To enhance innovation in highway operations and intelligent transportation systems through research and technology transfer, as well as to continue assessing transformational technologies and their impact on the transportation industry.

Objectives: The Board initially selected 13 research projects for this phase of the pooled fund study. Additionally, the Board amended the Athey Creek contract and added

Remaining projects from original round
10. Defining and Advancing Digital Infrastructure
12. Alternate Methods of Traffic Data Analysis
14. Documenting Current Road Weather Information Systems (RWIS) Technologies Related to ITS and Operations

New projects for second round
15. ITS Simple Solutions – Phase 2
16. Information Technology Support Models for ITS
17. Evaluation Process for ITS Systems
18. Deterrents for Rodents Chewing into Fiber and Cabinets
19. ITS Device Communications Using WiFi Connections
20. Leveraging Video from Snowplow Cameras for Innovative DOT Uses
21. Lease Agreements for ITS Services Using Transportation Agency Assets
22. Engaging Mapping Companies

Progress this Quarter

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

Board teleconferences held on November 19 and December 17, 2025. CTC & Associates developed the agenda, documented the meeting, and finalized, distributed and posted meeting minutes.

CTC & Associates finalized the planning and held a hybrid in-person/virtual Board meeting in Naperville, IL from October 15-16, 2025. Tasks included setting up the virtual platform, meeting agenda, booking flights, booking hotel rooms, meeting logistics, meeting facilitation and notetaking, posting meeting materials on the ENTERPRISE website and reimbursements.

CTC & Associates began the planning for a hybrid in-person/virtual Board meeting in Bloomington, MN from April 14-16, 2026. Tasks included drafting an agenda and sending a travel memo to Board members.

CTC & Associates assisted MDOT with members' pooled fund commitments and transfers.

CTC & Associates updated the website with current information. (http://enterprise.prog.org)

CTC & Associates assisted Athey Creek with activities related to individual research projects.

Research projects

Project 10: Defining and Advancing Digital Infrastructure
- Task 4: Final Report – Incorporated comments into the final report.

Project 12: Alternate Methods of Traffic Data Analysis
- Task 1: Gather Agency Examples – Completed conducting research and interviews to identify alternative methods of traffic data analysis.
- Task 2: Use Cases – Completed identifying and documenting use cases.
- Task 3: Draft Report – Began drafting final report.

Project 15: ITS Simple Solutions – Phase 2
- Prepared and conducted project kickoff in October 2025.
- Task 1: Review and Prioritize Three Innovations to Advance for Implementation – Developed a prioritization approach

Project 16: Information Technology Support Models for ITS
- Prepared and conducted project kickoff in October 2025.
- Task 1: Conduct Research – Developed interview question guide. Began scheduling interviews with ENTERPRISE members.

Project 17: Evaluation Process for ITS Systems
- Continue to prepare for project kickoff in January 2026.

Project 18: Deterrents for Rodents Chewing into Fiber and Cabinets
- Continue to prepare for project kickoff in January 2026.

The following research projects are complete, and the final report is posted to the ENTERPRISE PFS website:
- **Completed December 2023:** Project 1: State of the Art Roadway Sensors – Phase 1: https://enterprise.prog.org/wp-content/uploads/ENT-Roadway-Sensors-Phase-1-Final-Report.pdf
- **Completed March 2024:** Project 2: New Methods of Traffic Data Collection (Comparison of Emerging Traffic Data Collection Methods to Traditional Methods): https://enterprise.prog.org/wp-content/uploads/ENT-Comparison-Traffic-Data- Collection-Methods-Final-Report.pdf
- **Completed April 2024:** Project 5: Novel Uses of Unmanned Aerial Systems (UAS) in ITS: https://enterprise.prog.org/projects/novel-uses-of-unmanned-aerial-systems-uas-in-its/
- **Completed June 2024:** Project 4: Procurement Specification for Physical Security of ITS: (Posted to the ENTERPRISE members only website.)
- **Completed June 2024:** Project 6: State of the Art of Roadway Sensors – Phase 2: https://enterprise.prog.org/projects/state-of-the-art-roadway-sensors-phase-2/
- **Completed July 2024:** Project 3: Potential Approaches for Wrong-Way Driving Applications – Phase 2: https://enterprise.prog.org/projects/potential-approaches-for-wrong-way-driving-applications-phase-2/
- **Completed March 2025:** Project 11: Role of Artificial Intelligence in Intelligent Transportation Systems: https://enterprise.prog.org/wp-content/uploads/ENT-AI-in-ITS-Final-Report-Mar-2025.pdf
- **Completed April 2025:** Project 9: Uncontrolled Pedestrian Crossing ITS Countermeasures: https://enterprise.prog.org/projects/uncontrolled-pedestrian-crossing-its-countermeasures/
- **Completed April 2025:** Project 13: Truck Parking Technologies: https://enterprise.prog.org/projects/truck-parking-technologies/
- **Completed April 2025:** Documenting Current Road Weather Information System (RWIS) Technologies Related to ITS and Operations: https://enterprise.prog.org/projects/documenting-current-road-weather-information-system-rwis-technologies-related-to-its-and-operations/
- **Completed June 2025:** Project 7: Administration of Communications: https://enterprise.prog.org/projects/administration-of-communications/
- **Completed July 2025:** Project 8: ITS Simple Innovations https://enterprise.prog.org/projects/its-simple-innovations/
- **Completed October 2025:** Project 10: Defining and Advancing Roadway Digital Infrastructure (RDI) https://enterprise.prog.org/projects/defining-and-advancing-digital-infrastructure/

Anticipated work next quarter:

The Board will hold teleconferences on January 21, February 19 and March 18, 2026. CTC & Associates will create agendas, take notes, and finalize, distribute and post meeting minutes for monthly Board meetings.

CTC will continue planning for a hybrid in-person/virtual meeting taking place from Apri 14-16, 2026 in Bloomington, MN. Activities will include finalizing the agenda, securing a hotel for rooms and a meeting venue, booking flights, and setting up meeting logistics.

CTC & Associates will assist MDOT with members' pooled fund commitments and transfers, including reaching out to members to request they make their FFY26 transfers to MDOT.

CTC & Associates will update the website with current information. (http://enterprise.prog.org).

CTC & Associates will monitor the research projects schedules and assist Athey Creek with activities related to individual research projects.

Research projects - Athey Creek (Project updates are presented at monthly Board meetings.)

Project 12: Alternate Methods of Traffic Data Analysis
- Task 3: Draft Report – Complete draft report.
- Task 4: Final Report – Incorporate comments on draft report and prepare final report.

Project 15: ITS Simple Solutions – Phase 2
- Task 1: Review and Prioritize Three Innovations to Advance for Implementation – Complete prioritization
- Task 2: Document Next Steps to Implement the Prioritized Innovations – Begin documenting next steps.
- Task 3: Continue to Gather Examples of ITS Innovations – Begin gathering and documenting innovations.

Project 16: Information Technology Support Models for ITS
- Task 1: Conduct Research – Conduct interviews with ENTERPRISE members, begin documenting interview summaries, and continue to review existing resources.

Project 17: Evaluation Process for ITS Systems
- Conduct project kickoff in January 2026.
- Task 1: Define ENTERPRISE Member Evaluation Test – Conduct and document online search.

Project 18: Deterrents for Rodents Chewing into Fiber and Cabinets
- Conduct project kickoff in January 2026.
- Task 1: Online search – Conduct and document online search.

Significant Results:

See Progress This Quarter section.

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).

None

Potential Implementation:

None