

TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): Iowa DOT

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.

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|---|--|---|
| Transportation Pooled Fund Program Project # TPF-5(545) | Transportation Pooled Fund Program - Report Period: Quarter 1 (January 1 – March 31, 2025) Quarter 2 (April 1 – June 30) XQuarter 3 (July 1 – September 30) Quarter 4 (October 1 – December 31) | |
| Project Title: Midwest Smart Work Zone Deployment Initiative | | |
| Name of Project Manager(s): Dan Sprengeler | Phone Number: 515-239-1823 | E-Mail: Dan.Sprengeler@dot.iowa.gov |
| Lead Agency Project ID: Keith Knapp | Other Project ID (i.e., contract #): Addendum 915 | Project Start Date: January 1, 2025 |
| Original Project End Date: December 31, 2025 | Current Project End Date: | Number of Extensions: None |

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 |
|----------------------|--------------------------------|--------------------------------------|
| \$375,000 | \$39,701 | 75% |
| | | |

Quarterly Project Statistics:

| Total Project Expenses and Percentage This Quarter | Total Amount of Funds Expended This Quarter | Total Percentage of Time Used to Date |
|--|---|---------------------------------------|
| \$20,204 | | 3% |

Project Description:

The Smart Work Zone Deployment Initiative (SWZDI) was initiated in 1999 as a Federal Highway Administration (FHWA) Pooled Fund Study intended to coordinate and promote research among the participating states related to safety and mobility in highway work zones.

The program is an ongoing cooperative effort between State Departments of Transportation, universities, and industry. The studies completed have consisted of evaluations of various work zone related products, various innovative topics, and several synthesis studies. Completed reports and descriptions of ongoing projects can be obtained at the Iowa State University's Institute for Transportation (InTrans) website (www.intrans.iastate.edu/smartwz/) link to the Smart Work Zone Deployment Initiative. InTrans currently operates as the program manager of the pooled fund efforts and completes administrative tasks related to request for ideas and proposals, meetings, project files, quarterly reports, and recommending reimbursement.

Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.):**Quarter Ending September 30, 2025 (Overall)**

As part of this project funding number, two PY 2025 research projects are currently under contract and are summarized below. During this quarter, a request for proposal was developed with regard to two topics. These topics included the evaluation of expanded uses of residential driveway temporary signals (RDTS) and the evaluation of positive protection in work zones. The Iowa DOT has required that request for proposal on a schedule they have and it went out on September 15, 2025 and proposals are due by November 1, 2025. Work also continued during this quarter, on three PY 2024 projects and another additional supplemental project for PY 2024, as part of the old SWZDI project account (See that quarterly report).

The following is a summary of accomplishments provided by the project principal investigators for the July to September 2025 time period for their individual research projects underway with fund account TPF-5(545).

2025 Program Year Projects

- Mobility and Safety Impacts of Work Zone Lane and Shoulder Widths – Part 2 – University of Wisconsin – Madison, Madhav Chitturi as PI.

Project kickoff meeting on 07/15/2025.

Assembled devices for data collection.

Collected information for potential WZs to collect data from IL and WI.

Coordinated with IL DOT and collected data on I-80 near Joliet, IL in August.

Project team found issues with using Bluetooth for activating the camera.

Redesigned the device and collected data again on I-80 near Joliet in September.

Plan to process the data collected in IL in October.

Plan to collect data in WI in October.

This project has been contracted to start on July 1, 2025 and end on January 31, 2027. It is 10% complete.

- Traffic Control for Work Zones in Alternative Intersections – University of Missouri, Henry Brown as PI.

A draft chapter for the literature review is under development. The draft DOT survey is also under development. The draft survey will be distributed to the TAC for review in early October. A list of survey contacts from state DOTs is being compiled.

For the next quarter, the survey will be revised based on feedback from the TAC and distributed to state DOTs. This project has been contracted to start on April 1, 2025 and end on September 30, 2026. It is 10% complete.

Anticipated work next quarter: Work will start and/or continue on the two currently contracted projects. We will respond to the request for proposals that is currently out for this program year in the next quarter.

Significant Results: Continued work on two projects.

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, with recommended solutions to those problems).

Potential Implementation: