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.

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) Quarter 3 (July 1 – September 30) X Quarter 4 (October 1 – December 31)
Project Title: Midwest Smart Work Zone Deployment Initiative	

Name of Project Manager(s): Brian Worrel	**Phone Number:** 515-239-1471	**E-Mail** brian.worrel@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:** December 31, 2029	**Number of Extensions:** 1

Project schedule status:

X 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	100 (2025 Annual Funding)%

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 December 31, 2025 (Overall)

As part of this project funding number, two PY 2025 research projects are currently under contract and are summarized below. Two other, for PY 2026, are under negotiation for contracts. During this quarter, the proposals received for two topics, residential driveway temporary signals (RDTS) and the evaluation of positive protection in work zones, were reviewed and ranked by the SWZDI board state representatives. The highest ranked proposals were communicated to the board and it was agreed to fund both. These contracts are currently being negotiated between those selected for each project and the Iowa DOT. Work also continued during this quarter, on two 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 October to December 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.
  Collected data at 3 locations on I-94 near Eau Claire, WI and at 6 locations on I-43 near Appleton, WI in October.
  Developing an algorithm to process the images and identify the vehicle make/model and vehicle width.

  This project has been contracted to start on July 1, 2025 and end on January 31, 2027. It is 20%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 DOT survey was developed and distributed to the TAC. The survey was finalized based on TAC feedback and sent to DOTs for the 50 states and District of Columbia. As of December 31, 2025, 44 survey responses have been received (86 % response rate). Analysis of survey results has begun.

  For the next quarter, the literature review will be finalized, and survey results will be analyzed. Interviews will be conducted with four to six DOTs. The synthesis of DOT practices will be completed, and development of guidelines will begin.

  This project has been contracted to start on April 1, 2025 and end on September 30, 2026. It is 20% complete.

Anticipated work next quarter: Work will start and/or continue on the two currently contracted projects. The projects for PY 2026 that were selected for funding should also get under contract in the next quarter.

Significant Results: Work continued on the two PY 2025 projects. And two projects for PY 2026 were selected.

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: