

## 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.*

<b>Transportation Pooled Fund Program Project #</b> TPF-5(295)		<b>Transportation Pooled Fund Program - Report Period:</b> Quarter 1 (January 1 – March 31, 2021)  Quarter 2 (April 1 – June 30)  X Quarter 3 (July 1 – September 30)  Quarter 4 (October 1 – December 31)	
<b>Project Title:</b> Midwest Smart Work Zone Deployment Initiative			
<b>Name of Project Manager(s):</b> Dan Sprengeler	<b>Phone Number:</b> 515-239-1823	<b>E-Mail</b> Dan.Sprengeler@dot.iowa.gov	
<b>Lead Agency Project ID:</b> Keith Knapp	<b>Other Project ID (i.e., contract #):</b> Addendum 535	<b>Project Start Date:</b> July 1, 2014	
<b>Original Project End Date:</b> June 30, 2020	<b>Current Project End Date:</b> December 31, 2021	<b>Number of Extensions:</b> 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
\$1,425,000 committed	\$1,290,109.29	75% (of extension)

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
\$3,611.69		100

**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/](http://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, 2021 (Overall)**

During this quarter we communicated with principal investigators as needed and resolved typical progress issues if they occurred. The two projects for which concerns had been raised in the last quarter were addressed by the advisory board. The requirements noted in the last quarterly report for the "Field Testing of Non-Motorized Road User Accommodations for Work Zones" project were shared with the researcher and his project is noted below.

During this quarter SWZDI advertised and selected problem statements for the RFP on its new funding number (this is described in another quarterly report). Two projects from Program Year 2019 contracts progressed (see below) and are the remaining focus of this project number. The 2020 to 2022 PY projects of the SWZDI pooled fund are discussed in another quarterly report.

The following is a summary of accomplishments provided by the project principal investigators for the April to June 2021 time period for their individual research projects underway with fund account TPF-5(295).

**2019 Program Projects**

The following projects were selected for 2019 program year funding.

- Field Testing of Non-Motorized Road User Accommodations for Work Zones, Iowa State University, John Shaw as PI.

Completed systematic literature review of research on pedestrian safety in work zones. Prepared draft final report summarizing background information, literature review, Pedestrian Test Tack concept, and institutional review board (IRB) process.

A TAC meeting was also held on September 21, 2021.

This work was contracted for 1/1/2019 to 3/31/2020 and was extended to December 31, 2020. It has been extended to March 31, 2021 and was extended again to December 31, 2021. Additional information about the current status of this project and its reduced scope and schedule is described in the overall summary of activities paragraph last quarter. The principal investigator has indicated that this project is 98% complete.

- Investigation of Autonomous/Connected Vehicles in Works Zones, University of Missouri-Columbia, Carlos Sun as PI.

The draft final report is being produced.

It should be noted that internal funds are now being used to complete the project. This was due to the COVID shutdown and the need for a no-cost extension to the project.

This project was contracted to start on 4/15/2019 and end on 7/31/2020. It was extended to March 31, 2021 and extended again to December 31, 2021. The project is 95 percent.

**Anticipated work next quarter:**

Work will continue to finalize the two 2019 projects listed above. These two projects were extended to the end of 2021 due to impacts of COVID. The principal investigator for the Iowa state University project has been told to finish by October 2021 and appears to be on track for that and the University of Missouri-Columbia principal investigator has indicated he expects to have a report completed soon.

**Significant Results:**

Work continued on the two projects above.

**Circumstance affecting project or budget. (Please describe any challenges encountered or anticipated that might the completion of the project within the time, scope and fiscal constraints set forth in the agreement, along with recommended solutions to those problems).**

Currently there are no problems to report with the administrative contract. The COVID 19 situation has impacted the progress of the two 2019 projects and the status of each project has been described above.

**Potential Implementation:**

The website for the SWZDI pooled fund is updated on a regular and as needed basis for finished reports.