

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(081)	Transportation Pooled Fund Program - Report Period: Quarter 1 (January 1 – March 31, 2014) Quarter 2 (April 1 – June 30) <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input type="checkbox"/> 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.sprendeler@dot.iowa.gov
Lead Agency Project ID: Keith Knapp	Other Project ID (i.e., contract #): Addendum 189	Project Start Date: 2001 to Present
Original Project End Date: Ongoing	Current Project End Date: June 30, 2015	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
\$1,917,500	\$1,879,189.58	Ongoing*

Quarterly Project Statistics:

Total Project Expenses and Percentage This Quarter	Total Amount of Funds Expended This Quarter	Total Percentage of Time Used to Date
N/A.	N/A.	Ongoing*

*TPF-5(081) contracts expire in the winter of 2014/2015 and this pooled fund number is proposed to be closed-out in the late spring of 2015. TPF-5(295) has begun and is funding the new 2014 projects.

Project Description:

The Midwest Smart Work Zone Deployment Initiative (MwSWZDI) 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, 2014 (Overall)**

During this quarter we communicated with various principal investigators. Resolved some progress issues. Posted some final reports and initiated all four program year 2014 project contracts. The progress on these four projects are summarized another quarterly report for fund account TPF-5(295). Communicated with Board about reviews of final reports. Received comments and shared them with principal investigators. Requested 2015 problem statement ideas from Board, met with the board, and released the 2015 program request for proposals from potential university principal investigators, and vendors. Answered questions about the request for proposals. The following is a summary of accomplishments during the quarter for individual research projects under fund account TPF-5(081).

2012 Program Projects

- Development of a TL-3 Transition between Temporary Concrete Barrier and Guardrail, University of Nebraska with Ron Faller as PI.

This final report for this project has been posted on the SWZDI website.

- Effects of Road Construction Intensity and Operations on Rural Freeway Work Zone Capacity, Missouri University of Science and Technology with Ronaldo Luna as PI.

Dr. Luna is working to complete the project. It is still 95% complete. Dr. Luna has submitted a draft final report to his technical advisory committee (TAC) and is responding to their comments. Once received the TAC will re-review and send on the Board for review. The end date for this project is December 30, 2014, however, Dr. Luna has left Missouri University of Science and Technology, but is finalizing the report.

2013 Program Projects

- Highway Work Zone Capacity Estimation using Field Data from Kansas State University, Kansas State University with Sunanda Dissanayake as PI.

This project is 95% complete. The majority of the work on this project has been completed. A draft final report is being prepared and is almost complete. It will be submitted soon. This task has now been completed. The project end date is December 31, 2014.

- Modeling Merging Behavior at Lane Drops, Iowa State University with Shauna Hallmark as PI.

Overall, this project is 70% complete. The literature review (Task 1) is almost complete. Tasks 2 (TAC involvement), 3 (data collection), and 4 (strategy identification) are complete. Tasks 5 (modeling simulation) and Task 6 (results summary) are ongoing. The end date for this project is currently 11/30/2014.

- Intelliroute: A Smart Phone – Based Real Time Work Zone Detour Information System Driven by Crowd-Sourced Data; Yue Liu as PI.

This project is 98% percent. The system test has been completed and the final report is being drafted. The project was extended to December 31, 2014 during this quarter.

- Calibration of Highway Safety Manual Work Zone Crash Modification Factors, University of Missouri-Columbia with Carlos Sun as PI.

The report for this project has been posted to the SWZDI website.

Anticipated work next quarter:

Work will continue on contracted projects. Several contracted projects will expire in 2014. We will continue to work with the new investigators of Program Year 2014 projects. This next quarter the proposals for Program Year 2015 will be collected, reviewed and selected. Contract negotiations may be started.

Significant Results:

Two project reports were posted. Program Year 2015 request for proposal was submitted. Additional detail is provided above in the summary for the overall pooled fund program for the quarter.

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).

Currently there are no problems to report with the administrative contract. Any issues that have come up with the individual projects that may impact schedule or budget are resolved on a case by case basis.

Potential Implementation:

Two project reports were completed this quarter and two more appear to be near completion. Two reports were posted. Those that download the report and/or hear the PI present the material may potentially use the information to change their decision-making.