

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, 2012) Quarter 2 (April 1 – June 30, 2012) Quarter 3 (July 1 – September 30, 2012) <input checked="" type="checkbox"/> Quarter 4 (October 4 – December 31, 2012)	
Project Title: Midwest Smart Work Zone Deployment Initiative		
Project Manager: Dan Sprengeler	Phone: 515-239-1823	E-mail: dan.sprengeler@dot.iowa.gov
Project Investigator: Tom McDonald	Phone: 515-294-6384	E-mail: tmcdonal@iastate.edu
Lead Agency Project ID: RT 63	Other Project ID (i.e., contract #): Addendum 189	Project Start Date: 2001-On-going Pooled Fund
Original Project End Date: On-going	Current Project End Date: On-going	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	Total Percentage of Work Completed
\$1,917,500	\$1,654,697.51	On-going

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
N/A	N/A	On-going

Project Description:

- Vendor Solicitation
- Distribute Group Reports
- Maintain website
- TAC meetings
- Maintain research report
- Recommend research reimbursement
- Solicit state participation
- Inquiry contact
- (On-going project)

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

Work has been completed on all program projects prior to 2008 and continues on subsequent program year projects as listed below. Projects for the 2012 program have been approved by the Board of Directors and contracts sent to the Principal Investigators.

Received and recorded quarterly report data from Principal Investigators for contracted projects. Following is a summary of accomplishment for individual projects under contract.

2008 Program

-Evaluation of Variable Speed Limits for Work Zones, University of Missouri, Praveen Edara, PI

VASL data from congested site on I-270 in St. Louis, Missouri, was obtained and analyzed. This data complements the uncongested data previously analyzed. Simulation models are being developed to conduct sensitivity analysis in terms of truck percentages, VSL algorithms, and other variables. 70 % complete at this time.

-Ramp Metering for Work Zone Mobility & Safety, University of Missouri, Praveen Edara, PI

Draft final report was submitted in November 2012 and is under review by the Smart Work Zone Board of Directors. Project is 99% complete at this time.

2011 Program

-Investigation of Incentive Contracting for Minimizing Work Zone Traffic Impacts, University of Missouri with Carlos Sun as PI. Draft final report was submitted in November and is currently under review by the Board of Directors. 99% complete at this time..

-Influencing Work Zone Traffic Flow Through Variable Messaging Technologies, Missouri University of Science and Technology with Ghulam Bham as PI. Dr. Bham has left the University and the work has been assumed by Dr. Ming Leu. Progress toward completion is expected to continue as planned, project is approximately 60% complete at this time.

-Integrated Risk Management Systems for Improving Internal Traffic Control, Work Zone Safety, and Mobility During Major Construction, Iowa State University with Jennifer Shane as PI. Final report has been submitted and reviewed by the Smart Work Zone Board of Directors. Project is complete.

2012 Program

-Development of a TL-3 Transition between Temporary Concrete Barrier and Guardrail, University of Nebraska with Ron Faller as PI. Working with the TAC several connection options have been discussed and will be ranked and considered for simulation testing. Project is approximately 15% complete.

-Work Zone Performance Measures, Iowa State University with Shauna Hallmark as PI. Work continues on the literature review, references identified and summarized. The TAC has been formed and an initial meeting conducted. Initial work on a guidebook has also been accomplished. Project is about 25% complete at this time.

-Effectiveness of Work Zone Intelligent Transportation Systems, University of Missouri with Praveen Edara as PI. Work is underway with ITS technology deployed at a site on I-44 near St. Louis and at a second site on I-70 in the city. The second site seemed more suitable as a study site and data was collected for later analysis. Project is approximately 25% complete.

-Effects of Road Construction Intensity and Operations on Rural Freeway Work Zone Capacity, Missouri University of Science and Technology with Ghulam Bham as PI. Dr. Bham has left the University and Dr. Ronaldo Luna has assumed the duties of PI. Work on the project is underway with about 5% completion at this time.

Anticipated work next quarter:

Work will continue on contracted projects and some research should be completed in 2012.

Significant Results:

Several projects were completed in 2012 and others should be completed before the end of the year.

Circumstance affecting project or budget (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).

No problems to report.