TRANSPORTATION POOLED FUND PROGRAM QUARTERLY PROGRESS REPORT

Vanan A bea I	(FHWA or State DOT):	Michigan Department of Transportation	
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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 Proje	ect # Transportation Pooled Fund Program - Report Period:				
TPF-5(231)	☐Quarter 1 (January 1 – March 31)				
	■Quarter 2 (April 1 – June 30)				
	□Quarter 3 (July 1 – September 30)				
	□Quarter 4 (October 1 – December 31)				
Project Title: ITS Pooled Fund Program (ENTERPRISE)					
Project Manager:Lee NederveldPhone: (517) 335-5317E-mail: nederveldl@michigan.gov					
Project Investigator:Dean Deeter, Athey CreekPhone:503.343.9602E-mail:deeter@acconsultants.org					
Lead Agency Project ID:	Other Project ID (i.e., contract #): Project Start Date: January 2010 2010-0316				
Original Project End Date: December 2015	Current Project End Date: Number of Extensions:				
Project schedule status: On schedule □ On revised schedule □ Ahead of schedule □ Behind schedule Overall Project Statistics:					

Quarterly Project Statistics:

Total Project Budget

\$2,200,000 (5 year estimated budget, final

Budget dependent on member contributions)

To	otal Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
	\$209,109	\$209,109	10%

Total Cost to Date for Project

\$1,218,762

Total Percentage of Work Completed

55%

Project Description:

The ENTERPRISE Pooled Fund Program performs technical projects to serve the needs of the member agencies. Currently, 16 member agencies participate in the ENTERPRISE Pooled Fund. Each year, the members identify current needs of their organization that they feel are most suited to be addressed by pooled fund projects. After identifying candidate projects, the members discuss and ultimately vote to elect the projects to be included in the year's Work Plan. Technical projects are then performed to execute the projects and address member needs. Overall, three high level tasks are performed:

- *Management support* to the program, the lead state, and to members;
- Administrative support to organize and conduct in-person meetings and monthly webinars; and
- Technical support to execute the technical projects selected for each year's Work Plan.

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

Administrative/Management Task:

• Three conference calls were held during the 2nd Quarter with the ENTERPRISE board members.

Technical Task:

- Project 5: ICWS Coordination and Systems Engineering Phase 2
 Project Goal: An extension of Project 1, this project will further support the standardization of ICWS by coordinating among the various national standards and association groups, and by developing a concept of operations and system requirements for the four types of ICWS identified in the Design and Evaluation Guidance for Intersection Conflict Warning Systems.
 - Continued coordination with the Low Cost and Traffic Control Devices pooled funds, NCUTCD ICWS task force and ATSSA.
- Project 10: HAR Best Practices and Future Direction
 Project Goal: The intent of this project is to research the current HAR 'state of the practice', and document how effective HAR is, and provide additional details that will allow ENTERPRISE members to make decisions about whether or not to invest (or continue investing) in HAR technologies.
 - Project completed. The final summary report is available at: http://enterprise.prog.org/Projects/2010_Present/har.html
- Project 11: Intelligent Workzone Synthesis of Best Practices
 Project Goal: Document the best practices and lessons learned regarding IWZ technologies
 (Dynamic Merge, End of Queue Warning, Alternate Routes, and Variable Speed Limits) from
 various sources to draw conclusions about what approaches work best in what situations.
 - Project completed. The final report is available at: http://enterprise.prog.org/Projects/2010_Present/iwz.html
- Project 12: Connected Vehicles Data Element ConOps
 Project Goal: This effort will examine the opportunities for state DOT's to improve highway operations and safety through the use of Connected Vehicles sourced data.
 - The final User Needs for Rural Connected Vehicle Systems Document was distributed during the May monthly call.
- Project 13: Assessment of Emergency Service Providers Data Feeds
 Project Goal: Research the current data feed available from emergency service providers,
 document the feeds, and 0work with ENTERPRISE member agencies to understand if the member
 agencies wish to receive this data feed (either for emergency response or for travel information)
 and what value the data may have for operations, travel information, and planning.
 - Project completed: The final summary report is available at: http://enterprise.prog.org/Projects/2010_Present/onstarfeed.html
- Project 14: Next Generation Traffic Data and Incident Detection from Video (Phase 2) Evaluation

Project Goal: To evaluate video streams of traffic data and incident detection. Test environments are expected to include rural area animal detection (to warn of animal crossings), and metropolitan area incident detection.

- An approach for presenting findings in the final report was discussed with the project champions. It is anticipated that the final report will document various capabilities of video analytics systems that were proven during the project and provide guidelines for procuring video analytics systems.
- Prepared a draft technical report. The report provides the project goals, describe the
 evaluation approach and results, and outline a number of use case scenarios. Each use case
 scenario is accompanied by procurement recommendations, 'strawman' requirements, and
 "readiness of the state of practice" for Video Analytics to meet each use case.

Anticipated work next quarter:

Administrative/Management Support Task:

 Monthly webinars will be conducted in April, May and June. Work will focus on developing project ideas for the 2015 Work Plan.

Technical Task:

- Project 5: Intersection Conflict Warning System Phase 2
 - o Develop a summary of efforts to complete the project.
- Project 12: Connected Vehicles Data Element ConOps
 - Distribute and finalize the report to complete the project.
- Project 14: Next Generation Traffic Data and Incident Detection from Video (Phase 2) Evaluation
 - Finalize the evaluation report to complete the project.
- Additional projects from the 2010-2012 Work Plan will begin to commence during the next quarter.

Significant Results:

Project completed:

- Project 10: HAR Best Practices and Future Direction
- Project 11: Intelligent Workzone Synthesis of Best Practices
- Project 13: Connected Vehicles Data Element ConOps

Projects authorized:

None

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).

N/A