**TRANSPORTATION POOLED FUND PROGRAM**

**QUARTERLY PROGRESS REPORT**

Lead Agency (FHWA or State DOT): \_Michigan Department of Transportation\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**INSTRUCTIONS:**

|  |  |
| --- | --- |
| **Transportation Pooled Fund Program Project #**TPF-5(231)  | **Transportation Pooled Fund Program - Report Period:**□Quarter 1 (January 1 – March 31)□Quarter 2 (April 1 – June 30)□Quarter 3 (July 1 – September 30)x□Quarter 4 (October 1 – December 31) |
| **Project Title:** ITS Pooled Fund Program (ENTERPRISE) |
| **Project Manager:** Luke Biernbaum **Phone:** (517) 636-5021 **E-mail:** BiernbaumL@michigan.gov |
| **Project Investigator:** Dean Deeter, Athey Creek **Phone:** 503.343.9602 **E-mail:** deeter@acconsultants.org  |
| **Lead Agency Project ID:** | **Other Project ID (i.e., contract #):**2010-0316 | **Project Start Date:** January 2010 |
| **Original Project End Date:** September 2012 | **Current Project End Date:** **Revised 9/30/17** | **Number of Extensions: 5** |

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** |
| $2,200,000 (5 year estimated budget, final Budget dependent on member contributions) | $2,141,765 | 97% |

***Quarterly*** Project Statistics:

|  |  |  |
| --- | --- | --- |
|  **Total Project Expenses** **This Quarter** |  **Total Amount of Funds**  **Expended This Quarter** | **Percentage of Work Completed** **This Quarter** |
| $2,141,765 (97.4%) | $154,395 (7%) | 7% |

**Project Description:**

The ENTERPRISE Pooled Fund Program performs technical projects to serve the needs of the member agencies. Currently, 10 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:

* Two conference calls were held during the 4th Quarter. The purpose of the meetings were to provide project updates and develop the next work plan.

Technical Task:

* Project 23: ITS at International Borders

*Project Goal: This project will provide members with a summary of current and emerging practices for the use of ITS technologies at international borders*.

* Project completed.
* Project 24: Portable Travel Time Displays and ICM with Parallel Routes – Phase 1

*Project Goal: To support Phase 1 of this effort to develop a project plan and system engineering documents to be used in future phases of deployment*

* Project completed.
* Project 25: The Future of DMS Messaging

*Project Goal: To support the ENTERPRISE Pooled Fund members to research and document Dynamic Message Signs (DMS) uses and appropriateness of DMS demands*

* Project completed.
* Project 26: Integrate Active Work Zone Notifications into Traveler Information Dissemination Systems

*Project Goal: To support a first phase of the project to develop ‘model’ systems engineering documents (Concept of Operations and System Requirements) that ENTERPRISE agencies could use when implementing solutions to integrate active work zone notifications into current Traveler Information dissemination systems*

* Prepared the draft Model Concept of Operations by documenting operational concepts from various stakeholder perspectives, scenarios, and roles and responsibilities.
* Held a project team webinar on November 14 to review the draft Model Concept of Operation document and collect comments. Currently conducting outreach to individuals representing arrow board manufacturers, RCRS vendors, and intelligent work zone vendors, to gather industry feedback on the Draft Model Con Ops.
* Gathered feedback and comments on the Draft Model Concept of Operations document from industry representatives and incorporated changes into the document. Began drafting the Model System Requirements.
* Project 27: Policies, Laws and Agreements for the Use of Fiber Communications

*Project Goal: To support preparing a summary of resources (policies, laws, agreements) on the use of fiber communications at transportation agencies and to highlight best practices for sharing fiber infrastructure.*

* Project completed.
* Project 28: Demonstrate and Evaluate Communications to Support Rural ITS – Phase 2

*Project Goal: Evaluate commercially available products for sending full motion video over cellular. Research practices for checking operability of rural field devices remotely.*

* Obtained final approval on the evaluation plan from the project champion, obtained additional data from Iowa DOT. Interviewed North Dakota and Iowa DOT TMC staff and ITS engineers. Started drafting the evaluation report.
* Completed the draft evaluation report for transferring video from remote traffic cameras and began research activities to investigate remote monitoring capabilities.
* Received feedback from TMC operators on evaluation report input. Developed approach and interview questions for research activities on remote monitoring capabilities.

**Anticipated work next quarter:**

Administrative/Management Support Task:

* Planned webinars: Feb. 09, 2017 and March 9, 2017.
* Finalize 2017 Work Plan.
* Tentative April 12-13, 2017 TAC April Meeting [In person; Denver, CO].

Technical Task:

* Continue to complete project tasks for the active [#26 & #28] work plan projects.

**Significant Results:**

Projects completed:

* Project 23: ITS at International Borders
* Project 24: Portable Travel Time Displays and ICM with Parallel Routes – Phase 1
* Project 25: The Future of DMS Messaging
* Project 27: Policies, Laws and Agreements for the Use of Fiber Communications

**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