**TRANSPORTATION POOLED FUND PROGRAM**

**QUARTERLY PROGRESS REPORT**

Lead Agency (FHWA or State DOT): Iowa Department of Transportation

**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 #**  SPR-3(042) | | **Transportation Pooled Fund Program - Report Period:**  □ Quarter 1 (January 1 – March 31)  □ Quarter 2 (April 1 – June 30)  X Quarter 3 (July 1 – September 30)  □ Quarter 4 (October 4 – December 31) | |
| **Project Title:** Aurora Program | | | |
| **Project Manager:** Chris Albrecht **Phone:** 515-294-7684 **E-mail:** calbrecht@iastate.edu | | | |
| **Project Investigator:** Neal Hawkins **Phone:** 515-294-7733 **E-mail:** hawkins@iastaste.edu | | | |
| **Lead Agency Project ID:** | **Other Project ID (i.e., contract #):** | | **Project Start Date:**  1996 - Ongoing Pooled Fund |
| **Original Project End Date:**  Ongoing Pooled Fund | **Current Project End Date:**  12/31/2012 | | **Number of Extensions:** |

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** |
| $292,887 | $149,158 | Ongoing Pooled Fund |

***Quarterly*** Project Statistics:

|  |  |  |
| --- | --- | --- |
| **Total Project Expenses**  **This Quarter** | **Total Amount of Funds**  **Expended This Quarter** | **Percentage of Work Completed**  **This Quarter** |
| $18,001 | N/A | Ongoing Pooled Fund |

**Project Description:**

The Aurora Program is a successful consortium of public agencies focused on collaborative research, evaluation, and deployment of advanced technologies for detailed road weather monitoring and forecasting. Members seek to implement advanced road weather information systems (RWIS) that fully integrate state-of-the-art roadway and weather forecasting technologies with coordinated, multi-agency weather monitoring infrastructures. Aurora’s projects are designed to improve the efficiency of highway maintenance and distribute effective information to travelers. These initiatives are expected to result in advancement and improvement of existing RWIS, significantly reducing the adverse impacts of inclement weather on mobility.

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

Program Administrative Activities (management):

* Developed meeting agendas for the September 2011 on-site board meeting, peer exchange activities, one web meeting, and two administrative calls.
* Coordinated development of two new FY2012 project ideas and several additional peer exchange research needs statements assigned to the Aurora pooled fund.
* Maintained the RWIS Knowledge Base website with input from Aurora and Clear Roads members and communicated regularly with Clear Roads support staff.
* Forwarded various emails and miscellaneous requests to board members.
* Updated the main program website with new content/materials and coordinated site re-design.

Facilitate Meetings and Conference Calls (management):

* Facilitated September 2011 on-site board meeting and peer exchange in Montana.
* Facilitated several ongoing project and FY2012 research proposal correspondences.
* Produced materials and presentations for the meetings and calls.
* Corresponded with other members of the TRB winter maintenance committee and reviewed TRB paper submissions.
* Drafted minutes for web meeting in July.

Processing Travel Requests, Travel Reimbursements, and Meeting Expenses (management):

* Coordinated travel and arrangements for the peer exchange in Montana with Lee Smithson and WTI staff, as well as for Aurora board member travel.
* Coordinated travel reimbursements for peer exchange and board meeting.

Project-Specific Activities (management):

* Participated in several project and peer exchange (Project 2011-01) planning committee calls.
* Updated project status reports and summarized them for the board meetings and pooled fund website quarterly report.
* Tracked project status with champions and team members through email updates and coordinated discussions with each research project team.
* Tracked and notified project teams of project timelines for research efforts (Project 2007-02, 2009-05, 2007-01, etc.).
* Distributed project materials for various projects.

Outreach and Membership (management):

* Continued coordination of arrangements with WTI for the peer exchange in Montana and corresponded with vendors concerning participation and sponsorship.
* Facilitated much of the operations at the peer exchange.
* Followed up with agencies concerning membership issues.
* Coordinated and wrote much of the July e-news and website launch.
* Updated the FOA mailing list with new members and created an e-news mailing list.

**Anticipated work next quarter:**

Program Administrative Activities:

* Develop meeting agendas.
* Complete FY2012 work plan.
* Maintain the RWIS Knowledge Base website.
* Distribute documents to board and individual project team members relating to specific Aurora projects.
* Updated the main program website with updated materials.

Facilitate Meetings and Conference Calls:

* Facilitate and document web meetings and project correspondence.
* Produced materials and presentations for the meetings and calls.

Processing Travel Requests, Travel Reimbursements, and Meeting Expenses:

* Continued coordination travel for upcoming meeting in Utah.

Project-Specific Activities:

* Updated project status reports.
* Tracked project status with champions and team members.
* Facilitate discussions with each research project team.
* Track project timelines and distribute project materials.

Outreach and Membership:

* Review membership status and contact SP&R representatives from members agencies.

**Significant Results:**

To date, 40 research projects have been completed by the Aurora Program. Progress has been made on several ongoing research efforts in the past quarter; including Project 2010-03: Development of Models for Standards, which is being done through a partnership with the University of Waterloo and Project 2011-01: 2011 Peer Exchange.

**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).**

A project status report detailing individual Aurora research efforts is available. These ongoing research projects are:

* 2000-01: Benchmarking of RWIS Forecasts ($50,000 in-kind) = 75% complete
* 2006-01: Support of the Clarus Initiative ($25,000) = 80% complete
* 2007-01: RWIS Equipment Monitoring System, Phase 2 ($135,000) = 5% complete
* 2007-04: Development of a Freezing Drizzle Algorithm ($85,000) = 70% complete
* 2007-05: Multiple-Use ITS Data Collection Sites ($15,000) = 15% complete
* 2008-01: National Road Weather Testing Program ($11,000) = 20% complete
* 2008-03: Next Generation RWIS for Canada ($75,000 in-kind)= 75% complete
* 2009-01: Evaluation and Inter-comparison of the Lufft R2S ($55,000) = 20% complete
* 2009-04: Road Weather Education Enhancements ($20,000) = 30% complete
* 2009-05: Further Development of PPAES ($83,000) = 30% complete
* 2010-01: Enhancements of AI/RWIS CBT ($50,000) = 25% complete
* 2010-02: Mobile-Weather Data Collection Guidelines ($25,000) = 10% complete
* 2010-03: Development of Models for Standards ($120,000) = 55% complete
* 2010-04: RWIS Sensor Density Grid ($100,000) = 5% complete
* 2010-05: Determining RPU and Sensor Failure ($5,000) = 5% complete
* 2011-02: RWIS Training Tool (200,000) = 5% complete
* 2011-03: Benefit/Costs and Instruction for Migrating to Open RWIS ($75,000) = 5% complete
* 2011-04: Study of MDSS Costs ($20,000) = 5% complete
* 2011-05: Funding Sources Identification ($5,000) = 5% complete