

## 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.*

<b>Transportation Pooled Fund Program Project #</b> SPR-3(042)	<b>Transportation Pooled Fund Program - Report Period:</b> <input type="checkbox"/> Quarter 1 (January 1 – March 31) <input type="checkbox"/> Quarter 2 (April 1 – June 30) <input type="checkbox"/> Quarter 3 (July 1 – September 30) <input checked="" type="checkbox"/> Quarter 4 (October 4 – December 31)	
<b>Project Title:</b> Aurora Program		
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<b>Lead Agency Project ID:</b>	<b>Other Project ID (i.e., contract #):</b>	<b>Project Start Date:</b> 1996 - Ongoing Pooled Fund
<b>Original Project End Date:</b> Ongoing Pooled Fund	<b>Current Project End Date:</b> 12/31/2012	<b>Number of Extensions:</b>

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	\$167,342.18	Ongoing Pooled Fund

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$18,632.49	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:

- Coordinated final development of twelve FY2012 project proposals currently being evaluated by the executive board. Several of the proposals were developed from 2011 peer exchange research needs statements assigned to the Aurora pooled fund.
- Maintained and updated the RWIS Knowledge Base website with input from both Aurora and Clear Roads members and support staff.
- Developed meeting agendas for the March 2012 on-site board meeting to be held jointly with Clear Roads, two web meetings, one administrative call, and one project call.
- Forwarded various emails and miscellaneous requests to board members.
- Coordinated with Lee Smithson concerning the report summarizing the 2011 peer exchange.
- Updated the main program website with new content and project materials.

### Facilitate Meetings and Conference Calls:

- Coordinated planning of March 2012 on-site board meeting with Clear Roads support staff and board members.
- Facilitated several ongoing project and FY2012 research proposal correspondences and conference calls.
- Produced numerous materials and presentations for the meetings and calls.
- Corresponded with other members of the TRB winter maintenance committee and scheduled presentations for both the TRB Committee on Winter Maintenance (AHD65) and Committee on Surface Transportation Weather (AH010) in January 2012.
- Drafted minutes for web meeting in November, administrative calls in August and December, project call in December, and on-site meeting in September.

### Processing Travel Requests, Travel Reimbursements, and Meeting Expenses:

- Coordinated reimbursements for the peer exchange in Montana with Lee Smithson and WTI staff, as well as Aurora board member travel reimbursements.
- Coordinated final accounting for the peer exchange in Montana and coordinated payment of meeting expenses with Clear Roads and Minnesota DOT.

### Project-Specific Activities:

- Updated project status reports and summarized them for the board meetings and pooled fund website quarterly report.
- Participated in project planning committee calls and communicated often with project teams.
- Coordinated editorial reviews of several project documents.
- Tracked project status with champions and teams through email updates and coordinated discussions.
- Distributed project materials for various projects.

### Outreach and Membership:

- Coordinated preparation of the upcoming January e-news.
- Followed up with several agencies concerning membership issues.

## **Anticipated work next quarter:**

### Program Administrative Activities:

- Facilitate March 2012 on-site meeting in Utah.
- Complete FY2012 work plan with selected projects.
- Develop additional meeting and call agendas.
- Updated the main program website and maintained the RWIS Knowledge Base website.
- Distribute specific Aurora project documents to board and individual project team members.

### Facilitate Meetings and Conference Calls:

- Facilitate and document web meetings and project correspondence.
- Produce numerous materials and presentations for the on-site meeting and calls.
- Produce Aurora presentation for TRB spring meeting.

### Processing Travel Requests, Travel Reimbursements, and Meeting Expenses:

- Coordination of travel reimbursements for March 2012 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 member agencies.

## **Significant Results:**

To date, 42 research projects have been completed by the program. Very good progress has been made on several ongoing research efforts in the past quarter; including Project 2000-01: Benchmarking of RWIS Forecasts, which is essentially complete, and Project 2010-01: Enhancements of the AI/RWIS CBT.

## **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) = 95% complete
- 2007-01: RWIS Equipment Monitoring System, Phase 2 (\$135,000) = 5% complete
- 2007-04: Development of a Freezing Drizzle Algorithm (\$85,000) = 90% 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: MDSS Demonstration in 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) = 50% complete
- 2010-01: Enhancements of AI/RWIS CBT (\$50,000) = 60% complete
- 2010-02: Mobile-Weather Data Collection Guidelines (\$25,000) = 10% complete
- 2010-03: Development of Models for Standards (\$120,000) = 65% complete
- 2010-04: RWIS Sensor Density Grid (\$100,000) = 5% complete
- 2010-05: Determining RPU and Sensor Failure (\$5,000) = 10% complete
- 2011-01: Third Peer Exchange (\$30,000) = 95% complete
- 2011-02: RWIS Training Tool (200,000) = 10% 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