# TRANSPORTATION POOLED FUND PROGRAM
# QUARTERLY PROGRESS REPORT

Lead Agency (FHWA or State DOT): <u>Iowa Department of Transportation</u>

**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 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 # <br> SPR-3(042) | Transportation Pooled Fund Program - Report Period: <br> X Quarter 1 (January 1 – March 31, 2013) <br>    Quarter 2 (April 1 – June 30, 2013) <br>    Quarter 3 (July 1 – September 30, 2013) <br>    Quarter 4 (October 4 – December 31, 2013) |
|---|---|
| **Project Title:** Aurora Program | |

| **Project Manager:** Chris Albrecht | **Phone:** 515-294-7684 | **E-mail:** calbrecht@iastate.edu |
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| **Lead Agency Project ID:** | **Other Project ID (i.e., contract #):** | **Project Start Date:** <br> 1996 - Ongoing Pooled Fund |
|---|---|---|
| **Original Project End Date:** <br> Ongoing Pooled Fund | **Current Project End Date:** <br> Ongoing | **Number of Extensions:** |

Project schedule status:

X 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 |
|---|---|---|
| $4,109,826 | $4,053,877 <br> (project allocations reduced) | Ongoing Pooled Fund |

*Quarterly* Project Statistics:

| Total Project Expenses <br> This Quarter | Total Amount of Funds <br> Expended This Quarter | Percentage of Work Completed <br> This Quarter |
|---|---|---|
| $15,877 | N/A | Ongoing Pooled Fund |

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**Project Description:**

The Aurora Program is a 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, significantly reducing the adverse impacts of inclement weather.

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

Program Administrative Activities:
- Worked out further details of program financial records, both income and expenditures from several years, with Iowa DOT staff.
- Coordinated Aurora's participation in and contribution to the upcoming 2013 national winter maintenance peer exchange in September.
- Forwarded and responded to various emails and miscellaneous requests to board members, FHWA, and other interests.
- Maintained and updated the RWIS Knowledge Base website and the program website.

Facilitate Meetings and Conference Calls:
- Facilitated ongoing project updates, tracked progress on project schedules, and facilitated correspondences.
- Scheduled activities for the April 2013 on-site board meeting in Virginia.
- Drafted minutes for administrative, project-specific, and board calls.

Processing Travel Requests, Travel Reimbursements, and Meeting Expenses:
- Coordinated travel for the Virginia meeting, including airfare and hotel rooms.
- Set up contract and coordinated detailed arrangements with hotel in Virginia.

Project-Specific Activities:
- Updated several project status reports and summarized them for the board meetings and pooled fund website quarterly report.
- Communicated with project teams concerning project schedules, deadlines, and progress.
- Distributed various project materials for ongoing projects.

Outreach and Membership:
- Published and advertised January e-news.
- Coordinated participation of Friends of Aurora meeting in Virginia.

**Anticipated work next quarter:**

Program Administrative Activities:
- Develop meeting and call agendas for May, June, and August web meetings
- Facilitate administrative and project calls as needed.
- Update the main program website and maintain the RWIS Knowledge Base website.
- Distribute specific Aurora project documents to board and individual project team members.
- Continue to rectify financial information with Iowa DOT.

Facilitate Meetings and Conference Calls:
- Facilitate the on-site meeting in Virginia and plan for September meeting in Washington.
- Facilitate and document web meetings.
- Facilitate project correspondence and status reports.
- Produce materials and presentations for the on-site meeting and calls.

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<u>Processing Travel Requests, Travel Reimbursements, and Meeting Expenses:</u>
- Coordinate reimbursements for spring 2013 meeting and Friends of Aurora event in Virginia.
- Coordinate and book travel arrangements for September meeting.

<u>Project-Specific Activities:</u>
- Update project status reports.
- Track project status with champions and team members, with goal to complete several by end of fiscal year.
- Facilitate discussions with each research project team.
- Track project timelines and distribute project materials.

<u>Outreach and Membership:</u>
- Review membership status and contact SP&R representatives from member agencies.
- Draft July 2013 e-news content.

**Significant Results:**

To date, 46 research projects have been completed. Good progress has been made on several on-going research efforts in the past quarter. All ongoing projects will also be reviewed to maintain funding during the Virginia meeting.

**Circumstance affecting project or budget:**

A project status report detailing individual Aurora research efforts is available. These ongoing research projects are:
- 2007-01: RWIS Equipment Monitoring System, Phase 2 ($135,000) = discontinued
- 2007-04: Development of a Freezing Drizzle Algorithm ($85,000) = completed
- 2007-05: Multiple-Use ITS Data Collection Sites ($15,000) = 25% complete
- 2008-01: National Road Weather Testing Program ($5,000) = 70% complete
- 2008-03: MDSS Demonstration in Ontario ($25,000 in-kind) = 95% complete
- 2009-01: Summary and Comparison of Sensors ($5,000) = 85% complete
- 2009-04: Road Weather Education Enhancements ($20,000) = complete
- 2009-05: Further Development of PPAES ($83,000) = 95% complete
- 2010-01: Enhancements of AI/RWIS CBT ($50,000) = completed
- 2010-02: Mobile-Weather Data Collection Guidelines ($5,000) = 50% complete
- 2010-03: Development of Models for Standards ($120,000) = 90% complete
- 2010-04: RWIS Sensor Density Grid ($100,000) = 35% complete
- 2010-05: Determining RPU and Sensor Failure ($5,000) = 15% complete
- 2011-02: RWIS Training Tool ($265,000) = 10% complete
- 2011-03: Instruction for Migrating to Open RWIS ($5,000) = 80% complete
- 2011-04: Study of MDSS Costs ($5,000) = 40% complete
- 2011-05: Funding Sources Identification ($5,000) = 10% complete
- 2012-01: Validate Accuracy of Pavement Predictions ($100,000) = 5% complete
- 2012-02: Winter Severity Index, Phase 2 ($5,000) = 45% complete
- 2012-03: Cameras and Operational Impacts of Remote Conditions ($20,000) = 10% complete
- 2012-04: Communicating and Publicizing Info ($30,000) = 5% complete
- 2012-05: Seasonal Weight Restrictions Demo ($250,000) = 5% complete
- 2013-01: Fourth Peer Exchange ($35,000 pending available funds) = 15% complete
- 2013-02: Transition of Clarus to MADIS ($5,000 pending available funds) = 5% complete
- 2013-03: Improving Estimations of Real-Time Traffic Speeds for Winter Performance Measurement ($130,000 pending available funds) = 5% complete
- 2013-04: Quantifying Salt Concentration ($150,000 pending available funds) = 10% complete
- 2013-05: Knowledge Base Management/Marketing ($10,000 pending available funds) = 5% complete
- 2013-06: Make Winter Severity Index Available to All ($30,000 pending available funds) = 5% complete

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