

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 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 # TPF-5 (435)		Transportation Pooled Fund Program - Report Period: Quarter 1 (January 1 – March 31, 2020) Quarter 2 (April 1 – June 30, 2020) X Quarter 3 (July 1 – September 30, 2020) Quarter 4 (October 1 – December 31, 2020)	
Project Title: Aurora Program			
Project Manager: Tina Greenfield		Phone: 515-233-7746	E-mail: tina.greenfield@dot.iowa.gov
Project Investigator: Zach Hans		Phone: 515-294-8103	E-mail: zhans@iastate.edu
Lead Agency Project ID:	Other Project ID (i.e., contract #): Addendum 731	Project Start Date: January 1, 2020	
Original Project End Date: December 31, 2020	Current Project End Date:	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
\$159,019	\$53,613	

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$16,930	N/A	

Project Description:

The Aurora Program is a consortium of public agencies focused on collaborative research, evaluation, and deployment of 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; ultimately lessening adverse impacts of inclement weather.

Progress this Quarter (includes meetings, work plan status, contract status, significant progress, etc.). These efforts are identified below.

Program Administrative Activities:

- Coordinated with states regarding new (or interim) Board representatives.
- Managed Aurora email list. In some cases, states requested multiple individuals be included in Aurora-related correspondence.
- Continued tracking state commitments.
- Facilitated discussions via auroraboard@iastate.edu. Including.
- Provided program management in terms of projects and program budgets.
- Participated in planning call (July 10) for the 2020 International Road Weather and Winter Maintenance Conference.
- Prepared presentations about Aurora for members to discuss at the following meetings.
 - SICOP
 - FHWA Road Weather Stakeholder Meeting
- Updated Aurora website content.
- Addressed question regarding Aurora website access.
- At the request of Ontario Ministry of Transportation, held a meeting to provide an overview of Aurora with appropriate Ministry staff.
- Provided list of funded projects for use in budget tracking.
- Coordinated with Iowa and Illinois DOTs regarding update of Illinois' Aurora representative.
- Addressed Board member request for confirmation of the validity of a TPF-related email.
- Shared information about a VirtualRWIS 2020 pilot by Connect Management, LLC. They had presented to the Board in June 2020.

Facilitate Meetings and Conference Calls:

- Scheduled virtual Fall 2020 meeting to be held on the following dates. The first three dates will focus on "round robin" discussions.
 - October 8
 - October 13
 - October 14
 - November 12
- Hosted Board member 60-Minute monthly conference calls on the following dates.
 - July 9, including Björn Zachrisson of Nira Dynamics, speaking about "Crowdsourcing Winter Road Conditions". An invitation to "Floating car data in practice - Real time winter road surface monitoring" webinar was later shared with the Board.
 - August 13, including Patrick Baglien of Frost Control Systems, Inc. on "Battery Powered RWIS". The presentation was later distributed to the Board.
 - September 10.
- Coordinated with TRB, Clear Roads and SICOP regarding "2020 International Road Weather and Winter Maintenance Conference & Peer Exchange". This included participation in related conference calls.

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Processing Travel Requests, Travel Reimbursements, and Meeting Expenses:

- None this quarter.

Project-Specific Activities:

- 2020-02 "Roadway Ice/snow Detection using a Novel Infrared Thermography Technology".
 - Added Cody Oppermann to project team.
 - Requested quarterly reports.
- 2020-03 Roadway Friction Modeling: Improving the Use of Friction Measurements in State DOTs
 - Contract was signed by Montana State, pending with NCAR.
- Reviewed literature germane to approved "Using Connected Vehicle Technology to Improve Network-wide RWIS Coverage".
- Tracked project status.

Anticipated work next quarter:

Program Administrative Activities:

- Continue Aurora website updates.
- Follow up with Ontario regarding membership.
- Manage budget.
- Track new solicitation contributions.
- Update the Aurora Charter, Work Plan and Associate Members.

Facilitate Meetings and Conference Calls:

- Continue monthly Board meeting calls to generate research ideas, discuss important issues and have vendor presentations.
- Hold Fall 2020 virtual meeting.

Processing Travel Requests, Travel Reimbursements, and Meeting Expenses:

- None anticipated next quarter.

Project-Specific Activities:

- Hold task for meeting (October 14) to refine scope of "Using Connected Vehicle Technology to Improve Network-wide RWIS Coverage".
- Hold project kick-off meeting for "Roadway Friction Modeling: Improving the Use of Friction Measurements in State DOTs"
- Track project status and timelines.
- Request quarterly reports from research teams.
- Distribute project materials/updates and invoices (for approval) to project teams.
- Schedule and host project meetings.
- Maintain list of project champions and team members.

Significant Results:

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- Continued monthly Board meeting calls, including presentations from outside vendors.
- Initiated projects.
 - “Roadway Friction Modeling: Improving the Use of Friction Measurements in State DOTs”
- Communicated with new Aurora representatives.
- Planned Fall virtual meeting.

Circumstance affecting project or budget:

- Since the Spring meeting was virtual (although flights had been purchased), and the Fall meeting will be virtual, the Aurora travel budget for FY2020 will be largely unspent. Possible use of the budgeted funds will be investigated and discussed with the Board.