

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: x Quarter 1 (January 1 – March 31, 2021) Quarter 2 (April 1 – June 30, 2021) Quarter 3 (July 1 – September 30, 2021) Quarter 4 (October 4 – December 31, 2021)	
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, 2021	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
\$850,000	\$111,695.10	

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$46,211.53	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:

- Extended current 2020 support contract with additional funds for support but no additional travel budget.
- Coordinated with states regarding new (or interim) Board representatives. i.e. Matt Murphy (Alaska).
- 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.
- Provided program management in terms of projects and program budgets.
- Prepared presentation about Aurora activities for two TRB 2021 committees. Presented at one meeting, while Tina Greenfield presented at the other.
- Shared project idea template with Wisconsin.
- Updated Aurora website content.
- Upon request, shared information with Utah DOT Director of Maintenance & Facility Management, including details about 2020-02 "Roadway Ice/snow Detection using a Novel Infrared Thermography Technology".
- Assimilated and distributed new project idea statements.
- Participated in Clear Roads 20-07 AWSSI, Phase 2 - Kickoff Meeting on February 16, 2021.
- Provided input to question regarding example scope of work for equipment testing/comparison.
- Addressed request from FHWA regarding any Aurora projects that have addressed Fixed Automated Spray Technology (FAST).
- Addressed question from AASHTO SICOP regarding the possible timing of the next peer exchange.
- Coordinated regarding future eNews, including timing and content.
- Coordinated interview with Aurora Board member Kevin DUBY (Arizona) for April 4, 2021.
- Coordinated with Iowa DOT SPR Engineer regarding Aurora project contracting options.
- Addressed question regarding Virginia's current Aurora commitment level.
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Facilitate Meetings and Conference Calls:

- Scheduled 2021 Aurora Spring Meeting, May 11-13 from 1:00 to 3:00 (central) each day.
- Facilitated or participated in all project-related meetings.
- Held meeting (March 24, 2021) with Aurora Board executive group regarding possible solicitation of project ideas.
- Hosted Board member 60-Minute monthly conference calls on the following dates.
 - January 14, 2021
 - Possible White Paper, Research Ideas
 - Open Solicitation of Ideas & Topic Areas
 - Project Updates
 - February 11, 2021

- Submitted Research Ideas
- Mini Round Robin
- Project Update Presentation: Optimal RWIS Sensor Density and Location - Phase 3. Presentation material was shared with the Board after the meeting.
- March 11, 2021
 - Peer Exchange
 - Spring Meeting
 - Project Updates
 - Submitted Research Ideas
 - Topics of Interest
 - Open Solicitation
 - Demonstration: 2018-01 RWIS LCCA Tool Demonstration

Processing Travel Requests, Travel Reimbursements, and Meeting Expenses:

- None this quarter.

Project-Specific Activities:

- Tracked project status and prepared a summary for recently completed and active projects.
- Distributed quarterly reports and invoices for project team approval.
- 2020-02 "Roadway Ice/snow Detection using a Novel Infrared Thermography Technology".
 - Distributed quarterly report to project team.
 - Scheduled project update presentation for May 2021.
- 2020-03 Roadway Friction Modeling
 - Task 2 review meeting was held on January 12.
 - Facilitated sharing of some sensors in support of the project.
 - Participated in review of project-related materials and solicitation of information from Board members.
 - Participated in meeting (February 26, 2021) pertaining to testing options, due to some limitations of planned facilities.

Anticipated work next quarter:

Program Administrative Activities:

- Continue Aurora website updates.
- Manage budget.
- Track new solicitation contributions.
- Update the Aurora Charter, Work Plan and Associate Members.
- Distribute, vote on, prioritize and select new project ideas (during Spring meeting).
- Obtain project scopes and/or release RFPs.

Facilitate Meetings and Conference Calls:

- Continue monthly Board meeting calls to generate research ideas, discuss important issues and have vendor presentations.
- Hold Spring 2021 virtual meeting

Processing Travel Requests, Travel Reimbursements, and Meeting Expenses:

- None anticipated next quarter as the meetings in the near future will be virtual.

Project-Specific Activities:

- Hold project 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.
- 2020-02 “Roadway Ice/snow Detection using a Novel Infrared Thermography Technology”.
 - Have project update presentation.
- 2020-03 Roadway Friction Modeling
 - Facilitate project activities as needed.
- Initiate "Using Connected Vehicle Technology to Improve Network-wide RWIS Coverage" Task “Roadway Friction Modeling: Improving the Use of Friction Measurements in State DOTs”.

Significant Results:

- Continued monthly Board meeting calls.
- Communicated with new Aurora representatives.
- Obtained and distributed project ideas.
- Initiated new (trial) project idea solicitation process.
- Held several project-related meetings.

Circumstance affecting project or budget: