

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(290)		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: RT 0034	Other Project ID (i.e., contract #): Addendum 156	Project Start Date: January 1, 2013	
Original Project End Date: May 31, 2019	Current Project End Date: – May 31, 20 <u>19</u> 21	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
\$2,250,000	\$1,909,646.10	

Quarterly Project Statistics:

Total Project Expenses This Quarter	Total Amount of Funds Expended This Quarter	Percentage of Work Completed This Quarter
\$853,925.85	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:

- Provided program management in terms of projects and program budgets.
- Updated website content.
- Coordinate on no cost extension of administration contract until July 31, 2022.

Facilitate Meetings and Conference Calls:

- Project-related meetings are noted in “Project-Specific Activities”

Processing Travel Requests, Travel Reimbursements, and Meeting Expenses:

- N/A

Project-Specific Activities:

- 2020-03 “Ongoing Issues with Winter Weather Severity Indices”
 - Assisted in necessary aspects of forming the working group.
 - Coordinated with Board regarding draft white paper.
 - Edited and published white paper.
 - Upon request, directly contacted Vermont and Nebraska when the white paper was published.
 - Shared final report template.
 - Obtained final report that will be shared only among Aurora Board members and working group participants.
- 2020-01 “Impacts of Atmospheric Rivers in the Transportation Sector”
 - Shared potentially pertinent reference material provided by former Board member from Alaska.
 - Held project meeting on January 29, 2021.
 - Coordinated with Board regarding draft final report.
 - Received final report.
- 2014-01 “Demonstration and Inter-comparison of Seasonal Weight Restriction Models, Phase 2”
 - Requested that minor updates be made to the published final report and tech transfer document.
- 2019-01 Optimal RWIS Sensor Density and Location – Phase 3
 - Coordinated with research team regarding possible timing of final project meeting.
 - Responded to inquiry regarding progress report feedback.
- 2018-02 “Invasive and Non-Invasive Sensing: Assessing Agreement between Measurement Systems”
 - Coordinated with states regarding non-sensor installation status and data acquisition, including Delaware.
 - Shared information about StaRWIS sensor mounting with the Board.
 - Coordinated with Iowa DOT SPR Engineer regarding possible project extension due to installation issues; several of which were related to COVID. An extension was granted by FHWA. A no cost extension was processed until June 30, 2022.
- 2018-01b “RWIS LCCA Tool”

- Reached out to Minnesota DOT regarding possible acquisition of data for use in the tool. Unfortunately, they were unable to provide data. Therefore, AECOM used representative data from their prior effort.
- Participated in demonstration meeting and provided feedback during February 17, 2021 meeting.
- Coordinated with Iowa DOT SPR Engineer regarding necessary project deliverables.
- Provided images for use within the tool.
- Facilitated tool demonstration during March 11, 2021 Aurora meeting.
- Addressed Board member question regarding access to tool.
- Provided feedback on tech transfer document.
- Obtained updated tool.
- Obtained final tool and demonstration video.
- 2011-02 “RWIS Training Tool”
 - Begin addressing request to change the domain name, due to ITERIS having been obtained DTN.
 - Continued work associated with assuming control and management of the tool (<http://aurorabase.iteris.com/login/?destination=/>), including monthly billing.
- 2016-03 RWIS Sensor Density and Location, Phase 2
 - Provided feedback on tech transfer document.
 - Tracked project status and prepared a summary for recently completed and active projects.
 - Distributed quarterly reports and invoices for project team approval.

Anticipated work next quarter:

Program Administrative Activities:

- Manage budget.

Facilitate Meetings and Conference Calls:

- Facilitate project correspondence, meetings and status reports regarding active 290 projects.

Processing Travel Requests, Travel Reimbursements, and Meeting Expenses:

- N/A

Project-Specific Activities:

- 2018-02 “Invasive and Non-Invasive Sensing: Assessing Agreement between Measurement Systems”
 - Continue coordination with states regarding non-sensor installation status and data acquisition.
- 2020-01 “Impacts of Atmospheric Rivers in the Transportation Sector”
 - Edit and publish final report.
 - Have final project presentation.
- 2019-01 Optimal RWIS Sensor Density and Location – Phase 3
 - Obtain, edit and publish final report.
 - Have final project presentation.
- Facilitate project correspondence, meetings and status reports regarding active 290 projects.

Significant Results:

- 2020-03 “Ongoing Issues with Winter Weather Severity Indices” white paper and final report.
- 2014-01 “Demonstration and Inter-comparison of Seasonal Weight Restriction Models, Phase 2” updated final report and tech transfer document.

- 2018-02 “Invasive and Non-Invasive Sensing: Assessing Agreement between Measurement Systems” project extension.
- 2018-01b “RWIS LCCA Tool” final tool, demonstration video and tech transfer document.
- 2011-02 “RWIS Training Tool” continued support.
- 2016-03 “RWIS Sensor Density and Location, Phase 2” tech transfer document.

Circumstance affecting project or budget: A no cost extension was necessary to support 2018-02 “Invasive and Non-Invasive Sensing: Assessing Agreement between Measurement Systems” due to sensor installation delays.