

Aurora Program

minutes

Aurora Board Meeting December 3, 2009 – Web Meeting/Conference Call

Individuals Participating:

Bill Hoffman, Nevada DOT
Tina Greenfield, Iowa DOT
Mike Adams, Wisconsin DOT
Max Perchanok, Ontario MOT
Dawn Gustafson, Michigan DOT
Mike Kisse, North Dakota DOT
Jack Stickel, Alaska DOT&PF
Kirk Carpenter, Indiana DOT
Curt Pape, Minnesota DOT
Dean Kernan, Illinois DOT
Joe Doherty, New York State DOT
Jason Norville, Pennsylvania DOT
Sheldon Drobot, NCAR
Lee Smithson, SICOP
Chris Albrecht, Iowa State University
Jen Serra, Iowa State University

Meeting Agenda:

- 1) Call to Order (Bill Hoffman)
- 2) Program Management Agreement (Tina Greenfield and Chris Albrecht)
- 3) Financials and Membership Status (Chris Albrecht)
- 4) Aurora Program Coordination with Clear Roads (Chris Albrecht)
- 5) Aurora Participation at SIRWEC (Chris Albrecht)
- 6) 2009-2010 Project Selection (Chris Albrecht and Jen Serra)
- 7) Project Status Reports (Champions)
- 8) Other Business (All)

1. Call to Order

Bill Hoffman called the meeting to order.

2. Program Management Agreement

Chris Albrecht and Tina Greenfield gave a summary of the new management contract in development. Minor adjustments and additions were being finalized, Tina noted.

3. Financials and Membership Status

Chris Albrecht reviewed a spreadsheet of program finances that displayed a breakdown as to where each member state stood on payments for current and previous fiscal years. It was noted that Utah DOT would not be a contributing member for this next year. With this factored in, it was estimated that the group had approximately \$290,000 to work with when funding the proposed project candidates for FY2010, Chris summarized.

4. Aurora Coordination with Clear Roads

Max Perchanok would be making arrangements to attend the next Clear Roads meeting in January in Olympia, Washington. In addition, Jack Stickel noted that the team for 2009-03 planned to have a concept of operations ready for Max to present to them for input, since this project would be of benefit to both groups.

5. Aurora Participation at SIRWEC

After a brief discussion, the group agreed to fund Curt Pape's expenses to SIRWEC. It was mentioned that Sheldon Drobot, Max Perchanok, Lee Smithson and Bill Hoffman would also be attending funded through other sources. Attendance to this event will present a good opportunity for outreach to European countries that might be interested in membership or collaboration with Aurora, Lee Smithson noted.

6. 2009-2010 Project Selection

Chris reviewed the project candidates for FY2010. After compiling the group's votes and a lengthy discussion by the board concerning project funding levels, the following projects were selected for FY2010 funding:

- *Candidate I: Enhance A/I RWIS CBT for \$50,000*
- *Candidate O: Mobile-Weather Data Collection Guidelines for \$25,000*
- *Candidate C: Co-funding of Research on Winter Road Maintenance for \$120,000*
- *Candidate D: RWIS Density Grid Study/ESS Density Optimization for \$100,000*
- *Candidate R: Determine RPU and Sensor Failure for \$5,000*

Chris noted that, based on the board discussions, the following three project candidates would be included in the research for Candidate C:

- *Candidate A: Inter-comparison of fixed and mobile road condition monitoring systems*
- *Candidate B: Development of a real time anti-icing scheduling model for MDSS*
- *Candidate G: The Use Speed Data as a Measure of Winter Maintenance Performance*

Finally, the remaining project candidates will be brought up again for consideration at the spring meeting when 2011 project ideas are presented, Chris noted.

7. Project Status Reports

The project champions then gave a brief review on the status of ongoing Aurora research projects. Details of the reports are as follows:

Project 2000-01 – Benchmarking the Performance of RWIS Forecasts: Max Perchanok reviewed this project. At this point, a literature review was about 50% complete, he noted. The team was in the process of accessing MTO’s RWIS archive to create a test case before requesting data from other agencies, he added.

Project 2000-05 – RWIS Leverage Opportunities: No report was provided.

Project 2003-04 – Intelligent Image-Based Winter Road Condition Sensor - Phase III: No report was provided.

Project 2004-04 – Winter Weather Severity Index Enhancements: Tina Greenfield stated that AccuWeather would not be adding the SHRP index and the breakdown of the six components they had used to create their index as the team had hoped. They did propose to waive Aurora’s annual fee of \$5,200 for the first two years in an attempt to compensate for this, she added. A discussion followed, wherein the board decided to let the project team decide the next course of action.

Project 2005-01 – Development of a RWIS Quality Assurance Monitoring System: Jack Stickel reviewed this project, noting that the project team needed to discuss what the user needs for this effort would be. He noted that a call would be set up for the week of December 14-18.

Project 2005-02 – RWIS Telecommunications Issues and Options: Chris Albrecht reviewed project progress. A few contacts were still not responding, he noted, so alternative contacts were being investigated.

Project 2005-06 – New Road Surface Condition Sensor: No report was provided.

Project 2006-01 – Support of the *Clarus* Initiative: Tina Greenfield noted that Clarus would be having a webinar in February, wherein opportunities may be presented that would be of interest to the Aurora Program. She noted that she would send out more information closer to the time of the webinar.

Project 2006-04 – Evaluation of Vaisala Spectro Pavement Sensor: Mike Adams noted that an updated version of the final report was now available on the website. An email would be sent out for voting purposes prior to the next meeting, he added.

Project 2006-05 – Technology Transfer of Alternative Inexpensive RWIS: Jack Stickel reviewed this project, noting that a call would be set up for the week of December 14-18.

Project 2006-08 – Low Cost Mobile RWIS: Lee Smithson noted that he, Bill, Max, and Curt hoped to meet with Claude Lapointe to clarify where things stood on this project as well as getting an update on his current research when the members of Aurora were in Quebec for SIRWEC.

Project 2007-01 – RWIS Equipment Monitoring System – Phase II: Jack Stickel reviewed this project, noting that a call would be set up for the week of December 14-18.

Project 2007-02 – Cold Weather Testing of the Halliday Road Grip Unit: Ohio DOT has yet to receive a final report on this project, Chris noted. He also noted that Jeff Tilley had emailed the team to say that illness in combination with added work related to his teaching had contributed to the delay.

Project 2007-03 – Incorporation of MDSS into Winter Weather Forecasting- Phase I: Tina Greenfield had little new to share on the project and the team discussed contacting Ralph Patterson for further detail. Chris noted that he would contact Ralph.

Project 2007-04 – Development and Demonstration of a Freezing Drizzle Algorithm for ESS: Max Perchanok noted that he planned to set up a call with Jeff Tilley to discuss the agreement that they had arranged at the September meeting. Deliverables were not sent to him as agreed, Max added.

Project 2007-05 – Multiple-Use ITS Data Collection Sites: After a short review of the project purpose, Jack Stickel and Dawn Gustafson planned to coordinate a call to discuss contacting representatives from the sensor companies.

Project 2008-01 – Development of a National Road Weather Testing Program: Tina Greenfield reviewed the latest with this effort, noting that the team planned a call to re-evaluate the project scope. This would be done before the Clear Roads meeting in January, she added.

Project 2008-02 – Evaluation of Utah DOT’s Weather Operations/RWIS Program: No report was provided.

Project 2008-03 – Next Generation RWIS for Canada: No report was provided.

Project 2009-01 – Evaluation and Inter-comparison of the Lufft R2S Sensor: The project was still on hold waiting for Curt Pape’s experiences, Chris noted, but the team planned a project call in the very near future.

Project 2009-02 – Road Weather Information Outreach/Second Peer Exchange: Concerning the second peer exchange, Tina Greenfield noted that WTI would have the report ready and posted soon.

Project 2009-03 – Knowledge Base for RWIS Programs and Environmental Data Loggers: Jack Stickel noted that he team had recently had a project call and was working on determining needs their users will have when navigating this site. Jack had sent out an email with a draft concept of operations to build from, he added.

Project 2009-04 – Road Weather Education Enhancements and Dissemination: Mike Adams noted that the Wisconsin DOT library had the results from their survey, and the project team would plan a call at the soonest available time.

Project 2009-05 – Further Development of PPAES: The Iowa DOT had to make some adjustments in the formatting of the contract with UND, Tina noted. These changes had been made and the contract was with UND for review, she added.

Project 2009-06 – Salinity Sensor Improvements and Development: No report was provided.

Project 2009-07 – Review of Friction Detection Technologies: No report was provided.

8. Other Business

The board briefly discussed future meeting dates and times. As a result of the discussion, a board call/web meeting was scheduled for February 18, 2010 at 1:00 p.m. (CST) and an on-site meeting was to be held the week of April 12-16, 2010 in Salt Lake City, Utah. Chris Albrecht also noted that an administrative call would be arranged for January.