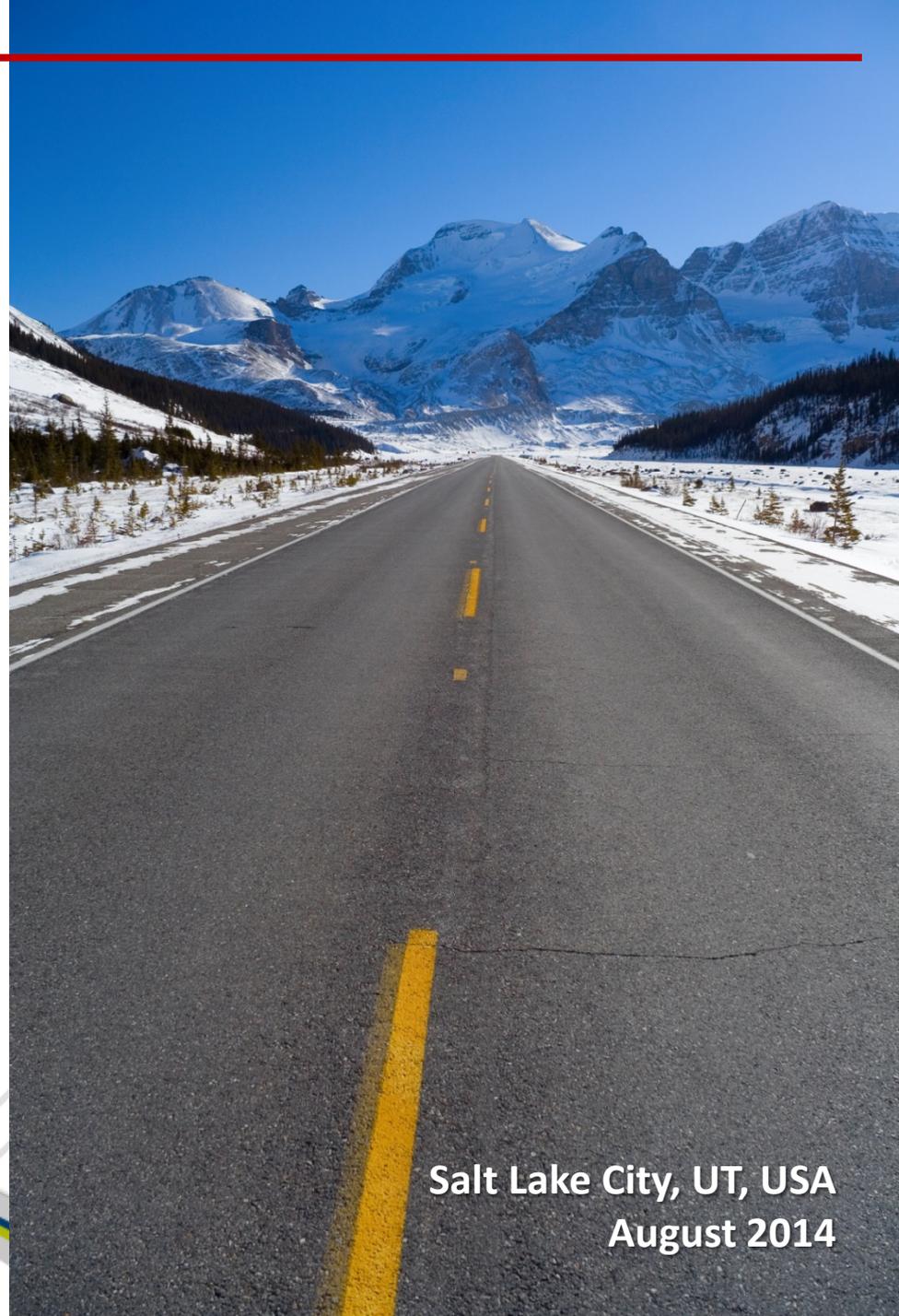

2014 Road Weather Management Stakeholder Meeting





**working to advance road weather
information systems technology**

Aurora is an international partnership of public agencies who work together to perform collaborative **research activities, **development**, **advocacy**, and **deployment** in the area of road weather information systems (RWIS).**



Active Participants

- *Iowa DOT*
- *Ontario MOT*
- *Alaska DOT&PF*
- *Ohio DOT*
- *Pennsylvania DOT*
- *North Dakota DOT*
- *Utah DOT*
- *California DOT*
- *Colorado DOT*
- *Virginia DOT*
- *Minnesota DOT*
- *Wisconsin DOT*
- *New York DOT*
- *Illinois DOT*
- *Michigan DOT*
- *Kansas DOT*



working to advance road weather
information systems technology

Affiliates/Partners

- National Center for Atmospheric Research (NCAR)
- Meteorological Service of Canada
- Montana State University
- Swedish Meteorological and Hydrological Institute
- Penn State University
- University of North Dakota
- University of Minnesota
- University of Wisconsin – Madison
- University of Wisconsin – Milwaukee
- Purdue University
- Massachusetts Institute of Technology
- Iowa State University
- Ohio University
- University of Waterloo
- University of Utah



Aurora

WORKING TO ADVANCE ROAD WEATHER
INFORMATION SYSTEMS TECHNOLOGY

[Home](#) [About](#) [Projects](#) [News](#) [Participate](#) [Resources](#) [For Members](#)

[Knowledge Base](#)



Upcoming Events

Aurora Board Web Meeting - Thursday,
December 6, 2012 at 10:00am (CST)

Transportation Research Board Annual Meeting - January 13-17, 2013 in Washington, DC

Aurora Board On-Site Meeting - April 2-4, 2013 in Virginia (tentative)

Who We Are

Aurora is an international partnership of public road agencies working together to perform joint road weather-related research. This site is designed to introduce the program, its partners, and its research.

Why Join Aurora?

- to set the agenda for collaborative research, development, and deployment of road weather information systems (RWIS).
- to multiply your agency's financial resources to address its most pressing RWIS-related challenges.
- to develop relationships with national and international, public and private leaders in RWIS equipment, decision support systems, standards, and training.

Aurora Features



January 2013 eNews Available!
The latest eNews is available with future goals, new research, and a welcome to the Kansas DOT, Aurora's newest member.



Video Guide to Testing Deicing Chemicals
Clear Roads has released a field guide video on testing deicing chemicals.



Knowledge Base Boasts New Content
Knowledge Base continues to offer more content on road weather best practices.

Board Chair: Jason Norville, Pennsylvania DOT

Members: Alaska DOT&PF, Illinois DOT, Iowa DOT, Kansas DOT, Michigan DOT, Minnesota DOT, New York State DOT, North Dakota DOT, Ohio DOT, Ontario Ministry of Transportation, Pennsylvania DOT, Utah DOT, Virginia DOT, Wisconsin DOT



Projects completed by Aurora include

- 2007 National Winter Maintenance Peer Exchange
- 2009 National Winter Maintenance Peer Exchange
- Adaptation of the Local Climatological Model
- Compilation of RWIS Specifications
- Computer-Based Training Development
- Evaluation of Utah DOT Weather Operations Program
- Evaluation of Vaisala Spectro Pavement Sensor
- Expert System for Maintenance Decision Support
- Guidelines for Pavement Sensors
- Hot Plate Snow Gauge Demonstration
- Improved Frost Forecast Model, Phase 1
- Improved Frost Forecast Model, Phase 2
- Integration of Road Weather Information with Traffic Data
- Intelligent Image-Based Winter Road Condition Sensor, Phase 1
- Intelligent Image-Based Winter Road Condition Sensor, Phase 2
- Intelligent Image-Based Winter Road Condition Sensor, Phase 3
- Interjurisdictional Traveler Information Exchange
- Investigation of the Variability of Snow Cover Conditions
- Knowledge Base for Road Weather and Winter Operations
- Laser Road Surface Sensor
- Low Cost Mobile RWIS
- Mobile Weather and Road Condition Reporting
- **Off-the-Shelf Component RWIS**
- Pavement Temperature Sensor Accuracy
- Road Weather Roadshow
- Road Weather Training for Improved Winter Response
- RWIS Communications Standards
- RWIS Data Integration and Sharing Guidelines
- RWIS Equipment Monitoring System, Phase 1
- RWIS Institutional Issues
- RWIS Telecommunication Issues and Options

This screenshot shows a web browser window with the address bar displaying 'Off-the-Shelf Component RWIS'. The page features the Aurora logo and navigation menu. The main content area includes the following text:

Off-the-Shelf Component RWIS
Final Report

Project Overview
This project involved building an RWIS station with an open test the performance of different sensors.

Project Status
Completed
Last updated 12/21/2007

At the bottom of the page, there is a footer with contact information: 'For further information about the Aurora Program, our research projects, or this website, please contact Chris Albrecht, Transportation Research Specialist, Institute for Transportation.'

The cover page features the Aurora logo at the top right. Below the logo, the title 'Off-the-Shelf Component RWIS' is prominently displayed, followed by the URL 'http://aurora-program.org' and 'Aurora Project 2003-02'. At the bottom right, it states 'Final Report May 2008'.

Ongoing Projects

- ~ 15 Ongoing Projects, covering areas of:
 - Equipment Evaluation
 - Standards / Architecture
 - Site Operations / Quality Assurance
 - Information Outreach
 - Decision Support / Modeling
 - Road Condition Monitoring

*Reviewed during “project updates” portion
of each board meeting*

Recent and Ongoing Projects

- Multiple-Use ITS Data Collection Sites
- Summary and Comparison of Sensors
- Mobile-Weather Data Collection Guidelines
- Results Based Winter Road Maintenance Standards
- RWIS Sensor Density and Location
- RWIS Training Tool
- Study of MDSS Costs
- Validate the Accuracy of Pavement Condition Predictions
- Winter Weather Severity Index, Phase 2
- Cameras and Operational Impact of Remote Condition

Recent and Ongoing Projects

- Communicating and Publicizing Information
- Seasonal Weight Restrictions Demonstration
- Fourth National Winter Maintenance Peer Exchange
- Transition of Clarus to MADIS
- Improving Estimations of Real-Time Traffic Speeds During Weather for Winter Performance Measurement
- Quantifying Salt Concentration on Pavement
- Knowledge Base Content Management and Marketing
- Make the Aurora Winter Severity Index Available to All



working to advance road weather
information systems technology

Aurora Program Web Site:

www.aurora-program.org

Aurora Program Chair:

Jason Norville, Pennsylvania DOT



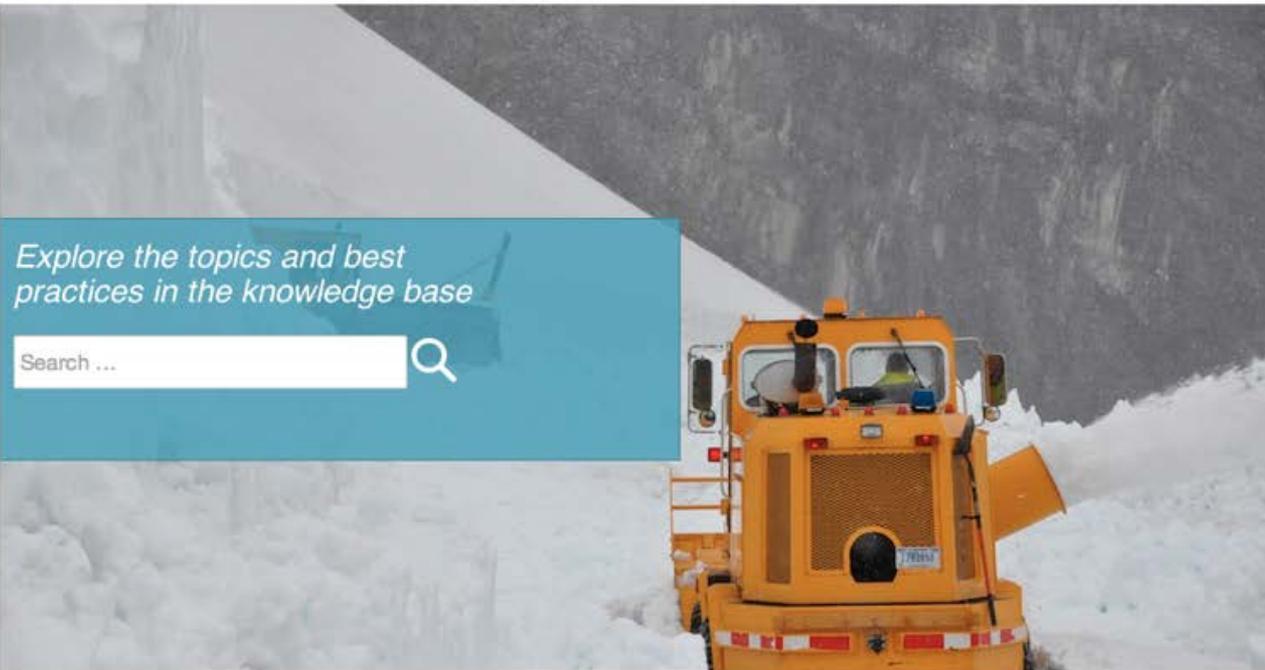
2013 National Winter Maintenance Peer•Exchange

September 10-11

Vancouver, Washington

KNOWLEDGE BASE

for road weather and winter maintenance



Explore the topics and best practices in the knowledge base

Search ...



Other

LATEST ADDITIONS

Aurora Project 2000-01 – Benchmarking the Performance of RWIS Forecasts

Aurora Project 1999-02 – Road Weather Roadshow

Aurora Project 1999-01 – Compilation of RWIS Specifications

Aurora Project 1998-02 – Standardized Testing Methodologies for Pavement Sensors

Aurora Project 1997-05 – Standardized Weather and Road Condition Information

CATEGORIES

Recent Contributions



Aurora Project 2000-01 – Benchmarking the Performance of RWIS Forecasts

POSTED ON AUGUST 1, 2013 | BY LINDSLEY

This effort reviewed the state-of-the-art within the meteorological community in regards to measuring the performance of weather forecasting information, reviewed the current status of RWIS... [Read more](#)



Aurora Project 1999-02 – Road Weather Roadshow

POSTED ON AUGUST 1, 2013 | BY LINDSLEY

