

State Planning and Research Program Quarterly Report

PROJECT TITLE: 2012 to 2013 Clear Roads Administration and Information Services

OBJECTIVES: Clear Roads is a pooled fund research project aimed at rigorous testing of winter maintenance materials, equipment and methods for use by highway maintenance crews. The Clear Roads Technical Advisory Committee contracted with CTC & Associates LLC to perform the administrative functions associated with maintaining the pooled fund project as well as information services that support technology transfer. This report summarizes activities conducted under this contract over the last three months.

PERIOD COVERED: September through December 2012

PARTICIPATING AGENCIES: Minnesota Department of Transportation

PROJECT MANAGER: Debra Fick

SP&R PROJECT NO:
96037

PROJECT IS:

LEAD AGENCY: Mn/DOT

Planning
 Research & Development

PRINCIPAL INVESTIGATOR:
CTC & Associates LLC

ANNUAL BUDGET:
\$89,470.00

PROJECT EXPENDITURES TO DATE: \$22,189.50

WORK COMPLETED:

TAC Meetings

- Continued planning for a face-to-face meeting of the Clear Roads Technical Advisory Committee on May 8-10, 2013 in Jackson Hole, Wyoming. Planning includes all preparations for the meeting such as communication with TAC members, meeting logistics, agenda and meeting materials.
- Coordinated with members of AASHTO, Aurora and PNS to continue planning the 2013 Winter Maintenance Peer Exchange.

Administration and Marketing

- Updated the Clear Roads Web site with current TAC members, project status and meeting information.
- Maintained and updated commitment, obligation, and overall budget information for the pooled fund in coordination with WisDOT and MnDOT.
- Supported efforts of TAC members in recruiting new members and talking about Clear Roads at conferences.

Information Services

- Researched and wrote content for the winter maintenance news published in November.
- Began soliciting ideas for the 2012-2013 Product Experience Survey.
- Distributed Clear Roads updates (final reports, RFPs, newsletters, etc.) to the Clear Roads distribution list using Constant Contact.
- Drafted a two-page brief for the research project on Weather Severity Mapping.

Research Support

New projects

- Supported the TAC and MnDOT in evaluating proposals and contracting with selected vendors for the following research projects selected by the TAC for funding in March.
 - Establishing Effective Salt and Anti-icing Application Rates

- Understanding the Chemical and Mechanical Performance of Snow and Ice Control Agents on Specialized Pavement Types
- Coordinated with MnDOT on establishing a contract with the selected vendor for Comparison of Materials Distribution Systems - Phase I.
- Continued to support the TAC in reviewing options to collaborate with the APWA on the project Snowplow Operator and Supervisor Training

Research in progress

- Continued Coordination with the PI and subcommittee to schedule check-in teleconferences and facilitate the review of interim and final deliverables for:
 - True Costs of Snow and Ice Control
 - Environmental Factors Causing Fatigue in Snowplow Operators
 - Snow Removal at Extreme Temperatures – Phase I
 - Cost-benefit Analysis Toolkit Phase II
 - Determining the Toxicity of Deicing Materials
 - Development of a Totally Automated Spreading System
- Mapping Weather Severity Zones: Coordinated with MnDOT and the TAC on proper distribution of the final report.
- Plug and Play Initiative: Coordinated with the project subcommittees and other stakeholders to establish a Technical Architecture Committee and continue refining a Plug and Play specification.
- Winter Maintenance Knowledge Base: Gathered Clear Roads discussion threads to have posted as a resource for others.

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

- Research, write and publish the February Winter Maintenance E-News.
- Coordinate the submission of research projects selected for funding in 2013.
- Continue developing the 2012-2013 Product Experience Survey.
- Continue planning for a face-to-face meeting of the Clear Roads Technical Advisory Committee on May 8-10, 2013 in Jackson Hole, Wyoming: travel logistics, agenda, etc.
- Assist in finalizing plans for a meeting to continue implementation of specifications that will enable “plug & play” technology for winter maintenance equipment.
- Continue to support the contracting process for Establishing Effective Salt and Anti-icing Application Rates, Understanding the Chemical and Mechanical Performance of Snow and Ice Control Agents on Specialized Pavement Types and Comparison of Materials Distribution Systems - Phase I.
- Continue to coordinate and support the TAC in coordinating with the APWA on Snowplow Operator and Supervisor Training.
- Continue to coordinate with investigators and the Clear Roads subcommittees on projects in progress. Distribute interim and final deliverables.
- Complete the two-page brief for the recently completed research project on Weather Severity Mapping.
- Begin planning for the Fall 2013 Clear Roads TAC meeting (conference facilities, travel arrangements, vendor selection, etc.).
- Maintain the Clear Roads Web site and budget.

STATUS AND COMPLETION DATE:

The current contract expires July 31, 2013.