

# State Planning and Research Program Quarterly Report

**PROJECT TITLE:** 2012 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:** July through September 2012

**PARTICIPATING AGENCIES:** Minnesota Department of Transportation

**PROJECT MANAGER:** Debra Fick

**SP&R PROJECT NO:**  
96037

**PROJECT IS:**

**LEAD AGENCY:** MnDOT

Planning  
 Research & Development

**PRINCIPAL INVESTIGATOR:**  
CTC & Associates LLC

**ANNUAL BUDGET:**  
\$97,306.00

**PROJECT EXPENDITURES TO DATE:** \$97,160.14

## WORK COMPLETED:

### TAC Meetings

- Coordinated a face-to-face meeting of the Clear Roads Technical Advisory Committee on September 25-26 in Saratoga Springs, New York. This included communication with TAC members, meeting logistics and agenda development.
- Began 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 a face-to-face meeting on September 24, 2012 to advance the implementation of specifications that will enable “plug & play” technology for winter maintenance equipment.
- Coordinated with members of AASHTO, Aurora and PNS to continue planning the 2013 Winter Maintenance Peer Exchange.

### Administration and Marketing

- Updated the Clear Roads website 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 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 August.
- Finalized and posted the results of the 2011-12 product experience survey on the Clear Roads website.
- Distributed Clear Roads updates (final reports, RFPs, newsletters, etc.) to the Clear Roads distribution list using Constant Contact.

### Research Support

#### *New projects*

- Supported the TAC’s scoping efforts and worked with MnDOT to post RFPs 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

- Snowplow Operator and Supervisor Training
- Comparison of Materials Distribution Systems - Phase I
- Improving Snowplow Design
- Coordinated with MnDOT on evaluating proposals received for Comparison of Materials Distribution Systems - Phase I and Improving Snowplow Design.

*Research in progress*

- Continued Coordination with the PI and subcommittee to schedule check-in teleconferences and facilitate the review of interim 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 the project subcommittee and principle investigator for final editing and deliverables.
- Plug and Play Initiative: Coordinated with the project subcommittees and other stakeholders.
- 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 November Winter Maintenance E-News.
- Develop 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.
- Continue to coordinate and support the RFP development and evaluation 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
  - Snowplow Operator and Supervisor Training
- Continue to coordinate with investigators and the Clear Roads subcommittees on projects in progress. Distribute interim and final deliverables.
- Write a two-page brief for the recently completed Mapping Weather Severity Zones project.
- Maintain the Clear Roads website and budget.
- Provide support for the review and processing of investigator invoices, as needed.
- Begin planning for the Fall 2013 Clear Roads TAC meeting (conference facilities, travel arrangements, vendor selection, etc.).

**STATUS AND COMPLETION DATE:**

This is the last quarterly report for this contract, which expired September 30, 2012. CTC completed all required tasks within the budget.