State Planning and Research Program Quarterly Report

PROJECT TITLE: 2012-2013 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 (TAC) 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: January through March 2013		
PARTICIPATING AGENCIES: Minnesota Department of Transportation		
PROJECT MANAGER: Debra Fick	SP&R PROJECT NO: 96037	PROJECT IS:
LEAD AGENCY: MnDOT		Planning X Research & Development
PRINCIPAL INVESTIGATOR: CTC & Associates LLC		
ANNUAL BUDGET : \$89,470.00	PROJECT EXPENDITURES TO DATE: \$50,872	

WORK COMPLETED:

TAC Meetings

- ➤ Continued planning for a face-to-face meeting of the Clear Roads Technical Advisory Committee on May 7-9 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 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 February Winter Maintenance E-News.
- Finalized and posted the 2012-13 Product Experience Survey on the Clear Roads website.
- Distributed Clear Roads updates (final reports, surveys, newsletters, etc.) to the Clear Roads distribution list using Constant Contact.
- > Drafted a two-page brief for the research project on Snow Removal at Extreme Temperatures.
- ➤ Began identifying topics for articles to develop on Clear Roads projects and potential industry publications to pursue for publishing them.

Research Support

New projects

• Coordinated with MnDOT on completing contracts with the selected vendor for the following projects:

- o Establishing Effective Salt and Anti-icing Application Rates
- Understanding the Chemical and Mechanical Performance of Snow and Ice Control Agents on Specialized Pavement Types
- Continued to support the TAC in reviewing options to collaborate with the APWA on the Snowplow Operator and Supervisor Training project.

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:
 - o True Costs of Snow and Ice Control
 - o Environmental Factors Causing Fatigue in Snowplow Operators
 - Cost-Benefit Analysis Toolkit Phase II
 - Determining the Toxicity of Deicing Materials
 - o Comparison of Materials Distribution Systems Phase I.
 - Development of a Totally Automated Spreading System
- Plug and Play Initiative: Coordinated with the project subcommittees and other stakeholders on the Technical Architecture Committee to 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 May Winter Maintenance E-News.
- Summarize and post online the results of the 2012-2013 Product Evaluation Survey.
- Finalize planning for and attend 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.
- > Complete literatures searches and assist the TAC in developing scopes of work for the new projects selected for funding at the May meeting.
- > Continue planning for the TAC meeting in September: travel logistics, final agenda, etc.
- ➤ Coordinate and support the RFP development and evaluation process for new projects.
- Continue to coordinate with investigators and the Clear Roads subcommittees on projects in progress.
- ▶ Begin drafting articles to submit for publication with *Roads and Bridges, APWA Reporter*, and *TR News*.

STATUS AND COMPLETION DATE:

The current contract expires July 31, 2013. CTC is on track and within budget on all deliverables.