



MINUTES

Clear Roads 2008 Technical Advisory Committee Summer Meeting:

Pooled Fund Project #TPF-5(092) - Test and Evaluation of Materials, Equipment and Methods for Winter Highway Maintenance

Tuesday and Wednesday July 29 - 30, 2008

Sheraton Madison Hotel - Reflection D (www.starwoodhotels.com/sheraton/madison)

Attendees:

Paul DeJulio, Colorado DOT	Tim Jackson, Missouri DOT	Monty Mills, Washington DOT
Dennis Burkheimer, Iowa DOT	Larry Gangl, North Dakota DOT	Brian Burne, Maine DOT
Shane Larson, Illinois DOT	Bernie Howard, Ohio DOT	Pete Garcia, FHWA
Dennis Belter, Indiana DOT	Lynn Bernhard, Utah DOT	Rudy Persaud, FHWA
Paul Brown, Massachusetts DOT	Allen Williams, Virginia DOT	Leland Smithson, AASHTO
Tim Croze, Michigan DOT	Mike Sproul, Wisconsin DOT	Colleen Bos, CTC & Assoc.
Linda Taylor, Minnesota DOT	Cliff Spoonemore, Wyoming DOT	Steve Martinelli, Wisconsin DOT Purchasing

Materials Distributed:

- Agenda
- Round Robin Reports and PowerPoint presentations
- Clear Roads Budget
- Membership Categories and Policies (proposed)
- Clear Roads Administration Contract Update
- Winter 2009 Meeting Planning
- Product Evaluation Survey Responses
- Determining Effectiveness of Deicing Material and Procedures – Clear Roads Update
- Winter Maintenance Testing Program “Straw Man”
- Effectiveness of Anti-icing Strategies – Clear Roads Update
- Miscellaneous Projects Update
- Collision Avoidance Systems for Snowplows: An Overview of Strategies and Research
- Winter Safety Campaign PowerPoint Presentation
- 2007-2008 DOT Salt Price Comparison and Average Usage
- Computer Based Training Program Update
- Draft Minutes for AASHTO Winter Maintenance Technical Service Program
- WMTSP Proposed Four-Year Program (2009-2012)
- Winter Maintenance Peer Exchange Progress Tracking Spreadsheet
- NCHRP List of Current and Recently Completed Projects Related to Maintenance
- NCHRP Project Web Pages

Tuesday, July 29, 2008

Welcome and Meeting Objectives

Chairperson Dennis Belter kicked off the day with introductions of all attendees and a review of objectives:

- Review proposal scores and select a vendor
- Hear updates on research projects underway
- Plan for future research and marketing efforts
- Share state experiences

Bernie Howard represented the Ohio DOT and this was his first Clear Roads meeting. And several guests joined the Clear Roads members meeting, including Brian Burne (Maine DOT), Larry Gangl (North Dakota DOT) and Monty Mills (Washington DOT).

Round Robin Reports

Participants had a chance to update the group on their agency's activities, challenges and highlights related to winter highway operations. Refer to the reports, posted in the Members Only section of the Clear Roads Web site, for presentation details. Below are some of the key shared issues that the group discussed:

- Budget issues related to the severity of the 2007-08 winter season
- Successes with handling big blizzards in the 2007-08 winter season
- Challenges with salt procurement
- Both challenges and successes associated with staffing as well as training.

The following states presented:

- | | | |
|------------|-----------------|--------------|
| ▪ Colorado | ▪ Massachusetts | ▪ Utah |
| ▪ Illinois | ▪ Michigan | ▪ Washington |
| ▪ Indiana | ▪ Minnesota | ▪ Virginia |
| ▪ Iowa | ▪ Missouri | ▪ Wisconsin |
| ▪ Maine | ▪ Ohio | ▪ Wyoming |

>>Action Items

- *CTC & Associates*: Post all round robin reports on the Clear Roads Web site in the Members Only section.

Scoring Results and Discussion

Steve Martinelli from Wisconsin DOT Purchasing joined us for this portion of the meeting. Prior to this meeting, each TAC member had received, reviewed and tentatively scored five proposals in response to the two Clear Roads RFPs issued this spring. Steve led a discussion of the scores, giving TAC members an opportunity to adjust their scores if desired. Mike Lashmet joined in the discussion via phone conference.

RFP 264011: Development of Interface Specifications for Mobile Data Platforms on DOT Vehicles

- IWAPI and Thompson Engineering both submitted proposals.

- Everyone agreed that both proposals met the requirements and that the proposers would be able to successfully complete the project. However, the final scores were very close, so the group decided to interview each vendor to make a final determination.

Project Champion: Dennis Burkheimer

Subcommittee: Diana Clonch, Rudy Persaud, Allen Williams and Tim Jackson. Farideh Amiri (Minnesota DOT) may also be available to help out, but we need to confirm.

RFP 264012: Development of a Cost/Benefit Analysis Toolkit for Specific Winter Maintenance Practices, Equipment and Operations

- Montana State, Intertiviti and George Joseph submitted proposals for this project.
- Montana State received the highest scores and will be awarded the contract.
- The group agreed no interviews or best and final offer were needed. We will proceed with reference check and award the contract.

Project Champion: Paul Brown

Subcommittee: Lynn Bernhard, Linda Taylor, Mike Lashmet, Jim Dowd (Iowa DOT) and Bill Hoffman (Nevada DOT).

>>Action Items

- *WisDOT Purchasing*: Contact the vendors to arrange the interviews for RFP 264012.
- *WisDOT Purchasing*: Contact the references for RFP 264011.

Budget

Colleen Bos provided an overview of the Clear Roads budget, including amounts committed and obligated, amounts contracted, and estimated planned expenses. Due primarily to the increasing costs of travel this year there is a small over commitment for 2008.

Project Champion Role

As Clear Roads grows, it is important to make sure all members understand the role and importance of the project champion and how the project subcommittees support the champion. The group discussed the following key responsibilities of project champions:

- To lead the project with a good understanding of the research needs statement and the objectives
- To represent Clear Roads with the principle investigator sharing our vision for the project
- To lead conversations between the principle investigator and the subcommittee, starting with an initial phone call at the beginning of the project to confirm understanding of the goals
- To have quarterly phone calls with the principle investigator to make sure the project is on track.
- To present on the project at Clear Roads and other meetings
- To oversee the project to make sure it stays on time and on budget
- To review and approve the invoices for the project

- To make sure that we are receiving the information or deliverables from the principle investigator and that any barriers or problems are relayed to the subcommittee to be addressed.

Colleen will create a standalone document describing these key responsibilities so that new project champions have written guidance about their role.

>>Action Items

- *CTC & Associates*: Create a best practices document for future project champions.

Wednesday, July 30, 2008

New Membership Categories

The group reviewed the new membership categories proposed by the Chair and Vice Chair and agreed on the following clarifications to the existing Operating Procedures:

- Associate members will not be able to bid on projects.
- There will be no membership category created to allow vendor participation at this time.
- The major distinction in membership will be paying members who can vote versus non-paying members who cannot vote.
- Clear Roads will pay for non-voting members to participate in group meals but will not cover travel, hotel and other meal expenses associated with attending a meeting.

LTAP and APWA were both mentioned as examples of organizations that could be invited to send an attendee as a non-voting member.

The group also discussed whether we would limit membership to state agencies or if we would include other types of public agencies. We discussed the pros and cons of limited membership and voted to not limit membership to state agencies at this time. We will have more discussion and another vote via email to determine the exact wording change to be made to the Operating Procedures.

>>Action Items

- *CTC & Associates*: Send out the revised membership wording for the group to vote on or discuss further via email.

Determining Effectiveness of Deicing Materials and Procedures

Linda Taylor updated us on this project and reviewed the goals and status.

- Started in 2006 and has already had one extension.
- The project is 53% complete but the contract is up in August and we need to extend the project. The project is off-schedule and the vendor is currently unable to give us a completion date.
- The group agreed to set a December 31st deadline and to make payments contingent upon receiving acceptable deliverables.

>>Action Items

- *CTC & Associates and Mike Sproul*: Follow up on the contract extension and related contractual issues.

Carbide Insert Snowplow Blade Wear Project Update

Lynn Bernhard reviewed the project goals and status for the group. This project focuses on developing laboratory and field tests to predict carbide blade wear.

- Task 1 is completed and Task 3 is underway.
- Task 2 was postponed till November, due to some delays acquiring blades and finding the test location.
- The project is still on track for the completion date.

Standardized Procedures for Evaluating Deicing Chemicals Update

Shane Larson reviewed the goals and status of this project. The goal is to develop a set of standardized lab tests so that we can evaluate the latest and greatest deicing chemicals being sold.

- The researchers have completed Task 1 and are finishing up Task 2.
- Shane has sent them some deicer chemicals for Task 3 testing, including salt brine, magnesium chloride, calcium chloride and various blends.
- The principle investigator has done a great job, and the project is on track for completion on time.

Peer Exchange Update

Lee Smithson led a review of some of the problem statements and ideas from the Peer Exchange. We also reviewed the minutes of the AASHTO Winter Maintenance Technical Service Program meeting, which gave an update on many of the Peer Exchange projects. WTI keeps a progress tracking spreadsheet on their Web site, which Lee works on keeping up-to-date.

- Lee shared with the group how they can stay updated on the status of research on winter maintenance using the minutes and the progress tracking spreadsheet. We reviewed some specific examples from the spreadsheet such as Guidelines for Anti-icing and Deicing, Staffing, Level of Service.
- There was discussion about the need for a 2009 Peer Exchange or whether more time is needed to follow up on the projects from the last peer exchange. There is an Eastern Snow Expo being planned in Madison for 2009, and the group discussed having another Peer Exchange at the same time. The group agreed that if we did the focus should be more on information exchange rather than developing additional problem statements.

Computer Based Training Update

Lee Smithson provided an update on the Computer Based Training project sponsored by AASHTO.

- Seven courses are currently available, and the final course, Winter Maintenance Management will be out very soon.
- The question of licensing and distribution came up and whether Clear Roads can distribute copies of the CD ROM. Lee noted that APWA is selling them at its bookstore for \$500. Clear Roads can share copies free of charge with members and guests who should take responsibility for distribution within their state. All others should plan to purchase the software.

We discussed the internal challenges, especially with IT departments, to getting the CDs distributed. There are also challenges with getting supervisors to give their staff time. They are continuing to work on overcoming the myriad technical challenges that seem to come up with different methods of distribution.

Update on Miscellaneous Projects

Colleen provided an update on miscellaneous projects.

- The letters of support for Effective Anti-Icing Strategies and Nationwide System for Snow/Ice Condition Reporting have been sent and acknowledged.
- NCHRP 6-17 is completed, so the subcommittee should review that before the next winter meeting and we can discuss whether or not to fund the implementation.
- Two of the four Transportation Synthesis Reports requested at the winter meeting have been completed and are available on the Web site: Collision Avoidance for Snowplows and Virtual Snowplow Training: State of the Practice and Recent Research.

>>Action Items

- *CTC & Associates*: Find out the status of the last two TSRs and let WisDOT know that Colorado DOT has an interest in helping with The Use of Sand for Winter Maintenance.
- *CTC & Associates*: Contact Bill Hoffman to find out the status of his Post-Storm Meeting project and research.

Snowplow Design Project Update

Dennis Burkheimer provided an update on this project. The goal was to develop a different type of blade with multiple edges on it for one-pass plowing. The idea is to remove as much snow and ice as possible in a single pass. The three edges are a regular carbide blade, a rubber blade for slush, and a scarifier blade for snowpack. The design also adjusts to the contours of the road and causes less damage to the paint, etc.

- The next steps include working with Indiana, Ohio, Minnesota and Wisconsin for testing.
- The project was put out to bid and four vendors have been identified for four designs. Hinckey, Monroe, Falls, Henderson, Flink are the five manufacturers that submitted designs for proposals. Four of them been selected, though the names are still confidential.

Calibration Accuracy of Manual and Ground-Speed-Controlled Salters

Dennis Burkheimer noted that the original scope of the project has been completed. The report has been written and is posted on the Clear Roads Web site. However, we amended the contract to add a Calibration Guide and PowerPoint presentation as additional required deliverables. Dennis is working with Bob Blackburn to finalize those. The project will be fully completed by the end of September.

>>Action Items

- *All*: If you have calibration photos, please send them to Dennis and Bob as they are needed for the guide.
- *Dennis Burkheimer*: Dennis will email the group with a list of what he is looking for in terms of photos.

Winter Safety Campaign Update

Dennis Burkheimer reviewed the status of this project. We are continuing to push out the Winter Safety Media campaign with the "Ice and Snow ... Take it Slow" logo and slogan.

- Dena Gray-Fisher (Iowa DOT) and Bob Felt (Michigan DOT) are presenting on the campaign at the National Transportation Public Affairs Workshop and will encourage people to continue to promote and rollout the campaign.
- Colleen developed a PPT that people can use to promote the campaign at meetings and conferences.

Winter Safety Campaign – Reaching out

Dennis also led the group in a discussion of whether there are additional things we can do to promote the program.

- The group agreed to pick one week per year as Winter Driving Safety week to promote the program. The first week in December was selected since it is at the start of the winter season.
- The group also discussed sending out a follow-up letter this fall to remind state agencies that the Winter Safety Campaign CD is available and that it is an ongoing program. We can also mention the Winter Driving Safety week.

>>Action Items

- *All:* Work with your state agency to begin planning for and promoting Winter Driving Safety week during the first week of December.
- *CTC & Associates:* Work with Dennis to write a follow-up letter promoting the campaign.
- *CTC & Associates:* Contact the PIOs to discuss additional ways to promote Winter Driving Safety week.

Winter Driver Safety Messages Project

Dennis updated the group on the status of the Winter Driving Safety Messages project. The TAC had approved funding to develop PSAs at the winter meeting, but we have refocused the project to include several research elements, such as identifying our high-risk target audience is and the best means to deliver messages to them and measuring the effectiveness of the format. We are pleased with the new direction, since it will allow us to be more targeted in our efforts. We have recruited help from the five PIOs to be a part of the evaluation committee for the RFP process.

National Winter Maintenance Test Facility

Paul Brown reviewed the status of the project. It's moving forward and there is momentum and interest.

- Tina Greenfield from Iowa has created a "straw man" document to present an approach to the National Winter Maintenance Test Facility concept with input from folks with PNS, Aurora, Clear Roads, FHWA and AASHTO.
- The focus has shifted toward having a clearinghouse of research, facilities, so the various groups do not overlap each other too much with research. We want to avoid redundancy.

Bill Hoffman presented at the WMTSP meeting. It would be quite a bit of work to coordinate and track all of this information, so this would not likely be a volunteer organization. It's a big project that will take a while to get off the ground, though there is quite a bit of interest. A white paper is being prepared entitled, "Winter Maintenance Testing Program" which Clear Roads will offer to review.

>>Action Items

- *CTC & Associates:* Work with Dennis to write a letter offering the help of Paul Brown and Cliff Spoonemore in reviewing the white paper.

Product Evaluation Survey Results

Colleen shared the results of Product Evaluation Survey, which will be posted on the Clear Roads Web site.

- There was discussion about whether or not to distribute the information beyond the Web site. The group decided to send it out to the Snow & Ice Listserv along with the disclaimers that the survey is not a scientific study but rather a means for capturing and sharing state experiences with winter maintenance products. It does not necessarily represent the views of Clear Roads and includes unedited feedback.
- We also agreed that we should change the name to avoid the word "evaluation survey." "Product experience feedback" is probably a more accurate description.

>>Action Items

- *CTC & Associates:* Send out the survey results to the listserv with appropriate disclaimers.
- *CTC & Associates:* Post the survey results on the Clear Roads Web site using the new product name.

CTC Update

Colleen presented a report summarizing CTC's work for Clear Roads over the last year. Dennis Burkheimer asked about the possibility of having CTC write reports for the Winter Safety Campaign and the Multiple Blade Plow project, which Colleen will report back on.

>>Action Items

- *CTC & Associates:* Follow up on the status of the Winter Safety Campaign report and check on the cost and contractual issues involved in providing a report for the Multiple Blade Plow project.

PNS Report

Monty Mills presented an overview and update on the Pacific Northwest Snowfighters.

- A group of transportation agencies within the states of Washington, Oregon, Montana and Idaho and the province of British Columbia formed a committee several years ago to develop specifications for chemicals related to snow and ice control. This committee has evolved to become the Pacific Northwest Snowfighters (PNS) Association.
- They are a little different than Clear Roads, in that they are focused on testing products. They do invite vendors to meet with them.
- Monty recommended their Web site is a good resource for information on their research - <http://www.wsdot.wa.gov/partners/PNS/default.htm>. Their main project is an Inhibitor Longevity and Deicer Performance Study being completed by WTI. They also have plans to address the Peer Exchange items but are tied up with current research for the moment.

Planning for Next Meeting

The group agreed that the next meeting would take place during the last week in January 2009. The group will meet in Boston unless it is too costly. Virginia near the Smart Road facility is the backup location.

Moving forward the two annual meetings will take place during the last week in January and the last week in July.

- *CTC & Associates*: Investigate the costs of these options and send out an email confirming the dates and location.