

ATTACHMENT “A”

Proposed Four Year Program (2009-2012)

Winter Maintenance Technical Service Program (WMTSP)

2009

- Promote comprehensive training and professional development for winter maintenance personnel:
 - Anti-icing/Road Weather Information Systems Computer Based Training
 - Monitor state and local government snow and ice control practices and research programs for material to update Anti-icing/RWIS Version 2 CBT that was distributed on July 9, 2007.
 - Evaluate completed NCHRP winter maintenance research projects for either updating the existing CBT or producing a separate CBT to achieve technology transfer.
 - Work with state DOTs on refining the AI/RWIS CBT for use in an interactive computerized classroom.
 - Develop Winter Operations Computer Based Training
 - Obtain user feedback on their successes and problems in implementing the “Equipment Maintenance” CBT distributed in 2007 and the “Proper Plowing Techniques”, “Deicing” and “Blowing Snow Mitigation” CBTs distributed in 2008. Investigate ways to improve this method of training delivery to state and local governments.
 - Finish developing CBT module on:
 - Winter Maintenance Management
 - Evaluate technical papers presented at the 4th National Conference on Surface Transportation Weather and the 7th International Symposium on Snow Removal and Ice Control Technology held June 16-19, 2008 for material that should be used in future revisions of the above Computer Base Training modules.
- Promote technology transfer:
 - Provide support for the 13th Eastern Snow Expo (August 27-28, 2008)
 - Recruit future host State DOTs
 - Arrange and contract for facilities
 - Assist with technical program development
 - Provide other assistance as required by the AASHTO, Program Director for Engineering
 - Provide continuing technology transfer and research support for the 4th National Conference on Surface Transportation Weather, the 7th International Symposium on Snow Removal and Ice Control Technology and the 2007 National Winter Maintenance Peer Exchange

- Work with FHWA, TRB, Aurora, Clear Roads and Pacific Northwest Snowfighters in identifying research and technology gaps
 - Insure research needs and technology gaps are submitted to appropriate groups or agencies for action and assist with appropriate technology transfer methods
 - Assist with program development
 - Assist the FHWA with technology transfer and implementation for:
 - Clarus
 - Participate in the 6th Clarus Initiative Coordinating Committee meeting (August 6-7, 2008)
 - Monitor progress in the Multi-state Regional Demonstrations and assist where ever possible and appropriate
 - Encourage development of multi-agency partnerships
 - MDSS
 - Participate in the 10th MDSS Stakeholders Meeting (August 4-5, 2008)
 - Participate in the MDSS Show Case, August 27, 2008
 - Evaluate needs to deepen the science
 - MODSS
 - Participate in MODSS Stakeholders Meetings
 - Assist with identifying barriers or technology issues and how to overcome these shortfalls
- Provide technical assistance to:
 - State DOTs
 - Maintain contact with research consortiums, state DOT research programs, and TRB to stay current with research underway, proposed or identified in unfunded research problem statements associated with winter maintenance.
 - Assist in locating experienced operational problem solvers
 - SICOP List-serve
 - Archive message strings
 - Develop a Speaker Resource Bank
 - Local Agencies and LTAP
 - Assist by locating experts in their problem areas
 - Develop a Speaker Resource Bank
 - NCHRP
 - Provide technical assistance in maintaining best method practices on AASHTO Center for Excellence website following guidance in NCHRP 25-25(4)
 - Maintain a listing on the SICOP website of AVL and FAST users to keep the findings of NCHRP 20-07(200), *Synthesis of Vehicle Based Winter Maintenance Technologies* current.
 - Evaluate NCHRP 6-17, *Performance Measures for Snow and Ice Control Operations*, for developing appropriate training program or technology transfer techniques and identifying best method practices for posting on the AASHTO Center for Excellence website.

- Promote research and development:
 - Collaborate with Aurora and Clear Roads Consortiums, APWA, NACE, PNS, LTAP, and TRB's Winter Maintenance Committee and the newly formed Surface Transportation Weather Committee to shape the research effort to insure it meets the needs of the winter maintenance community.
 - Collaborate with NOAA's Office of the Federal Coordinator for Meteorology (OFCM) and FHWA's Weather Team to explore partnering opportunities for the purpose of building synergy with weather products between transportation sectors.

- Promote Winter Maintenance Domestic Best Method Practices Scan:
 - Organize and evaluate best method practices for winter maintenance operations (operations, equipment, and material selection, storage, blending, performance, etc.) and VII for potential sites to conduct technology scans in the U. S. and Canada.
 - Develop Winter Maintenance Best Practices Speakers Bureau to make presentations at national, state and local winter conferences and snow rodeos

2010-2012

- Promote comprehensive training and professional development for winter maintenance personnel:
 - Anti-icing/Road Weather Information Systems Computer Based Training
 - Update as required to educate winter maintenance personnel on new materials, methods and equipment
 - Evaluate completed NCHRP winter maintenance research for either updating existing CBTs or producing a separate CBT to achieve technology transfer
 - Winter Operations Computer Based Training
 - Work with Aurora to assist them with technology transfer for completed RWIS research
 - Work with Clear Roads to assist them with technology transfer for operations training needs
 - Work with APWA on establishing equipment operator certification programs
 - Identify Unmet Maintenance Training Needs and Develop Appropriate Training Programs

- Promote technology transfer:
 - Provide logistical and technical program development support for the World Road Association (formerly PIARC) 13th Winter Road Congress, February 8-11, 2010, Quebec City
 - Provide support for Eastern Snow Expos
 - Provide support for FHWA Road Weather Management Program
 - Assist the FHWA with technology transfer and implementation support for:
 - Clarus

- MDSS
 - MODSS
- Provide technical assistance to:
 - State DOTs
 - Maintain SICOP website and List-Serve
 - Provide message archiving
 - Offer Speaker Bureau assistance
 - Local Agencies and LTAP
 - Maintain SICOP website and List-Serve
 - Provide message archiving
 - Offer Speaker Bureau assistance
 - NCHRP
 - Provide technical assistance in maintaining best method practices following the guidance from NCHRP 25-25(4)
 - Evaluate completed research and develop appropriate technology transfer methods
- Promote research and development:
 - Follow up on the progress being made on research needs and technology gaps identified in the 2007 National Winter Maintenance Peer Exchange Final Report, <http://www.wti.montana.edu/TechnologyTransfer/2007PeerExchange.aspx>.
 - Collaborate with Aurora and Clear Roads Consortiums, APWA, NACE, PNS, LTAP, and TRB's Winter Maintenance Committee and the Surface Transportation Weather Task Force to shape the research effort to insure it meets the winter maintenance community needs.
 - Participate with PIARC B-5 Winter Services Committee by coordinating U.S. participation in topics that overlap strategic agenda items for Clear Roads, Aurora, SICOP and other projects.
- Conduct Winter Maintenance Domestic and International Technology Scans as deemed appropriate.
 - Best method practices in selected state DOTs and local governments in US
 - Best method practices in salt management and outsourcing in Canada and other countries in the World

Saturday, July 12, 2008