SICOP QUARTERLY REPORT
January-March 2012

RWIS/Anti-Icing Computer-Based Training Program
TPF-5(009)

Background

This project was identified by AASHTO's Winter Maintenance Policy Coordinating Committee (WMPCC) as two projects, reviewed and evaluated at the Snow and Ice Cooperative Fund Program (SICOP) Workshop held in Minneapolis in April 1997, and given the highest priority by WMPCC at their October 2-3, 1997 meeting. One project was entitled "Anti-icing training for state, county and municipal highway operations" and the other "Road Weather Information System (RWIS) Training". The two subjects were so interrelated that it was decided to combine them into one project, RWIS/AI Computer-Based Training. The objective of the training was to develop and deliver a comprehensive training program on RWIS, anti-icing strategies, snow and ice control materials, equipment and procedures for personnel responsible for deciding the level of service to be provided on highways and streets under winter conditions. Training would utilize a series of realistic scenario-based exercises. Critiques following each exercise would be designed to contribute to new insights by participants, and provide a basis for subsequent exercises. The concept was endorsed by the FHWA's Lead States Program which subsequently formed a Lead States Anti-icing Team. This Team put together the basic course content before the Lead States Program was sunset in September 2000. At that point, the Aurora Consortium stepped forward and put together the Request for Proposal, advertised the RFP, and assisted in selecting the contractor. AASHTO wrote a letter to all member States in June 2000 announcing the opportunity to participate in the pooled fund project. The pooled fund was originally assigned a study number of SPR-3(104) and because of a duplicate number problem was assigned a second number of TPF-5(009). Most of the snow-belt states have joined the pooled fund study. A contract was let in March 2001 and a Technical Working Group (TWG) formed to guide the project. Thirty-one states, APWA, NACE, FHWA, Aurora and the New York State Thruway Authority have joined and have paid or are in the process of paying into the pooled fund. The Technical Working Group (TWG) met with the contractor September 10-13, 2001 in Nevada to review draft storyboards for the seven lessons of the CBT. The contractor completed a draft CD-ROM containing all seven lessons and submitted to the TWG for final comments and approval. TWG was able to complete their review of the first three lessons in summer 2002, lessons 4-6 in mid-March 2003, and Lesson 7 in mid April 2003. In October 2002 the contractor submitted a CD-ROM containing the first three lessons to the State DOTs who joined the pooled fund and asked for their recommendations for any customization they needed. The CD-ROM containing all seven lessons (with additional revisions to lessons 1-3) was submitted May 1, 2003 to the State DOTs asking for their final customization recommendations.

Most State DOTs integrated the CD-ROM into their existing training programs usually as a stand alone portion of either an academy program or as a module in their maintenance course offerings. The success of using a CD-ROM that could be available at each field location proved to be an effective means to provide technology transfer for emerging snow and ice control

research. The AASHTO Winter Maintenance Technical Service Program (WMTSP) Committee (previously established as the WMPCC) decided to take the research results from NCHRP winter maintenance projects as they were completed and published and integrate those results into the AI/RWIS CBT lessons. Currently NCHRP projects are finished when the final report is published. NCHRP does not usually get involved in technology transfer efforts beyond the published report so this makes an ideal project for SICOP to get research results implemented into field maintenance operations. Additionally, the Clear Roads Consortium asked SICOP to develop CD-ROM CBT lessons to cover a variety of maintenance training needs outside of the snow and ice control program.

In early 2008, NCHRP finished project 6-17, "Performance Measures for Snow and Ice Control Operations" and published the results as a Web-Only Document 136. AASHTO's Winter Maintenance Technical Service Program (WMTSP) decided the project would have greater technology transfer impact if the project results were developed into a computer based training (CBT) program. An expert task group was assembled to review and edit the program.

On July 15, 2010 the AASHTO Highway Subcommittee on Maintenance passed Resolution 10-07 for "Conversion of the AASHTO Anti-icing/Road Weather Information System (AI/RWIS) Computer-Based Training (CBT) Program from an Executable Format to an Internet Browser Format and Making all Eight CBTs Training Suites SCORM-Compliant (Sharable Content Object Reference Model)". Notice was sent to all state DOTs that they could use TPF-5(009) for project payment. Project period is November 1, 2010 to October 31, 2012.

Quarterly Progress

Contractor began work on testing and debugging Scenario Room examination and making data files edits. He also continued work on converting audio, preparing interactive slides, revising glossary, adding new reference material, and converting video on seven CBTs (1. "Blowing Snow Mitigation", 2. "Deicing", 3. "Equipment Maintenance", 4. "Performance Measures in Snow and Ice Control", 5. "Proper Plowing Techniques", 6. "Selecting Snow and Ice Control Materials to Mitigate Environmental Impacts", and, 7. "Winter Maintenance Management"). All seven web versions are posted on the Clear Roads and contractor's web sites and the Expert Task Group from several state DOTs is currently reviewing them and the contractor is incorporating feedback from the Expert Task Group into revising material and correcting any malfunctions in the interactive slides. Contractor began conversion of AI/RWIS during the previous quarter. Work on the conversion continued this quarter on all seven lessons with additional narration (voice talent, recording, editing), incorporating edits from the Expert Task Group, and conversion of the scenario room to Adobe Flash format. Final product will be deployed in eight parts, seven lessons and the scenario room "knowledge test".