Attendees

Pat Hughes, Chairman—Minnesota DOT
Lee Smithson, SICOP Coordinator—AASHTO
Paul Pisano—FHWA
Bret Hodne, City of West Des Moines, IA—APWA
Greg Parker, County Engineer, Johnson County, IA—NACE
John Burkhardt, City of Indianapolis, IN—TRB Winter Maintenance Committee Chair
Wilfrid Nixon, University of Iowa—SICOP Web Master
Rick Nelson, Nevada DOT—Lead States Program
Dan Roosevelt, Virginia DOT—AASHTO Southeastern Region
John Blacker, Montana DOT—AASHTO Western Region
Ken Kobetsky, AASHTO Staff

Guests

Roemer Alfelor, FHWA
James Pol, FHWA

Chairman Pat Hughes opened the meeting with a review of the agenda. The morning
would be spent on discussing WMTSP member involvement in projects and outreach
outside the SICOP program. The afternoon would be spent on a review of the SICOP
program, what has been accomplished since the May 2005 meeting, identifying gaps in
the program, and determining what to do about those gaps. The next day would be spent
in discussing and evaluating new projects, evaluation of what needs to be accomplished
on existing projects, establishing priorities and target dates, and end with 2006 budget
considerations.

Outreach & Discussion of Other Projects That WMTSP Members Are Involved In

• NCHRP Project 6-13 has been completed and NCHRP Report 526, Guidelines for
Snow & Ice Control Materials & Methods, was published in November 2004.
Since NCHRP project responsibilities end with the publication of the report,
WMTSP has been promoting technology transfer for this project through two
means. One has been the posting of the report on the SICOP web site and
notifying the 700 members on the SICOP Snow and Ice List serve that the report
is available to them on the web site. The second technology transfer effort has
been directed to developing storyboards for the AASHTO AI/RWIS Computer-
Based Training (CBT) program. Lee distributed copies of the 86 pages of
storyboards for Lessons 2 (19 pages), 3 (8 pages), 4 (6 pages), 5 (19 pages), and 7
(34 pages). Lee has reviewed the content of all 86 pages and worked the example
problems and found the package ready for distribution. Dennis Burkheimer of the
Iowa DOT is doing a similar review. This additional material updates, expands
and strengthens the material in the existing CBT, especially in the discussion of
establishing and achieving level of service (LOS) within and after the storm.
How agencies characterize LOS, how they assign LOS goals, and how they
measure the performance of maintenance operations in achieving the LOS goals,
are presented. Strategies and tactics for proactively achieving level of service are
also presented. A 17 page unit entitled “Using RWIS to Make Treatment
Decisions” was added to Lesson 7. The decision matrix for this unit was
developed in the NCHRP 6-13 project but was difficult to follow. The interactive
CBT pulls the student through a six step process for considering 1) Pavement
temperature and trend; 2) Dilution potential; 3) Dilution potential for wheel path
condition; 4) Dilution potential for treatment cycle time; 5) Dilution potential for
traffic speed and volume; 6) Adjustments if the ice-pavement bond exists. After
the student has mastered the skills taught in the lesson, they can launch the
‘Treatment Designer’ and put it as an icon on their desktop and run future storms.
A problem surfaced at the January 2005 TRB Winter Maintenance Committee
meeting with some of the chemical tables in the 526 report. Since that time
follow-up communications were accomplished by e-mail but no reliable
information was forth coming, so the report stands as currently published. Since
John Burkhardt chairs the Winter Maintenance Committee he will contact Joe
Althouse who raised the problems and put Joe in contact with the contractor, Bob
Blackburn, who wrote the 526 report to work out the problems in Table A-6.
WMTSP also discussed various aspects of the report and how far should
AASHTO go in presenting LOS. LOS needs to be presented making it clear
AASHTO isn’t specifying any single standard, procedure or regulation, rather it is
providing guidance, state of the art technologies and processes pertaining to snow
and ice control for consideration and adoption by AASHTO member departments
and other organizations responsible for roadway snow and ice control programs.
No decision will be made on how much of the 526 report should be included in
the CBT or if it will be incorporated until Lee contacts the DOTs to get their
input. The was feeling that the 526 report was significant so technology transfer
should get underway soon.

- NCHRP 6-15, Testing and Calibration Methods for RWIS Sensors. Dan reported
that a discovery on this project was that the instruments did not produce the
accuracy the manufacturer claimed. This was especially evident in chemical
sensors. The NCHRP report will be a manual with a matrix of testing and
calibration methods for RWIS surface and subsurface sensors. The matrix will
include pavement temperature, surface state (ie dry, wet, frozen, depth of snow or
ice), chemical concentration or freezing point, and subsurface temperature and
moisture. The manual will complete NCHRP responsibilities for the project. The
Aurora Consortium intends to conduct pilot tests in three regions (Virginia and
Utah are confirmed, and Dan is looking for another Aurora state to participate).
Feelings among WMTSP members were that RWIS sensor accuracy should be
about the same as National Weather Service requirements.
• NCHRP 6-16, *Guidelines for the Selection of Snow & Ice Control Materials to Mitigate Environmental Impacts*. Lee distributed copies of the project background, objectives, and tasks. He also distributed the index from the latest draft report for the project. The draft has been reviewed by a panel of experts from DOTs, Ontario Ministry of Transportation, Salt Institute and other chemical vendors who supply the products investigated in the project. That review is being considered by the NCHRP staff and panel for inclusive in the final report. The report is behind schedule due mostly to the samples being tested for corrosion have not exhibited any signs of corrosion, thus no results can be made. All other areas of the project are finished. Lee estimated the final report will be distributed early in 2006. Like project 6-13, the results are complicated and WMTSP needs to determine how best to get technology transfer. The report goes well beyond the scope of the AI/RWIS CBT, although some of the material is being taught in the CBT. WMTSP needs to determine whether a separate CBT needs to be developed.

• NCHRP 6-17, *Performance Measures for Snow & Ice Control Operations*. This project is to evaluate performance measures throughout the world and evaluate the potential of the most promising measures and their applicability to different roadway classifications and storm characteristics. The project will be conducted in two phases. The first will develop a comprehensive investigation of performance measures and methods of their evaluation. The second will involve a thorough evaluation of potential measures, identification of the most promising, and development of a plan for the evaluation of the most promising measures. The contract was delayed in signing so the project is behind the original target dates. To date, the literature search has nearly been completed (subject to review and editing) and a survey has been put together and is being sent out.

• NCHRP 20-7, Task 200, *Synthesis of Vehicle Based Winter Maintenance Technologies*. Lee distributed background material on the project. This project started out as a synthesis on vehicle based winter maintenance technologies at a project estimated cost of $50,000. The 20-7 selection committee added $25,000 to the original research and requested that fixed automated spray technology (FAST) be included. A panel has been selected, RFPs have been reviewed and a contract is being awarded. The project was supposed to have started in June 2005 and completed by February 2006. That time frame will need to be adjusted.

• NCHRP Synthesis of Highway Practice 34-10, *Winter Highway Operations*. Dan passed out a three page review he prepared on the now published NCHRP Synthesis 344, *Winter Highway Operations*. The synthesis reports findings of a survey of a limited number of state DOTs, Canadian provincial MOTs and three Canadian cities. Of the 13 state DOTs that responded to the survey, nine are west of the Mississippi and four are east. The survey focused on capturing changes that have occurred over the 10 years since the publication of the 1994 synthesis. Dan felt much of the value of this report is what works and doesn’t work for those states who responded to the survey and their reported reluctance to change. A shortfall of the report is it doesn’t stress working smarter. Dan feels SICOP needs to continue efforts to promote change and smarter use of AI/RWIS. WMTSP should examine the areas of future study listed on page 29 of the synthesis which
is attached to these minutes of this meeting and determine how to respond to them within the four guiding principles of SICOP. WMTSP discussed several options for better dissemination which included a domestic scan to find the best practices and capturing case studies then follow the ‘Lead State(s)’ model to penetrate the user community. The thought was that the leading state would get credit as an accomplished state and other chief engineers will take notice as to how the lead state got there and their state didn’t.

- FHWA MDSS Implementation. Paul and others who attended the MDSS Stakeholder meeting in Boulder, Colorado, October 20-21, 2005 discussed the active dialog of the meeting. It was their feeling the meeting and the MDSS were a success. Success is defined as meaning several public sector agencies have put an MDSS requirement in their winter weather services contracts and several private sector agencies have offered MDSS in their product line. Paul discussed the 8 state pooled fund that is developing their version of MDSS. The project appears to be off to a good start. Ray Murphy developed a questionnaire to determine what was needed beyond MDSS to improve snow and ice control operations. MDSS meeting presentations and version 4.0 are posted on the NCAR website. WMTSP briefly discussed whether there was a need to discuss MDSS in a future revision of the AI/RWIS CBT. Members were divided as to whether that would be an appropriate addition in the CBT. John Burkhardt attended the INDOT MDSS training program held last month in Columbus. INDOT is beginning to get some real time operations feedback for use in MDSS.

- FHWA Clarus Initiative. Paul summarized Clarus progress, benefits of quality checking and full access to the system. Project is progressing well with proof of concept in 2006 and regional deployment in 2007. Working with NOAA from test to operational system. ICC will be meeting starting at 1:00 PM November 15th.

- TRB Task Force on Surface Transportation Weather, AH010T, was created in response to WMTSP and BASC report. Wilf Nixon is the Chair and Rich Wagoner, NCAR, and Rick Nelson are co-Vice Chairs. The Task Force has a three year charge to get everyone talking and working together. Task Force members have been selected and will have their first formal meeting at TRB in January 2006. The Task Force will sponsor three sessions at the annual meeting one of which is a spotlight session. The Task Force is also committed to organizing a road weather symposium sometime within the three year term. SAFETEA-LU, Section 5308 has earmarked 5 million/year for a surface transportation weather research program. The Task Force will be pulling information together worldwide and learning from the weather disasters that have occurred this past year. The Task Force will be in close liaison with the TRB Winter Maintenance Committee, AHD65.

- American Public Works Association. Bret reviewed items underway for planning the 2006 Snow Conference in Peoria. Lots of participation. Will have an Equipment Expo which is new. New tracks for technical program to help people who haven’t made the change to AI/RWIS make the change. There will be sessions for the beginners as well as the advanced experienced people. APWA is putting together an award program for agencies to recognize outstanding
performers and implementing new processes. Des Moines will host the 2009 Snow Conference.

- National Association of County Engineers. Greg discussed the need to channel the information and training down to the local level. He discussed the need to be able to show when governmental agencies spend sizable funds to improve winter maintenance, what are the outcomes in improved level of service, increased mobility, safety, etc. Greg also discussed the increased expectations of the public for winter mobility while reality is reduced budgets and staffing.

- PIARC 2006. Pat reported on PIARC scheduled for March 2006 in Italy. The committee that Paul and Pat are members is to identify topics for upcoming and future meetings. About 120 papers have been accepted for presentation. SIRWEC precedes PIARC and presents papers on road weather. Committee also has responsibilities feeding into the PIARC Strategic Plan. Pat made input to a survey and those results will be published. Another survey was done to identify what is happening worldwide on contracting winter maintenance. There will also be a summary of that survey. Both the Strategic Plan and the survey will be posted on the PIARC Committee’s website. Wilf will contact appropriate PIARC staff to post PIARC winter maintenance material on the SICOP website. There is a need to publish the PIARC winter maintenance handbook in French. PIARC will be pulling together some of the environmental aspects of snow and ice control world wide. Need to help countries in transition by holding snow and ice control conferences in those countries. Paul distributed and showed parts of a CD-ROM, “PIARC Winter Maintenance Seminar”, Riga, Latvia. In the past PIARC was at the end of a Winter Scanning Tour, so had good representation from the US, but since the Scan Tour was not picked for 2006, the US will not have the presence as in past. SICOP needs to be sharing what we are doing with others of the world and learning from them what might be applied in the US. WMTSP needs to explore the possibilities of getting two people to PIARC and SIRWEC. Lee will to put a budget together. 800 Euro=$937US

- 11th Annual Eastern Winter Road Maintenance Symposium & Equipment Expo. AASHTO has contracted for the lodging and convention center. The New Jersey DOT is hosting the 2006 Expo at Atlantic City. They have had two meetings and conference calls. Next meeting of the committee will be December 12th. Current thoughts are the 2006 program will have three tracks, Environmental, Safety and Operations. Lee is developing the Operations track and the New Jersey DOT is developing the other two tracks. Paul is putting together a budget request for the Symposium. Need to emphasis MDSS in technical program and also get some information introduced on the SICOP program and why there is an WMTSP program.

- Winter Maintenance Technical Peer Exchange. Lee will attach a copy of this report to the meeting minutes. WMTPS discussed the need as presented on page 17-18 for a National DOT Winter Maintenance Manager meeting. Aurora has funded a program item for a national meeting and would probably be receptive to partnering with others like WMTPS to coordinate such a meeting. Also since the newly created Surface Transportation Weather TF is to coordinate a national conference, there should be some coordination and collaboration among all three
groups for setting up this meeting. Paul passed around the index of the Technical
Peer Exchange.

• Other WMTSP member input. Wilf will be going to Japan next month to discuss
winter maintenance in the US.

Project Review of SICOP Program

• Deploy AI/RWIS CBT—the deployment of future updates to the CBT was
extensively discussed. Some felt the CBT would get too large if NCHRP
projects get added, while others felt if the revision material fits into the
existing lesson material to keep that material current and relevant, the
update should be inserted into appropriate lessons and a new CD ROM
issued. Lee is to develop a survey and call each state DOT to determine
how they are using the CBT and how they would like or don’t want to
have future updates made to their CBT. Since the new storyboards contain
considerably more discussion on Level of Service taken from the 526
report, Lee will also discuss with each state the LOS material being
presented in the new storyboards. He will also obtain a copy of that states
LOS policy. John Burkhardt will begin conversation with Bob Blackburn
to determine how to correct Table A-6 in the 526 report if it is not correct
or how to explain the apparent inconsistencies in the table. Also, since the
Salt Institute published an article using the materials and Table A-6 from
the 526 report, John will call Dick Hanneman to determine if he can help
in solving the problem. WMTSP needs to determine if some minor
changing in the Table is appropriate, or if addition research is needed to
correct the problem. If additional research is needed, a statement of work
needs to be prepared for 20-7 funding. Wilf and Rick will review the new
storyboards that Gantek prepared for any inconsistencies. Material needs
to be assembled to promote the CBT to upper management. States have a
common problem getting sufficient computers to operate the CBT and
reach the many operators and field supervisors in a timely manner. A well
prepared brochure put in the hands of the Chief Engineers describing the
CBT and the training benefits it has might be successful in securing these
needed computers. Lee will prepare a draft and circulate to WMTSP for
comments. AASHTO staff could then prepare the brochure for handout at
SCOH meetings. The April 2005 letter from Clear Roads Consortium
offering to partner with WMTSP to develop CBT training for guidance on
proper snow plowing techniques, snow and ice control equipment
inspection and maintenance was discussed. Lee will meet with the
Consortium in December and obtain more specifics on what they have in
mind and report back to WMTSP.

• Winter Maintenance Chemical Specification. At the last meeting,
WMTSP agreed to wait until NCHRP 6-16 is published to see if anything
else needs to be posted. Lee will check to be sure that 6-16 contractor
didn’t use the same A-6 table from the 526 report.
“Standard phase curves are available in the literature but apply to pure materials only. Many commercial materials are blends and ice-melting properties can deviate significantly when secondary active ingredients or additives are present. Phase curves developed by an independent laboratory using standard test procedures should be obtained from the manufacturer/vendor for all products being considered. If independent verification is not available, it is suggested that the phase curve for the primary active constituent be used until certified phase curves can be obtained.” WMTSP feels if the vendor doesn’t have a phase curve they should be dropped from consideration. WMTSP felt that testing procedures have improved the quality and consistency of the chemicals being used.

• Vehicle Based Equipment Integration. (now NCHRP 20-7 Task 200) Dan reviewed the original project statement and AVL will be covered under Task 200. Also the Frensor chemical detector was supposed to be tested and a report published. Dan will check to see if that has been done. Dan will continue to monitor field evaluation and use of the Haliday friction measuring device. Ohio is continuing with their Haliday devices and Virginia DOT has bought three Haliday devices which Dan will evaluate next winter if he can get them installed on trucks. Paul reported that Clarus will have a VII project which will look at capturing road condition data from vehicle braking systems and NCAR will look at correlating that to weather and road conditions New vehicle www.vehicle-infrastructure.org is public website that has information.

• Fixed Spray Technology. (now NCHRP 20-7, Task 200) The original scope of work for this project called for BMP which has now been incorporated into Task 200. Following up from last WMTSP meeting, Dan has contacted Colorado DOT for information, but the report is still in draft form and nothing can be reported until committee has approved the report. The committee will be meeting early December. Preliminary results indicate the automatic operation of the system is not reliable. The best way seems to be is to have a camera to verify roadway conditions. The FAST system needs to be customized for each location. The purpose of this project is to obtain information on existing systems and get it posted on the SICOP website to assist people who are purchasing or are involved with maintaining systems in their agency. The report will have purchase specifications. The only information on European systems comes from PIARC papers, which haven’t addressed how reliable their systems are.

• Development of ESS Guidelines report has been published and also posted to the SICOP website. Lee made presentations at the Regional RWIS Users Group in Kansas City and to HSCOM meeting in July 2005. Lee also worked with Cambridge Systematics, subcontractor to Mixon-Hill to develop a metadata questionnaire. The questionnaire was sent to snowbelt states and the survey data is being compiled for use in the Clarus
project. WMTSP’s follow-on project to pilot test the updated guidelines and provide technology transfer to state and local agencies is pending.

• Synthesis of Winter Maintenance Practices and Their Impacts to Infrastructure. John Blacker will prepare a status report for this project and send it via e-mail to the other WMTSP members.

• Promote Anti-drifting Measures with Pro-Active Design Consideration. Lee handed out a copy of the research problem statement “Four Dimension Highway Design” that was developed and presented to the HSCOM for balloting at the July 2005 meeting. Balloting results were that the problem statement did not make it into the top four that were submitted by HSCOM, so Lee gave the RSP to the Iowa DOT and they submitted it for consideration. It is on the RAC/SCOR list for balloting this Fall. Lee talked with Joe Doherty and learned that UNY Buffalo contract for the “SnowMan” expired June 1, 2005 and a new contract has not yet made it through the administrative processes. NYSDOT had nearly $60,000 set aside for the contract. The intent is to continue the project. The project started with the Brookhaven Laboratories, who used some old coding procedures that were not compatible with the NYSDOT new design micro-workstations, so UNY Buffalo is updating and making that work compatible with the new workstations. NYSDOT has an employee that did his master’s work in snow fence design, so there seems to be interest and expertise to continue on with the project. Ron Tabler will continue to be a consultant on the project. Lee will periodically monitor the progress of this project and report to WMTSP.

• Road Condition Information the work plan is to document state of the practice of winter road condition information reporting for travelers including friction. Also tied into Performance Measures NCHRP 6-17. Dan will be monitoring how the friction measurements are working and are being used in Ohio, Virginia, Wyoming, Alberta also VII, but he will basically just be monitoring what’s going on. Pat asked Jim Wright to have their consultants document how the states using 511 are describing the road conditions so we can see the similarities and differences. Jim is having them put together the summary. (Action item is to pass the information from Jim on to Paul so Mixon-Hill can use it in the Clarus Initiative. Goals is to obtain uniformity in 511 reporting)

• Outreach to Local Governments. Bret is working with Russ Neiman from VA LTAP to identify outreach needs and how to address them. Small agencies are having difficulty getting training. APWA is developing a CD on how to develop a winter maintenance program. It will be a baseline CD on how to get started. It is started, but not yet finished. Bret will be speaking at the next LTAP meeting on how to get the training down to the local level. In Iowa the APWA Chapter is holding round table discussions with small town supervisors to learn who isn’t getting the information and the reasons why. Feedback from these meetings may be useful to WMTSP technology transfer activities.
• Communication Standards and Winter Maintenance. Pat sent a letter June 2, 2005 to John Conrad, Chair of the AASHTO Subcommittee on Operations and Management expressing WMTSP interest in the development of standards within the ITS Standards program that affect the winter maintenance community. The letter acknowledged the field-to-center standard NTCIP 1204 is well developed and moving to implementation. However, the status of the center-to-center standard is not quite so clear. The letter pointed out that there are several standards that apply to passing of weather, road condition, and maintenance data from one center to another and encouraged those who are working on the center to center standards to broaden their scope and consider all the standards that could apply, not just those currently within the ITS Standards program. The “ITS Standards Impacting the Maintenance Community” has been posted on the SICOP website. Another consideration that needs to be examined is the communications standards needed for the Clarus Initiative.

• Integrated ITS Corridor. WMTSP, in an effort to better understand the role traffic management has in the integrated ITS corridor, has scheduled meetings this past year in cities that have a traffic management center (TMC) and then get a tour of that TMC. So far WMTSP members have visited TMCs in Minneapolis and Kansas City and at the end of the Clarus meeting will visit the TMC in Salt Lake City. WMTSP had hoped to visit the multimodal TMCs in Finland and Sweden on the International Winter Scan to Turino, Italy to add to their knowledge base, but that tour was not funded.

• Equipment and Facilities for RWIS and AI. AVL and FAST Handouts were prepared and Lee handed them out at the HSCOM meeting asking each state maintenance engineer to check their state and correct any information that needed to be changed or updated and return the updated sheets to Wilf so he could update the website. Wilf also put out an invitation on the SICOP list serve asking government agencies to update their equipment specifications and return to the SICOP webmaster. He got several good responses.

• Develop Model Media Package. Wilf will post on the SICOP website the results of the material he received from his request on the list serve.

WMTSP Program

• Presentation of New Projects
  • Wilf will need to revamp the web site since it got infested. Would like to make the site more subject oriented, ie, Drifting snow page, level of service page, RWIS, AI equipment, Chemicals, FAST, CBT, AVL, etc. Paul wants to be able to search the archives. Dan believes we should appoint a web site committee to meet and decide what needs to be done and get it done. Committee to be
Wilf, Bret, Greg and Lee. Lee to convene a monthly call. Try for first call the week before Christmas. Pat wants to be linked to PIARC if possible.

- Wilf asked if we should have a 20-7 project to write up what Canada has done on their salt management plans. WMTSP needs to monitor the Canadian movement, learn from their progress and see how it fits into BMP for the US. Bret feels it is very timely to do such a summary/synthesis and take the lead to help local agencies. Example the storm water regulations have been put in place and agencies are trying to figure out how to react to them. WMTSP needs to get into the drivers seat and figure out how to be proactive rather than reactive. The Discovery magazine for December 2005 has a story about road salt and stream contamination. The winter maintenance community needs to have a better understanding of how long it takes salt to work through the watershed, who is contributing to this run off and how much, etc. John said they hired a consultant to do a study for Montana. This study may be helpful as WMTSP moves forward on this problem. Pat feels we need to put this into a domestic scan and include a look at what’s going on in Canada. Wilf will draft a research problem statement with a title like “Examining the Environmental Benefits and Drawbacks of Sound Winter Maintenance Practices”. The Salt Institute should have some experience that would be helpful. WMTSP also needs to partner with the Environmental Subcommittee at TRB to get their suggestions.

- Need to develop a case study to show AI uses less chemical to do the same job. If material is available an AI BMP CD ROM with case studies should be developed. Need to show successful ways to implement BMP. Need to acknowledge agencies that are doing well in implementing BMP. Need to invite someone with experience in this area of marketing to help us get the story told.

- International scan was submitted, selected but wasn’t funded. Maybe we should use a Peer to Peer Exchange rather than title it a ‘scan’. John Blacker will write up the domestic scan research problem statement. First trip is discover who is in the lead and next year be the lead state with shoulder to shoulder demo.

- The Final Report of the “Winter Maintenance Technical Peer Exchange”, page 17, proposed FHWA sponsor and financially support an annual ‘National DOT Winter Maintenance Manager Meeting’ which would invite snow and ice managers from each DOT to share information about winter maintenance operations, learn about new research in the field, learn about new training tools and also develop a framework for a comprehensive national snow and ice removal strategy. WMTSP discussed the proposal and considering APWA has a snow conference each year, TRB every four years, the tremendous organizational effort that would be
needed plus finding the financial support would be a difficult undertaking and would run into the same travel problems as national conferences already are experiencing. Another way to penetrate the market is to identify BMPs and offer speaking services to the local winter maintenance workshops, conferences, and roadeos. WMTSP should be able to pull together the BMPs and then go to the other experts like Deana or Ray Murphy as to how to do this. Perhaps web casting is an alternative. John Blacker feels the most effective method for them is to bring in an expert like Wilf to show them and generate the enthusiasm to want to implement. Need the TELL & SHOW to get the job done.

- John Burkhardt discussed the RSP, “Effect of Solar Loading and Radiational Cooling on Pavement Surface Temperature”. Wilf supports this because it is an identified problem and the TRB Task Force on Surface Transportation Weather will also want to weigh in with its support. Lee thought the concept was similar to Mike Adams discussion at the last Aurora meeting and this should be brought up at the next Aurora meeting for their support. Pat asked Lee to work with John Burkhardt to relate WMTSP support for this RSP.

- Dan discussed the NCHRP Synthesis 344 (see attachment to these minutes, six bulleted items) does WMTSP want to build on or pursue any of the recommendations for future study? One of the bullets is outsourcing and WMTSP discussed the need for government agencies to have a good management plan to be able to show and explain their work and the costs involved. Government should be able to do it cheaper, but the way our accounting practices are structured have great difficulty in being able to prove it with figures. British Columbia and Alberta tell us it is cheaper to contract, but one can’t always rely on the statistics that have been put together. Government needs to operate more like a business, but most agencies don’t really understand what this is or how to do it considering the institutional issues and barriers obstructing their way.

- Wilf wants to update the AASHTO Snow & Ice Guide but cautions WMTSP to be sure we know what we want to see in an updated guide before we begin.

- Discussion returned to marketing WMTSP. Paul passed out their BMPs for an example. We need to sit down with some marketing experts and figure out how to do it. Need to put together a TWG to do this. Lee will start the process at the Des Moines Aurora Dec 1-2 meeting. Need to identify what kind of things do WMTSP and Aurora want to market and how is the best way to do the marketing, i.e. BMP sheets, CD-ROM, etc?

- Reprioritization of program. Pat listed the following potential new projects on a flip chart for WMTSP consideration and action:
• #1. Marketing AI
  ■ Best Practices
  ■ Case studies
• #2. Domestic Scan
  ■ Canada (Salt Management)
  ■ Outsourcing
• #3. Environmental-Salt Management
• #4. Update on Snow & Ice Guide
• #5. TWG-Combine with Aurora & Get Marketing Experts (5-8)

Discussion for the above items was: #1. Include this in the discussion at the next WMTSP meeting; #2. John Blacker is writing a problem statement for this proposed domestic scan to include the salt management progress the Canadians have made. Wilf has asked the Canadian Provinces for their salt management plans and will post them on the SICOP web site; #3. Wilf is preparing a draft problem statement “Examining the Environmental Benefits and Drawbacks of Sound Winter Maintenance Practices”; #4. Lee will contact Jerry Horner and discuss the possibility of the AASHTO HSCOM Snow and Ice Task Force endorsing this update and making input as to what should be in the update; #5. Lee will put this on the table for discussion at the Aurora meeting, December 1, 2005.

• Budget considerations. Ken reported both budgets are in the black. Have almost $80,000 in SICOP Administrative budget which should be sufficient for the next year. CBT has $185,000 balance which should be sufficient for next update. Need to look at finances for future revision and updates.