

AASHTO
Standing Winter Maintenance Policy Coordinating Committee
(WMPCC)

MINUTES OF MEETING

June 1-2, 1999

Kansas City Airport Marriott

Kansas City, Missouri

Attendees and participants:

Committee Members:

Patrick Hughes, Minnesota DOT Chairman
Larry Frevert, Kansas City, MO, DPW, APWA
Dave Gravenkamp, Siskiyou County, CA, DPW, NACE
Clayton Sullivan, Idaho DOT
Rick Nelson, Nevada DOT
John Blacker, Montana DOT
Wilfrid Nixon, U of Iowa

AASHTO Staff:

Mujeeb Basha
Rod Pletan

Guests:

Ivan Corp, Missouri DOT
Deborah Vocke, FHWA
Linda Dolan, Minnesota DOT

Absent:

Andy Bailey, Virginia DOT
Gary Hoffman, Pennsylvania DOT
Ken Kobetsky, AASHTO
Lee Smithson, Iowa DOT
Don Steinke, FHWA

I. Call to Order and introductions

- A. Chairman Hughes called the meeting to order at 10:10 a.m. and welcomed the group to Kansas City.
- B. Hughes introduced members and guests.

II. SICOP Progress Report Since Last Meeting

- A. Pletan gave a report of SICOP activities since October (see Handout A). Issues addressed include:
 - A SICOP brochure has been developed and handed out at numerous conferences and meetings. **Vocke needs 2000 for an upcoming conference.**
 - A Lead State booklet and video has been prepared and advertised via e-mail.
 - The Snow-Ice & Friction list-serves have been combined into one (Snow-Ice) and has over 350 subscribers.
 - SICOP information is on the lead state's web site and links to this web site are on FHWA's web site. Linda Dolan is currently expanding information, graphics and photos on website.
 - Relationships have been strengthened via attendance at several meetings with SCOH, Lead State Team Leader, TRB Winter Maintenance Committee, APWA, NACE, AASHTO's Subcommittee of Maintenance.

- The SICOP Program was promoted and explained in conferences outside the country (including Canada, Argentina & Chile). SICOP's visibility therefore has been dramatically increased both domestically and outside the USA. A Memo of Understanding was developed between Argentina, FHWA and MN/DOT to network together on snow & ice related as well as other issues.
- About 100 copies of Wisconsin's RWIS Power Point presentation have been distributed.
- A special Chemical Slickness meeting has been held. Dale Keep was the champion. White paper was developed and distributed. A vendor in British Columbia has developed the phenomenon within the laboratory and is doing further research.
- Roundtable discussions (adjoining states meeting together to dialog about winter maintenance technologies at minimum or zero out-of-state expense):
 - Various combinations of adjacent states are meeting, including Illinois, Minnesota, Wisconsin, Iowa, Virginia, Tennessee, Kentucky, North Carolina, Michigan, Indiana, Nebraska, Missouri
 - Nelson mentioned that Nevada and CALTRANS have quarterly meetings. **Nelson will get meeting notes to Pletan for distribution.**
 - Rocky Mountain States (old Region 8) continue to meet. Topics included other issues than just winter maintenance.
- B. Hughes mentioned the T2 road shows and the need to get SICOP involved since their audience is the smaller, local governments.
- C. Frevert reported on the new APWA Winter Maintenance Committee, which he chairs, that met for the first time in Duluth held in April. A need was identified because the local government winter maintenance community does not have enough connections via the current PET (professional, educational and technical) committee structure. He has written an article for a periodical on the subject (see Handout B).

III. Report from AASHTO

- A. SICOP Budget Status - Basha reported on the proposed budget for July 1999-2000 (see Handout C) and the Statement of Revenue and Expenses for July 1, 1998 to April 30, 1999.
 - There was some question regarding the information provided.
 - **Mujeeb will be double checking with AASHTO's accounting department on the numbers and will e-mail the committee on the results of that discussion.**
 - Money will roll over if the projected dollars not spent.
 - 34 and 37 states gave funding to SICOP in the first two requests respectively.
- B. SICOP Relationship to NCHRP 20-7; The Winter Maintenance Guide will be coming out in July (see Handouts D & E)

IV. Report from FHWA

- A. Deb Vocke reported on TEA-21 and its relationship to SICOP. FHWA still thinks SICOP is a critical element.
- B. She reported on the four Resource Centers (Atlanta, Illinois, San Francisco & Baltimore) and the major restructuring within FHWA.

- C. Winter Maintenance is under the Office of Transportation Operations (Don Steinke, Director) within the Operations Core Business Unit.
 - D. Office of Technical Applications was split up.
 - E. FHWA wants to be seen as "seamless".
 - F. Fourth Annual FHWA Eastern Snow and Ice Control Conference will be in Albany NY in 1999 and Virginia in 2000
 - G. FHWA's web site is updating the clearinghouse page, added vendor lists (equipment, material with hot links), information exchange with free searching capabilities, conference schedules, publications icon.
 - H. Training across state lines/free to attend/one day workshop/FHWA co-hosting
 - I. 2001 budget will still be able to support SICOP generated projects.
- V. AASHTO Subcommittee On Maint-Winter Maintenance Task Force & SICOP**
- A. Blacker reported that Steinke is FHWA liaison to this Task Force
 - B. Big issue is extent to which Lead State role for SHRP Implementation will be transferred to AASHTO
 - C. Winter maintenance privatization is an emerging issue/trend. Will need more data.
 - D. Need to expand/clarify membership on his task force.
 - E. Need "yellow pages" of all the web sites. Need people registered with search engines so people can find them through the "search" feature.
- VI. Lead States Program & SICOP**
- A. Nelson reported that the meeting was in St. Louis September 1998 and there were four goals:
 - Development of Benefit/Cost of Anti-icing (volunteers and technology)
 - Communications/Getting the word out (7,300 brochures, 140 videotapes and 920 ice scrapers were distributed)
 - Money for travel and training (Train the Trainer); Bill Timmisch is a professional trainer in Nevada DOT
 - Technology (Anti-icing use of liquids, Fixed Remote Distribution Systems)
 - B. Sunsetting activities (PR, trainers, media, marketing) are all areas that need to be maintained to add value.
 - C. Future Strategic Highway Research Program – Son of SHRP – Next organizational meeting June 22 (see Handout F).
 - D. Pletan shared with the group the "Costs of Poor Maintenance" (see Handout G)
- VII. TRB Winter Maintenance Committee/SICOP**
- A. Wilfrid Nixon reported on a report written including information on weather forecasting, anti-icing strategies, tools, equipment, techniques, training, education, technology transfer and future challenges (see Handout H)
 - B. He also shared the call for requests for sessions at the Annual TRB meeting, January 2000 (see Handout I) and the call for papers for the Fifth International TRB Symposium on Snow Removal and Ice Control Technology (see Handout J).
 - C. Long-term goals include increasing the number of United States attendees in the future (i.e., 2002 Japan 100-200 US attendees)
 - D. Education-web site being developed

VIII. SCAN II Tour's Recommendations for SICOP

- A. Ivan Corp and Blacker reported on their SCAN II observations (see Handout K).
- B. The final summary report is due to come out soon.
- C. Some overall observations of what was seen on this tour were:
 - Lessor public involvement in countries visited than in USA
 - USA can learn from foreign advancements in traffic management, traveler information and enforcement
 - Evidence of less concern for cost in the countries visited than in USA
- D. SICOP will want to refer to specific recommendations in final report of SCAN II

IX. Pool Funded Project Proposal

- A. Clayton Sullivan discussed the implementation and deployment of the anti-icing/RWIS training. Reviewing the computer based interactive training especially for inaccessible people
- B. Cost should be \$150-170,000
- C. Need to answer the question: What does our customer want? (i.e., CD ROM, Internet, etc.)

X. Restatement of SICOP Original Objectives

- A. Anti-icing & RWIS Training
- B. Training for Local Governments
- C. Anti-icing Materials & Testing
- D. Best Practices in Urban Areas
- E. GPS for Winter Maintenance
- F. Friction Measurement
- G. Winter Public Information & Public Relations
- H. Driver Training & education
- I. Other Hi-Tech Applications

XI. Evaluation of SICOP & Priority Projects for FY 2000

- A. Pat Hughes and Linda Dolan facilitated discussion and evaluation of SICOP.
 - Where is SICOP going?
 - What are the challenges for FY 2000?
- B. Criteria for discussion based on SICOP's Objectives
 - Identify and benchmark best practices in winter maintenance within the states and around the world; and
 - Test and evaluate technologies not currently utilized within the states, and subsequently deploy them to the highway agencies
- C. The committee brainstormed potentially high priority projects for each of the 9 initial priority projects listed in Section X above. The complete listing of all of the ideas identified is included in Appendix A.
- D. The committee then clustered and prioritized the brainstormed listing, leading to the following result:

FINAL PRIORITY SICOP PROJECTS FOR FY 2000

Rank	Project	Champion
1	Computer-based training/ adaptable to all levels of government/RFP/Establish NHI train the trainer/ Operator level/ RWIS/Anti-icing/maximize use of T ² /LTAP for local government	Rick Nelson
2	State of the practice equipment and facilities/ Anti-icing/RWIS	Rick Nelson & John Blacker
3	Determine appropriate measures for road condition/consistent criteria for information for public/identify friction data for motorists	Lee Smithson
4	Develop driver education for snow packed or icy roads/marketing driver education plan	Pat Hughes & John Blacker & Dave Kuemmel
5	Chemical specifications/ deployment of PNS (Pacific Northwest States) results/expand regionally/national	Clayton Sullivan
6	Anti-drifting/snow fence/design	Clayton Sullivan
7	Building and sustaining winter maintenance programs for small agencies/support APWA in development of urban best practices manual/disposal of snow (urban)	Larry Frevert Wilfrid Nixon
8	Automatic Remote Fixed location de-icing distribution systems /experiences / study / pooled fund	Deb Vocke with MNDOT, PADOT & Rand Decker
9	Develop model media package	Wilfrid Nixon
10	GPS/cost benefit winter maintenance/AVL /route optimization/ pooled fund /2 year test	Andy Bailey Lee Smithson
11	On-board freezing point measurement	Wilfrid Nixon

XII. Strategies for Implementation & Future Leadership

- A. Hughes led discussion about what will happen after calendar year 1999 Pletan's term will end.
- Nelson will discuss it with his organization and get back to Pat.
 - Hughes will talk to Iowa DOT to see if there is any interest in helping to support the position.
- B. The qualifications should include both engineering as well as communications/marketing skills. Additional administrative support is necessary either through loaned or hired staff.
- C. The committee also discussed hiring someone in their "mid-career" to provide benefits to the hosting organization from the experience.
- D. Preference is to have loaned staffed again and will need to solicit interest.

XIII. Committee Membership/Terms/Rotations

- A. Rotation of committee members and terms of members was discussed.

- The conclusion was that there is so much “natural” rotation with retirements, job changes and changes in appointees that if a member would like to resign from being a member they may do so and a new member would replace them.
 - B.** The group also discussed the need for all members to be present at every meeting.
 - It was agreed that if a member cannot attend, they are asked to please send a representative from the same region/organization.
- XIV. SICOP Budget issues and needs/Decision to ask for 3rd annual contribution**
- A. Each member identified as a Champion of a Final Priority Project above must submit a workplan/implementation plan to Pletan by July 10, 1999.**
 - This will include a problem statement, background, objective/goal, tasks (long and short), budget, timeline and audience.
 - Basha will send Pletan a copy of a format for the plan to be relayed to the Champions.
 - B. There will be a General Fund Solicitation from the states for additional administrative funds for SICOP. This will be presented in October at the Annual AASHTO Meeting.**
 - To prepare for this solicitation, an Accomplishment Report is needed from Pletan by September 1, 1999.
 - The report will include accomplishments, future goals and overall justification for the request of additional funds.
 - C. Basha will revise the budget report and e-mail it to everyone.**
- XV. Other Business**
- A.** Nelson noted that the planning process for the “Son of SHRP” is underway.
 - B.** Next meeting is expected before the end of the year (prior to Pletan’s retirement) tentatively in November or December.
 - C.** Nelson offered to look into having Nevada host the next meeting.
- XVI. Adjournment**

The meeting was adjourned at 11:00 a.m. on Wednesday, June 2, 1999.

APPENDIX A**LIST OF POTENTIAL SICOP PROJECTS FOR FY 2000****A. ANTI-ICING & RWIS TRAINING**

- Computer-based training adaptable to all levels of government
 - RFP
 - Establish NHI train the trainer
 - Establish NHI operator
- State of the practice equipment and facilities for RWIS
- Center for Winter Maintenance University
- Resource Sharing
- Media (Fall Media Day, etc.)
- Develop uniform standards/guidelines
- Involvement with National Weather Service
- Multiple chemicals - known best practices
- Automated call-out
- Formalize introduction to management

B. TRAINING FOR LOCAL GOVERNMENTS

- Maximize T²/LTAP for local governments
- Building and sustaining winter maintenance programs
- Guidelines for interagency information sharing (i.e., roundtable)
- Computer-based training/operators/supervisors.
- Center for winter maintenance training
- Promote employee exchange program
- Winter maintenance 101
- Privatization study - information gained transferred

C. ANTI-ICING MATERIALS & TESTING

- Deployment of PNS results/regional/syndicate/national standard
- Automated fixed location de-icing study experiment – pool fund/application devices
- Mobile/real-time chemical condition sensor
- Standard testing/protocol
- Fine graded salt implementation
- Value of sand in winter maintenance

D. BEST PRACTICES IN URBAN AREAS

- Support APWA to develop manual
- Disposal of snow
- Compile added information from RWIS/Anti-icing training for locals
- Document methods and techniques
- Route optimization
- Snow removal and disposal
- Identify, implement and practice

- Privatization of service criteria
- Transit, tie-in bike paths, etc.
- Environmental concerns
- Collect input from jurisdictions with est. population levels sorted by type of work
- Emphasize uniqueness of urban areas
- Abrasives use
- Snow melting

E. GPS FOR WINTER MAINTENANCE

- Pooled fund - 2 year test and evaluation project to document costs and benefits
- AVL route optimization
- Publish various uses of GPS
- Active control and deployment of winter maintenance fleet
- Automatic data collection
- Outsource & in-house effectiveness measurement
- Cost/benefit analysis
- Aurora track
- Vehicle tracking
- Deployment of existing technology
- AVL

F. FRICTION MEASUREMENT

- Identify data for use by motorists
- Determine appropriate measure for road condition
- Decision making criteria
- Aurora track
- Cost/benefit true value practicality
- Consistent public information
- Set standards/implement/practice
- Research studies

G. WINTER PUBLIC INFORMATION & PUBLIC RELATIONS

- Consistent criteria for informing public
- Common set of definitions for road conditions
- Develop model media package
- Develop of standard performance measures
- Standardize protocol/marketing/seamless
- Cooperate with ATIS/HAR/In-vehicle navigation
- Directory of road condition numbers for each jurisdiction/corridor condition
- Model public information program using a variety of modes
- Develop common language
- Share RWIS pavement condition information
- Participate in collaborative public information and public relations
- "Penguins and Frosty" the snowman/marketing
- FORTEL group and work on public announcements

H. DRIVER TRAINING & EDUCATION

- Develop driver education for snow packed or icy roads
- Marketing
- Compile report on each state practices, schedules, etc. and share across state lines
- Introduce winter driving techniques
- High-school outreach program/PR/marketing
- Contract through RFP
- State or local mandates for educating new drivers and refreshing existing drivers
- Identify/communicate or implement proactive
- FHWA workshop and support existing

I. OTHER HI-TECH APPLICATIONS

- Anti-drifting
- On-board freezing point measurement
- Remote fixed spray systems
- Try to influence son of SHRP
- Promote new product development
- Road closure application
- Fixed distribution of anti-icing, micro-road weather forecasting, drifting snow cont.
- Blue sky research study
- ITS protocol
- State of the practice equipment and facilities
- Productivity measurements
- WWW information exchange
- In-place broadcast system evaluation
- Internet
- Thermal mapping
- Develop less offensive studs