

The Maintenance Manager

A quarterly e-newsletter of the AASHTO Highway Subcommittee on Maintenance Volume 4, No. 3

Message from the Chair:

Hello maintenance community, I hope that this issue finds you all well and enjoying the transition from summer to fall. I want to start off by thanking the members of the subcommittee for making the annual meeting a great success; especially I would like to thank the state of Maryland and their team, led by Russ and Lenny, which made our experience so productive. I also want to thank Lacy, who when he stepped up to take the vice chair position probably didn't realize how heavily I depend on that position, but who has been working very hard to make the subcommittee activities successful.

I hope that you find the articles that have been contributed to the newsletter informative and useful in your day-to-day activities. I would like to encourage all of you to take a few minutes to write up a short article that you can share. The newsletter is important for us to be successful, because communication will continue to be one of our key functions. So, thanks to Celso who is responsible for making sure this continues.

Enjoy!

- Carlos

(Carlos Braceras, UDOT Deputy Director, is the current Chairman of the Subcommittee on Maintenance)

Subcommittee Activities

Bridge Task Force

Balloting on proposed resolutions and prioritization of research needs statements (RNS) submitted at the AASHTO Subcommittee on Maintenance is complete.

Resolution 09-08 entitled Guide Document for the Use of HBP Funds for Preventive Maintenance submitted by the Bridge Task Force (BTF) resolves that: AASHTO Highways Subcommittee on Maintenance and FHWA will partner to develop guidelines outlining

the criteria and process for the timely approval to use HBP funds for preventive maintenance.

The BTF co-sponsored Resolution 09-03 Continuing Concerns Regarding Raising Truck Weight and Size Limits with the Pavements Task Force. This resolution expresses concern regarding proposals to increase the truck weight and size limits on our nation's existing roads and bridges and seeks the development of informational brochures to explain the damaging impacts of increasing truck weights and sizes on both the physical infrastructure and the DOT budgets, and the associated safety impacts and that any proposed increases in the truck weight and size limits contain appropriate and equal mitigation measures and resources to ensure the protection of our existing infrastructure assets from the additional loading damages and other impacts.

The two RNS submitted by the BTF fared favorably, although additional support will most likely be necessary to see these projects get funded.

Snow & Ice Task Force

The Snow and Ice Task Force in collaboration with Aurora, Clear Roads, and Pacific Northwest Snow Fighters (PNS) consortiums, Transportation Research Board (TRB), FHWA and AASHTO SICOP facilitated the 2009 National Winter Maintenance Peer Exchange, August 25-26, 2009 in Madison, Wisconsin. A total of 31 Snow Belt state DOTs, the District of Columbia DOT, FHWA, and TRB attended the event. Progress on completing the 27 research needs developed at the 2007 Peer Exchange was reported and four discussion groups focusing on (1) Equipment, (2) Materials, (3) Weather and RWIS, and (4) Methods developed and prioritized an additional 26 research needs to be worked on by the consortiums in their future programs. The website for the Peer Exchange is hosted by Western Transportation Institute at www.wti.montana.edu/TechnologyTransfer/2007PeerExchange.aspx and contains progress being made on the research needs statements.

SICOP – The Snowfighters Friend

At the fourth International Symposium on Snow Removal and Ice Control technology, held in Reno, Nevada in 1996, it was decided to create a subscriber based list-serve for the snow and ice community. The list-serve is mailing list of group of people who are geographically dispersed but who share one common interest—in this case winter maintenance. To use the list you have to subscribe to the list. Once you have subscribed, then whenever any list member e-mails the list address (snow-ice@list.uiowa.edu) you will get a copy of that e-mail. So will everyone else on the list. If you reply to the list-generated e-mail, your reply will also be sent to everyone on the list.

Questions, comments, and requests for information are routinely posted by more than 700 interested snow and ice professionals from Arizona to Nova Scotia and beyond. Subjects discussed have included topics from Downtown Sidewalk Snow Removal to Wing Plows, Salt Performance Enhancers, Snowfighter vehicle livery, and Maintenance Station Location Optimization Software. The service, hosted by the University of Iowa, is free and is available world-wide. Discussions often include university faculty, researchers, first-level snow control supervisors, fleet managers, and state, provincial, county, and local winter maintenance managers. For more information go to:
<http://www.transportation.org/?siteid=88&pageid=2174>

Equipment Focus Group

Equipment Technical Services Program

During AASHTO's annual meeting in Hartford, Connecticut in 2008, the Standing Committee on Highways and the Board of Directors approved the Advance Equipment Technology Operations (AETO) Technical Services Program (TSP). This TSP was developed to support and enhance the on-going work and priorities of the Subcommittee on Maintenance (SCOM) Equipment Focus Group. The SCOM will oversee the AETO, which will keep current data pertaining to new types of equipment along with advancing innovation and technology related to the equipment fleet. This information will be disseminated throughout the state DOTs to reduce costs of maintenance operations.

At the annual meeting in Annapolis, Maryland, the formation of an oversight committee who will guide and direct the activities of this TSP was discussed.

Volunteers were solicited from the state DOT equipment managers to serve on the oversight committee. Nominees were selected to form the TSP oversight committee. Since a prerequisite for membership on the oversight committee is to be a member of the SCOM, AASHTO is presently seeking membership approval from the CEOs of the state DOTs of the nominees who are not currently members of SCOM. All but one of the current nominees are either a member of SCOM or been approved for membership by the CEO of their state DOT.

Sufficient state contributions have now been collected to get the program started. The proposed scope, task document, and budget for start-up of the program have been developed with some proposed activities been prioritized. Some of the proposed prioritized tasks of this TSP are:

- A unique AASHTO Equipment Management TSP (AETO) Website will be created to serve the needs of the member agencies and planned Regional Equipment Management Partnerships.
- A bulletin board system will be developed and maintained to facilitate technical exchange between member departments and affiliates.
- An on-line technical reference will be built to collect Equipment Fleet Management topics including asset management, procurement, specifications, environmental, management systems, research, performance measurement and training tailored to the needs of State DOT Equipment Managers.
- Respond to inquiries from member states by way of telephone, email and fax. Technical assistance requests will be coordinated and subsequently referred to appropriate resources.
- Organize and facilitate Regional Equipment Management Partnership meetings. These meetings enhance technical exchanges between member agencies, local agencies, FHWA, academia, manufacturers and suppliers.
- Coordinate with the leadership of each regional partnership to facilitate periodic conference calls in conjunction with planning the various activities or to discuss the status of activities being undertaken by the partnership and its task forces.

Once all the TSP oversight committee members have been appointed and confirmed, the committee will start the development of a Charter, a Strategic Plan for the program, and a final Work Plan for the first year of the program. Full implementation of the TSP will also provide an excellent means to reach out and engage State Equipment Managers, who generally are not able to attend the SCOM annual meetings.

Although sufficient contributions have now been collected to get the program started, more contributions are needed to achieve the goals and objectives of the TSP. By letter dated July 15, 2009, AASHTO recently asked each State for the \$3000 voluntary contribution to fund this new program.

The equipment fleet comprises a significant asset investment of a State DOT. The effectiveness of such equipment fleet operations affect the DOTs' ability to adequately perform normal activities and successfully respond to emergency events. All DOT Maintenance Engineers are being encouraged to request their research contacts to support this program through the voluntary assessment.

Performance Measures Focus Groups

Implementing a Performance Based Federal Aid Program

At the Annual SCOM meeting in Annapolis this summer, the Performance Measures Focus Group hosted a presentation by Mr. Jim March of FHWA. Jim's presentation provided insight into what national performance measures will be likely be required in the new highway bill. His presentation entitled "Considerations in Implementing a Performance Based Federal-aid Program" highlighted some of the key performance areas of interest which included Safety, Pavement and Bridge Conditions and Congestion among others.

While these performance areas are being targeted, there is concern that the actual performance measures not be overly burdensome to collect and that they be outcome oriented. They also should be easily understood by the public and reflect the most important aspects of performance. While the actual performance measures have not been established some possibilities being discussed include % reduction in fatalities, % reduction in structurally deficient bridge deck area and % reduction in Interstate lane miles in poor condition.

Current versions of the bill include a 20% loss of federal funds if performance measures are not achieved; however once the targets are reached the funding could be restored. Federal funds may also be made available to collect performance data. To further define what measures should be included, a Performance Management Scan was held recently and our own Carlos Braceras was included in the trip. Countries visited included Sweden, Great Britain,

Australia and New Zealand. These countries were selected due to their work in the performance measurement area.

Research Focus Group

The following Problem Statements were submitted to NCHRP as a result of the balloting conducted after the summer meeting. They were submitted in the priority order shown below:

1. Guidelines/Methodology for Developing Cost Effective and Cost Efficient Levels of Service
2. Convincing the Stakeholders: Developing a Guide for Communicating Maintenance and Preservation Needs
3. Quantify the Information Necessary to Guide Bridge Preservation Decisions
4. Improvement or Development of Corrosion Inspection Techniques for Highly Stressed High Strength Wires Used in Bridge Structures
5. Combining Data Collection for State DOT's Existing Management Systems and HPMS Submittals
6. Cross Asset Funding Investment Strategies for Maintenance

State DOT News

NYSDOT Operations Introduces Triple Bottom Line Sustainability Metric



GreenLITES Operations was launched by New York State DOT on Earth Day 2009. The program encourages Transportation Maintenance, Fleet Administration, Traffic, Safety & Mobility, and Modal Safety and Security to advance Triple Bottom Line sustainability principals in all aspects of work. Residency Managers are asked to weigh in on broad-ranging activities related to bridge, road and roadside maintenance and facility management with environmental components. Approximately, 100 new green lines have been integrated into the annual Maintenance and Operation Plan (MOP) where activities are tracked and accomplishments recorded at the end of each the fiscal year. The MOP spreadsheet includes a weighted factor used to score GreenLITES certifications of Evergreen, Gold, Silver and Certified levels. The GreenLITES Operations

program will be refined over the next two years based on feedback by users. The annual summary data will provide a basis for “environmental gap analyses” in Operations.

GreenLITES participation provides an opportunity for employees and groups to share their innovative activities and have these recognized and evaluated for statewide practice. The willingness to innovate and to do the “right thing” is a reliable motivator among Maintenance ranks and ultimately drives participation in the program. GreenLITES nominations and awards will be announced on Earth Day each year. For more information please visit

<https://www.nysdot.gov/programs/greenlites/operations-cert> or email Gary McVoy or Elisabeth Kolb at GreenLITES@dot.state.ny.us.



Missouri Department of Transportation recently hosted Tennessee DOT for a very informative winter operation peer exchange. The event, which included topic presenters from various offices of MoDOT, was organized by Jim Carney, MoDOT Maintenance Director and Chair of SCOM Contract Maintenance Focus Group with the help of Mike Shea and Tim Jackson, MoDOT Maintenance Liaison Engineers. TDOT was represented by the staff from Maintenance headquarters as well as regional, and district offices.

MoDOT prepared a very detailed program agenda which included Budgeting, Expenditures, Policy, Guidelines, Fleet, Salt & Beet Juice Procurement, Salt Storage, Winter Event Database, Employee Training, EOC Winter Operations, and Clear Roads Pooled Fund. Also, MoDOT’s salt/salt brine storage facilities were inspected and equipment demonstrations were conducted allowing both states to share ideas.

All states face very difficult budget issues, increasing public and private demand for improved services or to do more with less. MoDOT and TDOT shared many processes, guidelines, training and equipment purchases to meet this demand. MoDOT has increased front snowplow widths to 14 feet and use towplows making the capability of 26 feet coverage with one truck/driver. Beet Juice has also been very successful in MoDOT in cold temperatures instead of using calcium chloride. Since Beet Juice is non-corrosive it adds the flexibility to either pre-wet

stockpiles or pre-wet salt at the spinner without the fear of corrosion damage to equipment. Missouri pointed to one of the main successes of their winter program: the development of “CHAMPIONS” or leaders who facilitates training and operations at the local level within their organization.

As a result of this peer exchange, increased communications have been established to share storm information between MoDOT and TDOT. TDOT plans to purchase 14 foot plows and test Beet Juice in their winter operations this year.



TSP•2 Updates

The AASHTO Transportation System Preservation Technical Services Program or TSP-2 is now in its fourth year of operation, serving as a “one stop shop” for pavement preservation practitioners through its technical help desk, web-based document library and facilitation of regional preservation partnerships. Managed by the National Center for Pavement Preservation (NCP) at Michigan State University, the program can attribute much of its success to the establishment of Pavement Preservation Partnerships in each region of the country. Annual Partnership meetings are facilitated by NCP staff and travel costs for two members from each participating state are covered as part of their annual voluntary contribution to AASHTO for the TSP-2.

Great news from AASHTO, they are moving forward with the implementation of a parallel program for bridge preservation through the TSP-2. Proposals for this expansion are to be evaluated by the TSP-2 Oversight Panel within the next few weeks and a contract awarded to manage this phase of the program. Annual voluntary State contributions were increased last fall to \$20,000 to cover the two programs. As a result of interest in the TSP-2 and in view of the budget challenges facing many state DOT’s, the FHWA waived the required state match, allowing 100% SP&R funds to be used to cover the cost of the voluntary contribution. SCOM members need to be champions for the TSP-2 by ensuring that their states contribute so they remain eligible to participate in activities and receive the benefits offered through the program.

AASHTO TSP-2 Pavement Preservation Partnerships are now active in four regions of the country. A Western States Partnership is managed by the

Washington State DOT through a pooled fund outside of the AASHTO program, though in the future they may opt to come in to the TSP-2. These partnerships create a unique opportunity for interaction between highway agency, industry and academic professionals. The Southeast Partnership, SEPPP, held their annual meeting this past May in New Orleans, opting for a joint conference with the Southeast Pavement Management Association. The conference agenda was structured to include a joint plenary session with a theme of "Integrating Pavement Preservation and Pavement Management". SEPPP Task Forces are currently focusing their work efforts on developing template specifications for their region, communicating the message of preservation through articles and pamphlets, comparing pavement distress identification methods and triggers for preservation treatments and exploring the possibility of a pilot pavement preservation contractor certification program. The other three TSP-2 partnerships are currently busy finalizing agendas for their annual meetings which will be held this fall beginning with the Rocky Mountain Partnership, RMPPP in Salt Lake City on October 13-15. The Midwestern partnership, MPPP, will be meeting in Schaumburg, Ill on October 27-29, followed by the Northeast partnership, NEPPP, on November 3-5 in Princeton, N.J. Meeting proceedings, presentations and minutes for each partnership can be viewed on the NCPP website at www.pavementpreservation.org.

Since their formation in 2007, the partnerships have provided an excellent forum for state and industry peer to peer exchange on preservation treatments, programs, specifications and best practice. The work efforts of partnership Task Forces will over time lead to common regional specifications along with continual improvement in quality and consistency of work performed by contracting industry which will likely be enhanced through increased agency-industry training efforts. Partnerships are also looking for ways to capitalize on the data collected through the FHWA State Preservation Program reviews that have now been completed in 41 states through the sharing of best practices. Consideration is also being given to the development of a "self assessment tool" as well to periodically refresh the data from this effort. Additional information on the AASHTO TSP-2 can be found by visiting their website at www.tsp2.org.

In Memoriam ***James B. Sorenson (1949 - 2009)***



Jim Sorenson, Senior Construction and System Preservation Engineer, Office of Asset Management, FHWA, passed away June 27, 2009. Jim served as the Secretary of the Subcommittee on Maintenance from 1997 and championed the pavement preservation program at the national level. He is survived by his three daughters and twelve grandchildren.

Calendar of Events

- **The Rocky Mountain Pavement Preservation Partnership Annual Meeting** – October 13-15, 2009, Salt Lake City, Utah. Contact AASHTO TSP-2 Ph. (517) 432-8220 or visit www.pavementpreservation.org/rockymountain/
- **Eight National Conference on Transportation Asset Management: Putting the Asset Management Piece Together** – October 19-21, 2009, Portland, Oregon, <http://www.trb.org/conferences/2009/Assets>

Please e-mail any news articles/events that you would like to share with the Subcommittee members to Celso Gatchalian: celso.gatchalian@dot.gov

Also make sure to visit our Subcommittee website: <http://maintenance.transportation.org/?siteid=76>