

# The Maintenance Manager

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

## Message from the Chair:

*Hello to all of my friends in the maintenance community, I hope that you have all had a great summer and have had the opportunity to put into practice something new that you learned or picked up at our summer meeting. Again, I have to thank Steve and his team at Caltrans for being such terrific hosts. What a beautiful location and what great people!*

*I realized that the format of our meeting was very different, but that seems to be the change we need to have, to better understand the functions of other AASHTO committees. Here in Utah, as are most of you know, we are facing what seems to be a never ending budget challenges. We have been lucky that our legislature has provided significant funding for capacity projects, but we are falling behind in being able to meet the maintenance needs of our roads and bridges. Couple this with the new reality of increased costs and our ability to take care of what we have gets more difficult. We are using this "opportunity" to better focus our money on what really matters, which is the maintenance of pavements and bridges.*

*We are also being asked by our public to not only be sensitive to the environment, but also to be part of the solution to make improvements. Under the Leadership of Utah Governor Huntsmen, all Utah state employees have been asked to work four 10-hour days a week. The Governor's goal is to reduce the demand for the energy to heat and cool our building and to reduce driving. It is our job to figure out how to achieve the goals as set out by our Governor and still provide the excellent level of service our customers expect. This may be considered difficult by some, but I am excited because I know our great employees are up to the challenge and understand why we are doing this.*

*Thanks to all of you for the time you volunteer to the committee, you make a difference and provide opportunities for all of our member states to do better for their customers. Have a great fall.*

- Carlos

## Subcommittee Activities

### Snow & Ice Task Force

July 2008 marked the completion of a suite of seven AASHTO Computer-Based Training (CBT) programs which provide comprehensive training in all aspects of winter roadway maintenance in a convenient and cost-effective training medium. AASHTO distributed the CBTs to state DOTs, Ontario Good Roads Association and Canada Provinces who joined the pooled fund effort, APWA made the CBTs available to local governments through their book store and NACE made distribution to LTAP. The titles of the seven courses are:

- Anti-icing/RWIS
- Selecting Snow & Ice Control Materials to Mitigate Environmental Impacts
- Equipment Maintenance
- Proper Plowing Techniques
- Deicing
- Blowing Snow Mitigation
- Winter Maintenance Management

### Equipment Focus Group

The Equipment Focus Group, in collaboration with the Roadside & Environment and the Snow & Ice Task Forces, developed a survey of "Best Practices in Fuel Conservation and Carbon Footprint Reduction in DOT Operations."

This survey of state Departments of Transportation (DOT) practices is needed to identify current strategies that other agencies use to conserve fuel and reduce the carbon footprints caused by vehicle emissions and to present best practices for other DOTs to share. The results of this survey will have the potential for immediate significant payoff due to the increased costs of motor vehicle fuels and the increasing awareness of the effects of state DOT actions on the production of greenhouse gases.

The survey was distributed by AASHTO to DOT Equipment Managers on August 8<sup>th</sup> to gather current efforts being used in state DOTs to reduce fuel use and reduce CO<sub>2</sub> emissions. When the survey results are finalized, the chairs of the Snow & Ice Task Force, Roadsides & Environment Task Force, Research Focus Group, and Equipment Focus Group will assess the results and determine how they will use the information to move forward with a 20-7 research proposal for further research.

### **Performance Measures Focus Group**

The Performance Measures Focus Group has again begun to pursue common performance measures on a national level. In 2001, the Subcommittee on Maintenance adopted a resolution for developing a several common measures each year. These common measures were never pursued and this Resolution was resubmitted this year for adoption by the Subcommittee.

The upcoming 2<sup>nd</sup> National MQA Peer Exchange will open discussions for some basic agreement on these common measures and upon adoption of the resolution, the Performance Measures Focus Group expects to begin identifying some elements where common performance measures can be identified. Once these common elements are identified the Focus Group will work toward identifying a few performance measures and propose them for adoption at next summer's meeting.

For more information on the 2<sup>nd</sup> National MQA Peer Exchange visit <http://www.mrutc.org/outreach/MQA/index.htm> or contact Jennifer Brandenburg at 919-733-3725.

### **Maintenance Station turned "Green"**

On March 21, 2008, UDOT put into operation its first grid tied wind turbine in Milford Utah. Milford maintenance station 4531 is now the proud owner of a new Skystream 3.7 wind turbine. The wind turbine sits on top of a 45 foot tower and can generate as much as 2,200 watts of AC electricity. The turbine is tied directly into the electrical grid and uses no batteries. Following a 3200-watt grid tied photovoltaic system in Murray last fall; this is the second renewable energy project for UDOT.

UDOT's Milford maintenance station is participating in Rocky Mountain Power's net metering program. This program is an agreement between Rocky Mountain Power and UDOT to allow UDOT to

cogenerate electricity on site. A special bi-directional power meter monitors the amount of any excess power that is fed back into the grid so that the Milford shed is able to use the credits at a later date.

The maintenance personnel at Milford were instrumental in making this project happen. They constructed the tower foundation and laid the electrical conduit back to the building. Funding for the project was provided by UDOT and a matching grant from the Utah Geological Survey's State Energy Program. The total installed cost was just under \$14,000. It is estimated that this turbine will provide up to 40% of the station's yearly power use.

Milford was selected as a good candidate for this project due to the steady and consistent wind. Good wind sites typically have a minimum average wind speed of 10 miles per hour. Commercial developers are in the final stages of the planning and environmental process to build a 200-megawatt wind farm just north of Milford. That power has been purchased by the city of Los Angeles.

### **TSP2 Update**

#### *Bridge Resources Added to the AASHTO TSP•2 Website, PME Study Nearing Completion*

Approval was recently received from the AASHTO TSP•2 Oversight Panel to expand the program website to offer Bridge Preservation, Maintenance, and Inspection resources (<http://www.tsp2.org>). New additions to the website include distinct news sections for bridge and pavement practitioners, a bridge oriented on-line library search, bridge bulletin boards, and support for existing and newly formed bridge partnership/working groups. Interested bridge practitioners are encouraged to provide materials for hosting on the TSP•2 website, including technical documents and manuals, working group information, calendar/event announcements, and posts to the bulletin boards. Materials can be provided to the TSP•2 webmaster via email: [john1545@egr.msu.edu](mailto:john1545@egr.msu.edu), or by calling the TSP•2 at (517) 432-8220.

The NCPP's work on the FHWA Federal Lands Highway (FLH) study on the use of polymer modified emulsions (PME) in thin surface treatments is nearing completion. A draft interim report is currently undergoing peer review by agency, industry, and academic practitioners. The report includes the results of a comprehensive literature review; a "Strawman" report-only specification developed in

conjunction with industry; and a PME testing plan. Efforts are underway to collect samples for testing under the Strawman from several FLH projects planned for this summer and fall.

The TSP•2 is still seeking comments on the Transportation System Preservation Research Roadmap which has been posted on the TSP•2 website. Practitioners may view the Roadmap and register their votes for the Problem Statement initiatives they feel are most relevant to their needs. To view the Roadmap or place your vote, please visit the Roadmap website at:  
<http://www.tsp2.org/roadmap>.

## Moving On

### Leadership Team Updates:

Lacy Love, NC DOT was confirmed by AASHTO as the new Vice Chair of the Subcommittee on Maintenance effective July 15, 2008.

Paul Corti, VT AOT, became the new Chair of the Management Systems Focus Group taking over the position vacated by Lacy Love who moved up as the Vice Chair of the Subcommittee.

Mike Mattison, NE DOR, became the new Chair of the Roadsides & Environment Task Force taking over the position held by Mark McConnell, MSDOT who just recently completed his second "tour of duty" as a dedicated member of the Leadership Team. Mark will remain an active member of the Subcommittee.

Brad Darr, ND DOT, is taking over the position of Vice Chair of the Snow & Ice Task Force. He will replace Jaci Vogel, KSDOT, who moved up to another division at KSDOT. Jaci has served the Subcommittee in different capacities during the past 10 years.

Russ Yurek, MD SHA, stepped down as the Vice Chair of the Subcommittee in order to work full time on their preparations to host the 2009 Summer Meeting in Annapolis, Maryland. Russ has been an active member of the Subcommittee, served in different capacities including Management Systems Focus Group Leader prior to being the Vice Chair.



Above picture was taken during the award ceremony at the 2008 Summer Meeting in Monterey, California recognizing Russ Yurek's services and contributions to the Subcommittee. From left: Ken Kobetsky, AASHTO Program Director for Engineering; John Horsley, AASHTO Executive Director; Russ Yurek; Carlos Braceras, Subcommittee on Maintenance Chair; and Jim Sorenson, Subcommittee Secretary.

## Calendar of Events

- **2<sup>nd</sup> National MQA Peer Exchange** – September 23-24, 2008, Raleigh, NC. Contact Jennifer Brandenburg, NC (919) 733-3725, <http://www.mrutc.org/outreach/mqa/Flyer.pdf>
- **National Workshop on Highway Asset Inventory & Data Collection Expo** – September 24-26, 2008, Raleigh, NC. Contact Terry Canales, NC (919)-733-2210, website <http://www.itre.ncsu.edu/NCAssetMgmtConf/locati on.html>
- **2008 National Safety Rest Area Conference** – October 1-3, 2008, Seattle, WA. For more information visit <http://www.wsdot.wa.gov/partners/nsrac2008/>

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

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