

# The Maintenance Manager

A quarterly newsletter of the AASHTO Highway Subcommittee on Maintenance Volume 4, No. 1

## Message from the Chair:

*Welcome to 2009! I hope that you all had a great holiday season and had the opportunity to take some time off and spend it with your families. As I am sure is true with a lot of the northern tier states, our Utah maintenance employees spent a great amount of their holiday season behind the wheel of a snowplow. I love the snow, and Utah does need the water, but I wish our hard working folks didn't have to miss the time with their families. As you all know these hard working women and men don't complain, they just do what needs to be done. They know how important the work they do is for the people of our states, it is really awe inspiring. Governor Huntsmen sent a letter this week to our employees thanking them for their sacrifices and their great work.*

*In Utah, as I am sure is true in your state, we are working hard on two different issues, cutting back due to the economic slow down, and getting ready for a potential economic recovery package. It is really a unique situation were we find ourselves, but I believe that our State DOT's are in a position to really show the public how good our folks really are. I hope that you are working closely with your department leadership to identify pavement and bridge projects that you can get out to contract as quickly as possible, and that will help you make a leap forward in the condition of your assets. Look that this as an opportunity to find ways to get your product to market faster than ever before. It has never been more important than to be able to demonstrate that we **can** identify the right projects and that we **can** get them under construction quicker than ever before, and that we **can** get people back to work, and that we **can** be accountable for how the money is spent, and that we **can** save lives and improve our costumers roads and bridges.*

*I think that we will all look back at this very difficult period and reflect on how lucky we were to have been a part of something that made a difference. The public will be watching us like never before; it is our time to shine. Look to members of the subcommittee for help, ask questions, and offer suggestions. We are in this together and I am proud to be a small part*

*of it. Good luck, have fun, and be the ones in your organization who say, Yes we **can** do it.*

- Carlos

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

## Subcommittee Activities

### Snow & Ice Task Force

The Snow & Ice Task Force in collaboration with Aurora, Clear Roads, Pacific Northwest Snow Fighters (PNS), FHWA and AASHTO SICOP is developing the 2009 National Winter Maintenance Peer Exchange. The Peer Exchange will be held August 25-26, 2009 in Madison, Wisconsin. The first Peer Exchange was held in Columbus, Ohio in 2007. A total of 35 Snow Belt states, District of Columbia, APWA, and several universities attended the event where they developed and prioritized 27 winter maintenance research needs statements. Western Transportation Institute volunteered to host a website for the Peer Exchange if AASHTO SICOP would provide periodic updates. The website is found at [www.wti.montana.edu/TechnologyTransfer/2007PeerExchange.aspx](http://www.wti.montana.edu/TechnologyTransfer/2007PeerExchange.aspx). The January 2009 update shows progress made by TRB, Aurora, Clear Roads, PNS, NCHRP, FHWA, SICOP and PNS on all 27 research needs statements. For more information visit [www.sicop.net](http://www.sicop.net), click on "Events" or contact Lee Smithson at 515-239-1519 or [leland.smithson@dot.iowa.gov](mailto:leland.smithson@dot.iowa.gov).

### Equipment Focus Group

**NCHRP Report 624, Selection and Application of Warning Lights on Roadway Operations Equipment**, is the result of NCHRP Project 13-02, in which the Equipment Focus Group participated and supported since developing the problem statement nearly five years ago. This report provides recommended guidelines for the selection and application of warning lights on roadway operations

equipment. In the absence of any widely-accepted guidelines for selecting warning lights for roadway equipment that consider the many relevant factors, many states and municipalities could benefit from the research and experience that are represented within this document.

The report includes the needed guidelines, which address the physical, functional, and performance requirements of the lighting system. The guidelines also consider that the lighting systems on such vehicles must be designed and installed in regard to vehicle application, and provide technical information for use in developing procurement specifications for specific applications.

All respondents to a recent poll of the Equipment Focus Group provided approval of the guidelines. The Equipment Focus Group submitted the guidelines to the AASHTO Highway Subcommittee on Maintenance for consideration and balloting. Once passed at the subcommittee level, the guidelines can be presented to the Standing Committee on Highways (SCOH) and the AASHTO Board of Directors for approval as a formal AASHTO Guide and national publication. As soon as the ballot is approved by the subcommittee we will send an e-mail ballot to SCOH.

The report may be accessed on the TRB website from the following link:  
[http://www.trb.org/news/blurb\\_detail.asp?id32](http://www.trb.org/news/blurb_detail.asp?id32)

### **Policy Resolution 2008-11: *Establish a Technical Service Program to Advance Equipment Technology***

Policy Resolution 2008-11 establishes a voluntary AASHTO Technical Services Program (TSP) for advancing asset management principles in the management of the equipment fleet. The volume and rate of occurrence of advancing innovation and technology in the highway equipment fleet is such that it is nearly impossible for individual agencies' equipment management organizations to stay abreast of the latest technologies to gain the cost effective advantages that the new technologies provide. The Equipment TSP will develop an information base on new types of equipment, innovative technologies, and other advances of interest to the equipment manager.

The AASHTO Board of Directors approved our recommendation for an Equipment Technical Services Program at the Fall Business Meeting. By

letter dated January 15, 2009, AASHTO has recently asked each State for the \$3000 voluntary contribution to fund this new program. Since the DOT equipment fleet comprises a significant asset investment, is a large portion of all DOTs' budgets and expenses, and the effectiveness of such equipment fleet operations affect the DOTs' ability to adequately perform normal activities and successfully respond to emergency events, it would behoove all DOT Maintenance Engineers to urge their research contacts to support this program through the voluntary assessment.

The resolution may be accessed on the Highway Subcommittee on Maintenance website from the following link:

<http://maintenance.transportation.org/sites/maintenance/docs/Resolution%2008-11%20Equipment%20TSP.pdf>

### **Contract Maintenance Focus Group**

The development of the NHI Training Course 134079, ***Performance Based Contracting for Maintenance***, is progressing well with the pilot training delivery planned for Nashville, Tennessee in early May 2009. The course development is being guided by selected officers and members of the Subcommittee on Maintenance; Jim Carney – MoDOT, Jennifer Brandenburg – NCDOT, Tammy Sims – TxDOT, Lloyd Neeley – UDOT, and Celso Gatchalian – FHWA.

### **State DOT News**



### **UDOT Launches New Maintenance Management Software**

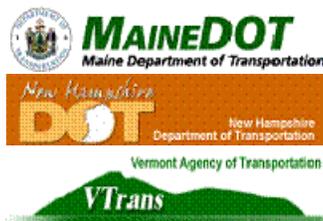
Utah Department of Transportation received an early Christmas present with the launch of their new Operations Management System (OMS). OMS replaced their legacy Maintenance Management System (MMS), which was still mainframe/desktop-based software. As a fully web-based, Oracle database system, OMS will allow for tighter integration with other UDOT business systems. UDOT's OMS is a customization of a commercial off-the-shelf software package. After nearly four and a half years of defining system requirements, working through the procurement process, development, customization and training, the new system was launched at midnight November 15, 2008. Due to an aggressive training program, employees were well

prepared for the transition and had relatively few problems during the transition.

As the New Year unfolds, final configuration will take place, and proposed integration and additional uses will be identified. The program is being released in phases to help employees make the transition. The initial phase included training on key inputs related to inventory, work orders, day cards and other critical aspects of the system. Currently employees are being trained on budgeting aspects and will soon receive training on field data collection.

As UDOT moves forward, more business systems will be linked to OMS data to help manage the business processes of the transportation system. Future plans include tighter integration with GIS data, construction program data and integration of the Pavement module.

### Tri-State Partnership for Maintenance Management Introduces Asset Management Capabilities



The **Tri-State Partnership for Maintenance Management** among **Vermont, Maine, and New Hampshire** began its eighth year in November 2008. Since its inception, the Partnership has shared business knowledge, data, and software functionality through the use of the **Managing Assets for Transportation Systems (MATS)** application which is implemented in all three states.

In 2008 the Partner States completed the reengineering of MATS core functionality in a .NET environment that operates with both Oracle and SQL Server databases. This included new work reporting for crews, individuals, and administrative reporting including a management approval process that enables the reporting to be extended Department wide. Other new and reengineered functionality includes modules for: work order, winter operations, meter readings, rental agreements, stockpiles, billing, and planning and budgeting.

Once the core components were completed, the Partnership undertook a significant effort to introduce asset inventory capabilities within MATS. The asset model was developed using signs as the initial asset proxy, and once the asset paradigm and model was finalized and integrated with work reporting and work orders, then culverts, guardrail, retaining walls, and signals were quickly included as additional asset types following the Partnership's '**phased or building block approach**'. Beginning in 2009, the Tri-State Partnership will extend the asset model to include asset condition assessment and asset valuation as additional components of asset management.



### TSP2 Updates

#### **AASHTO Board of Directors approves Bridge Preservation Technical Services Program**

AASHTO's TSP2 continues to grow in popularity with state transportation agencies. As a result of this interest, approval was given to move forward with an expansion of the TSP2 into the bridge preservation area by the Board of Directors at their annual meeting in Hartford Connecticut this past October.

During the past year, a section was added to the program website for bridge preservation related documents along with a bulletin board for dialogue between bridge practitioners. The TSP2 was initially sponsored by the Subcommittee on Maintenance, and is funded through voluntary contributions from member states. This expansion will complete the third and last phase of the program implementation, with the annual contribution increasing from \$9,500 to \$20,000. The bridge program is expected to follow the template established for the pavement area including regional partnerships, though they may have different boundaries. With the budget challenges facing most state DOT's this year, subcommittee members should be pleased to learn that the state match for federal SP&R funds has been waived for the TSP2 contribution. AASHTO began sending new invoices for the program to state CEO's in January, so make sure your state research group is aware of this change. For more information, go to [www.tsp2.org](http://www.tsp2.org). or contact NCPP at 517-432-8220.



## Maintenance Wins Roadeo

Tennessee hosted the 2008 Southeast Regional Equipment Operators Roadeo Thursday, October 2 in Pigeon Forge. TDOT's Maintenance personnel took home top prize in the competition. Tennessee's personnel from across the state bested the competitors from Arkansas, Mississippi, South Carolina, Virginia, and North Carolina in six skill and safety events that showcase their ability to maneuver heavy equipment through a series of obstacles and precision challenges. The events included backhoe, motor grader, tractor mower, tractor lowboy, single axle dump truck, and tandem axle dump truck. Tennessee placed first in three of the events. These events were: backhoe, tractor lowboy, and single axle dump truck.



*Pictured above is the TDOT team with Greg Duncan, State Maintenance Engineer and Vice Chair of the SCOM Contract Maintenance Focus Group. The winning team consisted of: Wayne Davis - Backhoe; Randy Perry - Backhoe; Claude Martin - Motor Grader; Mark Lovelace - Motor Grader; Gary Rohraff - Tractor Mower; Tim Bailey - Tractor Mower; Johnny Allred - Single Axle Dump Truck; Ernest England - Single Axle Dump Truck; Ricky Harris - Tandem Axle Dump Truck; Ricky Byrd - Tandem Axle Dump Truck; Floyd Fortune - Tractor Lowboy; Billy Smartt - Tractor Lowboy.*

## Moving On

**John Blacker**, MDT, became the new Deputy Director of the Montana Department of Transportation effective December 2008. John spent more than 10 years with the subcommittee serving in different capacities, including chairman of the Snow and Ice Task Force. Congratulations John!

**Zane Webb**, TxDOT State Maintenance Engineer retired effective January 2009. Zane has been an active member of the Subcommittee during the past 10 years.

## Calendar of Events

- **WASHTO Committee on Maintenance Conference** – March 8-11, 2009, Scottsdale, AZ. <http://www.azdot.gov/WASHTO/index.asp>
- **12<sup>th</sup> AASHTO-TRB Maintenance Management Conference** – July 19-23, 2009, Loews Annapolis Hotel, Annapolis, MD. <http://www.marylandroads.com/businesswithsha/aashto/oom/2009aashtoconference.asp>
- **2009 National Winter Maintenance Peer Exchange** – August 25-26, 2009, Madison, Wisconsin. [www.transportation.org/?siteid=88&pageid=2169](http://www.transportation.org/?siteid=88&pageid=2169)
- **14<sup>th</sup> Eastern Snow Expo**—August 26-27, 2009, Madison, Wisconsin, <http://www.transportation.org/?siteid=88&pageid=2169>.

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>