

Message from the Chair:



As I am writing this article I find myself sitting in the parking lot of one of our newer rest areas waiting for a bus with members of our legislative appropriations committee. They are out doing their annual tour of Utah's roads and buildings, they like to get out and see both the needs as well as the accomplishments. It is really a great opportunity to connect with the members of the legislature in a less formal setting; we get to know each other as people which makes communication throughout the year so much better.

I arrived early, which I always try to do when working with members of the legislature, so I am taking the opportunity to speak with the folks who are stopping at the Tie Fork Rest Area, built along US-6. It was built to emphasize the history of the area, and the locals are very proud. But, it's the tourists who appreciate the facility. It's informative and interesting, which is resulting in people spending more time here. I am sure that they are more rested and alert because of their stops here, which makes our roads safer. But is their data to back this up?

Eleven years ago, Readers Digest named this 100-mile section of US-6 one of the most dangerous roads in the country, you can imagine the concerns of the traveling public. They all wanted to know what we were going to do about it. The full rebuild would be much more costly than we could ever afford, so we committed to do "something" every year. So, things like centerline rumble strips, signs indicating distance to the next passing lane, passing lanes, deer and elk fencing and passages, better pavement, new rest areas, and it goes on and on. The bottom line is that we have spent over \$250 million over the last 12 years, and have reduced the fatalities by 76%.

So, while the safety results are what excite me, to our customers that is a basic requirement of their DOT. As I listen to the folks it's their experience that they remember. It's fun to work in an industry where we make people's lives better.

All the best,
Carlos

Message from the Vice Chairs:

2013 SCOM Planning

It seems like we just got home from Seattle and the 2012 Subcommittee on Maintenance meeting, but it is already time to start planning for the 2013 meeting in Burlington Vermont. Mark your calendars for July 21-25, 2013. Scott Rodgers and the Vermont team have already begun their planning work and have included some great outings for our group.

Next year will be a joint meeting with the AASHTO Subcommittee on Asset Management so be thinking about what topics you would like to see discussed. The program committee has been named and our conference calls will begin in November. We will be seeking input from each of you through your TWG leadership.

Stay tuned from more details.

2012 Summer Meeting Resolutions:

This year 4 resolutions were put forward below are the results.

Resolution on the Promotion of Highway Bridge Measurement Criteria that Promotes Bridge Preservation

Affirmative: 36 of 52 (1 duplicate cannot be counted Total submitted 37)

Negative: 2 of 52

Establish a Schedule for Alternating Biennial Regional and National AASHTO EMTSP Partnership Meetings

Affirmative: 37 of 52 (1 duplicate cannot be counted Total submitted 38)

Negative: 1 of 52

Equipment Fleet Management Performance Measures

Affirmative: 38 of 52 (1 duplicate cannot be counted Total submitted 39)

Negative: 0 of 52

A Resolution Expressing the AASHTO Subcommittee on Maintenance's Support for the FHWA Pavement Preservation Expert

Task Group and Requesting Semi-Annual Meetings for the Group

Affirmative: 37 of 52 (1 duplicate cannot be counted Total submitted 38)

Negative: 1 of 52

Equipment Technical Working Group

Equipment Management Technical Services Program (EMTSP)



National Equipment Fleet Management Conference
Over 300 attendees representing 40 states participated in the First National Equipment Fleet

Management Conference in Mobile, Alabama on June 24-28, 2012. The EMTSP Oversight Panel collaborated with TRB Committee AHD60, Maintenance Equipment in developing and conducting this successful event. In addition to the many technical presentations and abundant equipment displays at the workshop, breakout sessions were conducted for each of the regional EMTSP partnerships and TRB Committee AHD60 to conduct their business meetings and hold discussions germane to the individual groups.

Several significant outcomes of this conference are listed below:

- A national consensus of the EMTSP Regional Partnership members recommending adoption and implementation of the equipment fleet performance measures of utilization, preventive maintenance, retention, and availability/ downtime.
- A ballot of the state equipment managers on the frequency of holding national versus regional partnership meetings. The majority of the states that voted were in favor of establishment of biennial National Meetings beginning in 2014 and biennial Regional Meetings beginning in 2013, with the location of the National Meeting being

rotated among the four AASHTO regions and including 12-16 hours dedicated for concurrent regional meetings.

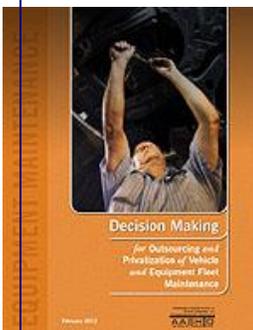
- A national prioritization of the research needs identified by NCHRP Project 20-7 –Task 309 – *Challenges and Opportunities: A Strategic Plan for Equipment Management Research*.
 1. Equipment Replacement Management
 - Replacement Cycle Guideline Development
 - Repair/Rebuild vs. Replace Decision Making
 - Equipment Replacement Planning
 - Equipment Replacement Financing
 2. Fleet Performance Measurement
 3. Equipment Utilization Measurement
 4. Equipment Disposal and Remarketing
 5. Equipment Cost and Financial Management
 - Cost of Service Analysis
 - Charge-Back System

EMTSP Oversight Panel

The EMTSP Oversight panel reviewed its strategic plan and made noteworthy updates and additions to the plan. Since many of the planned actions had already been completed, the panel added new planned actions to meet its goals and added one new goal. The revised strategic plan can be found on the home page of the EMTSP website at the following link: <http://www.emtsp.org/>

AASHTO Guide - Decision Making for Outsourcing and Privatization of Vehicle and Equipment Fleet Maintenance

The results of NCHRP Project 13-03A and the published NCHRP Report 692, *Decision Making for Outsourcing and Privatization of Vehicle and Equipment Fleet Maintenance*, were approved by the Subcommittee on Maintenance (SCOM), the Standing Committee on Highways (SCOH), and the Board of Directors (BOD) to be published as an AASHTO guide. The guide has now been published and is available as item code [EFM-1](#) on the AASHTO online bookstore at: https://bookstore.transportation.org/collection_detail.aspx?ID=114



Equipment Technical Working Group (continued:)

Equipment Technical Working Group (TWG) Annual Meeting

The Equipment TWG presented two resolutions and one research problem statement as a result of the outcomes of the First National Equipment Fleet Management Conference at the annual subcommittee meeting in Seattle, Washington in July. Both of the resolutions, **Equipment Fleet Management Performance Measures** and a call to **Establish a Schedule for Alternating Biennial Regional and National AASHTO EMTSP Partnership Meetings**, passed.

In light of ongoing concerns of performance measurement and the recent passing of MAP-21, Resolution 12-03, **Equipment Fleet Management Performance Measures**, requested the AASHTO Subcommittee on Maintenance to express their endorsement of the use of the key performance metrics for the equipment fleet of utilization, preventive maintenance, retention, and availability/downtime. This resolution was passed by the subcommittee.

Resolution 12-04, **Establish a Schedule for Alternating Biennial Regional and National AASHTO EMTSP Partnership Meetings**, was submitted requesting the AASHTO Subcommittee on Maintenance to recognize the importance of the regional technical services program partnerships and the need for interaction between individual state DOT equipment managers regionally, as well as nationally, and recommend the establishment of biennial National Meetings beginning in 2014 and biennial Regional Meetings beginning in 2013, with the location of the National Meeting being rotated among the four AASHTO regions and including 12-16 hours dedicated for concurrent regional meetings. This resolution was also passed by the subcommittee.

The research problem statement titled **Guidelines for the Development of Highway Operations Equipment Replacement Lifecycle Criteria** was submitted to the subcommittee for consideration to be submitted as a research problem for the fiscal year 2014 National Cooperative Highway Research Program (NCHRP). As a result of the balloting at the annual meeting, this problem statement was ranked #1 of 8 problem statements by the subcommittee to be submitted as NCHRP proposals.

Safety and Reliability Technical Working Group

2012 International Conference on Winter Maintenance & Surface Transportation Weather

The 2012 International Conference on Winter Maintenance and Surface Transportation Weather, sponsored by TRB, AASHTO, and the Iowa Department of Transportation was held in Iowa City, Iowa on April 30-May3, 2012. Members of the HSCOM HS&R TWG facilitated sessions and participated in the conference. Technical papers from Austria, Canada, China, Japan, Korea, New Zealand, Norway, Sweden, and the United States provided the attendees the latest results of road weather and winter maintenance research, state of the art practices and best method practices. These conferences, presented every four years are like going on an international transportation weather and winter maintenance technology scanning tour only the technology is brought to our doorstep here in the United States.

Bridge Technical Working Group

The Bridge Technical Working Group had its second most productive meeting this past July. (The products delivered from the 2007 meeting at Loon Mountain in New Hampshire may never be equaled). Six research needs statements and one resolution were submitted to the Subcommittee. In short order, one of the statements received funding already and the resolution was passed by SCOM. And we got a lot smarter about chloride mitigation, shared

New Web-based Winter Maintenance Training Suite is Completed

The AASHTO Winter Maintenance Technical Service Program's "Winter Maintenance Training Suite", redeveloped from the eight CD ROMs to a web browser format has been completed. Notices to the state DOTs that participated in the pooled fund have been sent and they are in the process of integrating the Suite into their Learning Management Systems. The redeveloped CBTs are in Shareable Content Object Reference Model (SCORM) compatible form enabling the CBTs to now be launched from and work with the standard SCORM Learning Management Systems that most state DOTs now use. If you have any questions about this new system, give Lee Smithson a call at 515-239-1519 or an e-mail at leland.smithson@dot.iowa.gov.

environmental best practices, and contracting bridge maintenance.

SCOM hosted this joint meeting with TRB. TRB papers on element-level deterioration modeling, bridge management systems, and health monitoring for bridge maintenance were presented to the general assembly.

Bridge Technical Working Group (continued:)

The following four statements will be submitted as research projects:

1. Identifying and Addressing Failures of Small Movement Bridge Expansion Joints
2. Quantifying Environmental Benefits of Bridge Preservation
3. Detection and Remediation of Chloride Contamination Prior to Coating Structural Steel
4. Investigation of the Use of Reduced Residual Compressive Stresses for Arresting Steel Girder Cracks Induced by Out-of-Place Bending

The following will be submitted as a synthesis project:

1. Reducing Traffic Impacts by Using Innovative Bridge Maintenance and Preservation Techniques

FHWA is funding the research on.

1. Current Practices, Benefits, and Environmental Requirements for Bridge Cleaning and Washing
The work is being conducted by the University of Washington.

The resolution (Resolution 12-02) entitled "Resolution on the Promotion of Highway Bridge Measurement Criteria that Promotes Bridge Preservation" asks that "bridge condition assessment be based on element-level inspection data...and allows for the classification of bridges under categories that are easily understood by the general public..". The resolution passed.

Pavements Technical Working Group

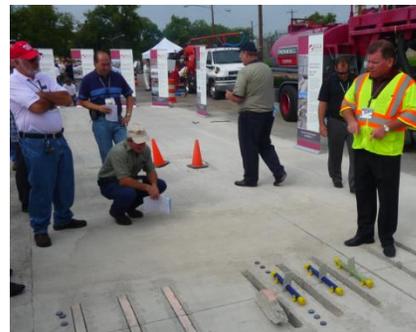
Eric Pitts, Georgia DOT, Chair PTWG

The incredibly successful First National Conference on Pavement Preservation was held in Nashville, TN from August 27-30, 2012. Nearly 550 people attended the conference, including many members of the SCOM. The size of the meeting clearly showed how the interest in pavement preservation has grown in the United States. The Pavements TWG has been an essential part of the growth of the preservation movement. From the initial resolution to create a National Center for Pavement Preservation, to the resolution that began the AASHTO Transportation System Technical Services Program (www.tsp2.org),

to numerous research problem statements, and more, the work of the PTWG has successfully led to the widespread adoption of preservation as a key consideration in most State pavement maintenance programs and by many local public agencies. There were numerous sessions involving nearly 100 speakers, and several special events during the four day meeting, including a field demonstration of more than a dozen pavement preservation technologies. In addition, each of the four regional Pavement Preservation Partnerships held meetings during the conference.



Chairs of the Pavement Preservation Partnerships addressed the Conference. L-R: Pat Kennedy, Rocky Mountain West PPP; Geoff Hall, Northeast PPP; Jerry Geib, Midwestern PPP; Larry Galehouse, National Center for Pavement Preservation; and at the podium is Eric Pitts, Southeastern PPP. (Photo by Steve Mueller, FHWA)



John Roberts, Executive Director of IGGA explains the Dowel-Bar-Retrofit Demonstration. (Photo by Steve Mueller, FHWA)

More information on the meeting, including downloadable copies of the presentations, is available at this website: <http://nationalpavement2012.org/> Videos of all of the

presentations and the demonstrations will be available soon at this website.

Roadway/Roadsides Technical Working Group

The Roadway/Roadsides Technical Working Group (RRTWG) is planning to host two teleconferences or webinars in the coming months. Attendees of the RRTWG

breakout sessions at the Summer Meeting in Seattle will be sent an invitation by email. An announcement will also be posted on the AASHTO SCOM website for others who are interested. The topics will be selected from those that generated the most interest and discussion at the Summer Meeting. Stay tuned for details!

From the Editor's Desk:

Information regarding Map 21 has been posted on FHWA's website the address is:

<http://www.fhwa.dot.gov/map21/>

There is an extensive Q&A section that I would highly encourage you to read, two items of particular interest to the Maintenance group in our state of North Carolina is the Q & A section on the Emergency Relief program, there are 4 items that I think are particular noteworthy for the maintenance community:

<http://www.fhwa.dot.gov/map21/qandas/qaer.cfm>

Question 5: Deadline to submit an application for ER related funding.

Questions 7, 8 & 9: all have to do with changes to the debris removal, I highly encourage you to read through them and start a dialog with your local Federal Highway Office.

Question 12: Deals with the time to receive 100% reimbursement.

Question 13: Deals with the Federal Share

Another item that you may find to be of use is the Q & A section on Asset Management and question 5 which deals

with the costs associated with a risk-based asset management plan. Now you might be asking what does that have to do with maintenance?

To quote from the answer; "... These activities include data collection, maintenance, and integration and the cost associated with obtaining, updating, and licensing software and equipment required for risk-based asset management and performance-based management..." Most if not all of you either want or currently have a maintenance management system and some are also in charge of the pavement and bridge management systems. Again I encourage each of you to start discussions with your leadership and local FHWA office about setting up a program to utilize federal funds to help with the expenses associated with this data collection.

<http://www.fhwa.dot.gov/map21/qandas/qaassetmgmt.cfm>

There is a section specific to data collection located at:

<http://www.fhwa.dot.gov/map21/qandas/qadataimpacts.cfm>

I hope that you find this information useful, as we move forward with a new series of transportation legislation.