Highways Subcommittee on Bridges and Structures

Officers

- Chair: Malcolm T. Kerley (Virginia)
- Vice Chair: Kevin Thompson (California)
- Secretary: M. Myint Lwin (FHWA)
- Assistant Secretary: Firas I. Sheikh Ibrahim (FHWA)
- AASHTO Liaisons: Ken Kobetsky & Kelley Rehm

The 2008 Annual SCOBS Meeting was held in Omaha, Nebraska on May 18-23, 2008. During this meeting, the twenty (20) SCOBS Technical Committees met to conduct technical committee business, followed by a two-day general session meeting of the full Subcommittee to review and ballot required changes and additions to the specifications and guide documents maintained by the Subcommittee. The Subcommittee also hosted the Chairman’s Lecture which discussed the collapse, response and reconstruction of the I-35W Bridge in Minneapolis, Minnesota.

During the general session, members of the Subcommittee leaving the Subcommittee, either retiring or promoted, were recognized for their service. Also during the general session meeting, the full Subcommittee voted on 80 technical agenda items, all of which have passed.

Two of the 80 agenda items represent significant advancement towards enhancing bridge safety to mitigate future natural and man-made hazards. The first significant item was the adoption of new guide specifications for the design of bridges to withstand coastal storms. This was the result of a combined effort between FHWA, AASHTO, Academia, and Consultants that was initiated after the hurricanes in Florida, Louisiana, Alabama, and Mississippi which resulted in significant damage to bridges. The second significant effort was the development of LRFD guide specifications to design and assess bridges to for vessel and ship collision. This effort was also a combined effort between FHWA and AASHTO which was initiated after the collapse of the I-40 bridge in Oklahoma.

Since establishing a technical committee on tunnels, T-20 (Tunnels) has been steering a joint FHWA-AASHTO effort to develop a design and construction manual for tunnels. During the general session in Omaha, the technical committee reported 90% progress on this manual which is anticipated to be completed in 2009.

The Subcommittee voted on research recommendations by T-11 (Research), all of which support the grand challenges of the 2005 Strategic Plan for Bridge Engineering to meet the changing needs of bridge engineering through a streamlined research program. The seven prioritized grand challenges are: Extending Service Life, Optimizing Structural Systems, Accelerating Bridge Construction, Advancing the AASHTO Specifications, Monitoring Bridge Condition, Contributing to National Policy, and Managing Knowledge.

The recently established Executive Committee held its first official meeting during the 2008 SCOBS meeting in Omaha. This Committee, which is comprised of the SCOBS officers and technical committee chairs and chaired by SCOBS Chair, was formed to assist the SCOBS Officers in making business decisions, planning, and setting priorities, as well as improve communications between the technical committee leadership and chairs and to resolve issues of importance to SCOBS. The Committee discussed several issues including prioritizing the publication of the subcommittee’s specifications and other documents. As was done in a prior year, the first priority was assigned to publishing the latest revisions to the design specifications.

SCOBS has made significant steps towards the implementation of the Load and Resistance Factor Rating (LRFR) methodology for rating bridges designed with the LRFD specifications, and for improving the ratings of existing bridges. The new Bridge Evaluation Manual which contains the latest knowledge in inspection, evaluation, and LRFR methodology will be published towards the end of this year. The FHWA has established a date of October 2010 for all new bridges designed by LRFD to be load rated using LRFR and will be encouraging the rating of existing bridges using LRFR whenever a new load rating is performed.
SCOBS in cooperation with FHWA and NCHRP is currently planning an international scan to be conducted in May-June 2009. The scan is entitled “Assuring Bridge Safety and Serviceability (ABSS)”. The purpose of the scan is to evaluate European practices in the design and evaluation of bridges that will assure bridge safety and serviceability. One of the unique aspects of the scan is to compare the load rating program in the US and in Europe in an effort to enhance or revisit the current US practice in load evaluation. Another important aspect of the scan is to compare US and European practice in the calibration of design and evaluation specifications against actual truck traffic. A third significant outcome of the scan is to bring to the US the European lessons learned from the implementation of three-dimensional analysis in the design and evaluation of bridges.

SCOBS will also continue to focus on the development and deployment of new technologies and materials to better utilize investments in the nation’s bridges and other highway structures. High performance materials (including high performance steel, concrete, and fiber reinforced polymer composites), accelerated construction methods (using prefabricated components and systems), and rapid foundation excavation and construction technologies are among the innovative features which should be considered in bridge design and construction practices and specifications. SCOBS will also work to ensure the use of improved bridge inspection, evaluation, and management technologies for the existing inventory of bridges and other highway structures. Among these are improved technologies related to non-destructive evaluation and assessment of bridge components, and in data acquisition and management.

The next annual meeting will be held in New Orleans, Louisiana on July 5-10, 2009. Other future meetings of the subcommittee have been scheduled in the following states: 2010 in California, 2011 in Virginia, 2012 in Texas, and 2013 in New Jersey.

Schedule on New/Recent/Updated Publications

Below is a table showing the publication schedule of new, recent, and updated bridge publications

<table>
<thead>
<tr>
<th>Queue Order</th>
<th>Pub (Pub Code)</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4)*</td>
<td>Guide Specs. for Design of FRP Pedestrian Bridges (GSDFPB-1)</td>
<td>COMPLETED. Avail. 8/28/08; 18 pp.</td>
</tr>
<tr>
<td>1</td>
<td>Manual for Bridge Evaluation (MBE-1)</td>
<td>IN PRODUCTION—FINAL EDITS. To press &amp; replication ~10/7/08 Avail. ~11/4/08; 534 or 536 pp.</td>
</tr>
<tr>
<td>4</td>
<td>LRFD Design (LRFDUS-4-I2)</td>
<td>IN QUEUE (very rough estimates). In prod. ~10/21/08 To tech review ~2/09 Avail. ~4/09</td>
</tr>
<tr>
<td>5</td>
<td>Vessel Collision (GVVCB-2)</td>
<td>IN PRODUCTION—DESIGN PHASE. To press ~12/8/08 Avail. ~1/6/08</td>
</tr>
<tr>
<td>6</td>
<td>Coastal Guide (BVCS-1)</td>
<td>IN PRODUCTION—DESIGN PHASE. To press ~12/18/08 Avail. ~1/21/08</td>
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<tr>
<td>Queue Order</td>
<td>Pub (Pub Code)</td>
<td>Status</td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------------</td>
<td>--------------</td>
</tr>
<tr>
<td>7</td>
<td>LRFD Construction (LRFDCONS-2-I4)</td>
<td>IN QUEUE.</td>
</tr>
<tr>
<td>8</td>
<td>Bridge Welding Code (BWC-5-I1)</td>
<td>IN QUEUE.</td>
</tr>
<tr>
<td>9</td>
<td>NSBA S 2.1 Steel Bridge Fabrication Guide Spec. (NSBASBF-2-OL)</td>
<td>IN QUEUE.</td>
</tr>
<tr>
<td>10</td>
<td>Bridge Design Guide Specs. For GFRP Reinforcement (pub code TBD)</td>
<td>IN QUEUE.</td>
</tr>
</tbody>
</table>
* Placed fourth in 2007 queue by Subcommittee.
** New titles and new editions must be reviewed and approved by SCOH.
*** Awaiting some figure files. Any delay in file delivery will push back production milestones.
Highways Subcommittee on Construction

Officers
Chair: Gary Ridley, ODOT
Vice Chair: Thomas Bohuslav, TxDOT
Secretary: Julius (Butch) Wlaschin, FHWA
AASHTO Liaison: Jim McDonnell, AASHTO

Summary of Activities and Accomplishments from October 2007 to September 2008:

General
1) The SOC continues to participate in expert task groups, national task force, FHWA, AASHTO, industry, and other joint committees.
2) Meeting agenda is developed for SOC annual meetings.

Contract Administration Section
1) Section members assisted FHWA with an update of the “Highway Cost Increases and Competition” web page as an activity in current practices for cost containment. This internet page is used by the states and industry to provide information on price escalation issues and related informational sources. The updated web page is posted at http://www.fhwa.dot.gov/programadmin/contracts/price.cfm.
2) Section members developed a spreadsheet that summarizes the State DOT’s approval authority for contract change orders. The spreadsheet summary and state policy files are posted on the AASHTO SOC web site: http://www.transportation.org/sites/construction/docs/change%20order%20delegation.xls.
4) Section members participated in liaison activities with the FHWA / AASHTO / Industry DBE Work Group that is involved with the development of NCHRP Project 20-07 - Task 233 – AASHTO DBE Toolkit.

Computers and Technology Section
1) Continued to provide information updates to AASHTO website and established a state contact roster for updates. Continued to participate in FHWA effort to enhance the National Highway Specification Website (NHSW). The NHSW was originally established through an initiative of this C&T Section. Enhancements will include the update of information and adding states’ construction manuals and standard drawings. Working towards reorganization of AASHTO SOC website to improve user navigation.
2) Continued to provide leadership, extension, and guidance for the enhancements of the AASHTO Trns•Port software (specifically the NGT web based application) and the Civil Rights and Labor Management System (CRLMS).
3) Supported TCCC in the development of one-day training module for stakeless construction. The web-based training course is available through TCCC and NHI websites free of charge.
4) Continued to work on a survey of the state-of-practice in electronic project documentation, as-built documentation, and archiving.
5) Promoted traffic modeling efforts to improve work zones in urban corridors at a macro level. Identified a need for workshops for design and construction engineers to increase awareness of modeling software and technologies to integrate with plans and specifications.
6) Section members provided representation to the NICET steering committee, the Electronic Engineering Data Technical Committee and AASHTO TIG.

Roadway & Structures Section
1) Continued with a study on the amount of time inspectors are spending performing work other than construction inspection and looked for areas of improvement. A draft survey has been developed and will be circulated for responses from the states in early 2009.
2) Conducted a survey of states on the best practices of inspection and measures of workmanship. Survey responses were received from 37 states. A draft summary report was prepared and discussed at the 2008
SOC annual meeting. In addition, developed draft QA Guidelines were reviewed during the meeting’s technical section breakout session.

3) Continued a study of state practices of constructability reviews, value engineering, contractor solicited input and post construction feedback with the aim to improve the quality and effectiveness of construction plans sets. Section members agreed to shift focus of this activity from a cataloging of practices to a survey of states practices. The development of a survey will be completed this year with intent of distributing to the states for responses.

4) Completed a survey of states conducted to determine how states are accomplishing “specialty” construction inspection such as ITS, structures painting and hazardous abatements. The results of this survey are being compiled to see if there is potential training course needs in some of these areas.

5) Provided AASHTO additional information with regard to the response to the NTSB related to the 2004 Colorado girder collapse.

Environment and Human Resources Section

Environmental Stewardship

1) Conducted a survey of states’ contract requirements to include a point environmental representative similar to the traffic control supervisors for work zones. The findings were presented to the SOC’s EHR Section.

2) Participated in continuing efforts for the selection of appropriate Best Management Practices (BMPs) for specific applications with the University of Auburn, a partner with the Center for Environmental Excellence.

3) Participating in NCHRP 25-25 Environmental Stewardship project, which is an ongoing plan by Parsons Brinckerhoff to create a “Best Practices Library from the Environmental Stewardship Practices in Construction and Maintenance Compendium.”

Work Zone Safety

1) Provided feedback of new FHWA work zone implementation regulations to the state DOTs through a presentation by FHWA at the SOC Annual Meeting.

2) Review and comment on report by the Texas Transportation Institute (TTI) on new/innovative work zone items to address state concerns and buy-in and marketing strategies.

Human Resources

1) Participated in the Transportation Curriculum Coordination Council (TCCC) and in the National Institute for Certification in Engineering Technologies (NICET) to develop highway construction certification programs. Status was reported to the SOC.

2) Performed a survey of the states to determine what they are presently doing to overcome cultural/language differences in determining how they can be adequately staffed and trained. Results were presented to EHR Section and a final write-up of the results will be completed.

3) Performed a survey of the states on recruiting/retention of employee; allow incentives (i.e. Missouri) recruiting, bonuses, performance incentives, coop programs, etc. and presented the results.

4) Participated on the pilot panel for a new National Highway Institute (NHI) class on “Environmental Factors in Construction.”

Research Steering Committee

The Research Steering Committee will develop and submit proposals for the following research programs:

1) Research proposal for Alternative quality systems for applications in highway construction. (Joint Materials/Construction submission)

2) Synthesis proposal on the use of profilers: what blanking bands, how they are verifying results and certifying equipment and operators. This idea was generated in anticipation of performance measures that may be based on ride and to determine the current practices among the states.

3) A 20-7 program proposal to update the past FHWA report on equipment fuel usage factors for price adjustment clauses. The prior report was prepared in the 1980s.

Dates and Locations of Future Committee Meetings:

Monthly Status Teleconference Meetings are conducted. Future SOC annual meetings are as follows:
2009, August 2 – August 6, Chicago, Illinois
2010, Burlington, Vermont
2011, Norfolk, Virginia
Highways Subcommittee on Design

Officers
Chair: Carolann Wicks, Delaware
Vice Chair: Richard Land, California
Secretary: Dwight Horne, FHWA
AASHTO Liaison: Jim McDonnell, AASHTO

Summary of Activities and Accomplishments from October 2007 to October 2008:

The Highway Subcommittee on Design (SCOD) held its annual meeting in Albuquerque, New Mexico on July 13-17, 2008.

The meeting was attended by 142 individuals that represented 39 member departments (83), FHWA (31), and other stakeholders (28). The attendees were welcomed to New Mexico (NM) by Max Valerio, Director of Design of the NMDOT, on behalf of Rhonda Faught, Secretary of the NMDOT. John Horsley, AASHTO Executive Director, provided an overview of the key issues of interest and aspects of AASHTO’s proposed position on Authorization of a New Federal Transportation Bill.

The draft SCOD vision that was created by the SCOD Vision Task Force was presented, reviewed, discussed, revised, and adopted. The SCOD Strategic Plan (vision, mission, goals, and strategies) was discussed, revised, and unanimously approved. The SCOD will accomplish its mission by focusing on the following goals:

1. Improve the timely delivery of projects.
2. Develop design solutions that meet the purpose and need of a project, address its context, and protect the natural and human environment.
3. Improve the quality and cost effectiveness of projects.
4. Improve safety for the traveling public and the workforce.
5. Advance the state of the practice.
6. Foster collaboration within AASHTO and with other organizations and disciplines.

Five resolutions were adopted during the annual meeting. The titles are:

1. Consistent Use of Dual Units in AASHTO Publications.
2. Supporting an International Scan Tour on Universal Accessibility in Pedestrian Design.
3. Reactivate the Joint Technical Committee on Highway Lighting.
4. Recruitment and Retention.
5. Work Zone Safety and Mobility Technical Committee.

The annual meeting included formal presentations and panel discussions on various topics of interest to the SCOD members, regional meetings, and presentations of the regional meeting results to the full Subcommittee.

The following is a summary of the current activities for each of the Highway Subcommittee on Design Technical Committees.

1. **Technical Committee on Cost Estimating**

The Technical Committee on Cost Estimating (TCCE) is continuing its work to develop “practical” guidance on preparing cost estimates, including recommended procedures and guidance on reviewing bids prior to concurrence in award. Guidance will also be included for improving pre-bid, bid review, and evaluation policies and procedures. Three chapters: Estimating Using Historical Bid Pricing, Cost Based Estimating, and
Evaluation of Contractor Bids, have been completed and are available for comment. Current work is posted on the TCCE webpage:

Work is underway on the next three chapters: Parametric Estimating, Risk Based Estimating, and Inflation Forecasting. Completion is anticipated in 2008 for the Risk Chapter and early 2009 for the Parametric Chapter. The Inflation Chapter will be delayed while team members research the impact of emergent fuel technology on inflation forecasting.

The TCCE has developed a common set of Definitions for cost estimating work to be incorporated into the practical guidance and will continue to investigate existing AASHTO definitions as well as other resources. The Definitions section of the guidance will be dynamic as additional cost estimating guidance chapters are developed.

Work will begin on two more chapters during the October 1-2, 2008 TCCE meeting. Potential topics include: Tracking Estimates and Performance; Quality Control/Quality Assurance procedures; Project Packaging and Scheduling Lettings; Estimation Training; and Real Estate/Utility Cost Estimates.

The TCCE continues to review NCHRP Report 574, “Guidance for Cost Estimation and Management for Highway Projects During Planning, Programming, and Preconstruction” and will incorporate appropriate information into the practical guidance chapters. The committee feels the report has substantially beneficial information and recommends it as a valuable reference on estimating tools and techniques. TCCE members are involved in and staying current on other research projects related to cost estimating issues. Additional research proposals will be submitted for funding under NCHRP 20-7 in 2008: one related to cost indexing and one related to contractor competition.

The next TCCE meeting will be held October 1-2, 2008 in conjunction with the annual Transportation Estimators Association conference in Saratoga Springs, New York.

2. **Joint Technical Committee on Design Build**

Inactive

3. **Technical Committee on Environmental Design**

The most recent meeting of the Technical Committee on Environmental Design (TCED) was April 7-10, 2008 in Baltimore, Maryland with 13 of 18 members attending. This was a joint meeting with the Technical Committee on Hydrology and Hydraulics. Future TCED meetings are scheduled for September 22-25 in Idaho, Spring 2009 in Indiana (Joint Meeting with Hydrology and Hydraulics), and Fall 2009 in California. Many e-mail messages and phone calls on current and potential TCED topics are sent among members between meetings. We currently have 1 vacancy (Region 3) on TCED; AASHTO staff earlier asked the Region 3 Steering Committee for a replacement (unsuccessful). This is needed to replace the former Chair, Win Stebbins of Michigan, who retired last spring. Major topics for our October meeting include the review of the Guide for Transportation Landscape and Environmental Design. This assignment will hopefully be ready for balloting in 2009. “Environmental considerations during project development” is the main theme. Idaho will also be sharing some of their Best Management Practices at the meeting. Out of state travel has hampered the upcoming meeting in Idaho. Only 8 members are planning to attend. Absent members will have the ability to phone conference into this meeting.

The Technical Committee will also be developing its Strategic Plan as requested in an email from Jim McDonnell of AASHTO. This email was shared with the members of the Technical Committee and input to the plan was requested prior to the upcoming meeting. The Goals and Strategies will be developed through the 6 goals provided by AASHTO which are:
1. Improve the timely delivery of projects
2. Develop design solutions that meet the purpose and need of a project, address its context, and protect the natural and human environment
3. Improve the quality and cost effectiveness of projects
4. Improve safety for the traveling public and the workforce
5. Advance the state of the practice
6. Foster collaboration within AASHTO and with other organizations and disciplines

The mission of the Technical Committee will not touch all 6 goals.

The meeting will also discuss the proposed rule to 50 CFR Part 402; Interagency Coordination Under the Endangered Species Act. The administering agencies are the U.S. Fish & Wildlife Service from the Department of the Interior, and the National Oceanic and Atmospheric Administration of the Department of Commerce. These changes were proposed in response to new challenges from global warming and climate change. The proposal is providing many new streamlining features like a more flexible approach to biological assessments and section 7 consultation.

Several items have been proposed by members for possible future work topics for TCED. The outputs could be either a hard copy guide or an online document similar to the 2001 AASHTO Visualization in Transportation we contributed to the AASHTO web site and updated on-line in 2003. Among the possible work topics under consideration are: methods for handling and retaining stormwater runoff in the ROW (with the TC on Hydrology/Hydraulics), successful condemnation for mitigation lands, wetland banking and stream banking, 5-year monitoring requirement before receiving mitigation credit, native species/habitat restoration and invasive species mitigation, and visual quality aesthetic design guide. TCED and TCHH will discuss the hydraulic items when both Technical Committees jointly meet in Indiana in April 2009.

4. Technical Committee on Geometric Design

The AASHTO Technical Committee on Geometric Design met in Springfield, Missouri on June 23 through 25, 2008. The Technical Committee reviewed and commented on proposed additions and revisions to the Green Book for each individual chapter for the next edition.

The Technical Committee heard two presentations on recently implemented interchange designs from the Missouri Department of Transportation. The Technical Committee also heard a report of the proposed national bicycle route system.

Research activities were also discussed. The Committee received reports on two projects directly from the research agencies. First, the research on Passing Sight Distance has been completed and will be incorporated into the next edition of the Green Book. The second report presented work thus far on a draft guide for Design Speed for Intermediate and Low Speed Roads.

The Technical Committee continues to work toward having the additions and revisions for the next edition of the Green Book finished during calendar 2009 for a tentative AASHTO ballot process to be initiated early in 2010.

The next meeting of the Technical Committee on Geometric Design is scheduled for March 22 through 24, 2009 in Nashville, Tennessee.

5. Joint Technical Committee on Highway Lighting

Inactive

6. Technical Committee on Hydrology and Hydraulics

General
The Technical Committee on Hydrology and Hydraulics (TCHH) meets on a semiannual basis. Member states
take turns hosting the meetings. The committee usually meets for three days from Tuesday to Thursday. The
typical agenda includes a welcome from a leader of the host state and updates from FHWA, AASHTO and
NCHRP. The host state usually provides a brief technical presentation relating to local research and work on
hydrology and hydraulics. During the three days, the committee works on its current revisions of the AASHTO
Model Drainage Manual (MDM), reviewing the work from each member (typically the group splits in two or three
to speed up the completion). The third day the group discusses state needs going around the table allowing
each member to express concerns.

Meetings

Following are the time and location where meetings were held with a brief summary of accomplishments.
November 6 through 8, 2007, location – Red Cliffs Lodge, Moab, Utah
The meeting was well attended by the member states (15) and by the associate members. The work on the
manual continued. Most of part one is complete and the review of part two is well on its way as shown in table I
below.

While working on the manual, the committing reviewed its resolution to use dual units and changed it to single unit.
Other changes to the manual are detailed in the minutes and collected in a separate document prepared by Andrea
Hendrickson, Minnesota DOT and Te Ngo, Oklahoma DOT.

Concerns of the states vary from the need of more hydrology research to guidelines for stream classifications.

Business – Financial report – the technical committee financial status and expenditures were discussed.

At the end of the meeting David Henderson, chair of the committee for more than two years, passed the committee
leadership to Michael Fazio, the new TCHH chair.

Table I. 2007 AASHTO Drainage Manual Review Progress as of the Moab meeting

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<th>Chapter No.</th>
<th>Title</th>
<th>Chair</th>
<th>Fall 07</th>
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<tr>
<td>1</td>
<td>Introduction</td>
<td>Morse</td>
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<td>2</td>
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<td>Planning</td>
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<td>6</td>
<td>Data Collection</td>
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<td>Culverts</td>
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<td>10</td>
<td>Bridge</td>
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</tr>
<tr>
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<tr>
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<td>Storm Drains</td>
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In between meetings TCHH members were guided by a rigorous chapter review plan, with follow up notes emailed by the vice chair at specific benchmarks

April 8th through the 10th - Baltimore, Maryland

After the welcome from Karuna Pujara, TCHH member (Maryland), and from Maryland State Highway Administrator, Mr. Neil Pedersen, we had the usual updates as mentioned in the general section of this document.

Larry Arneson, from FHWA resource center, informed the committee on hydraulics engineering software developments, providing presentation of a new hydraulic engineering toolbox.

Dave Reynaud from NCHRP informed the committee on the progress on the H & H research project he manages.

A portion of the meeting was dedicated to preparing and selecting research problem statements to submit to SCOD. Eleven problem statements have already been written and compiled. We reviewed them and prioritized them by vote.

The TCHH decided to structure the meeting to have regular technical updates from attending FHWA resource engineers and from the Turner Fairbank research lab work.

Additionally, the Committee decided to have a semiannual newsletter to keep all state practitioners informed on national activities and work. A few people volunteered to help publish the newsletter.

The Committee decided the official name of the new manual will be:


At this meeting, the TCHH had the first field trip since changing the schedule from five to three days. The field trip to the new Woodrow Wilson Bridge was in coordination with the Technical Committee on Environmental Design. This meeting allowed the members of each committee to interact and exchange valuable information.

The committee chairs decided to exchange information and plan on future meeting to improve communication since some work overlaps.

TCHH discussed concerns of the states on Thursday. Issues discussed included: BMPs, Plan of Actions for scour critical bridges, flooding, drainage in the shoulders to allow traffic on the shoulders, fish passage, EPA permits, and other included issues in our meeting minutes.

The financial report was provided by vice chair Rick Renna, Florida DOT.

June 2008 – Subcommittee on Design Annual Meeting – Michael Fazio, Chair, made a presentation to the member on TCHH AASHTO Drainage Manual work and progress. The TCHH plans on continuing to send the chair to SCOD annual meetings.

July 2008 – First newsletter published

August 25, 2008 – Portland, Maine

This meeting was held in conjunction with the 2008 National Hydraulic Engineering Conference, to reduce costs and increase the opportunity to communicate with other states HH engineers.

TCHH members came a day earlier to cover a very busy agenda. The contracted meeting time did not allow TCHH member to cover all the normal agenda items.

Charles Hebson, Hydrologist from Main DOT welcomed TCHH to Portland, Maine. During the meeting TCHH discussed:
the new Subcommittee on Material proposed standard on pipe joints, deciding to provide comments to Kelley by Sep 9, 08.

SCOD Strategic plan – Michael and Rick will fill the requested form for SCOD

Discussed proposals for scan tours and made assignments for proposal preparation.

Dual units – hold on, don’t go back to single unit yet.

Funding for the publication of the AASHTO Drainage Manual

Later in the afternoon, the TCHH met with the TRB AFB 60 Committee to discuss how to coordinate research work among the two committees. We decided to co-sponsor research problem statements and work together on new problem statements.

Following is the plan for the next TCHH meetings:

Spring 2009 – Indianapolis, Indiana – will meet with TCED

Fall 2009 – Lakewood, Colorado – FHWA Resource Center is sponsoring the meeting

Spring 2010 – San Francisco, CA

Fall 2010 – TBD, in conjunction with the 2010 National Hydraulic Engineer Conference.

7. Joint Technical Committee on Nonmotorized Transportation

An activity report was not received from this Joint Technical Committee.

8. Joint Technical Committee on Pavements

One of the primary foci of the JTCP has been the balloting on the Manual of Practice for the Mechanistic-Empirical Pavement Design Guide. The Manual of Practice passed balloting by the AASHTO Standing Committee of Highways in early 2008. The Local Calibration Guide, another product of the NCHRP Project 1-40, is currently being reviewed by the NCHRP 1-40 Panel. The final Local Calibration Guide will require balloting through the JTCP, SCOD, SCOM and the SCOH, before it can be included as an AASHTO Guide for publication.

Since the NCHRP 1-40 project was limited by the constraints set by the original NCHRP 1-37A project, several key pavement issues, including reflection cracking and top down cracking, were not addressed. These two issues are being addressed through the NCHRP projects I-41 and I-42A. Key topic areas for the JTCP are the next generation of design models, which are currently being developed through the various NCHRP efforts, would complete some of the gaps in the current version of the MEPDG and provide future research needs for the next version.

Another major issue of concern by the JTCP is the FHWA’s HPMS Reassessment. This reassessment significantly increased the pavement data requirements from states to the FHWA. Funding and resource impacts necessitated by these changes are of great concern to many State Highway Agencies.

The Friction Guide passed balloting by the AASHTO Subcommittees on Design and Materials. All comments received during the ballots were discussed and addressed. Some language in the Friction Guide was dictated by legal advice and no changes were made to these items. The Friction Guide is now in the publication process.

The JTCP is reorganizing members to assure that the documents created by the JTCP are properly reviewed and updated. A specific committee within the JTCP reviewed The Pavement Management Guide in 2008. The committee report was presented at the spring meeting, held in Raleigh, NC in May 2008. Editorial changes have been identified for a short term update of the guide.
The JTCOP will continue to use the NCHRP 20-7 Task 223, “Business Needs for Pavement Engineering” to guide and define the research needs submitted for funding.

The next meeting of the JTCOP is scheduled for Spring 2009 in Jackson, Wyoming. This meeting will focus on research needs, MEPDG implementation, development of MEPDG AASHTOware software, and more clearly define the roles of the many specific committees, within the JTCOP. The JTCOP’s goal is to move forward in the coming years as a more structured committee with more national representation.

9. **Technical Committee on Preconstruction Engineering**

The objective of this technical committee is to provide a focal point and working group charged with developing guidelines for effective management of preconstruction engineering processes. These guidelines are intended to provide a systematic approach to managing resources such as time, funds, and personnel.

The Technical Committee completed work on the Guide to Consultant Contracting which replaces the 1996 Guide for Contracting, Selecting, and Managing Consultants in Preconstruction Engineering. In completing this new guide, the Technical Committee reviewed the existing publication, determined that it should be rewritten, and sought input from the transportation agencies and the consulting industry, including through two web-based questionnaires and a review of the compiled results of these surveys addressing key findings. One of the surveys was prepared for consulting firms to complete so that the technical committee could gain input and experiences from the consultant perspective. The other survey was completed by members of the SCOD to provide input to the technical committee from the state transportation agency perspective. The technical committee utilized NCHRP 20-7 funding for interpretation of survey results. With the feedback from these surveys on the current practices and trends coupled with the collective knowledge and experience of the technical committee members, the technical committee prepared the Guide to Consultant Contracting. The new document was balloted to the SCOD and approved. The technical committee completed edits related to comments from the SCOD and the publication was balloted and received final approval by SCOH.

During this year, the Technical Committee met twice, once in Indianapolis, IN and once in Atlanta, GA. At these meetings, the work on the Guide to Consultant Contracting was completed. The Technical Committee also developed work statements on five preconstruction engineering topics that had been prioritized for future work by the Technical Committee. These topics included: Measurements and Performance Trends in Preconstruction Engineering, Errors and Omissions, Estimating in Preconstruction Engineering, Project Development Toolkit, Bidding Analysis, Implications of Alternative Delivery Methods and PPP’s. Of these subjects, two areas for the Technical Committee’s future work that were identified for immediate work were:

1) Identifying best practices in dealing with errors and omissions. Work is already underway on this subject through an NCHRP research project. There has been interest among Subcommittee on Design participants in identifying how to deal effectively with errors and omissions. Informal discussions reveal that agencies have varying degrees of success in holding consultants accountable for extra costs when errors or oversights are identified. The Technical Committee intends to be prepared to present information on our research and work related to Errors and Omissions by the 2009, SCOD meeting.

2) Developing an array of best practices for the use of performance measures as a reference for transportation agencies is a second goal for the technical committee. The technical committee developed the “Guide to Quality in Preconstruction Engineering, February 2003”. Portions of this guide suggest possible means of measurement of performance which may serve as a starting point for further development and refinement of performance measures.

Other publications which are the responsibility of the technical committee include: AASHTO Guidelines for Preconstruction Engineering Management, (1991), Guide to Quality in Preconstruction Engineering Management, (2002), and the Guide to Consultant Contracting, (2008). These publications are consistently reviewed and the need for their update evaluated by the technical committee. The technical committee has already identified an interest by the Subcommittee in developing an in-depth evaluation of the current practices.
for addressing the issue of errors and omissions by engineering consultants. Additionally, the Technical Committee will be reviewing the Guidelines for Preconstruction Engineering Management, (1991), to determine subjects in this guide that the Technical Committee believes should be updated and reissued. This will allow more frequent, focused work product from the Technical Committee for the benefit of all AASHTO member agencies.

10. Technical Committee on Public Transportation Facilities Design

Inactive

11. Technical Committee on Roadside Safety

The Technical Committee on Roadside Safety (TCRS) met for its annual meeting on September 12, 13 and 14, 2007. The meeting was held in Seattle, Washington. The first two days of the TCRS meeting (September 10 and 11, 2007) was a joint meeting with AASHTO/AGC/ARTBA Task Force 13; a group that shares similar roadside safety interests and joint members from TCRS. The annual business meeting of the TCRS proceeded on Wednesday, September 12th to Friday, September 14th. The 2008 TCRS annual business meeting is scheduled for October 1-3 in Savannah, Georgia after a joint meeting with Task Force 13 on September 29th and 30th.

The Roadside Design Guide (RDG) was last revised in 2006 with an update to Chapter 6, "Median Barriers." The TCRS is working toward the next revision of the RDG, which is targeted for AASHTO balloting in 2009/10. The next updated of the RDG will include chapter updates based upon ongoing research, a new chapter for "Low Volume Roadways" and an expanded chapter for "Urban Roadside." In addition, the TCRS is pursuing a cost/benefit software update of the Roadside Safety Analysis Program (RSAP). The software update is expected to be available for distribution in 2010/2011.

The TCRS is working to address the comments obtained through the AASHTO Subcommittees on Design, Bridges and Structures and Maintenance ballot approval of the "Manual for Assessing Safety Hardware, 2008" (MASH-08). The objectives of MASH-08 are to updated and replace the former NCHRP Report 350 that previously defined the safety hardware testing parameters. The TCRS anticipates proceeding with MASH-08 balloting through the AASHTO-Standing Committee on Highways (SCOH) during the fall/winter of 2008/09. In addition to the balloting MASH-08, the TCRS is seeking ballot approval for an "Implementation Plan" as jointly developed with FHWA Safety Office for compliance with Section 1408 of the SAFETEA-LU act.

12. Technical Committee on Value Engineering

The Technical Committee on Value Engineering met for its annual meeting on September 16-19, 2008, in Santa Fe, New Mexico. Major objectives for that meeting included continuing work on their 5-year goals. The major objectives include updating the 2001 AASHTO Guidelines for Value Engineering, and conference planning for the next biennial AASHTO Value Engineering Conference that is being scheduled for September 1-4, 2009 in San Diego, California.
Subcommittee on Highway Transport (SCOHT)

Officers:
Chair: James Lynch, Montana
Vice-Chair: Jeff Honefanger, Ohio
Secretary: Jim March, FHWA
Liaison: Leo Penne, AASHTO

Subcommittee on Highway Transport—Charge:

The Subcommittee on Highway Transport is AASHTO’s trucking committee. “The Subcommittee shall be concerned with the interrelationship between commercial vehicle operations and the highway systems of the United States. It shall evaluate the degree to which the needs of interstate commerce are met by the highway systems in their current state of improvement under existing laws, policies and practices, and make recommendations that contribute to improving the efficiency of highway systems to handle commercial vehicles with due regard to public safety and the conservation and cost of the highway plant.” It is responsible for truck size and weight issues, including oversize/overweight permitting.

Activities from September 2007 to October 2008:

The following topics will be highlighted:

- **2008 Annual Meeting**—of the Subcommittee was held in St. Louis, Missouri. The Subcommittee took advantage of the site to visit the MoDOT traffic management center and to get the perspectives of the Missouri Motor Carriers Association on issues important to the industry. The program also included speakers representing FMCSA, FHWA, the American Trucking Associations, and specific trucking sectors such as wind turbine transporters, and the special carriers.

  - **Authorization Policy**—SCOHT members participated in the Freight Team that developed recommendations for AASHTO’s Board for the next surface transportation authorization.

  - **European Vehicle Size and Weight SCAN Implementation**—The NCHRP 20-7 project for Vehicle Size and Weight Management will be completed this fall.

  - **Assessing Proposals for Changes in Vehicle Size and Weight Limits**—SCOHT members have met with industry representatives and with federal government officials to discuss possible proposals for changes in size and weight law in the next authorization and how to assess them.

- **Testimony on Oversize/Overweight Permitting**—Jeff Honefanger, SCOHT Vice-Chair, testified concerning the current practice of OS/OW permitting before the Highways and Transit Subcommittee of the House Transportation and Infrastructure Committee.

- **China International Scan Implementation**—The findings and conclusions of the 2007 freight scan to China are being disseminated.

- **The Freight Bottom Line Report**—The consulting team led by Cambridge Systematics has completed the work on the AASHTO Freight Transportation Bottom Line report, including the Highway Freight Movement Bottom Line report.

  - **Guide for Vehicle Weights and Dimensions**—Update of the guide is underway, to be completed in the summer of 2009.

SCOHT Annual Meeting: St. Louis, Missouri

The Subcommittee on Highway Transport, AASHTO’s trucking committee, met in St. Louis, Missouri, June 25-
27. It featured strong participation from both the member states and the trucking industry. Total registration exceeded 60.

The meeting was hosted by Missouri DOT, and organized by a MoDOT team led by Jan Skouby, Director of Motor Carrier Services.

Jim March, FHWA, addressed the Subcommittee on issues for the next surface transportation authorization. Tom Kearney, FHWA Size and Weight Team presented an overview of the European Scan implementation, reviewed the status of vehicle size and weight issues, and described current and near term projects that involve FHWA. Amy Houser presented a report on activities of the Federal Motor Carrier Safety Administration, focused on commercial vehicle safety technology.

Briefings included presentations on Alternatives/Prospects for Federal Size and Weight Increases (ATA), S&W Enforcement Training & Virginia DOT Survey, Integrating Technology on Roadside Enforcement, Review of Canadian Experience with Large Commercial Motor Vehicles (NCHRP Project) and Transporting Wind Powered Turbines.

To see pictures and speakers’ presentations and other related background materials from the meeting, please visit: http://freight.transportation.org/highway_meetings.html

**Authorization Policy**

SCOHT members participated in the Freight Team that developed freight transportation recommendations for AASHTO’s Board for the next surface transportation authorization. The recommendations include: the creation of a state freight program to assure that all states have access and connectivity to the national freight system and a national freight corridors investment fund, half of which would be apportioned to the states, half of which would administered by the U.S. DOT, for investment in projects that improve the efficiency of freight movement on the national corridors. The national investment fund would be capitalized from new sources of revenue. The work of the freight team was coordinated with that of the highway team. The commitment made by the AASHTO Board last year, that “States, in collaboration with the freight transportation industry and the federal government, should investigate the feasibility of regional adjustments in truck size and weight in particular corridors that demonstrate important economic benefits and meet safety, pavement/bridge impact and financing criteria,” was reaffirmed.

**European Vehicle Size and Weight SCAN Implementation**

The NCHRP 20-7 (Task 254) project on Vehicle Size and Weight Management Technology Transfer/Best Practices will be completed this fall. Based on the findings and conclusions of the European Scan on Commercial Vehicle Size and Weight Enforcement, consultants from the Texas Transportation Institute are preparing information briefs on:

- Commercial Motor Vehicle Size and Weight Enforcement
- Weigh-in-motion System Calibration
- Oversize/Overweight Vehicle Permitting, Routing, and Monitoring
- Bridge Infrastructure Preservation

The Project, which was advocated by SCOHT Chair Jim Lynch, will provide to DOT CEOs and senior staff information and analysis demonstrating the importance of size and weight enforcement relative to general transportation objectives, such as safety and infrastructure preservation.

**Assessing Proposals for Changes in Vehicle Size and Weight Limits**

SCOHT members have met with industry representatives and with federal government officials to discuss
possible proposals for changes in size and weight law in the next authorization and how to assess them. The discussions have focused on the proposal of the American Trucking Association (ATA) to enable states to exercise the option of raising the federal freeze to 97,000 pounds on six axles. Subcommittee Chair Lynch met with ATA leadership, the Subcommittee received a briefing from the ATA at its Washington and Annual meetings, and AASHTO staff have exchanged information with ATA staff. In addition, SCOHT organized a conference call for both SCOHT members and representatives of AASHTO infrastructure committees with infrastructure staff and S&W staff from FHWA. Additional meetings will be organized to develop a common understanding of the infrastructure impact implications of proposed changes.

Testimony on Oversize/Overweight Permitting

Jeff Honefanger, SCOHT Vice-Chair, and Manager of the Special Hauling Permits Section of the Ohio Department of Transportation, testified regarding the current and future issues surrounding the size and weight of vehicles moving on America's highways on July 9. He was accompanied by Denny Silvio, Chair of SCOHT's Task Force on Oversize/Overweight Permitting and Weight Enforcement and Permits Administrator for the Louisiana DOTD.

In his statement Honefanger focused on Oversize/Overweight permitting. He said, "The importance of effective enforcement of truck size and weight laws and regulations is not widely recognized or understood. "Traditionally size and weight laws, regulations and enforcement were focused principally on infrastructure protection and safety, which remain preeminent concerns. Today, however, the case for change includes additional factors such as the need to move more freight more efficiently, the importance of reducing congestion, and the imperatives of energy conservation and greenhouse gas emissions reduction. In addition, any changes made need to take into account impacts on other modes of transportation, in particular freight rail, and the consequences for the overall efficiency and productivity of the nation's multimodal freight transportation system."

China International Scan Implementation

In September of 2007 a team composed of representatives from AASHTO, FHWA, and the trucking industry conducted a freight transportation scan in China focused on land side transportation investment connecting to China's ports. In meetings with national, provincial, and local government officials the team learned about the expressway system being developed and the freight-specific investments in rail and highways to meet China's economic growth objectives. The team also met with international carriers and representatives of U.S. companies who provided information and opinions on the performance of the Chinese freight system relative to the U.S. freight system. A report on the scan has been prepared and is available for distribution. A short flyer, focused on the Chinese planning and investment process is being developed.

The AASHTO Bottom Line Report—Highway Freight Movement

The Highway Freight Movement portion of the Bottom-Line Report will be issued early next year. It will summarize the issues and opportunities facing the nation's highway freight transportation system. It will provide a snapshot of the highway/ truck freight system, covering freight corridors; services; structure and ownership of the trucking industry; freight flow patterns and volumes of key commodities, and intermodal coordination with rail and water freight systems.

The general objectives of the AASHTO Freight Transportation Bottom Line Report are:

1. To create awareness and agreement among opinion leaders and decision makers that it is imperative that the nation invest in a freight transportation system that will assure continued competitiveness for the U.S. in the global economy and sustained economic prosperity;
2. To establish a framework for the national dialogue on the future of the national transportation system and the roles and responsibilities for transportation financing and management among federal and state governments and the private sector;

3. To develop a foundation of data and analysis that can be used to identify strategic investments in the freight transportation system.

Five preliminary reports will be prepared and issued in a manner that engages interest by building the argument for investment in freight transportation step-by-step and asks that others contribute to the development of the case.

Each report will be well-grounded in the best available information and analysis but will be structured for clear communication to a policy-relevant audience (20-30 pages of text, 2 dozen graphics, Power Point, brochure). Each report will have a well-publicized release/event and a structured process for securing reactions and suggestions for improvement.

To see pictures and speakers’ presentations and other related background materials from the meeting, please visit: http://freight.transportation.org/highway_meetings.html

Guide for Vehicle Weights and Dimensions

In updating the Guide for publication in the summer of 2009, the subcommittee on Highway Transport will consider advice, information, and input from states, other AASHTO committees and member, FHWA, commercial carriers, and their representative groups, and the Department of Defense. It will replace the previous Guide published in 2007. The primary purposes of this Guide are to:

- Provide a baseline of common terminology;
- Promote common permitting practices for overdimension/overweight operation;
- Promote improved transportation safety
- Promote efficiency and productivity for government and industry
- Provide necessary protection of the public infrastructure investment
- Promote uniformity in regulation and process
- Formalize operational procedures with the Dept. of Defense

The Guide is focused on providing information and guidance for States as they manage their transportation systems and for commercial carriers and others as they utilize highway transport.

List of future meetings: 2009—Savannah, Georgia. June, Contact: Kathleen Gibson, kathleen.gibson@dot.state.ga.us for more information.
Highway Subcommittee on Maintenance

Officers:
- Chair Carlos Braceras, UT
- Vice Chair Lacy Love, NC
- Secretary Jim Sorenson, FHWA
- Liaison Ken Kobetsky, AASHTO

Summer Meeting

The 2008 Summer Meeting of the Highway Subcommittee on Maintenance (SCoM) was held in Monterey, California on July 13-17. The meeting was well attended with 267 registrants including 181 delegates representing 31 states, AASHTO, and FHWA, and 86 participants representing the industry associations, vendors, and the academia. This year’s meeting was the first joint summer meeting of the Subcommittees on Maintenance and Asset Management and the Standing Committee on Environment.

The PowerPoint presentations given at the General Session and Technical Presentations are posted on the CALTRANS maintenance website.

The following resolutions were developed during the meeting but due to lack of quorum during the election process, these resolutions are being forwarded to the Subcommittee members for balloting:

- Resolution 08-02 Concerns Regarding Raising Truck Weight And Size Limits
- Resolution 08-03 Encourage the Establishment of a Public Information Effort to Publicize the Needs and Benefits of Protecting and Preserving America’s Infrastructure Investment
- Resolution 08-04 Endorsement of FHWA Report, “Transportation System Preservation Research, Development, and Implementation Roadmap”
- Resolution 08-05 Endorsement and Expansion of the Transportation System Preservation Technical Services Program
- Resolution 08-06 Endorsement of the AASHTO Bridge Preservation Strategic Plan (BPSP)
- Resolution 08-07 Approval of the Winter Maintenance Technical Service Program (WMTSP) and 4 Year Work Plan (2009-2012)
- Resolution 08-08 Resolution to Support National 511 Coalition
- Resolution 08-09 Proposes Common Performance Measures
- Resolution 08-10 Support of University Curriculum and Training Development for Infrastructure Preservation and Management
- Resolution 08-11 Establishment of a Technical Service Program to Advance Equipment Technology
- Resolution 08-12 Support an NCHRP Research Project to Quantify the Cost of Delayed Maintenance and Associated Risk

Completed Tasks or Activities:

Bridge Task Force

- Research: NCHRP Project 20-7 Task 234 Guidelines for Selection of Bridge Deck Overlays, Sealers, & Treatments. This project was initiated by the Task Force and received supported by SCOM. The project PI has submitted the draft final report for review and comments have been made and forwarded to Amir Hanna.

- Bridge Preservation Research: A Transportation System Preservation Bridge Preservation Research & Development Roadmap Workshop funded by FHWA and held on May 22-23, 2007 in Arlington, Texas. A TSP Research, Development, and Implementation Roadmap was subsequently published on January 2008. An AASHTO resolution supporting this document was approved by the AASHTO SCOBS, SCOM and Asset Management. The BTF will pursue funding for and prioritize bridge preservation related RNS contained in this document.
- National Bridge Preservation Workshop. A National Bridge Preservation Workshop (NBPW) funded by FHWA was held in St Louis, Mo. on April 17-18, 2007. All 50 States were invited to share strategies on Bridge Preservation. Some 170 attendees (110 of the participants were from State DOTs (43 States sent representatives). Outcomes from the workshop include: a) shared experiences during and after the workshop, b) networking with other practitioners, c) formation of regional bridge work groups, d) input into the draft bridges preservation roadmap, e) lessons learned, f) action register, g) research needs statements, h) decision to hold periodic workshops. An Action Register was created that identifies bridges preservation activities beyond the workshop. The BTF will continue to champion NBPW Action Register work items. BTF will support a subsequent NBPW slated for 2010 that is subject to the availability of funds.

- Bridge Preservation Strategic Plan (BPSP). BTF members completed a 5 year plan of action for the period from 2008 to 2013. BTF members met at TRB and have had a series of web conferences on the BPSP. The plan incorporates the vision of SCOM and provides five goals, each of which has a set of strategies to achieve the goals. The plan was submitted to executive leadership at the 2007 annual meeting. The BTF was able to secure support in the form of a resolution in adopting this BPSP as an AASHTO wide strategic plan. The next step is to obtain support from the AASHTO SCOBS.

- Bridge Preservation and Maintenance Roadmap. BTF members developed an overarching document identifying a number of necessary activities in establishing a foundation and network tools for bridge preservation and maintenance practitioners. The roadmap will accompany the Bridge Preservation Strategic Plan being routed to the AASHTO SOBS. The BTF will continue to work and follow the roadmap.

- Two websites were made available for bridge maintenance practitioners in an effort to foster dialogue and the exchange of information. One site contains cross links for the three known bridge maintenance regional groups.

- A spreadsheet of bridge maintenance engineers, phone, e-mail for all 50 states sent to member states.

- Regional Bridge Preservation and Maintenance Groups. The BTF in following its roadmap will help form regional bridge preservation work groups where they don’t exist and support the ones that do exist. These groups and their activity this year is as follows.
  
  o Midwest Working Group – One meeting was held on June 17 – 18, 2008 in Evanston, IL another to be held later this year. This conference offered video-casting for those unable to attend in person. Information is posted on the web.
  o Northeast Bridge Maintenance Group: One meeting was held on Aug 5 – 6, 2008.
  o Southwest Bridge Preservation Work Group: Their initial meeting is slated for Oct 29, 2008 in Reno, NV
  o Southeast Bridge Preservation Work Group: They are planning their initial meeting for April 2009 in Orlando, FL if they can secure funding.

- TRB Involvement. Members actively participated in TRB AHD-30 Structures Maintenance Committee sponsored meetings, sponsored sessions, paper reviews, developed and reviewed research needs statements.

- BTF / T-9 Coordination. BTF will continue coordination with the AASHTO SCOBS subcommittees on Bridge Preservation (T-9) and other stakeholders. Plan is to have a possible mid-year meeting at TRB in January 2009 in order to coordinate BTF and T-9 Bridge Preservation Committee activities for 2009. One agenda item is seeking AASHTO SCOBS support to adopt AASHTO BP Strategic Plan. A second agenda item is to define terminology.
Snow and Ice Task Force

- Completed and distributed to 34 state DOTs, APWA and NACE a suite of Computer-Based Training (CBT) programs which provide comprehensive training in all aspects of winter roadway maintenance in a convenient and cost-effective training medium. 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

- Provided logistical support and developed technical program for the 13th Eastern Snow Expo in Pennsylvania (330 pre-registered + 160 walk-in registrations)
- Provided logistical support and participated in FHWA MDSS Product Demonstration Showcase in Pennsylvania (100 attendees)
- Provided updates to National Winter Maintenance Peer Exchange web site to track progress of 28 research needs generated from 2007 Peer Exchange
- Began planning for 14th Eastern Snow Expo and 2009 National Winter Maintenance Peer Exchange
- Continued support/coordination with Aurora, Clear Roads, Pacific Northwest Snowfighters
- Participated in TRB AHD 65 Winter Maintenance Committee and TRB AH010, Surface Transportation Weather Committee
- Participated in TRB’s 4th National Conference on Surface Transportation Weather and 7th International Symposium on Snow Removal and Ice Control Technology
- Held two very productive Task Force meetings
  - Developed research problem statements
  - Developed and approved four year work plan for Winter Maintenance Technical Services Program

Roadsides & Environment Task Force

Representatives of the task force were involved with the following research activities:

- Native Species & Baling Hay on Right of Way Survey
  - Results available
  - To be posted on AASHTO website
- NCHRP 14-16 – Guidelines for Vegetation Management completed

- NCHRP 14-19 – Culvert Rehabilitation to Maximize Service Life

- Conducted survey of the State’s Rest Area operations. Survey results will be posted on the Subcommittee website

Contract Maintenance Focus Group

- NCHRP 14 - 18 Determining Highway Maintenance Costs was awarded to Cambridge Systematics and they have begun interviewing twelve DOT’s in phase 1 of the project.
- NCHRP 20 - 24 Issues and Practices in Performance-Based Maintenance and Operations Management was awarded to PB Consult, Inc. who are planning an executive summit this winter.
- Continue to partner with performance based contracting industry group AMOTIA
- Co-sponsor the 2008 National MQA Peer Exchange in Raleigh, North Carolina on September 22-23,
2008

- Working with NHI to develop training course for DOT's to gain knowledge about performance based maintenance contracts

**Equipment Focus Group**

  - The research agency has submitted its final report.
  - The report will be published in the NCHRP report series. In the meantime, copies of the agency's report have been sent to Program sponsors.
  - Dr. Amir Hanna, NCHRP Senior Program Officer for the project, offered to send copies of the guidelines resulting from this project to SCOM members for their review.
  - After being published by NCHRP, the guidelines will be presented to SCOM for consideration for being published as an AASHTO guideline.

- Participated in NCHRP Project 13-03, Decision Making for Outsourcing and Privatization of Vehicle and Equipment Fleet Maintenance
  - The research agency has submitted its interim report on phase I of the project.
  - The interim report was rejected by the project panel.
  - The research agency was requested to submit a revised interim report.

- Participating with TRB Committee AHD60 Maintenance Equipment in planning the 16th Equipment Management Workshop.
  - Date and location of the workshop is yet to be determined.
  - Considering 2 potential locations in the west – Arizona and Wyoming.
  - Due to widespread travel restrictions, considering delaying one year.

- Utah DOT again updated the AASHTO Equipment Reference Book for 2008 and it has been posted on the Maintenance Subcommittee website.

- Equipment Presentation
  - A presentation on NCHRP Project 13-02, Guidelines for Selection and Application of Warning Lights on Roadway-Operations Equipment was made during the technical presentations session by the principal investigator, Dr. Ron Gibbons.

- The focus group developed a proposal and resolution for establishing a Technical Services Program for advancing equipment technology.
  - The mission of this program will be to systematically identify recent and new equipment management technologies, evaluate the technologies, develop guidance in implementing potentially useable technologies, and publicize the results of these activities so that equipment managers are knowledgeable of the most available, practical, and cost-effective modern equipment management technologies and can apply such technologies to individual state and municipal equipment management programs.
  - The resolution for creating the Technical Services Program is included in the list presented to the SCOM membership for vote.

- The Equipment Focus Group **Statement of Direction** was updated on the SCOM website to include the revisions the focus group made at the last meeting. The two items added are:
  - Support Environmentally Sensitive Considerations in equipment acquisition and operation issues
  - Support equipment personnel training, development, and retention practices

- A link to the Equipment Focus Group’s TRB counterparts’ (TRB Committee AHD60, Maintenance Equipment) website was added to the SCOM website.
The Equipment Focus Group, in collaboration with the Roadside & Environment and the Snow & Ice Task Forces, developed a research problem statement for “Best Practices in Fuel Conservation and Carbon Footprint Reduction in DOT Operations.” These groups further collaborated in developing an AASHTO survey of state DOTs to obtain similar information for a starting point for the research project.

Management Systems Focus Group

- Participated in the 7th National Conference on Asset Management with 6 sessions of 19 presentations devoted to “Integration of Maintenance and Operations into Transportation Asset Management” with many emphasizing the benefits of Management Systems.
- Research has been approved and begun on Project 08-71, “Methodology for Estimating Life Expectancies of Highway Assets”.
- Two states have scheduled NHI course # 131107 on Principles and Practices for Enhanced Maintenance Management Systems
- NHI Web Conference on Principles and Practices for Enhanced Maintenance Management Systems is available as course # 131112 and covers the same material as course # 131107, but at a reduced cost to save participants time and money on travel.
- Worked with Performance Measures Focus Group to sponsor MQA Peer Exchange update to the 2004 workshop and to sponsor the National Workshop on Highway Asset Inventory and Data Collection in North Carolina in September 23-26, 2008.
- Paul Corti, Vermont AOT has agreed to take over as Chair of the Management Systems Focus Group

Performance Measures Focus Group

- The Maintenance Quality Peer Exchange that is scheduled for September 22-23, 2008 was discussed. The Peer Exchange website is http://www.mrutc.org/outreach/MQA/index.htm
- NCHRP Projects sponsored by this group are: NCHRP 20-07 (Task 260), Development of Guidelines for Developing Effective Customer Surveys and NCHRP 20-74A, Developing a national Level of Service for the Interstate System. A research project statement moved forward from this group this year was “Relationship Between Maintenance Cost and Level of Service”.
- Maryland, Kansas and Texas reported on their MQA programs and there was much discussion about common performance measures nationwide. The 2001 Subcommittee on Maintenance Resolution 01-07 concerning common performance measures was brought forward for re-resolution. No consensus was obtained at this meeting, however, resolution number 08-11 submitted for voting by the entire Subcommittee.

Workforce Development Focus Group

- Currently working with the Transportation Curriculum Coordination Council (TCCC) to identify existing training courses that will address the competencies identified in their Maintenance Training Matrix and to identify gaps in existing training so that new courses can be developed.
- Continued support of TCCC, and collaboration to identify existing courses that address maintenance training needs that can be converted into an e-learning format for use by maintenance personnel.
- Support the efforts of the TCCC to populate the new Transportation Training Data Base scheduled to be launched in late 2008. The database will serve as a resource to training program managers, and will be correlated to the competencies within the TCCC curriculum matrices.
• The Focus Group presented a research problem statement in 2007 entitled “Challenges and Success in Attracting and Retaining a Skilled Transportation Workforce” that was selected by NCHRP (Project 20-81, FY 2009). The Focus Group chair is serving on the project panel. The project kickoff meeting was held on August 25 and 26, 2008 with proposals interested consultants and academia due in November.

• The Subcommittee continues to support FHWA/NHI development of the Maintenance Leadership Academy. Work on the curriculum has progressed and subcommittee members have participated in numerous conference calls to review and provide comments on the draft module outlines and slides. The technical walkthroughs of the various program modules are scheduled for fall of 2008 with possible completion of the project slated for spring or summer of 2009.

• The Subcommittee, with the support of industry, is working to develop a certification program for pavement preservation contractors aimed at providing the states with a pool of qualified contractors from which to choose from for the application of preventive maintenance treatments.

Future Events

• The 2009 Subcommittee on Maintenance Meeting is scheduled July 12-16, 2009 in Annapolis, Maryland

• 2nd MQA Peer Exchange, September 23-24, 2008, Raleigh, North Carolina

Highways Subcommittee on Materials

Officers:

Chair: Chair: Grant Levi, ND
Vice Chair: Vice Chair: Mark Felag, RI
Secretary: Secretary: Jack Springer, FHWA
AASHTO Liaison: Keith Platte, Ken Kobetsky

Summary of Activities and Accomplishments from October 2007 to October 2008:

The SOM held its 94th Annual Meeting in Asheville, NC on August 3-8, 2008. The 21 Technical Sections; the Executive and AASHTO Products Evaluation List (APEL) Councils; and the AMRL Administrative Task Group (ATG) all met during the period. An agenda is included as Attachment A.

Representatives from 42 States plus NCHRP, ASTM and NIST participated in the meeting. As in the past, the FHWA headquarters and field office Materials Engineers met concurrently with the SOM and participated in the Roundtable and Technical Section meetings. Georgene Geary from Georgia DOT was nominated and approved to be the Region II Vice-Chairman.

The 28th Edition of AASHTO Materials, which includes all of the SOM's standard tests and specifications, was published in a five-volume paper version in July and as a single-user CD-ROM in September. It includes 163 specifications, 42 recommended practices, 215 test methods, and 39 provisional standards. The 28th Edition is also available on-line: with an annual subscription from a commercial vendor. AASHTO now sells individual copies of the standards. A NCHRP 20-7 problem statement was approved by SCOH at the Spring 2008 meeting to look at AASHTO's business plan concerning the selling of AASHTO documents.

The AMRL's laboratory inspection and proficiency sample programs continue to grow, as does the AASHTO Accreditation Program (AAP). The 26th assessment tour was over in May 2008. The tour included visits to 1,360 laboratories. The number of assessments has increased 26% in the last 5 years. As of July 2008, 1256 laboratories held AASHTO accreditation. The AMRL working with NTPEP has begun to evaluate plants that produce rebar and plastic pipe in January 2008. They plan to assess 35 rebar plants and 65 plastic pipe plants on an annual basis.

The SOM continues to look at ways of taking advantage of developments in electronic information technology. Updates have been made to the e-ballot website and most technical sections now use the e-ballot system for tech section ballots. A new version of the electronic ballot system and the SOM website will go on line in 2009.

The Executive Council has also held discussions concerning the relationship between AASHTO and ASTM. The Executive Council is concerned that AASHTO's present policy of paying ASTM a royalty to use the standards may no longer be appropriate. The Council did give direction to the Technical Chairs to encourage them to rewrite those standards we are paying ASTM for that have been significantly modified by SOM. Upon completion of the rewrite the standards would become AASHTO standards. For the fall 2008 SOM ballot, there will be a ballot item to publish the cover page of the "C" standards but to not publish the ASTM standard. Also, AASHTO and ASTM have begun discussions concerning the development of a new MOA between the two agencies.

The membership of the Joint Technical Committee on Pavements was also discussed during the meeting. Executive council members did express concerns with AASHTO's placement of the Joint Technical Committee on Pavements under the Design Subcommittee. The executive council members indicated that the resolutions / actions taken by the Joint Technical Committee on Pavements should be balloted through SOM. The members indicated that for the most part SOM members handled the states pavement thickness / material design efforts.

There was discussion about attendance at the meeting. This year a number of states were unable to attend or send their normal contingency (2-3 representatives) to the meeting. Some states attended only because the trip
was paid for by themselves or other organizations. This reduction in attendance hurts the development of standards by the SOM in many ways. Within the SOM are 21 technical sections plus the AMRL technical working group and the APEL Advisory Council. Each technical section is comprised of a chairman, a vice-chairman and members. Each technical section develops material specification and testing protocols at the annual meeting. If a chairman cannot attend then they must find someone to fill in for them. If the vice-chair cannot attend then the chair must find someone to assist them in the meeting. If a member cannot attend then they miss the discussion of the submitted comments or they have no chance to support their own comments. This happened at the meeting this year along with the absence of any Task Force Representative on one major issue. In addition, the 52 members that make up the SOM do not all have the same experience and technical knowledge. This restriction is due to two main reasons: the state not recognizing the benefit of sending representative(s) and financial constraints. The bottom line is that the development of standards within AASHTO suffers when states restrict travel to the SOM meeting.

There were two resolutions passed at this year’s meeting and one was going to be balloted in early September. The first resolution was to support the Subcommittee on Maintenance Resolution, 08-02, which expresses concerns about raising the truck weight and size limits. The second resolution expresses support to expand the Transportation System Preservation Technical Service Program (TSP-2) to include both bridges and pavements. An SOM ballot that is set to close on September 19, is balloting whether to offer support to the TSP-2 roadmap. The roadmap had not been reviewed by the members of the SOM so a ballot was conducted after the members had time to review the roadmap.

Presentations of interest at the Plenary Sessions included research advantages relevant to transportation materials at the National Institute of Standards and Technology, DARWin-ME software development, training programs at the American Concrete Pavement Association, Recycling, Polyphosphoric Acid in Asphalt, Warm Mix Asphalt and RAP.

The annual presentation of the National Highway Institute’s 6-week Highway Materials Engineering training course will be offered during the February/March timeframe. A new contract is being awarded so all of the details. This course has been a valuable step on the career ladders of many of the current State materials engineers, and AASHTO member agencies are encouraged to include the course in development plans for their staffs. A new module on RAP will be added this year and two modules are being updated.

Names of Other Committees Involved or with an Interest in Each Activity: Joint Technical Committee on Pavements, Subcommittee on Design, Subcommittee on Construction; Subcommittee on Maintenance

Dates and Locations of Future Committee Meetings: The 95th annual meeting of the SOM will be held August 2 - 7, 2009, in Anchorage, AK. The location of the 96th meeting of the SOM is yet to be determined.
Highways Subcommittee on Right of Way and Utilities

Officers:

- Chair: John P. Campbell, P.E., SR/WA, Texas
- Vice-Chair, Right of Way: Matt DeLong, Michigan
- Vice-Chair, Utility: Chuck Schmidt, New Hampshire
- Secretary: Gerald Solomon, FHWA HQ, Washington, D.C.
- FHWA Utility Liaison: Jeffrey Zaharewicz, FHWA HQ, Washington, D.C.
- AASHTO Liaison: Jim McDonnell, P.E., AASHTO

Membership Changes:

The Subcommittee membership sustained another year characterized by the significant loss of valued leadership, professional expertise and years of experience. We will particularly miss the wisdom and dedication of 87 years of combined service with the retirements of Ken Towcimak, Florida DOT and Stuart Waymack, Virginia DOT. Ken and Stuart served together as Chairman and Co-Chairman of the subcommittee during the formative years in which the utility function was first recognized and included in our membership. They will be fondly recalled as two of the most influential leaders in our profession.

December 1, 2008, Gerry Gallinger is retiring from the Washington State Department of Transportation after almost 26 years of service. Gerry has served as the Director of Real Estate Services for the Washington DOT for the past 8 years. He has been an active member of the subcommittee for several years and a Region IV Representative of the Executive Board for the past four years.

July 31, 2008, Tom Swafford retired from the Washington State Department of Transportation after 31 years with the department. Tom was the State Utilities Engineer for the Washington State DOT for the past 4 years.

May 1, 2008, Stuart Waymack, retired from the Virginia Department of Transportation, after more than 54 years of service. Stuart was the Director, Right of Way and Utilities Division for the Virginia DOT for the past 20 years and served on the subcommittee Executive Board for several years and as Vice-Chairman from 2003-2004.

April 30, 2008, Kenneth M. Towcimak, retired from the Florida Department of Transportation after almost 34 years with the department. Ken was the Director of Right of Way for the Florida DOT for 24 years. Ken served 3 ½ terms as Chairman of the Subcommittee from 1997-2004.

March 27, 2008, Ernest Peterson retired from the Wisconsin Department of Transportation after 32 years. He was the Statewide Utility Engineer for the Wisconsin DOT for the past 12 years.

January 18, 2008, Heidi Mireles retired from the Nevada DOT. Heidi was the Chief of R/W for the Nevada DOT and an early advocate for utility representation on the subcommittee.

November 21, 2007, Randy Needham retired from the Nebraska Department of Roads after over 40 years of service. Randy served as the Right of Way Manager for Nebraska Department of Roads for over 12 years.

We are encouraged by the continued enthusiasm of our membership and particularly pleased with the strength of our continued partnership with the FHWA. The R/W and Utilities Subcommittee welcomes the appointments of the following new additions to the subcommittee membership.

- Gerald Solomon, Esq., FHWA – Executive Board Secretary, Director of Real Estate Services, FHWA HQ, Washington D.C., (effective: 02/03/2008).
- Jeffrey Zaharewicz, FHWA – FHWA Utility Liaison, FHWA HQ, Washington D.C., (effective: 02/03/2008).
- John Garner, Florida - Appointed Director, Office of Right of Way, Florida Department of Transportation (effective: April 18, 2008)

Gary Britton, Nebraska – Appointed Right of Way Manager, Nebraska Department of Roads (effective: January 11, 2008).

Executive Board Business and Planning Session:
The Executive Board of the R/W and Utilities Subcommittee met in Grand Rapids, MI January 15-17, 2008 to conduct mid-year business, identify emerging issues and coordinate with FHWA leadership on anticipated federal program changes. The planning session for the 2008 annual conference and meeting of the full subcommittee membership was also conducted and included a site tour of the Amway Grand Hotel, host facility for the 2008 annual meeting.

Spring Membership Meeting and Conference:
The Highway Subcommittee on Right of Way and Utilities met in Grand Rapids, Michigan April 29 – May 3, 2008. The theme for the 2008 conference was also the title of the keynote presentation by Dr. Tom DeCoster, “Transitions - The Road Ahead”. Dr. DeCoster explored the generational differences that distinguish the four distinct groups that find themselves employed together in the modern work place for the first time in our history. Conference hot topics focused on preparing for, and facilitating the change ahead for a transportation industry and work force in transition.

The annual conference featured topic specific formal presentations, subject matter specific breakout sessions and teleconferencing of the technical council discussions.

2008 FHWA Excellence in Right of Way Awards
The FHWA awards for “Excellence in Right of Way” were presented by Robin Broils-Cox and Gerry Solomon, FHWA Office of Real Estate Services, at the Awards Luncheon on on Monday, May 5, 2008. The Right of Way awards are presented biannually to recognize outstanding innovations that enhance the right-of-way professional’s ability to meet the challenges associated with acquiring real property for a Federal aid project. The awards are presented in the categories of Leadership, Stewardship, Innovation, Streamlining, Integration and Technical Specialties. The following State DOT recipients were recognized at the Grand Rapids, Michigan conference for their right of way program accomplishments:

Leadership Award
- Texas Department of Transportation (TxDOT)
  Texas Turnpike Authority Division
- Teri Morgan, HDR Engineering
- John P. Hearn, PBS&J

Leadership, Honorable Mention Award
- Steve Damron, Kentucky Transportation Cabinet

Stewardship Award
- Maryland State Highway Administration (MDSHA)
  District Three, District Four, District Five Offices
- MDOT Special Acquisitions Division
- MDOT Office of Counsel

Innovation Award
- Florida Department of Transportation (FDOT)
  District Three, Survey and Mapping, Appraisal, Acquisition, Legal and Administrative Offices.

Streamlining and Integration Award
- Virginia Department of Transportation (VDOT)
Streamlining and Integration, Honorable Mention Award
- Texas Department of Transportation (TxDOT)
  Texas Turnpike Authority Division
- Teri Morgan, HDR Engineering
- John P. Hearn, PBS&J

Technical Specialties Award
- Oregon Department of Transportation (ODOT)

The FHWA Excellence Awards program recognizes the accomplishments of our professional peers that meet the challenges and succeed in the varied pursuits associated with acquiring right of way, managing real property and clearing utilities while ensuring that property rights are protected. FHWA will present the "Excellence in Utilities Awards" in Oklahoma City, OK at the 2009 spring meeting, then continue the alternating sequence with next presentation of the "Excellence in Right of Way Awards" in San Diego, CA in 2010.

Summary of Subcommittee Activities and Publications for 2008:

NCHRP Project Panel 20-36
The AASHTO Special Committee on International Activity Coordination and FHWA selected the subcommittee proposal entitled, “Integrating and Streamlining R/W and Utility Processes with Planning, Environment and Design”. The International scan team was assembled to include representation from the FHWA, AASHTO through its member-state departments of transportation and the private sector.

The scan team departed for Sydney, Australia and the first of 6 international stops on Thursday, 09/04/2008. The tour concluded two weeks later with the final stop in Edmonton, Canada and the safe return of the team to the US on Friday, 09/19/2008.

The team traveled over 21,500 miles, spanned two continents, and successfully completed six stops over the course of 15 days. The Australian leg of the tour began in Sydney, was organized by Austroads and hosted by the New South Wales, Roads and Traffic Authority (RTA). Then on to Adelaide, South Australia, where the team was received by the Department of Transport, Energy and Infrastructure (DTEI). The next stop was Melbourne, Victoria and our host, VicRoads, was kind enough to share two days of their valuable time with the scan team. The final stop in Australia was in Brisbane, Queensland, hosted by the Department of Main Roads.

The Canadian leg of the tour included stops in St. Catherine’s, Ontario hosted by the Ontario Ministry of Transportation and finally concluding with a stop in Edmonton, Alberta hosted by Alberta Infrastructure and Transportation.

The International Scan team includes the following ten members:
- FHWA Co-Chairman – Gerald Solomon, Esq., Dir., Office of Real Estate Services
- AASHTO Co-Chairman – John P. Campbell, P.E., SR/WA, Dir., R/W Division, TxDOT
- Report Facilitator – Cesar Quiroga, P.E., PhD, Texas Transportation Institute, Texas
- FHWA Representative – Dan Mathis, P.E., Division Administrator, Washington State
- FHWA Representative – Jeffrey Zaharewicz, Value Engineering Program Mgr.
- DOT Representative – Bimla Rhinehart, Div. Chief, R/W and Land Surveys, CalTrans
- DOT Representative – Ray Lorello, Utility and R/W Program Mgr., Ohio DOT
- DOT Representative – Gary Fawver, P.E., Div. Chief, Environment and QA, PennDOT
- Industry – Nick Zembillas, Senior VP, TBE Group, Clearwater, FL
- Industry – Ben Ward, VP, R/W Div. Mgr., PBS&J, W. Palm Beach, FL

The scan team remained focused, committed and productive throughout what would prove to be a very ambitious schedule of appointments. The key to success was the quality of the team preparation in advance of the tour and the organizational effort exerted by tour coordinator, Jake Almborg, ATI. The team compiled a robust set of amplifying questions for advance delivery to our prospective international hosts for their use in
preparation of the meeting agendas and presentations. The following is the outline of right of way and utility subject areas included in the amplifying questions:

A. Legal Framework for Right of Way and Utility Processes  
B. Transportation Project Delivery Methods  
C. Project Development Process  
D. Environmental Impacts  
E. Right of Way Acquisition  
F. Utility Coordination and Utility Contract Management  
G. Real Property Management  
H. Project Team Strategies, Training and Professional Development

The International Scan Team will reconvene in Washington D.C. in December for review of the final draft report in anticipation of the timely release and publication of findings and implementation ideas in the Spring of 2009.

“Turbo Relocation”

“Turbo Relocation” is a proposed AASHTOWare, expert system application being developed to provide an interactive application for use by professional relocation assistance services providers. Successful implementation of the Turbo Relocation product will result in a practical tool for use by the relocation assistance practitioner to assure consistency in the calculations and professional advisory services offered by state DOT’s in compliance with the “Uniform Act”. The “Turbo Relocation” concept envisions the development of a software product similar in function to “Turbo Tax” with built in component “calculators” to assist in the calculation of relocation assistance benefits and payments.

12 States have committed to participate in the development of the “Turbo Relocation”, AASHTOWARE product. The following members of the “Turbo Relocation” task force have been selected by AASHTO for their right of way expertise:

- Sabra Mousavi, Arizona DOT (Chair)  
- Arnold Feldman, FHWA Project Liaison  
- Gina Anthony, Maryland DOT  
- Walter Mabry, Mississippi DOT  
- Paul Meleri, Delaware DOT  
- Carmen Reese, Idaho DOT  
- James Braden, Arkansas DOT  
- Annette McCrorey, South Carolina DOT  
- Kelly Ramirez, Michigan DOT  
- Robert Wright, Alaska DOT

The next step will be to finalize the RFP for anticipated award of the software development contract in early 2009. The product development is expected to take approximately 15 months following contract award, with tentative product introduction by mid 2010.

Research Studies and Pilot Project Initiaitves

NCHRP 20-7

SCOH approved funding for two subcommittee research projects selected for NCHRP 20-7 funding at the 05/2007 meeting.

NCHRP 20-7, Task 247 – “Outdoor Advertising Sign Regulation Study” funded at $75,000. The objective of this research is to identify, compile and report on the standards, measures, practices and enforcement of control of outdoor advertising signs in the various states. The research project was delayed due to turnover of participants and has been recently reactivated with anticipated completion in early 2009.
NCHRP 20-7, Task 248 – “Utility Encasement Policy for Highway Crossings”, funded at $50,000. The objective of this research is to determine if current DOT encasement policies are appropriate. If it is determined that uncased utility highway crossings are a safe alternative to encased crossings, criteria for uncased crossings will be developed. The following team members have been selected for Task 248:

- Chuck Schmidt, New Hampshire
- Ray Lorello, Ohio
- Robert Memory, North Carolina
- Robert Lee, Alabama
- Paul Scott, TRB representative

Integrated Project Delivery
The Subcommittee on Right of Way and Utilities continue to pursue opportunities to participate in combined forums with other AASHTO Committees and SCOH Subcommittees in order to meet the goal of improving multi-disciplinary coordination in development and delivery of transportation projects. The 2008 priority for improved integration of right of and utility operations with project planning and development, creates a mutually beneficial opportunity for interaction with groups such as the Subcommittee on Design, the Standing Committee on Planning, and the Standing Committee on Environment.

AASHTO Legislative Policy for Program and Project Development and Delivery
The Program and Project Development and Delivery Team is one of seven AASHTO teams assembled to produce specific legislative recommendations for federal reauthorization in 2009. The PPDD team is chaired by Deb Miller, Secretary, Kansas DOT with representation by SCOH, SCOP and SCOE team members. The primary areas of focus are; Regulatory Reform, Innovative Contracting/Program Delivery, Federalizing Projects, Fiscal Constraint/Financing Issues with the over-arching philosophy of sustainability.

Representatives of the R/W and Utility Subcommittee participated in work group efforts to identify and compile recommendations for consideration of right of and utility features to enhance the next federal transportation bill. Recommendations for more effective delivery of right of way included: Encourage Corridor Preservation, Provide for Advanced Acquisition, Establish a Corridor Preservation Fund, Accommodate Future Expansion, and Allow for Concurrent Construction and Right-of-Way Acquisition.

The Legislative Recommendations Summary included: Expanding opportunities for early right-of-way acquisition to protect future transportation corridors and to reduce cost and disruption to communities.

Program Delivery Improvement Tool (PDIT)
The Subcommittee on Right of Way and Utilities continues to participate on the Program Delivery Improvement Tool (PDIT) team developed in response, and as a component of the U.S. DOT priority for focus on Accessibility and Accountability. Turnover in subcommittee representatives on the PDIT team will require additional appointments to fill current vacancies; the remaining representative is Jim Viau, Ohio DOT.

The Right of Way and Utility subcommittee’s hope for PDIT is to develop a mechanism by which to correlate the effectiveness of improved, coordination between project planning and Right of Way and Utility functions with more timely and cost efficient project delivery.

Strategic Communications and Information Exchange
The Subcommittee continued to expand our resources for information exchange among the membership. The key communications and information exchange resources include:

- The Subcommittee website located at [http://rightofway.transportation.org/](http://rightofway.transportation.org/), developed and maintained by the voluntary efforts of the Florida DOT.

- The Subcommittee “Clearinghouse” resource for web based, query, compilation and distribution of topic-specific, surveys submitted by R/W and Utility members. The “Clearinghouse” function is managed by the voluntary efforts of the Illinois DOT. This year 13 surveys were completed and are published under
the “Documents” tab of our web site at http://rightofway.transportation.org/. Topics of particular interest this year included authority for “corridor preservation”, abandoned utilities policy and various acquisition process and program management topics.

Technical Councils
Each of the standing Technical Councils is chaired by a state R/W or Utility Director with participation open to all member state employees. The primary objective of the Technical Councils is to expand the strategic communications network among the membership to establish a forum for broader participation by employees at the operations level within member states. The current standing Technical Councils have been established for the following nine subject areas:

- “R/W Appraisal and Appraisal Review”
- “R/W Relocation”
- “R/W Acquisition / Program Management”
- “R/W Property Management”
- “Outdoor Advertising Control”
- “R/W and Utilities, Scoping and Mapping”
- “Utility Coordination, Relocation and Subsurface Utility Engineering”
- “Utility Accommodation”
- “Utility Safety”

The Technical Councils conducted teleconference enabled discussion sessions for the first time at the annual meeting in Grand Rapids to further expand opportunities for participation of the membership.

Partnerships in Professional Education and Training:
In partnership with the FHWA, Office of Real Estate Services, the IR/WA facilitated the second annual Public Real Estate Symposium (PRES) in Addison, TX, February 12–14, 2008. Subcommittee Chairman, John Campbell was invited to accompany the IR/WA International Executive Board on their annual federal agency outreach visit to Washington D.C., July 19-20, 2008, in preparation for the more accurately titled, “Federal Agency Update”. The “Federal Agency Update” is an annual effort led by the FHWA, Office of Real Estate Services to facilitate information exchange and knowledge transfer among the various federal agencies responsible for real property acquisition subject to the Uniform Relocation Assistance and Real Property Acquisitions Act (aka “Uniform Act”).

The FHWA and IR/WA continue to combine efforts in a developing partnership that is focused on meeting the growing demand for high quality, reasonably available opportunities for professional education. The subcommittee supports this mutually beneficial partnership in professional education that assures a more robust curriculum of consistent high quality professional education.

Future Meetings of the Highway Subcommittee on R/W and Utilities:
Executive Board Business and Planning Session
- The Executive Board of the Highway Subcommittee on Right of Way and Utilities meets annually in a winter forum to conduct mid-year subcommittee business, identify emerging issues and coordinate with FHWA leadership on anticipated federal program changes. The planning session for the annual, spring meeting of the full subcommittee is also conducted at this mid-year meeting of the executive board.
  - Dates: January 6 - 8, 2009
  - Location: Oklahoma City, OK
  - Duration: 2½ days
  - Frequency: Subcommittee Executive Board meeting occurs once per year.

Annual Subcommittee Meeting and Membership Conference
- The full membership of the subcommittee is composed of individual Right of Way (R/W) and Utility directors for each of the 50 states, Puerto Rico and the District of Columbia, as well as FHWA Liaisons for both Realty and Utility program areas. Separate business meetings of the R/W and Utility Directors are
incorporated into the conference schedule. An estimated 500 attendees and guests are expected to attend the general, break out and Technical Council sessions.

- Dates: April 19 – 23, 2009
- Location: Oklahoma City, OK
- Duration: 3½ days
- Frequency: The Highway Subcommittee on Right of Way and Utilities meeting of the full membership occurs annually.
Highways Subcommittee on Systems Operation and Management

Officers:
Chair: Scott Rawlins, NV
Vice Chair: Connie Sorrell, VA
Secretary: Jeffrey Lindley, FHWA
AASHTO Liaison: Mark S. Bush, AASHTO

Committee Activities:

The Subcommittee on Systems Operations and Management held its 2008 meeting in San Francisco, CA, August 10-14, jointly with the AASHTO Special Committee on Wireless Communications and Technology. A joint general session was held on the first full day of business to communicate and discuss ongoing related issues to both committees. For the remainder of the meeting time, each subcommittee met separately. Twenty states were represented for the meeting and a combined total of eighty six meeting registrants included participants from AASHTO, USDOT RITA JPO, and FHWA offices, consultants, vendors and contractors.

This year marked a significant change and milestone for Systems Operations and Management with the majority of the SSOM Leadership Team new members and a refocusing and development of a new strategic plan. Also, with the significance of SAFETEA-LU, the current state of transportation funding, and new authorization on the horizon have made operations a priority item. The primary focus area of business at the meeting for this year was the new strategic plan. State DOT’s are continually challenged in the delivery and operations of their transportation infrastructure along with the funding shortages to deliver them. Whether it is the continual higher customer expectations or how performance is measured, focusing in on reducing congestion, improving mobility, reducing fatalities, improving safety, and maximizing the throughput in the development of a new strategic plan was needed to meet these challenges.

Early in the year, the leadership team of SSOM formulated a position paper for consideration of new funding authorization dedicated for Operations which was then transmitted to the respective legislative teams within AASHTO that are examining and drafting proposed recommendations for congressional consideration. The adoption of a proposed $3 billion per year program specifically for operations, and a proposed $150 million per year program for continued ITS R&D programs was a result. Other financial programs of highway surface transportation also have some reference that may be operations related. These proposals are planned to be presented in detail with the entire new authorization proposals under consideration to the AASHTO Board of Directors at the Fall 2008 meeting.

With changes in the leadership team and a focus to continually move operations forward, the goal of this year’s annual meeting was to be as informative as possible as well as allowing states to also present material and provide a peer exchange on their successes and challenges in moving towards an operations business structure. This was also a catalyst in further refining the new strategic business plan for the subcommittee. The leadership team along with FHWA had met for a full day working session prior to the AASHTO 2008 Spring meeting under the NCHRP contract proposal to develop the initial full draft strategic plan. As originally scoped, the strategic plan was then to be completed and presented at this year’s August SSOM annual meeting, but due to the circumstances noted above and with the members input and discussions at both the AASHTO Spring meeting and SSOM annual meeting, the strategic plan is currently being refined.

Along with a full meeting agenda dedicated towards the new strategic plan and regular business items, several informative sessions were conducted that included:

1. Updates of USDOT FHWA and RITA JPO initiatives
2. Updates of TRB, NCHRP and SHRP2 research
3. The Operations Academy through the University of MD
4. National Transportation Operations Coalition through ITE
5. Related activities and crosscutting issues between SSOM and SCOWCoT
6. CA Showcase presentation that included presentations on Incident and Corridor Management, Traveler Information, Vehicle Detection and Probe Data, Vehicle Infrastructure Integration, SafeTrip-21 and ITS in general.
7. ITS Deployment Series through ITS CA Chapter that included an overview and working session on Congestion Pricing and Managed Lanes initiatives.
8. A Technical Tour that showcased CA PATH program which included demonstrations and presentations of research in ITS, highlighted by the Connected Traveler Project which is the first project funded under the SafeTrip-21 initiative. Demonstrations also included intersection collision avoidance, curve over speed warnings, onboard monitoring of truck drivers and bus automation and precision docking.
9. A SHRP2 Workshop under the L06 project, an executive Forum on Institutional Architecture for Systems Operations and Management. This half day working session focused on how changes in state DOT “institutional architecture” (culture, leadership, organizational structure and staffing, resource allocation process, partnering with public safety and local governments) can provide a more supportive basis for effective Systems Operations and Management programs and activities.

The business session of the annual meeting also included final updates from the old task forces and recognition of the outgoing chairs for their contributions and valuable work. The task forces and summaries included:

1. Work Zone Management
   a. Coordinated with FHWA to facilitate the development and implementation of Work Zone Mobility and Safety Plans in conjunction with the federal regulations.
   b. Coordinated and championed reviews and methodologies for improvements in work zone safety and mobility.
   c. Worked with the performance measures to establish a means of benchmarking work zone management practices.
2. Performance Measures
   a. Assisted in establishing a coordinated and common standardized set of measurements for key operation activities.
   b. Developed standardized key measures and reporting mechanisms for benchmarking key national trends in operations.
   c. Communicating the benefits of operations to managers, decision makers and public.
3. Technology Initiatives for Operations
   a. Supported and advanced the business plans for Vehicle Infrastructure Integration, National 511 Coalition, Incident Reporting Systems and electronic data exchange.
   b. Support peer exchange and advancement in best practices in ITS, including ITS procurement practices and public private partnerships.
   c. Supported knowledge exchange with private sector technology leaders.
4. Incident Management/Emergency Operations and NTIMC
   a. Supported the development and adoption of the National Unified Goal in support of the National Traffic Incident Management Coalition (NTIMC) and in cooperation with USDOT partners.
   b. Executed a business plan for the NTIMC that advances best practices in responder safety and quick clearance and providing a forum for interoperability and communications with related groups and organizations.
   c. Worked with the performance measures task force to establish a means of benchmarking incident management practices.

Under the new strategic plan, each of the old task forces and work plans were reexamined and with the initiative to support the vision, mission and objectives of the SSOM, new task forces were identified. Each of the new task forces identified new leadership and membership. Much of the continued work remains in force. These new task forces are:

1. Technology
2. Performance Measures
3. Reliability

These new Task Forces each reported their final work plans and accomplishments completed from there work sessions.

With its updated plan, SSOM will implement its goals and objectives through new and already developed initiatives. Some of the existing initiatives that remain in effect and underway:

1. Mainstreaming of operations into state DOT policy-making and organizational structures.
2. Expansion of performance monitoring and measurement.
3. Increased real-time reliability and 24-7 system operation.
5. Improved coordination for developing, maintaining and enhancing strategic partnerships and those critical relationships with other stakeholders, interests, and associations affecting and having a vital interest in the operation of the nation’s transportation infrastructure, including other AASHTO committees and subcommittees.

Summary of Activities and Accomplishments from October 2007 to October 2008:

- Named new Chairman: Scott Rawlins, Nevada DOT
- Named new FHWA Secretary: Jeffrey Lindley, FHWA
- Named new AASHTO Liaison: Mark S. Bush, AASHTO
- Developed new Strategic Plan for Systems Operations and Management
- Identified and formulated new Task Forces to meet the goals and objectives under the new Strategic Plan
- Formulated a position paper on the 2009 Authorization for future and current needs of operations and forwarded to the legislative teams for consideration resulting in a position established by the Authorization Steering Committee
- Balloted and passed several ongoing NTCIP standards
- Endorsed a draft resolution in conjunction with the Subcommittee on Maintenance, Snow and Ice Task Force to continue the efforts of the national 511 program
- Drafting of an NTIMC Strategic Plan - noting the continued support of SSOM as the primary AASHTO committee sponsor of NTIMC in partnership with FHWA
- Formative activities for an NTIMC Foundation to engage private sector partnerships in advancing TIM at the national level
- Initial success in implementing the National Unified Goal for TIM, some examples include SHRP II TIM Training; Towing & Recovery Practices & Procedures.
- Kickoff of the NCHRP 3-94 project (AASHTO Guide to System Operations & Management) - a cornerstone project for SSOM
- Provided input and review for SHRP 2 Project L6: Institutional Architectures to Advance Operational Strategies
- Finished the Linking Planning and Operations Primer by November 2009
- Initiated a request to develop a business case for system operations and management through domestic scan program and NCHRP Synthesis program.

Names of other committees involved or with an interest in each activity:
- Special Committee on Wireless Communications and Technology
- Special Committee on Transportation Security
- Subcommittee on Traffic Engineering
- Subcommittee on Maintenance
- Subcommittee on Highway Transport
- Standing Committee on Planning
- Standing Committee on Performance Management (Quality)
Standing Committee on Highway Traffic Safety

Dates and locations of future committee meetings:

2009:
Joint meeting with the Subcommittee on Traffic Engineering to be held June 14-17, Manchester, NH.

2010:
Proposed joint meeting with ITS America, May/June, Houston, TX

2011:
Proposed meeting in Michigan with MI DOT or Virginia with VDOT.

Other proposed joint meetings include ITS America in Orlando, FL.

Additional requests for joint meetings are also being solicited with other related Standing or Subcommittees.
Highways Subcommittee on Traffic Engineering

Officers

Chair — Del McOmie, Chief Engineer, Wyoming Department of Transportation
Vice Chair — Tom Hicks, Director, Traffic and Safety, Maryland State Highway Administration
Secretary — Robert Arnold, Director of Transportation Operations, FHWA
AASHTO Liaison — Ken Kobetsky, Program Director, Engineering

Review of Subcommittee Charge Statement
No change to existing charge statement.

Proposed Schedule
Plans for 2008-2009 include continuing work with the NCUTCD, including the mid-year meeting in January, and proposed changes to the MUTCD.

The five Technical Committees have the following work plans:

Work Zone
1. One item from the previous work plan that was not finished was the development of a compendium of work zone training. This project will be continued during the coming year.
2. The Team will work with ATSSA on the development of their work zone flagger training program. It is anticipated that this project will start soon after the next edition of the MUTCD is published.
3. Continue to work as needed on the Work Zone Operations Best Practices Guidebook and the Work Zone Peer to Peer program.
4. The team members will be available for input as needed on a variety of subjects such as the recent rulemaking efforts by the FHWA in the work zone area.

Signing and Marking
5. Send copies of “Are Your Signs Working For You?” to agencies involved in sign installation and maintenance.
6. Work with AASHTO members to focus comments to the NPA-MUTCD docket on various signing issues to include:
   a. Impact to 1-inch to 30-feet legibility requirement
   b. Need for flexibility on diagrammatic signs
   c. Need to create a separate Part for toll facilities
   d. Need to use standard procedure for adoption/inclusion of several symbols
   e. Need to assess driver comprehension of as many as twelve logos at a single site
7. Airport Wayfinding task force, chaired by Dave Woodin, NYS DOT, to work with Kevin Sylvester, FHWA, on the need for national standards for signing to and at airports.
8. Bill Lambert, NH DOT, will report on NCHRP 20-7 (256), exploring the impact of digital billboards on the driving experience.
9. Work with Hari Kalla, FHWA, to summarize method being used by states to comply with sign retro-reflectivity standard in the MUTCD.
10. Continue to work with FHWA on any proposed language in the MUTCD on marking retro-reflectivity.
11. Work with NCHRP panel for project 20-7 (11) on the use of colored pavements for special uses and/or users.
12. A task force will examine how states are addressing wrong way maneuvers in regard to the occurrence of such crashes.

Traffic Design, Regulation and Management

13. Automated Enforcement. The technical team will continue discussions concerning the issues of automated enforcement. The team identified the need for a guideline or a best practices report to specify standards that should be used in red light running applications. An NCHRP synthesis is
presently underway that may provide the information necessary to accomplish this need. The team will monitor the progress of this synthesis and will evaluate it when completed.

14. **Bicycle Guideline.** The technical team will monitor the development of the Bicycle guideline and will report any issues to SCOTE – and a recommendation for subcommittee approval.

15. **Speed Operational Issues.** A technical team member will review the latest research on the issue of design versus operational speed and will report to the team at the next annual meeting. Distribution of information to the SCOTE committee on this subject will be made when appropriate.

16. **Driver’s Handbook.** The team will review the material developed for State Driver’s Manuals on the subjects of Older Drivers, Trucks, Work Zones, Bicycles, and ITS as part of NCHRP 20-07 Task 212. The final write-ups will be presented to the SCOTE committee.

17. **Roundabout Design Issues.** A review of existing state programs regarding the criteria used for selecting a roundabout over a traffic signal will be conducted along with a review of the revised guideline to be issued by FHWA. A report of the findings will be presented to the SCOTE committee.

18. **Congestion Mitigation Strategies.** A review of the use of adaptive signal systems to improve congestion on traffic arteries will be conducted. The use of these systems appears to have great potential to improve congestion and to reduce gas consumption. There is an NCHRP synthesis beginning on this subject and could provide the information desired. Ed Fisher (Oregon) will represent the technical team on the panel for this synthesis. Information from this synthesis will be discussed by the task force and information will be distributed to the SCOTE committee.

**Traffic Signals and Roadway Lighting**

19. **Goal.** By use of NCHRP 20-7, Develop a “Graphical Traffic Signal Design Aid” software that will use MUTCD language and guidelines to produce graphical signal design options that are MUTCD compliant.

20. **Work Plan.**
   a. The technical team will work with AASHTO SCOTE to submit a proposal to secure NCHRP 20-7 funding for development of this software.
   b. The Traffic Signal Technical Team will work as the oversight committee, as needed, during development of the software.

**Safety and Security**

21. Perform literature search, survey of states on emerging safety treatments including rumble stripes and strips, median barrier, special curve warning treatments, recovery area methods and advance warning for “end of green” (flashing indication).

22. Continue to liaison with leadership of the Highway Safety Subcommittee to determine roles and possible joint meeting.

**Upcoming Meetings**

June 2009, Manchester, New Hampshire (Joint Meeting with SSOM)

June 2010, Region 3
The Project Management and Delivery Task Force has two charges: to address project management and delivery issues “that cut across the traditional functional areas within State DOTs and, if needed, recommend a structure within AASHTO to address these issues and provide technical assistance;” and to “continue the existing Context Sensitive Solutions (CSS) work program identified jointly by AASHTO and FHWA, and determine how best to institutionalize CSS within AASHTO.”

The Task Force met on May 4, 2008 in Branson, Missouri. In a morning workshop the task force reviewed with Tom Warne the initial findings of NCHRP Project 20-7 Task 258, Identification of Cross-Cutting Issues related to the Development, Management and Delivery of Transportation Projects and Programs. The objectives of this research project are “1) to identify and prioritize cross-cutting issues related to development, management, and delivery of projects and programs, and 2) to develop an organizational plan for integrating these issues within the AASHTO committee structure.” Mr. Warne facilitated a broad ranging discussion of a number of major issues including utility delays, environmental issues, public involvement issues, concerns about use of design criteria and fiscal issues.

The afternoon workshop focused on review of the Strategic Goals and Actions developed from a joint AASHTO/FHWA Context Sensitive Solutions Strategic Planning Process completed in 2007 that was focused on how to mainstream CSS within state DOTs and FHWA. A discussion of the relevance of CSS principles to resolving problems with crossing cutting issues of project management and delivery yielded a wide range of responses, including support for the principles inherent in CSS; however, others expressed concern that CSS not become a mandate or something for which FHWA creates a “check list.”

Review by the task force of the 2007 CSS Action Plan items found that two items were completed and six items are underway. The two completed items included meeting with the AASHTO Subcommittee on Design in June 2007 and developing an informational flyer for CEOs on what they need to know about CSS (completed and disseminated at last year’s AASHTO meetings). Of the six items underway, particular interest was voiced about the development of a CSS Self-Assessment Tool aimed at helping DOTs evaluate how they can improve their project delivery process. Task force members asked that the title of this product be reconsidered and that they have a role in its development. Other items underway addressed the pending completion of: NCHRP Report 15-32, CSS: Quantification of the Benefits in Transportation; a CSS Training Guide nearing completion by an FHWA contractor; AASHTO and FHWA peer exchanges on CSS implementation; and plans by FHWA to hold a series of sessions advancing a national dialogue on CSS. The sixth item addressing tort liability as a topic for a NCHRP synthesis was integrated into action items addressed by the task force as reported below.

The task force reviewed an additional six action items from the 2007 CSS Action Plan that were not yet underway. This review resulted in agreement to proceed with three tasks.

1) Prepare a description of the needs in terms of tort liability identified by the task force and seek to have research funded from NCHRP 20-6 funds.

2) Develop a problem statement to outline the structure for a course and/or develop a course to promote flexibility in standards application focused on AASHTO’s Policy on Geometric Design of Highways and Streets, commonly known as the Green Book, and AASHTO’s 2004 publication, A Guide for Achieving Flexibility in Highway Design. The course purpose would be to understand underlying research and principles behind Green Book design criteria and to understand the inherent flexibility within those criteria.

3) Submit a research proposal to NCHRP 20-7 that explores how DOTs have structured their staff and program activities to support successful project delivery.

The Task Force will meet to develop recommendations based on NCHRP Project 20-7 Task 258 and to review progress of action items included in the 2007 CSS Action Plan on Friday, October 17, from 6:30-9:00 pm at AASHTO’s Annual Meeting in Hartford, Connecticut.
Highway Safety Manual

AASHTO TASK FORCE TO DEVELOP THE HIGHWAY SAFETY MANUAL (HSM)

Officer: D. W. Vaughn, Alabama, Chair, HSM Task Force

The AASHTO Highway Safety Manual (HSM) Task Force continues to work with the NCHRP panel to provide input into the consultant (Kittelson and Associates) selected to develop the HSM. Task Force work has been coordinated through meetings, conference calls and e-mail.

Activities occurring since the March 26, 2007 work plan:

- As an outcome of activities at TRB in January, resulting from review comments made by this Task Force, the Kittelson and Associates’ project team developed a strategy to move forward in developing the Highway Safety Manual (HSM) that will keep in mind user friendliness and attractiveness; scientific quality; and practical text, tools, graphics and applications. Chapter 11 was selected as the prototype chapter that would fully demonstrate the look of the finished HSM.

- Presentations on the progress of the development of the HSM were made to the following AASHTO committees at their annual meetings:
  1) Standing Committee on Safety – April 22-25 in Branson, Missouri
  2) Subcommittee on Design – June 10-12 in Vermont

- Working groups were formed at each meeting to provide committee input to the HSM development process.

- The Highway Safety Manual Mid-Year Meeting was held August 20-22, 2007 in the National Academics Beckman Center, Irvine, California. Twelve (12) AASHTO HSM Task Force members attended. This meeting afforded an excellent opportunity for the TRB HSM Task Force and the AASHTO HSM Task Force to coordinate and communicate HSM content, editing and publication issues.

- The Chapter 11 prototype was "rolled" out for first review and was considered at initial response to provide a more user friendly, practitioner oriented presentation of research materials.

- Major discussions centered on the time required for the AASHTO balloting process once a draft of the manual is produced. There is some thought being given to the benefits of producing an NCHRP document that would compile and document the Safety research that has been conducted for this effort. There is also consideration being given to publishing a technical advisory to allow the State DOT’s access to the information and to gain experience with its practical application prior to publishing a document for AASHTO balloting.

- It is recognized that to produce a manual that can be used to guide Planning, Design and Operation decisions based on Safety considerations, goes beyond the original scope of work and that more time and more funding may be required.

- January 16, 2008 – HSM Workshop, TRB Annual Meeting
- July 30, 2008 – Submitted Comments for HSM Draft 2
- August 20, 2008 – HSM Workshop, Irvine, California
SCOH BUSINESS AGENDA
V. ACTIVITY REPORTS
HARTFORD, CONNECTICUT – OCTOBER 18, 2008

Technology Implementation Group (TIG)

AASHTO TIG Publication

The TIG Executive Committee (EC) oversaw the production of the AASHTO TIG Guidebook for Executive Committee. The book was completed in late January, and printed in February. This guide book provides the EC with guidance and processes for the management of the TIG program.

Selection of a New Chair

Ananth Prasad of Florida DOT left his agency in May and thus stepped down as chair of the TIG EC. While Anath's knowledge and expertise will be missed, the newly appointed chair Kevin Chesnik, Chief Engineer of the Wisconsin DOT will bring an exciting perspective to the EC.

New Members

There was one new member added to the EC in the past year. Mr. James McMinimee from Utah DOT. He replaced Amadeo Saenz, from Texas as the Region 4 representative.

Vacancies on the TIG EC

Currently we have two openings in the TIG Executive Committee: one in Region 2, and one in Region 3. If you are interested in joining the TIG EC, please send a short resume to Keith Platte, kplatte@aashto.org.

New Technologies

The new Focus Technologies for 2007 are the following:

- **LRS** (Linear Reference System)
  This project is being sponsored by Iowa State and its intent is to align the linear reference points in all DOT databases so information from crash statistics, pavement management and other business data can be accurately mapped and data more easily analyzed. Through this integration, the LRS improves data integration and access, improves accuracy, minimizes redundancy in DOT databases, minimizes data maintenance activities and includes all public roads.

- **SR** (Surface Resistivity)
  The sponsoring state for the SR project is Florida. SR is the simple and the most economical test compared to other electrical indicators used as electrical indicator of permeability. SR does not have problems with specimen heating or epoxy disbondment so it is more reliable. SR can replace the RCP test (see table 1). In addition preliminary tests show that SR test method has half the coefficient of variation of the RCP test and therefore is more reliable.

- **WVDS** (Wireless Vehicle Detection System)
  The state of California will be the lead sponsor for the WVDS program in which the Sensys™ Wireless Vehicle Detection System uses pavement-mounted magnetic sensors to detect the presence and movement of vehicles. The magneto-resistive sensors are wireless, transmitting their detection data in real-time via low-power radio technology to a nearby Sensys access point that then relays the data to one or more local or remote traffic management controllers and systems.

Open Technologies

The following are the Technologies that are currently in Open Status

- Self Propelled Modular Transporters (SPMT) (2006)
- Precast Concrete Paving Slabs (PCPS) (2005)
- Virtual Weight-in-Motion (VWIM) (2004)
- Cable Median Barrier (CMB) (2004)

**Closed Technologies**

The following Technologies have been placed in Closed Status:

- ITS in Work Zone Safety (ITS-WZS) (2001)
- Accelerated Construction Technology (ACT) (2001)
- Prefabricated Bridge Elements (PBE) (2001)
- Fiber-Reinforce Repair on Overhead Sign Structures (FRP-OSS) (2003)

**Additional Selected Technologies**

This year, three technologies were selected to be spotlighted by TIG. They are:

- Comments Works
- Life Dimensional 3D Technology
- US Limits

In the coming months, TIG will be rolling out one page fact sheets for each of these technologies.

**Nomination Process**

The 2008 TIG Nomination process is now closed. The Executive Committee will review the nominations, and announce the 2008 Focus Technologies sometime in early 2009.
### NTPEP Oversight Committee

**Officers**
Chair: William Temple (Louisiana, Chief Engineer)
Vice Chair: Tom Baker (Washington, State Materials Engineer)
Secretary:
AASHTO Liaison: Keith M. Platte, Program Director for Materials and Evaluation, Claire Kim, NTPEP Project Engineer, and Henry Lacinak, NTPEP Consultant

**Summary of Activities and Accomplishments from November 2007 to September 2008:**

<table>
<thead>
<tr>
<th>Technical Committee</th>
<th>Date</th>
<th>Lead State(s)</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMCS&amp;FAP</td>
<td>February 2008</td>
<td>North Carolina</td>
<td>Coordinate field evaluation of portable changeable message signs and flashing arrow panels. Publish and distribute a final report.</td>
</tr>
<tr>
<td>CADD</td>
<td>March 2008</td>
<td>Minnesota, Missouri</td>
<td>Coordinate laboratory evaluations of concrete admixtures. Publish and distribute final report.</td>
</tr>
<tr>
<td>CCC</td>
<td>March 2008</td>
<td>Minnesota, Kansas</td>
<td>Coordinate laboratory evaluations of concrete curing compounds. Publish and distribute final report.</td>
</tr>
<tr>
<td>SSM</td>
<td>April 2008</td>
<td>Virginia, Louisiana, Minnesota, Arizona and Missouri</td>
<td>Coordinate fabrication and install test panels for 2008-2011 cycle of testing for sign sheeting materials. Field evaluation racks are at four locations nationally. Publish previous year’s data on DataMine.</td>
</tr>
<tr>
<td>RUP</td>
<td>April 2008</td>
<td>Louisiana, Minnesota, Arizona and Missouri</td>
<td>Coordinate, fabricate, and install 2007 “Roll Up Signing Materials” test deck at three field locations. Evaluate products and publish reports.</td>
</tr>
<tr>
<td>PMM</td>
<td>May, June &amp; July 2008</td>
<td>Wisconsin, Pennsylvania, Utah Louisiana, Minnesota, Mississippi and Mississippi State University</td>
<td>Coordinate, install, and evaluate a pavement marking deck in Wisconsin. Conduct routine readings on test decks installed in previous years. Perform laboratory testing. Post data on DataMine.</td>
</tr>
<tr>
<td>Technical Committee</td>
<td>Date</td>
<td>Lead State(s)</td>
<td>Activity</td>
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<tr>
<td>RPM</td>
<td>Fall 2008</td>
<td>Georgia</td>
<td>Coordinate, install, and evaluate raised pavement marker “sun country” field test deck in Georgia. Conduct laboratory testing on products. Publish and distribute reports.</td>
</tr>
<tr>
<td>SRPM</td>
<td>Fall 2008</td>
<td>Ohio, Georgia, Florida</td>
<td>Coordinate, install, and evaluate snowplowable raised pavement marker field test deck in Ohio. Conduct laboratory testing on products. Publish and distribute reports.</td>
</tr>
<tr>
<td>RSCP</td>
<td>Fall 2008</td>
<td>Ohio, Kansas, New York</td>
<td>Coordinate, install, and evaluate rapid set concrete patch field test deck. Conduct laboratory testing on products. Publish and distribute reports.</td>
</tr>
<tr>
<td>GTX</td>
<td>QUARTERLY</td>
<td>New York, Washington</td>
<td>Quarterly solicitation and laboratory evaluation of geotextiles. Publish and distribute hard copy test reports and post results via the Internet and NTPEP DataMine.</td>
</tr>
<tr>
<td>RECP</td>
<td>QUARTERLY</td>
<td>Wisconsin, TRI/Environmental</td>
<td>Quarterly solicitation and laboratory evaluation of Erosion Control Products Publish and distribute hard copy test reports and post results via the Internet and NTPEP DataMine.</td>
</tr>
<tr>
<td>PIPE</td>
<td>ONGOING</td>
<td>Kansas, Washington, TRI/Environmental, and AMRL</td>
<td>Coordinate, sample and test “HDPE Plastic Pipe”. Publish test reports online. Launched new program merger with Plastics Pipe Institute (PPI) and the Eastern States Consortium (ESC) called NAPPR, which utilizes AMRL as the auditing agency.</td>
</tr>
<tr>
<td>REBAR</td>
<td>ONGOING</td>
<td>Texas and AMRL</td>
<td>Finalize and launch new program to certify reinforcing steel plants utilizing AMRL as the auditing agency.</td>
</tr>
<tr>
<td>REGEO</td>
<td>ONGOING</td>
<td>Washington, New York, TRI/Environmental</td>
<td>Coordinate, sample, and test geosynthetic soil reinforcement materials. Publish reports online.</td>
</tr>
</tbody>
</table>

NTPEP staff maintains the committee website, [http://www.ntpep.org](http://www.ntpep.org). The program’s success is largely due to public-private partnerships. Therefore presentations are made at various regional and national conferences and liaison reports are provided to other AASHTO committees.

**Names of Other Committees Involved or with an Interest in Each Activity:**
- Subcommittee on Materials
- Subcommittee on Maintenance
- Subcommittee on Traffic Engineering
Dates and Locations of Future Committee Meetings:

NTPEP 2009 annual meeting of the NTPEP Oversight Committee
  o Dates: May 4–8, 2009
  o Location: Portland, Maine
Special Committee on International Activity Coordination

Officers:
Chair      Vacant
Vice Chair Vacant
Secretary  Vacant
AASHTO Liaison Ken Kobetsky

Current Activities:

For the International Scan Program FY 2008, all four scans have been completed and published results of these scans will be available in the coming months on the FHWA website (http://international.fhwa.dot.gov/links/pubs.cfm).

The fiscal year 2008 program contains the following scans:

Survey of International Best Practices to Accommodate Older Road Users (Co-Chair: Pamela Hutton, CO DOT)

Public-Private Partnerships: Best Practices for Contract Procurement and Administration (Co-Chair: Bob Pieplow, CalTrans)

Integrating and Streamlining Right of Way and Utility Processes with Planning, Environment, and Design (Co-Chair: John Campbell, TX DOT)

Transportation Research Program Administration (Co-Chair: David Huft, SD DOT)

For FY 2009, four proposals were selected. All four scans below are in the preliminary planning stages.

Linking Performance and Accountability to National and State/Provincial/Metropolitan Budget and Revenue Increase (Combined with European Approaches to Determining Highway User Satisfaction). (Co-Chair Carlos Braceras, UT DOT)

Survey of Innovative Pedestrian and Bicyclist Infrastructure Improvements and Policies to Increase Safety and Mobility. (Co-Chair Ed Fisher, OR DOT)

Reducing Congestion, Enhancing the Environment, and Funding Transportation Using Road Pricing. (Co-Chair Peggy Catlin, CO DOT)

Assuring Acceptable Safety and Performance of Highway Bridges Through Advanced Load Rating Practices (+Increasing Safety and Accelerating Construction through Advanced Bridge Design and Analysis Techniques) (Co-Chair Susan Hida CALTRANS)

International Scan Program, 2010

The Special Committee will review all the Scan proposals received for FY 2010. The solicitation ends on September 30th 2008. (http://international.fhwa.dot.gov/scan/2010/)
PIARC

AASHTO has 8 members departments serving on PIARC Technical Committees.

They are:

<table>
<thead>
<tr>
<th>Committee/Title</th>
<th>Primary Member</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC A.1 Sustainable Environment (ex TC 2.1)</td>
<td>Douglas Simmons, Maryland SHA</td>
</tr>
<tr>
<td>TC A.1 Financing, Managing and Contracting of Road System</td>
<td>Heather Copp, Colorado DOT</td>
</tr>
<tr>
<td>TC A.2 Investment (ex TC 1.1)</td>
<td>Mara Campbell, Missouri DOT</td>
</tr>
<tr>
<td>TC B.1 Good Governance of Road Administrations (ex TC 1.3)</td>
<td>Randy Iwasaki, California DOT</td>
</tr>
<tr>
<td>TC B.2 Road Network Operations (ex TC 1.4)</td>
<td>Cecil Selness, Minnesota DOT</td>
</tr>
<tr>
<td>TC B.4 Freight Transport and Inter Modality (ex TC 2.4)</td>
<td>Rick Nelson, Nevada DOT</td>
</tr>
<tr>
<td>TC B.5 Winter Operation (ex TC 3.4)</td>
<td>Keith Cota, New Hampshire DOT</td>
</tr>
<tr>
<td>TC C.1 Safer Road Infrastructure</td>
<td>Larry Tibbits, Michigan DOT</td>
</tr>
<tr>
<td>TC C.2 Safer Road Operation (ex TC 3.1)</td>
<td>Michael Bridges, Louisiana DOTTD</td>
</tr>
<tr>
<td>TC D.1 Management of Road Infrastructure Assets (ex TC 4.1)</td>
<td>Malcolm Kerley, Virginia DOT</td>
</tr>
<tr>
<td>TC D.3 Road Bridges (ex TC 4.4)</td>
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</tbody>
</table>
Special Committee on U.S. Route Numbering

Officers:
Donald W. Vaughn, Chair & Region II
   Chief Engineer/Deputy Director, Operations Alabama
Kenneth L. Sweeney, Region I Director Bureau of Project Development, Maine
Kevin Keith, Region III Chief Engineer, Missouri
Cathy Nelson, Region IV Manager, Technical Services/Chief Engineer, Oregon
Marty Vitale, Secretary Administrative Coordinator for Engineering, AASHTO

Activities for 2007-2008:

- Policy and Procedures for U.S. Bicycle Routes by December 2008 – at this time the Subcommittee on Design is voting on joining the Subcommittee on Traffic Engineering and the Technical Committee on Nonmotorized Transportation in recommending that the Standing Committee on Highways endorse the proposed corridor plan and designation system for use in designating future US Bicycle Routes through its Special Committee on Route Numbering.

- A U.S. Bicycle Route System web page has been incorporating into the U. S. Route Number website.

- Update 1989 Edition of U.S. Route Numbering publication using NCHRP funds by December 2008 – a contractor has been approved to work on this and the project has begun.

- At its spring meeting in Branson, Missouri the committee approved ten of the eighteen applications. Four interstate notices were accepted for information as no action was necessary since they had received prior approval by FHWA and AASHTO.

Upcoming Meetings:
- Fall 2008 in Hartford, Connecticut
- Spring 2009 in Bedford Falls, Pennsylvania
Special Committee on Wireless Communications Technology

Officers

Chair: William A. Brown (Virginia)
Vice Chair: David S. Chase (Vermont)
Secretary: James Arnold (FHWA)
AASHTO Liaison: William Brownlow

The 2008 Annual SCOWCoT Meeting was held in San Francisco, California in conjunction with the Subcommittee on Systems Operations and Management August 10-13, 2009. During this meeting, the SCOWCoT Technical Task Group on Radio Frequency Coordination provided the Committee with its final draft of training and knowledge requirements to create a program resulting in certification as an AASHTO Frequency Coordinator. The combined committees met to conduct a one-day general session meeting before moving to breakout sessions to conduct technical committee business. The Committee lacked enough members to constitute a quorum to review and ballot required changes and additions to the specifications and guide documents maintained by the Special Committee. During the general special committee session meeting, the members present accepted the work of the Task Group and recommended AASHTO seek a partner to develop a professional development training course to issue certification as an AASHTO Frequency Coordinator.

During the general session, members of the Task Group were recognized for their service. Also during the session, the Special Committee presented an update on changes to radio licensing and spectrum utilization to the combined committees affecting the operations of members on a national level. The importance of the opening of the 700 MHz frequency band for both voice and data communications and how data communications will enhance the implementation and deployment of existing and new ITS systems was stressed. This presentation was gratefully acknowledged as many attendees did not realize the impact these new frequencies would have on daily operations. The Special Committee also stressed its ongoing work in obtaining interoperable communications for coordination with other responders in the areas of emergency response, disaster response and recovery, evacuation planning and execution.

One significant outcome of the SCOWCoT meeting was the formation of a new Task Group which will develop a presentation for other AASHTO Committees and Subcommittees explaining new wireless communications technologies and services available through their Department’s own radio communications operation.

The Special Committee will hold its next annual meeting with the Special Committee on Transportation Security (SCOTS), the TRB 20-59 and the TRB ABE-40 Transportation Security groups on August 24-27, 2009 in Irvine, California.