HIGHWAYS SUBCOMMITTEE ON BRIDGES AND STRUCTURES (SCOBS)

Officers
Chair: Gregg C. Fredrick, Wyoming
Vice Chair: Bruce Johnson, Oregon
Secretary: Joseph L. Hartmann, FHWA
Assistant Secretary: Raj Ailaney, FHWA
AASHTO Liaison: Patricia Bush

Meetings
Mid-Year Meetings
- 11 technical committees held mid-year meetings to consider research and develop the necessary specification language.
- A special mid-year meeting was held to further work on the LRFD Bridge Design Specifications, Section 5 rewrite.

Annual Meeting
- 2015 Annual Meeting was held in Saratoga Springs, New York on April 20-23, 2015.
- 47 states and over 500 registered attendees participated.
- 20 technical committees conducted business over the first two days.
- 21 technical agenda items were balloted, passed, and will be incorporated into the specifications for the design, construction, evaluation, or maintenance of highway structures.
- The executive committee met to discuss strategic direction and focus for the coming year.

Summary of Activities and Accomplishments Supporting the Strategic Objectives

Extend Bridge Service Life
- Performing research supported adjustments to AASHTO specifications for promoting longer design life of culverts and buried structures.
- Developing a national guide policy for rehabilitating existing culverts.

Assess Bridge Condition
- Ongoing study to monitor and assess the in-service performance of timber bridges.
- Ongoing studies on load testing, improved analytical techniques, and advanced field evaluation tools for historic covered bridges.

Maintain and Enhance a Knowledgeable Workforce
- Funded bridge security workshops for two state DOTs.
- Ongoing participation in several FHWA efforts on loads and loads distribution.
- Collaborated on the development of 6 webinars on wooden bridges (366 to 627 attendees).
- Promoted AASHTOWare Bridge software training.

Maintain and Enhance the AASHTO Specifications
- Evaluated and submitted various research problem statements based on the prioritized objectives in the SCOBS Strategic Plan.
- Completed NCHRP 20-07/Task 348 to review the AASHTO LRFD Movable Bridge Specifications, 2nd Edition, 1997 and its current needs update. Further NCHRP funding to initiate the Specification Update has been requested.
- Ongoing study to determine the presence of conflicts regarding expansion devices between AASHTO LRFD Bridge Design Specifications, AASHTO LRFD Construction Specifications, and AASHTO and ASTM material specifications.
• Coordinating with other AASHTO Subcommittees (Materials, Construction, etc.), FHWA, industry partners, and academia to incorporate new technologies in bridge bearings.
• Published the first edition of the *LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals*.
• Updated the *AASHTO Guide Design Specifications for Temporary Works, 1st Edition*.

**Accelerate Bridge Delivery and Construction**
• Ongoing involvement in NCHRP 12-102 “Recommended AASHTO Guide Specification for ABC Design and Construction”.
• Ongoing participation in the NCHRP 12-98 “Project for Recommended Guidelines for PBES Tolerances and Dynamic Effects”.

**Optimize Structural Systems**
• Reviewed and participated in FHWA efforts on multi-hazard loads.
• Coordinated with AASHTOWare Bridge Design software.
• Seeking outside funding for “Demolition Requirements for Bridge Construction Projects; Best Practices Guideline”.
• Began coordination with the Subcommittee on Construction a NCHRP 20-07 project to study alternative contracting specifications.

**Model and Manage Information Intelligently**
• April 14-15, 2015 3d Design and Modeling Workshop
• Worked with AASHTOWare and FHWA on the tunnel schema and inventory reporting needs.

**Contribute to National Policy**
• Commented on Notice of Proposed Rulemaking on bridge performance measures.
• Participated in and commented on TRB “USDOT Truck Size & Weight Study” Review Panel.
• Reviewed final National Tunnel Inspection Standards and the Specifications for the National Tunnel Inventory (Tunnel Inspection Guide).
• Updated relevant American Welding Society (AWS) and American Society for Testing and Materials (ASTM) specifications.
• Reviewed scopes and draft reports for NCHRP 20-59(47) “Emergency Exit Signs and Marking Systems for Highway Tunnels” and NCHRP 220-07 Task 363 “Recommended Guidelines for Emergency Smoke Ventilation”
• Participated in FHWA 3d Bridge Information Modeling workshops.

**Publications**

**New Editions**
• Published *LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 1st Edition*.

**Interim Editions**
• *LRFD Bridge Design Specifications, 7th Edition, 2016 Interim*
• *LRFD Bridge Construction Specifications, 3rd Edition, 2016 Interim*
• *AWS Bridge Welding Code*

**Other**
• Completed Survey of States Software and uploaded to Web (T-19)

**Next Subcommittee Meeting**
• 2016 SCOBS Annual Meeting will be held in Minneapolis, Minnesota on June 27-30, 2016.
Committee Officers:
Chair: Malcolm Dougherty Caltrans
Vice Chair: David Hoyne, VAOT
Secretary: Rob Elliott, FHWA
AASHTO Liaison: Evan Rothblatt, AASHTO

General
1. The annual meeting was held in Little Rock, Arkansas August 9 – August 14, 2014. Thirty-nine (39) State DOTs and one Canadian Province (ON) were represented at the meeting, as well as representatives from AASHTO, FHWA, AGC, ARTBA, ACPA, NICET, Academia, and the consulting and contracting industry.
2. Topics included a key note presentation on the Connecting Arkansas Program, a voter approved infrastructure improvement plan for the highway network. The agenda included presentations on differing site conditions and risk allocation for large projects, panel discussions included the CMGC contract delivery method and e-Construction, presentations on innovative materials such as carbon fiber and crumb rubber, and an overview of the environmental BMP flipbook for field inspectors. This meeting had a strong emphasis on safety in the work zones with demonstrations of a mobile positive barrier and the work zone intrusion system “AWARE”. General discussion sessions included topics such as inspector training programs, succession planning, skilled craft shortages, project scheduling and technology such as civil integrated management.
3. The SOC continues to participate in expert task groups, national task force, FHWA, AASHTO, industry and other joint committees.
4. The SOC received approval of a 20-7 proposal to update the AASHTO Guide Specification for Highway Construction. The goal is to complete the update by September 2016.
5. Each of the technical sections reported on their accomplishments of the past year and developed work plans for the coming year.

Accomplishments

Contract Administration Section
1. A survey was distributed to the SOC; Incentive/Disincentive clauses for purposes other than timely Contract Completion. Includes clauses relating to Storm Water, Erosion control, Environmental (air quality, noise, etc.), Timely Documentation, Maintenance of Traffic; Safety and Prompt Payment.
2. Review & Update Division 1 Guide Specifications. Evaluate the contents of Division 1 to determine if any sections can be deleted because they no longer apply, and determine if there need to be new sections added to reflect new technology, materials, and specifications. Preliminary review of Division 1 is nearly complete.

Computers and Technology Section
1. An e-Construction panel discussion and Vermont’s Cloud-Based Process Improvement Solution were presentation topics at the 2015 SOC annual meeting.
2. An update of NCHRP 10-96 (Developing a Guidebook for Implementing CIM in Departments of Transportation) was presented at the 2015 SOC annual meeting.

Roadway & Structure Section
1. Conducted a facilitated discussion at the SOC regarding Risk Based Inspection experiences. A survey will follow.
2. Provided a presentation on status of MAP-21 requirements to explore porous pavements for storm water pollution control.
3. Conducted a facilitated discussion at the SOC regarding the impacts of environmental work window constraints on the establishment of contract time.
4. Discussed and submitted a research topic regarding best practices of two-lane two-way traffic control.
Environment and Human Resources Section

1. Worked with AASHTO Center for Environmental Excellence on storm water management best practices pocket guide for construction field staff. Gave a presentation promoting the guide to the SOC. The release of the guidebook is imminent.
2. Prepared a survey to submit to the subcommittee to determine the need for national certification for construction inspectors. The survey will be sent out in September.
3. Continued to focus on Work Zone Safety with presentations and demonstrations during the annual meeting; a positive barrier trailer and the work zone protection alarm called “AWARE”.
4. Continue to support the TC3 center by having a couple of members serve on the board; Mark Chaput (Michigan) and Darby Clayton (West Virginia).

Research Steering Committee

2. Problem Statement B-17, Submitted and endorsed as 2nd Priority by the Research Steering Committee, became funded as NCHRP Project 08-107: A Guidebook for Emergency Contracting Procedures for Administration of a Regional Emergency.
3. Problem Statement D-05, Submitted by Jason Gutting of Michigan DOT, became funded as NCHRP Project 20-107: Construction Project Staffing Strategies for Effective Program. Oversight (not submitted or endorsed by the Research Steering Committee, but of interest to SOC).
5. Participate and Monitor on NCHRP 19-10 Quantifying the Costs and Benefits of Partnering on Projects Delivered Using Traditional and Alternative Contracting Methods that was submitted in 2014. (Gary Angles, Ohio DOT, Ken Solak, California DOT, and Michael McGrath, Massachusetts DOT are panel members).
6. The Research Committee voted to endorse AASHTO’s Subcommittee on Materials research problem statement that deals with the durability and service life of cracked concrete and structures. It is primarily focused on bridge decks. The SOC’s interest is in assessing the point at which cracking drives some sort of repair such that it’s done at an optimal time.
HIGHWAY SUBCOMMITTEE ON DESIGN (SCOD)

Officers
Chair Carlos Braceras, Utah
Vice-Chair Joyce Taylor, Maine
Secretary Thomas Everett, FHWA
AASHTO Liaison Greta Smith (retired)/Patricia Bush

Annual Meeting
The Subcommittee on Design annual meeting is in Seattle, Washington, September 21 through 24, 2015. The meeting is a joint meeting with the TRB Subcommittee on Access Management, and will provide a variety of sessions on access management and the activities of the SCOD technical committees. Three technical committees are holding their annual meetings as part of the SCOD annual meeting.

The 2016 SCOD annual meeting is scheduled to be held in Maryland in June 2016.

TC on Cost Estimating
- Development and sharing of cost estimating and risk analysis tools and strategies.
- Launched “Ask the Estimator” resource on the AASHTO SCOD website; posted answers to questions within 10 working days.
- Participated in developing the response for FHWA to the OIG audit on national cost estimating practices and procedures.
- Drafted steps and compiled resources for states to use when preparing emergency projects for contract letting.
- Completed NCHRP 20-7, Task 344 “Practical Cost Estimating: Development of Training”, which developed a modular training companion for the Practical Guide to Cost Estimating that can be used by DOTs in classroom settings or as independent study. Training modules can be customized to meet training needs for individual agency practices and include actual highway construction projects as exercise examples and evaluation quizzes.
- The 2015 annual meeting will be held in September in Portland, Maine. The 2014 meeting was in Vermont in September 2014.

TC on Environmental Design
- Final draft of rewrite of AASHTO Visualization Guide submitted to NCHRP panel for review
- Final draft of replacement for AASHTO Landscape Guide expected in September
- The 2014 annual meeting was held in Indianapolis last fall. The 2015 annual meeting will be held in Seattle, Washington, as part of the SCOD Annual Meeting.

TC on Geometric Design
- Completed final draft of the AASHTO Policy on Design Standards Interstate System and moved publication to ballot.
- Reviewed 12 completed and 7 ongoing research projects related to A Policy on Geometric Design of Highways and Streets (AASHTO Green Book) as part of efforts to start work on the 7th Edition.
- The 2015 annual meeting was held in Des Moines, Iowa in June. The 2016 meeting is scheduled to be a joint meeting with the TRB Operational Effects of Geometrics Committee in Woods Hole, Massachusetts in July 2016.

TC on Hydrology and Hydraulics
- Completed Extreme Weather (Climate Change) white paper
- Published two Hydrolink newsletters, with articles on state and federal work and research on topics of interest
- Ongoing efforts of 6 work groups on specific areas related to hydrology and hydraulics, including climate change, newsletter production, and proposed updates to the AASHTO Drainage Manual and the LRFD Bridge Design Specifications, 7th Edition.

TC on Non-Motorized Transportation
• Completed several NCHRP reports, including 17-56 “Development of Crash Reduction Factors for Uncontrolled Pedestrian Crossing Treatments”, 03-78B “Guidelines for the Application of Crossing Solutions at Roundabouts and Channelized Turn Lanes to Assist Pedestrians with Vision Disabilities”, 15-42 “Recommended Bike Lane Widths”, and 07-17 “Pedestrian and Bicycle Transportation along Existing Roads”
• The 2015 annual meeting will be held in Seattle, Washington as part of the SCOD Annual Meeting.

JTC on Pavements
• Completed The Pavement Handbook, an online document.
• The 2015 annual meeting was held in Des Moines, Iowa in May.

TC on Roadside Safety
• Updated MASH 2009 – development of new crash test criteria for crash testing roadside hardware on slopes; moved to ballot
• Updated AASHTO/FHWA Implementation Agreement (sunset of NCHRP 350); moved to ballot
• Provided substantial assistance to FHWA on evaluation of Energy Absorbing Guardrail Terminals, including additional crash testing and a dimensional review of ET-Plus systems, including participation in 69 conference calls or meetings between October 2014 and mid-August 2015
• With FHWA, completed a review of guardrail in-service performance for potential vulnerabilities.
• Reviewed 43 completed and 25 ongoing research projects for incorporation into the Roadside Design Guide update

JTC on Roadway Lighting
• Continued work on updates to the AASHTO Roadway Lighting Design Guide
• Coordinating with the Subcommittee on Materials on possible AASHTO LED lighting specification

JTC on Value Engineering
• Delivered 2015 AASHTO Value Engineering Peer Exchange Workshop in Washington, DC in August
Committee Officers:
Chair: Vacant
Vice-Chair: Jeff Honefanger, Ohio
Secretary: Tom Kearney, FHWA
Liaison: Chris Smith, AASHTO

Activities from November 2014 to September 2015:

Completion of Phase II Harmonization
The Subcommittee on Highway Transport is expected to approve by supermajority ballot technical recommendations for Oversize/Overweight Permit Harmonization – Phase II. These recommendations were developed with close input from Industry Advisory Group (IAG) who remains a critical partner to SCOHT on the Harmonization initiative. Phase I and II technical recommendations, as well as all research products, are available online at: http://highwaytransport.transportation.org/Pages/Harmonization.aspx.

Technical recommendations will eventually be published in an updated version of the AASHTO Guide to Weights and Dimensions.

SCOHT Annual Meeting: Salt Lake City, Utah
The Subcommittee on Highway Transport met in Salt Lake City in July of this year as part of the larger AASHTO Conference on 21st Century Freight and Passenger Mobility. The meeting was hosted and organized by Utah DOT. The meeting had strong participation from the member states, the trucking industry, commercial vehicle service providers, and consultants and researchers.

US DOT, Federal Motor Carrier Safety Administration (FMCSA) and the Federal Highway Administration (FHWA) provided briefings on Federal agency commercial vehicle activities and MAP 21. The agenda also included: regional permitting and harmonization of oversize/overweight requirements and progress on states adopting the resolutions, ITS, and connected commercial vehicles. Utility coordination, National Truck Size & Weight Study, rail crossings, trucking parking, Emergency Response, and SC&RA priorities and perspectives on activities impacting their members was also presented.

The Subcommittee continues to seek balance between its dual mandates of highway freight policy and planning, and highway freight operations.

Work Items
Highway Freight Movement
The implementation of MAP-21 (PL 112-141), in particular the three truck studies and more generally the freight provisions, continue to be a high priority with the potential for dramatic and unpredictable impact on the Work Plan. Additionally, legislative reauthorization proposals for MAP-21, which expires on October 1, will likely be presented in the Congress this year.

- Continue to assess emerging technologies that facilitate highway freight movement efficiency and safety, including truck parking
- Assess ongoing legislative proposals in states and the Federal government related to truck size and weight
- Work with the AASHTO Standing Committee on Rail (SCORT) to improve practices for the prevention of rail-truck crashes, as well as other AASHTO freight modal committees

Permitting
- Complete the Harmonization Initiative and the update to the AASHTO Guide to Weights and Dimensions
Surface Transportation Reauthorization
SCOHT in coordination with SCITEE anticipates forthcoming rulemaking and guidance from USDOT on the National Freight Network (NFN), Critical Rural Freight Corridors, and the National Freight Strategic Plan and will coordinate as appropriate on preparing comments to the Federal Register as needed.

SCOHT, via its FHWA liaison, continues to be engaged on the three MAP-21 studies related to trucking: the comprehensive truck size and weight study; compendium of state truck size and weight laws; and a report on truck parking adequacy.

Future meetings:
The 2016 Annual Meeting is TBD.
HIGHWAYS SUBCOMMITTEE ON MAINTENANCE (SCOM)

OFFICERS
Chair: Mark McConnell, MS DOT
Vice Chair: Jennifer Brandenburg, NC DOT
Vice Chair: Steve Lund, MN DOT
Research Coordinator: Jon Wilcoxson, KY DOT
Secretary: Bryan Cawley, FHWA
AASHTO Liaison: Jameelah Hayes, AASHTO

SUBCOMMITTEE ORGANIZATION
The Subcommittee on Maintenance is organized into five Technical Work Groups (TWGs). The five TWGs are as follows:

- Pavement - Promotes the preservation and maintenance of pavements
- Bridge - Promotes the preservation and maintenance of bridges
- Roadway/Roadside - Focuses on highway maintenance issues including traffic services, vegetation, safety appurtenances, signs, striping, drainage, and lighting
- Equipment - Addresses equipment issues and champions the principles and practices of effective equipment management.
- Maintenance Operations - Focuses on highway maintenance operations issues including work zone safety, snow and ice control, and emergency response

SUMMARY OF KEY ACTIVITIES AND ACCOMPLISHMENTS TO DATE

WORKFORCE DEVELOPMENT
- Worked with and supported the AASHTO TSP, TC3, FHWA’s Long Term Bridge Performance Program, and FHWA Preservation ETGs. This included the identification and delivery of training, coordination with leadership, and technology transfer activities.
- Conducted teleconferences and email exchanges with the Bridge TWG members.
- Supported the SCOM leadership to update the SCOM Strategic Plan and the AASHTO Maintenance Manual for Roadways and Bridges (NCHRP Project 20-07/Task 380).
- Sustained high level of maintenance involvement in the area of System Preservation.
- Promoted the Transportation System Preservation TSP2 Partnerships to AASHTO Members.
- Supported the expansion of Regional Preservation Partnerships.
- Continued development of training and certification program for state DOT equipment managers in collaboration with NCDOT, NCPP and Ferris State.
- Identified and prioritized modules with AASHTO TC3 Training Matrix. Two training modules accepted for web-based development. (Preventive Maintenance Concepts for Equipment Fleet Management & Bench Marking and Best Practices within Equipment Fleet Management)
- Continue webinars and focus on getting presentations of completed research.
- Support of the NHI Maintenance Leadership Academy.

RESEARCH
- Supported bridge related NCHRP projects and submitted research problem statements.
- Assisted with the TSP2 Research Roadmap and FHWA’s Long Term Bridge Performance Program update.
- Supported the work of various TRB committees; Bridge Preservation (AHD37); Structures Maintenance (AHD30) and Bridge Management (AHD35).
- Continued supporting implementation recommendations for NCHRP 14-24, Report 742 “Communicating the value of preservation”.
- Supported the implementation of SHRP2 Project R19A (Designing Bridges for 100 years’ service life).
- NCHRP Project 20-7 Research Problem Statements Submitted by the BTWG at the 2014 SCOM Meeting (Maintenance Manual, and Maintenance Actions for Fatigue Cracking)
- Assisted in the implementation of SHRP-2 products that are useful to pavement preservation and maintenance, especially R-26 and R-23.
- Worked to better understand the linkage of pavement preservation activities to overall crash reductions in comparison to traditional rehabilitation and reconstruction activities.
- Determined research needs and feedback through webinars and the SCOM Conference.
- Reviewed TRB/NCHRP Completed Research for possible implementation.
PERFORMANCE MEASURES

- Provided a coordinated response concerning the FHWA NPRM for bridge and pavement condition and other performance measures rule making.
- Continued to collaborate with FHWA BPETG, and other stakeholders on defining “State of Good Repairs” as it applies to the bridge assets.
- Promoted the reliability and safety of bridges by focusing on innovative maintenance practices, early intervention techniques, timely inspections and repair, and worker safety.
- Promoted accountability and transparency through performance management of bridges and structures in conjunction with the other TWGs with a focus on an accurate and efficient bridge inventory system, appropriate performance measures, clear measurable goals, and innovative reporting techniques using common terminology.
- Developed four common state DOT performance measures (utilization, preventative maintenance, retention, and availability).
- Goal was established at the 2014 National Equipment Managers Conference to increase from the current 17 States to 34 States reporting at least one of their performance measures on the website by 2016.
- Discuss the need for consistent units of measurement in the MQA Programs.

ENVIRONMENT

- Promoted sustainability of the highway bridge environment with a special focus on climate change mitigation strategies and pollution prevention.
- Monitored and disseminated information regarding new and proposed regulatory changes that impacted highway equipment fleets on the EMTSP.org website and at the regional partnership meetings.
- Explore best management maintenance practices for storm water and silt detention.

UPDATE OF SCOM STRATEGIC PLAN

SCOM held a leadership meeting with the Committee Chair and Vice Chairs and the TWG Chairs and Vice Chairs to review and update the Subcommittees Strategic Plan (NCHRP facilitated). Modifications were presented at the 2015 SCOM meeting and adopted.

The new “Strategic Focus Areas” for the Committee are as follows:

- Safety (Goal: A safe, reliable highway system in a state of good repair.)
- Asset Management (Goals: A safe, reliable highway system in a state of good repair; Accountability and transparency through performance management.)
- Environmental (Goal: Environmental stewardship and ensure compliance.)
- Workforce Development (Goal: A well-qualified and competent workforce.)
- Communication (Goal: The communication of the value and role of maintenance.)
- Research (Goal: Research, innovation and technology.)

ANNUAL MEETING REPORT

The 2015 Subcommittee on Maintenance meeting was held in Des Moines, Iowa on July 19-23.

The next annual meeting will be held in Clark County, Nevada in July, 2016.
Committee Officers:
Chair: Moe Jamshidi, NE
Vice Chair: Cole Mullis, OR
Secretary: Jack Springer, FHWA
AASHTO Liaison: Evan Rothblatt

Summary of Activities and Accomplishments from October 2014 to September 2015:

Annual Meeting: The SOM held its 101st Annual Meeting in Pittsburgh, PA, on August 2 to August 7, 2015, with participation of representatives from 42 states, FHWA, NCHRP, academia, and industry. 19 of the 21 Technical Sections; the Executive Committee and the AMRL Administrative Task Group (ATG) all met during the period. The remaining 2 Technical Sections met via webinar prior to the meeting. The plenary sessions had a number of presentations that updated the SOM members on a variety of subjects, including the REOB Task Force and Update and Status on MAP-21 Performance Management Requirements. A copy of the agenda is attached.

There were a number of items discussed during the Executive Committee (EC) meeting. The major topic of discussion was the new procedures for conducting the fall SOM ballot. It will become a rolling ballot with the technical sections divided into 3 groupings: the first group will go to ballot on September 15, the second October 15, and the final on November 15. This will help spread out the balloting workload, providing less of an impact on the DOTs and AASHTO staff, as well as on the production schedule. There was also discussion about the transition away from print version of the standards and moving solely to electronic version, starting in 2016. The tentative plan is to have each state receive 5 user licenses for the electronic standards, with all of them being agency based and not computer based. There was additional discussion on other ways to obtain the standards online, either through resellers such as ASTM or IHS, but the consensus amongst the states was that they would prefer going through AASHTO for all standards, including ASTM specifications.

We are also still evaluating how to allocate technical section membership. The purpose is to ensure all technical sections have a good distribution of members from all regions while maintaining a number commensurate with allowing clear, concise communication and achievable quorums for ballot measures.

Another major discussion was about the Developing AASHTO Materials Standards (DAMS) technical service program. 33 states currently contributing to the DAMS, which is vital to the operation of the SOM. It allows the SOM to hire consultants to assist with technical writing, revisions, and balloting of standards, thereby alleviating some of the time requirements for technical section chairs, making participation more manageable. The states present expressed that the current system employed by AASHTO for invoicing is potentially the reason some states do not contribute/participate to DAMS; that some states select some programs over others.

There was continued positive feedback regarding AASHTO’s support of the Tech Sections through mid-year webinars as well as on-site during the annual summer meeting. As part of the new ballot procedures, all webinars were pre-scheduled, taking into account conflicting meetings such as TRB and the Mid Atlantic QAW, in order to meet production schedule deadlines and prevent overlap. In the event of extenuating circumstances there is a small amount of latitude for technical section chairs to modify the schedule.

This was Bill Ahearn’s (VT) last year as Region 1 vice-chair. Rick Bradbury (ME) was nominated and elected to serve as the new Region 1 vice-chair.

2015 SOM Achievement Awards were presented to Bill Ahearn (VT), Eileen Sheehy (NJ) and Mark Felag (RI).

Publications: The 35th Edition of the AASHTO Standard Specifications for Transportation Materials and Methods of Sampling and Testing, which includes all of the SOM's specifications for materials, methods of testing, and specifications for testing equipment (including provisional standards), was published in a five-volume paper version in July. The electronic version was released in August.

The AMRL's laboratory inspection and proficiency sample programs continue to grow, as does the AASHTO Accreditation Program (AAP). As of July 2015 over 1767 labs held AASHTO accreditation, which is a 2% increase over the past year. The Proficiency Sample Program, now in its 49th year, sent out over 22,000 samples in the past
year. In addition to these long standing programs, AMRL’s Operator Certification Program certified 33 operators at 14 Falling Weight Deflectometer (FWD) Calibration Centers.

The SOM continues to explore opportunities to take advantage of developments in electronic information technology. Updates have been made to the AASHTO Electronic Balloting System; all technical sections use the e-ballot system for technical section and subcommittee ballots. And as stated previously, the subcommittee utilizes web meeting software to facilitate work through the year.

Names of Other Committees Involved or with an Interest in Each Activity: Joint Technical Committee on Pavements (JTCoP), Subcommittee on Design, Subcommittee on Construction; Subcommittee on Maintenance, National Transportation Product Evaluation Program (NTPEP), AASHTO Product Evaluation Listing (APEL), Transportation Curriculum Coordination Council (TC3), AASHTO Innovation Initiative (A.I.I.)

Dates and Locations of Future Committee Meetings: The 102nd annual meeting of the SOM will be held July 31 to August 5, 2016, in Greenville, South Carolina. The proposed location of the 103rd meeting of the SOM is to be held in Region 4, in Portland, OR, hosted by Oregon DOT.
Committee Officers

Chair: Matt DeLong, Michigan

Vice Chair, Right of Way: Paula Gibson, Arizona

Vice Chair, Utilities: Nelson Smith, Maryland

Vice Chair, Outdoor Advertising Control: Jim Spalla, Florida

Secretary - FHWA Right of Way Liaison: Virgil Pridemore, FHWA

FHWA Utility Liaison: Ken Leuderalbert, FHWA

AASHTO Liaison: Keith Platte, AASHTO

Conferences and Meetings

The Executive Board of the Subcommittee, along with representatives from the National Association of Highway Beautification Agencies (NAHBA) met in Minneapolis, Minnesota from January 6-9, 2015, for the annual Subcommittee Executive Board Meeting and Conference Planning session.

The 2015 Annual Conference of the Subcommittee was held in Minneapolis, Minnesota from April 25-30, 2015. The conference was once again co-located with the Annual Conference for NAHBA. The proceedings of the conference are posted on the Subcommittee website.

Activities for 2014-2015

- Continued to provide strategic communication and information exchange through the Subcommittee website, located at http://rightofway.transportation.org/, and the online “Clearinghouse” resource for query, compilation, and distribution of results from topic-specific surveys submitted by the member states.

- Continued the integrate Outdoor Advertising Control into the Subcommittee operating structure. During this reporting year, the Technical Council shifted from being comprised of the National Alliance of Highway Beautification Agencies’ (NAHBA) Board to being composed of individuals familiar with the outdoor advertising regulatory program whose focus is to address policy issues of national significance. The Council has identified 15 priority issues it is focusing on.

- Continued efforts to fully utilize the capabilities of our Technical Councils to address the more everyday issues and concerns of the members related to the responsibilities of the subcommittee and to incorporate development and refinement of research ideas within the technical council activities.

- Continued active participation in the SHRP2 including implementation efforts on R15B and beginning the implementation process for R01B (Finding Underground Utilities with Technology) and R01C (Innovations in Location of Deep Utilities).

- Continued working with FHWA on the Every Day Counts initiative to identify and resolve key issues effecting Right of Way, Utilities, and Outdoor Advertising Control.

- Continued working on bringing active members to the Subcommittee and to the Executive Board. Three new members and a new vice chair are now serving on the board.

Research Activities:

- The Subcommittee remains very active in national research through partnerships with FHWA and AASHTO. Examples of current programs include working with the SHRP2 on the implementation of R01B: Finding Underground Utilities with Technology and R01C: Innovations in Location of Deep Utilities. NCHRP 20-05/Topic 47-14: Effective Utility Investigations to Optimize Safety and Savings is kicking off in September. The Utility Technical Councils continue to propose and peruse the following topics for 20-7 research: Utility Coordination Best Practices for Design-Build and Alternative Contracting Projects; Dig Law Revisions and an Assessment of Potential Impacts to State Transportation Departments; Evaluation of the Management and Implementation of Utility Impact Analysis (UIA), Utility Conflict Matrix (UCM), and Subsurface Utility Engineering (SUE) affecting...
utility-related Risk on projects by State Departments of Transportation; Horizontal directional drilling within highway rights of way; Handling utility facilities that are taken out of service (formerly known as abandonment); Encasement requirements and allowances for water mains and pressurized sanitary sewer mains. The Subcommittee has volunteers actively participating in these and many other studies and pilots

• NAHBA was not successful in securing research funds from the National Cooperative Highway Research Program (NCHRP) and has worked during this reporting period with the OAC Technical Council in drafting a research project under the NCHRP 20-7 funding guidelines. This project will identify and collect data and facts to establish standards and practices adopted by the Federal/State Agreement in each state and to analyze that data and effective control measures utilized by the states in order to establish a consistent federal standard for effective control of the federally mandated outdoor advertising control program nationwide.

Awards

The following award recipients were honored at the joint AASHTO/NAHBA awards luncheon during the co-located 2015 annual conference in Minneapolis, Minnesota.

2015 NAHBA Awards of Excellence

NAHBA Awards of Excellence is an annual awards program developed by NAHBA to honor programs that excel in the outdoor advertising control program.

Award Recipients:

- **Chairmen’s Award**: Keith Melvin, South Carolina DOT
- **Streamlining and Integration Award**: Florida DOT
- **Innovations Award**: Missouri DOT

Additional Information on the NAHBA awards is available at [http://nahba.org](http://nahba.org).

Technical Councils

• The Outdoor Advertising Technical Council is comprised of individuals with outdoor advertising regulatory background whose focus is to address needed policy concerns of the Outdoor Advertising Control program. The Council has identified 15 issues of national significance and is currently focusing on two (2): An NCHRP 20-7 research project to collect needed data to analyze federal laws and regulations to determine what effective control means and a pilot project concept addressing the movement of nonconforming signs for transportation projects. The Technical Council works closely with the Board of Directors of NAHBA. NAHBA is very effective in the dissemination of information and discussions with the states about regulatory problems and forwards to the Technical Council the policy concerns raised by its membership.

• The Utility Technical councils continue to be the focus of communication and issue development within each of the Subcommittee’s disciplines. The Utility Technical Councils were reorganized last year to reflect current practices and issues: Utility Mapping, GIS & SUE; Utility Project Scoping and Coordination; and Utility Accommodation and Scoping. The Utility Technical Councils have been very active with holding quarterly conference calls, discussing emerging issues suggesting and submitting research topics. There are several potential proposals which will be further discussed in research activities.

• The Right of Way Technical Council is comprised of four focus councils: 1) Appraisal and Appraisal Review; 2) Acquisition and Program Management; 3) Property Management; and, 4) Relocation. The Chair, Co-Chair and FHWA Representative to hold quarterly teleconferences with members from state DOT’s, local governmental agencies and consultants. Discussions on hot topics, areas of interest and ideas for conference presentations and webinars are encouraged. New technologies and innovations are a concentrated effort for working smarter and quicker due to the demands for a leaner government as we all focus on transportation funding and doing more with less.
Committee Officers

Chair
Shailen Bhatt, CO DOT
Vice Chair
John Nisbet, WA DOT
Secretary
Jeff Lindley, FHWA
Liaison
Gummada Murthy and Patrick Zelinski, AASHTO

Summary of Activities and Accomplishments to Date

The 2015 STSMO Annual Meeting was held May 31-June 3, 2015, in conjunction with the ITS America Annual Meeting in Pittsburgh, Pennsylvania. There were at least 108 participants during the STSMO sessions, including representatives from 28 state DOTs, local transportation agencies, academia, FHWA, consultants, and other associations. The program included a number of presentations and discussions covering connected and automated vehicles, freight mobility, MAP-21 performance measures, integrated corridor management, Truck Smart Parking in Michigan, SHRP2 Reliability Research implementation, advanced towing and recovery initiatives, the impacts of automated/connected vehicles on freight mobility and the newly created National Operations Center of Excellence. The growing importance of TSM&O was demonstrated by the attendance of the CEOs from Colorado, Pennsylvania, Iowa, Michigan, Arizona, California and Texas state departments of transportation. Participating in a roundtable discussion, the CEOs described the state of operations and the issues and challenges in the years ahead.

STSMO has five technical working groups (TWGs): 1) Systems Operations Strategies, 2) Performance Measures, 3) TSM&O Research, 4) Traffic Incident Management, and 5) Connected Vehicles. Their Activities are as follows:

Highlights of the TWG action plans include:

- The long term development of a research program directed at the development of an update or standalone document that addresses incorporation of TSM&O into the AASHTO Policy on Geometric Design of Highways (“Green Book”)
- Working with the National Operations Center of Excellence to conduct a national “summit” on TSM&O workforce development
- Working with the state DOT’s understand and respond to FHWA’s MAP-21 NPRM for system reliability performance measures
- Support the development of TSM&O research problem statements
- Share experiences and knowledge to understand how connected and automated vehicle technology will improve operations and move us toward zero fatalities, and provide input to federal and private initiatives.
- Implement core TIM performance measures and a national responder and roadside worker struck-by/near miss reporting system

Technical Work Group 1: Systems Operation Strategies:
- Conducted a survey to develop a list of prioritized topics for this working group to address through research, peer-to-peer exchanges, and webinars
- Has been working with the National Operations Center of Excellence to prepare for a national “summit” on TSM&O workforce development
- Developed an NCHRP 20-7 proposal for the long-term development of a research program directed at the development of an update or standalone document that addresses incorporation of TSM&O into the AASHTO Policy on Geometric Design of Highways (“Green Book”)

Technical Work Group 2: Systems Operation Performance Measures:
- Has been preparing for the solicitation and consolidation of AASHTO member comments, and eventual submission of a recommended response to the anticipated NPRM for System Performance/Reliability Performance Measures
- Has been monitoring FHWA progress toward issuing NPRM
Has been anticipating questions, issues, and positions AASHTO member agencies may have based on the original AASHTO SCOPM recommendations for System Performance/Reliability PMs as a starting point for when the NPRM is issued

Has been developing a response plan (appoint a small team with the right technical expertise and who are commit to participate in a tight time frame, a tentative schedule, plan for sharing information, receiving information, scheduling conference calls, etc.) in coordination with AASHTO staff to coordinate review and response in coordination with other AASHTO committee structures and needs

Technical Work Group 3: Transportation Systems Management and Operation Research:
- Has been working relationship with RTSMO and TRB TSMO Committees
- Has been focusing on moving from research to implementation
- Has regular calls: Fourth Friday every month
- Submitted two NCHRP 20-7 Problem Statements:
  - Transportation Cyber Security - The Dimensions of Threats, Challenges, and Remedies
  - Transportation System Management and Operations Standards for Highway Infrastructure

Technical Work Group 4: Traffic Incident Management:
- Has been supporting AASHTO and the Executive Leadership Group (ELG) by:
  - Providing a concise voice for transportation on TIM related topics
  - The development of model programs and research development
  - Supporting strong national, state, tribal, regional and local outreach initiatives involving transportation programs
- Has been working on significantly improving transportation and economic sustainability by supporting:
  - SHRP2, National TIM Responder Training Course
  - Deployment of TIM Performance Measures nationally
  - National investment of building future transportation and public safety leaders
  - Integration of traffic incident management (TIM) principals into state strategic Highway Safety Plans (SHSP)
  - Program development in rural communities
- Has been developing a plan to implement core TIM performance measures and a national responder and roadside worker struck-by/near miss reporting system

Technical Work Group 5: Connected Vehicles
- The Connected Vehicles Technical Work Group is a new group, which has only been stood up this year.
- Their primary activities will focus around supporting the completion of the near-term V2I transition project, supporting the Vehicle-to-Infrastructure Deployment Coalition, exploring ways to improve collaboration with onboard equipment manufacturers, and disseminating connected and automated vehicle experience and tools.

Annual Meeting

The 2016 Subcommittee on System Operations and Management Meeting will tentatively be held in conjunction with SCOD and the TRB RTSMO committee.
Committee Officers
Chair Vacant
Vice Chair Mark Wilson, FL
Secretary Mark Kehrli, FHWA
Liaison Jameelah Hayes, AASHTO

General
The annual meeting was held in San Antonio, Texas June 14 – June 17, 2015. There were 41 states represented and representation from ARTBA, ATSSA, NCUTCD, ITE and contractors. A collaborative session was held on the goal and purpose of the committee’s first Strategic Plan which will include emerging technologies, a five year plan, and reorganization of the technical team structure. The Strategic Plan was approved for NCHRP funding and the consultant selected was present at the meeting.

Subcommittee Organization

Summary of Activities and Accomplishments to date
• Developed and submitted comments to the NCUTCD on several technical committee recommendations
• Participated in a successful NCUTCD meetings
• Encouraged each State to have a representative actively attend the NCUTCD meetings to be able to directly express concerns to the NCUTCD and FHWA about any proposed changes to the MUTCD.
• Assisted FHWA with the Every Day Counts – Smarter Work Zone Initiative for 2015 – 2016
• Participated in several active research projects including work zone speed limits, active and passage management of work zone speeds, work zone crash characteristics and effectiveness of TMP strategies
• Developed “Cyber Security for Traffic Signal and ITS Systems” research problem statement to be submitted to TRB. This research will be developed in coordination with the TRB Signal Systems Committee.
• Incorporated Part II Guidelines for Airport Guide Signing into Part I.
• Revised Part III List of Control Cities for Use in Guide Signs on Interstate Highways in preparation for the AASHTO balloting process.

Research – submitted to NCHRP
• Effective Pavement Marking Specifications and Practices related to Maintained Retroreflectivity and Exit Gore Areas

Upcoming and Continuing Activities
• Develop and submit comments to FHWA when the solicitation for comment period is open for the revised MUTCD. The MUTCD is currently anticipated for publication in 2018.
• Participate in the FHWA comment period on the Vision and Strategic Plan of the MUTCD. The current target publication of RFC is September 2015.
• Develop and submit comments on the Final Draft of the Update to the AASHTO Guide for the Planning, Design, and Operations of Pedestrian Facilities
• Query states use of temporary portable rumble strips in the work zone and develop best practices
• Query states policies and procedures for maintaining pedestrian accessibility in the work zone
• Query states rumble strips and striping designs and polices
• Query states pedestrian laws and regulations

Annual Meetings
• 2016 - SCOTE June 2016, Savannah, GA
• 2017 - SCOTE June 2017, Pittsburg, PA
AASHTO INNOVATION INITIATIVE (A.I.I.)

Committee Officers:
Chair Rich Tetreault, Vermont
Vice Chair Tom Byron, Florida
Secretary , FHWA
Liaison Keith Platte, AASHTO

Spring Meeting

The spring TIG (Technology Implementation Group) meeting of the Executive Committee convened on May 13 in Cheyenne Wyoming. This meeting solely focused on the future of the program. It was determined to have a consultant conduct a complete review, both financially and administratively, of the AII program. With that said, here are accomplishments for 2015.

Accomplishments for 2015

1. e-Construction (nominated by Michigan)
   o This technology defines the paperless construction site currently in use by MDOT. Several additional states including Florida, Minnesota, Iowa and Texas agreed to work with Michigan on the Lead States Team to collaborate with the EDC initiative. The team members have promoted this process through the EDC summits and will meet in January to refine the final implementation plan based on feedback from the state agencies attending the summits in October and early November.

2. UPlan II Original (nominated by Utah) (now Closed)
   o UPlan is a powerful yet easy to use web-based decision support tool that maps information for planning and project development. It allows data sharing (open or selective) among various units within the transportation agency. It also allows data sharing between agencies, with other transportation agencies nationwide and with the public. This project, which has reached 41 states in 2 and ½ years, is now officially closed. This project is in the process of transitioning to a technical working group under the Standing Committee on Planning Subcommittee on Data.

3. Intelligent Roadway Information System (nominated by Minnesota)
   o The Intelligent Roadway Information System (IRIS) is an extensive Advanced Traffic Management System (ATMS) software originally developed by Minnesota Department of Transportation to control the Freeway Management System for its Regional Transportation Management Center. The Lead States Team has conducted an informational webinar. The web meeting was recorded and posted to the IRIS web page as part of the A.I.I. website. Additional outreach is planned for 2015.

4. Maryland Watershed Resources Registry WRR (nominated by Maryland)
   o The WRR is a national pilot to integrate land-use planning, regulatory, and non-regulatory decision making using the watershed approach. Developed in collaboration with the USACE and EPA, the WRR serves as a significant model of interagency cooperation and provides the DOT the ability to optimize planning and preservation of natural resources during the project development process. The WRR hosted a number of workshops, which are not online, with attendees from 5 EPA regions and 7 states. These workshops demonstrate the product and work on implementation plans for other regions across the country.

5. Automatic Traffic Signal Performance Measures
   o Automated signal performance metrics show real-time and historical functionality at signalized intersections. This allows traffic engineers to measure what they previously could only model. Accurate decision-making about signal performance and timing helps signal management personnel identify vehicle and pedestrian detector malfunctions. The team conducted a webinar in February, which had over 60 attendees. The team is allowing states one more opportunity to request assistance. After the request is ended, the team will close out the project.

6. Towing and Recovery
   o Towing and Recovery Service Partnerships (TRSPs) help public and private partners establish protocols, and often training and incentives, to ensure that the right responders, tow equipment and operators are brought in to rapidly restore traffic flow, based purely on the type of incident and the vehicles involved. The team is looking for one last presentation opportunity within AASHTO, and then will close the project.
7. **Existing ROW plans Index Site**
   - Plans on Demand offers two user-friendly options, either PDF or GIS Indexed plans, which provide convenient access to existing right of way plans, maps, and other documentation. The team submitted their marketing documents February and are now starting their promotion activities.

8. **Carbon Fiber Reinforcing Prestressing Strands**
   - CFRP is a corrosion-free option for pre-tensioning and posttensioning applications on concrete elements. It performs comparably to steel in the finished product in terms of material handling, structural erection, constructability, and other factors. CFRP’s benefits compound with its promise of lower life cycle costs, including reduced maintenance and rehabilitation work. The team submitted their marketing documents in August and will be starting promoting later this year.

9. **Prep-ME (Not a full Team)**
   - Prep-ME is a full production software program to store and process climate, traffic, and materials data required for the AASHTO Pavement ME Design. This software complies with FHWA Traffic Monitoring Guide (TMG) and TMAS for quality assurance and quality control (QA/QC). State highway agencies’ experience has been built into the QA/QC of traffic data collection. This information will be delivered via webinar presentations.

10. **Bridge Expansion Joint System (Not a full Team) (Closed)**
    - BEJS is an innovative traffic-durable expansion joint that has proven to provide water tightness in our structures. It has successfully filled a much needed cost effective mid-range repair option of failed joints on our bridges. The BESJ webinar was held on June 17th, which had over 100 attendees.

11. **Sandwich Plate System for Bridge Decks (Not a full Team)**
    - The SPS technology has been developed for the heavy civil engineering market and consists of two steel plates bonded to form a sandwich with a compact polyurethane elastomer core. The elastomer provides continuous support to the steel plates and precludes local plate buckling and the need for stiffeners. The flexural stiffness and strength of the sandwich plate is tailored to meet particular structural requirements by selecting appropriate thicknesses for the sandwich elements.

For further information on these technologies and all past technologies, please visit [http://aii.transportation.org](http://aii.transportation.org)

**Committee Meetings**

TBD
Annual Meeting

The annual meeting of the Subcommittee on Asset Management was held on August 26, 2015 in St. Paul, Minnesota. This meeting took place in conjunction with a CEO Peer Exchange on the topic of Enterprise Risk Management. The annual meeting also included a peer exchange on risk management within the context of asset management. Highlights of the annual meeting include the following:

- Enterprise Risk Management Peer Exchange—This peer exchange brought together 20 high-ranking State DOT leaders to discuss the implementation of enterprise risk management within their state DOTs and to share experiences and lessons learned. A number of action items were also developed for AASHTO to do in conjunction with the Committee on Committee Review that is currently taking place.
- TAM Risk Management Peer Exchange—The peer exchange focused on risk and how State DOTs are addressing risk as part of their transportation asset management plans and programs. The peer exchange enabled more than 20 state DOTs to share experiences and lessons learned on addressing risk.
- Capacity Building Activity—The subcommittee will propose a capacity building peer exchange to be funded through the SCOP Subcommittee on Capacity Building program that will take place as part of the 11th National Transportation Asset Management Conference scheduled for July 2016 in Minneapolis, MN. The focus will be determined at a later date.
- Research Activities—The research activities of the subcommittee are coordinated by Cory Pope, Utah DOT. Three research activities have been approved through various research funding sources to be moved forward as follows:
  - Transportation Asset Management Plan Builder (completed)
  - Transportation Asset Management Web Portal (completed)
  - TAM Research Roadmap (ongoing)
- The subcommittee will propose three new NHCRP projects for FY2016 funding:
  - Updating the AASHTO TAM Guide: A Focus on Implementation
  - Incorporation of Social and Environmental Factors in Risk-Based Transportation Asset Management
  - Methods for Integrating Outputs from Multiple Management Systems to Support TAM
  - An Assessment of the Impact of Sampling Approaches and Survey Frequency on Pavement Condition Results
  - Essential Elements of Data Integration to Drive Business Decisions in Transportation Agencies
- The subcommittee will be working closely with FHWA in organizing a series of webinars related to TAM to complement the AASHTO Transportation Asset Management Guide: A Focus on Implementation webinar series.
- The Subcommittee will continue to work with FHWA on continuing the Transportation Asset Management Expert Task Group.
- The Subcommittee continue to work with TRB in organizing the 11th National Transportation Asset Management Conference.

Completed Tasks or Activities

The Subcommittee on Asset Management had a successful year. The following summarizes key deliverables of the subcommittee:

- Developed comprehensive comments on the FHWA Transportation Asset Management Plan NPRM.
- Co-sponsored and organized joint peer exchange focusing on various aspects of risk management in August 2015.
- Worked with FHWA in hosting the bi-monthly asset management webinar series with over 500 people participating in each webinar.
Peer Exchange TAM—The subcommittee sponsored a peer exchange that focused on TAM and risk management.

TRB Asset Management Committee—The subcommittee continues to work closely with the TRB Asset Management Committee.

FHWA TAM ETG—The subcommittee continues to work closely with the FHWA Transportation Asset Management Expert Task Group.

**Future Events**

The Subcommittee on Asset Management has proposed the following future events:

- *FHWA/AASHTO TAM Webinar Series*—Working with FHWA in organizing a series of webinars over the next 2 years that will present different TAM topics. More information is available at tam.transportation.org.

- *2016 TRB Annual Meeting*—The subcommittee will host a smaller mid-year meeting as part of the 2014 TRB Annual Meeting in conjunction with the TRB Asset Management Committee meeting.

- *11th National Conference on Transportation Asset Management*—The subcommittee is involved through different members in the development and organization of this large conference. AASHTO is a co-sponsor.

- *Summer 2016 Peer Exchange*—The subcommittee is proposing a peer exchange workshop as part of the Standing Committee on Planning Capacity Building program. The peer exchange will take place as part of the 11th National Conference on TAM.

- *2016 Annual Meeting*—In conjunction with the peer exchange mentioned previously, the subcommittee will have an annual meeting to occur at the 11th National Conference on TAM.
NTPEP OVERSIGHT COMMITTEE

Committee Officers:
Chair: Vacant
Vice Chair: Chris Peoples (North Carolina, Materials Engineer)
AASHTO Liaison: Katheryn Malusk, Program Manager for NTPEP

NTPEP Executive Committee:
David Kuniega (Pennsylvania)
Danny Lane (Tennessee)
Ross Metcalfe (Montana)
Todd Bennett (Missouri)

Organizational and Administrative Framework

NTPEP is a pooled fund engineering technical service program which operates from AASHTO headquarters in Washington, DC. It is staffed by one full time Program Manager, one Associate Program Manager for the NTPEP Audit Programs, one NTPEP Technology Specialist, one NTPEP Product Implementation Specialist, one Administrative Web Design and Support Specialist, and three Contractors who are responsible for day-to-day operations, administration and coordination of the program. NTPEP coordinates testing for a wide array of highway safety devices, construction materials and maintenance products, as well as conducts audits for manufacturers of products used in highway applications. Whenever possible, cooperative agreements are entered into with Industry Associations who are experts in their respective fields. For each class of product category under NTPEP, a Technical Committee of state DOT and Industry membership convenes annually in person and quarterly on conference calls to discuss the status of the ongoing and pending evaluations.

Each NTPEP Technical Committee is composed of a minimum of three members from each AASHTO member department as well as an industry member, who has expertise with utilizing the specific product(s) and thereby provides technical guidance. The Chairman and Vice Chairman of the NTPEP Committee are appointed by the AASHTO Executive Director. For administrative matters and industry appeals a NTPEP Executive Committee (EC), representing each of the AASHTO regions, is selected by the NTPEP Chairman.

The NTPEP Committee regularly communicates with the Federal Highway Administration (FHWA). FHWA subject matter experts participate with the NTPEP technical committees.

Ongoing Activities and Projects:

The AASHTO Product Evaluation Listing (APEL) is a technical service program managed under the NTPEP Executive Committee with the mission of developing and conducting evaluations for new and/or proprietary products through accelerated lab testing. The program has continued to grow and develop, with modifications to the operations guidelines and clarifications to user information including an updated terms and conditions agreement and better definition of a certification versus an evaluation. The APEL Council has expanded, adding at large members to reinforce the minimum requirement of at least one representative per region as well as a contractor to develop the initial scope of work for product evaluations. The first full APEL evaluation was completed and is being posted to the web module, with additional evaluations at various stages of completion. With regard to the module, the current site is based on an outdated platform and work flow, therefore a complete overhaul and update to the module is underway. The update module will be based on a sharepoint platform and provide three distinct information types/reported data: AASHTO product evaluations, state DOT product evaluations, and state DOT product certifications. There is still a great deal of outreach needed to better communicate the mission and benefits of APEL to the states and industry, therefore AASHTO staff is presenting at regional and national meetings including those conducted by AASHTO, the states, and industry associations.

NTPEP has coordinated major field demonstration projects and nationally-coordinated laboratory testing in the following product categories.
<table>
<thead>
<tr>
<th>Due</th>
<th>Lead State(s)</th>
<th>Description of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 2016</td>
<td>Virginia, Louisiana,</td>
<td>Coordinate fabrication and install test panels for 2014-2017 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></td>
<td>Minnesota, Arizona,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Missouri</td>
<td></td>
</tr>
<tr>
<td>April 2016</td>
<td>Louisiana, Minnesota,</td>
<td>Coordinate, fabricate, and install 2016 “Roll Up Signing Materials” test deck at three field locations. Evaluate products and publish reports.</td>
</tr>
<tr>
<td></td>
<td>Arizona and Missouri</td>
<td></td>
</tr>
<tr>
<td>August 2016</td>
<td>Tennessee</td>
<td>Coordinate, install, and perform field evaluations of Temporary Traffic Control Devices and publish reports.</td>
</tr>
<tr>
<td>May through June</td>
<td>Pennsylvania, Florida,</td>
<td>Install and evaluate pavement marking test deck in Pennsylvania. Conduct routine readings on test decks installed in previous years (Florida and Minnesota). Perform laboratory evaluation of marking materials. Post data for completed testing for all test sites via DataMine web based data.</td>
</tr>
<tr>
<td>2016</td>
<td>New York, Louisiana,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Minnesota</td>
<td></td>
</tr>
<tr>
<td>September 2016</td>
<td>Georgia, Florida</td>
<td>Coordinate, install, and evaluate raised pavement marker “sun country” field test deck in Georgia. Conduct laboratory testing on products. Post data for completed testing for all test sites via DataMine web based data.</td>
</tr>
<tr>
<td>September/October</td>
<td>Ohio, Georgia, Florida</td>
<td>Coordinate, install, and evaluate snow-plowable raised pavement marker field test deck in Ohio. Conduct laboratory testing on products. Post data for completed testing for all test sites via DataMine web based data.</td>
</tr>
<tr>
<td>2015</td>
<td></td>
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<tr>
<td>October 2016</td>
<td>Ohio</td>
<td>Coordinate, install, and evaluate rapid set concrete patch field test deck. Conduct laboratory testing on products. Post data for completed testing for all test sites via DataMine web based data.</td>
</tr>
<tr>
<td>January 2016</td>
<td>North Carolina</td>
<td>Coordinate field evaluation of portable changeable message signs and flashing arrow panels. Post data for completed testing for all test sites via DataMine web based data.</td>
</tr>
<tr>
<td>Quarterly Cycles</td>
<td>Wisconsin, Alabama, TRI</td>
<td>Quarterly solicitation and laboratory evaluation of Erosion Control Products. Post electronic test reports via NTPEP DataMine.</td>
</tr>
<tr>
<td></td>
<td>Environmental</td>
<td></td>
</tr>
<tr>
<td>Continuous</td>
<td>TRI Environmental</td>
<td>Yearly on-site audit and laboratory evaluation of geotextiles. Post electronic test reports via NTPEP DataMine.</td>
</tr>
<tr>
<td>Program</td>
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<tr>
<td>Program</td>
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</tr>
<tr>
<td>Continuous</td>
<td>TRI/Environmental, Microbac,</td>
<td>NTPEP Audit Program is scheduled to conduct 48 audits for HDPE Plastic Pipe in calendar year 2016. Electronic reports are posted in DataMine.</td>
</tr>
<tr>
<td>Program</td>
<td>Kansas, South Carolina,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NTPEP Contract Auditors</td>
<td></td>
</tr>
<tr>
<td>Continuous</td>
<td>Texas, South Carolina,</td>
<td>NTPEP Audit Program is scheduled to conduct 32 audits for Reinforcing Steel and 20 Welded Wire Reinforcement (WWR) audits in calendar year 2016. Electronic reports are posted through DataMine.</td>
</tr>
<tr>
<td>Program</td>
<td>Illinois, NTPEP Contract</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Auditors</td>
<td></td>
</tr>
<tr>
<td>Continuous</td>
<td>Washington, TRI/Environmental</td>
<td>Coordinate, sample and test geosynthetic reinforcement materials. Reports are published in DataMine.</td>
</tr>
<tr>
<td>Program</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous</td>
<td>TRI/Environmental, University</td>
<td>NTPEP Audit Program is scheduled to conduct 12 audits for Polypropylene Pipe in calendar year 2016. Electronic reports are posted through DataMine.</td>
</tr>
<tr>
<td>Program</td>
<td>of Kentucky, Virginia,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NTPEP Auditors</td>
<td></td>
</tr>
<tr>
<td>Continuous</td>
<td>TRI/Environmental, Indiana,</td>
<td>NTPEP Audit Program is scheduled to conduct 3 audits for PVC Pipe in calendar year 2016. Electronic reports are posted through DataMine.</td>
</tr>
<tr>
<td>Program</td>
<td>NTPEP Contract Auditors</td>
<td></td>
</tr>
</tbody>
</table>
### NTPEP TEST DECKS (MAJOR PROJECTS 2015-2018 CYCLE)

<table>
<thead>
<tr>
<th>Quarterly Cycles</th>
<th>Texas</th>
<th>Coordinate sampling and laboratory evaluation of Asphalt Release Agents. Reporting will follow for these products in DataMine.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous Program</td>
<td>Missouri, Minnesota, American Engineering Testing Services, TEC</td>
<td>Conduct laboratory evaluations of concrete admixtures. Once testing is completed, data will be available in DataMine.</td>
</tr>
<tr>
<td>March 2016, September 2016</td>
<td>Minnesota, Missouri</td>
<td>Conduct laboratory evaluations of concrete curing compounds. Once testing is completed, data will be available in DataMine.</td>
</tr>
<tr>
<td>Continuous Program</td>
<td>Florida</td>
<td>Conduct laboratory evaluations of epoxy and resin bonded adhesive systems. Once testing is completed, a PDF report will be issued on the NTPEP website.</td>
</tr>
<tr>
<td>May 2016</td>
<td>Minnesota, North Carolina</td>
<td>Minnesota performs the laboratory evaluations for joint sealants. North Carolina performs the field evaluations with a 3 year interval.</td>
</tr>
<tr>
<td>May 2016</td>
<td>Vermont, Minnesota</td>
<td>Minnesota performs the laboratory evaluations for crack sealers. Vermont performs the field evaluations with a 3 year interval.</td>
</tr>
<tr>
<td>Continuous Program</td>
<td>Kansas, Ohio, Nelson Laboratories</td>
<td>Rapid Set Concrete Patch Materials are evaluated for a 3 year interval. Nelson Laboratories performs the laboratory evaluations, while Ohio performs the field evaluations.</td>
</tr>
<tr>
<td>Continuous Program</td>
<td>Texas, NTPEP Contract Auditors, Phoenix Test Lab</td>
<td>Elastomeric Bridge Bearing Pad manufacturers will be audited yearly, beginning within the first quarter of 2016.</td>
</tr>
<tr>
<td>Continuous Program</td>
<td>North Carolina, Tennessee, NTPEP Contract Auditors</td>
<td>Guardrail/Guiderail manufacturers will be audited yearly, beginning within the first quarter of 2016.</td>
</tr>
<tr>
<td>Continuous Program</td>
<td>North Carolina, Wisconsin</td>
<td>NTPEP will begin evaluating Warm Mix Additives within the fourth quarter of 2015.</td>
</tr>
</tbody>
</table>

**Ongoing activities supporting NTPEP expansion and promotion:**

NTPEP staff continues to maintain and expand the dedicated informational website [http://www.ntpep.org](http://www.ntpep.org) and the online data repository DataMine, [http://data.ntpep.org](http://data.ntpep.org). The program’s success is largely due to public-private partnerships, therefore presentations are made at various regional and national conferences, while liaison reports are provided to other AASHTO committees/subcommittees.

**Goals for Next 3 Years:**

- AASHTO staff will work with AASHTO member departments and industry to launch the completely reconstructed DataMine site by the end of the second quarter in 2016.
- AASHTO staff will attend other AASHTO committee meetings to educate interested state members and industry partners on the benefits of utilizing NTPEP.
- Evaluate the use of the program by member departments. Determine emerging needs and appropriate evaluations/audits, expanding services to meet the demands of state members.

**Upcoming Meetings:**

2016 NTPEP Annual Meeting
- Dates: May 8 through May 12, 2016
- Location: Grand Rapids, Michigan
The Special Committee on U.S. Routing meets on September 24, 2015 in Chicago, Illinois to discuss the following applications. Mark McConnell, MS the region 2 representative is appointed to chair the special committee. This appointment was approved by President John Cox, WY and the term is four years. The vacant seat for region 3 is filled by Mark Van Port Fleet from Michigan and chief engineer. He was selected and appointed by President Cox among a list of region 3 SCOH members that volunteered.

Below you will find the 24 applications sent to AASHTO for review and approval from 15 member departments. The committee will meet to review the ballot in Chicago, IL on September 24, 2015 around 5:15 PM. Its decisions will be presented to the Standing Committee on Highways at its business meeting on September 25, 2015 for approval and announcement to the AASHTO Board of Directors.

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<th>MEMBER DOT</th>
<th>ROUTE</th>
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<tr>
<td>1. Alabama</td>
<td>Alabama - US 82 Relocation</td>
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<td>2. Alabama</td>
<td>Alabama - US 411 Relocation</td>
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<td>3. Arizona</td>
<td>Arizona - USBR 90 Establish</td>
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<td>4. Arkansas</td>
<td>Arkansas - US 70 (Hot Springs) Relocate</td>
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<td>5. Arkansas</td>
<td>Arkansas - US Bus 70 (Hot Springs) Recognition of Business Route</td>
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<td>6. Arkansas</td>
<td>Arkansas - US 270 (Hot Springs)</td>
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<td>7. Arkansas</td>
<td>Arkansas - US 270 Business Route Recognition (Hot Springs)</td>
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<td>8. Arkansas</td>
<td>Arkansas - US 270 (Malvern, AR) Relocation</td>
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<td>10. Georgia</td>
<td>Georgia - USBR 21 (Establish)</td>
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<td>11. Indiana</td>
<td>Indiana - USBR 35 (Establish)</td>
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<td>12. Indiana</td>
<td>Indiana - USBR 36 (Establish)</td>
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<td>13. Indiana</td>
<td>Indiana - USBR 50 (Establish)</td>
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<td>14. Iowa</td>
<td>Iowa - US 71 (Elimination)</td>
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<td>15. Iowa</td>
<td>Iowa - US 71 Relocation</td>
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<td>16. Kansas</td>
<td>Kansas - USBR 76 Establish</td>
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<td>17. Louisiana</td>
<td>Louisiana - US 371 Extension</td>
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<td>19. Mississippi</td>
<td>Mississippi - I 269 Establish</td>
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<td>21. Ohio</td>
<td>Ohio - USBR 50 A (Establish)</td>
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<td>22. Oklahoma</td>
<td>Oklahoma - US 70 Relocation</td>
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<tr>
<td>23. Vermont</td>
<td>Vermont - USBR 7 Establish</td>
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<tr>
<td>24. Wyoming</td>
<td>Wyoming - US 85 Relocation</td>
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</table>
Committee Officers:
Chair: Paul J. Steinman, P.E. District Secretary, Florida DOT
Vice Chair: David S. Chase (New Hampshire)
Secretary: Jonathan Walker, FHWA
AASHTO Liaison: Gummada Murthy/Bill Brownlow (Contract Staff)

Annual Meeting
The 2015 Annual Wireless Workshop and SCOWCoT Meeting will be held at the District 7 Headquarters, Tampa, FL on Oct. 28 and 29 2015. This committee is in the process of reorganization to better address the challenges facing members in wireless communications and spectrum management. The primary focus of the committee is shifting from land mobile (two-way radio) communications to include better educational outreach on issues facing members with new programs such as Connected and Autonomous Vehicle, spectrum management and cyber security for ITS equipment. The meeting focused on development of a strategic plan and setting goals and direction for the primary focus areas of managing the Frequency Coordination TSP, Spectrum Management planning for the First Responder Broadband Network, Connected and Autonomous Vehicle infrastructure requirements and deployment along with implementing cyber security in light of recent attacks on DMS and ATC signal controllers.

Mr. Paul Steinman, District Secretary, District Seven of the Florida DOT who is the AASHTO representative to the Public Safety Advisory Committee of the First Responder Network Authority responsible for the design and deployment of the Public Safety Broadband Network (FirstNet) accepted the position as Committee Chair with his appointment confirmed for a two year period in March, 2015. AASHTO is expected to name a new AASHTO Liaison following the retirement of William Brownlow in June, 2015. The U.S. DOT Liaison position is vacant as the previous liaison transferred outside FHWA and no successor has been named.

Completed Tasks or Activities
The Wireless Committee continued to represent transportation at a national level throughout the year. Ferdinand Milanes of CalTrans is a representative on the Department of Homeland Security's Interoperability Working Group SAFECOM, and Paul Gilbert of Texas continues to serve as a member and subcommittee chair on the Project 25/34 Steering Committee. The Project 25/34 Joint Committee oversees the development of standards for public safety digital radios while the DHS working group develops standards and guidelines for communication between emergency response groups.

The Wireless Committee and AASHTO Liaison Bill Brownlow prepared and submitted comments on numerous FCC proposals and actions every month throughout the year, aggressively providing representation of the best interests of the transportation community. Mr. Brownlow retired from AASHTO in June, 2015 and a successor will be named shortly.

Mr. Brownlow, and Mr. Gilbert (TX) represented AASHTO by manning a booth at the 2015 International Wireless Communications Exposition (IWCE), again achieving more national recognition for AASHTO and member organizations. IWCE is the largest annual event worldwide that specializes in public safety communications, with over 325 vendors and booths and 4,000 attendees from government and business.

Future Events
Members of the Special Committee will continue to represent AASHTO at the 2016 IWCE Conference and Exhibition as well as in meetings of the National Public Safety Telecommunications Council, Land Mobile Communications Council, P25 Steering Committee and DHS SAFECOM.
TRANSPORTATION CURRICULUM COORDINATION COUNCIL (TC3)

Officers
Chair: Tom Bryon (Florida, Chief Engineer)
Vice Chair: Mark Chaput (Michigan, Deputy Bureau Director)
AASHTO Liaison: Keith Platte, Program Manager
TC3 Executive Board: Christine Anderson (Iowa)
Jeff Saddler (Utah)
James Feda (South Carolina)
Kenneth Cox (Florida)
Chris Peoples (North Carolina)
Darby Clayton (West Virginia)
Leo Stevens (Retired)
Woody Hood (Maryland)
Vacant

Organizational and Administrative Framework

Transportation Curriculum Coordination Council (TC3) is a new AASHTO Engineering technical service program. It is staffed by one AASHTO employee who allocates 1/3 of their time to the program. The Executive Board directs the day-to-day operations, administration and coordination of the TC3 program. The program develops, maintains and delivers training for the technical transportation professionals in three focus areas: Construction, Materials and Maintenance. This work is conducted through the Executive Board and the 6 technical committees (Committee for Course Development and Distribution, Committee for Core Curriculum Matrix Implementation, Committee for Communications/Marketing and Resource Advancement, Committee for Performance Measurements, Committee for Technology Initiatives, and Committee for Partner Outreach) under TC3.

The goal of TC3 is have at least one member from each AASHTO member department. These member would provide technical guidance to the program. Chairman and Vice Chairman of the TC3 Committee are appointed by the AASHTO Executive Director. For administrative matters and other items, TC3 has an Executive Board, with representation from three SCOH Subcommittees (Materials, Construction, and Maintenance), the five regional training groups, FHWA, and one at large member. The TC3 Committee regularly communicates with the FHWA and NHI for technical guidance and input.

Activities Accomplished this Year:

• Successfully transitioned from NHI to an AAHSTO hosted platform
• Successfully launched a Training Store website which offers TC3 courses
• Updated the TC3 website: http://tc3.transportation.org/
• Updated more than 80 courses
• Continued the development of 20 hours of new courses
• 31 Contributing States, which eclipsed the goal of 25

Upcoming Meetings:

TC3 2016 annual meeting
• Dates: April 10-14, 2016 – Location: Columbus Ohio