

# **AASHTO Subcommittee on Maintenance (SCOM) Bridge Technical Working Group (BTWG)**

## **BTWG Annual Update**

**July 2015**

**J. L. Milton  
Chair BTWG**

**Bridge Preservation Specialist  
Virginia Department of Transportation**

# BTWG Leadership Team

- J. L. Milton - Chair  
Bridge Preservation Specialist  
Structure and Bridge Division  
Virginia Department of Transportation
- David R. Miller, P.E. – Vice Chair for Performance Measures and Environment  
Structure & Facilities Maintenance Administrator  
Louisiana Department of Transportation & Development

# BTWG Leadership Team

- Steven J. Cook, P.E. – Vice Chair for Research and Workforce Development  
Operations/Maintenance Field Services Engineer  
Michigan Department of Transportation

# Coordination with AASHTO Subcommittee on Bridges and Structures

- The Chair of the BTWG collaborated with the Chair of the AASHTO Subcommittee on Bridges and Structures (SCOBS) to appoint liaisons between the BTWG and SCOBS.
- David Miller from Louisiana serves as the liaison from the SCOM BTWG to SCOBS.
- Ben Rabun from Georgia serves as the liaison from SCOBS to the SCOM BTWG.

# Complete NCHRP Projects

- NCHRP 14-24 – “Guidance for Communicating the Value of Highway System Maintenance and Preservation” – Research Agency: High Street Consulting Group – Project complete and NCHRP Report 742 issued.

# Active NCHRP Projects

- NCHRP 14-23 – “Practical Bridge Preservation Actions and Investment Strategies” – Research Agency: Michigan State University – The work under the current task descriptions of NCHRP 14-23 has been terminated. The work that was completed through Phase 1 and Phase 2 has been documented in three un-reviewed deliverables submitted by the research team.
- Further research related to bridge preservation will be performed under the new NCHRP Project 14-36 – “Proposed AASHTO Guide for Bridge Preservation Actions”. The RFP for Project 14-36 was posted on March 27, 2015 and the RFP close date was May 12, 2015. Research contractor has been selected for this project. The contracting process is underway.

# Active NCHRP Projects

- NCHRP 14-28 – “Condition assessment of bridge post tensioning and stayed cable systems using NDE” – Research Agency: Texas A&M Transportation Institute – Interim Report No. 2 issued – Work Underway on Phase III – Estimated completion date: March 31, 2016.

# Active NCHRP Projects

- NCHRP 14-30 – “Spot Painting to Extend Highway Bridge Coating Life” – Research Agency: Kentucky Transportation Center – Research in progress - Estimated completion date: March 2, 2016.



# Active NCHRP Projects

- NCHRP 12-100 – “Guidelines for Maintaining Small Movement Bridge Expansion Joints” – Research Agency: University of Delaware – Research in progress – Estimated completion date: January 16, 2016.

# Active NCHRP Projects

- NCHRP 10-97 – “Detection and Remediation of Soluble Salt Contamination Prior to Coating Steel Highway Structures” – RFP Posted on December 22, 2014 – Proposals have been received in response to the RFP - Contract award is anticipated in early summer 2015.

# Active NCHRP Projects

- NCHRP Project 20-07/Task 387 - Maintenance Actions for Fatigue Cracking in Steel Bridge Structures - Work in progress – Developing RFP.

# Active NCHRP Projects

- NCHRP Project 20-07/Task 379 - Update the SCOM Strategic Plan – Work in progress - Workshop conducted July 9-10,2015, at the National Academies' Beckman Center in Irvine, California,.
- NCHRP Project 20-07/Task 380 -Update the AASHTO Maintenance Manual for Roadways and Bridges – Work in progress.

# 2015 Work Plan

- Focus Areas – Research
  - Supported bridge related NCHRP projects and submit research problem statements.
  - Supported the work of the TRB Bridge Preservation Committee (AHD37).
  - Supported the work of the TRB Structures Maintenance Committee (AHD30).

# 2015 Work Plan

- Focus Areas – Research
  - Supported the work of the TRB Bridge Management Committee (AHD35).
  - Supported update of the TSP2 Research Roadmap.
  - Supported FHWA's Long Term Bridge Performance Program.

# 2015 Work Plan

- Focus Areas - Workforce Development
  - Served as a liaison and facilitator between the TSP.2 regional bridge preservation partnerships and AASHTO SCOM Leadership.
  - Continued working with TSP.2, FHWA BPETG, and industry on collection of acceptance and use of materials and products.
  - Supported the AASHTO TC3 program.

# 2015 Work Plan

- Focus Areas - Workforce Development
  - Supported FHWA's Long Term Bridge Performance Program.
  - Supported FHWA's Bridge Preservation Expert Task Group efforts.
  - Conducted teleconferences and email exchanges with the Bridge TWG members.
  - Continued working with TSP.2, FHWA BPETG, and industry on collection of maintenance training material and make available for practitioners.



# 2015 Work Plan

- Focus Areas - Workforce Development
  - Supported the efforts of the SCOM leadership to update the SCOM Strategic Plan (NCHRP Project 20-07/Task 379).
  - Supported the efforts of the SCOM leadership to update the AASHTO Maintenance Manual for Roadways and Bridges (NCHRP Project 20-07/Task 380).

# 2015 Work Plan

- Focus Areas - Performance Measures
  - Provided a coordinated response from the SCOM Bridge Technical Working Group concerning the FHWA NPRM for bridge and pavement condition.
  - 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.

# 2015 Work Plan

- Focus Areas - Performance Measures
  - Promoted accountability and transparency through performance management of bridges and structures in conjunction with the other technical working groups with a focus on an accurate and efficient bridge inventory system, appropriate performance measures, clear measurable goals which can be attained, and innovative reporting techniques using common terminology.

# 2015 Work Plan

- Focus Areas – Environment
  - Promoted sustainability of the highway bridge environment with a special focus on climate change mitigation strategies and pollution prevention.

# Research

- Research Implementation Recommendations
  - 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).

# Research

- NCHRP Project 20-7 Research Problem Statements Submitted by the BTWG at the 2014 SCOM Meeting:
  - Submitted the problem statement “Review and Update of the AASHTO Maintenance Manual for Roadways and Bridges” – Project selected and work underway.
  - Submitted the problem statement “Synthesis for Bridge Maintenance and Preservation Practices that Minimize Environmental Impact” – Project not selected.
  - Resubmitted the problem statement “Maintenance Actions for Fatigue Cracking in Steel Bridge Structures” – Project selected and work underway.

# SCOM Resolutions - 2014

- Resolution 14-01 - AASHTO Subcommittee On Maintenance Technical Services Program Feasibility for Maintenance Quality Assurance and Maintenance Contracting - Therefore, be it resolved that the AASHTO Subcommittee On Maintenance will consider in their 2015 Meeting in Iowa the feasibility of a Technical Service Program for Maintenance Quality Assurance And Maintenance Contracting.

# SCOM Resolutions - 2014

- Resolution 14-02 - AASHTO Subcommittee On Maintenance - A resolution to create a research liaison - therefore be it resolved, the AASHTO Subcommittee on Maintenance endorses the establishment of a Research Liaison position to coordinate and provide leadership of the committees Strategic Focus Area on research.



# SCOM Resolutions - 2014

- Resolution 14-03 - AASHTO Highway Subcommittee On Maintenance - Formalizing the attendance of the TSP-2 Regional Bridge Preservation Partnerships at the annual AASHTO SCOM meeting - Therefore, be it further resolved that the SCOM develops a process to support the attendance of bridge practitioners at the annual AASHTO SCOM meeting.

# SCOM Resolutions - 2014

- Policy Resolution PR-10-14- Fall Protection Requirements for Highway Workers on Existing Bridges - RESOLVED, That the Board of Directors request that AASHTO convene a team from OSHA, FHWA, AASHTO Subcommittees as appropriate (e.g. Bridges and Structures, Construction, Design, and Traffic Operations), as well as representation from member states to address the interpretation of current fall protection regulations as they relate to existing bridges and non-static short duration maintenance, inspection and construction activities and determine the most appropriate approach moving forward; and, therefore be it further resolved, that the results of the team be published and then distributed consistently across the national transportation system.

# Resolution 2013

- Formalizing the Organizational Relationships Between the TSP2 Bridge and Pavement Regional Preservation Partnerships and SCOM - the Technical Working Groups within the SCOM shall serve as the liaisons between AASHTO SCOM and the AASHTO Regional Bridge and Pavement Preservation Partnerships.

# Other Activities

- The Bridge Technical Working Group provided an endorsement for a proposed Domestic Scan Program titled “Bridge Recoating Best Practices”. The proposal was selected by the NCHRP panel. The scan team is currently being formed.
- The Bridge Technical Working Group provided an endorsement for a research proposal titled “Modeling the Performance of Vehicular Bridge Expansion Joints Under AASHTO LRFD Loads and Actual Traffic”. This proposal has been submitted to AASHTO SCOBs for consideration and ranking.

# Other Activities

- The bridge related abstracts for the 2015 AASHTO/TRB Maintenance Conference were reviewed by the Bridge Technical Working Group.
- A National Bridge Preservation Partnership (NBPP) Coatings Group has been established. Jeff Pouliotte from Florida is the Chair
- A National Bridge Deck Preservation Working Group has also been established. Mike Johnson from California is the Chair.

# Other Activities

- The Bridge Technical Working Group and the Regional Bridge Preservation Partnerships are in the process of updating the list of State Bridge Maintenance Engineers and State Bridge Preservation Engineers.

# Maintenance Manager Newsletter

- The AASHTO SCOM publishes a quarterly newsletter titled “The Maintenance Manager.
- The Spring 2015 issue of this newsletter was published in May, and may be viewed at the AASHTO SCOM website:

[http://maintenance.transportation.org/Documents/2015%20Spring\\_The%20Maintenance%20Manager.pdf](http://maintenance.transportation.org/Documents/2015%20Spring_The%20Maintenance%20Manager.pdf)

# Meetings of AASHTO SCOM

- July 18-23, 2015 – Des Moines, Iowa – Joint meeting with TRB – Theme: Practical Innovations In Maintenance –papers concerning challenges/issues/unmet needs in maintenance will be presented
- 2016 – Nevada
- 2017 – Rhode Island
- 2018 – North Carolina – Joint meeting with TRB
- 2019 – Michigan