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

Activity Update to Southeast Bridge Preservation Partnership - April 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.



## National Bridge Preservation Partnership Conference

- The AASHTO TSP.2 hosted the national bridge preservation partnership conference from April 21 – 25, 2014 in Orlando, Fl.
- The members of the BTWG were active participants in the planning of this meeting, and several members of the BTWG attended the meeting.



## National Bridge Preservation Partnership Conference

- The meeting was very successful with more than 500 individuals in attendance.
- 52 agencies and 58 industry partners were represented.
- Our industry partners conducted 23 outdoor demonstrations and 6 indoor demonstrations.



## 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.



- 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 is May 12, 2015.



 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: May 2015.



 NCHRP 14-30 – "Spot Painting to Extend Highway Bridge Coating Life" – Research Agency: Kentucky Transportation Center – Research in progress, contractor's final report pending - Estimated completion date: March 2016.



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



 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 - The panel is in the process of selecting a contractor to perform the work.



 NCHRP Project 20-07/Task 379 - Update the SCOM Strategic Plan – Work in progress.

 NCHRP Project 20-07/Task 380 -Update the AASHTO Maintenance Manual for Roadways and Bridges – Work in progress.



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



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



- Focus Areas Workforce Development
  - Continue working with TSP.2, FHWA BPETG, and industry on collection of maintenance training material and make available for practitioners.
  - Continue supporting the FHWA proposed Peer exchange idea for bridge maintenance – the BTWG Vice Chair for Research and Workforce Development will serve as a member of the Steering Committee.



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



- Focus Areas Workforce Development
  - Support FHWA's Long Term Bridge Performance Program.
  - Support FHWA's Bridge Preservation Expert Task
     Group efforts.
  - Conduct teleconferences and email exchanges with the Bridge TWG members.



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



#### Focus Areas - Performance Measures

- Provided a coordinated response from the SCOM Bridge Technical Working Group concerning the FHWA NPRM for bridge and pavement condition.
- Continue to collaborate with FHWA BPETG, and other stakeholders on defining "State of Good Repairs" as it applies to the bridge assets.
- Promote the reliability and safety of bridges by focusing on innovative maintenance practices, early intervention techniques, timely inspections and repair, and worker safety.



- Focus Areas Performance Measures
  - Promote 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.



Focus Areas – Environment

 Promote sustainability of the highway bridge environment with a special focus on climate change mitigation strategies and pollution prevention.



#### Research

- Research Implementation Recommendations
  - Continue supporting implementation recommendations for NCHRP 14-24, Report 742 "Communicating the value of preservation".
  - Support the implementation of SHRP2
     Project R19A (Designing Bridges for 100 years service life).



#### Research

- New NCHRP Project 20-7 Research Problem Statements Submitted by the BTWG at the 2014 SCOM Meeting:
  - Submit the problem statement "Review and Update of the AASHTO Maintenance Manual for Roadways and Bridges".
  - Submit the problem statement "Synthesis for Bridge Maintenance and Preservation Practices that Minimize Environmental Impact".
  - Resubmit the problem statement "Maintenance Actions for Fatigue Cracking in Steel Bridge Structures".



## Proposed Resolution - 2014

Fall Protection Requirements for Highway
 Workers on Existing Bridges – Jointly
 sponsored by the Highway Safety & Reliability
 and Bridge Technical Working Groups.



#### 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 Fall 2014 issue of this newsletter was published in October, and may be viewed at the AASHTO SCOM website:

http://maintenance.transportation.org/Documents/ 2014 Fall The%20Maintenance%20Manager%20 News%20Letter.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

