

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

**Activity Update to BTWG  
AASHTO SCOM Meeting  
July 2016**

**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  
Chief Maintenance Engineer  
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
- Morgan Kessler – FHWA Liaison  
Preservation Research Engineer  
FHWA-HQ

# 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.
- The liaison from SCOBS to the SCOM BTWG is currently vacant.

# SCOM Strategic Plan

The AASHTO Highway Subcommittee on Maintenance (SCOM) Strategic Direction and Organizational Structure was updated and approved on September 28, 2015.

Six "Strategic Focus Areas" were developed to support the plan goals: Safety, Asset Management, Environmental, Workforce Development, Communication, and Research.

# SCOM Strategic Plan

- Strategic Direction and Organizational Structure -  
<http://maintenance.transportation.org/Pages/Assignment.aspx>

# 2015 SCOM Meeting

The Bridge Technical Working Group (BTWG) of the AASHTO Subcommittee on Maintenance (SCOM) had very productive break-out sessions during the 2015 SCOM meeting in Des Moines, Iowa. The meeting included three breakout sessions for the Bridge Technical Working Group, and a total of 36 individuals attended these bridge breakout sessions, with 21 of those individuals being state DOT employees.

The chairs of the four bridge preservation partnerships attended the 2015 meeting.

# 2015 SCOM Meeting

The 2015 meeting was a joint AASTHO/TRB Maintenance Conference. The following papers were presented during a Bridge Technical Working Group break-out session:

- Using equity, functionality, importance and risk to select maintenance interventions for bridges – Adam Matteo – Presented by Jeff Milton.
- Comparing benefits of bridge maintenance and preservation focused life-cycle strategies with the rehabilitation and replacement based strategies – Charles Pilson.



# 2015 SCOM Meeting

The 2015 meeting was a joint AASTHO/TRB Maintenance Conference. The following papers were presented during a Bridge Technical Working Group break-out session:

- Bridge Maintenance and preservation in the context of transportation asset management planning – Jason Bittner.
- Tools to generate a more transparent decision for bridges – Jorge Rueda.

# 2016 Work Plan

## Strategic Focus Area - Workforce Development and Retention

- Continued working with TSP.2, FHWA BPETG, and industry on collection of maintenance training material and make available for practitioners.
- Continued supporting the AASHTO TC3 program.
- Continued serving as a liaison and facilitator between the TSP.2 regional bridge preservation partnerships and AASHTO SCOM Leadership.

# 2016 Work Plan

## Strategic Focus Area - Workforce Development and Retention

- Continued working with TSP.2, FHWA BPETG, and industry on collection and dissemination of information concerning bridge preservation materials and products.
- Coordinated with FHWA Lead to ensure that the Long Term Bridge Performance Program considers the appropriate bridge maintenance and preservation activities.

# 2016 Work Plan

## Strategic Focus Area - Workforce Development and Retention

- Continued supporting FHWA's Bridge Preservation Expert Task Group efforts.
- Conducted email exchanges with the Bridge TWG members.
- Continued supporting the efforts of the SCOM leadership to update the AASHTO Maintenance Manual for Roadways and Bridges (NCHRP Project 20-07/Task 380).

# 2016 Work Plan

## Strategic Focus Area - Workforce Development and Retention

- Updated the Strategic Plan for the BTWG. The Bridge Technical Working Group (BTWG) Strategic Plan was updated and submitted to the subcommittee leadership team on September 18, 2015. The updated plan may be viewed at the AASHTO SCOM website:

<http://maintenance.transportation.org/Documents/SCOM/SCOM%20Bridge%20TWG%20Strategic%20Plan%20091815.pdf>

# 2016 Work Plan

## Strategic Focus Area - Workforce Development and Retention

- Continued to coordinate with other committees through Bridge TWG liaisons.

# 2016 Work Plan

## Strategic Focus Area - Research

- Provided a collaborative environment that encourages new research problem statement ideas.
- Encouraged implementation of research recommendations.
- Reviewed and considered for endorsement research problem statements from other committees.

# 2016 Work Plan

## Strategic Focus Area - 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).
- Supported the work of the TRB Bridge Management Committee (AHD35).



# 2016 Work Plan

## Strategic Focus Area - Research

- Supported the update of the TSP2 Research Roadmap.
- Supported FHWA's Long Term Bridge Performance Program.

# 2016 Work Plan

## Strategic Focus Area - Asset Management

- Monitored the FHWA Rule Making for bridge and pavement condition and for asset management systems.
- Continued to collaborate with FHWA BPETG, and other stakeholders on defining “State of Good Repairs” as it applies to the bridge assets.

# 2016 Work Plan

## Strategic Focus Area - Asset Management

- Promoted Bridge Preservation activities by owners.
- Promoted accountability and transparency through performance management and asset 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.

# 2016 Work Plan

## Strategic Focus Area - Environment

- Promoted sustainability of the highway bridge environment with a special focus on climate change, mitigation strategies and pollution prevention.
- Promoted the proposed research project titled “Synthesis for Bridge Maintenance and Preservation Practices that Minimize Environmental Impact”.

# 2016 Work Plan

## Strategic Focus Area - Safety

- Promoted the reliability and safety of bridges by focusing on innovative maintenance practices, early intervention techniques, timely inspections and repair, and worker safety.
- Worked through the Bridge TWG representative on the Fall Protection Resolution Team to ensure a practical outcome for the states that are affected.

# 2016 Work Plan

## Strategic Focus Area - Communication

- Continued supporting implementation recommendations for NCHRP 14-24, Report 742 “Communicating the value of preservation”.
- Continued supporting the implementation of SHRP2 Project R06A (Non-destructive Testing to Identify Concrete Bridge Deck Deterioration) and R19A (Designing Bridges for 100 years service life).

# 2016 Work Plan

## Strategic Focus Area - Communication

- Supported members in communicating the value of maintenance and system preservation to elected officials, the general public and state DOT executives.
- Promoted communications concerning bridge maintenance and preservation with local agencies.
- Encouraged regional bridge preservation partnerships to submit proposed research needs statements through the SCOM Bridge Technical Working Group.

# FHWA Training Update

- FHWA has developed a NHI Bridge Preservation Web based training Course Series.
- FHWA has developed a NHI Bridge Management Web based training Course Series.
- FHWA has developed a NHI Principles and Practices for Enhanced Maintenance Management Systems Web based training course.
- FHWA has substantially completed the update of the NHI Bridge Maintenance Training Course.



# Research

The following bridge related research problem statement was presented during the 2015 SCOM business meeting:

- Synthesis for Bridge Maintenance and Preservation Practices that Minimize Environmental Impact

This statement was not selected by AASHTO SCOR as a full project; however, the statement was submitted and selected as a NCHRP 20-07 Project. The Project Panel is currently being formed.

# Resolution - 2014

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

Chris Keegan from the Washington DOT will serve as the Bridge TWG representative on the Fall Protection group created by Policy Resolution PR-10-14 (Fall Protection Requirements for Highway Workers on Existing Bridges).

# 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 NCHRP Domestic Scan 15-03 - “Successful Preservation Practices for Steel Bridge Coatings”.
- A four day panel meeting and peer exchange workshop for Domestic Scan 15-03 was conducted from May 23 to May 26 in Orlando FL. The following agencies made presentations during the workshop: Florida, Maryland, Oregon, Washington, Virginia, New York, Texas, Golden Gate Bridge, Michigan, Ohio, California, Pennsylvania, and NASA.

# Other Activities

- The Bridge Technical Working Group Chair serves as the Panel Chair for the SCOBS submitted NCHRP research problem statement titled “Development of Guidelines for Uniform Service Life Design for Bridges” (NCHRP Project 12-108).

# Other Activities

- 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

- A National Bridge Preservation Social Media Working Group has been established. Lorella Angelini, with Angelini Consulting Services, LLC is the Chair.
- A National Bridge Preservation Performance Specification Working Group has been established. The leaders of this group are Ed Welch, NCPP; Mike Stenko, Transpo; Eric Burns, MI DOT; Jeff Milton, VA DOT; David Minor, Dayton; Greg Freeman, Kwik Bond; Keith Ramsey, TX DOT; Rich Van Allen, CT DOT; Fred Grant, DBI

# Other Activities

- The development of a Transportation Asset Preservation Portal has been proposed by FHWA.

This work is proposed to be accomplished under a pooled fund project.

A Technical Advisory committee is being established.

This portal could be based on Defect, Cause, Action, and Cost model for preserving transportation system assets.



# Maintenance Manager Newsletter

- The AASHTO SCOM publishes a quarterly newsletter titled “The Maintenance Manager.
- The Spring 2016 issue of this newsletter was published in April, and may be viewed at the AASHTO SCOM website:

<http://maintenance.transportation.org/Documents/Spring%202016%20Maintenance%20Manager.pdf>

# Meetings of AASHTO SCOM

- 2017 – Rhode Island
- 2018 – North Carolina – Joint meeting with TRB
- 2019 – Michigan
- 2020 – Colorado