AASHTO SCOM Bridge Technical Working Group (BTWG) Update – July 2017
Jeff Milton, VA
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 Asset Management, Communications and Environment
  Chief Maintenance Engineer
  Louisiana Department of Transportation & Development
BTWG Leadership Team

• Steven J. Cook, P.E. – Vice Chair for Research, Safety, 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 T-9.
• Randall Mullins from Alabama serves as the liaison from SCOBS T-9 to the SCOM BTWG.
Coordination with AASHTO Subcommittee on Bridges and Structures

• We are working with the Chair of SCOBS to appoint liaisons between the BTWG and SCOBS T-18.
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
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:

The Bridge Technical Working Group (BTWG) of the AASHTO Subcommittee on Maintenance (SCOM) had very productive break-out sessions during the 2016 SCOM meeting in Clark County, Nevada.

The meeting included three breakout sessions for the Bridge Technical Working Group, and approximately 43 individuals attended these bridge breakout sessions.
Safety

- Continued to promote the reliability and safety of bridges by focusing on innovative maintenance practices, early intervention techniques, timely inspections and repair, and worker safety.

- Continued to work through the Bridge TWG representative on the Fall Protection Resolution Team to ensure a practical outcome for the states that are affected.
Safety

- Encouraged member agencies to explore the use of connected and automated vehicles for use in smart work zones.
2017 Work Plan Accomplishments 1 of 2

Asset Management

➢ Continued to monitor the FHWA Rule Making for bridge and pavement condition and for asset management systems.

➢ Continued to promote Bridge Preservation activities by owners.

➢ Continued to promote accountability and transparency through performance management and asset management of bridges and structures.
2017 Work Plan Accomplishments 2 of 2

Asset Management

- Supported member agencies in the inspection and maintenance of tunnels and ancillary (traffic, MSE walls, etc.) structures.
Environmental

- Continued to promote sustainability of the highway bridge environment with a special focus on climate change, mitigation strategies and pollution prevention.

- Supported the NCHRP 20-07 Project titled “Synthesis for Bridge Maintenance and Preservation Practices that Minimize Environmental Impact”.

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2017 Work Plan Accomplishments 1 of 4

Workforce Development

- Continued working with TSP.2, FHWA BPETG, and industry on collection of maintenance training material and make available for practitioners through TSP2.

- Continued supporting the AASHTO TC3 program by reviewing the competency matrices for bridge workers and by supporting new training.

- Continued serving as a liaison and facilitator between the TSP.2 regional bridge preservation partnerships and AASHTO SCOM Leadership.
2017 Work Plan Accomplishments 2 of 4

Workforce Development

- Supported the liaisons from SCOM to other committees. For example:
  - AASHTO SCOBS
  - FHWA BPETG
  - TRB
  - AASHTO STSM&O
2017 Work Plan Accomplishments 3 of 4

Workforce Development

- Continued working with TSP.2, FHWA BPETG, and industry on collection and dissemination of information concerning bridge preservation materials and products.

- Continued coordinating with FHWA Lead to ensure that the Long Term Bridge Performance Program considers the appropriate bridge maintenance and preservation activities.
**2017 Work Plan Accomplishments 4 of 4**

**Workforce Development**

- Continued supporting FHWA’s Bridge Preservation Expert Task Group efforts. For example, reviewing and providing comments for the pocket guides.
- Continued to conduct 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).
Communication

- 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).

- Continued to promote communications concerning bridge maintenance and preservation with local agencies.
Communication

- Develop a marketing package to communicate the value of system preservation to elected officials, the general public and state DOT executives. This strategy will include:
  - Implement existing research in order to promote the need for additional funding
  - Promote safety
  - Promote environmentally friendly practices
  - Develop a communication plan that promotes the value of bridge preservation
- There has been limited activity in this area – the effort will be continued in 2018
Communication

- Develop a strategy to better communicate bridge condition information by the media (ENR, Roads and Bridges, ARTBA, etc.).

There has been limited activity in this area – the effort will be continued in 2018.
2017 Work Plan Accomplishments 4 of 4

Communication

- Continued to encourage regional bridge preservation partnerships to submit proposed research needs statements through the SCOM Bridge Technical Working Group.
2017 Work Plan Accomplishments 1 of 7

Research

- Continued to provide a collaborative environment that encourages new research problem statement ideas.
- Continued to encourage implementation of research recommendations.
- Continued to review and considered for endorsement research problem statements from other committees.
Research

- Continued to support Bridge related NCHRP projects and submit research problem statements.
- Continued to support the work of the TRB bridge related committees: Bridge Preservation (AHD37), Structures Maintenance (AHD30), and Bridge Management (AHD35).
2017 Work Plan Accomplishments 3 of 7

Research

➢ Continued to support the update of the TSP2 Research Roadmap.

➢ Continued to support FHWA’s Long Term Bridge Performance Program.

➢ Worked with FHWA to develop research to determine the cost effectiveness of bridge cleaning and washing.
Endorsed the proposed research titled “Effective Use of Duplex Coating Systems to improve Steel Bridge Structure Durability” that was submitted by the TRB Structures Maintenance Committee (AHD30) and approved by the AASHTO Subcommittee on Bridges and Structures T-9 Technical committee.

The Bridge Technical Working Group supported this research and the research received a formal endorsement from SCOM during the voting for the 2016 meeting. This project was not approved by AASHTO SCOR at the March 2017 meeting.
Research - Unmanned Aerial Systems (UAS)

- Supported a proposed study for Defining State DOTs Needs for Unmanned Aerial Systems (UAS) for Bridge Condition Assessment.

The goal of this study is to determine the current state of the practice and to determine the next steps needed for implementation by state DOT’s.
The AASHTO Subcommittee on Maintenance and the AASHTO Standing Committee on Aviation submitted a Domestic Scan proposal titled “Defining State DOT Needs for Unmanned Aerial Systems for Bridge Condition Assessment” on October 14, 2016.

Also, the FHWA, the AASHTO Subcommittee on Maintenance, and the AASHTO Subcommittee on Construction submitted a Domestic Scan proposal titled “Unmanned Aerial Vehicles in Highway Construction and Maintenance” on August 31, 2016.
AASHTO approved the general scan, but assured that bridge inspection would also be included. This will be Domestic Scan 17-01 – “Successful Approaches for the Use of Unmanned Aerial Systems by Surface Transportation Agencies”.

The project team for Domestic Scan 17-01 is currently being selected.
2018 SCOM Meeting

- The 2018 SCOM meeting will be held in North Carolina.