Bridge Working Group
Jeff Milton, VA
2017 Work Plan Accomplishments 1 of 2

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.
2017 Work Plan Accomplishments 2 of 2

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”.

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).
2017 Work Plan Accomplishments 1 of 4

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.
2017 Work Plan Accomplishments 2 of 4

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.
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.
2017 Work Plan Accomplishments 4 of 7

Research - Effective Use of Duplex Coating Systems to improve Steel Bridge Structure Durability

- 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.
Research - Unmanned Aerial Systems (UAS) (Continued)

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 Work Plan 1 of 2

Safety

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

➢ Continue to work on a solution for the Fall Protection issue that was brought up in the 2014 Resolution.
2018 Work Plan 2 of 2

Safety

- Encourage member agencies and support other TWGs in the use of connected and automated vehicles for use in smart work zones.
2018 Work Plan 1 of 2

Asset Management

➢ Support member agencies in the implementation of the FHWA Rules for bridge and pavement condition and for asset management systems.

➢ Continue to promote Bridge Preservation activities by owners.

➢ Support the creation of the TSP2 National Bridge Management System working group.
2018 Work Plan 2 of 2

Asset Management

- Support member agencies in the inspection and maintenance of tunnels and ancillary (traffic, MSE walls, etc.) structures.
- Work with FHWA to review and update the definition of bridge preservation to better reflect agency practices.
2018 Work Plan 1 of 1

Environmental

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

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

2018 Work Plan 1 of 4

Workforce Development

➢ Work with LTAP to provide and promote Bridge Maintenance Training for local agencies.

➢ Continue supporting the AASHTO TC3 program by reviewing the competency matrices for bridge workers and by participating in the development of new courses.

➢ Continue serving as a liaison and facilitator between the TSP.2 regional bridge preservation partnerships and AASHTO SCOM Leadership.
2018 Work Plan 2 of 4

Workforce Development

➤ Continue to support the liaisons from SCOM to other committees. For example:

- AASHTO SCOBS
- FHWA BPETG
- TRB
- AASHTO STSM&O
2018 Work Plan 3 of 4

Workforce Development

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

➢ Continue coordinating with FHWA Lead to ensure that the Long Term Bridge Performance Program considers the appropriate bridge maintenance and preservation activities.
2018 Work Plan 4 of 4

Workforce Development

- Continue supporting FHWA’s Bridge Preservation Expert Task Group efforts. For example, reviewing and providing comments for the pocket guides and updating the Bridge Preservation Guide.

- Continue to conduct email exchanges with the Bridge TWG members.

- Continue supporting the efforts of the SCOM leadership to update the AASHTO Maintenance Manual for Roadways and Bridges (NCHRP Project 20-07/Task 380).
2018 Work Plan 1 of 4

Communication

➢ Continue 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).

➢ Continue to promote communications concerning bridge maintenance and preservation with local agencies.
2018 Work Plan 2 of 4

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
2018 Work Plan 3 of 4

Communication

- Develop a strategy to better communicate bridge information by and with the media (ENR, Roads and Bridges, ARTBA, etc.). An Ad-hoc committee will be put together to develop this.
Communication

➢ Continue to encourage regional bridge preservation partnerships to submit proposed research needs statements through the SCOM Bridge Technical Working Group.
2018 Work Plan 1 of 1

Research

 Support the implementation of completed research projects

 Support Domestic Scan 17-01 – “Successful Approaches for the Use of Unmanned Aerial Systems by Surface Transportation Agencies”.
Proposed Research

- Request re-endorsement of 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 endorsed by AASHTO SCOBS and SCOM in 2016. This project was not approved by AASHTO SCOR at the March 2017 meeting. The leadership of SCOBS and the SCOM BTWG believe this is an important project and would like to re-submit.
Proposed Research

- Request SCOM endorsement of the proposed NCHRP Project 20-07 proposal titled “Emerging LED technologies, and their spectrum of use on roadways and tunnels”. The objective of this project is to catalog the various types of LED lighting techniques commonly available both in roadways and tunnels and identify benefits and challenges with each when used to light tunnels, as well as roadways. Additionally, LED technology could possibly offer some opportunities to update existing tunnel lighting requirements, and take advantage of characteristics that LEDs provide that were previously unavailable with the older technologies. This project was proposed by AASHTO SCOBS and endorsed by the AASHTO Joint Technical Committee on Roadway Lighting and the PIARC D-5 Road Tunnel Operations Committee.
Proposed Research

Research

➢ Protecting bridge approaches during flooding events

➢ Test protocols for small movement bridge joints
Proposed Research Implementation

- Republish research project 12-100 as an AASHTO Guideline
- Republish research project 14-29 as an AASHTO Guideline
2018 North Carolina
Scott Capps, NC
Future SCOM

• 2018 North Carolina
• 2019 Michigan
• 2020 Colorado
• 2021 Maine
Adjourn

Be SAFE and see you next year in North Carolina!