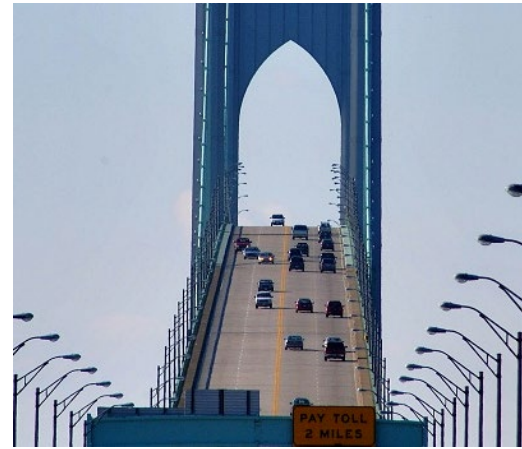
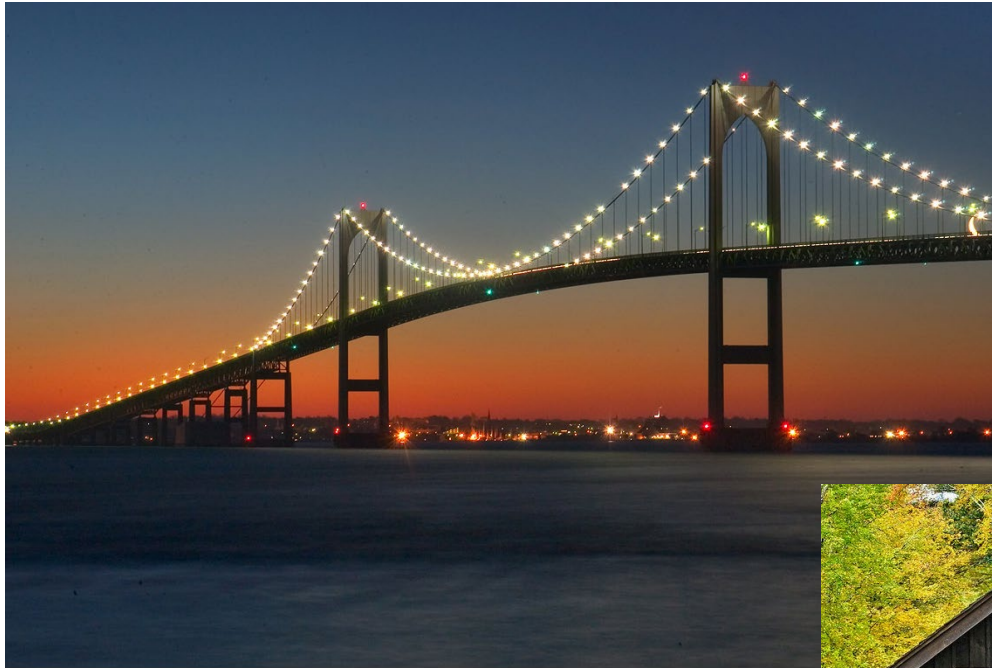


# Bridge Working Group

## Jeff Milton, VA



# 2018 Work Plan Accomplishments 1 of 1

## 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.

# 2018 Work Plan Accomplishments 1 of 1

## Asset Management

- **BTWG members participated in the National BMS Working Group.**

# 2018 Work Plan Accomplishments 1 of 1

## Environmental

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

# 2018 Work Plan Accomplishments 1 of 1

## Workforce Development

- Supported the AASHTO TC3 program and continued served as a liaison and facilitator between the TSP.2 regional bridge preservation partnerships and AASHTO MaC Leadership.
- Supported FHWA's Bridge Preservation Expert Task Group efforts.
- Participated in the National Bridge Preservation Partnership Conference was held in Orlando, Florida from April 8 to 12, 2018.

# 2018 Work Plan Accomplishments 1 of 1

## Communication

- Promoted communications concerning bridge maintenance and preservation with local agencies.
- Conducted email exchanges with the BTWG members.
- Prepared content for the Maintenance Manager Newsletter.
- Encourage regional bridge preservation partnerships to submit proposed research needs statements through the MaC BTWG.

# 2018 Work Plan Accomplishments 1 of 3

## Research

- Collaborated, encouraged implementation and reviewed research problem statements with relevant stakeholders.
- Supported TRB bridge related committees

# 2018 Work Plan Accomplishments 2 of 3

## Research

### ➤ Endorsed:

- **“Effective Use of Duplex Coating Systems to improve Steel Bridge Structure Durability” - selected for funding.**
- **Project 20-07 proposal titled “Emerging LED technologies, and their spectrum of use on roadways and tunnels” – Not selected for funding**
- **“Protecting bridge approaches during flooding events” – Not selected for funding.**



# 2018 Work Plan Accomplishments 3 of 3

## Research

- **NCHRP Project 12-100 “Guidelines for Maintaining Small Movement Bridge Expansion Joints” to be published as an AASHTO Document.**
- **NCHRP Project 14-29– “Assessing, Coding, and Marking of Highway Bridges in Emergency Situations” to be published as an AASHTO Document.**
- **AASHTO Maintenance Manual for Roadways and Bridges has been updated under NCHRP Project 20-07/Task 380.**

# 2019 Work Plan 1 of 1

## Safety

- **Promote safety and reliability of bridge preservation practices, and support other TWGs CAV initiatives.**

# 2019 Work Plan 1 of 1

## Asset Management

- Support member agencies in the implementation of the FHWA Rules for bridge and pavement condition and for asset management systems.
- Participate in the TSP2 National Bridge Management System working group.

# 2019 Work Plan 1 of 1

## Environmental

- **Promote sustainability while performing bridge maintenance and preservation activities.**

# 2019 Work Plan 1 of 1

## Workforce Development

- **Promote Bridge Maintenance Training for local agencies.**
- **Support the AASHTO TC3 program by reviewing the competency matrices for bridge workers and by participating in the development of new courses.**
- **Serve as and facilitator between the TSP.2 regional bridge preservation partnerships and AASHTO MaC Leadership.**
- **Support FHWA Bridge Preservation Expert Task Group efforts. conduct email exchanges with the Bridge TWG members.**

# 2019 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.**

# 2019 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**

# 2019 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 formed to develop this.**



# 2019 Work Plan 4 of 4

## Communication

- **Continue to encourage regional bridge preservation partnerships to submit proposed research needs statements through the MaC Bridge Technical Working Group.**

# 2019 Work Plan 1 of 1

## Research

- **Continue to support the implementation of completed research projects – NCHRP Project 12-100 and NCHRP Project 14-29 - publish the reports for these projects AASHTO Documents.**

# Proposed Research

- **Measuring Chlorides in Bridge Decks with Ground Penetrating Radar**
  - **Ground penetrating radar (GPR) technology has been shown to respond to the presence of chlorides in concrete, which are also the prerequisites for reinforcement corrosion and delamination. The proposed research will investigate a nondestructive methodology, using GPR, that may be used by bridge owners to quantify chloride content in concrete and identify chloride-contaminated concrete on a deck-wide basis for subsequent removal during bridge deck rehabilitation.**

# Proposed Research

- **Establishing a Procurement Guide for NDT/E and SHM based on Best Practices and Vendor Qualifications for State Departments of Transportation**
  - The objective of this research will be to develop a guideline for procurement of NDT/E and SHM services for the heavy civil infrastructure industry with a focus on highway infrastructure based on quality of service and best practices for consistent, quality driven, data collection, analysis, and reporting.
  - This guideline will increase the ease of which stakeholders can implement NDT/E an SHM type service contracts by ensuring that the same quality standards are in place across the United States while simultaneously ensuring that these stakeholders receive data of a high enough quality that can be used to confidently manage their assets.

# Proposed Research

- **Evaluating and implementing unmanned aerial systems (UAS) into bridge inspection and management methods**
  - **This research will be focused on field testing the application of UAS based bridge inspections as it relates to supporting bridge management data collection and practices.**

# Proposed Research

- **Update of the Bridge Preservation Research Roadmap**
  - **This project is to develop a bridge preservation research roadmap to guide future bridge preservation research efforts in productive directions.**
  - **In 2008, the FHWA, AASHTO, and the highway preservation industries, completed a study which identified the most critical knowledge gaps in pavement and bridge preservation and the research necessary to fill those gaps**
  - **An updated Bridge Preservation Research Roadmap would help guide not only national research efforts in the area of bridge maintenance and preservation but also state- and provincial-funded research.**