Greetings,

The following is an update of current activities and news items of interest pertaining to Bridge Preservation from Tech Committee T-9.


The RFP was posted on 10/2/2015, with proposals due on 11/19/2015. The project is anticipated to have an authorization to begin work on 4/1/2016. Contract time will be 30 months with available funding of $280,000.

The background behind this research work is that bridge owners currently rely on subjective evaluation for assessing alternative designs to improve the service life of bridges, and there is a need to develop more quantitative methods for evaluating anticipated performance with time.

The principle objectives of the research are to develop:

1. A proposed AASHTO guide specification for service life design
2. Case studies to demonstrate the application of the proposed guide specification

**Status of NCHRP 14-36 – Proposed AASHTO Guide for Bridge Preservation Actions**

This project has been contracted to the University of Colorado – Boulder, with an effective date of 11/13/2015 and a completion date of 2/12/2018. Contract funds are $300,000.

The background behind this research project is that transportation departments currently identify the effectiveness of bridge preservation actions based primarily on judgement or common sense. There is a need to document current strategies to evaluate and measure the short- and long-term performance of specific preservation activities.

The principle objectives of the research are to develop:

1. A catalog of bridge element preservation actions
2. Criteria and selection methodology of bridge preservation actions with associated costs and benefits for use in life cycle cost analysis and possible integration into a bridge management system.

**Status of SHRP2 R19A Implementation Action Program – Service Life Design for Bridges**
Five lead adopter agencies (IA, OR, PA, VA, and FHWA Central Federal Lands) have identified projects for performing service life design for bridges. Portions of the work include performing durability material performance testing of common concrete mix designs within their jurisdictions. This work is underway in OR. The Subject Matter Expert team of CH2M and Buckland & Taylor/COWI has developed both a full-probabilistic service life design tool, and a series of graphical design tools to assist the agencies in performing the service life design work. The tools, as well as the initial kick-off webinar presentations are available for downloading from the AASHTO SHRP2 website at:

http://shrp2.transportation.org/Pages/ServiceLifeDesignforBridges.aspx

There will be a 2nd webinar on 12/17/2015 with the five agencies to discuss project schedules, and to present information on how to use the design tools. Individual workshops are yet to be scheduled, but are anticipated for the 1st and 2nd quarters of 2016.

**T-9 Strategic Plan**

The strategic plan was updated in February, 2015. The following is from the Executive Summary:

The Strategic Plan for the AASHTO Subcommittee on Bridges and Structures (SCOBS) Technical Committee for Bridge Preservation (T-9) is a guide for T-9 committee members in serving the needs of the SCOBS related to bridge preservation. It will also serve as the focal point for innovation and research in bridge preservation and corrosion, and advancing the state-of-the-practice in bridge performance measures related to service life.

T-9 uses this plan to identify and prioritize committee activities, measure progress, and direct its resources and expertise to support SCOBS and the Standing Committee on Highways (SCOH) strategic plan objectives and actions related to bridge preservation and corrosion, specifically the SCOBS August 2013 “A Strategic Plan for Bridges and Structures”. In particular, T-9 supports the SCOBS Prioritized Objective #1, “Extend Bridge Service Life”, Prioritized Objective #2, “Assess Bridge Condition” by developing data-driven preservation decision making tools, Prioritized Objective #3, “Maintain and Enhance a Knowledgeable Workforce” by supporting development of bridge preservation training, Prioritized Objective 6, “Optimize Structural Systems” by developing guidance for optimal service life design. Key activities include, but not limited to those listed in the Objectives and annual work plan tasks below.

The full Strategic Plan is attached.

**Draft Summary of State DOT Preservation Practices is Ready for review and updating**

T-9 has completed a first draft of a summary of the State DOT Bridge Preservation Practices. Ken Walus and his staff at VA DOT prepared the first draft using a survey of State DOT Web Sites and data from presentations at the T-9 meetings over the past few years. The draft will be sent to SCOBS first for review and editing and then distributed to bridge
preservation professionals. The draft will also be included in Mike Johnson’s TRB Bridge Preservation Committee’s “Bridge Preservation Research Framework” to be made public at the 2016 TRB Meeting.

**National TSP2 Bridge Preservation Partnership (BPP) Efforts**

Link to TSP2 Bridge Preservation site: https://tsp2bridge.pavementpreservation.org/

Regional meeting updates

2015 Midwest MWBPP Annual Meeting was held 9/30/15 – 10/2/15 in Kansas City, MO
Meeting minutes and presentations can be found at: https://tsp2bridge.pavementpreservation.org/midwest-mwbpp/annual-meetings/2015-2/

2015 Northeast NEBPP Annual Meeting was held 9/9/15 – 9/11/15 in Manchester, NH
Meeting minutes and presentations can be found at: https://tsp2bridge.pavementpreservation.org/northeast-nebpp/annual-meetings/2015-2/

2015 Southeast SEBPP Annual Meeting was held 4/13/15 – 4/15/15 in Montgomery, AL
Meetings minutes and presentations can be found at: https://tsp2bridge.pavementpreservation.org/southeast-sebpp/annual-meetings-sebpp/2015-2/
2016 Southeast SEBPP Annual Meeting will be from 3/29/16 – 4/1/16 in San Antonio, TX

2015 West WBPP Annual Meeting was held 5/18/15 – 5/20/15 in Portland, OR
Meeting minutes and presentations can be found at: https://tsp2bridge.pavementpreservation.org/western-wbpp/annual-meetings/2015-2/
2016 West WBPP Annual Meeting will be from 5/17/16 – 5/19/16 in Salt Lake City, UT

**Conference Presentations on Service Life Design**

Presentations made in 2015, to promote the subject of Service Life Design, were made at the following national conferences:

National Association of Corrosion Engineers (NACE), Corrosion Symposium, 3/15/19 to 3/19/19 in Dallas, TX

AASHTO SCOBS T-9 Meeting, 4/21/15 in Saratoga Springs, NY

Western Bridge Engineers Seminar, 9/9/15 in Reno, NV

American Segmental Bridge Institute (ASBI) Annual Convention, 11/3/15 in Dallas, TX

American Concrete Institute (ACI) Convention and Exposition, 11/9/15 in Denver, CO
Journal Publications on Service Life Design

The Perspective section of the Fall 2015 issue of PCI Aspire Magazine contained the article “Are We Really Designing for a 100-Year Service Life?”
See link: http://www.aspiremagazinebyengineers.com/i/575053-fall-2015/11