



AASHTO TSP-2 Oversight Panel Update

June 27, 2017

Ed Welch NCPP

MICHIGAN STATE
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TSP-2 Points of Interest

- Partnership Meetings
- TSP-2 2017 Initiatives



Southeast Bridge Preservation Partnership

Meeting held in Charlestown, WV- April 10th -12th

Session Topics

- Deck Preservation
- Defining and Communicating Present Practices
- Emergency Response / Resilience
- Research Needs Statements
- Working Group Report-outs
- Technical Tour of Preserving the New River Gorge Bridge
- Performance Measures Roundtable Discussion



Western Bridge Preservation Partnership

Meeting held in Denver, CO: May 22nd-24th

Session Topics

- Success & Failure Stories & Lessons Learned Peer Exchange
- Risk, Resilience & Environmental factors
- Preservation Developments
- Bridge Preservation Future Needs
- Performance Measures Roundtable discussion



Northeast Bridge Preservation Partnership

Will Be Meeting in New Brunswick, NJ: September 11-13

Session Topics

- Deck Preservation
- Peer Exchange: Decks, Joints, Superstructure, Substructure, & Asset Management
- Best Practices and Case Studies in Bridge Preservation
- Retaining Systems
- Roundtable Discussion on Performance Measures
- Technical Tour of “The Beast” @ Rutgers



Midwest Bridge Preservation Partnership

Will Be Meeting in Minneapolis, MN: November 6-8

Session Topics

- Bridge Preservation Case Studies
- Roundtable Discussion on Performance Measures
- Preservation Practices & Training
- Technical Presentations
- Completed or Underway Research Projects
- Technical Tour of Preservation Site (Vikings Stadium)



Research Initiatives Supported

- Bridge Preservation is “actions or strategies that prevent, delay or reduce deterioration of bridges or bridge elements, etc.” *Source: AASHTO Board of Directors, Policy Resolution PR-3-11, October 17, 2011.*
- Research plays a critical role in continually improving the ability to preserve bridges
- All four of the Partnerships are involved in the promotion of Research Needs:

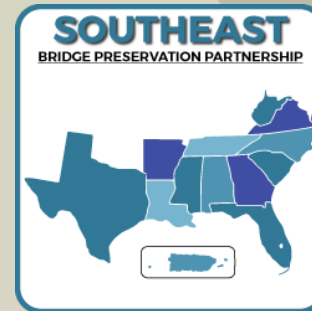
MWBPP



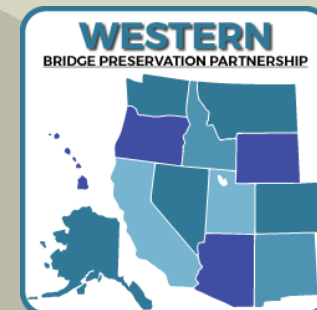
NEBPP



SEBPP



WBPP





NEBPP

Identified 5 high priority topics; and is developing a Research Needs Statement for the #1-ranked topic:

1. Develop **testing standards for bridge joints** with less than 4” movement
2. National scan to determine **Best Practices for inspection and maintenance of concrete decks.**
3. Synthesis of factors that contribute to **bridge joint life cycle**
4. **Corrosion** prevention and mitigation in **Prestressed strands**
5. Database of **current practices** of preservation activities



SEBPP

Identified 5 high priority topics; and is developing Research Needs Statements for all 5 topics:

1. Standardized maintenance & preservation **best practices**
2. Improved methods for **accelerated evaluation of bridge coatings**
3. **Deck sealers & overlays** –treatments and requirements for use
4. Benefits of bridge **cleaning & washing** and effect on service life
5. Protecting bridge **approaches during flooding events**



MWBPP

Identified 9 possible topics and is working on establishing priorities for future action:

1. Best practices for **steel pile** preservation
2. Best practices **substructure capacity during repair**
3. Best practices for **P/S girder** end block repairs
4. **FRP** over patches
5. Document/illustrate the **effectiveness of preservation**



MWBPP, Continued

6. Develop synthesis of **deck cracking** research
7. Performance of ECC **flexible concrete** for bridge deck applications
8. Regional survey of **agency and joint manufacturers**
9. Inclusion of a **joint sizing** requirement specification



WBPP

1. WBPP has not done a formal brainstorming session on research topics, but,
2. Academic Director George Hearn does an **annual survey** and collects topics for discussion/action at **TRB (AHD30 & AHD37) & SCOM**
3. Some key topics are:
 1. Effective Use of **Duplex Coatings**
 2. Costs and Performance of **Concrete Sealants** as Preservation Action
 3. Bridge **Improvements & Replacement Tool**
 4. **UAS Deck Survey**



SCOBS & SCOM Liaisons

- David Miller, LADOT and Jeff Milton, VDOT have been designated liaisons between SCOBS and SCOM. This allows for the two Subcommittees to communicate, share initiatives, promote joint support, and avoid any possible overlap.



TSP-2 2017 Initiatives

- The National Bridge Deck Product Database has completed the Beta testing and population of product users is underway.
- The TSP-2 Bridge Blog has posts monthly interviews. It also is being utilized for Meeting 'Save the Date' announcements.
- Other Social Media avenues are being developed based on need and participation.
- The use of videos to promote Bridge Preservation is expanding
- The **2018 National Bridge Preservation Conference** will be in Orlando, FL from April 8th – 13th



Why build the Database?

- When I ask what you like most about the Bridge Partnerships. The predominant answer is: **“Networking”**
- The thoughts behind building this Database is to develop **“Virtual Networking”** about the use of Bridge Products.
- When you think about it: **How long would it take for you to ask all the states what products they are using?**
- The National Deck Working Group feels that they have the answer.



Who is using What?

- A nationwide framework and listing of available **Bridge Deck Preservation Products and Technologies** and their respective technical attributes, with **contact information for Owners and Industry** (Sealers, Overlays & Patching Materials)
- The Database is designed to apply to other Preservation areas. (Coatings, Joints, Pavement Treatments, Etc.)
- Approved and Funded by the TSP-2 Oversight Panel in 2016.
- The software has completed the Beta Testing and presently State users are being populated.



- Dennis Tang @ NCPP has built the software for this Database and I would like to give you a demonstration of how this tool works.
- The purpose of this presentation has been an effort to let States understand how it works and feel comfortable about populating and using it.
- Additionally a short tutorial of how to populate and use this tool will be included as they are contacted.



BRIDGE PRESERVATION TRAINING FOR LOCAL AGENCIES



MICHIGAN STATE
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Ed Welch

Ed Welch is the former Bridge Maintenance Engineer for New Hampshire DOT. He currently serves as the Bridge Preservation Engineer for the AASHTO TSP-2 Program.



Pete Weykamp

Pete Weykamp is the former Bridge Maintenance Engineer for New York State DOT. He currently serves as an Independent Consultant working on several national training initiatives.

TRAINING TOPICS

Sessions will be tailored to specific audiences. These Sessions will include but will not be limited to:

- Washing and Sealing
- Concrete Repair
- Structural Steel Protection
- Joint Maintenance/Repair
- Asset Management Systems

ABOUT US

NCPP @ MSU has expanded the training that they are offering to Local Agencies by including Bridge Preservation Training. Understanding the need for training and the development of Municipal Programs specific to the preservation of the Non State Owned Bridges is vital to the overall condition of the country's 608,000 Bridges. It is emphasized in this training that an effective/balanced Bridge Preservation Program includes all aspects of Preservation, including Reactive and Proactive Maintenance.

WHY CHOOSE US

Between the two instructors, they bring more than seventy years of experience in maintaining and preserving bridges. These gentlemen know and regularly communicate with the national community of Bridge Preservation Practitioners, including: State Bridge Maintenance Engineers, Suppliers, Consultants, Contractors, FHWA Division Engineers, and Academia.

 **CALL US TODAY**
(517) 432 - 8220

 (517) 432 - 8220
 ncpp@egr.msu.edu  tsp2bridge.pavementpreservation.org
 2857 Jolly Road Okemos, MI 48864





In Summary: “Asks”

What do the States Want & Need

1. Continued Development of Database
2. Local Agency Awareness Support
3. Support of Research Roadmap Regular Updating
4. Monthly Accounting of Contributions



QUESTIONS?

COMMENTS (+ or -)