

AASHTO TSP-2-Bridge

UPDATE

Northeast

**Bridge Preservation Partnership
(NEBPP)**

Newport, Rhode Island

September 17-19, 2012

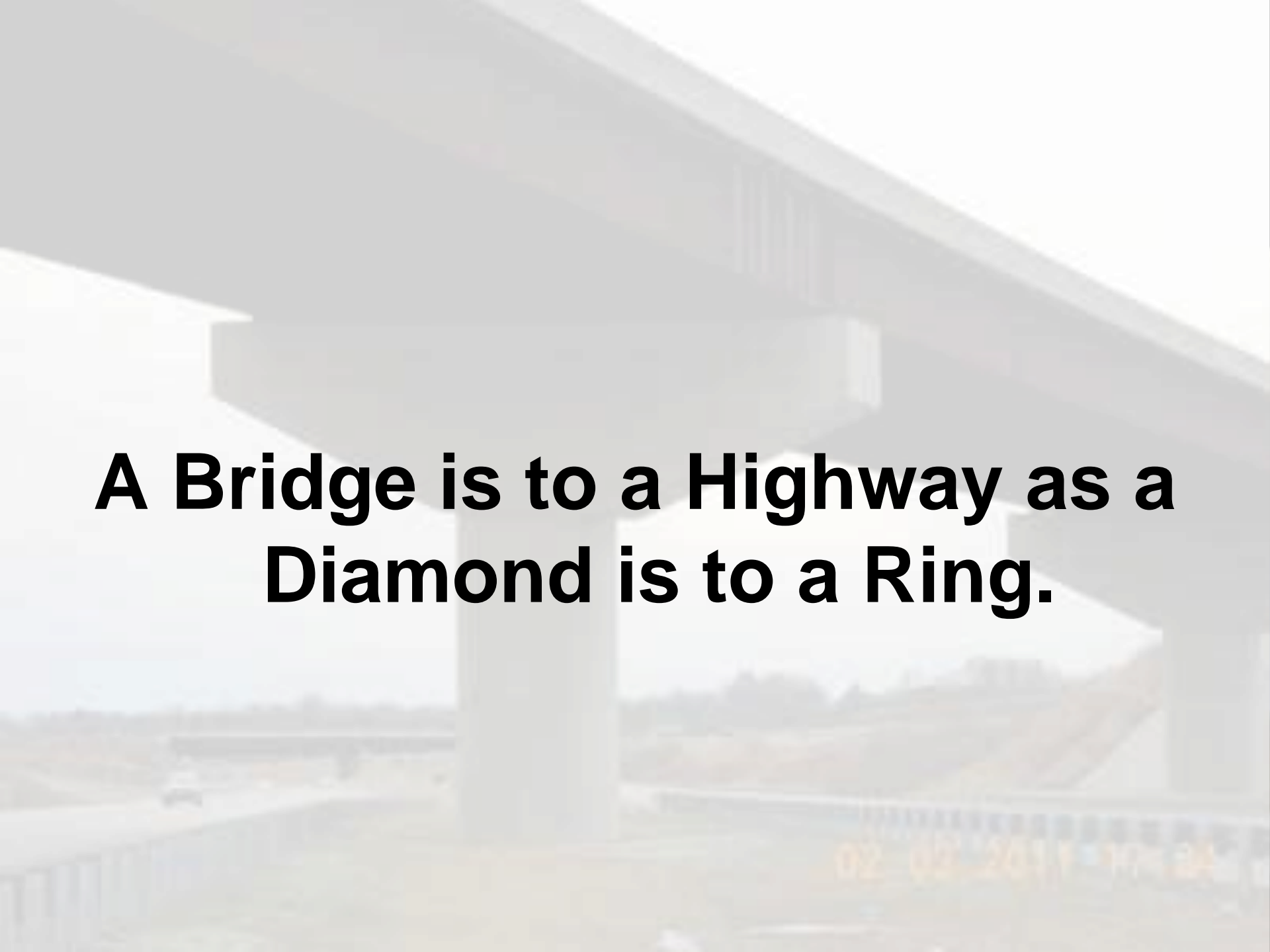
**“We are already late,
we don’t have time to stop for gas.”**

A photograph of a highway interchange with a semi-transparent text overlay. The text "Worst First is Worst!" is centered in a large, bold, black font. In the bottom right corner, there is a faint orange timestamp "02-02-2011 11:28".

Worst First is Worst!

02-02-2011 11:28

Are we Preaching to the Choir?



**A Bridge is to a Highway as a
Diamond is to a Ring.**

02-02-2011 10:28



BRIDGE PRESERVATION

02-02-2011 10:28



**BRIDGE
PRESERVATION
AHEAD**

02-02-2011 10:24

2011 Partnership Meetings

| Site | Attendees | Exhibitors |
|-------------------------|---------------|--------------|
| SE - Raleigh | 92 150 | 12 22 |
| NE - Saratoga Springs | 87 125 | 10 35 |
| NBMIP Conference | 300+/- | 50+/- |
| MW - St. Louis | 82 100+/- | 11 - 15 |
| WB - St. Louis | 85 100+/- | 13 - 15 |

2012 Partnership Meetings

| Site | Attendees | Exhibitors |
|------------------------------|--------------------|------------------|
| SEBPP -Atlanta | 150 163 | 22 36 |
| WBPP- Vancouver | 100 110 | 20 35 |
| NEBPP- Newport | 125 - 115 | 35 - 39 |
| MWBPP- Council Bluffs | | |

2012 Partnership Meetings

LOCATION

DATES

SEBPP - Atlanta, GA

April 23 – 25

WBPP - Vancouver, WA

May 8 – 10

NEBPP - Newport, RI

September 17 - 19

MWBPP- Council Bluffs, IA

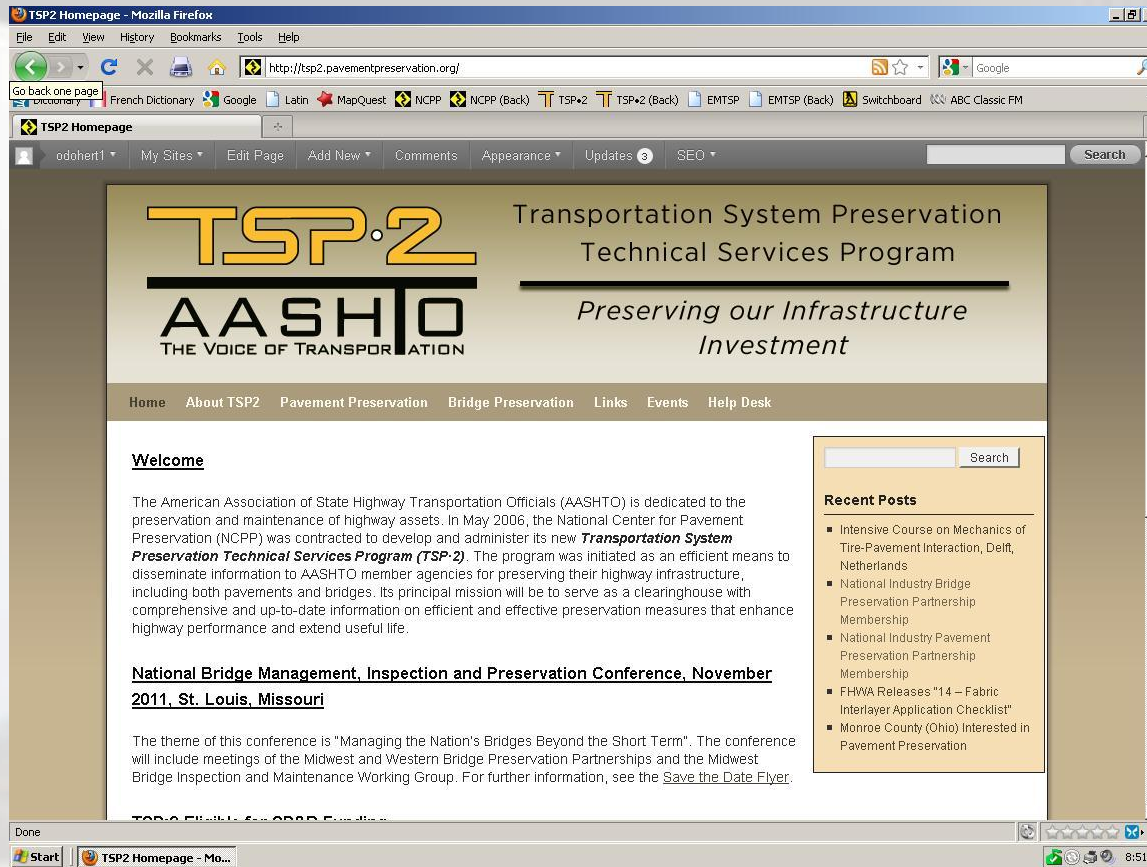
October 16-18

2013

SEBPP- Virginia Beach –March/April

WBPP – San Diego - May

Program Highlights for 2011



Upgrade website

➤ **New Look**

➤ **More flexible platform**

SE Working Groups

Performance Measures

- Seeking examples from SE States & input from ongoing national activities

Public Awareness/Marketing

- Search for videos w/State DOT approaches to Bridge Preservation.
- YouTube channel established; videos posted at www.tsp2.org

Specifications & Materials

- Requesting states to provide relevant specifications

Toolbox and Best Practices

- Working to put relevant material on website

Website Development

- Supporting developments by NCPP

2012 Meeting: Deck, Painting & Performance Measure Working Groups

NE Working Groups

Working groups established to investigate

- Deck overlays
- Deck joint repair
- Beam end treatments
- Bridge washing (funding, permitting & environmental issues)
- Bridge deck protection
- Preservation-friendly design
- Corrosion mitigation

MW Working Groups

Outreach -promote bridge preservation to local agencies:

- MI Bridge Conference, CRAM, & TAMC in Michigan
- Ask other MWBPP states for suggestions on reaching local agency groups
- Include FHWA, NACE, & APWA in this outreach/& promotion
- Attempt to increase attendance of locals and groups at the Annual Meeting – possible attendance funding?

Preservation Matrix state contributors will

- Identify bridge preservation techniques where they excel to provide networking and contact information for others
- Identify the top five bridge preservation strategies that would benefit them the most

Western Working Groups

Bridge Preservation Guide

- Bridge specific; similar to auto maintenance and service manuals;
- Assist in future decisions for maintenance / preservation work; include:
 - List of cyclical and preventive actions for maintaining, extending bridge life
 - Suggested products to use and those originally applied to the structure.
 - Appropriate action / strategic intervals
 - Cost of inaction

Toolbox Development

Working with the other TSP2 Bridge Partnerships, Long Term Bridge Performance program and BPETG to provide input

Western Working Groups

Research

- Send info on relevant ongoing research to TSP-2 website
- Develop region-specific research topics; sort relevant preservation topics
- Advocate bridge preservation on an individual and group basis
- Forward recommendations to SCOBS & SCOM
- NCHRP - review of ongoing projects and consideration for additional projects. TSP2 Website tool development

Qualifying a Systematic Preventive Maintenance Program

- Identify Western states with SMPs qualified for FHWA funding
- Identify states that have not been able to qualify their programs for FHWA funds and assist them in developed a qualified program.

DEFINITION OF BRIDGE PRESERVATION WITH COMMENTARY

APPROVED BY THE AASHTO BOARD OF
DIRECTORS – October 17, 2011

Bridge Preservation:

Actions or strategies that prevent, delay or reduce deterioration of bridges or bridge elements, restore the function of existing bridges, keep bridges in good condition and extend their useful life. Preservation actions may be preventive or condition-driven.

02-10-2011 11:24

- **Commentary:**

- Effective bridge preservation actions are intended to address bridges while they are still in good or fair condition and before the onset of serious deterioration.
- An effective bridge preservation program:
 - 1. employs long-term network strategies and practices that are aimed to preserve the condition of bridges and extends their useful life;
 - 2. has sustained and adequate funding sources;
 - 3. has adequate tools and processes to ensure that the appropriate treatments are applied at the appropriate time.
- An effective bridge preservation program may include, but is not limited to, the following components:
 - A. Qualifying parameters for bridge types and related conditions, i.e. bridge elements or components that are in fair to good condition such as concrete decks, coated steel elements, substructure elements in a marine environment, etc.
 - B. Appropriate treatments such as cleaning, installation of deck overlays, coating of steel elements, installation of cathodic protection and prevention systems, etc.
 - C. Regular needs assessment to identify, prioritize, and estimate the cost of planned work
- **Best practices for Bridge Preservation include:**
 - The method of identification of needs is uniform, specific and repeatable; and based on element level condition data.
 - First level national performance measures are used to set program funding levels and second level agency specific performance measures are used to set objectives for the full range of actions (maintenance, preservation, rehabilitation, and replacement) to optimize bridge conditions.
 - Prioritization process integrates agency objectives for network condition levels and individual bridge risk.
 - Verification and feedback on work completed.
 - A significant portion of resources determined by agency network goals are directed to preservation actions.
 - Agency management champions the preservation of assets.

CHALLENGES AHEAD

- Further development of Regional Partnerships (100% participation, include Canadian Provinces, Travel Approval,?)
- Define and Promote Research Needs
- Promote Municipal involvement (LTAP's, Counties, Cities & Towns)
- Public Awareness
- ?????

(Easy) Questions?



www.tsp2.org

AASHTO
THE VOICE OF TRANSPORTATION

TSP·2
Transportation System Preservation
Technical Services Program

Hard Questions?

Ed Welch

TSP2

Bridge Preservation Engineer

(603) 224-5792 Work

(603) 545-9620 Mobile

(603) 224-5792 Home

welched@egr.msu.edu

eswelch@comcast.net

356 Mountain Rd

Concord, NH 03301