

MWBPP - Midwest Bridge Preservation Partnership

Bill Oliva, PE
Vice-Chair



AASHTO MAC 2019
Grand Rapids, MI

Midwest Bridge Preservation Partnership Board

Committee Structure

Officers

Name

Organization

Office

Jeremy Hunter

Indiana DOT

Chair (State Rep)

Bill Oliva

Wisconsin DOT

Vice-Chair (State Rep)

Tom Donnelly

Transpo Industries, Inc.

Vice-Chair (Industry)

Sarah Sondag

Minnesota DOT

Secretary / Treasurer (State Rep)

Directors **Name**

Organization

Representation

Tom Donnelly

Transpo Industries, Inc.

At-Large Director

Sarah Wilson

Illinois DOT

State Agency Director

Jeremy Hunter

Indiana DOT

State Agency Director

Tim Anderson

FHWA

FHWA Director

James Leaden

Kansas DOT

State Agency Director

Bill Oliva

Wisconsin DOT

State Agency Director

Sarah Sondag

Minnesota DOT

State Agency Director

Nathan Peters

EmSeal

At-large Director

Glenn Washer

University of Missouri – Columbia

Academic Director

Patrick Conner

Indiana LTAP

Local Agency Director

Nick Graziani

Watson Bowman

Industry Organization Director

Ex-Officio (Non-voting)

Nancy Huether

North Dakota DOT

MWBPP Goals



- Maintain State Participation
 - Continue to have good attendance in monthly conference calls and annual meetings
 - Encourage continuity of engagement through additional State attendees
- Encourage Local Agency Participation
- Knowledge Sharing
 - Monthly Topics

MWBPP Meetings



- Monthly Web Meetings
 - First Tuesday of each month
 - State Report-Outs
 - One state reports on some aspect(s) of their bridge preservation program

State Report-Outs

- State experience (policy) using Thin Polymer Overlays (TPO)
- States moving toward using precast (Box) culverts structures
- Nebraska Flooding Response (over 3000 miles of roadways were closed and 27 bridges were impacted. 200 miles of pavement required repairs)



- Bridge Preservation Research – Glen Washer
 - Identify recent and ongoing bridge preservation related research
 - Support Research Roadmap
- Deterioration Modeling – Bill Oliva/Fouad Jaber

2019 MWBPP Annual Meeting



2019 Midwest Bridge Preservation Partnership Meeting

Enhancing Bridge Preservation Practices through Innovation and Collaboration



Save the Date!

The Midwest Bridge Preservation Partnership is a regional forum of bridge practitioners working together to promote the benefits of Bridge Preservation through information sharing, education and application.

October 15–17, 2019

Radisson Hotel Bismarck and
The Bismarck Event Center Bismarck, North Dakota

Indiana | Illinois | Iowa | Kansas | Kentucky | Michigan | Minnesota
Missouri | Nebraska | North Dakota | Ohio | Oklahoma | South Dakota | Wisconsin

Additional info will be available at: <https://tsp2bridge.pavementpreservation.org/midwest-mwbpp/>

AASHTO **TSP2**

2019 MWBPP Annual Meeting

8:40 – 9:20	Working Group Report - NBPP Outreach Effort in Educating Local Agencies / Update on the FHWA BPETG Pocket Guides	Gregg Freeman, Kwikbond Polymers
9:20 – 9:50	BPETG Update - Joints Pocket Guide & Pocket Guides to Micro Training	Jason DeRuyver , Michigan DOT
9:50 – 10:30	BREAK & Industry Displays	All
10:30 – 10:55	Local Agency Participation	Pat Conner, Purdue U. *
10:55 – 11:20	Local Bridge Preservation: Share Experience with Utilization of County Bridge Crew	Wayne Harrall , Kent County Road Commission
11:25 – 11:50	Preservation Strategies and Implementation at NDDOT	Nancy Huether , North Dakota DOT
12:00 – 1:00	LUNCH & Industry Displays	All
6	SESSION 3: Innovative Technologies for Bridge Preservation	Moderator: Bill Oliva, WisDOT
1:00 – 1:45	Fire Damage and Heat Straightening	Fouad Jaber , Nebraska DOT
1:50 – 2:15	Unmanned Aircraft Systems (UAS) - Metro District Bridge Inspection Implementation	Jennifer Wells, MnDOT
2:15 – 2:40	FHWA NDE Update	Hoda Azari , FHWA
2:40 – 3:05	TBD	TBD
3:05 – 3:40	BREAK & Industry Displays	All
3:40 – 4:05	Nondestructive Testing to Better Define Repair Quantities	Brian Pailles , Vector Corrosion Services
4:05 – 4:30	Improving the Quality of Element-level Bridge Inspections	Glenn Washer, U. of Missouri
	Concurrently Running Sessions	
4:30 – 5:15	Business Meeting - Elections & Additional Items	Moderator: Jeremy Hunter INDOT, Chair All Invited
	Industry Meeting – Topics TBD	Moderator: Richard Dunne, Rutgers-CAIT
5:30 – 7:00	Hospitality Hour & Industry Displays or Technical Tour	All
7:00	Dinner on Your Own?	All

Transportation Pooled Fund Study TPF-5(432) Bridge Element Deterioration for Mid-West States Collaboration of AASHTO TSP-2 Members



TRANSPORTATION POOLED FUND PROGRAM

TSP2

TRANSPORTATION SYSTEM PRESERVATION
TECHNICAL SERVICES PROGRAM

AASHTO

BRIDGE PRESERVATION

July 2019

Current Need

- It is necessary for DOTs to have insight to rates of deterioration to be able to anticipate future condition and work actions to manage their bridge assets.
- Deterioration rates and forecasting future condition provides the ability to identify, prioritize, plan, budget, and implement work in a systematic manner.

Utilization & Collaboration of AASHTO TSP2 Midwest Bridge Preservation Partnership

- **TSP2 established relationships** – Bridge preservation experts
- **Common need** – To better manage our existing inventory of bridges
- **Shared vision** – To forecast future bridge condition and work actions
- **Shared resources** – Our historic bridge data and research \$\$
- **Mutual benefit** – More accurate deterioration curves that reflect our common environment, details, and practices





Objective of the Study

- Multiple mid-west DOTs pool **resources** and historic mid-west DOT bridge **data** related to:
 - Historic design/construction details.
 - Operation practices
 - Maintenance activities
 - **Element, Defect, NBI Component, and related Inspection data**

Objective of the Study

- Develop deterioration curves that are specific and focused to address **key transition points** in a life of bridge structures so that **accurate determination of timing of work actions is possible**
- This effort will pool data and create results that will improve accuracy of various bridge management and asset management applications that the member DOTs use (AASHTO BrM, Agile Assets, and homegrown).

Deliverables

- Analyze DOT **Element**, and **Defect**, and **NBI** Component information to develop deterioration curves.
- Produce first generation of select deterioration curves with documented **methodology to update these curves** and add additional element curves.

TPF – 5(432) Bridge Element Deterioration for Mid-West States

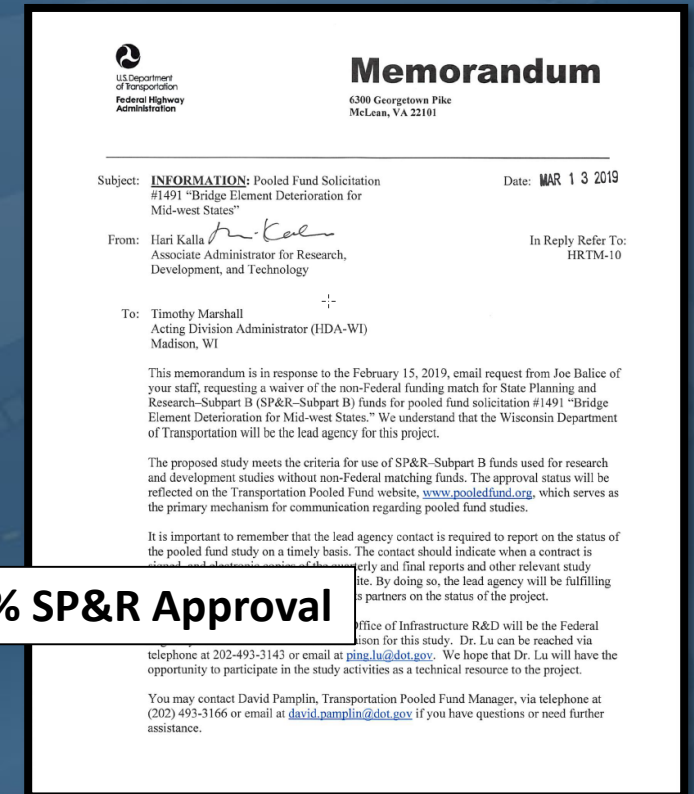
- Deterioration Workgroup Leads
 - Bill Oliva – Wisconsin DOT
 - Fouad Jaber – Nebraska DOT
- Duration: 24 months *TPF -5(432)*
- Cost: \$20,000 each year (2-year project) – **Solicitation \$400,000**
- Lead Agency: Wisconsin Department of Transportation
- Contractor – **Request for Proposal Due August 5th, 2019**



TPF Number: TPF-5(432)

- Wisconsin
- Nebraska
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Michigan
- Minnesota
- North Dakota
- Ohio
- South Dakota

• **12 out of 14 Mid-West DOTs**



100% SP&R Approval