The Future of Bridge Preservation in a Changing World

Panel Moderator: Ed Lutgen, MnDOT & FHWA BPETG (Bridge Preservation Expert Task Group)

Panel Members:

- Dick Dunne, GPI & TRB AKT40 Structures Maintenance Committee;
- Başak Bektaş, Minnesota State University, Mankato & TRB AKT50 Bridge Preservation Committee;
- Michael Brown, Wiss, Janney, Elstner Associates & TRB AKT60 Bridge Preservation Committee
- Graham Bettis, TxDOT & AASHTO Committee on Maintenance Bridge Technical Working Group (MaC Bridge TWG);
- Jim Nelson, IowaDOT & AASHTO Committee on Bridges and Structures Bridge Preservation Technical Committee (COBS BPTC)



TRB Committees

Infrastructure Management and System Preservation Section (AKT00) AKT40 Structures Maintenance AKT50 Bridge Management AKT60 Bridge Preservation

Also collaborate with: AKB20 Steel Bridges AKB30 Concrete Bridges AKB40 Testing and Evaluation of Transportation Structures

AKT40 Structures Maintenance

Structure inspection (including UAS) Underwater Inspection [AKT40(1)] Bridge Steel Coatings [AKT40(2)] Corrosion [AKT40(4)] Structure strengthening Structure upgrading Focus on trans. structures Non-bridge structures preservation

Structure preventive maintenance Structure repair Structure rehabilitation

NDE/SM for Bridge Mgt & Pres. [AKB40(1)] Effective communication of needs Cost effective preservation strategies Maximization of structure life Design for inspectability Coordinate w/ AASHTO & FHWA [AKB00(1)]

Incorporate inspection data and NDE/SM data into BMS Maintenance cost data for BMS

AKT60 Bridge Preservation

Bridge preservation (general) Preservation performance measures Quantification of preservation benefits Proactive use of cost-effective treatments How and why preservation fails Tools for preservation decision-making Implications of design on service life Feedback to design process

Bridge preservation timing Benefits of preservation actions and service life impacts for BMS

AKT50

Bridge Management

Management of bridge networks Economic decision making Deterioration modeling Identifying critical data needs Vulnerability assessments Safety and Security of Bridges and Structures [AKT50(1)] Life Cycle Cost Analysis (LCCA) [AKT50(2)]

TRB AKT60–Bridge Preservation

Committee Scope:

This committee is concerned with research, methods and tools that can <u>extend the useful life of bridges through</u> <u>preservation treatments</u>, and design and construction <u>practices</u>.

The committee advances <u>bridge preservation research</u> and provides a <u>forum for practitioners</u>, <u>academia and industry</u> to share information on preservation needs and emerging topics in bridge preservation.

Michael C. Brown, PhD, PE, Chair

https://sites.google.com/view/trb-bridge-preservation/home

BRIDGE PRESERVATION AHEAD

DB

DNAL BRIDGE PRESERVATION CONFERENCE 2024

TRB AKT60 Committee Members and Focus

23 Current Members

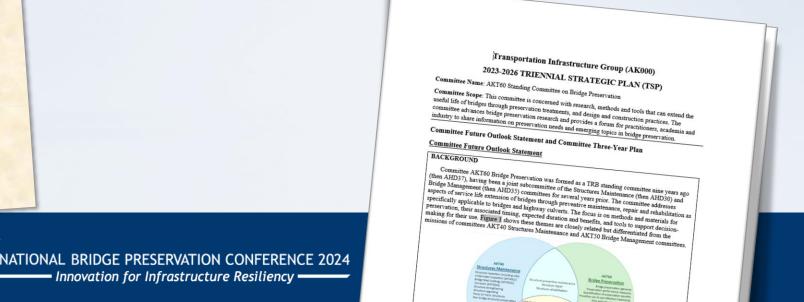
- 1 Federal government
- 5 State government
- 3 Industry or Producers
- 12 Consultant
- 2 Academia
- Friends self-appoint via myTRB.org

Members:

- Rai Ailaney \checkmark
- Sreenivas Alampalli \checkmark
- Graham Bettis \checkmark
- Shane Boone
- David Brodowski
- Michael Brown
- Richard Dunne \checkmark
- Andrew Foden Mohamed ElBatanouny
- Reed Ellis
- Michael Eno

Drew Garceau Amir Gheitasi Nancy Huether Brian Kozy Marybeth Miceli James Nelson Rebecca Nix William Oliva Kevin O'Neill

- 2023-2026 TSP Focus Areas
 - Design •
 - Construction
 - Innovative Technologies and Practices
 - Resilience
 - Performance Measurement
 - Workforce Development



Behrouz Shafei Anna Tarasova Eric Yermack \checkmark