

National Working Group Bridge Management Systems

Membership:

Co-Chair: Todd Springer, Virginia DOT

Co-Chair: Dave Juntunen, The Kercher Group.

Vice-Chair: Jeff Milton, Virginia DOT

Secretary: John Hooks, NCPP

Working Group Scope

- Promote the development and/or adoption of best practices for Bridge Management Systems (BMS)
- Makes implementation less intimidating.
 - Basic
 - Intermediate
 - Advanced
- Monitor and share the national development of management systems as they evolve.



Basic Bridge Management System

- Collection of Inventory and Condition Data that is accurate and meets the needs of an agencies BMS.
- Goals and performance measures.
- Monitor condition and performance trends.

Intermediate Bridge Management System

- Deterioration models
- Network Level Analysis
- Forecast of future network bridge condition and performance measures.
- Gap analysis of target condition versus desired goals.
- Data to support and validate agency rules for network level bridge preservation policies.

Advanced Bridge Management Systems

- Identify the most appropriate actions for individual bridges
- Benefit-Cost Analysis
- Life-cycle cost and user cost analysis
- Risk Analysis,
- Prioritize and optimize projects and programs
- Scenario comparisons

Deliverable Products

- White paper that defines a tiered approach ✓
 - <https://tsp2bridge.pavementpreservation.org/files/2018/10/BMS-Working-Group-Attachment-A-Final.pdf>
- **Survey of Practice (Ongoing)**
- Develop a proposal for a National BMS Scan specifically to determine the state of the practice. (Plan to do in 2021)
- Develop general guidance and examples



BMS Survey

- General
 - What BMS do you have?
 - Studies to set up your BMS
 - How is setup and calibration going?
 - What are your biggest challenges?
 - What has been helpful?
 - What research is needed?



BMS Survey

- General
- Condition Data and Deterioration Modeling
- Objectives & Benefits, Risk, Objectives, Life Cycle Cost Analysis, Performance Management Metrics
- Actions, Action Costs, and Project Types
- Optimization



Next Steps

- Compile survey results and share
- Develop general guidance and examples
- Looking for More State DOT members (Want two from each TSP-2 Region)

Thank You!