

2019 Bridge & Tunnel Inspectors Conference

Topics of Interest

Bridge Inspection Procedures/Manuals/Guidelines

- New FHWA Coding Guide – Coding Guide Changes Update
- Updates to AASHTO Bridge Manual on Bridge Inspection
- Agency crafted pocket field coding guide
- Fracture critical inspection procedures
- Procedures/Timelines for Critical Activities (Tracking Progress)
- NCHRP 14-29: Assessing, coding, and marking of highway structures in emergency situations
- MUTCD Bridge posting signage
- Management question - MOA with other states/agencies/locals for inspection

FHWA Policies & Programs/National Legislation/23 Metrics

- Tunnel inspection training/requirements/implementing new standards
- 23 FHWA Metrics – Plans of Corrective Action (PCAs) (Possible round table discussion)
- Dealing with the FHWA Metrics (the good, the bad, and the ugly)
- Things to improve performance in various metrics
- State of the Bridge Program – National results from metrics assessments
- Implementing MAP-21 Provisions
- Upcoming highway legislation - What's next? Funding?
- FHWA policy and program initiatives underway
- FHWA technology initiatives and NDE for substructure and superstructure
- NBE - Discussion on elements (or state-specific elements)

NBI Data

- NBI Data Integrity – What states are doing to assure accuracy of the data
- Changes to the NBI
- Bridge inspection data entry electronics/field apps

Procedures/Manuals/Guides

- Agency crafted pocket field bridge inspection coding guides
- Agency crafted Bridge inspection manuals
- Fracture critical inspection procedures
- Procedures/timelines for critical activities (Tracking progress)
- Presentations on QC/QA programs
- Training update - LRFR, 2-week, virtual bridge, WBT, tunnel comprehensive, etc.

Inspections - General

- Inspector Development
 - Inspector view
 - Supervisor view
- State-developed inspector training (hydraulic, load rating, FC, UW, Refresher)
- Unique inspection examples
- Other bridge inspection programs (BLM, BIA, COE, NPS, etc.)
- How to inspect hidden elements or hard to access elements (like covered bridges)
- Safety topics - fall restraint systems, traffic, confined space, different access
- What to look for in everyday inspections
- Implementation of the New AASHTO bridge inspectors process
- Inspection of moveable bridges
- Access UBIT? Ropes? Drones?
- Case studies/lessons learned on non-typical inspection issues
 - SR 2 lessons learned
 - CA I-10 lessons learned
 - FC bridge washing lessons learned
- Other methods for inspection for structures with less accessibility
- Risk based inspection (Frequency)
- Making bridge inspection a higher priority with locals
- Budgeting - Keeping bridge inspection a priority with dwindling agency budgets/funds
- Centralized certification for bridge inspectors (state-specific)
- NBIS PM delegation - Define the details, task, authorities of "project manager"?
- What does it mean to be PM and how do you go about it? How to check if going right?
- Assessing and reporting the condition of "stehlo" concrete protective coatings
- Damage inspections, heat straightening, corer plate repairs, repairs general
- Inspection friendly details in design

Bridge Incidents and/or Failures

- I-5 Skagit River Bridge – 5 years later
- Emergency Events – Case studies and process during an event
- Continued study of risk-based inspection frequencies, especially for fc bridges
- Incorporating inspection information into load rating and analysis for repair
- More exposure to national issues found in bridge inspections
- Case studies on failure mechanisms
- Forensic Engineering
- Process to go through in an ER Event
- Mississippi bridge closures
- Preparing for the "Big One" (Earthquake procedures)
- Emergency relief management (ER response, ER management, ER coordination with other states)
- Failure of rapid construction methods

Load Rating/Posting

- SHV Load Rating Challenges
- How to post for SHVs? Posting/Lack of enforcement issues
- More load testing more NDE
- Posting/lack of enforcement issues
- Load rating policies in different states
- Gussett plate load rating results

Underwater

- Remote Operated Vehicle (ROV) Technologies
- Example of underwater inspection procedures

Tunnels

- Tunnel inspection requirements/practices
- Tunnel scanning tour presentation
- Alaska Way Viaduct Tunnel Project - Bertha tunneling and opening of tunnel
- Tunnel inventory and coding guide
- National Tunnel Inspection Standards (NTIS) Program

Scour

- Discussion of Plan of Actions (POAs) implementation and event documentation
- Other states similar scour monitoring programs or devices
- Scour Critical POAs for state/county/local agencies/federal agencies
- Improvements in scour analysis and coding
- FHWA Plans of Corrective Actions
- Scour unknown foundations - POAs

Complex Bridges (Movable, segmental, suspension, cable stayed, floating, etc.)

- Complex bridge inspection case studies

Fracture Critical

- Fracture critical inspection case studies
- CRC Trunnion inspection/fracture mechanics evaluation
- Sherman-Minton Bridge lessons learned (KY)
- Snohomish River Bridge trunnion evaluation
- Corrosion along pre-stressing strands in adjacent pre-stressed slab bridges.
- Fatigue-prone detail inspection case studies
- WA Bridge washing program to aid in FC bridge inspection

Emerging Technologies

- BINS Training Sessions/NDE Technology
- Mobile Inspection - Tablets
- ROV Underwater Bridge Inspection
- Drone Inspection Use
- FHWA technology initiatives
- New technology available for bridge inspection
- ODOT research on environmental effects on FRP
- Electronic reporting connected to DOT NBI database