

**NCHRP Research Update
Bridge Preservation and Maintenance**

July 2017

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Complete NCHRP Projects

- NCHRP 14-24 – “Guidance for Communicating the Value of Highway System Maintenance and Preservation” – Research Agency: High Street Consulting Group – Project complete and NCHRP Report 742 issued.
- NCHRP 14-27 – “A Guide for the Preservation of Highway Tunnel Systems ” – Research Agency: Gannett Fleming, Inc. – Project complete and NCHRP Report 816 issued.

Complete NCHRP Projects

- NCHRP 14-29 – “Assessing, Coding, and Marking of Highway Structures in Emergency Situations” - Research Agency: Oregon State University – Project Complete - The research report has been published as NCHRP Report 233. The Assessment Process Manual, Coding and Marking Guidelines are published as Volumes 2 and 3, respectively, of the report. The Guidelines for Development of Smart Apps will be available on the TRB website (www.trb.org) as NCHRP Web-Only Document 223. To facilitate use, the assessment forms and training material will be posted on the NCHRP Report 833 summary page and will be available by searching the TRB website for NCHRP Report 833.

Complete NCHRP Projects

- NCHRP 14-32 – “Proposed Revisions to the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual” - Research Agency: Parsons Brinckerhoff – Final Report Issued in January 2016 - AASHTO SCOBS adopted Manual on June 29, 2016 – AASHTO Movable Bridge Inspection, Evaluation, and Maintenance Manual, 2nd Edition published and available for purchase on AASHTO website.

Complete NCHRP Projects

- NCHRP 12-100 – “Guidelines for Maintaining Small Movement Bridge Expansion Joints” – Research Agency: University of Delaware – Research Report and Guidelines Complete – Report posted on TRB website - Guidelines under review for possible publication as AASHTO document.

Complete NCHRP Projects

- NCHRP 14-28 – “Condition assessment of bridge post tensioning and stayed cable systems using NDE Methods” – Research Agency: Texas A&M Transportation Institute – Research complete- Report and Inspection Guidelines (NCHRP Report 848) issued and posted on TRB website.

Complete NCHRP 20-07 Projects

- NCHRP Project 20-07/Task 378 – “Assessing Risk for Bridge Management” – Research Agency: Western Management & Consulting LLC – Project complete – Agency's final report submitted to AASHTO SCOBs.
- NCHRP Project 20-07/Task 379 – “Update the SCOM Strategic Plan” – Work complete - Workshop conducted July 9-10,2015, at the National Academies' Beckman Center in Irvine, California – Updated plan published on SCOM website.

Complete NCHRP 20-07 Projects

- NCHRP Project 20-07/Task 387 – “Maintenance Actions for Fatigue Cracking in Steel Bridge Structures” - Research Agency: Purdue University – Research complete – Report issued and posted on TRB website.

Active NCHRP Projects

- NCHRP 14-30 – “Spot Painting to Extend Highway Bridge Coating Life” – Research Agency: Kentucky Transportation Center – Research in progress – Estimated completion date: July 31, 2017.
- NCHRP 10-97 – “Detection and Remediation of Soluble Salt Contamination Prior to Coating Steel Highway Structures” – Research Agency: Elzly Technology Corporation – Research in progress - Estimated completion date: July 15, 2018.

Active NCHRP Projects

- NCHRP 14-23 – “Practical Bridge Preservation Actions and Investment Strategies” – Research Agency: Michigan State University – The work under the current task descriptions of NCHRP 14-23 has been terminated. The work that was completed through Phase 1 and Phase 2 has been documented in three un-reviewed deliverables submitted by the research team.
- Further research related to bridge preservation will be performed under the new NCHRP Project 14-36 – “Proposed AASHTO Guide for Bridge Preservation Actions”. Research Agency: University of Colorado - Boulder – Research in progress - Estimated completion date: February 12, 2018.

Active NCHRP Projects

- NCHRP 12-104 – “Guidelines to Improve the Quality of Element-Level Bridge Inspection Data ” – Research Agency: University of Missouri – Research in progress - Estimated completion date: November 10, 2017.
- NCHRP 12-108 – “Guide Specification for Service Life Design of Highway Bridges” - Research Agency: Modjeski & Masters Inc. – Research in progress - Estimated completion date: February 28, 2019.

Active NCHRP 20-07 Projects

- NCHRP Project 20-07/Task 380 – “Update the AASHTO Maintenance Manual for Roadways and Bridges” – Research Agency: Volkert Inc. – Research in progress - Estimated completion date: December 5, 2017.

Active NCHRP 20-07 Projects

- NCHRP Project 20-07/Task 397 – “Characteristics of Decommissioned Bridges” – Research Agency: Iowa State University – Research in progress – Estimated completion date February 20, 2018.
- NCHRP Project 20-07/Task 399 – “Identifying Bridge Maintenance and Preservation Activities which Minimize Environmental Impact” – Research Agency: Greenman Pedersen – Research in progress - Estimated completion date January 30, 2018.

Complete NCHRP Domestic Scan

- NCHRP Domestic Scan 15-03 – “Successful Preservation Practices for Steel Bridge Coatings” - Information documented by the scan team will provide effective strategies and other specific information for use by bridge owners in their preservation of coating systems for steel structures that will result in substantial cost savings and significant extension of service life – A peer exchange workshop was conducted from May 23 – 26, 2016 in Orlando, Florida – Final scan report issued and posted on TRB website.

Active NCHRP Domestic Scan

- NCHRP Domestic Scan 17-01 – “Successful Approaches for use of Unmanned Aerial Systems by Surface Transportation Agencies” – Scan team is currently being formed.

Pending NCHRP Project

- “Improving the Guidelines for Inspection and Strength Evaluation of Suspension Bridge Cables.”

The research objective is to improve the current industry practice in inspection and strength evaluation of existing suspension bridge main cables.

This project has been funded by the SCOR and will be part of this year’s NCHRP Program (Project F-07).