NCHRP Research Update
Bridge Preservation and Maintenance

July 2018

J. L. Milton
Bridge Preservation Specialist
Virginia Department of Transportation
Complete NCHRP Projects


Complete NCHRP Projects

Complete NCHRP Projects


Complete NCHRP Projects

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. The AASHTO Maintenance Committee is working to publish the report as an AASHTO document.
Complete NCHRP Projects

Complete NCHRP Projects

Complete NCHRP Projects

Complete NCHRP 20-05 Projects


• NCHRP Project 20-05/Topic 46-11 –”Post Extreme Event Damage Assessment and Response for Highway Bridges” – Iowa State University – Project complete - Synthesis 497 issued and posted on TRB website.
Complete NCHRP 20-05 Projects


• NCHRP Project 20-05/Topic 20-07 – “Removing Concrete from Bridges” – Project complete – Synthesis can obtained from TRB website.
Complete NCHRP 20-07 Projects


Complete NCHRP 20-07 Projects

Complete NCHRP 20-07 Projects


Complete NCHRP 20-07 Projects


• 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


Active NCHRP Projects

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.

Active NCHRP Projects


Active NCHRP 20-05 Projects


Active NCHRP 20-07 Projects

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 the Use of Unmanned Aerial Systems by Surface Transportation Agencies” - This Scan will examine how agencies and their contractors are using UAS to facilitate inspection, inventory, survey, and other operations and dealing with regulatory and other impediments to UAS deployment. ” – Estimated Completion Date November 2018.
Active NCHRP Domestic Scan

- NCHRP Domestic Scan 17-03 – “Experiences in the Performance of Bridge Bearings and Expansion Joints Used for Highway Bridges” - This scan will facilitate the exchange of recent ideas and best practices for Bridge Bearings and Expansion Joint design, performance evaluation, maintenance and repair/reconstruction - Estimated Completion Date November 2018.
Pending NCHRP Projects

• NCHRP Project 12-115 - “Guidelines for Inspection and Strength Evaluation of Suspension Bridge Main Cable Systems” - Research contractor selected and the contracting process is underway.

• NCHRP Project 12-117 – “Effective Use of Duplex Coating Systems to improve Steel Bridge Structure Durability” – This project was selected for the NCHRP Fiscal Year 2019 Program.