



## COURSE NUMBER

FHWA-NHI-130053V

## COURSE TITLE

### Bridge Inspection Refresher Training (VIRTUAL DELIVERY)

NHI-130053V Bridge Inspection Refresher is a 3-day, online virtual course and builds upon participants' prior knowledge of bridge inspection. The major goals of this course are to refresh the skills of practicing bridge inspectors in fundamental visual inspection techniques; review the background knowledge necessary to understand how bridges function; communicate issues of national significance relative to the nation's bridge infrastructure; re-establish proper condition and appraisal rating practices; and review the professional obligations of bridge inspectors. This course is based on the "Bridge Inspector's Reference Manual," 2002 (updated in 2006) with reference to the AASHTO Manual as defined by the National Bridge Inspection Standards regulation. Core course topics include inspector qualifications and duties, bridge mechanics, record keeping and documentation, fatigue and fracture in steel bridges, traffic safety features, safety, National Bridge Inventory (NBI) component ratings, superstructure type identification, inspection techniques and case studies for decks, superstructures, bearings, substructures, channels and culverts, and a mock bridge inspection classroom exercise. Optional topics include fiber reinforced polymer, inspection of truss gusset plates, inspection of adjacent box beams, bridge site signing, structure inventory and appraisal overview, common NBI miscodings, element level ratings and timber superstructures. For this virtual online version of the course (3-day), the host agency will need to select three (3) desired optional topics. Course instructors will contact the host prior to the course to complete a pre-course questionnaire, determine optional topics to be taught, and discuss the course schedule.

## OUTCOMES

Upon completion of the course, participants will be able to:

- Describe the current overall condition and condition trends for the nation's bridges
- Identify the recent National Bridge Inspection Standards (NBIS) revisions
- Accurately code National Bridge Inventory (NBI) items
- Identify and document inspection observations using standard methods
- Evaluate defects based on the 2008 AASHTO Manual for Bridge Evaluation
- Code NBI components using the Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges
- Determine if overall structure/structural member is fracture critical prone
- Accurately inspect and evaluate a bridge's four traffic safety features
- List the keys to ensuring a safe work environment
- Explain bridge responses and bridge mechanic principles

## TARGET AUDIENCE

The target audience for this course includes Federal, State, and local agencies and private sector personnel employed in inspecting bridges or managing bridge inspection programs. The course is built to accommodate those that have completed comprehensive bridge inspection training (130055 or similar) or met the criteria for a bridge inspector under the State's procedures or requirements.

**TRAINING LEVEL:** Intermediate

**FEE:** 2021: \$370 Per Person; 2022: N/A

**LENGTH:** 18 HOURS (CEU: 1.8 UNITS)

**CLASS SIZE:** MINIMUM: 15; MAXIMUM: 20

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