



## COURSE NUMBER

FHWA-NHI-134067

## COURSE TITLE

### Construction Inspection of Bridge Rehabilitation Projects

This 4-day course has been designed to improve quality, ensure uniformity, and establish a minimum standard for bridge rehabilitation.

The keys to successfully ensuring quality on rehab jobs are: knowing what should happen on a given job; identifying problems when they do happen; and correctly using available resources to solve the problem. This course presents innovative and best practice inspection techniques for each structural element of a bridge.

This course will introduce participants to distress and deterioration they may encounter when working with concrete or steel that requires repair. It is essential to identify the issues that harm these materials because it is often poor construction techniques that lead to reduced structural condition or shortened service life. The focus then turns to construction and inspection practices pertaining to concrete decks, steel superstructures, concrete superstructures and substructures, joints, and bearings.

The course is activity-rich, using discussions of best practices, small and large group activities for identifying critical inspection moments, and a wide array of case studies from real projects to emphasize the importance of applying these techniques in the field.

## OUTCOMES

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

- Relate observable deterioration of bridge structural elements to distress mechanisms
- Associate potential construction and materials problems
- Explain the role of the construction inspector as part of the overall project team
- Interpret drawings and specifications
- Describe rehabilitation sequences for various bridge systems, bridge types, and materials
- Explain basic inspection and testing of materials
- Make and maintain sufficient records

## TARGET AUDIENCE

This course will be appropriate for inspectors with 1-5 years of experience who are seeking a better foundation in bridge rehabilitation techniques. They will likely have a basic grasp of construction and inspection methods, bridge terminology, and causes of distress and deterioration, although this information will be reviewed at the beginning of the course. The course will be appropriate for experienced bridge inspectors who are seeking to learn about innovative methods in bridge rehabilitation and obtain a refresher on familiar inspection methods. Construction supervisors, transportation department field inspectors, construction inspectors, field engineers, resident engineers, structural engineers, materials engineers, and other technical personnel involved in the inspection of bridge rehabilitation projects will benefit from this course. The course is designed for participants without an in-depth engineering background. However, those with engineering backgrounds are welcome to attend and can provide valuable perspective in the context of group activities and discussions.

**TRAINING LEVEL:** Basic

**FEE:** 2021: \$475 Per Person; 2022: N/A

**LENGTH:** 4 DAYS (CEU: 2.4 UNITS)

**CLASS SIZE:** MINIMUM: 20; MAXIMUM: 30

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