

2016-2017
Program Sponsors

BETA Group, Inc.

Childs Engineering
Corporation

Dewberry

Green International
Affiliates, Inc.

GZA
GeoEnvironmental,
Inc.

Haley & Aldrich,
Inc.

Hayward Baker, Inc.

Helical Drilling

Howard Stein
Hudson

Hoyle, Tanner,
& Associates

McMillen Jacobs
Associates

N.E. Bridge
Contractors, Inc.

Northeastern
University

Pare Corporation

Skanska Civil

Stantec

TranSystems

Tufts University

Weston & Sampson
Engineers, Inc.



FHWA-NHI-130078

Fracture Critical Inspection Techniques for Steel Bridges

Tuesday, November 29, 2016 – Friday, December 2, 2016

Hilton Garden Inn Worcester, 35 Major Taylor Boulevard, Worcester, MA

Tuesday through Thursday, 8:00AM – 4:30PM

Friday, 8:00 AM – 2:00 PM

This training examines current practices, while addressing new and emerging technologies available to bridge inspectors. In addition, the course features classroom training; hands-on workshops for popular types of nondestructive evaluation (NDE) equipment; and a case study.

The first day of the training focuses on the concept of fracture critical members (FCMs), FCM identification, failure mechanics, fatigue in metal, and an overview of NDE methods. Day two includes demonstration sessions and hands-on applications of NDE techniques for dye penetrant, magnetic particle testing, Eddy current testing, and ultrasonic testing. Days three and four emphasize inspection procedures and reporting for common FCMs, including problematic details, I-girders, floor beams, trusses, box girders, pin and hanger assemblies, arch ties, eyebars, and cross girders/pier caps. The course will conclude with a case study detailing the preparation of an inspection plan of a fracture critical bridge.

Please note: Prior to taking this course, participants should have completed NHI course 130055, Safety Inspection of In-Service Bridges, or possess equivalent field experience relative to bridges. Participants also should have a thorough understanding of bridge mechanics and bridge safety inspection procedures as required by the National Bridge Inspection Standards. Please visit the NHI website at www.nhi.fhwa.dot.gov or contact them at 703/235-0500 for additional information on the prerequisite course requirements.

Registration Deadline: Friday, October 28, 2016

Registration Fees: \$1,500 Members, \$1,800 Non-Members

Registration fee includes course materials, continental breakfast, breaks, and lunch.

Information/Registration:

Attendance for this program is limited to 30 participants. Individuals who attempt to register after the course is closed will be added to a waiting list.

Reservations will be accepted on a first-come first-serve paid reservation basis. Payment must be received with registration to secure a slot. Register to attend this course and pay by credit card online at <http://bit.ly/NHI-112916>. To register online for an event at the BSCES member rate you must login using your BSCES assigned username and password. If you do not know your login information call 617/227-5551. You can also register for this event by mail or email. To do so, download and complete a [BSCES Event Registration Form](#) and follow the submission instructions. Cancellations or no shows after October 28, 2016 will be billed.