

and evaluation of all highway bridges in accordance with 23 U.S.C. 151.

**§ 650.303 Applicability.**

The National Bridge Inspection Standards (NBIS) in this subpart apply to all structures defined as highway bridges located on all public roads.

**§ 650.305 Definitions.**

Terms used in this subpart are defined as follows:

*American Association of State Highway and Transportation Officials (AASHTO) Manual.* “The Manual for Bridge Evaluation,” First Edition, 2008, published by the American Association of State Highway and Transportation Officials (incorporated by reference, see § 650.317).

*Bridge.* A structure including supports erected over a depression or an obstruction, such as water, highway, or railway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 feet between undercopings of abutments or spring lines of arches, or extreme ends of openings for multiple boxes; it may also include multiple pipes, where the clear distance between openings is less than half of the smaller contiguous opening.

*Bridge inspection experience.* Active participation in bridge inspections in accordance with the NBIS, in either a field inspection, supervisory, or management role. A combination of bridge design, bridge maintenance, bridge construction and bridge inspection experience, with the predominant amount in bridge inspection, is acceptable.

*Bridge inspection refresher training.* The National Highway Institute “Bridge Inspection Refresher Training Course”<sup>1</sup> or other State, local, or federally developed instruction aimed to improve quality of inspections, introduce new techniques, and maintain the consistency of the inspection program.

*Bridge Inspector’s Reference Manual (BIRM).* A comprehensive FHWA man-

ual on programs, procedures and techniques for inspecting and evaluating a variety of in-service highway bridges. This manual may be purchased from the U.S. Government Printing Office, Washington, DC 20402 and from National Technical Information Service, Springfield, Virginia 22161, and is available at the following URL: <http://www.fhwa.dot.gov/bridge/bripub.htm>.

*Complex bridge.* Movable, suspension, cable stayed, and other bridges with unusual characteristics.

*Comprehensive bridge inspection training.* Training that covers all aspects of bridge inspection and enables inspectors to relate conditions observed on a bridge to established criteria (see the Bridge Inspector’s Reference Manual for the recommended material to be covered in a comprehensive training course).

*Critical finding.* A structural or safety related deficiency that requires immediate follow-up inspection or action.

*Damage inspection.* This is an unscheduled inspection to assess structural damage resulting from environmental factors or human actions.

*Fracture critical member (FCM).* A steel member in tension, or with a tension element, whose failure would probably cause a portion of or the entire bridge to collapse.

*Fracture critical member inspection.* A hands-on inspection of a fracture critical member or member components that may include visual and other non-destructive evaluation.

*Hands-on.* Inspection within arms length of the component. Inspection uses visual techniques that may be supplemented by nondestructive testing.

*Highway.* The term “highway” is defined in 23 U.S.C. 101(a)(11).

*In-depth inspection.* A close-up, inspection of one or more members above or below the water level to identify any deficiencies not readily detectable using routine inspection procedures; hands-on inspection may be necessary at some locations.

*Initial inspection.* The first inspection of a bridge as it becomes a part of the bridge file to provide all Structure Inventory and Appraisal (SI&A) data and other relevant data and to determine baseline structural conditions.

<sup>1</sup>The National Highway Institute training may be found at the following URL: <http://www.nhi.fhwa.dot.gov/>