

Changes in the Bridge Safety Inspection Program

OWNER RESPONSIBILITIES

Owners of structures that carry motorized traffic more than 20 feet long are required to inspect the bridge bi-annually and register the structure as part of the National Bridge Inventory.

The bridge inspections are intended to locate and evaluate any structural deficiencies to protect the motoring public. The Federal Highway Administration (FHWA) and the Michigan Department of Transportation (MDOT) use information from these inspections to develop priorities for funding bridge repairs or replacement. Units of government that do not provide up-to-date bridge inspections could jeopardize repair funding.

BACKGROUND

Many bridges were constructed during the 1950s and 1960s as part of the road and highway building boom. At 50 to 60 years old, many of these structures have reached or passed their intended useable life span. This increases the importance of inspecting bridges following the National Bridge Inspection Standards (NBIS).

While many of the bridges may not be structurally deficient, they may be

classified as "functionally obsolete" by FHWA. Functional obsolescence usually means that the bridge has an outdated design such as: traffic lanes that are too narrow by current standards, inadequate guardrails, or other factors. Also, many older bridges over waterways may not have enough clearance or a large enough



area beneath the bridge to safely pass the flow during flooding conditions.

While cataloging "functional obsolescence" is important, the identification of structural deficiencies that could affect public safety is the most important role of a bridge inspection.

REGULATION CHANGES

The National Bridge Inspection Standards are a set of federal regulations that were introduced in the late 1960s and have evolved since that time. Previously, inspectors had to be either: a registered professional engineer, have five years of bridge inspection experience and completed a training course, or be certified as a bridge safety inspector in the National Society of Professional Engineer's training.



Now, NBIS requires completing a FHWA training course for all qualified inspectors. NBIS has also added two other methods to obtain qualification:

- Have a bachelor's degree from a college accredited by the Accreditation Board for Engineering and Technology (ABET), pass the Fundamentals of Engineering examination, and have two years of inspection experience.
- Have an associates degree in engineering or engineering technology from an ABET accredited college and four years of inspection experience.

All inspectors are required to have 24 hours of advanced training every five years.



These changes will help maintain uniform qualifications for inspectors but it also has limited the number of approved bridge safety inspectors.

For more information about the NBIS program or to speak with a qualified bridge safety inspector, call Bob Verschaeve at Gosling Czubak Engineering Sciences, 800-968-1062.

Did you know...?

There are nearly 11,000 bridges in Michigan and more than 25% of these bridges are classified by the National Bridge Inventory as structurally deficient or functionally obsolete.



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