

NATIONAL BRIDGE AND TUNNEL INVENTORY AND INSPECTION STANDARDS

Purpose

To protect the safety of the traveling public and support the movement of people and goods on which the economy relies, there are Federal requirements for the inventory and inspection of bridges and tunnels on all public roads and the standards used for the inventory and inspections. This provides a basis for a data-driven, risk-based approach to, and cost-effective strategy for, bridge and tunnel investment.

Statutory citation(s): MAP-21 §1111; 23 USC 144

Funding

The following funding may be used to carry out provisions related to bridge and tunnel inspections, standards for inspection, and related training:

- The Secretary may use funds authorized for the administrative expenses of the Federal Highway Administration and funds authorized for and the Highway Research and Development, the Technology and Innovation Deployment, and the Training and Education Programs [23 USC 104(a) and 503];
- The States may use funds apportioned under the National Highway Performance Program, the Surface Transportation Program, and the Highway Safety Improvement Program [23 USC 104(b)(1) and 104(b)(3)] (See Bridge Questions and Answers at: <http://www.fhwa.dot.gov/map21/qandas/qabridges.cfm> for more information on the use of NHPP and HSIP funds for bridge and tunnel inspections.);
- Indian tribes may use funds made available under the Tribal Transportation Program [23 USC 202]; and
- Federal agencies may use funds made from the Federal Lands Transportation and the Federal Lands Access Programs for transportation planning, asset management systems, and data collection [23 USC 203 and 204]

Program features

The program has the following features for various bridge and tunnel activities:

National Bridge and Tunnel Inventories

The Secretary (USDOT), in consultation with the States and Federal agencies with jurisdiction over highway bridges and tunnels, is required to:

- Inventory all bridges on public roads, on and off Federal-aid highways, including tribally owned and Federally owned bridges, that traverse waterways, other topographical barriers, other highways, and railroads;
- Inventory all tunnels on public roads, on and off Federal-aid highways, and including those that are tribally owned and Federally owned;
- Classify the bridges according to serviceability, safety and essentiality for public use. The classification is to include the potential impacts to emergency evacuation routes and to regional and national freight and passenger mobility if the serviceability of the bridge is restricted or diminished;
- Assign a risk-based priority for systematic preventative maintenance, replacement, or rehabilitation based upon such classification; and
- Determine the cost of rehabilitating or replacing each structurally deficient bridge with a comparable structure.

Inventory Updates and Reports

The Secretary is required to:

- Annually revise the bridge and tunnel inventories and submit a report on the inventories to the House Transportation and Infrastructure (T&I) Committee and the Senate Environment and Public Works (E&PW) Committee;
- Provide guidance to the States and Federal agencies for inventory and report updates, while respecting the existing inspection schedule of each State; and
- Conduct a study on benefits, cost-effectiveness, and feasibility of requiring collection of element level data for bridges not on the National Highway System (NHS) and submit a report on the results of the study to the House T&I and Senate E&PW Committees.

Each State and appropriate Federal agency is required to:

- Within two years of enactment of MAP-21, report element level data on bridges on the NHS to the Secretary as each bridge is inspected.

National Bridge and Tunnel Inspection Standards

The Secretary is required to establish and maintain inspection standards for all highway bridges and tunnels. The standards will be designed to ensure uniformity of inspections and evaluations for safety and serviceability. Minimum requirements for the standards are:

- Specify the method by which States, Federal agencies, and tribal governments carry out inspections;
- Establish the maximum time period between inspections;
- Establish qualifications for those that carry out the inspections;
- Require States, Federal agencies, and tribal governments to maintain and make available to the Secretary written reports on inspections, notations of any action taken as a result of inspections, and current inventory data for all bridges and tunnels that reflect the findings of the most recent inspections; and
- Establish a procedure for national certification of bridge and tunnel inspectors.

The Secretary is required to update the inspection standards within 3 years of the enactment of MAP-21. The update will cover the methodology, training, and qualifications for inspectors and the frequency of inspection. The Secretary is required to consider a risk-based approach to determining the inspection frequency when completing the update.

Compliance with Standards

The Secretary is required to establish procedures to conduct reviews of State compliance with the standards established under the program and the calculations or reevaluation of bridge load ratings.

The Secretary is required to annually review State compliance with the established standards. If FHWA determines that a State is not in compliance, the following will occur:

- FHWA will issue a report detailing the issues of noncompliance by December 31st of the year in which the review was made;
- FHWA will provide the State with the opportunity to address the noncompliance by developing a corrective action plan, or resolving the noncompliance issue within 45 days of the date on notification.
- If a State fails to meet the noncompliance requirements by August 1st of the year following a finding of noncompliance, FHWA will require the State to dedicate apportioned funds under the National Highway Performance Program (23 USC 119) and the Surface Transportation Program (23 USC 133) to correct the noncompliance issues.

- The State will determine the amount of funds needed to correct the noncompliance based on an analysis of the actions needed to correct the issue, and the amount specified will require approval by the Secretary.

In addition, FHWA will establish procedures for States to follow in reporting to the Secretary critical findings related to structural or safety deficiencies of bridges and tunnels, and monitoring activities and corrective actions taken as a result of a critical finding.

Training Program for Bridge and Tunnel Inspectors

The Secretary, in cooperation with the States, is required to maintain a program to train bridge and tunnel inspectors. FHWA will revise the training program periodically to reflect new and improved techniques.