



M O V I N G T H E  
**AMERICAN  
ECONOMY**

**Federal Railroad Administration  
Railroad Bridge Safety  
Fact Sheet**

## **Background on FRA Railroad Bridge Safety Policy**

The structural integrity of the nation's approximately 100,000 railroad bridges is important to the safety of rail employees, rail passengers and the public. In August 2000, the Federal Railroad Administration (FRA) published a final *Statement of Agency Policy on the Safety of Railroad Bridges* and uses it to determine whether a railroad has implemented an adequate program of bridge inspection and management.

The FRA policy statement includes non-regulatory guidelines and accommodates a wide variety of effective railroad bridge inspection and management methods and practices. In addition, FRA has authority to perform safety inspections on all railroad bridges and can issue emergency orders to remove from service, or restrict operations on, any bridge which poses a serious hazard or risk to railroad operations, employees, passengers or the public at-large.

In September 2007, FRA issued *Safety Advisory 2007-03* to further explain and amplify important aspects of the agency's bridge safety policy and to re-emphasize the need for railroads to adopt and implement safe maintenance practices to prevent bridge failures.

## **Responsibility for Railroad Bridge Safety**

Responsibility for railroad bridge safety rests with the owner of the track carried by the bridge. The owner ensures the bridge is capable of safely carrying all railroad traffic operated on that track and specifies the maximum weight that may be operated over the bridge.

## **Role of the FRA**

- FRA inspectors conduct regular evaluations of railroad bridge inspection and management practices to document a railroad's bridge safety program and to identify program weaknesses that could affect the safety of rail employees, rail passengers or the public.
- In assessing a railroad bridge's structural condition, FRA focuses on the present safety of the structure, rather than its appearance or long-term usefulness.
- FRA cooperates with states to resolve railroad bridge safety problems, including: training inspectors from state railroad safety agencies, performing joint investigations and evaluations of bridge conditions, and using FRA enforcement authority as warranted.

## **Key Provisions of the FRA Railroad Bridge Safety Policy**

- Railroad bridge owners should follow the recommended specifications for the design and rating of bridges found in the *Manual for Railway Engineering* published by the American Railway Engineering and Maintenance-of-Way Association (AREMA). This manual incorporates recognized principles of structural design and analysis to provide for the safe and economic utilization of railroad bridges during their expected useful lives.
- Railroad bridge owners should perform periodic bridge inspections, at least annually, using competent inspectors to determine whether a structure conforms to its design or rating condition. More frequent inspections may be appropriate based on the condition of the bridge and the volume of rail traffic.
- Railroad bridge inspectors should have training and experience that enable them to detect and record indications of distress on a bridge. Inspectors should provide accurate measurements and other information about the condition of the bridge in enough detail so that an engineer can make a proper evaluation of the bridge's safety.
- The operating instructions for each railroad operating trains over bridges should include provisions to restrict the movement of rail cars and locomotives whose weight or configuration exceed the nominal capacity of the bridge. This may include speed restrictions, restriction of rail traffic on adjacent multiple tracks, and weight limitations on adjacent rail cars within the same train.
- An effective railroad bridge safety program should include provisions for: inspection of bridge structures located underwater, consideration of the risks arising from bridges located in earthquake zones, and performance of special inspections of bridges involved in floods, train accidents, and unusual impacts.

## **FRA Review of Railroad Bridge Safety Issues**

In June 2007, the FRA initiated a Railroad Bridge Safety Roundtable to begin a long-term discussion within the railroad industry on several issues, including:

- a strategic look ahead 30 years on what will be demanded of railroad bridges and whether the industry can generate the funds needed to maintain and replace them;
- whether railroad bridge safety personnel, equipment, and other resources are available today to provide appropriate maintenance and inspection needs;
- the future of research and technology to better identify potential problems in existing railroad bridges and develop advanced engineering solutions; and
- how best FRA might serve its role to protect rail employees, rail passengers, and the public from railroad bridge failures.