

## Why GAO Did This Study

The nation's 612,000 bridges are critical elements of the surface transportation system, but the entire system is under growing strain and funding it is on GAO's High Risk List. While state and local governments own and maintain most of the nation's bridges, the federal government provides some funding for them, administered by FHWA. In 2012, legislative changes consolidated the bridge-funding program into other highway programs, giving states more flexibility in how to allocate funds.

GAO was asked to review the funding and management of bridges. This report examines trends, over the past 10 years, in (1) the condition and (2) the funding of the nation's bridges, as well as (3) how states fund and manage their bridge programs, given the 2012 legislative changes. GAO analyzed FHWA's bridge conditions and funding data; reviewed applicable laws, relevant FHWA program guidance, and federal guidance on performance measures; and interviewed federal officials and transportation officials from 24 states and D.C., selected to include those with large bridge inventories, among other factors.

## What GAO Recommends

GAO recommends that DOT direct FHWA to develop measures on the linkage between the federal funding of bridges and the desired outcomes—maintained or improved bridge conditions—and report results to Congress. DOT concurred with our recommendation. DOT also provided technical comments, which we incorporated, as appropriate.

View [GAO-16-779](#). For more information, contact Mark Goldstein at 202-512-2834 or [goldsteinm@gao.gov](mailto:goldsteinm@gao.gov).

## HIGHWAY BRIDGES

# Linking Funding to Conditions May Help Demonstrate Impact of Federal Investment

## What GAO Found

Bridge conditions have generally improved nationwide from 2006 to 2015, based on GAO analysis of federal bridge data. For example, the percentage of structurally deficient bridge deck area (the surface area that carries vehicles) decreased from 9 percent to 7 percent nationwide during this period. The number of structurally deficient bridges also decreased from 13 percent to 10 percent nationwide. However, some states have substantially higher percentages of structurally deficient deck area than others. Bridge conditions may become more challenging to address as bridges age, because the number of bridges and amount of total deck area increased dramatically from the 1950s through the 1970s, generally with a 50-year design life. Analysis of federal bridge data shows that the amount of structurally deficient deck area is greatest for bridges built from 1960 through 1974, indicating an expected need for additional maintenance, replacement, or rehabilitation.

Federal funds obligated for bridge projects have remained relatively stable from 2006 to 2015, between \$6 billion and \$7 billion annually in most years. During this period, the use of federal funds on bridges shifted somewhat from building new bridges to projects that preserve existing bridges, such as bridge rehabilitation or preventative maintenance. While the Federal Highway Administration (FHWA) estimates total funds dedicated to bridges and collects data on bridge conditions nationwide, it does not track the linkage between federal funds and changes in bridge conditions. GAO has previously reported that linking performance outcomes with resources invested can help agencies to more clearly determine how changes in invested resources may result in changes to performance. Using such performance measures would help FHWA demonstrate the link between federal funding and outcomes for bridges.

Officials from the selected 24 states and the District of Columbia (D.C.) reported little change in the way they have funded and managed bridges since 2012. Officials from 21 states and D.C. reported bridge funding has been stable since the federal bridge program was consolidated in 2012. Officials from 3 states reported an increase in bridge funding since that time. The general stability in bridge funding may be a result of the long time frame for planning bridge projects; for example, bridge funding cycles can be 5 years or longer, a time span that means any changes would not be apparent for several years. Officials from 10 states mentioned increased flexibility in their ability to use federal funds for bridge projects. Changes from the Moving Ahead for Progress in the 21st Century Act provided states flexibility to determine whether to spend federal highway funds on bridges or other highway needs. Further, officials from 18 states and D.C. reported that they have not changed how they prioritize bridge projects relative to other transportation projects. With respect to challenges, officials from 14 states described inadequate funding as a challenge, and officials from 13 states reported aging bridges as a challenge. For many of these states, the challenge of maintaining aging bridges is intertwined with the challenge of inadequate funds.