

Tennessee Bridge Facts

September 10, 2009

There are **19,550** bridges on public roads in the state of Tennessee. These bridges fall into two categories for the purpose of distributing state and federal funds.

On-System Bridges are those maintained, owned and operated by the state. They are found on the Interstate System, the National Highway System and the State Route System and include **8,150** bridges.

Off-System Bridges are those found on roads owned, maintained and operated by local governments that include counties, cities and towns in Tennessee. Those number **11,400**.

Current Bridge Status

Tennessee has been working steadily to improve the conditions of its bridges, both on and off-system for the last two decades. A statistical overview of how we have progressed since 1982 demonstrates our success since that year.

The total number of bridges for on-system has increased by 2,790 or 52%, yet the following has also occurred.

The number of posted bridges (those carrying less than 15 ton loads) has decreased by 90.5%

The number of structurally deficient bridges has decreased 68.7%

Although daily traffic has greatly increased, the number of functionally obsolete bridges has decreased by 13%.

The total number of bridges on off-system routes has declined by 6.7%, but

The number of posted bridges has decreased by 81.0%

The number of structurally deficient bridges has decreased by 87.5%

The number of functionally obsolete bridges has decreased by 20%

On-System

The number of bridges classified as structurally deficient number 311 or 3.8% of the bridge population.

Currently only 1.5% of Tennessee's interstate bridges are deemed structurally deficient.

Functionally obsolete bridges number 916 or 11.2% of the bridge population.

Off-System

The number of bridges deemed structurally deficient is 784 (6.9%).

Functionally obsolete bridges number 1,454 (12.8%)

The average bridge age in this country today is 43 years according to data from the Federal Highway Administration.

The average age of all bridges in Tennessee is 36.3 years old. Broken down by type, the average for Interstate Bridges is 38.1 years old, for State Route Bridges it is 40.6 years and for off-system bridges it is 33.8 years.

Improvements

As a result of a recent Federal Highway Administration Peer Review of TDOT's bridge inspection program, TDOT is currently in the process of:

Implementing additional training for bridge evaluators

TDOT has updated the load permitting process to enhance the department's ability to issue permits

TDOT is employing sonar scanning technology to monitor selected deep-water bridges.

TDOT is employing computer monitoring of rainfall events to monitor for bridge scour.

TDOT is also partnering with the Tennessee Historical Commission and the Tennessee Department of Environment and Conservation to implement a new program to save some of Tennessee's historic bridges. The goal of the program is to assist communities interested in preserving historic bridge structures for the public road system or pedestrian or other adaptive use. The link to TDOT's Historic Bridge Page may be found here:

<http://www.tdot.state.tn.us/environment/historic/bridges.htm>

Funding

Between 1982 and 2008, TDOT spent more than \$1.81 billion on bridge replacement and repair. That includes \$1.52 billion under the federal bridge replacement program and an additional \$271 million from the state grant bridge program.

TDOT dedicated more than \$116 million to the replacement and repair of Tennessee's bridges in FY 2008/2009 and is estimated to dedicate a similar amount for bridge repair and replacement in FY 2009/2010.

According to the Federal Highway Administration, of 590,000 bridges nationwide, one in four needs repair or is too narrow for today's traffic volumes.

The Federal Highway Administration estimates it would take \$140 billion, in 2006 dollars, to replace all deficient bridges in the nation.

It would take an estimated \$2.2 billion, in 2009 dollars, to replace or repair all deficient bridges in the state of Tennessee.