

TRIP: 13% of Pennsylvania Bridges are in Poor Condition - Rock Products Magazine

June 25, 2024 | Rock Products News

Thirteen percent of Pennsylvania bridges are rated in poor condition, the sixth highest share in the nation. According to a new report released by TRIP, a Washington, D.C.-based national transportation research nonprofit, each day more than 10 million vehicles drive over Pennsylvania bridges in poor condition. This includes bridges 20 ft. or longer. A bridge is rated in poor condition if there is significant deterioration of the bridge deck, supports or other major components.

The TRIP report, "Preserving Pennsylvania's Bridges: The Condition and Funding Needs of Pennsylvania's Aging Bridge System," finds that while the state has made significant progress in the past decade in reducing the number of bridges in poor condition, deficiencies remain and the progress that has been made may be lost without additional funding. The lack of funding is compounded by inflation in construction costs – which have risen 69% since the beginning of 2021 – significantly reducing the buying power of existing transportation funding.

Pennsylvania's share of bridges in poor condition decreased from 23% in 2013 – the highest in the nation at that time – to 13% in 2024 as a result of increased transportation funding at the state and federal levels. However, despite recent progress, under current funding levels, the share of poor bridges in Pennsylvania is expected to increase to 17% in 2029.

Thirteen percent (2,835 of 22,043) of the state's bridges are rated in poor condition. Pennsylvania bridges that are in poor condition carry 10,121,202 vehicles per day. Fifty-four percent (11,849 of 22,043) of Pennsylvania bridges are rated in fair condition. A fair rating indicates that a bridge's structural elements are sound, but minor deterioration has occurred to the bridge's deck, substructure or superstructure. The remaining 33% (7,359 of 22,043) of the state's bridges are rated in good condition.

Bridges in poor condition may be posted for lower weight limits or closed if their condition warrants such action. Deteriorated bridges can have a significant impact on daily life. Restrictions on vehicle weight may cause many vehicles – especially emergency vehicles, commercial trucks, school buses and farm equipment – to use alternate routes to avoid weight-restricted bridges. Redirected trips also lengthen travel time, waste fuel and reduce the efficiency of the local economy. A significant number of Pennsylvania's bridges have surpassed or are approaching

50 years old, which is typically the intended design life for bridges built during this era. Statewide, the average age of all bridges is 55 years, while the average age of the state's bridges that are rated in poor condition is 84 years.

"Securing a predictable, reliable, and growing source of funding to repair and replace Pennsylvania's aging bridges is absolutely critical," said Dan DeBone, president and CEO of the Westmoreland County Chamber of Commerce. "This initiative is essential not only for the safety and well-being of our local communities, but also for the prosperity of Pennsylvania's extensive agriculture and manufacturing sectors. Our businesses rely on dependable infrastructure to acquire materials and, most importantly, to transport products efficiently within and outside of Pennsylvania. Addressing these infrastructure needs today is an investment in the future economic vitality of our region and the Commonwealth."



To address a lack of adequate transportation funding, in 2013 Act 89 was passed by Pennsylvania's legislature and signed into law by the governor, providing an additional \$2.3 billion in transportation funding each year and allowing the state to improve or rebuild thousands of bridges and more than 10,000 roadway miles.

Since the passage of Act 89 in 2013, the number of poor bridges in the state has decreased by 42%. In addition to state funding, the federal Infrastructure Investment and Jobs Act (IIJA) was signed into law in November 2021 and will provide \$13.1 billion in state funds for highway and bridge investments in Pennsylvania over five years, including a 46% funding increase over the first three years of the program from FY 2022 to FY 2024. Federal funds currently support 43%

of the revenue used by PennDOT to fund highway and bridge improvements.

"Bridges are lifelines, carrying our workforce, schoolchildren, families, and essential services," said P. Timothy Phelps, executive director of the Transportation Management Association of Chester County. "A robust, safe infrastructure supports a multimodal transportation system, offering residents choices and fostering safe, connected communities. When bridges close, everyone is impacted."

The ability of revenue from the Pennsylvania and the federal motor fuel tax — and other sources of state and federal transportation funding — to keep pace with the state's future transportation needs is likely to erode as a result of increasing vehicle fuel efficiency, the increasing use of electric vehicles and inflation in highway construction costs. The Federal Highway Administration's national highway construction cost index, which

measures labor and materials cost, increased by 44% in 2022 and the first three quarters of 2023, and has increased 69% since the beginning of 2021.

"Highways and bridges in Pennsylvania and beyond are vital to the supply chain and our nation's economy," said Rebecca Oyler, president and CEO of the Pennsylvania Motor Truck Association. "Tens of thousands of trucks rely on safe, well-maintained infrastructure to deliver goods to businesses and consumers every day. This report

highlights the fact that targeting funding into specific infrastructure improvements, like deficient bridges, is a sound investment strategy. This should be a high priority of PennDOT and other state decision-makers to ensure our supply chain remains intact and to keep inflation at bay."

"Pennsylvania's bridges are a critical component of the state's transportation system, providing connections for personal mobility, economic growth and quality of life," said Dave Kearby, TRIP's executive director. "While Pennsylvania has made commendable progress in improving bridge conditions over the past decade, without increased and reliable transportation funding, numerous projects to improve and preserve aging bridges will not move forward, hampering Pennsylvania's ability to efficiently and safely move people and goods."