

TRIP: North Carolina Roads Need Further Investment

April 19, 2023 | Rock Products News

While additional state and federal transportation investment will allow North Carolina to improve its transportation system, the state's ability to keep pace with growing transportation needs is threatened by the reduced purchasing power of motor fuel tax revenues due to inflation, improved vehicle fuel efficiency and the adoption of hybrid and electric vehicles.

This is according to a new report from TRIP, a national transportation research nonprofit based in Washington, D.C., that looks at the condition, reliability, safety and funding needs of North Carolina's roads, highways and bridges.

The TRIP report, "Moving North Carolina Forward: Providing a Modern, Reliable and Sustainable Transportation System in the Tar Heel State," finds that throughout North Carolina, one-third of major roads are in poor or mediocre condition, 7% of bridges (20 ft. or more in length) are rated poor/structurally deficient, increasing traffic congestion impedes personal and commercial mobility, and the state's traffic fatality rate rose significantly from 2019 to 2021. To address a lack of adequate transportation funding, in 2022 the North Carolina legislature approved HB 103, which dedicated a portion of the state's sales tax revenue to road and highway projects and is expected to provide an additional \$7.2 billion in highway funds through FY 2032-2033. The federal Infrastructure Investment and Jobs Act (IIJA), signed into law by President Biden in November 2021, will also provide North Carolina with \$7.8 billion over five years. These additional funds will allow the North Carolina Department of Transportation (NCDOT) to increase its annual investment in roadway preservation and bridge preservation by 17% and 22%, respectively, from 2023 to 2032. While the increased investment will be helpful, it does not keep pace with increasing inflation. The national highway construction cost index, which measures labor and materials cost, increased by 50% during the 21 months from the start of the first quarter in January 2021 to the end of the third quarter in September 2022.

"North Carolina's transportation infrastructure is essential to moving goods and people safely and efficiently," said Gary Salamido, president and CEO of the North Carolina Chamber. "TRIP's latest report underscores the critical need for investment in our state's transportation network, such as those called for in Senate Bill 354, which would provide a needed, bipartisan approach to jumpstarting funding that will benefit all modes of transportation. While we have made great strides, our state's leaders must continue to modernize transportation revenue streams to secure a prosperous, competitive future for North Carolina and its people."

Statewide, one-third of major locally and state-maintained roads are deteriorated, with 10% in poor condition and 23% in mediocre condition. Driving on deteriorated roads costs the average North Carolina driver an additional \$484 each year – \$3.7 billion statewide- in extra vehicle operating costs (VOC), which include accelerated vehicle depreciation, additional repair costs, and increased fuel consumption and tire wear. In 2022 NCDOT spent \$656 million on the preservation of roads and highways, \$341 million short of the \$997 million annual investment recommended by NCDOT.

Statewide, 7% of North Carolina's bridges are rated poor/structurally deficient, with significant deterioration to the bridge deck, supports or other major components. Most bridges are designed to last 50 years before major overhaul or replacement, although many newer bridges are being designed to last 75 years or longer. In North Carolina, 32% of the state's bridges are 50 years old or more. In 2022 NCDOT spent \$371 million on bridge preservation, \$39 million short of the \$410 million annual investment recommended. From 2000 to 2019, vehicle travel in North Carolina increased by 37%, the fifth highest rate in the country. Due to the COVID-19 pandemic, vehicle travel in North Carolina dropped by as much as 38% in April 2020 (as compared to vehicle travel during the same month the previous year). By 2021, vehicle miles of travel (VMT) in North Carolina had rebounded to four% below pre-pandemic levels in 2019. Congested roads, highways and bottlenecks choke commuting and commerce and cost North Carolina drivers \$4 billion each year in the form of lost time and wasted fuel. The chart below details the annual hours lost to congestion, congestion costs per driver and the average amount of fuel per driver wasted due to congestion in the state's largest urban areas.

The TRIP report includes a list of the 15 North Carolina highway segments with the lowest level of travel time reliability due to traffic congestion. The report also includes a list of the state's top 10 freight bottlenecks, which cause the longest delays for freight travel.

Using a combination of programs and projects, the North Carolina Department of Transportation is taking steps to address North Carolina's safety, traffic congestion and reliability challenges. These efforts include the following: retiming of nearly 500 traffic signals to reduce delays and stops; the operation of five Transportation Management Centers (TMC) throughout the state that manage freeway disruptions and clear incidents, and an Incident Management Assistance Patrol (IMAP) that provides services to stranded motorists and works with emergency responders to clear crash scenes quickly; the investment of approximately \$4.6 billion since 2018 to increase the capacity of numerous highway segments, including the Fayetteville Outer Loop, the Greensboro Loop, the I-485 Charlotte Beltway, the Winston-Salem Bypass, the Wilmington Bypass, the I-85 corridor, the Goldsboro Bypass, the Salem Parkway and the Jamestown Bypass. From 2017 to 2021, 7,387 people were killed in traffic crashes in North Carolina. The state's 2021 traffic fatality rate of 1.38 fatalities for every 100 million miles traveled is slightly higher than the national average in 2021 of 1.35. Nationwide, traffic fatalities began to increase dramatically in 2020 even as vehicle travel rates plummeted due to the COVID-19 pandemic, and the number of fatalities continued to increase in 2021. The number of fatalities in North Carolina increased 18% from 2019 to 2021, from 1,373 to 1,627, and the state's fatality rate per 100 million VMT increased by 23% during that time, from 1.12 to 1.38. This dramatic increase in the number of fatalities. and the rate of fatalities per 100 million VMT happened while vehicle travel in the state decreased by four% overall from 2019 to 2021.

"North Carolina is putting the increased state and federal transportation dollars to good use and making needed improvements to its transportation network," said Dave Kearby, TRIP's executive director. "But, the state's ability to provide a smooth, reliable and safe transportation system depends on long-term, consistent and sufficient funding. A safe and reliable transportation system that is maintained in good condition and offers improved mobility and accessibility to meet the needs of North Carolina residents, businesses, and tourists alike, is critical to keeping North Carolina mobile and moving the state forward."