



TRIP Report: New Hampshire Transportation Infrastructure Needs Continue To Increase

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New Hampshire Roads, Bridges And Transit Face Increasing Deterioration Without Additional Transportation Funding; Transportation Improvements Would Support Economic Recovery, Improve Conditions And Boost Traffic Safety

One-third of New Hampshire' major roads are deteriorated, 32 percent of the state's bridges are structurally deficient or functionally obsolete, and more than half of the state's roads are congested during peak travel times. However, the state lacks adequate funding to make needed improvements to its surface transportation system. This is according to a new report released today by [TRIP](#), a Washington, DC based national transportation organization. TRIP's report finds that increased investment in the state's transportation infrastructure could improve road and bridge conditions, enhance safety and support long-term economic growth in the state.

The report, "Moving New Hampshire Forward: The Condition and Funding of New Hampshire's Roads, Bridges and Transit Systems," finds that 12 percent of the state's major roadways are in poor condition and an additional 21 percent are in mediocre condition. Roads in need of repair cost each New Hampshire motorist an average of \$259 annually in extra vehicle operating costs – \$267 million statewide – including accelerated vehicle depreciation, additional repair costs and increased fuel consumption and tire wear. The TRIP report includes a list of sections of roadway throughout the state that are in need of reconstruction or pavement preservation work that can not be completed due to a lack of transportation funds. These include improvements to several sections of I-93 and I-89, as well as NH 12 and NH 16.

"New Hampshire built one of the finest highway systems in the country with our Federal Highway Administration partners. As our state continues to take proper care of the system, meet our bridge repair needs, and build the new capacity for I-93, we need that funding partner more than ever. Today's TRIP report documents the challenges," said George Campbell, commissioner of the New Hampshire Department of Transportation. "Transportation is the backbone of the American and New Hampshire economies, and deferring addressing these urgent needs will result in significantly higher expenses for the next generation. At the NHDOT we all call on Congress to act and reauthorize the federal transportation legislation."

In addition to deteriorated road conditions, 16 percent of New Hampshire's bridges are structurally deficient and an additional 16 percent are functionally obsolete. The state's roads are also becoming increasingly crowded, as commuting and commerce are constrained by growing traffic congestion on New Hampshire' major urban roads. In 2008, 51 percent of the state's urban highways were congested during peak travel times. The TRIP report contains a list of needed transportation projects throughout the state that would repair and replace deficient bridges, increase roadway capacity and improve the state's transit system. However, these projects can not move forward without additional transportation funding.

"The TRIP report findings validate why the state established the *Commission to Study Future Sustainable Revenue Sources for Funding Improvements to State and Municipal Highways and Bridges*. Current state funding is inadequate to keep up with routine maintenance, let alone finish widening I-93 and construct other needed new transportation projects. Transportation is jobs – construction jobs and the moving of goods and services. It is imperative that Congress do its part and adequately fund surface transportation with a timely and predictable program," said state representative Candace Bouchard.

Last year's federal American Recovery and Reinvestment Act provides approximately \$129 million in stimulus funding for highway and bridge improvements and \$13 million for public transit improvements in New Hampshire. This funding has served as an important down payment on needed road, highway, bridge and transit improvements but is not sufficient to allow the state to proceed with numerous projects needed to modernize its surface transportation system. The federal surface transportation program, which expires on December 31, 2010, remains a critical source of funding for road and bridge repairs and transit improvements in New Hampshire. It will be critical that Congress crafts and approves a new federal surface transportation program that could include a significant boost in funding for highway and transit improvements in New Hampshire.

"While the state has put a combination of federal and state funds to good use in the past, in the coming years, many additional needed projects will remain stranded on the drawing board because of insufficient funding," said Will Wilkins, executive director of TRIP. "It is critical that the state adequately fund its transportation system and that Congress produces a timely and adequately funded federal surface transportation program. Thousands of jobs and the state's economy are riding on it."

[Moving New Hampshire Forward:](#)

The Condition and Funding of New Hampshire's Roads, Bridges & Transit Systems

June, 2010

Prepared by: TRIP

Executive Summary

New Hampshire's extensive system of roads, highways, bridges and public transit provides the state's residents, visitors and businesses with a high level of mobility. As the backdrop that supports the Granite State's economy, New Hampshire's surface

transportation system provides for travel to work and school, visits to family and friends, and trips to tourist and recreation attractions while simultaneously providing businesses with reliable access for customers, suppliers, shipping and employees. With the state's population continuing to grow, New Hampshire must maintain and improve its system of roads, highways, bridges and public transit in order to foster economic growth, keep business in the state, and ensure safe, reliable mobility, all of which improve the quality of life expected by state residents and visitors.

As New Hampshire looks to rebound from the current economic downturn, the state will need to modernize its surface transportation system by improving its physical condition and enhancing the system's ability to provide efficient and reliable mobility for residents, visitors and businesses. Making needed improvements to New Hampshire's roads, highways, bridges and transit could provide a significant boost to the state's economy by creating jobs and stimulating long-term economic growth as a result of enhanced access and mobility.

In addition to state funding, the federal government is an essential source of revenue for the ongoing modernization of New Hampshire's roads, highways, bridges, and transit. While construction materials costs have stabilized somewhat during the current recession, a 37 percent materials cost increase over the past five years, coupled with declining revenue from gas taxes, have contributed to the difficulty all states face in maintaining and improving their surface transportation systems.

Last year's American Recovery and Reinvestment Act provided approximately \$129 million in stimulus funding for highway and bridge improvements and \$13 million for public transit improvements in New Hampshire. This funding has served as a stop gap measure for addressing needed road, highway, bridge and transit infrastructure preservation, but it has not been sufficient to allow the state to proceed with numerous projects needed to enhance its surface transportation system. Meeting New Hampshire's need to modernize its transportation system will require a significant, long-term boost in transportation funding at the federal, state and local levels.

Congress is currently deliberating over a long-range federal surface transportation program, the Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU). SAFETEA-LU was originally set to expire on September 30, 2009. Following a series of short term continuing resolutions, the current program now expires December 31, 2010. The level of funding and the provisions of a future federal surface transportation program will have a significant impact on future highway and bridge conditions and safety as well as the level of transit service in New Hampshire, which, in turn, will affect the state's ability to improve its residents' quality of life and enhance economic development opportunities.

The federal surface transportation program is an essential source of funding for the construction, maintenance and improvement of New Hampshire's system of roads, highways, bridges and public transit. The American Recovery and Reinvestment Act has further provided a helpful boost to surface transportation funding in the state.

- Federal spending levels for highways and public transit are based on the current federal surface transportation program, the Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), which was approved by Congress in 2005. The SAFETEA-LU program expires on December 31, 2010.
- The level of funding and the provisions contained in the upcoming federal surface transportation program will have a significant impact on future highway, bridge and transit conditions, levels of traffic congestion, and safety in New Hampshire. The future condition of New Hampshire's surface transportation system will have a critical effect on the state's ability to enhance economic development opportunities and improve its residents' quality of life.
- From 1998 to 2008, New Hampshire received approximately \$1.7 billion in federal funding for road, highway and bridge improvements, and \$108 million for public transit, a total of approximately \$1.8 billion.
- Federal funds provide 24 percent of revenues used annually by the New Hampshire Department of Transportation to pay for road, highway and bridge construction, repairs and maintenance.
- Federal funds provide 55 percent – one of the highest shares in the nation – of the revenue used annually to pay for the operation of, and capital improvements to, the state's public transit systems, which includes operations, purchase and repair of vehicles, and the construction of transit facilities.

Without a substantial boost in federal highway funding, New Hampshire will be unable to complete numerous projects to improve the condition and expand the capacity of roads, highways and public transit, hampering the state's ability to improve mobility and sustain economic development opportunities.

- To ensure that federal funding for highways and bridges in New Hampshire and throughout the nation continues beyond the expiration of SAFETEA-LU, the Federal Highway Trust Fund has required several infusions from other funds to remain solvent and meet previously authorized funding levels.
- In New Hampshire the American Recovery and Reinvestment Act provided approximately \$129 million in stimulus funding for highway and bridge improvements and \$13 million for public transit improvements.
- Included in this report are lists of needed projects that cannot proceed without a significant boost in federal or state transportation funding. These include road and bridge rehabilitation projects, capacity expansion projects that would ease congestion and enhance mobility, and transit improvements.

Despite the current economic downturn, population increases and economic growth in the Granite State over the past two decades have resulted in increased demands on the state's roads and highways.

- New Hampshire's population increased 19 percent from 1990 to 2008, from 1.1 million in 1990 to 1.3 million residents in 2008. New Hampshire's population is expected to increase to 1.5 million residents by 2025, an increase of 36 percent.
- Vehicle travel on New Hampshire's major highways increased 32 percent between 1990 and 2008, rising from 9.8 billion vehicle miles traveled in 1990 to 13 billion vehicle miles traveled in 2008.
- Vehicle travel in the state is expected to increase by 30 percent by 2025.

- In 2008, 51 percent of the state's urban highways carried traffic volumes likely to result in significant rush hour delays. Highways that carry high levels of traffic are also more vulnerable to experiencing lengthy traffic delays as a result of traffic accidents or other incidents.
- New Hampshire has also experienced significant economic growth since 1990. From 1990 to 2008, New Hampshire's gross domestic product (GDP), a measure of the state's economic output, increased by 53 percent, when adjusted for inflation.

One-third of major roads in New Hampshire are in poor or mediocre condition. This report identifies the sections of New Hampshire roads and highways that are most in need of repair or replacement.

- In 2008, 12 percent of major roads were rated in poor condition and an additional 21 percent were in mediocre condition.
- Driving on roads in need of repair costs New Hampshire's motorists \$267 million annually – \$259 per driver – in extra vehicle operating costs, including accelerated vehicle depreciation, additional repair costs and increased fuel consumption and tire wear.
- This report contains a list of needed roadway preservation projects in New Hampshire that would require significant federal funding to be completed.

Nearly one-third of bridges in New Hampshire are structurally deficient or functionally obsolete. Deficient and obsolete bridges impact commercial and personal mobility as well as safety. This report contains a list of bridges in the state with the lowest sufficiency rating.

- Sixteen percent of New Hampshire's bridges are rated as structurally deficient, showing significant deterioration to decks and other major components. A bridge is structurally deficient if there is significant deterioration of the bridge deck, supports or other major components. Bridges that are structurally deficient are often restricted to carrying lower weight vehicles or are closed if they are found to be unsafe.
- The classification of a bridge as "structurally deficient" does not mean the structure is unsafe. New Hampshire's bridge safety inspection program ensures that each bridge is safe for vehicles weighing less than the allowed weight limit. If the inspection determines a bridge to be unsafe for vehicles, the bridge is closed or posted for lower weight vehicles until repaired or replaced.
- Sixteen percent of New Hampshire's bridges are functionally obsolete. Functionally obsolete bridges are generally older bridges that are not designed to modern standards and/or do not have adequate lane widths, shoulder widths, or vertical clearances to serve current traffic demand. These bridges are not necessarily structurally deficient, nor are they necessarily restricted from carrying legal loads.
- Bridge deficiencies have an impact on mobility and safety. Restrictions on vehicle weight may cause heavier vehicles – emergency vehicles, commercial trucks, school buses and farm equipment – to use alternate routes to avoid these bridges. Narrow bridge lanes, inadequate clearances and poorly aligned bridge approaches reduce traffic safety. Redirected trips lengthen travel time, waste fuel and reduce the efficiency of the local economy.
- The overall rating for bridges is determined based on deck, substructure and superstructure conditions, as well as the amount of traffic carried by the bridge and the length of a detour that would be required if the bridge were closed.

Between 2004 and 2008 an average of 146 people were killed each year in crashes on New Hampshire's roads. Improving geometric deficiencies on New Hampshire's roads and highways would likely result in a decrease in traffic fatalities in the state. Roadway design is an important factor in approximately one-third of fatal and serious traffic accidents.

- A total of 732 people were killed in New Hampshire in traffic accidents from 2004 to 2008, an average of 146 fatalities per year.
- In 2008, New Hampshire had a traffic fatality rate of 1.07 fatalities per 100 million vehicle miles traveled.
- Where appropriate, highway improvements such as removing or shielding obstacles, adding or improving medians, adding rumble strips, widening lanes, widening and paving shoulders, upgrading road pavement, realigning curves, adjusting grades, and installing better road markings and modernizing intersections can reduce traffic fatalities and accidents while improving traffic flow to help relieve congestion.
- The Federal Highway Administration has found that every \$100 million spent on needed highway safety improvements will result in 145 fewer traffic fatalities over a 10-year period.

Two congressionally appointed commissions and a national organization representing state transportation departments have recommended a broad overhaul of the Federal Surface Transportation Program to improve mobility, safety and the physical condition of the nation's surface transportation system by significantly boosting funding, consolidating the program into fewer categories, speeding up project delivery and requiring greater accountability in project selection.

- The National Surface Transportation Policy and Revenue Study Commission (NSTPRSC) and the National Surface Transportation Infrastructure Financing Commission (NSTIFC) were created by Congress to examine the current condition and future funding needs of the nation's surface transportation program, develop a plan to insure the nation's surface transportation system meets America's future mobility needs and to recommend future funding mechanisms to pay for the preservation and improvement of the nation's roads, highways, bridges and public transit systems.
- The NSTPRSC concluded that it is critical to the future quality of life of Americans that the nation create and sustain its preeminent surface transportation system in the world, one that is well maintained, safe and reliable.
- The NSTIFC found that the U.S. faces a \$2.3 trillion funding shortfall over the next 25 years in maintaining and making needed improvements to the nation's surface transportation system.

- The NSTIFC found that the use of motor fuel fees is not sustainable as a primary source of funding for the nation's surface transportation system because of the shift to a variety of fuel sources and more fuel efficient vehicles.

Key recommendations of the Commissions and of the American Association of State Highway Transportation Officials (AASHTO) include:

Program format:

- Allocate funding through outcome-based, performance-driven programs supported by cost/benefit evaluations rather than political earmarking (NSTPRSC).
- Consolidate the more than 100 current transportation funding programs into 10 programs focused on key areas of national interest, including congestion relief, preservation of roads and bridges, improved freight transportation, improved roadway safety, improved rural access, improved environmental stewardship, and the development of environmentally-friendly energy sources (NSTPRSC).
- Speed up project development processes to reduce the excessive time required to move projects from initiation to completion by better coordinating the development and review process for transportation projects (NSTPRSC).
- Develop a future federal surface transportation program that would be accountable for results, would make investments based on community needs and would deliver projects on time and on budget (AASHTO).
- Provide a federal surface transportation program that is based on state-driven performance measures and is focused on six objectives of national interest: preservation and renewal, interstate commerce, safety, congestion reduction and connectivity for urban and rural areas, system operations, and environmental protection (AASHTO).

Funding:

- Shift the collection of federal surface transportation revenues from fuel taxes to mileage-based fees, which would charge motorists a fee based on the number of miles driven, with full deployment of a comprehensive system in place by 2020 (NSTIFC).
- Ensure that once implemented, mileage-based fees were indexed to inflation and that they and any other federal transportation charges were set at a rate that would provide enough revenue to provide adequate federal funding to ensure that the nation achieves an integrated national transportation system that is less congested and more safe, and that promotes productivity, national competitiveness, and environmental outcomes (NSTIFC).
- Failure to address the immediate funding shortfall and provide adequate long-term funding for surface transportation will lead to unimaginable levels of congestion, reduced safety, costlier goods and services, a poorer quality of life, and diminished economic competitiveness (NSTIFC).
- In the short term, significantly boost the current federal motor fuel tax and index it to inflation to support increased federal surface transportation investment (NSTIFC).
- Expand the ability to use additional surface transportation funding sources including tolling, state investment banks and public-private partnerships as a supplement to primary sources of funding such as motor fuel fees and eventually a mileage-based fee (NSTIFC).

The efficiency of New Hampshire's transportation system, particularly its highways, is critical to the health of the state's economy. Businesses depend on an efficient and reliable transportation system to move products and services. A key component in business efficiency and success is the level and ease of access to customers, markets, materials and workers.

- Every year, \$31 billion in goods are shipped annually from sites in New Hampshire and another \$32 billion in goods are shipped annually to sites in New Hampshire, mostly by truck.
- Sixty-three percent of the goods shipped annually from sites in New Hampshire are carried by trucks and another 27 percent are carried by courier services, which use trucks for part of the deliveries. Similarly, 76 percent of the goods shipped to sites in New Hampshire are carried by trucks and another 17 percent are carried by courier services.
- Commercial trucking in New Hampshire is projected to increase 31 percent by 2020.
- Businesses have responded to improved communications and greater competition by moving from a push-style distribution system, which relies on low-cost movement of bulk commodities and large-scale warehousing, to a pull-style distribution system, which relies on smaller, more strategic and time-sensitive movement of goods.
- Increasingly, companies are looking at the quality of a region's transportation system when deciding where to re-locate or expand. Regions with congested or poorly maintained roads may see businesses relocate to areas with a smoother, more efficient transportation system.

All data used in the report is the latest available. Sources of information for this study include the U.S. Department of Transportation (USDOT), Federal Highway Administration (FHWA), the U.S. Census Bureau, the National Highway Traffic Safety Administration (NHTSA), the Texas Transportation Institute (TTI), the Reason Foundation, the Bureau of Transportation Statistics (BTS), the National Surface Transportation Policy and Revenue Study Commission (NSTPRSC), the National Surface Transportation Infrastructure Financing Commission (NSTIFC), the American Association of State Highway and Transportation Officials (AASHTO), and the New Hampshire Department of Transportation (NHDOT).