



TRIP Report on Maine Maintaining And Improving Its Roads, Highways And Bridges

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Maine Is Falling Behind In Maintaining And Improving Its Roads, Highways And Bridges As A Significant Transportation Funding Shortfall Threatens To Stifle

Maine faces a \$3.3 billion gap over the next ten years in needed funding to allow the state to significantly improve road and bridge conditions, enhance economic development opportunities, improve mobility and enhance traffic safety. Without a significant boost in state or federal transportation funding, Maine will be unable to move forward with numerous projects to address the state's most critical transportation needs, found a new report released today by [TRIP](#), a Washington, DC based national transportation organization.

The report, "Falling Behind: The Condition and Funding of Maine's Roads, Highways & Bridges," found that at current funding levels, numerous needed highway projects will not proceed, pavement conditions on the state's major roads will worsen and that the miles of Maine highways restricted to lighter vehicles will increase.

The report found that without a significant boost in state transportation funding, numerous highway projects needed in Maine to support economic growth cannot proceed. These projects include a bypass on US 1 from Wiscasset to Edgecomb, the completion of the Northeast portion of the bypass on SR 25 in Gorham, the widening of a two-mile section of US 202 from Augusta to Manchester, a bypass from I-395 to SR - 9 from Brewer to Eddington and the modernization of a 26-mile section of Route 161 from Caribou to Cross Lake Township.

At current funding levels, the report also found that the share of deficient roads in Maine are expected to increase from 18 percent in need of significant repairs today, to 24 percent in 2014 and similarly the miles of state roads which are restricted to carrying lighter-weight vehicles due to poor pavement conditions, is expected to increase from 2,212 miles in 2008 to 2,400 miles in 2011.

"As Maine looks to bounce back from a serious economic downturn, we will need to increase our investment in our highway system, which is the backbone of the state economy," said Timothy Ouellette, chief financial officer of [CPM Constructors](#). "Moving forward with projects to improve our roads, highways and bridges will boost Maine's economy by creating construction-related jobs in the short-term and by providing numerous jobs in the long-term as a result of economic opportunities created by improved regional mobility."

The report also found that the approval earlier this year of the [American Recovery and Reinvestment Act](#) gave a helpful boost to the state's transportation system, providing approximately \$131 million in stimulus funding for highway and bridge improvements and \$13 million for public transit improvements in Maine. This funding can serve as a down payment on needed road, highway, bridge and transit improvements, but it is not sufficient to allow the state to proceed with numerous projects needed to enhance its surface transportation system.

The share of the state's major roads in poor and mediocre condition is increasing, the report found. Approximately one-quarter of Maine's major roads are rated in poor or mediocre condition, with 13 percent rated in poor condition and 12 percent rated in mediocre condition, the report found. In 2005, 20 percent of the state's major roads were rated in poor or mediocre condition (11 percent poor and nine percent mediocre).

The report also found that 14 percent of Maine's bridges are rated as structurally deficient and 19 percent of the state's bridges are rated as functionally obsolete.

With the current federal transportation program, which helps fund Maine's transportation system, set to expire at the end of October, Congress has an opportunity to approve a new federal surface transportation program that could include a significant boost in funding for highway and transit improvements in Maine, the report noted.

"Many transportation projects needed to support long-term economic growth in Maine are likely to remain stranded on the drawing board, unless a significant boost in funding is provided," said William M. 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 this year. Thousands of jobs and the state's economy are riding on it."

[Falling Behind: The Condition and Funding of Maine's Roads, Highways & Bridges](#)

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Executive Summary

Maine's system of roads, highways, bridges and public transit provides the state's residents, visitors and businesses with a high level of mobility. As the backbone that supports the Pine Tree State's economy, Maine's surface transportation system provides for travel to work and school, visits with family and friends, and trips to tourist and recreation attractions while simultaneously providing businesses

with reliable access for customers, suppliers and employees. With a rising unemployment rate of 8.6 percent, and with the state's population continuing to grow, Maine must improve its system of roads, highways, bridges and public transit to foster economic growth, keep business in the state, and ensure the safe, reliable mobility needed to improve the quality of life for all residents.

As Maine looks to rebound from the current economic downturn, the state will need to improve its surface transportation network, enhancing the system's ability to provide efficient and reliable mobility for residents, visitors and businesses. Making needed improvements to Maine's roads; highways, bridges and public transportation systems could provide a significant boost to the state's economy by creating jobs and stimulating long-term economic growth as a result of enhanced mobility and access. But a failure to address the state's growing transportation challenges will threaten Maine's economic recovery.

The approval earlier this year of the American Recovery and Reinvestment Act gave a helpful boost to the state's transportation system, providing approximately \$131 million in stimulus funding for highway and bridge improvements and \$13 million for public transit improvements in Maine. This funding can serve as a down payment on needed road, highway, bridge and transit improvements, but it is not sufficient to allow the state to proceed with numerous projects needed to enhance its surface transportation system. Meeting Maine's need to repair, improve and maintain its system of roads, highways, bridges and transit will require a significant, long-term boost in transportation funding at the state, federal and local levels.

Maine faces a \$3.3 billion gap over the next ten years in needed funding to allow the state to significantly improve road and bridge conditions, relieve congestion and enhance traffic safety and economic development. Without a significant boost in state or federal transportation funding, Maine will be unable to move forward with numerous projects needed to improve traffic safety, enhance economic development opportunities, relieve traffic congestion and maintain overall conditions.

- From 2009 to 2018, the [Maine Department of Transportation](#) (MaineDOT) estimates that \$6.5 billion will be needed to improve road and bridge conditions, relieve congestion and enhance safety and economic development. However, during that time, only \$3.2 billion will be available under current funding, leaving a funding shortfall of \$3.3 billion.
- Unless Maine is able to close its transportation funding gap, the condition of the state's roads, highways and bridges will deteriorate, needed roadway safety improvements will not proceed, traffic congestion will worsen and economic development opportunities in the state will be lost.
- Needed highway improvements that cannot proceed without a significant boost in state transportation funding include a bypass on US 1 from Wiscasset to Edgecomb, the completion of the northeast portion of the bypass on SR 25 in Gorham, the widening of a two-mile section of US 202 from Augusta to Manchester, a bypass from I-395 to SR – 9 from Brewer to Eddington and the modernization of a 26-mile section of Route 161 from Caribou to Cross Lake Township. A full listed of needed highway projects that cannot proceed without a significant boost in funding is included in the report.
- With the amount of funding currently available, the share of the state's roads and highways that need significant repairs is expected to increase. Currently, 1,646 miles, or 18 percent, of state roads and highways are in need of significant repairs. But by 2014, under current funding conditions, the miles of state roads and highways that will need significant repairs is expected to increase to 2,100 miles, or 24 percent of state roads and highways.
- Unless funding for state highway repairs is increased, the miles of roadway that the state will be able to reconstruct or rehabilitate will decrease significantly in the future from over 100 miles per year to less than 50 miles per year.
- MaineDOT is currently only able to fund approximately 50 percent of its pavement preservation needs.
- Because of a lack of adequate repairs, the number of miles of state roadway that are posted or weight-restricted, largely during the spring, will increase in the coming years. In 2008, 2,212 miles of state roadway were posted or weight-restricted. That number is projected to increase to 2,400 miles by 2011 under current funding.
- Without an additional source of transportation funding, the amount of capital investment in Maine's highway transportation system will drop drastically in the coming fiscal year. While the state projects a total of \$493 million in state and federal highway revenue to be available in fiscal year 2010, approximately \$198 million will be available each year from FY 2011 through FY 2014.
- Further compounding Maine's transportation funding shortfall is the escalation of the cost of roadway improvements due to increases in the price of key materials needed for highway and bridge construction. Over the five-year period from August 2004 to August 2009 the average cost of materials used for highway construction, including asphalt, concrete, steel, lumber and diesel has increased 39 percent.

The condition of Maine's major roads is worsening, with one quarter rated in poor or mediocre condition.

- In 2008, 25 percent of Maine's major roads were rated in either poor or mediocre condition (13 percent poor and 12 percent mediocre). This includes Interstates, rural highways connecting urban areas of the state and key urban streets. In 2005, 20 percent of the state's major roads were rated in poor or mediocre condition (11 percent poor and nine percent mediocre).
- Roads rated in poor condition may show signs of deterioration, including rutting, cracks and potholes. In some cases, poor roads can be resurfaced, but often are too deteriorated and must be reconstructed. Roads rated in mediocre condition may show signs of significant wear and may also have some visible pavement distress. Resurfacing can repair most pavements in mediocre condition, but some may need more extensive reconstruction to return them to good condition.
- Roads in need of repair cost each Maine motorist an average of \$250 annually in extra vehicle operating costs – \$251 million statewide. Extra vehicle operating costs include accelerated vehicle depreciation, additional repair costs and increased fuel consumption and tire wear.

- The functional life of Maine's roads is greatly affected by the state's ability to perform timely maintenance and upgrades to ensure that structures last as long as possible. It is critical that roads are fixed before they require major repairs because reconstructing roads costs approximately four times more than resurfacing them.
- Included in this report is a list of some of the segments of deteriorated roadway in the state that are most in need of repair.

One-third of bridges in Maine are structurally deficient or functionally obsolete. Deficient 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.

- Fourteen percent of Maine'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. Maine's bridge safety inspection program ensures that each bridge is safe for vehicles weighing less than the posted 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.
- Nineteen percent of Maine's bridges are functionally obsolete. Functionally obsolete bridges are those that do not have adequate lane widths, shoulder widths, or vertical clearances to serve current traffic demand. These bridges are not automatically rated as structurally deficient, nor are they inherently unsafe.
- Bridge deficiencies have an impact on mobility and safety. Restrictions on vehicle weight may cause many vehicles – especially 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. Bridge ratings range from 1 to 9, with 9 being the best condition and scores for any bridge component being four or below considered deficient.
- This report contains a list of some of Maine's structurally deficient bridges, with average daily traffic (ADT) of at least 2,500 vehicles.

Due to increases in population, economic growth and vehicle travel, Maine's system of roads and bridges is under more stress than ever.

- Maine's population increased seven percent since 1990, from 1.2 million in 1990 to 1.3 million residents in 2008. Maine's population is expected to increase to 1.4 million residents by 2025.
- Vehicle travel on Maine's major highways increased 21 percent between 1990 and 2008, from 11.8 billion vehicle miles traveled in 1990 to 14.4 billion vehicle miles traveled in 2008.
- Vehicle travel in the state is expected to increase by 20 percent by 2025.
- Maine has also experienced moderate economic growth since 1990. From 1990 to 2008, Maine's gross domestic product (GDP), a measure of the state's economic output, increased by 29 percent, when adjusted for inflation.

An average of 178 people were killed each year in crashes on Maine's roads from 2004 to 2008. Improving safety features on Maine'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 889 people were killed in Maine in traffic accidents from 2004 to 2008, an average of 178 fatalities per year.
- In 2008, Maine had a traffic fatality rate of 1.08 fatalities per 100 million vehicle miles traveled, lower than the national average of 1.27.
- Maine's rural, non-Interstate roads have a traffic fatality rate of 1.57 fatalities per 100 million vehicle miles of travel — more than triple the fatality rate on all other roads in the state (0.42).
- Where appropriate, highway improvements such as removing or shielding obstacles, adding or improving medians, adding rumble strips, widening lanes, widening and paving shoulders, upgrading roads from two lanes to four lanes, and installing better road markings and traffic signals 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.

Addressing Maine's transportation needs will enhance the state's economic recovery by creating short- and long-term jobs. Uncertainty about the future size and scope of the federal surface transportation program is further exacerbating Maine's transportation funding challenges.

- Every year, \$32 billion in goods are shipped annually from sites in Maine and another \$29 billion in goods are shipped annually to sites in Maine, mostly by truck.

- Trucks carry seventy-eight percent of the goods shipped annually from sites in Maine and another nine percent are carried by courier services, which use trucks for part of the deliveries. Similarly, trucks carry 80 percent of the goods shipped to sites in Maine and another 13 percent are carried by courier services.
- Commercial trucking in Maine is projected to increase by 28 percent by 2020.
- The unemployment rate in Maine was 8.6 percent in August 2009, a significant increase from August 2008, when the unemployment rate in Maine was 5.4 percent.
- A 2007 analysis by the Federal Highway Administration found that every \$1 billion invested in highway construction would support approximately 27,800 jobs, including approximately 9,500 in the construction sector, approximately 4,300 jobs in industries supporting the construction sector, and approximately 14,000 other jobs induced in non- construction related sectors of the economy.
- Congress is currently deliberating over a long-range federal surface transportation program. The current program, the [Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users](#) (SAFETEA-LU), expired on September 30, 2009, although the program has been extended until October 31st, 2009.
- Until a long-term federal surface transportation program is approved, state transportation departments are limited in their ability to fund transportation improvements in their state because of uncertainty about future levels of federal transportation spending.
- The level of funding and the provisions of a long term federal surface transportation program will significantly impact the future quality of Maine's surface 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 \(USDOT\)](#), the [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 [Maine Department of Transportation \(MaineDOT\)](#).

For a copy of the full report [click here](#)