TRIP Report on Future Mobility in Connecticut

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

Nearly half of Connecticut’s major roads are in need of repair, a third of the state’s bridges are structurally deficient or functionally obsolete, the rural traffic fatality rate is double that on other roads, 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, ease congestion, enhance safety and support long-term economic growth in the state.

The report, “Future Mobility in Connecticut: Meeting the State’s Needs for Safe and Efficient Mobility,” finds that 13 percent of the state’s major roadways are in poor condition and an additional 32 percent are in mediocre condition. In addition to deteriorated road conditions, nine percent of Connecticut’s bridges are structurally deficient and an additional 25 percent are functionally obsolete. The state’s roads are also becoming increasingly crowded, as commuting and commerce are constrained by growing traffic congestion on Connecticut major urban roads. In 2008, 58 percent of the state’s urban highways were congested during peak travel times.

“This report is a call to action to put transportation planning on the long-term agenda. We can’t fix the problems overnight, but the state’s overall economic vitality is in the crosshairs of doing nothing or having vision for the future,” said Senator Bob Duff, vice-chairman of the Connecticut General Assembly’s Transportation Committee. “The time has come to tackle our transportation shortcomings and improve the day-to-day lives of our constituents.”

According to TRIP estimates, Connecticut’s roadways that lack some desirable safety features, have inadequate capacity to meet travel demands or have poor pavement conditions cost the state’s drivers approximately $2.7 billion annually in the form of traffic crashes, additional vehicle operating costs and congestion-related delays. TRIP calculates that driving on inadequate roadways costs the average motorists in the Bridgeport and Stamford areas $1,270 annually, while the cost to the average motorist in the Hartford area is $1,119 each year and $1,074 for the average New Haven driver.

“TRIP’s report demonstrates the heavy reliance Connecticut has on federal transportation funding and the need to effectively plan for future transportation needs today. With a long list of expensive highway and transit projects already on the agenda, it is clear that state and federal revenues for these important services must be secured,” said Senator Donald DeFronzo, chairman of the Connecticut General Assembly’s Transportation Committee.

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. Needed surface transportation projects in Connecticut that would require significant federal funding to proceed include the reconstruction of CT 15 from Fairfield to Trumbull, bridge replacements, improving interchanges and ramps on I-95 in Norwalk from US 7 to Exit 14, replacing the bridges and approach on I-95 in New Haven over the Quinnipiac River and New Haven Harbor, reconstructing and widening I-84 in Waterbury from Silver Street to Pierpont Road, and improvements to the New Britain – Hartford Busway. A full list of needed projects is included in the report.

“Transportation is the number one concern of the business community. If businesses can not move their goods, products and employees in Fairfield County, they will move out of Connecticut,” said Jack Condlin, president and CEO of the Stamford Chamber of Commerce. “In this economy, the state legislators need to recognize that a sound transportation system will be a lynchpin for growth.”

Last year’s federal American Recovery and Reinvestment Act provided approximately $302 million in stimulus funding for highway and bridge improvements and $137 million for public transit improvements in Connecticut. 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 Connecticut. 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 Connecticut.

“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.”

FUTURE MOBILITY IN CONNECTICUT:
Meeting the State’s Need for Safe and Efficient Mobility

July 2010

Executive Summary:
Connecticut’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 backbone that supports the Constitution State, Connecticut’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. Connecticut 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 quality of life in Connecticut.

As Connecticut looks to rebound from the current economic downturn, the state will need to enhance its surface transportation system by improving the physical condition of its transportation network and enhancing the system’s ability to provide efficient and reliable mobility for residents, visitors and businesses. With unemployment in Connecticut jumping from 4.5 percent in June 2007 to 8.8 percent in June 2010, making needed improvements to the state’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 mobility and access.

The federal government is an essential source of funding for the ongoing modernization of Connecticut’s roads, highways, bridges and transit. While construction materials costs have stabilized somewhat during the current recession, a 33 percent materials cost increase over the past five years, coupled with declines in federal transportation revenues, has contributed to the difficulty all states face in maintaining and improving their surface transportation systems.

Approved in February 2009, the American Recovery and Reinvestment Act provided approximately $302 million in stimulus funding for highway and bridge improvements and $137 million for public transit improvements in Connecticut. 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 modernize its surface transportation system. Meeting Connecticut’s need to modernize and maintain its system of roads, highways, bridges and transit will require a significant, long-term boost in transportation funding at the federal, state or local levels.

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), originally scheduled to expire on September 30, 2009, now expires on December 31, 2010 following five short-term extensions. 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 Connecticut, 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 Connecticut’s system of roads, highways, bridges and public transit.

- 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. Following a series of short term extensions passed by Congress, SAFETEA-LU, scheduled to expire on September 30, 2009, now expires December 31, 2010.
- Largely due to federal transportation funds, from 1998 to 2008, Connecticut has been able to complete numerous highway, bridge and transit projects that have improved safety and enhanced mobility and economic productivity. This report contains lists of statewide projects completed with federal funding.
- From 1998 to 2008, Connecticut received approximately $5.2 billion in federal funding for road, highway and bridge improvements, and $1.3 billion for public transit, a total of approximately $6.5 billion.
- While construction materials costs have stabilized or even decreased during the current recession, a 33 percent materials cost increase over the past five years, coupled with declines in federal transportation revenues, will make it more difficult for Congress to authorize new federal surface transportation legislation that adequately funds needed improvements to the nation’s roads, highways, bridges and public transit systems.

Without substantial federal funding, Connecticut 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 to enhance economic development opportunities in the state.

- Needed surface transportation projects in Connecticut that would require significant federal funding to proceed include the reconstruction of CT 15 from Fairfield to Trumbull, bridge replacements, improving interchanges and ramps on I-95 in Norwalk from US 7 to Exit 14, replacing the bridges and approach on I-95 in New Haven over the Quinnipiac River and New Haven Harbor, reconstructing and widening I-84 in Waterbury from Silver Street to Pierpont Road, and improvements to the New Britain – Hartford Busway. A full list of needed projects is included in the report.
- TRIP estimates that Connecticut’s roadways that lack some desirable safety features, have inadequate capacity to meet travel demands or have poor pavement conditions cost the state’s drivers approximately $2.7 billion annually in the form of traffic crashes, additional vehicle operating costs and congestion-related delays.
- TRIP estimates that roadways that lack some desirable safety features, have inadequate capacity to meet travel demands or have poor pavement conditions, cost the average Hartford area motorist $1,119 annually, while the cost to motorists in the Bridgeport and Stamford areas is $1,270 and $1,074 for the average New Haven area driver.
- To ensure that federal funding for highways and bridges in Connecticut and throughout the nation continues beyond the expiration of SAFETEA-LU, Congress needs to approve a new long-term federal surface transportation program by December 31, 2010.
- The American Recovery and Reinvestment Act (ARRA) provides approximately $302 million in stimulus funding for highway and bridge improvements and $152 million for public transit improvements in Connecticut.
- ARRA 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 modernize its surface transportation system. Meeting
Connecticut’s need to modernize and maintain its system of roads, highways, bridges and transit will require a significant, long-term boost in transportation funding at the federal, state or local levels.

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

- Connecticut’s population reached 3.5 million in 2009, an increase of seven percent since 1990. The state’s population is expected to grow to 3.7 million by 2025.
- By 2025, vehicle travel in Connecticut is projected to increase by another 20 percent.
- From 1990 to 2008, Connecticut’s gross domestic product, a measure of the state’s economic output, increased by 33 percent, when adjusted for inflation.

Traffic congestion levels are rising as a result of population and economic growth, leading to increasing travel delays in Connecticut’s urban areas.

- In 2008, 58 percent of Connecticut’s urban Interstate and other highways or freeways were considered congested, carrying a level of traffic that is likely to result in significant delays during peak travel hours.
- The average rush hour trip in the Bridgeport – Stamford metro area takes approximately 25 percent longer to complete than during non-rush hour.
- According to a report by the Reason Foundation, by 2030, unless additional highway capacity is added, traffic delays in the Bridgeport – Stamford area will more than double, with the average rush hour trip taking 62 percent longer to complete than during non-rush hour. This level of traffic delay is equivalent to what is currently experienced in Atlanta and Chicago.
- The statewide cost of traffic congestion in lost time and wasted fuel is approximately $724 million annually. Drivers in the Bridgeport-Stamford area lose $727 each year due to congestion, while Hartford drivers lose $415 and the average New Haven driver loses $379 each year due to congestion.

In 2008, nearly half of major roads in Connecticut were in poor or mediocre condition, providing motorists with a rough ride.

- In 2008, 13 percent of Connecticut’s major roads were rated in poor condition and 32 percent were rated in mediocre condition. This includes Interstates, highways, connecting urban arterials and key urban streets that are maintained by state, county or municipal governments.
- 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. Most pavements in mediocre condition can be repaired by resurfacing, but some may need more extensive reconstruction to return them to good condition.
- Roads in need of repair cost each Connecticut motorist an average of $294 annually in extra vehicle operating costs – $847 million statewide. Costs include accelerated vehicle depreciation, additional repair costs and increased fuel consumption and tire wear.
- In the Hartford metropolitan area, where 20 percent of major roads are rated in poor condition and 31 percent are rated in mediocre condition, driving on roads in need of repair costs motorists $351 each year in extra vehicle operating costs.
- In the Bridgeport / Stamford area, where eight percent of major roads are rated in poor condition and 29 percent are rated in mediocre condition, driving on roads in need of repair costs motorists $280 each year in extra vehicle operating costs.
- The functional life of Connecticut’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.
- This report contains a list of needed roadway preservation projects in Connecticut that would require a significant increase in federal funding to be completed.

Thirty-four percent of bridges in Connecticut showed significant deterioration or did not meet current design standards in 2009. This includes all bridges that are 20 feet or more in length and are maintained by state, local and federal agencies.

- Nine percent of Connecticut’s bridges were structurally deficient in 2009. A bridge is structurally deficient if there is significant deterioration of the bridge deck, supports or other major components. Structurally deficient bridges are often posted for lower weight or closed to traffic, restricting or redirecting large vehicles, including commercial trucks, school buses and emergency services vehicles.
- Twenty-five percent of Connecticut’s bridges were functionally obsolete in 2009. Bridges that are functionally obsolete no longer meet current highway design standards, often because of narrow lanes, inadequate clearances or poor alignment.
- This report contains a list of needed bridge rehabilitation and replacement projects across the state that would require significant federal funding to be completed.

Connecticut’s rural traffic fatality rate is nearly double the fatality rate on all other roads in the state. Improving safety features on Connecticut’s roads and highways would likely result in a decrease in traffic fatalities in the state. Roadway characteristics are likely a contributing factor in approximately one-third of all fatal and serious traffic accidents.

- Between 2004 and 2008, 1,443 people were killed in traffic accidents in Connecticut, an average of 289 fatalities per year.
Connecticut’s traffic fatality rate was .83 fatalities per 100 million vehicle miles of travel in 2008, lower than the national average of 1.25 fatalities per 100 million vehicle miles of travel.

The traffic fatality rate in 2008 on Connecticut’s non-Interstate rural roads was 1.47 traffic fatalities per 100 million vehicle miles of travel, which is nearly double the traffic fatality rate of .76 on all other roads and highways in the state.

Several factors are associated with vehicle accidents that result in fatalities, including driver behavior, vehicle characteristics and roadway design.

TRIP estimates that roadway characteristics, such as lane widths, lighting, signage and the presence or absence of guardrails, paved shoulders, traffic lights, rumble strips, obstacle barriers, turn lanes, median barriers and pedestrian or bicycle facilities, are likely a contributing factor in approximately one-third of all fatal and serious traffic crashes.

Where appropriate, highway improvements can reduce traffic fatalities and accidents while improving traffic flow to help relieve congestion. Such improvements include removing or shielding obstacles; adding or improving medians; adding rumble strips, wider lanes, wider and paved shoulders; upgrading roads from two lanes to four lanes; and better road markings and traffic signals.

The cost of serious traffic crashes in Connecticut in 2008, in which roadway design was likely a contributing factor, was approximately $1.1 billion. Traffic crashes, in which roadway design was likely a contributing factor, in the Hartford area cost each driver approximately $353. The annual cost for such crashes in the Bridgeport and Stamford to area drivers is $263 annually, and these crashes cost each New Haven area driver an average of $462 each year. The costs of serious crashes include lost productivity, lost earnings, medical costs and emergency services.

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 the 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 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 achieve an integrated national transportation system that is less congested and safer and that promotes increased productivity, stronger national competitiveness, and improved 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, eroded 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 Connecticut’s transportation system, particularly its highways, is critical to the health of the state’s economy. Businesses are increasingly reliant on an efficient and reliable transportation system to move products and services. Expenditures on highway repairs create a significant number of jobs. Increases in the cost of highway construction materials have boosted the cost of road, highway and bridge repairs.

• Annually, $82 billion in goods are shipped from sites in Connecticut and another $87 billion in goods are shipped to sites in Connecticut, mostly by trucks.

• Seventy-five percent of the goods shipped annually from sites in Connecticut are carried by trucks and another 21 percent are carried by courier services, which use trucks for part of the deliveries. Similarly, 78 percent of the goods shipped to sites in Connecticut are carried by trucks and another 11 percent are carried by courier services.

• Commercial trucking in Connecticut is projected to increase 27 percent by 2020.

• 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.

• Over the five-year period from April 2005 to April 2010, the average cost of materials used for highway construction – including asphalt, concrete, steel, lumber and diesel – increased by 33 percent.

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