A Primer on the Federal Highway Program

Past, Present, and Potential Highway Policies

One of the first tasks awaiting the newly elected 111th Congress will be the development of legislation to authorize a new federal-aid highway program. Current law, the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users or "SAFETEA-LU" will expire on September 30, 2009. Congress must enact a successor bill by that time, or all federal funding for highway, highway safety, and transit projects will be slashed — with enormous national and local consequences.

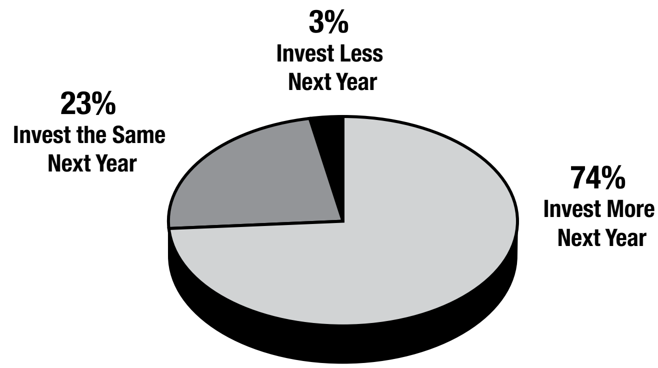
As we move further into the 21st Century, Americans are driving more than ever. In fact, highways are the most heavily used mode of transportation for both personal and commercial travel, accounting for 3,000,000,000,000 (3 trillion) miles driven last year (99 percent of America's surface travel). Trucks moving over highways in 2010 will ship 84 percent of the dollar value of all domestic freight sold in the U.S. Yet investments in our national system of highways and bridges have not kept pace with those increases in demand. As our infrastructure crumbles and people are injured and killed, underinvestment continues.

Safe and efficient roads are critical to our nation — impacting the well-being and mobility of its citizens, its productivity and employment base, its competitiveness, its national security and the health of its economy. Given their fundamental national importance, the federal government should continue to play a leading role in constructing and maintaining a top-quality, nationwide network of highways and bridges.

The Benefits of Road Investments

Safer, less congested roads benefit all Americans. Those benefits include improved highway safety, a cleaner environment, fewer greenhouse gases, better fuel efficiency and less consumption, more free time with families and friends, economic growth, and a better quality of life. Conversely, our failure to invest in highway and bridge improvements must be measured as an opportunity cost of benefits foregone. Specifically, the federal highway program helps to:

- **Increase Highway Safety** – Safety advocates emphasize the importance of driver behavior, vehicle design and road conditions to improving highway safety. Within these three pillars of highway safety, experts agree that substandard road conditions, obsolete designs and roadside hazards contribute to more than 14,000 highway deaths annually — about one-third of all fatal crashes. Improvements to these poor highway conditions will save lives and prevent injuries.



74% of voters feel that the federal government should invest more in highway and bridge improvements next year. Only 3% want government to invest less.

Source: Fabrizio McLaughlin & Associates Research, April 2008

- **SpeedEmergency Services** – Ask fire, police or ambulance personnel and they will tell you that seconds shaved off response times save lives. Who can put a price tag on the ability of fire and other rescue personnel to have quick access in your community?

- **Improve the Environment** – Congestion is a serious barrier to the nation's otherwise impressive air quality progress. Vehicles caught in stop-and-go traffic emit far more pollutants — particularly carbon monoxide and smog-forming volatile organic compounds — than they do without frequent braking and acceleration.

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- **Reduce CO_2 Emissions –** In addition, gridlock increases emissions of carbon dioxide (CO_2), a greenhouse gas. That is because vehicles emit CO_2 as fuel is consumed. The longer vehicles sit in traffic, the more fuel they consume and thus the more CO_2 they emit. Improving traffic flow and reducing congestion will decrease these emissions. According to a 2004 American Highway Users Alliance study, at our nation's worst 233 bottlenecks, traffic congestion relief would cut CO_2 emissions by an average of 77 percent. Americans emit 28 million tons of CO_2 annually due to traffic congestion.

- **Improve Fuel Economy and Reduce Dependence on Foreign Oil –** For vehicles stuck in traffic, not only do tailpipe emissions go up, but fuel economy goes down. The same study found that modest improvements to the nation's worst traffic bottlenecks — a miniscule portion of the nation's four million miles of roads — would save two billion gallons of fuel each year over the next 20 years.

- **Grow the Economy –** Highways are the circulatory system for our nation's "just-in-time delivery" economy, and federal investments pay dividends in the form of healthy economic growth. Every dollar invested in the nation's highway system yields $5.40 in economic benefits in reduced delays, improved safety and lower vehicle operating costs.

- **Improve Our Quality of Life –** Even for Americans who never get behind the wheel of a car, our first-class network of highway and bridges makes their lives better. Fresh produce is available on your grocer's shelf and affordable products can be purchased nationwide thanks to deliveries moving over the national highway system.

- **Make Our Roads Smoother –** The average urban motorist in the U.S. is paying $413 annually in additional vehicle operating costs as a result of driving on roads in need of repair. Driving on roads in disrepair increases consumer costs by accelerating vehicle deterioration, increasing the frequency of needed maintenance and increasing fuel consumption.

A Brief History of the Federal Highway Program

The establishment of post roads is mentioned in the U.S. Constitution, and the federal government has played a significant role in road building since 1916. Historically, the federal program's basic purpose has been to provide financial assistance to states for construction and repair of our nation's most important roads. These are the routes that carry the bulk of all personal and commercial traffic — roads that most of us use to get to work, the store, vacation destinations, and medical care.

State and local governments actually own almost all of the 4,000,000 miles of public roads in the United States, including the entire Interstate Highway System. In fact, the federal government owns or controls just four percent (about 117,000 miles) of all roads, primarily in national forests and parks.

Over the life of the federal highway program, funds have been targeted mainly at the construction and repair of those highways that are most vital to interstate commerce and national defense. In 1956, Congress enacted legislation authorizing construction of the Interstate Highway System. Under that law, the federal government agreed to fund 90 percent of the construction costs for the Interstates. States, in turn, would provide the remaining funds, administer the construction projects, and own and operate the completed Interstate highways. To finance this major construction program, the 1956 law also established the Highway Trust Fund. Revenues from a motor fuel tax were deposited in the trust fund and distributed to states to support Interstate construction. In time, other non-Interstate projects became eligible for federal funding, which would generally cover 80 percent of the project's cost.

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Today, revenue for the Highway Trust Fund is still generated by the motorists and truckers who use the system. Since 1993, federal highway taxes include an 18.4 cents-per-gallon tax on gasoline, 24.4 cents-per-gallon on diesel, varying tax rates on other motor fuels, a tax on heavy vehicles, and levies on certain truck equipment and tires. Between 1993 and 2010, inflation will have reduced the amount of highway investments per gallon of fuel tax in half.

Throughout its 52-year history, the Highway Trust Fund has been the financial support for the federal highway program. The highway user fees deposited in the trust fund have proven to be a sound, pay-as-you-go financing mechanism. But with insolvency of the Highway Trust Fund fast approaching, Congress must take action to avoid a crisis.

ISTEA: The first "TEA" Bill Following Interstate Construction

In 1991, Congress passed the first "TEA" bill, known as the Intermodal Surface Transportation Efficiency Act or "ISTEA" which officially declared that the Interstate System was completed. This bill also significantly restructured the federal highway program and greatly expanded the eligible uses of federal-aid highway funds beyond traditional highway projects. The goal was to provide state and local governments with greater flexibility in selecting projects to meet their transportation needs. ISTEA was the first of three bills developed with similar policies.

TEA-21: Restoring Trust to the Highway Trust Fund

TEA-21 maintained the same basic program structure as ISTEA, but addressed the problem of unpredictable annual appropriations and budget gimmicks that reduced highway spending. Before TEA-21 was enacted, cash balances in the Highway Trust Fund began to soar as federal spending dropped to a level much lower than what highway users were paying in fuel taxes. Though by law trust funds could only be spent on transportation projects, the Highway Trust Fund's growing cash balance helped mask the true size of the federal deficit.

In 1998, the enactment of TEA-21 fixed the budgeting problem and assured steady, increased funding for transportation. Congress created a "budgetary firewall" to ensure that highway user fees were fully spent.

SAFETEA-LU: The Last of the "TEA" Bills

In 2005, enactment of SAFETEA-LU continued the 14-year old program structure created by ISTEA and maintained during TEA-21 with a notable increase in funding for a new strategic safety program. SAFETEA-LU included modest funding increases over TEA-21 by spending down the reserve balance in the Highway Trust Fund. This plan will leave the Highway Trust Fund with a shortfall of revenue in 2009. SAFETEA-LU distributes funding for highways among the following program categories:

- **Interstate Maintenance** – This program is designed to rehabilitate, restore, resurface and reconstruct the Interstate Highway System. These funds cannot be used to add capacity for single occupant vehicles.
- **National Highway System**– The 161,000-mile NHS, which Congress officially designated in 1995, includes the 45,000-mile Interstate Highway System and additional routes identified for their special importance to interstate commerce, tourism and national defense. Consisting of only four percent of all U.S. road miles, the NHS carries 40 percent of all highway travel, 75 percent of all truck travel, and 80 percent of all tourist travel, according to the USDOT.
- **Bridge Replacement and Rehabilitation**– These funds are reserved for replacement and repair of deficient bridges. Some funding is set aside to fund local bridges not typically eligible for federal funding.

- **Highway Safety Improvement Program(HSIP) –** The only new core highway program in SAFETEA-LU, the HSIP program directs funding to road safety projects with performance tracking and reporting requirements. Funds are used for a variety of safety purposes, including eliminating hazards, funding systemic safety advancements, and improving safety at intersections and railroad crossings.

- **Surface Transportation Program (STP) –** This program is essentially a block grant to states and is eligible for expenditure on any non-local road, bridge or mass transit project. States are required to set aside a portion of their STP funds for metropolitan areas with populations over 200,000. Ten percent of STP is also reserved for "Transportation Enhancements", a program that mandates funding for non-road projects such as the preservation of historic sites and the acquisition of land for its scenic or archaeological value.

- **Congestion Mitigation and Air Quality Program (CMAQ) –** These funds are provided to areas that do not meet air quality standards set by the U.S. Environmental Protection Agency (EPA). CMAQ funds cannot be invested in road capacity improvements (except HOV lanes). Although transit has its own program mostly funded by the 2.86 cents of the gas tax deposited in the Mass Transit Account of the Highway Trust Fund, about one-half of the CMAQ dollars are spent on transit with funding from the highway account. CMAQ funds are not dedicated to relieving congestion, but they are used for programs designed to reduce highway demand.

- **Federal Lands Highways –** SAFETEA-LU dedicates funds for federally maintained road projects on federal lands, national parks, and Native American reservations.

- **Equity Bonus–** SAFETEA-LU provided a boost of funding to states to ensure that each state's share of funding for core highway programs would be at least 92 percent of its percentage contribution to the Highway Account of the Highway Trust Fund in 2009.

In addition to the core programs described above, SAFETEA-LU authorized funds for individual projects specifically designated by Congress, emergency repairs to roads damaged in natural disasters, trade corridor development, scenic byways, research, and a number of other transportation programs.

Reconsidering the "TEA" Programs: A Report from the National Surface Transportation Policy and Revenue Commission

When SAFETEA-LU was drafted five years ago, both the House and Senate authors recognized that expert help would be needed to reconsider the bill's outdated policies and the approaching funding shortfall. Congress created two bipartisan commissions to work on these issues and develop recommendations for the future. In early 2008, the first commission, known as the National Surface Transportation Policy and Revenue Commission, issued its report. All commissioners agreed that the "TEA" program needed reforms and should not be reauthorized without major changes. The bipartisan majority of commissioners recommended that the new program focus on nationally-oriented goals, with performance-based programs, and a new national sense of purpose. The majority also recommended a continued strong federal role for Congress and the USDOT, as well as significant federal funding increases paid for with annual user fee increases on highway users over the next five years. Earmarked projects and wasteful spending would have to be reformed to gain public support for Congressional action.

> **Did you know...** **Few other domestic legislative efforts facing members of the 111th Congress will more directly impact the personal and professional lives of their constituents than decisions on transportation investments.**

Factoring into the considerations was an extensive assessment of surface transportation needs. The U.S.

has an overwhelming backlog of highways and bridges in need of repair and upgrade. The Federal Highway Administration (FHWA) judges 33 percent of our major roads to be in poor or mediocre condition and rates 26 percent of bridges to be either structurally deficient or functionally obsolete. Safety experts estimate that such substandard highway conditions are a factor in about one-third of all fatal crashes — resulting in some 14,000 deaths annually.

In addition, traffic congestion continues to be a major problem in every major U.S. city. Studies show that gridlock costs Americans $78 billion a year. This cost is based only on the 4.2 billion hours of additional delay caused by congestion and 2.9 billion gallons of fuel wasted by gridlock. The average commuter loses more than one full work-week per year stuck in traffic. When lost productivity and other indirect societal and business costs are considered, the cost of congestion soars to $200 billion per year, according to the USDOT.

Congestion has worsened because road capacity hasn't kept pace with road use. According to the FHWA, since 1980, the U.S. population has increased by 34 percent, registered vehicles are up by 55 percent and the number of miles Americans drive every year has nearly doubled (97 percent). Yet during that same time period, new lane capacity has grown by a scant 6.3 percent and new roads have grown by only four percent.

The National Surface Transportation Policy and Revenue Commission found that, in the short-term (through 2020), all levels of government would need to double their capital investment to $143 billion annually — just to maintain current physical conditions and make slight operational improvements on U.S. highways and bridges. To truly improve both conditions and performance, $225 billion per year is necessary to make needed, cost-effective improvements.

The federal government funds about 45 percent of all highway and bridge improvements and must continue to fund its fair share. At this share, the Commission report suggests that Congress would need to fund the federal highway program at levels between $65 billion and $100 billion annually to improve the system and address serious needs. Unfortunately, current revenues supply less than $40 billion per year into the Highway Account of the Highway Trust Fund.

Recommended Priorities for Congress

As the 111th Congress develops new highway reauthorization legislation, it should view the Commission's report as the beginning of a conversation on how to reform and revamp the old "TEA" programs. We recommend focusing on the following priorities:

■ **Funding** – Today's highway investment levels fall short of safety improvement, freight mobility, and congestion reduction needs.

Recommendations:

- Congress must replenish the failing Highway Trust Fund by returning monies transferred out and preventing new diversions.
- Congress should continue the budgetary firewall that protects the Highway Trust Fund from being misused to mask deficit spending. The firewall should continue to guarantee predictable, multi-year funding so that wise long-term investment decisions can be made.
- Given both the national funding needs and the inventory of deficient roads and bridges identified by USDOT, Congress should increase federal highway investments. Highway users are willing to pay more for investments that serve their needs and endorse increasing the federal fuel taxes targeted to improve roads and bridges. Congress must invest highway user fees wisely and prevent wasteful spending that would be sure to cause taxpayers' anger.

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- **Roadway Safety–** Safer highways and bridges save lives. According to the FHWA, nearly 120 people die each day on the roads. Safety improvements could save at least 40 of them every day.

  Recommendation:
  - Congress should continue the new Highway Safety Improvement Program in the next highway bill. Performance requirements should be improved based on the experiences of the first four years of the program and systemic improvements should be encouraged.

- **Congestion–** Traffic congestion has become a national problem and it requires a national solution.

  Recommendations:
  - Congress should fund a Congestion Relief Program that is comprehensive and requires measurable, quantifiable results from the states in combating traffic congestion. The program must include targeted expansion of our highway system, particularly at key traffic bottlenecks, and improvements to the operation of existing facilities. CMAQ funds should be available for any project that will mitigate traffic congestion and improve air quality. Project selections should be incentivized so that maximum congestion and air quality benefits are achieved at the lowest costs.

- **Bureaucratic Delay–** Major transportation projects currently face a federal bureaucratic and legal obstacle course that can delay needed improvements for a decade or more. For every 10 years of delay, projects double in cost.

  Recommendations:
  - Congress should make pilot streamlining projects from SAFETEA-LU permanent and allow all states to participate.
  - Congress should look for new ways to move important highway and transit projects from design to reality more expeditiously.
  - Congress should avoid any new proposals to slow project approvals by requiring additional planning requirements, studies, or other procedural hurdles.