

Federal Highway Funding

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Overview

The federal government plays a large role in transportation policy through subsidy programs for state governments and a growing array of regulatory mandates. Modern federal highway aid to the states began in 1916. Then the interstate highway system was launched in 1956 and federal involvement in transportation has been growing ever since.

Today, the interstate highway system is long complete and federal financing has become an increasingly inefficient way to modernize America's highways. Federal spending is often misallocated to low-value activities, and the regulations that go hand-in-hand with federal aid stifle innovation and boost highway costs.

The Department of Transportation's Federal Highway Administration will spend about \$52 billion in fiscal 2010, of which about \$11 billion is from the 2009 economic stimulus bill.¹ FHWA's budget mainly consists of grants to state governments, and FHWA programs are primarily funded from taxes on gasoline and other fuels.²

Congress implements highway policy through multi-year authorization bills. The last of these was passed in 2005 as the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Congress will likely be reauthorizing highway programs in 2011, and it is currently pursuing many misguided policy directions in designing that legislation.

One damaging policy direction involves efforts to reduce individual automobile travel, which will harm the economy and undermine mobility choice. Another damaging policy direction is the imposition of federal "livability" standards in transportation planning. Such standards would federalize land-use planning and pose a serious threat to civil liberties and the autonomy of local communities. Finally, ongoing federal mandates to reduce fuel consumption have the serious side effect of making road travel more dangerous. The federal government pursues these misguided goals by use of its fiscal powers and regulatory controls, and by diverting dedicated vehicle fuel taxes into less efficient forms of transportation.

This essay reviews the history of federal involvement in highways, describing the evolution from simple highway funding to today's attempts to centrally plan the transportation sector. It describes why federal intervention reduces innovation, creates inefficiencies in state highway systems, and damages society by reducing individual freedom and increasing highway fatalities.

Taxpayers and transportation users would be better off if federal highway spending, fuel taxes, and related regulations were eliminated. State and local governments can tackle transportation without federal intervention. They should move toward market pricing for transportation usage and expand the private sector's role in the funding and operation of highways.

Private Provision of Roads

Before the federal government began financing highways in the 20th century, that role was assumed by state governments and the private sector. Private turnpike companies built thousands of miles of toll roads across the states during the 18th and 19th centuries. The first private turnpike connected Philadelphia and Lancaster in 1794 and, by 1800, 69 turnpike companies had been chartered in New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Virginia, and Maryland.³ The movement continued throughout the 19th century, with many toll roads created in the mining states of Colorado, Nevada, and California. The financing of turnpike companies was entirely voluntary, except in Ohio, Pennsylvania, and Virginia where some state subsidization occurred.

There were upwards of 2,500 companies that operated private toll roads in America in the 19th century.⁴ The total length of those roads was 30,000 miles or more. The investment in New England in the first part of the 19th century comprised a higher proportion of the overall economy than did governmental investment in the Interstate Highway System in the 20th century.⁵ In Britain, there were 1,116 turnpike trusts maintaining 22,000 miles of toll roads by 1830.⁶ These companies were financed almost entirely by private capital.

The private road company was an innovation in organizational form. The virtues of unified ownership, authority, residual claimancy, and self-finance from voluntary sources are as real today as they were then. The companies sold their stock to local beneficiaries, who gained from contributing to a local community enterprise. The impetus to contribute was less in receiving dividends than gaining the use-benefits of the road and esteem of the community. Despite the benefits to communities, the road companies were often hamstrung by regulations on toll

rates and toll collection.⁷

Over time, the road companies adapted to changes in transportation modes, often becoming spokes and feeders to the spreading rail lines. The railroads themselves faced a rising challenge from automobiles in the 20th century. Unfortunately, rather than encouraging the revival of private toll roads for automobiles, politicians of the era favored abolishing the private ownership of roads and substituting state-owned "free" roads financed by taxes. The roads of the 20th century were virtually all government roads provided outside of the market system.

Looking ahead, there are no technical or economic reasons why the highways of the 21st century should not be private toll roads once again. Modern GPS-based technology enables mileage-based tolls to be debited to road users, and the revenues credited to road providers, without vehicles having to stop, and without invading the privacy of road users. One such tolling method has already been successfully demonstrated in Oregon, where those taking part had the option to pay for roads either by fuel taxes or by the new mileage charge. GPS-based methods are also used to charge truck tolls on the German Autobahn. Also, the congressionally appointed National Surface Transportation Infrastructure Financing Commission unanimously recommended in 2009 that the United States proceed to finance its roads by means of mileage charges rather than fuel taxes.⁸

While payment for road use by fuel taxes involves paying into opaque government-controlled funds with no knowledge about how the revenues are spent, mileage-based fees can provide precise and transparent information on the payments being made for each road segment, and thus illuminate the costs and efficiencies of different road providers. Such information, which could be made available without revealing the identities of the road users, would be sure to be publicized, and thus help move the control and financing of roads from nonresponsive government funds to competitive suppliers operating in open markets.

The Rise in Federal Intervention

Article 1, Section 8 of the Constitution gives Congress the power "to establish Post Offices and post Roads." In 1806, Congress approved funding from the proceeds of land sales to construct the "National Road" westward from Maryland.⁹ But there were doubts about whether the federal government was allowed to fund such "internal improvements" under the limited powers granted it under the Constitution. President Thomas Jefferson requested Congress to amend the Constitution to allow such expenditures, but Congress declined to do so.

In 1817, President James Madison vetoed a bill that would have provided federal aid to construct roads and canals.¹⁰ He was followed by Presidents Monroe, Jackson, Tyler, Polk, Pierce, and Buchanan, who all vetoed transportation bills on the grounds that they were unconstitutional. However, by the late 19th century the federal government was occasionally providing grants of land to the states to raise funds for road construction.¹¹

The highway laws of 1916 and 1921 were the first major federal interventions into road financing. These laws authorized regular federal grants to the states for highways and established the Federal Bureau of Public Roads, the predecessor to the Federal Highway Administration. The laws were passed after years of intense lobbying by road building companies and state highway interests.¹² With the federal grants came the beginning of top-down regulatory controls of America's roads from Washington.¹³

The origins of the Interstate Highway System can be traced to the presidency of Franklin Roosevelt. The Federal-Aid Highway Act of 1938 directed the Bureau of Public Roads to study the feasibility of a six-route toll network. The subsequent report rejected toll highways and proposed a non-toll interregional highway network which was later established as the 41,250-mile "Interstate and Defense Highway System."¹⁴

President Dwight Eisenhower had long been interested in national highways and participated in a 1919 transcontinental motor convoy from Washington D.C. to San Francisco. Subsequently he was impressed by the German autobahn network, which he saw and used during World War II. In 1954 the Eisenhower administration unveiled a \$50 billion proposal to create a national highway network within a 10-year period. The subsequent Federal-Aid Highway Act of 1956 was designed to create a national 41,250-mile highway system to be completed by 1969. The law authorized \$25 billion to finance 90 percent of the cost, with funds disbursed to the states by Congress from a federal Highway Trust Fund created for the purpose.

The powers under the 1956 Act were supposed to expire in 1972, but that sun never set. The highway program was repeatedly renewed and the length of the Interstate Highway System was increased.¹⁵ Construction was formally completed in 1996, but federal financing was then directed to a brand new 160,000-mile "National Highway System."¹⁶

The primary sources of federal highway funds are fuel taxes. After a number of initiatives to establish a federal gas tax beginning in 1914, a tax was enacted in 1932 at 1 cent per gallon. The tax was supposed to be a one-year source of funds to deal with a temporary federal budget deficit, but like many "temporary" government measures, the gasoline tax became part of permanent federal law.¹⁷ Congress increased the gasoline tax rate over the years, and it reached the current 18.4 cents per gallon in 1994.¹⁸ The tax rate on diesel fuel is currently 24.4 cents per gallon. State governments impose their own fuel taxes, and in 2009 the average state gasoline tax was 18.5 cents per gallon.¹⁹

Initially, revenues from the gasoline tax flowed into the federal government's general fund. But in 1956, the Federal Highway Trust Fund (FHTF) was established to finance the construction of the Interstate Highway System. However, Congress has increasingly spent FHTF monies on non-highway uses, such as urban transit. The sources and uses of revenues in the FHTF have become ever more complicated, and the spending allocations across the 50 states and different types of activities illustrate central planning run amok.²⁰

Six Disadvantages of Federal Funding

Today, gasoline taxes and other revenues flowing into the FHTF total about \$36 billion annually. Congress spends the money on highways

and many other activities, often inefficiently. The following sections discuss six disadvantages of federal highway financing, and thus indicate the advantages of devolving highway financing to the states and private sector.

1. Funds Used Inefficiently and Diverted to Lower-Priority Projects

Federal aid typically covers between 75 and 90 percent of the costs of federally supported highway projects. Because states spend only a small fraction of their own resources on these projects, state officials have less incentive to use funds efficiently and to fund only high-priority investments. Boston's Central Artery and Tunnel project (the "Big Dig"), for example, suffered from poor management and huge cost overruns.²¹ Federal taxpayers paid for more than half of the project's total costs, which soared from about \$3 billion to about \$15 billion.²²

Federal politicians often direct funds to projects in their states that are low priorities for the nation as a whole. The Speaker of the House of Representatives in the 1980s, "Tip" O'Neill, represented a Boston district and led the push for federal funding of the Big Dig. More recently, Representative Don Young of Alaska led the drive to finance that state's infamous "Bridge to Nowhere," discussed below.

The inefficient political allocation of federal dollars can be seen in the rise of "earmarking" in transportation bills. This practice involves members of Congress slipping in funding for particular projects requested by special interest groups in their districts. In 1982, the prohibition on earmarks in highway bills in effect since 1914 was broken by the funding of 10 earmarks costing \$362 million. In 1987, President Ronald Reagan vetoed a highway bill partly because it contained 121 earmarks, and Congress overrode his veto.²³

Since then, transportation earmarking has grown by leaps and bounds. The 1991 transportation authorization bill (ISTEA) had 538 highway earmarks, the 1998 bill (TEA-21) had 1,850 highway earmarks, and the 2005 bill (SAFETEA-LU) had 5,634 highway earmarks.²⁴ The earmarked projects in the 2005 bill cost \$22 billion, thus indicating that earmarks are consuming a substantial portion of federal highway funding.

The problem with earmarks was driven home by an Alaska bridge project in 2005. Rep. Don Young of Alaska slipped a \$223 million earmark into a spending bill for a bridge from Ketchikan—with a population of 8,900—to the Island of Gravina—with a population of 50. The project was dubbed the "Bridge to Nowhere" and created an uproar because it was clearly a low priority project that made no economic sense.

2. Funds Diverted to Non-Highway Activities

Since 1982, increasing amounts of revenues from the FHTF have been diverted to non-highway uses. The Surface Transportation Assistance Act of 1982 raised the federal gas tax by five cents, with one-fifth of the increase dedicated to urban transit. The 1991 Intermodal Surface Transportation Efficiency Act substituted "flexibility" and "intermodalism" for the "dedication" of fuel taxes to highways. That wording change meant that any transportation-related activity could lay claim to highway money.

Under the most recent highway authorization—SAFETEA-LU of 2005—transportation scholar Randal O'Toole figures that only about 59 percent of highway trust fund dollars will be spent on highways.²⁵ Funds from the FHTF will go to mass transit (21 percent), earmarks (8 percent), and a hodge-podge of other activities such as bicycle paths (12 percent). Note, however, that some of the earmark funds will also go to highways.

The main diversion is to rail transit, which can be a very inefficient mode of transportation, [as discussed in a related essay](#). Most Americans do not use rail transit and should not have to subsidize expensive subways and rail systems in a small number of major cities that prohibit the use of more modern and effective transit methods, such as shared taxis.

As the FHWA table (www.fhwa.dot.gov/safetealu/safetea-lu_authorizations.xls) indicates, Congress allocates highway money to truck parking facilities, anti-racial profiling programs, magnetic levitation trains, and dozens of other non-road activities.

O'Toole finds that the House version of upcoming transportation authorization legislation would reduce the highway portion of FHTF spending to just 20 percent. It would add high-speed rail at 10 percent, fund transit at 20 percent, and provide about 50 percent of the funds to the states to spend on "flexible" projects and earmarks.²⁶

3. Federal Intervention Increases Highway Costs

The flow of federal funding to the states for highways comes part-in-parcel with top-down regulations. The growing mass of federal regulations makes highway building more expensive in numerous ways. First, federal specifications for road construction standards can be more demanding than state standards. But one-size-fits-all federal rules may ignore unique features of the states and not allow state officials to make efficient trade-offs on highway design.

A second problem is that federal grants usually come with an array of extraneous federal regulations that increase costs. Highway grants, for example, come with Davis-Bacon rules and Buy America provisions, which raise highway costs substantially. Davis-Bacon rules require that workers on federally funded projects be paid "prevailing wages" in an area, which typically means higher union wages. Davis-Bacon rules increase the costs of federally funded projects by an average of about 10 percent, which wastes billions of dollars per year.²⁷

Ralph Stanley, the entrepreneur who created the private Dulles Greenway toll highway in Virginia, estimated that federal regulations increase highway construction costs by about 20 percent.²⁸ Robert Farris, who was commissioner of the Tennessee Department of Transportation and also head of the Federal Highway Administration, suggested that federal regulations increase costs by 30 percent.²⁹

Finally, federal intervention adds substantial administrative costs to highway building. Planning for federally financed highways requires the detailed involvement of both federal and state governments. By dividing responsibility for projects, this split system encourages waste at both levels of government. Total federal, state, and local expenditures on highway "administration and research" when the highway trust fund was established in 1956 were 6.8 percent of construction costs. By 2002, these costs had risen to 17 percent of expenditures.³⁰ The rise in federal intervention appears to have pushed up these expenditures substantially.

4. Funds are Misallocated Across States

Some states persistently receive more federal highway funding than they pay into the federal Highway Trust Fund. The Federal Highway Administration publishes *Highway Statistics* each year, showing the amounts the fund receives from each state and the allocation paid to each state from the fund.³¹ Supporters of federal highway financing use these figures to demonstrate how supposedly beneficial the current system is to all states.

However, the receipts-and-allocations data presented in *Highway Statistics* are misleading. The FHWA divides the dollar amounts of the apportionments and allocations for each state by the amount of revenue paid into the fund by each state. The result is a ratio that overstates the benefits of the federal highway system to individual states for a number of reasons:

- **Interest.** Larger amounts are taken out of the trust fund than paid in—in other words, the grand total ratio exceeds 100 percent. For the whole period 1956–2008, the excess from the FHTF was around 13 percent, and for 2008 it was 32 percent.³² The excess is the result of interest earned on the fund's balances. But the interest on unspent balances does not represent additional resources that the federal government provides to the states.
- **Minimum guarantee.** The 1998 TEA-21 legislation included a "minimum guarantee" that no state would receive less than 90.5 percent of the amount it paid into the trust fund. The 2005 SAFETEA-LU reauthorization raised the minimum guarantee to 92 percent. To implement the guarantee from 1998, \$35 billion—16 percent of the total authorized—was set aside to increase the shares of those states that, under the traditional formulas, received less than 90.5 percent of what they paid into the fund. Yet some of this money also went to states that were already receiving more than they paid into the fund, thereby doing little to remedy prior disparities. As there was no such guarantee before 1998, this rule's effect on total distributions over time cannot be gauged from data provided by the Federal Highway Administration.
- **Exclusion of Mass Transit Account and non-road uses.** The FHWA data excludes payments that are transferred to the Mass Transit Account and to other non-road uses. As these make up over 30 percent of fuel tax revenues, the data from the FHWA overstate the benefits of the federal highway program.

A better way of showing the inequities between the states is to compare each state's *share* of money taken out of the highway trust fund as a ratio of the *share* it paid in.³³ If a state's receipts were 3 percent of the whole, and its contribution 2 percent, the share ratio would be 1.5. I have presented such calculations elsewhere and found that there are substantial winner and loser states from the Highway Trust Fund.³⁴

Similarly, a recent analysis by Ronald Utt found that half of the states are shortchanged by the current highway trust fund allocations.³⁵ The Congressional Research Service notes that struggles over recent highway bills have focused on these interstate inequities (rather than on ways to make federal expenditures more productive), with the donor states tending to be in the South and Midwest and the donee states tending to be in the Northeast, Pacific Rim, and West.³⁶

Finally, note that these analyses do not take into account the increased costs in every state from federal regulations and administrative costs. If these were taken into account, road users in very few states would derive any net benefits from federal highway financing.

5. Private Solutions Are Discouraged

By subsidizing the states to provide seemingly "free" highways, federal financing discourages the construction and operation of privately financed highways. A key problem is that users of private highways are forced to pay both the tolls for those private facilities and the fuel taxes that support the government highways. Another problem is that private highway companies have to pay taxes, including property taxes and income taxes, while government agencies do not. Furthermore, private highways face higher borrowing costs because they must issue taxable bonds, whereas public agencies can issue tax-exempt bonds.

The Dulles Greenway is a privately financed and operated highway in Northern Virginia, which cost investors about \$350 million to build.³⁷ The Greenway must compete against nearby "free" state highways. It has been tough going, but the Greenway has survived for 15 years. Typical users of the Greenway pay 36 cents in federal and state gasoline taxes per gallon to support the government highways, plus they pay Greenway tolls, which range from \$2.25 to \$4.15 per trip for automobiles using electronic tolling.³⁸

If the Greenway and other private highways were credited the amounts paid into state and federal highway funds, their tolls could be lowered and more traffic would be attracted to them. That would make better use of private capacity as it could develop in coming years and relieve congestion on other roads.

Unfortunately, the proposed version of new highway legislation by the chairman of the House Committee on Transportation and Infrastructure would add new federal regulatory barriers to toll roads in the states.³⁹ Section 1204 of the bill would create a federal "Office of Public Benefit" to ensure "protection of the public interest in relation to highway toll projects and public-private partnership agreements on federal-aid highways." This new office would be tasked with reviewing and approving or disapproving proposed toll rate increases on these projects, among other interventionist activities. This would completely flip around the idea of road tolling as a decentralized market-based mechanism and turn it into a central planning mechanism.

6. Innovation Is Discouraged

One of the promising advances to relieving urban congestion is High-Occupancy or Toll (HOT) highways. Networks of HOT lanes can be structured for use by vehicles with payment of variable tolls combined with buses at no charge. The tolls are collected electronically and set at levels high enough to ensure acceptable traffic conditions at all times. A current obstacle to expanding HOT lane programs is that it is difficult to add tolls to roads constructed with federal funds.

The first HOT lanes in the United States were introduced in 1995 on California's State Route 91 near Anaheim. The California Private Transportation Company conceived, designed, financed, constructed, and opened two pairs of "express lanes" in the median of a 10-mile

stretch of the highway.⁴⁰ Express lane users pay tolls by means of identifiers, similar to those used by EZPass systems, with the payments debited electronically from accounts opened with the company.

Following the lead of the private sector, California's public sector implemented a similar project on Route I-15 north of San Diego. It has also proven popular. The rates charged on the I-15 lanes are varied automatically in real time to respond to traffic conditions. HOT lanes have also been implemented in Denver and Minneapolis, and are planned for the Washington, D.C., area. Payments for the use of roads can now be made as easily as payments for the use of telephones, without vehicles having to stop. Such changes in payment methods can have profound effects on the management and financing of roads.

If the federal government removed itself from highway financing, direct payments for road use could be made directly to state governments through tolls. These sorts of tolls are already in place in New York and New Jersey. An even better solution would be payment of tolls for road use directly to private highway companies, which would cut out government financing completely. This is now technically feasible.

Following the success of the HOT lanes in Southern California, many other projects are being pursued across the country. One project is in Northern Virginia. Fluor-Transurban is building and providing most of the funding for HOT lanes on a 14-mile stretch of the Capital Beltway. Drivers will pay to use the lanes with electronic tolling, which will recoup the company's roughly \$1 billion investment.

HOT lane projects are attractive to governments because they can make use of existing capacity and because the tolls can pay for all or most of the costs.⁴¹ Such networks offer congestion-free expressways for those wanting to pay a premium price, in addition to reducing congestion on other roads and creating faster bus services.

There are many exciting technological developments in highways, and ending federal intervention would make state governments more likely to seek innovative solutions. Technological advances—such as electronic tolling—have made paying for road services as simple as paying for other sorts of goods. In a world where a fuel tax that is levied on gasoline is an imperfect measure of the wear-and-tear each driver puts on roads, it is vital to explore better ways to finance highways.

Damaging Directions in Transportation Policy

The Obama administration and leading policymakers on Capitol Hill are pursuing numerous misguided policies in forthcoming transportation legislation. Congress will soon be updating transportation programs, which were last authorized in the SAFETEA-LU legislation of 2005. Unfortunately, lawmakers are pushing damaging policies including: trying to reduce automobile travel, imposing land-use planning controls on local governments, and mandating increases in fuel efficiency standards, which increase highway fatalities.

1. Reducing Automobile Travel. A possible Senate version of upcoming transportation legislation may be based on the Federal Surface Transportation Policy and Planning Act of 2009 (S.1036), drafted by the Senate Committee on Commerce, Science, and Transportation.⁴² Here is the actual language from Section 2 regarding the "goals" of the legislation.

- to reduce national per capita motor vehicle miles traveled on an annual basis;
- to reduce national motor vehicle-related fatalities by 50 percent by 2030;
- to reduce national surface-transportation-generated carbon dioxide levels by 40 percent by 2030;
- to reduce national surface transportation delays per capita on an annual basis;
- to increase the percentage of system-critical surface transportation assets, as defined by the secretary, that are in a state of good repair by 20 percent by 2030;
- to increase the total usage of public transportation, intercity passenger rail services, and non-motorized transportation on an annual basis;
- to increase the proportion of national freight transportation provided by non-highway or multimodal services by 10 percent by 2020;
- to reduce passenger and freight transportation delays and congestion at international points of entry on an annual basis;
- to ensure adequate transportation of domestic energy supplies; and
- to maintain or reduce the percentage of gross domestic product consumed by transportation costs.

Some of these goals might be harmless, although they bring to mind the arbitrary planning objectives of centrally planned economies. But other goals are not harmless. The goal "to reduce national per capita motor vehicle miles traveled" is not only of dubious constitutionality, it is also damaging to economic development.

Because car travel is generally faster (door-to-door) than transit (which is not even available to most American travelers), it is not possible to reduce car travel without reducing total travel. The amount of time available for travel is limited, so the use of slower door-to-door travel modes is invariably associated with loss of trips. While requiring road users to cover the costs arising from their trips is a legitimate government objective, a blanket requirement to reduce "per capita" travel constitutes an unacceptable attack on freedom.

Travel is generally not carried out for its own sake, but enables participation in activities such as employment, commerce, and social intercourse. Travel by motor vehicles increases the number of activities that can be reached, and hence the choices available to all. The demand for additional activities tends to increase as societies get richer, and it is difficult to see how such activities can be reduced without reducing living standards, which is not what the Obama administration claims to be doing.

2. Imposing Federal Land-Use Planning. A House version of the new highway bill is the Surface Transportation Authorization Act of 2009: A Blueprint for Investment and Reform, which was introduced by the House Committee on Transportation and Infrastructure in 2009.⁴³ The legislation provides for an "Office of Livability" to be established in the Federal Highway Administration. The purpose of this proposed office is to ensure that federal "Smart Growth" planning standards are mandated for all urban areas of 100,000 or more. In addition to the undesirability and futility of "Smart Growth" policies, and of federal land-use planning standards being imposed on local areas, this approach will offer huge opportunities for corruption, as land developers nationwide lobby federal officials for special treatment.

The following text from the House bill (pages 39 and 40) on the proposed Office of Livability indicates the degree to which some members

of Congress think that the federal government ought to micromanage local communities:

Provides leadership nationally and at DOT on issues pertaining to livability. Provides leadership to expand surface transportation options; advance sustainable modes of transportation including transit, walking, and bicycling; enhance integrated planning to support the creation of livable communities; and serve as a clearinghouse of information and statistics related to livability and sustainability.

Reforms livability and sustainability programs. Requires the Office to administer the following programs: Safe Routes to Schools; Transportation Enhancements; Recreational Trails; Scenic Byways; and the U.S. Bicycle Route System; the Office will also be responsible for the finalization of the Non-motorized Transportation Pilot Program and the dissemination of the results of the program; Works collaboratively with other DOT offices that administer the following programs: Metropolitan Planning; Statewide Transportation Planning; Transit in Parks; and New Starts and Small Starts; and compiles and disseminates best practices and provides technical assistance related to the delivery of non-motorized transportation projects; the development of livable communities and the integration of land use and transportation policies; transit-oriented development; comprehensive street design policies and principles and practical design standards; and implementation of the U.S. Bicycle Route System.

Encourages and supports the adoption of comprehensive streets policies and principles. Oversees implementation of the new requirement that all federal-aid projects under title 23 consider comprehensive street design policies and principles and practical design standards; and establishes best practices, model legislation, and technical assistance to support States, regions, and localities in adopting and implementing comprehensive street design policies.

Establishes a U.S. Bicycle Route System. Creates a system for approval and designation of routes on a national system of bicycle routes.

Do we really want Washington telling towns across the nation how to design their streets and bicycle paths? Do we really need Washington telling us that we need to walk more? This sort of legislation contains very dangerous precedents for a free society. It would undermine our system of decentralized power and self-directed state and local governments, while expanding further the power of federal bureaucracies.

3. Saving Fuel by Increasing Fatalities

A goal of the Senate highway bill mentioned above is "to reduce national motor vehicle-related fatalities by 50 percent by 2030." But that goal is in direct conflict with the goal of federal policymakers to downsize automobiles to reduce fuel consumption. The federal government continues to tighten Corporate Average Fuel Economy standards, which effectively pushes Americans into smaller and thus less-safe cars.

The positive relationship between vehicle size and safety is well established. Larger cars have more mass to absorb crash forces, and they have more interior space in which their occupants can "ride down" a collision before striking a dashboard or side pillar. The smallest cars have occupant death rates that are more than twice those of large cars.

The negative effects of CAFE standards on safety are widely documented. A 2002 National Academy of Sciences study concluded that CAFE's effect on vehicle downsizing contributed between 1,300 and 2,600 deaths annually and to 10 times that many serious injuries.⁴⁴ A 1989 Brookings-Harvard study estimated that CAFE standards caused a 14 to 27 percent increase in occupant fatalities.⁴⁵ A 1999 *USA Today* analysis concluded that, over its lifetime to that point, CAFE had resulted in about 46,000 additional fatalities.⁴⁶

Conclusions

Americans are frustrated by rising traffic congestion. In the period 1980 to 2008, the vehicle-miles driven in the nation increased 96 percent, but the lane-miles of public roads increased only 7.5 percent. The problem is that U.S. road systems are run by governments, which do not respond to the wishes of road users but to the preferences of politicians. Transportation markets need to be liberated from government control so that road users can directly finance the needed highway improvements that they are prepared to pay for.

We need to recognize "road space" as a scarce resource and allow road owners to increase supply and charge market prices for it. We should allow the revenues to stimulate investment in new capacity and in technologies to reduce congestion. If the market is allowed to work, profits will attract investors willing to spend their own money to expand the road system in response to the wishes of consumers.

To make progress toward a market-based highway system, we should first end the federal role in highway financing. In his 1982 State of the Union address, President Reagan proposed that all federal highway and transit programs, except the interstate highway system, be "turned back" to the states and the related federal gasoline taxes ended. Similar efforts to phase out federal financing of state roads were introduced in 1996 by Sen. Connie Mack (R-FL) and Rep. John Kasich (R-OH). Sen. James Inhofe (R-OK) introduced a similar bill in 2002, and Rep. Scott Garrett (R-NJ) and Rep. Jeff Flake (R-AZ) have each proposed bills to allow states to fully or partly opt out of federal highway financing.⁴⁷

Such reforms would give states the freedom to innovate with toll roads, electronic road-pricing technologies, and private highway investment. Unfortunately, these reforms have so far received little action in Congress. But there is a growing acceptance of innovative financing and management of highways in many states.

With the devolution of highway financing and control to the states, successful innovations in one state would be copied in other states. And without federal subsidies, state governments would have stronger incentives to ensure that funds were spent efficiently. An additional advantage is that highway financing would be more transparent without the complex federal trust fund. Citizens could better understand how their transportation dollars were being spent.

The time is ripe for repeal of the current central planning approach to highway financing. Given more autonomy, state governments and the private sector would have the power and flexibility to meet the huge challenges ahead that America faces in highway infrastructure.

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¹ *Budget of the U.S. Government, Fiscal Year 2011, Analytical Perspectives* (Washington: Government Printing Office, 2010), Table 33-1.

² *Budget of the U.S. Government, Fiscal Year 2011, Appendix* (Washington: Government Printing Office, 2010), p. 943.

³ Daniel Klein and John Majewski, "America's Toll Roads Heritage" in *Street Smart: Competition, Entrepreneurship, and the Future of Roads*, ed. Gabriel Roth (New Brunswick, N.J.: Transaction Publishers, 2006). See also Daniel B. Klein and John Majewski, "Turnpikes and Toll Roads in Nineteenth-Century America," February 5, 2010, www.eh.net.

⁴ Daniel Klein and John Majewski, "America's Toll Roads Heritage" in *Street Smart: Competition, Entrepreneurship, and the Future of Roads*, ed. Gabriel Roth (New Brunswick, N.J.: Transaction Publishers, 2006). See also Daniel B. Klein and John Majewski, "Turnpikes and Toll Roads in Nineteenth-Century America," February 5, 2010, www.eh.net.

⁵ Gerald Gunderson, "Privatization and the 19th Century Turnpike," *Cato Journal* 9, no. 1 (Spring-Summer 1989): 191–200. See also Daniel Klein and John Majewski, "America's Toll Roads Heritage" in *Street Smart: Competition, Entrepreneurship, and the Future of Roads*, ed. Gabriel Roth (New Brunswick, N.J.: Transaction Publishers, 2006).

⁶ Rees Jeffreys, *The King's Highway* (London: Batchworth Press, 1949).

⁷ Daniel B. Klein and John Majewski, "Economy, Community, and Law: The Turnpike Movement in New York, 1797-1845," in *Law and Society Review* 26 (1992).

⁸ National Surface Transportation Infrastructure Financing Commission, "Paying Our Way: A New Framework for Transportation Finance," February 2009.

⁹ For articles on the history of federal road funding, see Federal Highway Administration, "Highway History," www.fhwa.dot.gov/infrastructure/history.htm.

¹⁰ James Madison, veto message for the Bonus Bill, March 13, 1817, www.constitution.org/jm/18170303_veto.htm.

¹¹ Robert Jay Dilger, "Federalism Issues in Surface Transportation Policy: Past and Present," Congressional Research Service Report no. R40431, January 5, 2010.

¹² Austin F. MacDonald, *Federal Aid: A Study of the American Subsidy System* (New York: Thomas Y. Crowell, 1928), p. 90. See also Richard F. Weingroff, "For the Common Good: The 85th Anniversary of a Historic Partnership," *Public Roads* 64, no. 5 (March-April 2001).

¹³ Austin F. MacDonald, *Federal Aid: A Study of the American Subsidy System* (New York: Thomas Y. Crowell, 1928), p. 93. MacDonald notes that the 1916 Act "went further than any previous federal aid legislation in prescribing the exact manner of spending federal allotments." States were required to send a "vast amount of detailed information" to Washington on their projects and be subject to thorough federal inspections.

¹⁴ Richard F. Weingroff, "Federal-Aid Highway Act of 1956: Creating the Interstate System," *Public Roads* 60, no. 1 (Summer 1996).

¹⁵ Federal Highway Administration, "Dwight D. Eisenhower National System of Interstate and Defense Highways," www.fhwa.dot.gov/programadmin/interstate.html.

¹⁶ www.fhwa.dot.gov/planning/nhs.

¹⁷ Brian Francis, "Gasoline Excise Taxes, 1933–2000," *Statistics of Income Bulletin*, Internal Revenue Service (Winter 2000-2001).

¹⁸ For historical rates, Brian Francis, "Gasoline Excise Taxes, 1933-2000," *Statistics of Income Bulletin*, Internal Revenue Service (Winter 2000-2001).

¹⁹ See www.api.org/statistics/fueltaxes. See also, "The History of the Gasoline Tax, Part I," *Transportation Weekly* 11, no 24 (April 20, 2010).

²⁰ See an official overview at www.fhwa.dot.gov/reports/fifahwy/index.htm.

²¹ See the *Boston Globe's* "Easy Pass" series of reports by Raphael Lewis and Sean Murphy, www.boston.com/globe/metro/packages/bechtel. See also Amy Goldstein, "Myriad Reports Pointed to Big Dig's Problems," *Washington Post*, July 23, 2006, and see Rick Klein, "Big Dig Failures Threaten Federal Funding," *Boston Globe*, August 6, 2006.

²² Rick Klein, "Big Dig Failures Threaten Federal Funding," *Boston Globe*, August 6, 2006. The federal contribution was \$8.5 billion.

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²⁴ National Surface Transportation Policy and Review Study Commission, "Transportation for Tomorrow," December 2007, p. 6-5,

http://transportationfortomorrow.org/final_report.

- ²⁵ Randal O'Toole, "The Citizen's Guide to Transportation Reauthorization," Cato Institute Briefing Paper no. 116, December 10, 2009, p. 2. Ronald Utt similarly finds that non-highway diversions under SAFETEA-LU are about 38 percent of the total cost. See Ronald Utt, "Congress Undermines America's Infrastructure by Looting the Highway Trust Fund," Heritage Foundation, September 3, 2008.
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- ²⁷ James Sherk, "Davis-Bacon Act Extensions," Heritage Foundation, January 14, 2010.
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- ³⁰ Gabriel Roth, "Liberating the Roads: Reform U.S. Highway Policy," Cato Institute Policy Analysis no. 538, March 17, 2005.
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- ³⁸ <http://dullesgreenway.com/toll-rates.html>.
- ³⁹ The bill is available at http://transportation.house.gov/Media/file/Highways/HPP/OBERST_044_xml.pdf.
- ⁴⁰ Although the California Private Transportation Company operations were profitable (and remain so), they were bought by Orange County in 2003 to restore to it the legal right to build competing facilities in the same corridor.
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- ⁴⁶ James R. Healey, "How Fatality Statistics Were Calculated," *USA Today*, July 2, 1999, p. B2.
- ⁴⁷ Garrett's bill is the Surface Transportation and Taxation Equity Act. Flake's bill is the Transportation Empowerment Act.

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