



# Backgroundnder

## Executive Summary

No. 1643

April 7, 2003

## REAUTHORIZATION OF TEA-21: A PRIMER ON REFORMING THE FEDERAL HIGHWAY AND TRANSIT PROGRAMS

*RONALD D. UTT, PH.D.*

Congress and the President should allow the troubled federal highway program to die a quiet death when the Transportation Equity Act for the 21st Century (TEA-21) expires on September 30, 2003. Since the completion of the interstate highway system more than 20 years ago, and with the increased urbanization of the population, America's transportation problems have become increasingly local and regional in nature. As a result, Washington officials have little to offer in the way of effective solutions to distant problems.

### **An Opportunity to Improve the System.**

Among the current law's many problems are the regional inequities between who pays and who receives, diversion of as much as 40 percent of fuel tax revenues to non-general-purpose highway projects that benefit small but influential fractions of the population, and increasing congressional meddling that circumvents state and local priorities by mandating construction of thousands of pork-barrel projects.

In place of the current system, Congress should transfer to the states all surface transportation responsibilities and the financial resources needed to fulfill them. Several legislative initiatives to

accomplish this goal were introduced in 1997 during the debate on the last reauthorization of the surface transportation programs. However, they were not adopted. Instead, Congress enacted TEA-21 in 1998. Last year, Senator James Inhofe (R-OK) introduced a revised version of the Transportation Empowerment Act (S. 2861), which would allow states to keep most of the fuel tax revenues raised within their borders and spend them on locally determined mobility objectives.

With TEA-21 expiring later this year, Members of Congress and the hundreds of industries and special-interest groups involved in building the highways and transit systems are now supporting replacement legislation that will keep Washington officials and influential

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special interests at the center of the system. If they succeed, the resulting legislation will continue to divert significant portions of fuel tax revenues to initiatives that do nothing to improve travel and mobility on America's highways and roads.

**Counterproductive Diversions.** Among the many counterproductive diversions from the highway trust fund, the largest is the 2.86 cents of the 18.4-cent federal fuel tax that is applied to the Mass Transit Account of the Highway Trust Fund. In turn, these revenues are spent on a variety of transit projects throughout the country, including buses, light rail systems, ferries, and commuter rail. Currently, federal spending on transit is authorized at about \$7.2 billion per year and is expected to account for a little more than 20 percent of federal highway trust fund revenues in 2003.

Because transit moves only a small fraction of American travelers and none of its freight, this mandated diversion of one-fifth of all trust fund money hinders mobility, destroys jobs, and diminishes the productivity of the U.S. transportation system. These negative consequences occur because the federal transit mandate shifts a large portion of the budget to a costly, inefficient, and underutilized mode of transportation (transit) at the expense of a mode (roads) that is used substantially more and is more cost-effective. As a result, the system provides large subsidies to a few riders who are disproportionately concentrated in a small number of major metropolitan areas.

**Distortion in Funding.** According to the U.S. Bureau of the Census, transit's share of work trips nationwide was only 4.5 percent in 2000, down from 5.2 percent in 1990. For all trips, including work trips, transit's share of the urban markets is just 1.9 percent when measured on a per-passenger-mile basis. For all regions, transit's share is closer to 1 percent. In effect, under the existing federal transportation program, 1 percent of passengers receive 20 percent of all federal transportation subsidies. This distortion in funding is one reason that roads in major metropolitan areas are so congested, in contrast to the largely empty transit buses that use them.

**Pervasive Inequity.** Another source of unresolved conflict is the pervasive inequity that exists between "donor" states (whose motorists pay more in fuel taxes than they receive back from the pro-

gram) and "recipient" states (which receive more than they pay). Over the past several decades, many of the southern and western states have found themselves donors, while states in the northeast and central regions of the country are most often recipients. In the year leading up to the reauthorization of the Intermodal Surface Transportation Efficiency Act, many donor states organized themselves as STEP 21, an advocacy group that sought to ameliorate the inequity by guaranteeing each state at least a 90.5 percent return on fuel tax revenues. While such a provision was included in TEA-21, many argued that it would be ineffective, and this seems to have been the case as many traditional donor states still receive returns below 90 percent.

**Conclusion.** Having completed construction of a 41,000-mile interstate highway system from coast to coast and border to border, the federal government has found it difficult to resolve surface transportation problems that are increasingly local and beyond the skill of a Washington bureaucracy and congressional committees. Despite record levels of highway spending, congestion is worsening and roads are deteriorating. Yet many in Congress and the Administration appear to have little interest in doing much more than reauthorizing the *status quo*, albeit at higher levels of taxpayer funding. If this is all it achieves, Congress will have done little more than perpetuate a defective system for another six years of worsening congestion and deteriorating roads.

Alternatively, if the federal role in surface transportation can be diminished, states will have an opportunity to rectify the four key problems with the current system: (1) The motorists and truckers who fund the system will get a more equitable return on their taxes, and overall mobility will improve; (2) the inequitable geographic allocations in the current system will be eliminated; (3) transportation priorities will be set by state officials, not by Washington officials trying to satisfy politically influential constituencies; and (4) reform-minded state officials, no longer hobbled by federal prohibitions and costly mandates, can introduce promising reforms that have succeeded elsewhere.

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# Background

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## REAUTHORIZATION OF TEA-21: A PRIMER ON REFORMING THE FEDERAL HIGHWAY AND TRANSIT PROGRAMS

*RONALD D. UTT, PH.D.*

Created in 1956 to finance and build the interstate highway system, the federal highway program achieved that goal in the early 1980s and since then has had its goals repeatedly modified in successive reauthorizations that have diverted money from general-purpose roads to a variety of other objectives that benefit influential constituencies. When the Transportation Equity Act for the 21st Century (TEA-21) expires on September 30, 2003, Congress and the President should allow the increasingly dysfunctional federal highway program—which is no longer focused on the mobility needs of the motorists who fund it—to die a quiet death and shift the program's responsibility and revenues to the states.

Refusing to reauthorize the program in its current form would give Congress an opportunity to help communities, motorists, and other highway users meet their mobility requirements by ending the accelerating growth of the counterproductive federal micromanagement of America's surface transportation system. Among the current law's many problems are:

1. The regional inequities between who pays and who receives,

2. The diversion of as much as 40 percent of fuel tax revenues to non-highway projects that benefit small fractions of the population, and
3. Increasing congressional micromanagement that circumvents state and local priorities by mandating thousands of specific construction projects regardless of need.

In place of the current system, Congress should transfer to the states all surface transportation responsibilities and the financial resources needed to fulfill them. Several legislative initiatives to

accomplish this were introduced in 1996 during the debate on the last reauthorization of the surface transportation programs.<sup>1</sup> However, they were not adopted. Instead, Congress enacted TEA-21 in 1998, which expires later this year.

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Congestion Measure	1982	1990	1994	2000
Road Way Congestion Index	0.82	1.01	1.04	1.15
Annual Hours of Delay (Peak Travel)	16	44	45	62
Congested Lane Miles of Roadway (% Peak)	27	43	-	54
Average Journey to Work Time (Minutes)	21.7*	22.4	-	25.8

**Note:** \*1980 data  
**Sources:** Road way congestion index, annual hours of delay, and congested lane miles of roadway are from Texas Transportation Institute, *2002 Urban Mobility Study*, Appendix A, Exhibits A-18, A-4, and A-13, at [mobility.tamu.edu/ums/study/appendix\\_A/](http://mobility.tamu.edu/ums/study/appendix_A/); Average Journey to Work Time is from U.S. Bureau of the Census data, at [www.publicpurpose.com/ut-jtw2000fr1980.htm](http://www.publicpurpose.com/ut-jtw2000fr1980.htm).

Members of Congress and the hundreds of industries and special-interest groups involved in building and using highways and transit systems are now working to develop replacement legislation that will keep Washington officials and influential special interests at the center of the system. If they succeed, the resulting legislation will continue to divert significant portions of fuel tax revenues to initiatives that do nothing to improve travel and mobility on America's highways and roads.

Although the reauthorization of the highway program is typically a festival of sharp elbows, influence peddling, and rent-seeking by the many factions that benefit from the program—highway builders, major construction companies, unions, transit buffs, real estate developers, rail hobbyists, and environmentalists—next year's reauthorization process promises more acrimony than usual.

Among the chief reasons for heightened conflict is the belief among the program's many beneficiaries that they are not getting their fair share of the money dispensed—a conflict that is exacerbated by the unexpected recent shortfalls in federal fuel tax revenues. According to President George W. Bush's

recently released fiscal year (FY) 2004 budget proposal, contributions to the highway trust fund from fuel and other tax revenues fell from \$34.9 billion in FY 2000 to \$31.4 billion in FY 2002<sup>2</sup> and are not expected to exceed FY 2000's level until FY 2005. Because of the revenue shortfalls, federal highway spending has declined from \$31.8 billion in FY 2002 to a projected \$27.6 billion in FY 2003.<sup>3</sup>

Those who are responsible for public transit systems, which carry less than 2 percent of the urban traveling public (and 4.7 percent of the journeys to work in 2000)<sup>4</sup> but receive 20 percent of the funds, believe that even this overly generous share is too small and want more. Conversely, those who are responsible for highway operations and construction believe that their part of the program deserves more money than it now receives. As measures of need, the highway group can point to billions of dollars in deferred maintenance and increases in traffic congestion, as illustrated in Table 1.

### MORE SPENDING AND HIGHER TAXES?

Recognizing that a head-to-head fight over shares of the pie may leave both sides damaged, program beneficiaries are looking for ways to expand the pie,

1. Senator Connie Mack (R-FL) and Representative John Kasich (R-OH) introduced the Transportation Empowerment Act in 1997.
2. *Fiscal Year 2004 Budget of the United States Government*: Historical Tables, Table 2.4, p. 41.
3. *Fiscal Year 2004 Budget of the United States Government*, p. 235.
4. U.S. Bureau of the Census, *Journey to Work: 2000*, Table QT-P23, 2000, at [factfinder.census.gov/servlet/QTTable?\\_ts=66758146447](http://factfinder.census.gov/servlet/QTTable?_ts=66758146447).

## VOTERS REJECT TRANSPORTATION TAX INCREASE PROPOSITIONS

Beginning in the summer of 2002, voters in several states, cities, and counties voted on a series of tax increase proposals, most of which were promoted as necessary to increase funds for state and local transportation projects.

The first of these votes was in Missouri on August 6, 2002, when the voters were asked to vote for a \$483 million increase in sales and motor fuel taxes to fund highway construction. With the state's leading politicians and business groups supporting a "yes" vote, the tax increase was expected to win. However, when the votes were tallied, the tax increase had lost by nearly 3 to 1, a staggering margin of defeat.

In November 2002, more tax increase initiatives were on the ballot, and most did just as poorly. In Virginia, two referenda to increase regional taxes were put to the voters: In the Northern Virginia suburbs, voters were asked to approve a 0.5 percent increase in the sales tax to fund a series of transportation projects heavily weighted toward transit, and in the Hampton Roads region (southeast Virginia), voters were asked to approve a 1 percent increase in the sales tax rate. Both proposals failed. In Hampton Roads, the proposed increase was defeated by a margin of 2 to 1. In the northern suburbs, the tax increase lost 55 percent

to 45 percent, despite a well-funded "yes" campaign supported by most of the state's elected officials.

Similar referenda failed in Solana and Fresno Counties, California; Little Rock, Arkansas; and Butler County, Delaware County, and Cincinnati, Ohio. By a margin of 2 to 1, voters in the state of Washington rejected a gas tax increase of 9 cents per gallon to pay for highways and transit. Washington voters also supported an initiative to reduce automobile license fees. However, tax increase initiatives did pass in Miami, Florida; Reno, Nevada; Riverside, California; and Seattle, Washington.<sup>1</sup>

On January 28, 2003, Oregon voters voted on an increase in the state income tax to eliminate a \$300 million budget deficit. State legislators claimed that without the tax increase, they would be forced to cut the number of state troopers, aid to low-income seniors and the disabled, community mental health funding, and money for schools. Despite the threatened service reductions and active support from labor unions, Oregon voters rejected the tax hike by a margin of 55 percent to 45 percent<sup>2</sup>—perhaps demonstrating that anti-tax sentiment among the electorate was not confined only to the November elections.

1. "The November Transportation Referenda: A Post Mortem," *Innovation Briefs*, Vol. 14, No. 1 (January/February 2003), and Robert W. Poole, Jr., "Transportation Taxes Taking a Beating at the Polls," Reason Foundation, *Privatization Watch* No. 313, January 2003.
2. Brad Cain, "Cuts in Schools, Public Safety, Social Services Loom in Oregon After Voters Reject Tax Hike," Associated Press, January 29, 2003.

and some are advocating a fuel tax increase. The American Road and Transportation Builders Association (ARTBA) has advocated a 54 percent increase in the federal fuel tax paid by motorists by proposing tax increases of 2 cents per gallon per year for the next five years. Alternatively, state transportation officials represented by the American Association of State Highway and Transportation Officials (AASHTO) want the federal fuel tax indexed for inflation.

Until recently, elected officials have been silent on the issue of more spending and higher taxes,

largely in appreciation of voters' overwhelming rejection of a series of well-funded, highly visible state and local referenda to raise state fuel and sales taxes to fund additional transportation projects. (See box, "Voters Reject Transportation Tax Increase Propositions.") Many believe that voters rejected these initiatives because they were unconvinced that the state transportation department and the proposed spending plans would do much to relieve congestion and improve mobility.<sup>5</sup> In contrast to the voters' attitude on tax increases, the resistance to more spending and higher taxes is waning in

Congress, and some Members are advocating substantial increases.

Indeed, despite the prospect of huge increases in the federal budget deficit, the urgent need to spend more on national defense and homeland security, and bipartisan agreement on reducing the tax burden on families to stimulate the economy, some in Congress have conceded to lobbyists' demands and have announced plans to double surface transportation spending over the next several years and raise taxes to fund the increase.

In December 2002, Chairman Don Young (R-AK) of the House Transportation and Infrastructure Committee floated key elements of his own proposal to the media and the White House. Under the Young plan—which he stressed is “not even anything on paper yet”—federal fuel taxes would be increased by adopting *both* the AASHTO and ARTBA proposals, which would increase the federal fuel tax by 2 cents per year over the next six years and index it to the rate of inflation. Under the Young plan, federal fuel taxes would increase by 81 percent from 18.4 cents per gallon today to about 33.4 cents by 2009. These higher taxes would be used to increase funding for existing federal transportation programs: Under the Young plan, highway spending would increase from the current \$32 billion to \$60 billion in 2009, and transit spending would increase from \$7 billion to \$12 billion.<sup>6</sup>

In response to early criticism of his December 2002 fuel tax increase proposal, Chairman Young has since floated a number of alternatives for consideration and comment. Most recently, in March 2003, he proposed that highway and transit spending increase to a total of \$375 billion over the next six years. He has also suggested that this increased spending be financed by immediately raising the federal fuel tax by 5.45 cents per gallon and indexing it to the rate of inflation for each year thereafter.

In the Senate, a majority voted in March 2003 to amend the FY 2004 Budget Resolution to increase highway and transit spending to a total of \$311.5 billion over the next six years—about \$65 billion less than what Chairman Young is proposing. Future fuel tax revenues are expected to cover the Senate's proposed spending package without a tax increase.<sup>7</sup>

Unmoved by transit's declining market share and excessive federal subsidies, a bipartisan group of 43 Senators sent a letter to President Bush in early December 2002 stating that “Strong support for transit is essential in light of the increasing demands on our public transportation system.”<sup>8</sup> Also in December, the American Public Transit Association (APTA), the lobbying group for public transit systems and the major contractors that build them, quantified “strong support” as increasing total transit spending over six years from the \$41 billion authorized by TEA-21 to \$65.7 billion. Not to be outdone by the lobbyists, the U.S. Department of Transportation (DOT) estimates that “an average annual capital expenditure of \$20.6 billion is needed to improve the conditions and performance of transit systems.”<sup>9</sup>

Again, these enormous sums of money are for systems that carry less than 2 percent of the nation's urban passengers and none of America's freight at a time when budget deficits are exceeding \$300 billion per year.

## REGIONAL DISPARITIES

Another reauthorization-related conflict will be between donor states (those whose motorists pay more in fuel taxes than they receive back from the program) and recipient states (those that receive more than they pay). Over the past several decades, many southern and western states have found themselves donors, while states in the northeastern

5. Ronald Utt, “Proposed VA Transportation Improvements Will Not Solve Region's Traffic Problems,” Virginia Institute for Public Policy, *Virginia Viewpoint*, November 2002, No. 2002-23, and Kenneth Bredemeir, “Sales Tax? Road Kill,” *The Washington Post*, November 25, 2002, p. E1.
6. Heather M. Rothman, “Young Meets with Card to Pitch Working Plan for Highway, Transit Bill,” Bureau of National Affairs, *Daily Report for Executives*, December 11, 2002, p. G7.
7. Heather Rothman, “House, Senate Get Ready to Vote on Transportation Funding Amendments,” Bureau of National Affairs, *Daily Report for Executives*, March 20, 2003, p. A36.
8. Mike Sherry, “Senators Seek More Money for Public Transit in 108th Congress,” *CQ Daily Monitor*, December 9, 2002, p. 11.
9. *Ibid.*

and central regions of the country are most often recipients.

In the year leading up to reauthorization of the Intermodal Surface Transportation Efficiency Act (ISTEA), many donor states organized themselves as STEP 21, an advocacy group that sought to ameliorate the inequity by guaranteeing each state at least a 90.5 percent return on tax revenues. Such a provision was included in TEA-21, but many argued that it would be ineffective, and this seems to have been the case as many donor states still receive returns below 90 percent.

This year, some donor states, organized as State Highway Authority Revenue Equality (SHARE), intend to seek a guaranteed 95 percent return. The potential losses this might cause recipient states could lead to heightened conflicts between regional factions. For these and other reasons, the reauthorization of the federal highway program may become so acrimonious that reauthorization may be impossible this year. Such a deadlock could be used productively to effect fundamental reform, recognizing that most of today's transportation problems are regional and local and that more transportation decision-making should be shifted to the states.

As Members of Congress, Administration officials, governors, mayors, and state legislators choose among the many proposals to replace the TEA-21, they should give priority attention to the Transportation Empowerment Act (S. 2861), introduced by Senator James Inhofe (R-OK) in the waning days of the 107th Congress. Senator Inhofe's proposal would have reduced the federal fuel tax from 18.4 cents per gallon to 2 cents per gallon and limited federal funding of roads and highways to those on federal lands and maintenance of the existing interstate highway system. All other responsibilities would devolve to the states, and states would be required to maintain current levels of transportation spending, funded by state fuel taxes increased to offset the reduced federal tax.

Other key provisions of the Empowerment Act included terminating federal transit programs and ending federal limits on the creation of state and/or regional infrastructure banks and other sources of innovative finance, including tolls. Instead, under Senator Inhofe's Empowerment Act, each state could choose to allocate its spending among the modes of transportation most appropriate to the

unique needs and characteristics of its communities.

Since the completion of the interstate highway system more than 20 years ago, and with the increased urbanization of the population, America's transportation problems have become increasingly local and regional in nature. As a result, Washington officials have little to offer in the way of effective solutions to distant concerns. The Transportation Empowerment Act introduced by Senator Inhofe would better address these changing circumstances and objectives by allowing states to keep most of the fuel tax revenues raised within their borders and giving state and local officials greater responsibility and authority to set priorities and use the revenues to fulfill locally determined mobility objectives.

## **ORIGINS OF THE FEDERAL HIGHWAY PROGRAM**

The Federal Highway Administration (FHWA) and the highway trust fund were created in 1956 to design and build the interstate highway system. Ten years later, FHWA was merged with other federal transportation programs to become part of the newly created U.S. Department of Transportation.

Federal involvement with roads and highways dates back to building the National Road (or Cumberland Road) beginning in 1811, followed by the creation of the Office of Road Inquiry in 1893 and enactment of the Federal Road Act in 1916. With the exception of some work relief highway programs under President Franklin Roosevelt's 1933 National Recovery Act, the federal role in highways and roads was relatively modest until the 1950s.

Federal involvement changed dramatically in 1956 when President Eisenhower signed the Federal Aid Highway Act, authorizing the construction of a 41,000-mile interstate highway system. At the same time, the Highway Revenue Act of 1956 established the highway trust fund to finance the interstate system and increased the federal excise tax on gasoline from 2 cents to 3 cents per gallon.<sup>10</sup>

By 1980, over 40,250 miles of the (revised) 42,500-mile interstate highway system were complete,<sup>11</sup> but the federal highway program continued to expand by adding new responsibilities and objectives—including the goal of facilitating the organization of a newly defined, 160,092-mile

National Highway System.<sup>12</sup> Over time, Congress has added other non-highway responsibilities to the program, the largest being the federal urban mass transit program, which has been allowed to tap into the highway trust fund since 1982. At present, as much as 20 percent of the fuel taxes paid by motorists is diverted to transit subsidies.

Other programs now accessing the highway trust fund include underground storage tank removal, recreational trails, roads in national forests, the transportation component of the Appalachian Regional Commission, environmental enhance-

ments, historic preservation, and air quality and congestion mitigation. Recently, attempts have been made to allow the financially troubled Amtrak to tap into the highway trust fund, but they have not succeeded. In 2001, Senator Paul Sarbanes (D-MD) introduced legislation (S. 1136) to divert funds to public transportation programs in National Parks.

**HOW DIVERSION OF TAX REVENUES LIMITS PROGRAM EFFECTIVENESS**

As a consequence of the program's expanding mandate, the federal excise tax on gasoline has

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**Estimated Leakage from Highway Trust Fund Under TEA-21 in FY 2001**

Program	Cost of Leak (millions of dollars)	Amount Left (millions of dollars)	Percent of Total	Percent Left
<b>Total</b>		\$37,815	100%	100%
<b>Leaks:</b>				
Transit	\$7,274	30,341	19.2	80.8
Congestion Mitigation and Air Quality Provisions	1,385	29,156	3.6	77.2
Federal Lands, Trails, Appalachian Development Highway System	1,206	27,950	3.2	74.0
Earmarks (High Priority)	1,685	26,265	4.4	69.6
Ferry, Magnetic Levitation, Covered Bridges, Scenic Easements	422	25,847	1.1	68.5
Research, Miscellaneous	647	25,196	1.7	66.8
Davis-Bacon Act (at 8 percent)	2,016	23,180	5.3	61.5
<b>Left for the Motorist</b>		\$23,180		61.5%

Source: U.S. Department of Transportation, at [www.fhwa.dot.gov/tea21/sumauth.htm](http://www.fhwa.dot.gov/tea21/sumauth.htm).

10. For more detailed reviews of the early history of federal involvement in roads, see Terree P. Wasley, "A Private Sector Foundation for Roads and Bridges," in Edward L. Hudgins and Ronald D. Utt, eds., *How Privatization Can Solve America's Infrastructure Crisis* (Washington, D.C.: The Heritage Foundation, 1992), and J. F. Hornbeck, "Matching Federal Aid for Highways: Rationale from Post Roads to Interstates," Congressional Research Service *Report for Congress*, January 2, 1992.
11. "Development of the Dwight D. Eisenhower System of Interstate and Defense Highways," unpublished table provided to the author by the U.S. Department of Transportation, October 28, 1999.
12. According to transportation expert Peter Samuel, "In promoting the Interstate highways the federal government set some clear national standards and objectives. Interstate highways were to be multi-lane divided with full access control and grade separation. Their design speed and signage was uniform, and interconnections across state boundaries made them part of a recognizable national system. By contrast, the National Highway System has no standards. A 'National Highway' may be a fullblown freeway, a signalized arterial, or just a winding 2-lane country road. There is no plan for upgrading National Highways and no signage to identify them to the public. The National Highway System is simply an empty legislative and bureaucratic category whose meaninglessness exemplifies the federal make-work that the federal gas tax now supports in Washington, D.C." Letter to the author, February 13, 2003.



risen from 3 cents when the program was created to 18.4 cents today. Although the motorists and commercial truckers provide virtually all of the revenues for the trust fund, the value of the money returned to them in usable highway spending shrinks with each new diversion as Congress earmarks ever-larger shares of transportation spending for the benefit of influential constituents.<sup>13</sup> Adding to the cost of federal transportation programs is the requirement that workers receive “prevailing wages” (Davis–Bacon Act), which inflates federal highway construction and repair costs by an estimated 5 percent to 38 percent.

As Table 2 reveals, under TEA–21, motorists receive only about 60 percent of the value they pay in federal fuel taxes.

**The Transit Diversion.** The largest diversion from the highway trust fund is the 2.86 cents of the 18.4-cent federal fuel tax applied to the Mass Transit Account of the Highway Trust Fund. Although transit’s fuel tax claim amounts to only 15.5 percent of the tax rate, the annual share of federal spending on transit exceeds the amount of dedicated revenues raised by that share. These fuel tax revenues are spent on a variety of transit projects throughout the country, including buses, light rail systems, and commuter rail. Currently authorized federal spending on transit is about \$7.2 billion per year and is expected to account for a little more than 20 percent of federal highway trust fund spending in 2003.

Because transit moves only a small fraction of American travelers and none of its freight, this mandated diversion of trust fund money hinders mobility and diminishes the productivity of the U.S. transportation system because it shifts such a large share of money to a costly, inefficient, and underutilized mode of transportation (transit) at the expense of modes that receive substantially greater use (roads) and are more cost-effective. As a result, the system provides substantial subsidies to a few riders who are disproportionately concen-

trated in a small number of major metropolitan areas.

According to the U.S. Bureau of the Census, transit’s share of work trips nationwide was only 4.5 percent in 2000, down from 5.2 percent in 1990.<sup>14</sup> For all trips including work trips, transit’s share of the urban markets is just 1.9 percent when measured per passenger mile; nationwide, it would probably be close to 1 percent. In effect, under the existing federal transportation program, 1 percent of passengers receive 20 percent of all federal transportation subsidies. This distortion in funding, and the shortfall it creates in the highway program, is one reason that roads in major metropolitan areas are so congested.

Table 3 provides information on transit’s performance for work trips (commuters) between 1990 and 2000 in each of the top 50 metropolitan areas of the United States. As the table reveals, transit’s share of the commuter market fell both nationally and in 39 of the 50 major metropolitan areas. In 1990, five areas had transit market shares above 10 percent; by 2000, only two metro areas—New York and Chicago—held shares above this level. In Portland, Oregon, massive transit subsidies and a commitment to transit-oriented land use during the 1990s had increased transit’s share of commuters in the metropolitan area by only 0.29 percent by 2000. This misallocation of funds to transit contributed to Portland’s having some of the nation’s worst traffic congestion.<sup>15</sup>

Further distorting the allocation of federal money, transit is funded by national taxes levied on motorists, while transit use is concentrated in a small number of metropolitan areas. According to the Federal Transit Administration, 74 percent of all transit ridership in 2000 occurred in just seven metropolitan areas—New York, Chicago, Philadelphia, Boston, San Francisco, Los Angeles, and Washington, D.C. New York alone accounted for 42 percent of transit riders nationwide. Almost 25 percent of commuters in the New York area take transit to work, while in Detroit and Nashville,

13. Ronald D. Utt and Christopher Summers, “Can Congress Be Embarrassed into Ending Wasteful Pork-Barrel Spending?” Heritage Foundation *Backgrounder* No. 1527, March 15, 2002.

14. U.S. Census, 1990 and 2000; see also [www.publicpurpose.com/utw2000metro.htm](http://www.publicpurpose.com/utw2000metro.htm).

15. Texas Transportation Institute, 2002 *Urban Mobility Study*, Appendix A, Exhibit A-18, at [mobility.tamu.edu/ums/study/appemdix\\_A/](http://mobility.tamu.edu/ums/study/appemdix_A/).

Table 3

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### Journey to Work Data By Metropolitan Area: 1990–2000

Metropolitan Area	1990 Transit-Market Share	2000 Transit-Market Share	Transit Market-Share Change	Change in Transit Work Trips
Atlanta, GA MSA	4.71%	3.65%	-22.5%	5,450
Austin--San Marcos, TX MSA	3.37	2.57	-23.8	3,076
Boston--Worcester--Lawrence, MA--NH--ME--CT CMSA	10.64	9.03	-15.1	33,914
Buffalo--Niagara Falls, NY MSA	4.70	3.51	-25.2	-6,665
Charlotte--Gastonia--Rock Hill, NC--SC MSA	1.85	1.39	-24.9	-753
Chicago--Gary--Kenosha, IL--IN--WI CMSA	13.66	11.49	-15.9	-39,921
Cincinnati--Hamilton, OH--KY--IN CMSA	3.66	2.93	19.9	-1,830
Cleveland--Akron, OH CMSA	4.56	3.42	-25.0	-9,564
Columbus, OH MSA	2.74	2.31	-15.8	-629
Dallas--Fort Worth, TX CMSA	2.35	1.81	-23.0	-739
Denver--Boulder--Greeley, CO CMSA	4.25	4.34	2.3	17,510
Detroit--Ann Arbor--Flint, MI CMSA	2.43	1.82	-25.2	-5,449
Grand Rapids--Muskegon--Holland, MI MSA	1.21	0.84	-30.8	375
Greensboro--Winston-Salem--High Point, NC MSA	1.16	0.86	-25.6	-387
Hartford, CT MSA	3.66	2.81	-23.2	-4,460
Houston--Galveston--Brazoria, TX CMSA	3.78	3.28	-13.3	1,709
Indianapolis, IN MSA	2.08	1.32	-36.4	-2,469
Jacksonville, FL MSA	2.13	1.52	-28.5	-1,416
Kansas City, MO--KS MSA	2.14	1.28	-40.0	-5,199
Las Vegas, NV--AZ MSA	2.03	4.06	100.1	20,996
Los Angeles--Riverside--Orange County, CA CMSA	4.56	4.66	2.2	4,981
Louisville, KY--IN MSA	3.21	2.21	-31.0	-3,425
Memphis, TN--AR--MS MSA	2.82	1.95	-30.9	-4,111
Miami--Fort Lauderdale, FL CMSA	4.35	3.90	-10.3	-105
Milwaukee--Racine, WI CMSA	4.88	4.02	-17.7	-4,896
Minneapolis--St. Paul, MN--WI MSA	5.29	4.46	-15.7	2,021
Nashville, TN MSA	1.73	0.96	-44.9	-2,660
New Orleans, LA MSA	7.25	5.60	-22.8	-5,391
New York--Northern New Jersey--Long Island, NY--NJ--CT--PA CMSA	26.57	24.90	-6.3	48,206
Norfolk--Virginia Beach--Newport News, VA--NC MSA	2.19	1.87	-14.5	-1,079
Oklahoma City, OK MSA	0.68	0.60	-11.0	22
Orlando, FL MSA	1.55	1.69	9.6	4,706
Philadelphia--Wilmington--Atlantic City, PA--NJ--DE--MD CMSA	10.18	8.73	-14.2	-38,670
Phoenix--Mesa, AZ MSA	2.13	2.02	-5.1	8,397
Pittsburgh, PA MSA	7.95	6.18	-22.2	-10,650
Portland--Salem, OR--WA CMSA	5.42	5.71	5.4	23,867
Providence--Fall River--Warwick, RI--MA MSA	3.17	2.48	-21.8	9,790
Raleigh--Durham--Chapel Hill, NC MSA	2.00	1.69	-15.6	2,430
Rochester, NY MSA	3.19	2.00	-37.4	-5,043
Sacramento--Yolo, CA CMSA	2.40	2.72	13.4	5,301
Salt Lake City--Ogden, UT MSA	2.98	2.98	0.0	4,860
San Antonio, TX MSA	3.67	2.89	-21.1	-657
San Diego, CA MSA	3.28	3.37	2.6	3,379
San Francisco--Oakland--San Jose, CA CMSA	9.29	9.48	2.0	27,849
Seattle--Tacoma--Bremerton, WA CMSA	6.31	6.75	6.9	37,300
St. Louis, MO--IL MSA	2.97	2.41	-18.7	-4,079
Tampa--St. Petersburg--Clearwater, FL MSA	1.46	1.40	-3.9	1,573
Washington--Baltimore, DC--MD--VA--WV CMSA (VA part)	11.55	9.43	-18.4	-31,650
West Palm Beach--Boca Raton, FL MSA	1.35	1.40	4.2	1,553
Metropolitan Areas Over 1,000,000 Population	8.50	7.41	-12.9	77,368
Outside Metropolitan Areas Over 1,000,000 Population	1.17	0.96	-17.7	-79,254
United States	5.27	4.73	-10.3	-1,886

Note: Transit (Public Transport) includes taxicabs (separate data not yet available)

Source: U.S. Census 2000 and 1990

respectively, less than 2 percent and 1 percent do so.

The chief reason for public subsidies to transit systems is that passenger fares cover only a fraction of the costs needed to run the system. New York City Transit is one of the most efficient, with fares covering 63 percent of costs. In many other systems, however, fares cover less than half of the costs. Fares, for example, cover only 38 percent of costs in Philadelphia's SEPTA, 29 percent in Boston's MBTA, and 28 percent in Atlanta's MARTA.<sup>16</sup>

As one transportation expert recently noted:

There isn't a single light rail transit system in America in which fares paid by passengers cover the cost of their own rides. The aggregate deficit for 2000 (the latest year for which complete data are available) was more than a billion dollars. The average cost per passenger mile is around \$1.20. These costs are far higher than the average cost per bus passenger mile of about seventy-five cents. Of course, no transit option matches the average cost of automobile transportation, which is about thirty-four cents per vehicle mile.<sup>17</sup>

**Regulatory Impediments.** While the federal government diverts motorists' fuel taxes to non-highway uses, the government has restricted the operation of state and local highway departments and limited the extent to which states can supplement federal money with revenues other than direct state taxes. Chief among the burdensome provisions is the application of federal prevailing wage standards (Davis–Bacon Act) to all construction funded by federal dollars. Because the prevailing wages established by the U.S. Department of Labor (DOL) are generally higher than open market wages, federally funded construction projects generally cost more than they would without such reg-

ulations. The Davis–Bacon Act adds an estimated 5 percent to 38 percent to construction costs. Table 2 errs on the conservative side, estimating the Davis–Bacon cost at 8 percent.

Under a turnback program in which a state's transportation revenues would be derived exclusively from state taxes and fee sources, Davis–Bacon requirements would no longer apply to highway and transit construction projects. As a result, highway projects would cost less, allowing states to build and repair more roads for the same amount of money. Not all states, however, would benefit from ending this federal mandate because as many as 19 states have enacted their own versions of a prevailing wage law, while another 12 have less restrictive versions of the federal prevailing wage law.<sup>18</sup>

Similarly, regional and local transit systems would be freed from the significant union-related regulatory burden that comes with federal funds. Under current law, not only must transit systems adhere to Davis–Bacon provisions during construction and renovation phases, but they also must adhere to Section 13(c) of the Federal Transit Act of 1964 once in operation. Initially enacted to protect unionized transit workers when bankrupt private transit companies were taken over by public authorities, its application has since been distorted and extended in ways that effectively lead to mandatory union contracts for transit workers.<sup>19</sup>

Specifically, Section 13(c) requires that the DOL certify that fair and equitable labor arrangements are in place before DOT can make a grant to a transit agency. To be certified, five specific issues must be addressed in the arrangements:

1. Preservation of rights, privileges, and benefits under existing collective bargaining agreements;
2. Continuation of collective bargaining rights;
3. Protection of employees against a worsening of their positions with respect to employment;

16. Clemente Lisi, "Riders Pay More Than Their 'Fare' Share," *New York Post*, January 6, 2003, p. 2.

17. John Semmens, "Public Transit: A Bad Product at a Bad Price," *Laissez Faire Institute Issue Analysis*, January 2003, p. I, at [www.heritage.org/Research/SmartGrowth/wm213.cfm](http://www.heritage.org/Research/SmartGrowth/wm213.cfm).

18. Robert W. Poole, Jr., "Defederalizing Transportation Funding," *Reason Foundation Policy Study* No. 216, October 1996, p. 7, at [www.rppi.org/transportation/ps216.htm](http://www.rppi.org/transportation/ps216.htm).

19. See Charles D. Chiappo, "How the Labor Department Can Bring Common Sense to a Rail Contract," *Heritage Foundation Backgrounder* No. 1552, May 23, 2002.

4. Assurances of employment to employees of acquired mass transportation systems and priority reemployment for employees terminated or laid off; and
5. Paid training and retraining programs.

If there are no objections that the DOL deems valid, it certifies that appropriate labor protections are in place and approves the grant. However, if unions object to a transit agency's grant request and DOL upholds the objection, the grant request is denied. Also under 13(c), displaced employees receive up to six years of full pay and benefits. This provision has effectively discouraged the introduction of cost-saving automation and technology, as well as any competitive contracting that may lead to a reduction in force. The consequences of these provisions are higher labor costs that contribute to high operating costs.

Other regulatory burdens applied to federal transportation programs include costly and time-consuming environmental impact statements that can add one to five years to the duration of a major highway project.<sup>20</sup> These include provisions of the National Environmental Policy Act, Clean Air Act, and Rare Species Habitat Protection Act and preferential set-asides for businesses owned by minorities and women.

Another new bureaucratic layer added by recent legislation is the metropolitan planning process required for major highway upgrades in metropolitan areas that do not meet federal clean air standards. This can subject every project in the area to a protracted analysis of alternatives and to public consultation. In turn, these become opportunities for well-funded activist groups to impose their agenda and force travelers from automobiles to less efficient forms of transport.

**Congestion Mitigation and Air Quality Provisions.** The Congestion Mitigation and Air Quality (CMAQ) provisions are one of two new sets of costly environmental set-asides in the ISTEA. The

CMAQ program is intended to assist states in complying with federal air quality standards by funding projects that lower emissions.<sup>21</sup> TEA-21 reauthorized these provisions of ISTEA at a total cost of \$8.1 billion between FY 1998 and FY 2003. The CMAQ program annually diverts about 3.5 percent of fuel tax revenues to non-highway purposes.

Because a state's share of CMAQ money is related to population and air quality, funding is concentrated in just a few states with air pollution problems. In effect, states that pollute more get more money, and motorists in states with clean air subsidize those in polluted states. Under ISTEA, 10 states received two-thirds of the money—about 50 percent more than they paid into the trust fund.<sup>22</sup> By law, each state is guaranteed a minimum of 0.5 percent of CMAQ money distributed each year and may use it for general transportation purposes if air quality already meets federal standards. For example, Oklahoma, which accounts for 1.6 percent of trust fund revenues in 2000, receives only a 0.5 percent share of CMAQ money.

Funds from the CMAQ program can fund projects in any of eight approved categories: public transit, traffic flow improvements, rideshare, bicycle and pedestrian projects, traffic demand management, public education, vehicle inspection, and alternative fuels. Under ISTEA, nearly half of CMAQ money went to public transit, adding to the already substantial share of federal money—now running in excess of \$7 billion per year—that transit systems draw from the trust fund. For example, the heavily subsidized Virginia Railway Express system, which operates two commuter rail lines connecting Virginia suburbs to Washington, D.C., expects to receive more than \$3 million in CMAQ funds in FY 2003.<sup>23</sup>

A recent study of CMAQ spending between 1992 and 1999 reveals the mismatch between CMAQ priorities and commuter preferences, as presented in Table 4. The columns show the share of CMAQ funding received by different fuel-efficient modes,

20. John W. Fischer, "Highway and Transit Program Reauthorization," Congressional Research Service *Report for Congress*, December 11, 2002, p. 23.

21. David M. Bearden, "Federal Highway Funding for Air Quality Projects and Transportation Enhancements: How Much, To Whom, and For What?" Congressional Research Service *Report for Congress*, June 10, 1998.

22. California, New York, Texas, Pennsylvania, New Jersey, Illinois, Ohio, Massachusetts, Maryland, and Florida.

23. Unpublished budget provided to the author by Virginia Railway Express.

Mode	Share of CMAQ Spending	Commuting Market Share
Transit	44%	4.7%
Walking/Bicycle	3%	3.3%
Ride Share	4%	12.2%

compared to the modal share of the commuter market. As is apparent, transit's share of CMAQ money vastly exceeds its market share, in comparison to the underfunding of carpooling and ride sharing.

This misallocation among modes seems all the more questionable when comparisons over time are considered: Journey to Work data from the 1990 and 2000 U.S. Censuses indicate that transit's market share has been falling faster than the market share for car and van pooling.<sup>24</sup> In effect, the CMAQ program benefits the transportation modes of the past, not the future, as revealed by consumer choice.

**Enhancements.** The "enhancement" program was also added in 1991 by ISTEA. Under this program, each state is required to set aside 10 percent of its Surface Transportation Program (STP) money for enhancements. According to the Congressional Research Service:

Enhancements seek to diversify local networks of surface transportation by funding unconventional projects that have a direct or indirect environmental value. Enhancements may address bicycle and pedestrian travel, historic preservation, scenic easements, mitigation of water pollution from highway runoff, and other issues. Facilities for bicycle and pedestrian travel have received the largest share of

funding under the enhancements program and account for 38 percent of obligated funds.<sup>25</sup>

Similar to the enhancement program is a provision added to the highway statutes in 1999 to provide \$10 million annually from the trust fund for the purpose of renovating and restoring wooden covered bridges.

With TEA-21 providing \$33.3 billion in STP money for FY 1998 to FY 2003, the 10 percent provision will shift \$3.3 billion to bike and hiking trails, archeology, rails to trails, landscaping, billboard removal, and historic preservation. A recent study by the Congressional Research Service shows spending on enhancement projects from 1991 to 2001 in the following proportions:<sup>26</sup>

- 55 percent on 8,105 projects for bicycle and pedestrian facilities, rail to trails, and safety and education for bicyclists and pedestrians;
- 24 percent on 3,203 projects for historic preservation and preservation of historic transportation buildings, transportation museums, and welcome centers; and
- 21 percent on 3,601 projects for landscaping, beautification, and environmental mitigation.

None these projects adds to mobility or reduces congestion for the 87.9 percent of commuters who use autos.<sup>27</sup> Indeed, they all do just the opposite by

24. U.S. Census Bureau, Table QT-P23.

25. David M. Bearden, "Federal Highway Funding for Air Quality Projects and Transportation Enhancements: How Much, To Whom, and For What?" Congressional Research Service *Report for Congress*, December 11, 1997, Introduction.

26. Fischer, "Highway and Transit Program Reauthorization," p. 18.

diminishing the amount of money available for road improvements and expansion.

**Appalachian Development Highway System.** TEA-21 included a new program that shifted funding responsibility from general budgetary allocations to the highway trust fund to pay for a special Appalachian regional highway program benefiting just 12 states. Formerly funded through the Appalachian Regional Commission by annual appropriations drawn from general revenues, this regionally specific highway program now absorbs \$400 million per year from the trust fund.

This program benefits some states that already disproportionately benefit from the highway trust funds due to flaws in the apportionment formula. For example, Pennsylvania and West Virginia, already recipient states, received an additional \$187 million—42 percent of the funds allocated by the new Appalachian account in FY 2002.<sup>28</sup>

**Federal Lands Program.** In 1991, ISTEA authorized the U.S. Departments of Agriculture and Interior to tap the highway trust fund to pay for construction and rehabilitation of roads on federal lands managed by the National Park Service, the Bureau of Land Management, and the National Forest Service. Between 1998 and 2003, TEA-21 allocated \$4 billion to these purposes from the trust fund. Before this change, roads on federal lands were paid for out of the budgets of the federal agencies responsible for managing the land. ISTEA, however, shifted the burden to the DOT and the highway trust fund, thereby diminishing by \$4 billion the amount of money available for general-purpose highways and roads.

Such diversions from one program to another undermine the usefulness and accuracy of the federal budget. In this case, the diversion has the effect of understating the cost of federal land maintenance by excluding road maintenance and overstating the federal commitment to general-purpose transporta-

tion, which benefits the average motorist and commercial trucker whose taxes fund these diversions. Similarly, the CMAQ program essentially taps into the DOT budget to fund programs related to the U.S. Environmental Protection Agency (EPA). Moreover, the EPA can instruct the DOT to withhold highway funds from a state to force it to meet clean air standards.

**Earmarks.** Finally, the escalating propensity of Members of Congress to earmark money for specific projects and locations—pork-barrel projects—in most transportation bills diverts resources from high-priority projects to those favored by influential constituents. Recognizing the temptation for elected officials to pander to influential constituents and the extent to which earmarking had been getting out of hand, the U.S. House of Representatives adopted a rule in 1914 stating: “It shall not be in order for any bill providing general legislation in relation to roads to contain any provision for any specific road....”<sup>29</sup>

Such quaint notions of fiscal discipline began to dissolve in the later years of the 20th century, and transportation bills have reverted to the 19th century practice of adding earmarks because of the political visibility of these pork projects and the size of DOT’s annual budget. However, by diverting funds to low-priority earmarks, Congress diminishes the ability of states and local communities to set their own priorities and address their own mobility problems.<sup>30</sup>

Confirming the misplaced priorities and marginal value associated with the typical earmark, the U.S. General Accounting Office reports that:

Generally, demonstration projects we reviewed were not considered by state and regional transportation officials as critical to their transportation needs. In slightly

27. U.S. Census Bureau, Table QT-P23.

28. U.S. Department of Transportation, Federal Highway Administration, “Table 5: Computation of Apportionment of Appalachian Development Highway System Funds Authorized for Fiscal Year 2002,” in *TEA-21—Transportation Equity Act for the 21st Century*, at [www.fhwa.dot.gov/tea21/fy2002/tbl5.htm](http://www.fhwa.dot.gov/tea21/fy2002/tbl5.htm).

29. Gabriel Roth, “Road Policy for the Future,” *Regulation*, Vol. 26, No. 1 (forthcoming Spring 2003), p. 55.

30. See Ronald D. Utt, “How Congressional Earmarks and Pork-Barrel Spending Undermine State and Local Decisionmaking,” Heritage Foundation *Backgrounder* No. 1266, April 2, 1999, and Utt and Summers, “Can Congress Be Embarrassed into Ending Wasteful Pork-Barrel Spending?”

over half the cases, the projects were not included in state plans.<sup>31</sup>

A 1996 report from Pennsylvania's Department of Transportation emphasized exactly this point in a sharp critique of the federal earmarks targeted at the state:

Although the planning process established under ISTEA appears sound, the process can be undermined when Congress targets specific highway projects for federal funding. The local planning organizations and the Department [Pennsylvania Department of Transportation] are then put in the position of either giving the project a high priority on their transportation plans, which means that the monies are not available for other potentially more worthy projects, or rejecting the project....

The practice of Congress earmarking funds for specific purposes can significantly impact the Commonwealth's ability to fund the projects of greatest need. For example, approximately 27.5 percent (\$1.32 billion of \$4.8 billion) of the total funding projected to be available for the highway and bridge component of the 1997–2000 Statewide Transportation Improvement Program is for specific projects earmarked by Congress. When only the funding available for major highway construction projects is considered, the percentage applied to earmarked projects rises to 84 percent (\$1.32 billion of \$1.57 billion). Most (70 percent) of this \$1.32 billion is for projects in central Pennsylvania. Rather than turn down these projects and risk losing the associated federal funding, the Department accepts the earmarked projects. The earmarking by Congress of

funding for specific major construction projects therefore severely limits the ability of the Department and the State Transportation Commission to allocate funds to other projects that may be of higher priority.<sup>32</sup>

It should be noted that Pennsylvania's rueful assessment of congressional pork-barrel spending referred to ISTEA (1991), which contained 538 earmarks, not TEA-21 (1998), which contained 1,850 earmarks.

Many such earmarks are of questionable value, and some have nothing to do with transportation, as is evident in many added by the U.S. House of Representatives to the FY 2003 transportation appropriations bill. These include money for a Chinese Community Center in New York; a riverwalk in Wichita, Kansas; renovation of a plantation in Leesburg, Virginia; an auto insurance feasibility study in Philadelphia; a low-impact welcome center in Maryland; hovercraft in Toledo, Ohio; and bicycle paths in Indiana, Illinois, Florida, Rhode Island, and other states.<sup>33</sup>

In fact, these earmarks worsen congestion because most of these projects, instead of providing meaningful transportation benefits to most members of a community, instead divert scarce funds from higher priorities and more useful projects. Indeed, if the practice of earmarking continues at the current pace, state and local governments will soon have no discretion in allocating federal transportation dollars.<sup>34</sup>

The number of earmarks contained in the last three highway authorization bills illustrates a dramatic escalation by recent Congresses. The 1987 highway bill contained 152 earmarks, ISTEA (1991) had 538, and TEA-21 (1998) contained a staggering 1,850.<sup>35</sup> Earmarks in annual transportation appropriations bills show the same trend, and many of the projects in both authorization and appropriations bills are unrelated to transportation

31. U.S. General Accounting Office as quoted in Roth, "Road Policy for the Future," p. 56.

32. Pennsylvania General Assembly, Legislative Budget and Finance Committee, *Performance Audit: Department of Transportation, Pursuant to Act 1981-35*, June 1996, p. 187.

33. U.S. House of Representatives, *Department of Transportation and Related Agencies Appropriations Bill, 2003*, 107th Cong., 2d Sess., September 2002, pp. 77–101.

34. Utt, "How Congressional Earmarks and Pork-Barrel Spending Undermine State and Local Decisionmaking."

needs. In recent years, these projects have included money to refurbish museums, historic train stations, music performance centers, stadium skyways, hiking paths, and parking garages.

In advance of this year's effort to reauthorize the federal highway program, Chairman Don Young and ranking minority member James Oberstar (D-MN) of the House Committee on Transportation and Infrastructure required all House members to submit their requests for "high priority" projects by March 14, 2003, and answer 21 questions on the application. They are also requesting members to provide a letter of support from a state official or explain why none is available.<sup>36</sup> Whether these new administrative procedures in the earmark application process are designed to deter the frivolous or simply strike a pose of responsibility remains to be seen.

Earmarking has become pervasive throughout the federal budget, and transportation programs are just a few among the many that are subject to this practice.<sup>37</sup> In FY 2002, the Office of Management and Budget estimated that Congress included 7,803 earmarks totaling approximately \$15 billion in the federal budget. This growing penchant of federal lawmakers to micromanage local transportation policy and divert transportation resources to other programs or other uses is one more compelling reason to relieve federal officials of the responsibility of managing the nation's surface transportation policy.

**Other Leaks.** In addition to the major leaks described above, a number of smaller diversions have been given access to the trust fund. These include roads on Indian reservations, wildlife refuges, covered bridges, ferry boats and terminals, park roads and parkways, recreational trails, national scenic byways, magnetic levitation, roads in Puerto Rico, community preservation, and oth-

ers. These diversions were projected to account for \$9.4 billion of trust fund money between 1998 and 2003.<sup>38</sup>

## REGIONAL DISTORTIONS AND INEQUITIES

Another flaw that leads to diminished mobility in many states is the pattern of pervasive and systemic inequities in the federal highway program's geographic allocation of money. Although money is technically allocated to each state according to a complicated mathematical formula that attempts to adjust for miles of road, usage, number of drivers, and other factors measuring need, the static nature of the formula and the delays in changing it from one year to the next tend to penalize fast-growing states where congestion is worsening and reward slower-growing states where the congestion pressures are less. In effect, under the current formula, the more a state needs, the less it gets, and vice versa.

The Southern Governors' Association estimated that between 1992 and 1996, most of the fast-growing southern and Sunbelt states received a smaller share of the trust fund than they paid. For example, Florida received \$0.79 for every dollar in taxes, South Carolina received \$0.71, and Virginia received \$0.83. In contrast, northeastern states, where transportation needs were not growing as fast, received more than they paid into the fund. New York received \$1.14 for each tax dollar, Pennsylvania received \$1.11, and Rhode Island received \$2.09.<sup>39</sup> In 1997, these persistent inequities led many donor states to create an organization called STEP 21 to advocate a fairer distribution.

Table 5 and Figure 1 show apportionments by state for the most recent year available (FY 2001) and since the trust fund was created in 1956. States

35. "Statement by Senator Connie Mack on McCain Amendment Dealing with Demonstration Projects," March 11, 1998, and U.S. House of Representatives, *Transportation Equity Act: Conference Report to Accompany H.R. 2400*, 105th Cong., 2d Sess., May 22, 1998, pp. 155–205.

36. John Stanton, "Young, Oberstar Culling List of Transportation Earmark Requests," *National Journal's Congress Daily AM*, January 27, 2003, p. 12.

37. For updated information on congressional earmark patterns, see [www.heritage.org/Research/Features/Appropriations/index.cfm](http://www.heritage.org/Research/Features/Appropriations/index.cfm).

38. See U.S. Department of Transportation, Federal Highway Administration, "A Summary—Authorization Table," in *TEA-21—Transportation Equity Act for the 21st Century*, at [www.fhwa.dot.gov/tea21/sumauth.htm](http://www.fhwa.dot.gov/tea21/sumauth.htm).

39. Southern Governors' Association, "Highway Trust Fund Return Ratio for ISTEA, Fiscal Years 1992–1996," unpublished chart, 1998.

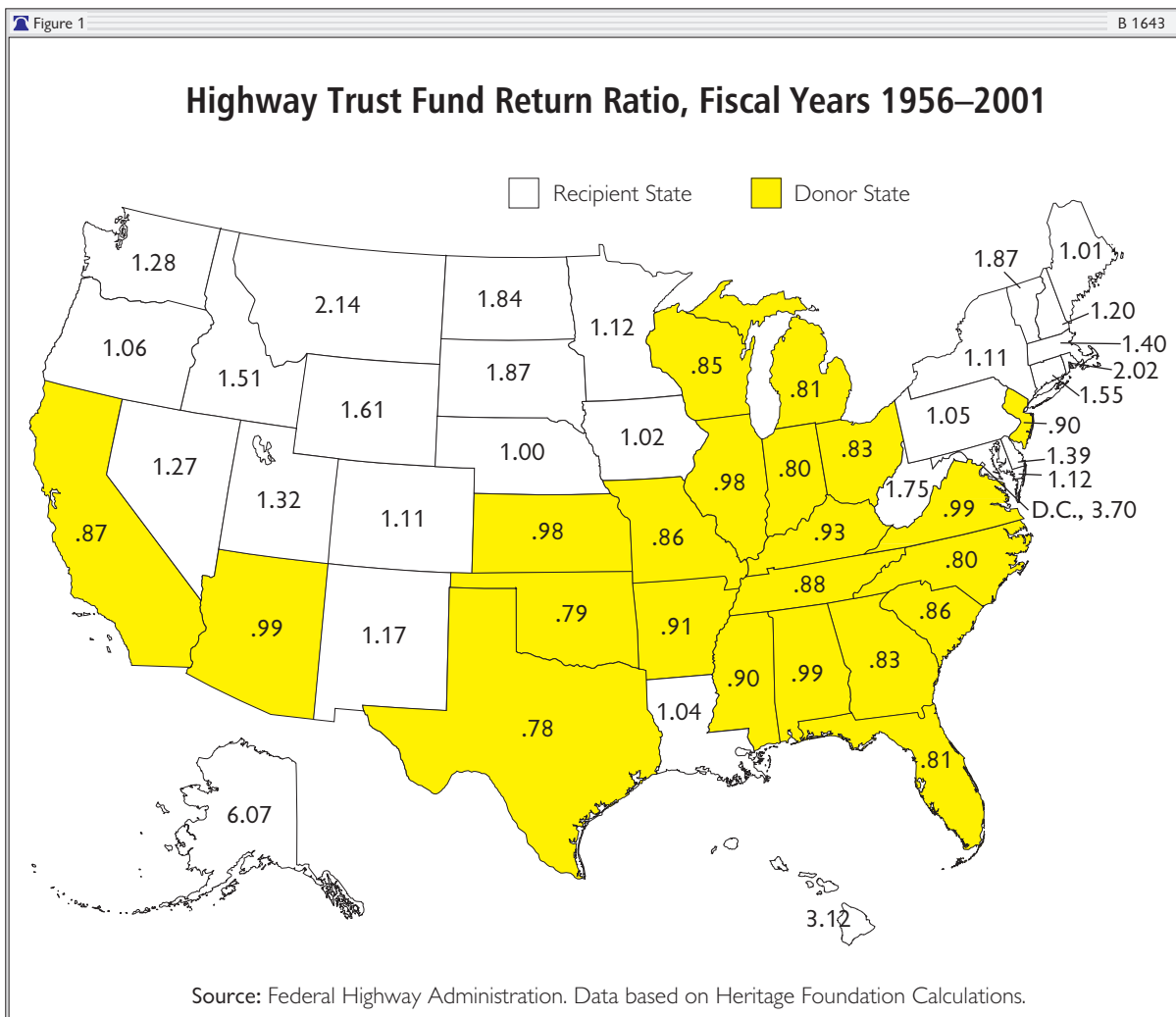


Table 5 B 1643

### State Shares of Apportionments Current

State	2001 Ratio of Shares	Ratio of Share Since 1956	Per Capita Income Rank
Alabama	1.18 %	0.99%	44
Alaska	7.07	6.07	15
Arizona	0.88	0.99	37
Arkansas	1.21	0.91	47
California	0.90	0.87	8
Colorado	0.85	1.11	7
Connecticut	1.41	1.55	1
Delaware	1.58	1.39	12
District of Columbia	3.61	3.70	*
Florida	0.84	0.81	23
Georgia	0.82	0.83	24
Hawaii	2.73	3.12	22
Idaho	1.53	1.51	41
Illinois	0.87	0.98	9
Indiana	0.88	0.80	31
Iowa	1.06	1.02	33
Kansas	1.03	0.98	27
Kentucky	0.90	0.93	40
Louisiana	0.84	1.04	45
Maine	0.90	1.01	36
Maryland	1.10	1.21	5
Massachusetts	0.89	1.40	2
Michigan	0.87	0.81	17
Minnesota	0.97	1.12	10
Mississippi	1.15	0.90	50
Missouri	0.91	0.86	28
Montana	2.27	2.14	46
Nebraska	1.00	1.00	26
Nevada	1.10	1.27	14
New Hampshire	1.09	1.20	6
New Jersey	0.85	0.90	3
New Mexico	1.07	1.17	48
New York	1.17	1.11	4
North Carolina	0.89	0.80	30
North Dakota	2.51	1.84	38
Ohio	0.83	0.83	19
Oklahoma	0.83	0.79	43
Oregon	1.07	1.06	20
Pennsylvania	1.13	1.05	18
Rhode Island	2.16	2.02	16
South Carolina	0.90	0.81	39
South Dakota	2.59	1.87	35
Tennessee	0.89	0.88	34
Texas	0.80	0.78	25
Utah	0.97	1.32	42
Vermont	1.86	1.87	32
Virginia	1.10	0.99	13
Washington	1.00	1.28	11
West Virginia	2.08	1.75	49
Wisconsin	1.02	0.85	21
Wyoming	1.42	1.61	29

**Note:** District of Columbia would rank in top three by per capita income.  
**Source:** "Comparison of Federal Highway Trust Fund highway account receipts attributable to the states and federal-aid apportionments and allocations from the highway account," Table FE-221 Highway Statistics 2001, Federal Highway Administration, Washington, D.C. at [www.fhwa.dot.gov/ohim/hs01/fe221.htm](http://www.fhwa.dot.gov/ohim/hs01/fe221.htm). Calculations by the Heritage Foundation Center for Data Analysis



with a share greater than 1.00 received a larger share back than they paid, while states with shares below 1.00 paid a larger share than they received.

Although TEA-21 was supposed to ameliorate these inequities and guarantee each state a return of at least 90.5 percent of what it paid, the actual results have been disappointing. Table 5 reveals that a number of long-standing donor states—including Oklahoma, Texas, and Florida—received a return share less than 90 percent of the share of revenues they paid into the system in FY 2001.

Indeed, over the history of the program, no state has done as poorly as Texas, and Oklahoma is not far behind.

Not all of the losers were southern states, however. Michigan, Ohio, California, New Jersey, and Arizona were also donors that year, and these patterns have generally held since the inception of the trust fund in July 1956.<sup>40</sup>

Distortions in the allocation formula have resulted in more congestion than there should be for the given level of spending. Much of this wors-

40. U.S. Department of Transportation, Federal Highway Administration, Table FE-221, “Comparison of Federal Highway Trust Fund Highway Account Receipts Attributable to the States and Federal-Aid Apportionments and Allocations from the Highway Account: Fiscal Years 1957–2001,” in *TEA-21—Transportation Equity Act for the 21st Century*, at [www.fhwa.dot.gov/ohim/hs01/pdf/fe221.pdf](http://www.fhwa.dot.gov/ohim/hs01/pdf/fe221.pdf). The Federal Highway Administration’s calculation of state shares is derived from a ratio of absolute dollars in to absolute dollars out. In an atypical year like 2001 when outflows vastly exceeded inflows, this yields skewed results, reporting that all states receive above average returns. In contrast, FY 2000’s results as reported on the previous year’s Table FE-221 yields a more accurate and typical outcome of the systems regional distortions.

ening congestion is concentrated in the faster-growing regions, and most of the states in those regions are donor states. If nothing is changed, the congestion in these places will worsen because these distortions are not self-correcting under the current program. Partly for this reason, the urban areas of Texas and California typically have some of the nation's worst traffic congestion.

Another troubling inequity embodied in the current allocation system is the extent to which the trust fund tends to redistribute fuel tax revenues from poor states to rich states, particularly along the Atlantic seaboard. The last column of Table 5 gives each state's ranking by per capita income, from 1 to 50 with 1 as the highest.

As the table reveals, 12 of the 22 donor states are ranked in the bottom half of the national income distribution. Even more inexplicable is that 7 of the 10 most prosperous states are recipient states. One of the most perverse outcomes of this peculiar trickle-up reward system is that motorists in Mississippi, ranked 50th by income, in effect support motorists in Connecticut, ranked 1st by income.

## SUMMARY OF THE PROBLEMS

Having completed construction of a 41,000-mile interstate highway system from coast to coast and border to border, the federal government has found it increasingly difficult to resolve surface transportation problems that are increasingly local in nature. As the worsening congestion suggests, this task is beyond the scope and skill of the Washington bureaucracy and congressional committees. Despite record levels of highway spending, traffic delays are worsening and roads are deteriorating.

Other than a Pavlovian embrace of the failed tax-and-spend policies of the past, many in Congress and the DOT appear to have little interest in doing much more than continuing the *status quo*. What passes for innovation in the Washington of today is little more than higher taxes, with perhaps a few new bells and whistles attached to appease reformers. By slogging along its present course, Congress will only perpetuate a defective system for another six years—six years characterized by worsening congestion and deteriorating roads.

The current highway program suffers from four main defects that have worsened over time:

1. The motorist pays the revenues but receives a

shrinking fraction of the benefits because funds are increasingly allocated by political influence, not need;

2. The current geographic allocation formulas consistently favor some regions over others;
3. An increasing share of federal transportation spending is micromanaged by Washington officials to satisfy politically influential constituencies rather than improved mobility; and
4. Existing federal law largely prohibits and/or penalizes the implementation of most of the more promising reforms—privatization, commercialization, and public-private partnerships—that have been successfully implemented elsewhere in the world.

Discussed below are a number of potentially promising reform proposals that address some or all of these defects.

## RECOMMENDED ACTIONS IN 2003

Five reforms could bring some relief if implemented at a scale greater than a series of pilot projects. The first four proposals involve alterations in the existing federal highway program, while the fifth involves a wholesale change in the system and could incorporate some or all elements of the first four.

### RECOMMENDED ACTION #1: Stop wasting money.

As noted earlier, the federal highway program suffers from a number of significant leakages that divert the federal fuel tax revenues paid by motorists and truckers to costly and inefficient transportation programs and projects that have little or nothing to do with transportation, such as hiking trails, beautification, historic preservation, federal lands, and covered bridges. Of the many diversions, transit is the largest and most serious loss, misallocating funds from heavily used, cost-effective roads to expensive, underutilized transit systems that serve less than 2 percent of the traveling public at a higher cost per passenger mile. Light rail costs nearly four times as much as autos, while buses are twice as expensive.<sup>41</sup>

Under TEA-21, nearly 40 percent (\$14.6 billion) of highway spending in 2001 was diverted away from general-purpose roads to lower-priority uses. If that sum had been devoted to general-purpose

roads, highways, and bridges to better serve those who paid the taxes, spending on roads would have increased by 63 percent. To raise that much revenue through higher taxes—as Chairman Young and many others now urge—would require a fuel tax increase of approximately 10 cents per gallon if the additional funds were dedicated just to roads. However, if the traditional 80/20 split between roads and transit determined distribution, taxes would have to increase by 12 to 13 cents per gallon.<sup>42</sup>

While ending the willful waste of money would free substantial funds for investment in roads, such congressional fiscal responsibility seems unlikely.

### **RECOMMENDED ACTION #2: Fund transportation needs through the broader use of tolls.**

With state and federal highway programs pressed for funds to meet current repair and expansion obligations, some analysts have recommended placing tolls on some or all limited-access highways and using the additional funds to maintain and improve those highways. Supporters of tolls argue that such user fees are more efficient than gas taxes because the fees will be devoted—in theory—to the infrastructure used. If tolls were placed on limited-access roads where it made economic and administrative sense, the money raised could supplement existing state and federal fuel tax revenues that otherwise would have been spent on the tolled facility, allowing those revenues to be devoted to other roads and projects where tolls are not practical or where toll collections would be insufficient to meet needs.

Until the 20th century, when the public funding of roads became more common, roads of any significant length and quality were often built and funded by tolls. One of the first successful U.S. toll roads dates back to 1791 when private promoters opened the Lancaster Turnpike, connecting Philadelphia with the rich farming and metal fabricating centers to the west in Lancaster County.<sup>43</sup> Indeed,

the term “turnpike” refers to the movable barrier (that turned or swiveled on a pike) that was placed at the entrance to such roads to limit entry to those who paid the toll.

Toll turnpikes in New Jersey, Pennsylvania, Connecticut, and Ohio and other toll roads throughout the country are a legacy of that earlier era. These toll roads—that did not require funds from a highway trust fund to build or operate—later became integral additions to the interstate highway system. Toll bridges are more common than toll highways, reflecting the higher cost of building and maintaining bridges.

When the idea of a federally supported interstate highway system was under study in the mid-1950s, public officials and transportation experts viewed state-levied tolls more favorably than they do today. Indeed, the January 1955 report of the President’s Advisory Committee on a National Highway Program recommended that states be allowed to levy tolls to finance the construction of some of the interstate system.

The commission, however, did not believe that tolls would generate sufficient revenue for the system then envisioned and recommended borrowing the money through special bonds whose debt service would be funded by general federal revenues including the federal fuel tax, imposed off and on since World War I.<sup>44</sup> The commission further recommended that, when the bonds were paid off, the federal system be ended and the roads turned over to the states for operation. Obviously, none of this happened, and the highway trust fund became the chief financing mechanism for the federal highway program and remains so today.

**Tolling the Interstates.** Nonetheless, many believe that the trust fund and the fuel taxes are no longer adequate to today’s transportation needs and that tolls should be selectively imposed to provide more financial resources and to link fees more closely to usage. Perhaps the most ambitious pro-

41. Semmens, “Public Transit,” p. i.

42. Transportation analysts use a rule of thumb that each one-cent increase in the fuel tax will increase trust fund revenues by \$1.5 billion per year.

43. J. C. Furnas, *The Americans: A Social History of the United States, 1587–1914* (New York: G. P. Putnam’s, 1969), p. 275.

44. Comment by John Fischer of the Congressional Research Service in *Public Works Financing*, November–December 2002, pp. 4–5.

posal was recently made by William Reinhardt, publisher of *Public Works Financing*, a leading newsletter in the field of transportation infrastructure. Noting that a major gas tax increase is unlikely on political grounds and recognizing that the gas tax is no longer the revenue generator it once was, Reinhardt recommends that the federal government toll the existing 42,000 miles of interstate highways using a remote sensing GPS system that avoids delays and high collection costs by eliminating the need for toll booths and human toll collectors. Reinhardt notes that a 3-cent-per-mile toll would more than cover the estimated \$16 billion-per-year cost of maintaining the interstate system.<sup>45</sup>

**Toll Truckways.** Reason Foundation scholars recently made a less ambitious, but potentially far-reaching, proposal for the construction of truck-only tollways using existing rights-of-way running parallel to interstate highways, within existing medians where practical.<sup>46</sup> Funded entirely by tolls collected on the trucks that use these exclusive lanes, the proposal would allow heavy trucks to avoid existing weight and length limits as well as congestion-related delays by segregating them from automobiles on select portions of the interstate system.<sup>47</sup> Motorists would benefit because of the shift of some truck traffic to the toll lanes, easing congestion on existing interstate lanes at no additional direct cost. Under some versions of this plan, trucks paying the toll to use these special lanes would receive a rebate on the estimated federal fuel tax paid on the fuel consumed while on toll lanes.

**High Occupancy/Toll (HOT) Lanes.** Another proposal would allow motorists to use special-purpose, limited-use, separated lanes to bypass regular lanes and travel at higher speeds in uncongested traffic.<sup>48</sup> These High Occupancy/Toll (HOT) lanes are usually created by permitting single-occupant,

toll-paying cars to access existing High Occupancy Vehicle (HOV) lanes where access is otherwise limited to cars carrying two or more passengers. Reflecting the underutilization of many HOV lanes, converting them to HOT lanes would allow greater utilization, generate more revenue, and reduce congestion on the existing lanes. At present, HOT lanes are in operation in southern California (two locations) and Houston, Texas (one location), and under consideration in Denver, Dallas, Minneapolis, Phoenix, and in the Virginia and Maryland suburbs of Washington, D.C.

In contrast to many existing and proposed toll proposals, HOT lanes and toll truck lanes involve voluntary payments for better service. In both cases, truckers and motorists can choose to travel—albeit more slowly—on the existing “free” system.

**Congestion Pricing.** Tolls have another efficiency advantage over fuel tax-based user fee systems in that the tolls can be adjusted up or down to reflect changes in the demand for a fixed supply of transportation infrastructure by way of a concept called “congestion pricing.” Under congestion pricing, tolls would be set higher during periods of peak use—the morning and evening rush hours—to encourage price-sensitive motorists and truckers to shift their road use to less congested periods. Some studies have found, for example, that as much as 20 percent of motorists during the evening rush hour are not commuters going home from work.<sup>49</sup> By raising the cost of using the roads during peak periods, trips that are not time-sensitive could be postponed to less costly or free periods during the day, while other price- and time-sensitive travel might be encouraged to seek cost-saving efficiencies such as telecommuting, car pooling, or transit.

45. William G. Reinhardt, “A Way to Survive the Perfect Storm: Toll the Interstates,” *Public Works Financing*, November–December 2002. That issue also includes commentary on the proposal, both pro and con, from a number of transportation experts.

46. Peter Samuel, Robert W. Poole, Jr., and Jose Holguin-Veras, “Toll Truckways: A New Path Toward Safer and More Efficient Freight Transportation,” Reason Foundation *Policy Study* No. 294, June 2002.

47. At present, only the New Jersey turnpike segregates trucks from cars in separate, barrier-protected lanes on that portion of the highway running through the heavily congested New York City metropolitan area.

48. Robert W. Poole, Jr., and C. Kenneth Orski, “Building a Case for HOT Lanes,” Reason Foundation *Policy Study* No. 257, April 1999.

49. Patricia S. Hu and Jennifer R. Young, “Summary of Travel Trends: 1995 Nationwide Personal Transportation Survey,” Oak Ridge National Laboratory, draft.

Although largely unused for roads, congestion pricing is used extensively throughout the economy. Restaurants charge less for lunch than for dinner, while movie theaters charge less for matinees than for evening shows. Airlines charge less on weekends than during the week, and Florida hotels charge less in summer than in winter. The metro system in Washington, D.C., charges substantially more for rides during the morning and evening rush hours. So-called early bird specials and happy hours are other common versions of congestion pricing.

With the development of cost-effective technologies to “collect” tolls using electronic signals and remote sensors, the application of congestion pricing to roads is becoming a practical reality. Singapore replaced the license fee system used since 1975 to regulate access to the congested central business district of the city with an Electronic Road Pricing (ERP) system that allowed for more flexibility in levying charges by using car-mounted electronic sensors. Under the current system, motorists are charged different fees depending upon time of day, length of trip, route, and degree of congestion.<sup>50</sup>

**Protecting Toll Revenues from Political Poaching.** While the application of tolls to existing and prospective roads offers the opportunity to increase the financial resources available for transportation improvements in a way more closely related to usage, current trends and proposals in a number of toll systems suggest that the concept will likely be quickly corrupted by public officials seeking reliable revenue streams to fund unrelated government services. Just as about 40 percent of federal fuel tax revenues is diverted to non-general-purpose highway uses, tolls on bridges and highways are now suffering the same fate, and portions of the tolls collected are increasingly diverted to purposes other than maintaining the infrastructure upon which the toll was earned. For example:

- In January 2003, New York City announced its intention to add tolls to the four bridges over the East River between Manhattan and Brooklyn to help reduce the city’s budget deficit.<sup>51</sup>
- In 1989, the New York Port Authority raised bridge and tunnel tolls to subsidize the PATH subway system, and in 1993, New York’s Triborough Bridge and Tunnel Authority raised tolls to subsidize the rail systems of the Metropolitan Transit Authority (MTA). The Triborough Authority, a division of MTA, sets its tolls at levels designed to generate a surplus of \$500 million per year over the cost of bridge and tunnel operations to subsidize the MTA’s transit services.<sup>52</sup>
- In 2002, Maryland raised tolls on Interstate 95 and diverted the new revenues to fund other state programs.
- Virginia plans to raise tolls on the Dulles Toll Road in the Washington suburb of Fairfax County to raise \$800 million for a proposed light rail system serving a similar route as the toll road.<sup>53</sup>
- In central London, England, drivers now pay a new \$8.00 per day congestion fee to subsidize bus service, not roads.<sup>54</sup>

Because of these increasingly common diversions, motorists are burdened with additional costs that fail to translate into any offsetting mobility benefits. To ensure that this does not happen, any effort to raise tolls must be accompanied by firm statutory protections to ensure that the funds are reinvested in roads and bridges.

Another problem with tolls on public roads—new or existing—is the political opposition that often emerges among motorists and truckers to tolls where there were none before. With most motorists taking the view that they already paid for the road through state and federal fuel taxes, opponents object on the grounds of having to pay twice for the

50. “Market Approaches to Congestion Control,” *Calvert Institute for Policy Report*, October 2002, pp. 36–37.

51. *New York Post*, January 23, 2003; “1906 US Law Cited Against DRJTBC,” *Toll Roads Newsletter*, Winter 2002/2003, p. 6.

52. “1906 US Law Cited Against DRJTBC.”

53. Lisa Rein, “Metro Extension to Tysons, Dulles Boosted in Fairfax,” *The Washington Post*, October 29, 2003, p. B1.

54. “Central Area Tolls Starting,” *Toll Roads Newsletter*, Winter 2002/2003, p. 1. Early estimates of impact suggest that traffic has been reduced by 20 percent to 30 percent.

same service. For this reason, most politicians are reluctant to endorse going from free to fee.

TEA-21 allowed for three pilot projects permitting the collection of tolls on existing interstate highways beginning in 1998.<sup>55</sup> To date, no state transportation department has applied for such a pilot project. Some state transportation officials explain that no governor wants to provoke the political anger potentially directed at any governor—one of at most three governors—who approved such fees over and above fuel taxes already levied. Given the number of transportation tax referenda defeated by voters in November 2002, this is a reasonable fear for elected officials.

**RECOMMENDED ACTION #3: Ensure more efficient and effective use of revenues through the broader use of privatization and public-private partnerships.**

Although the laws governing tolls on public roads and bridges can be written to protect against diversion to non-transportation uses, those protections can easily be overcome by future laws that amend, modify, or eliminate that protection. The 1956 law dedicating *all* federal fuel tax revenues to interstate highways has been amended and revised on numerous occasions over the past five decades to divert ever-larger shares of fuel tax revenues to non-highway and non-transportation purposes.

Despite these many political difficulties and risks, tolls do offer an opportunity to raise more money for transportation, more efficiently connect motorist payments with road usage, and direct funds where need and use is greatest as measured by motorists' preferences. One promising way to ensure that these economically efficient relationships can be implemented without risk of future violation by fiscally irresponsible public officials is to allow private investors to build, finance, own, and operate the toll roads and bridges.

If toll roads were privately owned, government's ability to confiscate the toll revenue stream would be deterred by constitutional protections of private property. Although such protections are not iron-clad and depend upon court interpretation, any attempted confiscation would lead to costly politi-

cal conflict and lawsuits. The threat of such suits and opposition would serve as a deterrent against government encroachment.

Although private toll roads spanning long distances were a common feature of America's transportation system in the 18th and 19th centuries, they fell out of favor as state, local, and federal governments increasingly intervened to provide motorists and other road users with "free" roads. Completing the slow exclusion process was the 1956 creation of a federally funded interstate highway system, thereby eliminating from commercial consideration what could have been the most viable business opportunity for private toll road investors and operators.

While privately constructed roads and public-private partnerships are permitted by law, state and federal transportation officials have often acted as if they were not and have erected numerous obstacles to their implementation. In part, this resistance stems from fear of having public inefficiencies exposed by comparison to more efficient private providers. In other cases, efforts to toll or privatize existing publicly built roads have also been rejected by government officials.

**Past Presidents Endorse Private-Sector Participation.** Despite the DOT's opposition to private roads financed with tolls and/or other revenues such as sales of development rights, two recent U.S. Presidents have issued executive orders (which are still in effect) to encourage and permit infrastructure privatization. On April 30, 1992, President George H. W. Bush signed Executive Order 12803 to encourage infrastructure privatization. Section 2(b) of this order states that

Private enterprise and competitively driven improvements are the foundation of our nation's economy and economic growth. Federal financing of infrastructure assets should not act as a barrier to the achievement of economic efficiencies through additional private market financing or competitive practices, or both.<sup>56</sup>

55. Transportation Equity Act for the 21st Century, Section 1216, May 22, 1998.

And Section 3 states that, “To the extent permitted by law, the head of each executive department and agency shall undertake...to modify those procedures to encourage appropriate privatization of such assets consistent with this order...”<sup>57</sup>

On January 26, 1994, President William Clinton issued Executive Order 12893, “Principles for Infrastructure Investment,” Section 2(c) of which specifically encourages private involvement:

Agencies shall seek private sector participation in infrastructure investment and management. Innovative public–private initiatives can bring about greater private sector participation in the ownership, financing, construction, and operation of the infrastructure programs referred to in Section 1 of this order. Consistent with the public interest, agencies should work with State and local entities to minimize legal and regulatory barriers to private sector participation in the provision of infrastructure facilities and services.<sup>58</sup>

Despite recent endorsements from two Presidents and executive orders that require executive branch agencies to adopt policies to facilitate private-sector investment in infrastructure such as highways, passenger rail, and airports, little has been accomplished, and executive branch bureaucracies are still hostile to private-sector participation and often work actively to thwart it. Consequently, the United States is woefully behind Europe and Asia in harnessing the energy, creativity, and financial resources of the private sector to finance and provide infrastructure investments and improvements.

**Private Roads in America.** Although private and private–public toll roads are becoming com-

mon in Europe, the U.S. has only a few privately financed and privately owned and/or operated toll roads and bridges. One of the oldest is the Ambassador Bridge connecting Detroit with Windsor, Canada, which has been in operation since the 1930s and serves an estimated 10,000 trucks per day as well as thousands of autos. Another private venture spanning the northern border is the newer Detroit/Windsor Tunnel, privately owned by a separate investor group.

Of the more recently completed private toll roads, the oldest is the Dulles Greenway in Northern Virginia, completed in 1995. The Greenway picks up where the public toll road ends at Dulles airport and extends service west into Loudoun County. The Greenway has since been joined by the Greenville Southern Connector, a private not-for-profit venture in South Carolina; the Pocahontas Parkway near Richmond, Virginia; and the Camino–Columbia Toll Road near Laredo, Texas. Construction has begun on the San Miguel Parkway in the San Diego area (California State Route 125). In February 2003, legislation (S.B. 497) was introduced in the Maryland Senate to allow private contractors to propose and finance unsolicited plans for road and bridge projects.<sup>59</sup>

In addition to these general-purpose toll roads are a number of “toll express” lanes that supplement existing public highways. In the Los Angeles area, the Route 91 toll express lanes were privately financed, built, and operated successfully from 1995 to 2002.<sup>60</sup> Active proposals for toll express lanes are under consideration in the Denver area. In Virginia, the Fluor Corporation proposed in late 2002 to build private toll express lanes in the existing right-of-way parallel to the Washington Beltway in the Virginia suburbs. Private investor groups have also made two separate proposals to renovate and expand Interstate 81 in Virginia under the provisions of TEA–21 that allow for a limited number

56. The White House, “Infrastructure Privatization,” Executive Order No. 12803, April 30, 1992, at [envirotext.eh.doe.gov/data/eos/bush/19920430.html](http://envirotext.eh.doe.gov/data/eos/bush/19920430.html).

57. *Ibid.*

58. *Federal Register*, Vol. 59, No. 20 (January 31, 1994), at [www.archives.gov/federal\\_register/executive\\_orders/pdf/12893.pdf](http://www.archives.gov/federal_register/executive_orders/pdf/12893.pdf).

59. See *Daily Record Online* (Maryland), February 10, 2003.

60. The Orange County Transportation Authority recently bought out the Route 91 Express operation so that the county could widen free lanes alongside the toll lanes, which was prohibited by the “non-compete” clauses in the investors’ franchise contract with the state of California.



of demonstration projects using tolls to renovate and rehabilitate portions of the interstate highway system.

**Private Roads in Europe and Asia.** In contrast to the handful of U.S. private road projects built or proposed, a number of European and Asian countries have moved aggressively to implement private road projects with government's encouragement or cooperation. Beginning in 1995, Italy began selling shares in Autostrada SpA—a state-owned corporation dating back to the Mussolini era—to the investing public and private investors. Autostrada operates 1,780 miles of toll roads, about half the roadway mileage in Italy. With revenues of some \$2 billion per year, Autostrada is now fully owned by investors, and its stock is actively traded on European exchanges.

In 2000, the Canadian province of Ontario sold Highway 407, a toll road serving Toronto, for an estimated \$2 billion. Tolls are collected either electronically by an electronic debit card mounted in the car or by photographing the license plate and billing the owner by mail. Either way, users avoid stopping at a tollbooth.

The People's Republic of China is building a modern highway system using only toll financing, most commonly with toll authorities established by cities and provincial governments in partnership with private investors. Following campaign commitments by Prime Minister Junichiro Koizumi, Japan is considering selling its government-owned toll roads. Australia allows its private sector to compete to build and operate its inter-city toll roads in accordance with plans developed by government transportation departments.

By utilizing the skills and resources of the private sector, countries in Europe and Asia have expanded and improved their surface transportation infrastructures in response to rising use. These expansions have been accomplished at little cost to the taxpayer and government budgets because tolls paid by motorists fund the roads.

**How Roads Can Become Independent of Deficits and Competing Priorities.** In contrast to privatization reforms occurring elsewhere in the world, U.S. road-building trends have very little to do with shifting demand and everything to do with the financial well-being of government. When the economy slows, as at present, tax revenues fall and

deficits increase. As government budgets tighten, state and federal transportation programs suffer from flat or falling fuel tax revenues and the diversion of transportation taxes and fees to other government programs.

If privately owned and operated roads were encouraged, transportation resources would be protected from such poaching, and the availability of funds would be related to transportation needs and usage, not the whim of public officials or competing government programs. And as private entities, the roads become taxpayers instead of tax users.

If private roads were used more broadly, their economics would be confined largely to new or existing limited-access highways and bridges and substantial improvements of existing highways. Typical projects might include the recent proposal from a consortium of investors to reconstruct 14 miles of the eight-lane Capital Beltway in Northern Virginia, adding four toll express lanes in the center.

Despite the many opportunities and proposals put forth for privatization or partnerships, the United States is well behind many European and Asian countries in adopting mechanisms to harness and encourage the resources and creativity of the private sector to finance, build, and operate roads, bridges, and transit systems. Indeed, notwithstanding several executive orders, such arrangements are still viewed as prohibited for any infrastructure that received any federal funding during its construction or operation.

#### **RECOMMENDED ACTION #4: Fund roads and bridges through the broader use of innovative finance mechanisms.**

With federal and state fuel tax revenues perceived as failing to keep pace with rising transportation needs, and with taxpayers increasingly reluctant to support tax increases, particularly those targeted for transportation, some transportation analysts and officials are advocating innovative finance mechanisms as an alternative source of funds for transportation projects.

Innovative finance describes a variety of funding techniques where money is borrowed to supplement existing tax revenues to build roads. Turnpikes and other toll roads and bridges—public or private—typically borrow some or all of the funds

needed to construct the project and then service the debt with the toll revenues generated by the project. Most of the toll roads in operation today have been financed in this fashion.

**GARVEE.** More recently, many state transportation departments have used a debt instrument called a grant anticipation revenue vehicle (GARVEE) to borrow against future federal payments from the highway trust fund in order to speed up the completion of infrastructure projects in which costs may exceed the revenues available from existing tax revenue sources.

**SIB.** Another widely discussed, but hesitantly implemented, form of innovative finance is the state infrastructure bank (SIB). First permitted and encouraged in 1991 under the ISTEA, state infrastructure banks are established and capitalized with a payment from the federal highway trust fund or other federal source. In South Carolina, this capital was leveraged by the infrastructure bank to borrow more funds, which were then lent to fund promising projects in the state. Virginia used its SIB as a revolving fund to provide loans to promising projects, including the Pocahontas Parkway, a private toll road near Richmond.

ISTEA set no limit on the number of states that could create a SIB, but TEA-21 limited the number of states to only five, compared to the 32 states that created SIBs under ISTEA. TEA-21 also imposed many federal labor mandates, such as Davis-Bacon, on any project receiving SIB funds. As a result, TEA-21 has relegated SIBs to the status of a relatively unimportant source of financial resources for transportation projects.

**TIFIA.** Created in 1998 as part of TEA-21, the Transportation Infrastructure Finance and Innovation Act (TIFIA) provides states with federal direct loans, loan guarantees, and standby lines of credit to fund up to 33 percent of a large (\$100 million-plus) transportation project's cost where a significant portion of the funds for the project are from non-federal sources and a dedicated revenue stream—such as taxes, user fees, or toll revenues from the project—is deemed sufficient to pay off the loans.

Because the federal credit contribution is viewed as subordinated debt, thereby offering more senior, private-sector creditors the equivalent of an equity cushion, TIFIA allows states to leverage federal support and invest in projects that they might not otherwise be able to afford. However, as of 2002, only nine states have used the TIFIA program because of a variety of state legal constraints and program preferences.

**Private Activity Bonds.** Another innovative finance proposal supported by some road privatization advocates is to extend the privilege of issuing tax-exempt private activity bonds to transportation projects. Like debt issued by state and local governments, the interest paid on private activity bonds is exempt from federal income taxes, making the borrowing rate lower—by about 30 percent—than the rate paid on taxable debt such as corporate bonds, commercial loans, or residential mortgages.

Under current law, this borrowing subsidy is limited to state and local governments and a few qualified private-sector borrowers engaged in federally approved investment activities, usually related to certain school and economic development projects. Supporters argue that extension of private activity privileges to road projects would encourage more private road construction by allowing private road developers to enjoy the same cost of capital available to the public sector. Without that privilege, private road developers must overcome a 30 percent cost disadvantage to be competitive with public projects.<sup>61</sup>

In 1999, then-Senator John Chafee (R-RI) introduced the Highway Innovation and Cost Savings Act (S. 470) to create a series of pilot projects to allow construction of a limited number of private toll roads using tax-exempt bonds issued by private developers. The proposal was not enacted, however, and has not been reintroduced in Congress. Nonetheless, provisions to allow a limited number of pilot projects to test the viability of the concept should be a part of any future highway legislation.

Although each of these innovative finance proposals is potentially valuable and promises more efficient use of transportation resources, none

61. Ronald D. Utt, "How the Senate's Tax Bill Would Facilitate Infrastructure Privatization," Heritage Foundation *Executive Memorandum* No. 618, August 4, 1999.

would bring more financial resources to transportation spending. As transportation expert Alan Pisarski has noted, “Innovative finance is not money,” and unless these financing arrangements are structured so that they tap into new revenue streams to service the debt, all they succeed in doing—particularly the more common forms of SIBs and GARVEEs—is reshuffling and redeploying existing government transportation money from one form to another with no net gain in the total money available.

However, innovative finance mechanisms can bring more money to transportation projects if linked with tolls, higher transit fares, or special tax districts where property tax surcharges are levied on land and establishments served by new roads.

### **RECOMMENDED ACTION #5: Turn the responsibility for roads and transit back to the states.**

Without a fundamental overhaul of the existing federal highway and transit program, the application of any or all of the above reform options would lead only to marginal improvements in surface transportation mobility and program costs. In the end, the bulk of the available financial resources would still be misallocated to low-value projects and purposes because of the many distortions (largely political) built into the current program.

For these reasons, the existing federal highway program should be terminated or dramatically revised. One promising solution to the pervasive problems that plague the system is to turn the program back to where it once belonged—the states.

With the construction of a 42,000-mile interstate highway system having been completed, responsibility for highway and transit transportation services should be returned to the states, recognizing that today’s most pressing surface transportation and mobility problems are increasingly local in nature. As such, they are beyond the scope and skill of a centralized bureaucracy in Washington and congressional committees operating under intense political pressure.

States should be permitted to collect and retain the 18.4 cents per gallon federal excise tax and

spend the proceeds of the tax on their transportation priorities, not Washington’s. States would also be freed from following the costly and counterproductive federal regulations, mandates, and set-asides. To facilitate the transition from one system to the other, responsibilities and money could be transferred incrementally over a period of several years.

Reflecting the federal responsibility for facilitating interstate commerce, the only requirement that might be imposed on a state as part of any turnback plan would be the ongoing maintenance, repair, and rehabilitation of those segments of the interstate system within the state. Failure to meet those standards could lead to financial penalties or a reimposition of federal regulations. Beyond this limited requirement, states would be free to spend the funds on projects of their own choosing and priorities, including highways, bridges, rail, buses, and any other opportunities related to enhanced surface mobility. After the transition period, states could reduce (or raise) the excise tax and devote their revenues to purposes other than surface transportation.

**The Cost of Doing Nothing.** Under the *status quo*, the federal fuel taxes paid by each motorist flow to Washington, where they run a gantlet of special interests before returning to highway programs, leaving the motorist with benefits worth much less than the taxes they have paid. Over time, the number of participants in this gantlet has grown, shrinking the share of money available for roads. In 1982, federal mass transit programs were entitled to tap into the trust fund. In 1991, the highway program’s reauthorization was used to funnel money to environmental objectives by authorizing “enhancements” and “air quality/congestion mitigation.” When the highway program was reauthorized in 1998, the Appalachian Regional Commission, parkways, refuge roads, pedestrian walkways, and roads for federal lands were given access to the highway trust fund.<sup>62</sup>

The cost to society of this misallocation of resources extends well beyond its negative impact on mobility and congestion and may lead to a substantial reduction in incomes and jobs throughout

62. U.S. House of Representatives, *Transportation Equity Act*, pp. 60–65.

the economy. As one transportation expert contends:

Taking the 35 years of “investment” in public transit of federal dollars as our starting point, we find that public transit spending since 1965 can be credited with assets and returns that currently support about one million jobs. This sounds pretty good until it is compared with the outcomes that might have been achieved if the funds poured into money-losing public transit had been used in some other ways. Since public transit has consistently had a negative return on investment, the assets acquired with the funds put into it have largely been consumed. As a result, the \$193 billion in taxpayer money invested in public transit has a current estimated residual value of only \$17 billion. If the \$193 billion in taxes that had been spent on public transit had been “spent” on a “break even” investment, the assets would have been conserved and the economy could theoretically have supported 10 million more jobs than it currently does. If the \$193 billion in taxes that has been spent on public transit had been “spent” on an investment yielding only a 5 percent return, the assets would have grown and the economy could theoretically supported 32 million more jobs than it currently does.<sup>63</sup>

With the exception of the interstate highway maintenance requirement, states would also be freed of the many mandates that now encumber the federal highway and transit program. These include Davis–Bacon prevailing wages, Section 13(c), federal earmarks, demonstration and high-priority projects, minority contracting requirements, environmental impact statements, environmental enhancements, historic preservation, transit subsidies, congestion mitigation, prohibitions on tolls

and privatization, roads for federal lands, buy-American provisions, and other such stipulations. All would be eliminated, and their re-implementation would be at each state’s discretion.

**America’s Greatest Spoils System.** Having largely completed its core mission of building the interstate highway system nearly two decades ago, the federal highway program has evolved into the nation’s largest spoils system. As it is currently operated, issues of enhanced mobility for ordinary citizens take a back seat to efforts to accommodate the interests of politically influential constituencies and financially connected businesses and individuals.<sup>64</sup> Whereas all of the revenues flowing into the trust fund are derived from motorists and truck operators, more than a third of the spending is siphoned off by non-highway programs for the benefit of special interests.

Transit systems for example, which are largely concentrated in a small number of urban areas, receive nearly 20 percent of the trust fund’s annual expenditure for the purpose of expanding service and keeping fares low. Elsewhere in the highway program, funds are diverted increasingly to non-transportation uses, such as hiking trails, while more and more of the money is earmarked by Congress for specific projects that would otherwise never be built by states or communities.

Because of these and other financial diversions, and despite the highest federal fuel excise tax ever levied and recent record levels of trust fund spending, America’s motorists confront worsening congestion. This congestion will remain largely unrelieved for the foreseeable future as a result of financial misallocations mandated or contemplated by the current highway program as authorized by TEA–21. More to the point, America’s degree of mobility will get much worse before it ever begins to improve, and those who oversee the federal highway program have no solution to reverse this trend beyond reverting to a more aggressive tax-and-spend policy.

63. Semmens, “Public Transit,” p. 12.

64. Eric Pianin and Charles R. Babcock, “The Bud Shuster Interchange,” *The Washington Post Magazine*, April 5, 1998, pp. 9–23, and Mark Murray, “King of the Roads,” *National Journal*, September 23, 2000, pp. 2954–2959.

## CONCLUSION

The application of any or all of the first four preceding options to the existing federal highway program could lead to measurable improvements, depending on the degree to which they are implemented. However, experience suggests that the degree of implementation, if any, would be modest and, therefore, so would the forthcoming improvements in mobility.

In continuous operation for nearly five decades and now spending close to \$40 billion per year on a variety of objectives and costly projects, the federal highway program has created a broad constituency of influential special interests who benefit financially from the program. The motorist who pays the fees that fund the system, however, is not one of these influential special interests. Consequently, the goal of enhanced mobility is not a high priority when Members of Congress, the DOT, unions, state transportation departments, construction and engineering companies, and lobbyists sit down every six years to divide the pie.

Past efforts to implement reform through the existing statutory structure have yielded only modest changes to placate reformers and have allowed the participants to pose as creative and thoughtful public officials. Innovative finance tools are circumscribed and heavily regulated and then are cut back substantially when potential users show an interest. Privatization and commercialization have fared no better, despite several presidential directives of support, and have been limited largely to hard-to-implement pilot projects. State-imposed tolls on existing interstates are still prohibited by law.

The prospect that Congress and the Administration would stop wasting money appears even more remote, as both currently seem comfortable with the *status quo*. Indeed, if the trends toward greater diversion of money that emerged with ISTEA and TEA-21 are any indication of future patterns, the practice of diverting money to non-road uses is likely to expand.

If meaningful reform within the existing institutional structure is unlikely this year, then the better solution is simply to scrap the program and shift both the revenues and the unencumbered authority

to spend them to the states. While state officials, in general, are no more reform-minded than their federal colleagues, they are not subject to the same program-distorting political pressures. They are also closer to the problems and thus more accountable to the voters and less accountable to lobbyists and special interests that loom ever larger in Washington.

More important, it is unlikely that each of the 50 states will utilize its new freedom exactly as every other state does. As a result, some will be bolder than others in adopting reform options discussed previously and, in doing so, will serve as demonstration projects for the others. Ultimately, through a process of experimentation, trial and error, success and failure, and rejection and emulation, a new and better transportation system will emerge.

Of course, getting Congress and the federal bureaucracy to surrender this much power could be viewed by some skeptics as far more difficult than implementing meaningful reforms within the current institutional structure. But against this considerable obstacle is the fact that the current system creates perennial losers among about half the states, and at some point the elected representatives from those states are going to be compelled by their frustrated voting motorists to seek a more equitable arrangement.

While it is easy to view the inequities simply as a potential fight between donors and recipients, many recipients at the margin would be better off with less money if it was returned to them with fewer mandates, regulations, prohibitions, and micromanaging directives. If governors and state legislatures were motivated to demand such change, Congress and the President might find it difficult to resist.

At some point, for example, Senators and Representatives from a poor state like Mississippi will find it increasingly difficult to justify their support for a system that ships their money to one of the richest, like Connecticut. When that point arrives, the system will be changed.

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