



THE \$300 BILLION QUESTION:



**ARE WE BUYING
A BETTER
TRANSPORTATION
SYSTEM?**



**Surface Transportation
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EXECUTIVE SUMMARY

The nation's surface transportation funding law is up for reauthorization this year. The last two federal transportation bills were significant in that they heralded a new era in federal transportation policy – they finished construction of the Interstate highway system and shifted towards a stronger emphasis on maintaining and repairing existing roads and bridges. At the same time, additional funds were targeted towards providing more transportation choices, particularly public transit, in addition to investing in transportation programs that helped meet federal environmental and air quality standards.

As Congress prepares to renew the transportation bill that could contain as much as \$250 billion in new spending over the next five to six years, STPP felt it was time to dig a little deeper into the nation's transportation finances, not just how much each state gets – but more importantly how they spend it and what the public sees as a result. STPP has analyzed the available federal transportation spending and performance data over the last 10 years in four specific areas:

- (1) roadway pavement conditions and road repair spending;
- (2) bridge conditions and bridge repair spending;
- (3) traffic safety and traffic safety spending; and
- (4) air quality and spending on clean air programs.

We wanted to take a hard look at what we actually bought with over \$300 billion in transportation money spent over the last decade, and examined spending trends and outcomes in these four areas in particular. The following analysis and the series of companion "decoders" assess, as accurately as possible with the available data, state performance under these transportation laws (see the companion charts in the four new STPP decoders for detailed state-by-state spending rates by program and project type – available at www.transact.org. Analysis of other crucial performance indicators including traffic congestion and public transit are forthcoming or have been previously released in STPP's decoder series.)

The bottom line is that conditions and performance have improved in areas where targeted funding exists – specifically in the repair of Interstate highways and the nation's bridges. Much of the credit for these repairs and improvements rests with specific funding provided through the Bridge Repair and Interstate Maintenance programs in the federal surface transportation

laws – ISTEA and TEA-21. More modest improvements have been realized in the areas of traffic safety and air quality.

Yet all four areas could have seen far more dramatic improvements had Congress closed accounting loopholes in the current law that allow states to shift funds out of road and bridge repair, traffic safety and clean air accounts and into more traditional highway construction programs. In the last ten years, states left a combined \$7.9 billion in bridge repair funds, \$2.2 billion in clean air money and \$1 billion in traffic safety funding on the table in favor of other priorities.

As Congress renews TEA-21 this year, legislators should close the loopholes that allow underspending in key programs, make investments in repairs, traffic safety and air quality a higher priority, and demand new accountability and performance standards that reward states and metropolitan areas for meeting stated transportation measures and goals. TEA-21 is a popular law that has yielded significant transportation improvements – these and other small fixes can yield even bigger results as the nation moves forward.

Fixing it First? Prioritizing Road and Bridge Repairs

- Pavement conditions for all major U.S. roadways (federal-aid roads) improved over the last decade as a result of targeted funding programs in ISTEA and TEA-21 — down from 70.1% of all major roads in less than good condition in 1994 to 49.9% in 2001 — but could have improved even more significantly had states and Congress adopted a stronger “fix it first” policy and closed accounting loopholes in the current law.
- For many states, tremendous political pressure exists to spend federal transportation funds building new highways even while existing roads and bridges remain in dire need of repair; 11 of the worst 20 states on STPP’s “pothole index” (see new STPP Road Condition decoder) spent more on new roads and bridges than they did on fixing existing roads and bridges.
- While pavement conditions improved overall in the U.S., there was tremendous variation among the states and among different types of roadways; Interstate highways improved the most of any road type over the last ten years due to the new Interstate Maintenance program enacted as a part of ISTEA – dropping from 60% of Interstates in less than good condition in 1994 to 34% in less than good condition in 2001; urban and suburban roads off the Interstate system improved the least.

- Bridge conditions improved from 1992 to 2001, with the structural deficiency rate for the nation's bridges dropping from 20.7 percent deficient in 1992 to 14.2 percent deficient in 2001; similar to the improvements in Interstate highways over this same time period, these changes can be attributed to dedicated bridge repair funding in ISTEA and TEA-21 through the federal Bridge repair program.
- Bridge structural deficiency rates actually increased in ten states from 1992 to 2001: Alaska, California, Hawaii, Iowa, Montana, New Mexico, South Carolina, South Dakota, Utah, and Wyoming.
- Of the five core funding programs under ISTEA and TEA-21, the federal Bridge repair program has been by far the most neglected: states collectively have invested less than three of four dollars that were available (a 73% obligation rate) under the federal Bridge program. This means that states left \$7.9 billion in Bridge money on the table, over ten years, in favor of funding other programs.
- In the last ten years, spending on new road capacity increased from \$4.7 billion in 1992 to \$7.5 billion in 2001. After the passage of TEA-21, which increased overall federal surface transportation spending by more than 40 percent, spending on new road capacity grew at a faster rate than road and bridge repair.
- Spending on repairs decreased as a share of all spending in 25 states. In another five states, the absolute dollars spent annually on road and bridge repair actually *decreased* during the first four years of TEA-21, relative to ISTEA spending – despite the influx of new money.
- Nationwide, highway lane miles in metropolitan (urban and suburban) areas increased by over 13 percent from 1990 to 2000, while existing road and bridge repair needs often remained underfunded.
- These findings should prompt Congress, as it renews the popular TEA-21 law in 2003, to provide even stronger “fix it first” policies and incentives to states to assure further attention to maintaining existing roads and bridges.

Improving Traffic Safety: Reducing Deaths and Injuries through Safer Streets

KEY SUMMARY POINTS:

- Traffic safety is a transportation issue that typically gets more lip service than it does funding. Despite traffic crashes being the leading cause of death for Americans aged 4 to 33, states failed to spend \$1 billion in targeted federal traffic safety funds (from the STP Safety Set-aside Program) over the last ten years. Overall spending on traffic safety from all federal transportation programs also decreased by 20 percent between the ISTEA funding period (FY92-FY97) and the initial TEA-21 funding period (FY98-FY01).
- Engineers have traditionally responded to traffic safety concerns by proposing the construction of wider and straighter roads. However, new research is suggesting that traditional so-called road "safety improvements" such as widenings may actually lead to increases in fatalities and injuries because they increase travel speeds.
- Pedestrian and bicyclist safety in particular have been ignored. While bicyclists and pedestrians represent 14 percent of all traffic fatalities in the U.S., they receive less than one percent of all federal road spending.
- The upcoming reauthorization of TEA-21 offers an excellent opportunity to make improving traffic safety a real priority. Legislators working on the bill should close the loophole that allows states to spend federal funds intended for safety on other programs. California's innovative Safe Routes to School laws, which make it safer for children to walk or bicycle to school, should be adopted as a national program. Additional incentives should be put in place to encourage states to address safety concerns with less costly traffic calming measures and bicycle and pedestrian safety improvements.

Clearing the Air: Spending Trends Under the CMAQ program

KEY SUMMARY POINTS:

- The Congestion Mitigation and Air Quality improvement (CMAQ) program – though a small part of ISTEA & TEA-21 funding – has provided critical funding to help localities and regions reduce vehicle emissions and make progress towards complying with federal air quality standards. While air quality has improved in some metropolitan areas throughout the U.S., in others it has gotten worse, and many areas still suffer from severe air pollution episodes that endanger the health of residents, particularly seniors and children.

- Each state receives CMAQ funding based on the population of local areas that are in non-compliance, or seeking to maintain compliance, with national standards for ozone and carbon monoxide; in 2001, that amounted to over 100 million Americans nationwide, more than a third of the total population.
- CMAQ funds are largely spent on Transportation Control Measures (TCMs) such as improving public transit service, traffic signalization and other traffic flow improvements, trip reduction and ride-sharing initiatives, and pedestrian and bicycle facilities. Under the CMAQ program, more than \$9 billion was spent over the ten fiscal years (FY 1992-2001) to provide greater mobility and improve air quality in non-attainment and maintenance areas. Of that, more than \$4 billion has been used for transit projects and about \$3 billion has been spent on traffic flow improvements.
- Nationwide, the CMAQ program has helped improve air quality. From 1992/1993 to 2000/2001, the number of person days of unhealthy air quality has declined by 38 percent nationally. But 97 percent of that improvement has occurred in California, where the number of person days of unhealthy air quality dropped by 1.4 billion. During that same period, California was one of the best performers in obligating CMAQ funds, with an obligation rate of 91.4 percent. Excluding California's gains in air quality, the country saw just a 2.5 percent decline in the number of person days of unhealthy air quality.
- The majority of states have failed to take full advantage of the program, often to the detriment of local areas struggling to improve their air quality and reduce public health threats. Nationwide, over the ten years of the program, only 81 percent of the apportioned funds to the states have been obligated to CMAQ, a program which overall receives less than 6 cents of every TEA-21 dollar available to the states. Setting aside California and New York (the biggest recipients), the remaining 48 states and the District of Columbia had an average obligation rate of 77.7 percent, spending roughly three out of every four dollars that were made available.
- CMAQ spending (at an obligation rate of 81 percent) is significantly lower than the 93.6 percent obligation rate for the National Highway System (NHS) program. At the state level, there is evidence of states lagging behind dangerously on the CMAQ program (see STPP's new CMAQ decoder, Table 1), while they over-spend on traditional highway programs such as the NHS program. Six states with non-attainment areas had poor spending records on CMAQ, while obligating more than 100 percent of available NHS funds.

- In total, more than \$2 billion (\$2.16 billion) in unobligated balances remain in the CMAQ program at the end of its first ten years. This lost potential results largely from the discrepancy between contract authority, which is specific to each major program, and obligation limitation, which applies to the entire contract authority for a state and is not differentiated by program. As detailed in STPP's *decoder*, "The Transportation Funding Loophole," states can take advantage of this discrepancy to fully fund their other highway priorities while programs such as CMAQ languish.

RECOMMENDATIONS: IMPROVING ACCOUNTABILITY & PERFORMANCE IN THE TRANSPORTATION SECTOR

Transportation finance is too important and involves too much of the taxpayers' money — \$300 billion over the last ten years at the federal level alone — to suffer as it does from the numerous accounting loopholes and financial complexities. The following recommendations would go a long way toward improving the effectiveness of federal transportation spending, giving taxpayers a bigger bang for their buck while building more accountability, transparency and performance requirements into a system that desperately needs them.

(1) Require Clearer Goals and Reward Performance:

Require goals and performance measures for all transportation agencies that use federal transportation funds. Agencies must demonstrate progress towards meeting goals in annual reports made available to the public.

Reward states and metropolitan planning organizations that show significant progress and effort towards meeting their stated goals with financial incentives including higher federal match for projects.

(2) Fix Accounting Loopholes in the Current TEA-21 law:

The new federal transportation law should match apportionments with obligation limits each year – or assign obligation limits to specific programs – in order to close the loophole that allows overspending in some categories and underspending in others.

Require demonstration of meeting crucial program goals before allowing transfer of funds out of key road and bridge repair, traffic safety and air quality programs for other purposes.

(3) Build more Transparency into Transportation Finance:

- Publish annual federal transportation spending information, including program and project type information.
- Require states to publish annual state and local transportation spending including program and project level information.
- Publish annual declarations for intended use of federal transportation funds.
- Publish financial audits of transportation agencies at least once every three years including rigorous analysis of the use of innovative finance tools like GARVEE bonds.
- Build better partnerships with local government officials and public interest groups by better advertising the availability of transportation funds.

(4) Remove Regulatory Barriers That Discourage Repair, Maintenance and Operation of Transportation Facilities:

- Allow federal transportation funds to be used for routine repair of local roads, streets, sidewalks and trails.
- Allow federal transportation funds to be used for the operations of mass transit and paratransit systems, and for intercity rail operations including Amtrak.

(5) Require "Fix-it-First" Provisions for Roads and Bridges Similar to Rules that Currently Exist for Mass Transit Systems:

- Require strong "Fix it First" policies and incentives in federal highway programs that ensure new highway investments are made in a fiscally responsible manner and will be protected, repaired and maintained in future years.
- Require "smart investment" provisions for federal highway funding that reward commitment to restricting growth around highway facilities to more cost-effectively preserve road capacity and curb unplanned development.

(6) Direct Federal Transportation Dollars Beyond State Agencies to Local Governments:

Devolve a significant portion of federal transportation dollars – at the very least proportional to population within a state -- to metropolitan planning organizations (MPOs) and the local governments they represent.

	ROAD REPAIR	BRIDGE REPAIR	TRAFFIC SAFETY	BICYCLE/ PEDESTRIAN SAFETY	AIR QUALITY
CONDITIONS & PERFORMANCE	States with Highest Percent of Roadway Miles in Less than Good Condition* (2001):	States with Highest Percent of Bridges that Are Structurally Deficient (2001):	States with Highest Traffic Fatality Rates per 100,000 Residents (2000- 2001):	States with Highest Bicycle/Pedestrian Fatality Rates per 100,000 Residents (2000-2001):	States with Largest Increases in Person Days of Unhealthy Air Quality** (1992/1993-2000/2001):
	Hawaii 89.7%	Oklahoma 33.5%	Wyoming 34.2	Florida 3.73	Arkansas 443.2%
	Missouri 87.5%	Missouri 25.8%	Mississippi 30.4	New Mexico 3.61	Kansas 216.3%
	Massachusetts 87.4%	Rhode Island 25.0%	South Carolina 26.3	Arizona 3.38	Oklahoma 162.0%‡
	Rhode Island 82.9%	Pennsylvania 24.7%	Montana 25.8	South Carolina 2.93	Louisiana 138.9%
	California 81.9%	South Dakota 23.3%	New Mexico 24.5	Hawaii 2.83	Minnesota 130.1%
	Oregon 81.2%	Mississippi 22.0%	Arkansas 23.5	Delaware 2.78	Nebraska 120.8%‡
	Connecticut 79.5%	Iowa 20.1%	South Dakota 22.8	Louisiana 2.75	Illinois 111.1%
	Arkansas 75.9%	North Dakota 19.3%	Tennessee 22.4	Nevada 2.45	Iowa 110.5%‡
	New Jersey 74.0%	Michigan 18.9%	Alabama 22.3	Mississippi 2.42	Wisconsin 106.7%
South Dakota 72.1%	Louisiana 18.2%	West Virginia 21.8	California 2.39	New Mexico 100%	
U.S. Total 49.9%	U.S. Total 14.2%	U.S. Total 14.8	U.S. Total 1.98	U.S. Total -38.2%	
FEDERAL SPENDING (FY1992-FY2001)	States Spending Lowest Percent of Federal Funds (excl. Planning and Engineering) on Road Repair:	States with the Lowest Obligation Rates for the Bridge Repair program:	States with the Lowest Obligation Rates for the Safety program:	States Spending Lowest Percent of Federal Funds on Bicycle/Pedestrian Safety:	States with the Lowest Obligation Rates for the Air Quality program (CMAQ):
	Massachusetts 12.4%	California 41.2%	Massachusetts 25.8%	West Virginia 0.0%	Alaska 46.3%
	Virginia 13.4%	Virginia 42.1%	Maryland 47.4%	South Carolina 0.2%	Idaho 50.4%‡
	Tennessee 15.9%	Alaska 46.5%	Vermont 49.8%	South Dakota 0.3%	Nevada 57.6%
	Georgia 18.2%	Iowa 55.2%	New Mexico 51.1%	Pennsylvania 0.3%	Hawaii 64.6%‡
	North Carolina 20.0%	Pennsylvania 56.4%	Maine 61.9%	Texas 0.3%	Nebraska 66.1%‡
	South Carolina 21.6%	Maryland 57.7%	Arkansas 64.3%	New Jersey 0.3%	Virginia 66.3%
	Connecticut 22.3%	Massachusetts 65.0%	Virginia 65.6%	Virginia 0.4%	South Carolina 66.7%
	West Virginia 22.5%	Delaware 66.0%	Idaho 65.7%	New York 0.5%	Wisconsin 66.8%
	New Jersey 23.7%	New Mexico 67.4%	Oregon 67.7%	Maryland 0.5%	Montana 67.0%
Maryland 25.2%	Ohio 67.5%	Michigan 68.7%	Mississippi 0.6%	Arkansas 67.5%	
U.S. Total 33.5%	U.S. Total 73.1%	U.S. Total 82.4%	U.S. Total 0.7%	U.S. Total 81.3%	

*Where "Less than Good Condition" refers to roads classified as in Poor, Mediocre, or Fair condition.

**Where Person Days of Unhealthy Air is calculated by multiplying the number of people affected by the number of days in which the Air Quality Index (AQI) exceeds 100 during a year, and averaging that value over 2 years.

‡State has no non-attainment areas for ozone or carbon monoxide, yet does receive some minimal CMAQ funding.