



Highlights of a
FORUM

Convened by the
**Comptroller General of
the United States**

**TRANSFORMING
TRANSPORTATION
POLICY FOR THE 21ST
CENTURY**

September 2007
GAO-07-1210SP



Highlights of a forum, [GAO-07-1210SP](#)

Why GAO Convened This Forum

The nation's economic vitality and the quality of life of its citizens depend significantly on the security, availability, and dependability of its transportation network. The nation's transportation network presents particularly complex policy challenges, because it encompasses many modes on systems owned, funded, and operated by both the public and the private sectors. As the August collapse of a bridge span in Minneapolis illustrated, policymakers currently face the challenge of maintaining the safety and condition of the transportation network—in a time of increasing fiscal constraint. Addressing these challenges requires a fundamental reexamination and transformation of the nation's transportation policies and programs.

This forum brought together government, academic, and transportation industry experts, along with GAO's own transportation specialists. The discussion addressed (1) the appropriate goals for the nation's transportation policy, (2) the role of the federal government in achieving transportation goals, (3) how transportation goals might be financed, and (4) next steps in transforming transportation policy for the 21st century. These highlights do not necessarily represent the views of any one participant or the organizations that these participants represent, including GAO.

www.gao.gov/cgi-bin/getrpt?GAO-07-1210SP.

To view the full product, including the scope and methodology, click on the link above. For more information, contact JayEtta Hecker at (202) 512-8984 or heckerj@gao.gov.

HIGHLIGHTS OF A FORUM

Transforming Transportation Policy for the 21st Century

What Participants Said

Participants said that the nation's transportation policy has lost focus and that the nation's overall transportation goals need to be better defined and linked to performance measures that evaluate what the respective policies and programs actually accomplish. They noted that as the federal share of total transportation spending continues to decline, it has become increasingly important that federal transportation policy goals and their link to local decision making and spending be well defined. Further, according to participants, measured outcomes, or performance results, should be used to drive federal transportation policy and funding decisions. Participants indicated that enhancing mobility and maintaining global competitiveness are the most important goals for the nation's transportation policy.

Participants said that the federal government's role should focus on the policy side of transportation—establishing policy, providing guidance for executing policy, and supporting local and regional investments that correspond with federal policy goals. Additionally, the federal government has an important role to play in the movement of goods because of the impact on the national and global economies. They noted ways that the federal government could encourage transportation decisions that are consistent with national transportation goals by, for example, developing and using incentives and strengthening the user-pay principle.

Participants generally agreed that there is a need to address transportation funding immediately, and no single mechanism will solve the existing and future funding crisis facing the nation's transportation system. Potential approaches identified by participants include levying new taxes, implementing tolls, and utilizing congestion pricing strategies. However, participants acknowledged potential drawbacks to several of the funding mechanisms that were identified, such as a lack of public support for tolling and equity concerns with certain pricing mechanisms.

There was broad consensus among participants on the need for a transformation of our current approach to transportation policy to better meet current and future mobility needs in a strategic, integrated, and sustainable manner. For a successful transformation, participants said it is necessary to develop a constituency that will push for and support change. Participants said that there is a need to educate and influence both political leaders and the broader public because transportation is not currently perceived as a significant national problem. The public and private sectors need to better understand the magnitude and consequences of these transportation challenges to be motivated to change the status quo. Additionally, participants stated that local transportation initiatives underway may offer lessons on how to build the consensus needed to address today's transportation challenges.

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United States Government Accountability Office
Washington, DC 20548

Introduction from the Comptroller General of the United States

The nation's economic vitality and the quality of life of its citizens depend significantly on the availability, dependability, and security of its transportation network. For the past several decades, population, income levels, and economic activity have risen considerably, and with them have come considerable increases in travel demand. Transportation infrastructure has not kept pace. The result is apparent: increasing number of hours spent inching along clogged and deteriorating roads and highways, especially at rush hours and other times of peak demand. The economic implications are significant, ranging from wasted time and fuel as cars idle in traffic to increased costs for business as the unreliability of the systems grows. In addition to burdening the economy, congestion can also harm the environment and the health of the nation's citizenry—for example, through increased emissions from idling and slow-moving cars.

The nation's transportation network presents particularly complex policy challenges, because it encompasses many modes—air, water, highway, transit, and rail—on systems owned, funded, and operated by both the public and the private sectors. Furthermore, transportation decisions are inextricably linked with economic, environmental, and energy policy concerns. Addressing these challenges requires strategic and intermodal approaches, effective tools and programs, and coordinated solutions involving all levels of government and the private sector.¹ Yet in many cases, the government is still trying to do business in ways that are based on conditions, priorities, and approaches that were established decades ago and are not well suited to addressing 21st century challenges. Addressing these challenges requires a fundamental reexamination of the nation's transportation policies and programs.

Part of this reexamination involves exploring the existing transportation programs and commitments, and determining whether these remain the best approaches for the future. We have previously reported on the following factors that highlight the need for transformation of the nation's transportation policy.

¹See GAO, *Performance and Accountability: Transportation Challenges Facing Congress and the Department of Transportation*, [GAO-07-545T](#) (Washington, D.C.: Mar. 6, 2007); and *21st Century Challenges: Reexamining the Base of the Federal Government*, [GAO-05-325SP](#) (Washington, D.C.: Feb. 1, 2005).

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- **Future demand for transportation will strain the network.** Projected population growth, technological changes, and increased globalization are expected to increase the strain on the nation's transportation system. For example, according to the Transportation Research Board, an expected population increase of 100 million by 2040 could more than double the demand for passenger travel. Moreover, this population growth will be concentrated in certain regions and states, intensifying the demand for transportation in these areas.² Likewise, freight traffic is projected to grow substantially, putting additional strain on ports, highways, railroads, and airports. Increasing congestion and unreliable transportation systems can have severe economic and environmental consequences. Congestion across modes—estimated to cost roughly \$200 billion per year—is significant and projected to worsen.
 - **National transportation goals and priorities are difficult to discern.** Federal transportation statutes and regulations establish multiple, and sometimes conflicting, goals and outcomes for federal programs. For example, safety, travel-time savings, reduction of environmental impacts, security, economic development, and reliability are all statutorily defined factors for consideration in transportation planning and project development. However, federal transportation funding is not linked to system performance or to the accomplishment of goals or outcomes. Further, we have found that formal analyses often are not used in deciding among alternative projects, projects often do not meet anticipated outcomes, and evaluations of outcomes are typically not conducted.³ Without links between specific performance-related outcomes and federal grant funding levels there is little assurance that the projects selected and funded best meet the nation's most critical but undefined mobility needs. Furthermore, most federal highway grant funds are apportioned to state and local governments by formula, without regard to the needs, performance, capacity, or level of effort of recipients.
 - **The federal government's role is often indirect.** DOT implements national transportation policy and administers most federal transportation programs. Its responsibilities are considerable and reflect the extraordinary scale, use, and impact of the nation's transportation

²Transportation Research Board, *Critical Issues in Transportation* (Washington, D.C.: 2006).

³GAO, *Highway and Transit Investments: Options for Improving Information on Projects' Benefits and Costs and Increasing Accountability for Results*, [GAO-05-172](#) (Washington, D.C.: Jan. 24, 2005).

systems. While the department carries out some activities directly, such as air traffic control, it does not have direct control over the vast majority of the activities that it funds, such as local decisions on the priority of transportation projects. Additionally, DOT's framework of separate modal administrations makes it difficult for intermodal projects to be integrated into the transportation network. Further, while passenger and freight travel occurs on many different modes, federal funding and planning requirements focus largely on highways, transit, and aviation passenger travel. As a result, projects focused on the movement of freight—key to the efficient movement of goods and helping ensure that American products remain competitive in global markets—often encounter difficulties in accessing federal, state, and local funding sources. Unless major modes—air, water, highway, transit, and rail—are well integrated it is unlikely that mobility can be enhanced.⁴

- **Transportation funding has not kept up with demand.** Revenues from traditional funding mechanisms will be unable to keep pace at current tax rates, and the nation's long-term fiscal challenges constrain decision makers' ability to use other revenue sources for transportation needs. For example, within the Highway Trust Fund—the major source of federal highway and transit funding—revenues are eroding with inflation. Additionally, funding authorized in the recently enacted highway and transit program legislation is expected to outstrip the growth in trust fund receipts. According to recent estimates from the Congressional Budget Office and the President's budget, the trust fund balance will steadily decline and reach a negative balance of more than \$14 billion by the end of fiscal year 2012.⁵ Further, according to DOT, investment by all levels of government remains well below the estimated amount needed to maintain the condition of the nation's highway and transit systems. As a result, the

⁴See GAO, *Intermodal Transportation: DOT Could Take Further Actions to Address Intermodal Barriers*, [GAO-07-718](#) (Washington, D.C.: June 20, 2007); *Freight Railroads: Industry Health Has Improved, but Concerns about Competition and Capacity Should Be Addressed*, [GAO-07-94](#) (Washington, D.C.: Oct. 6, 2006); *Freight Transportation: Strategies Needed to Address Planning and Financing Limitations*, [GAO-04-165](#) (Washington, D.C.: Dec. 19, 2003); *Intermodal Transportation: Challenges to and Potential Strategies for Developing Improved Intermodal Capabilities*, [GAO-06-855T](#) (Washington, D.C.: June 15, 2006); and *Intermodal Transportation: Potential Strategies Would Redefine Federal Role in Developing Airport Intermodal Capabilities*, [GAO-05-727](#) (Washington, D.C.: July 26, 2005).

⁵See GAO, *Performance and Accountability: Transportation Challenges Facing Congress and the Department of Transportation*, [GAO-07-545T](#) (Washington, D.C.: Mar. 6, 2007); and *Highway Trust Fund: Overview of Highway Trust Fund Estimates*, [GAO-06-572T](#) (Washington, D.C.: Apr. 4, 2006).

overall performance of the network is declining as exemplified by the Minneapolis, Minnesota bridge collapse that occurred in August 2007. As a result of these concerns, GAO designated financing the nation's transportation infrastructure as a high-risk issue this year.⁶ In recognition of these and other issues, GAO and others have highlighted the need for a new approach to transportation policy. These include suggestions for systemic changes to the way transportation policies are designed and implemented, such as focusing policy on economic prosperity for the nation, adopting a systems perspective (rather than modal), and more effectively integrating priorities across levels of government.⁷ Further, experts have suggested that addressing the challenges facing transportation policy in the 21st century without worsening other problems will require simultaneous attention to such issues as mobility, safety, security, and environmental protection. However, the slow and often cumbersome decision-making process for transportation investments, a lack of consensus on what investments should be made, and a decline in federal funding and control of transportation infrastructure make transforming the nation's transportation policy a complex undertaking.

GAO convened this forum on May 23, 2007, to help address the challenges facing transportation policy in the 21st century. The forum brought together government, academic, and transportation industry experts, along with GAO's own transportation specialists. The forum's purpose was to build knowledge and to support policymakers by identifying transportation-related issues and strategies that could improve government performance in an environment of increasing congestion and severe fiscal restraint. The discussion addressed (1) the appropriate goals for the nation's transportation policy, (2) the role of the federal government in achieving national transportation goals, (3) how the transportation network might be financed to meet these goals, and (4) the next steps in transforming the nation's transportation policy. (See app. I for a list of forum participants and app. II for the forum's agenda.) This forum was designed for the participants to discuss these issues openly, without individual attribution, in order to facilitate a rich and substantive discussion of these issues.

⁶GAO, *High Risk Series: An Update*, [GAO-07-310](#) (Washington, D.C.: Jan. 31, 2007).

⁷GAO, *Surface Transportation: Strategies Are Available for Making Existing Road Infrastructure Perform Better*, [GAO-07-920](#) (Washington, D.C.: July 26, 2007).

This report summarizes the ideas and themes that emerged at the forum, the collective discussion of participants, and comments received from participants based on a draft of this report. The report also presents the results of a survey that we sent to each participant prior to the forum. The survey was intended to solicit participant opinion on the forum discussion topics and the results of the survey were presented during the forum to help stimulate discussion. Twenty of the 22 participants completed the survey. The highlights summarized in this report do not necessarily represent the views of any individual participant or the organizations that these participants represent, including GAO.

I want to thank all the forum participants for taking the time to share their knowledge, insights, and perspectives. We at GAO will benefit from these insights as we carry out our work for the Congress and the country. I look forward to working with the forum's participants on this and other issues of mutual interest and concern in the future.

A handwritten signature in black ink, appearing to read "D. M. Walker", with a long horizontal line extending to the right.

David M. Walker
Comptroller General
of the United States

September 19, 2007

Participants Said That the Nation's Transportation Policy Goals Need Clarification and Measured Outcomes

The nation's transportation policy has lost focus and national transportation goals need to be better defined and linked to performance measures that evaluate what the policy actually accomplishes. As the federal share of total transportation spending continues to decline, it has become increasingly important that federal transportation policy goals and their link to local decision making and spending be well defined. Further, measured outcomes, or performance results, should be used to drive federal transportation policy and funding decisions. Preforum survey results showed that participants rank enhancing mobility and maintaining global competitiveness as the most important goals for the nation's transportation policy. Additionally, DOT has identified its top priorities as safety, increasing mobility, and ensuring that the nation's transportation network enables economic growth and development.

Federal Transportation Policy Is Unclear

Participants generally agreed that federal transportation policy has lost its focus. Current federal policy goals can be contradictory and not well linked to incentives for local decision makers, according to participants. For example, one participant suggested that it would be reasonable for state departments of transportation (DOT) to favor the use of large, fuel-inefficient vehicles because higher gas consumption would mean more fuel tax revenue for the state, even though this goal would be inconsistent with goals for energy efficiency. There was general agreement that transportation policy needs to ensure that the various types of goals—mobility, energy, environmental, safety, and security—are aligned. Participants said the federal government has a primary role in creating such a policy framework for transportation investments and systems.

While participants cited the importance of the federal government in shaping a transportation framework, they also said the current federal structure, with its modal administrations and stovepiped programs and funding, frequently inhibits consideration of a range of transportation options at both the regional and the national levels. This current federal structure has resulted in a noticeable shift by the public to focus on finding transportation solutions and additional transportation funding at the regional and local levels. Participants commented that states not only implement transportation programs, but, absent clear federal transportation goals, have considerable flexibility in how transportation dollars are used. This can result in little assurance that the projects selected and funded best meet critical but undefined national mobility needs.

Participants said that measured performance results should be used to drive decisions about transportation policy and funding, but they also agreed there is currently no mechanism to evaluate transportation policy effectiveness or execution. Although the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the current transportation authorizing legislation, contained transportation goals for states and metropolitan planning organizations, it falls short in administering the goals from the federal level, according to participants. Thus, participants emphasized that the federal government needs to invest in performance measures to be able to determine outcomes of its policies. Participants also said that the federal government, through authorizing statutes such as SAFETEA-LU or other means, needs to provide local transportation agencies with the tools for assembling transportation plans and assessing the performance of their systems. Prioritized goals and performance measures can be used on the local level to analyze and compare transportation alternatives and to make transportation decisions based on national as well as local priorities.

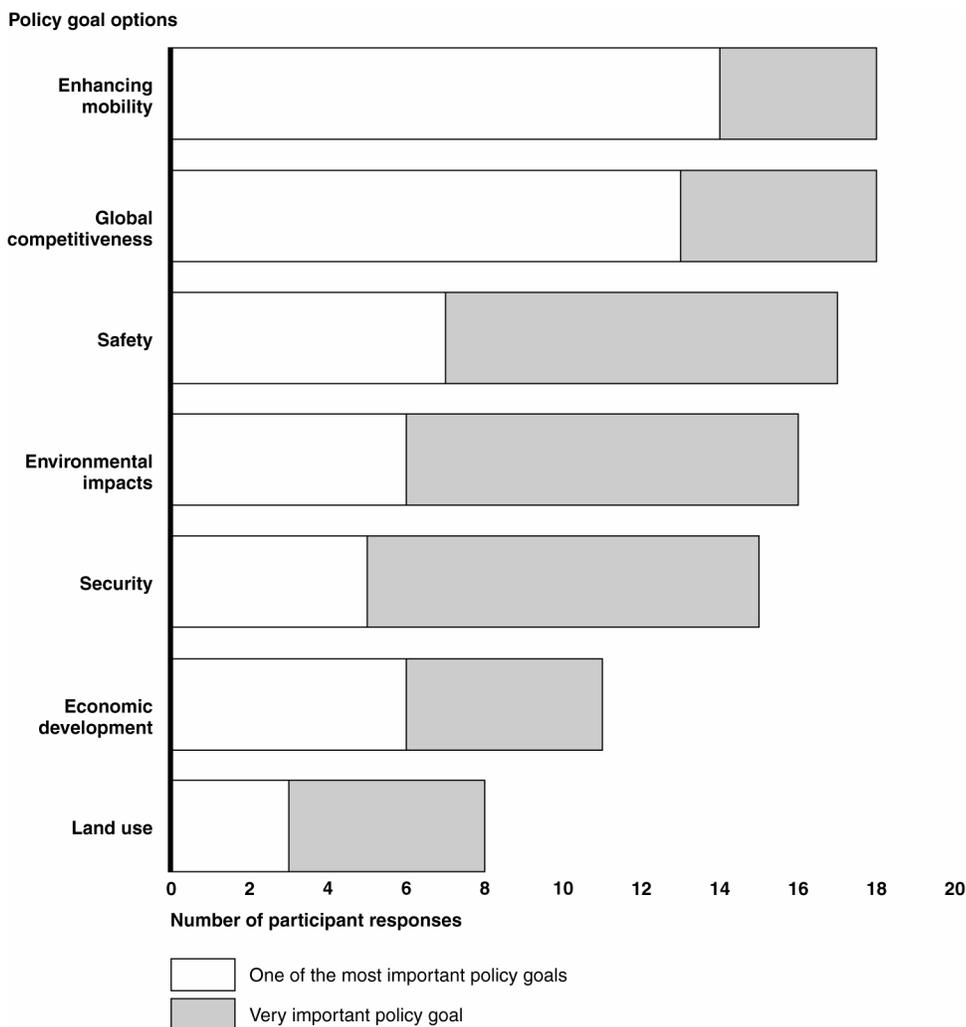
Most Participants Identified Enhancing Mobility and Maintaining Global Competitiveness as Key Federal Transportation Goals

Prior to the forum, we surveyed the participants, asking them to evaluate, from the federal perspective, the importance of various transportation goals including enhancing the mobility of people and goods; promoting local and regional economic development; maintaining global competitiveness; minimizing adverse environmental impacts of the transportation system; encouraging certain land use patterns; improving transportation safety; and facilitating the security of all transportation modes. The participants indicated that for them the two most important goals for the nation's transportation policy were enhancing the mobility of people and goods and maintaining global competitiveness (see fig.1). Improving transportation safety, minimizing adverse environmental impacts of the transportation system, and facilitating transportation security were also ranked as very important goals by a majority of participants. The lowest-rated goals for the nation's transportation policy were encouraging certain land use patterns and promoting local and regional economic development.

In discussing the survey results at the forum, the participants again emphasized the appropriateness of enhancing mobility and maintaining global competitiveness as goals of the nation's transportation policy, noting that it is particularly challenging to address these goals from the local level. Several participants also stated that the nation's transportation policy should recognize emerging conditions such as reducing fuel dependence and minimizing the impact of the transportation system on

global climate change. In contrast, other participants noted that the nation's transportation policy is too blunt an instrument to use in encouraging regional economic development, which therefore should not be included as a goal of national policy.

Figure 1: Participant Survey Responses of the Most Important Transportation Policy Goals



Source: GAO.

Note: Twenty of 22 participants responded to our survey.

Goals Participants Identified for the Nation's Transportation Policy Generally Coincide with DOT's Strategic Objectives

Similar to the goals that the participants identified in the survey and through discussion, DOT has outlined five objectives in its strategic plan including safety, mobility, and global connectivity (see table 1). Although DOT has not prioritized these objectives, officials have said that safety should be the department's top priority. Participants noted that enhancing transportation safety has the potential for great economic gains for the nation. One participant said that each year tens of thousands of people are killed and millions are injured in transportation accidents in the United States, resulting in huge losses of economic productivity as well as enormous costs to the medical system. Additionally, currently there are few links between transportation expenditures and safety outcomes, but such links are needed, according to participants. Several participants pointed out that transportation accidents and safety issues are viewed as solvable problems in other countries, and the United States needs to take a different approach to safety, one in which the federal government is held accountable for results. The participants noted that the strategic objectives of DOT should be distinguished from the nation's larger transportation policy goals, although DOT is the primary mechanism through which transportation policy can be administered.

Table 1: DOT's Strategic Objectives

Strategic objective	Description
Safety	Enhance public health and safety by working toward the elimination of transportation-related deaths and injuries.
Mobility	Advance accessible, efficient, intermodal transportation for the movement of people and goods.
Global connectivity	Facilitate a more efficient domestic and global transportation system that enables economic growth and development.
Environmental stewardship	Promote transportation solutions that enhance communities and protect the natural and built environment.
Security	Balance homeland and national security transportation requirements with the mobility needs of the nation for personal travel and commerce.

Source: Department of Transportation Strategic Plan 2003-2008, September 2003.

According to Participants, the Federal Government Should Establish Policy and Encourage Decisions Consistent with Policy and Goals

The federal government's role should focus on the policy side of transportation, establishing policy, providing guidance for executing policy, and supporting local and regional investments that correspond with federal policy goals. Additionally, the federal government has an important role to play in the movement of goods because of the impact on the national and global economies. Participants noted ways that the federal government could encourage transportation decisions that are consistent with national transportation goals by, for example, including using incentives and strengthening the user-pay principle. Preforum survey results and forum discussions showed support for federal involvement in other, more specific, areas as well, such as improving national transportation data and research.

Federal Government's Role Should Focus on Establishing and Supporting National Transportation Policy, Including Goods Movement

The federal government should focus on creating a planning framework for state and local decision making and an oversight mechanism for measuring goal performance, according to participants. In the previous century the nation's transportation policy was focused on building a vast and complex transportation infrastructure. Now, participants said, the federal and state transportation departments need to shift from a dominant emphasis on building to a complementary emphasis on managing this loosely connected system of modes. According to several participants, although the federal government has a minimal role in the direct oversight of transportation projects, it still has enormous leverage—over state and local agencies and the private sector—and needs to use it to achieve national transportation policy and goals.

The cost of moving goods affects the global competitiveness of the United States, and therefore requires federal attention, according to participants. Participants said that in order to stay competitive, the federal government needs to identify ways to maximize freight efficiency and develop incentives for doing so. Participants said that the negative impact of congestion is already affecting the nation's competitive edge, and in the future, the demand for movement of goods will grow in response to such factors as economic development in and growing trade with countries such as China and India. One participant said that while it is necessary to develop transportation infrastructure on a regional level, links between regions must also be forged for moving goods, and it is likely that the federal role will be key in doing so. Participants raised several examples of increased congestion in important transportation corridors due to cross-modal or cross-jurisdictional barriers. The ports of Miami and Newark were noted as examples of locations where congestion can be significant in moving large amounts of people and goods in and out of ports due to

particularly poor connectivity of modes and coordination among the various stakeholders including the private sector as well as federal, state, county, and local government agencies.

Use Incentives to Encourage Transportation Decisions That Are Consistent with Nationally Defined Goals

Participants said that the federal government should establish and use incentives to encourage state and local transportation agencies to act in accordance with better defined national policy goals. They agreed that transportation programs and funding need to be tied to incentives and identified outcomes—as opposed to the current structure of federal programs, which can function as revenue-sharing mechanisms (i.e., revenues are distributed among the states and projects are determined at the state or local levels). Participants suggested that by clearly defining national transportation goals and priorities and using incentives for other levels of government to contribute to those goals, the federal government can provide the political leadership that state and local agencies need to (1) implement projects with benefits that extend beyond their boundaries, and (2) more broadly apply new financing mechanisms such as congestion pricing. Moreover, participants noted, past experiences demonstrate that the incentives do not need to involve large sums of money to encourage state and local governments to act.

Participants pointed to cases in which using incentives and penalties have resulted in desired policy changes. For example, SAFETEA-LU established an incentive grant program to encourage states to pass primary safety belt laws.⁸ Since the law was signed, 3 states have enacted primary safety belt laws,⁹ bringing the total number of such states to 25.¹⁰ Additionally, the federal government has used penalties to push for certain policy changes. For example, penalties were used to encourage states to implement a “zero tolerance” law which required states to enact and enforce laws

⁸Primary enforcement seat belt laws allow police officers to stop vehicles and write citations whenever they observe violations of safety belt laws.

⁹According to the regulations, states that enact and enforce a primary safety belt use law are awarded a one-time grant award equal to 475 percent of the amount apportioned to the state under section 402(c) for fiscal year 2003. Recipients are allowed to use the grant funds for a variety of highway or roadway safety purposes.

¹⁰DOT has also recently initiated the Urban Partnership Agreement, a program where DOT will support select metropolitan areas that agree to pursue combined strategies (tolling, transit, telecommuting, and technology) with a track record of effectiveness in reducing traffic congestion. DOT will offer financial resources (including some combination of grants, loans, and borrowing authority), regulatory flexibility, and dedicated expertise and personnel in support of its Urban Partners.

making it illegal for drivers under age 21 to drive with a blood alcohol concentration of .02 percent or more. States were subject to the withholding of federal-aid highway funds for not implementing such a law beginning in 1999. All 50 states had established such laws by 1999.

Strengthen the User-Pay Principle

Participants also stated that the federal government should strengthen and expand the user-pay principle. This principle—that users should pay for the infrastructure they use—is a long-standing tenet of transportation policy in the United States. For instance, federal, state, and local governments have imposed excise taxes on motor fuels and other taxes on inputs into driving, such as taxes on tires, and charged fares for transit. These taxes, in turn, may be used to pay for a variety of transportation projects. Participants pointed out that the public generally agrees that users should pay something commensurate with the costs to provide transportation services, but that pricing initiatives are often politically difficult for local agencies to implement—as demonstrated by the fact that only a handful of state and local governments have implemented various pricing strategies. One participant suggested that the user-pay principle should be considered a fundamental element of all federal programs and activities.

Participants Identified Other Roles for the Federal Government

All participants responding to our preforum survey agreed that the federal government should have a role in minimizing adverse environmental impacts of the transportation system, improving safety, and facilitating the security of all modes. Additionally, our survey results showed that nearly all (19 of 20) participants agreed that the federal government should have a role in enhancing mobility and maintaining global competitiveness. Other roles for the federal government mentioned by participants included:

- **Research and innovation.** Several participants said that the federal government has a role in funding and developing research, technology, and innovation because it is difficult for local governments to fund these types of activities.
- **Data collection.** Most participants agreed that the federal government should have a primary role in improving data collection. Participants said that reliable and comprehensive national transportation data are necessary for planning, decision making, and performance evaluation.

Participants Said There Is No “Silver Bullet” for Transportation Financing Crisis

There is a need to address transportation funding immediately, and no single mechanism will solve the existing and future funding crisis facing the nation’s transportation system. Potential mechanisms identified by participants include increasing existing or levying new taxes, implementing tolling mechanisms and other user fees, instituting congestion pricing, and offering incentives. Our preforum survey results also showed support for a variety of other funding mechanisms, though none of the options were highly recommended by a majority of participants. Additionally, participants cited drawbacks to several of the mechanisms that were raised.

Various Funding Mechanisms Will Need to Be Used

Participants generally agreed that it will take a variety of funding mechanisms to address projected transportation financing shortfalls. They said that the size and nature of the funding problems facing the transportation system simply cannot be solved by one approach. Participants suggested a number of user fee strategies, describing them as generally inexpensive to administer, although participants noted that restrictive federal policies can prevent state and local agencies from adopting them. In particular, participants generally agreed that pricing mechanisms, such as congestion pricing, show a great deal of promise and should be pursued. Participants said that the federal government needs to use its leverage with state and local transportation agencies to support the implementation of pricing initiatives, which some localities and regions currently are studying or interested in adopting. In general, participants agreed that whatever financing options are pursued, investments need to seek to align fees and taxes with use and benefits and be better linked to performance of all aspects of the transportation system including highways, transit, parking, and pedestrians.

A variety of funding mechanisms were suggested by participants, including:

- **Taxes.** Tax options raised by participants included increasing or utilizing property taxes, fuel taxes, or income taxes, as well as implementing a carbon tax. Participants pointed out that the use of different types of tax options at the state and local levels has been growing recently, and that there has been increasing acceptance of tax strategies by the public in cases where the resulting transportation benefits are well understood.
- **Congestion pricing.** Participants also supported congestion pricing, which attempts to influence driver behavior by charging drivers higher prices during peak hours. However, participants noted that few states have

actually implemented congestion pricing or other pricing techniques, which, they suggested, likely reflects initial public and political opposition to such proposals. The most common form of congestion pricing in the United States is high-occupancy toll (HOT) lanes, which are priced lanes that offer drivers of vehicles that do not meet the occupancy requirements the option of paying a toll to use lanes that are otherwise restricted for high-occupancy vehicles.¹¹

- **Tolling.** Participants said that tolling can be a good option because it brings in new sources of revenues, and as noted above, can help influence driver behavior and increase efficiency in resource allocation. Tolls can generate revenues that are consistent with the user-pay principle because the driver is directly paying to use the specific road and the revenues collected from the toll can go directly to pay for the road's construction, maintenance, and operation.
- **Public-private partnerships.** Participants said that developing partnerships with private industry to help fund transportation projects can offer a number of benefits for transportation agencies, such as expediting project schedules, reducing costs, and providing access to private funding sources.¹²
- **Other user fees.** Participants generally agreed that user fees are a good tool when levied on transportation, but emphasized the importance of dedicating the revenues raised to transportation. Participants also noted that DOT is encouraging user fees on the regional and local levels, and supported this effort.

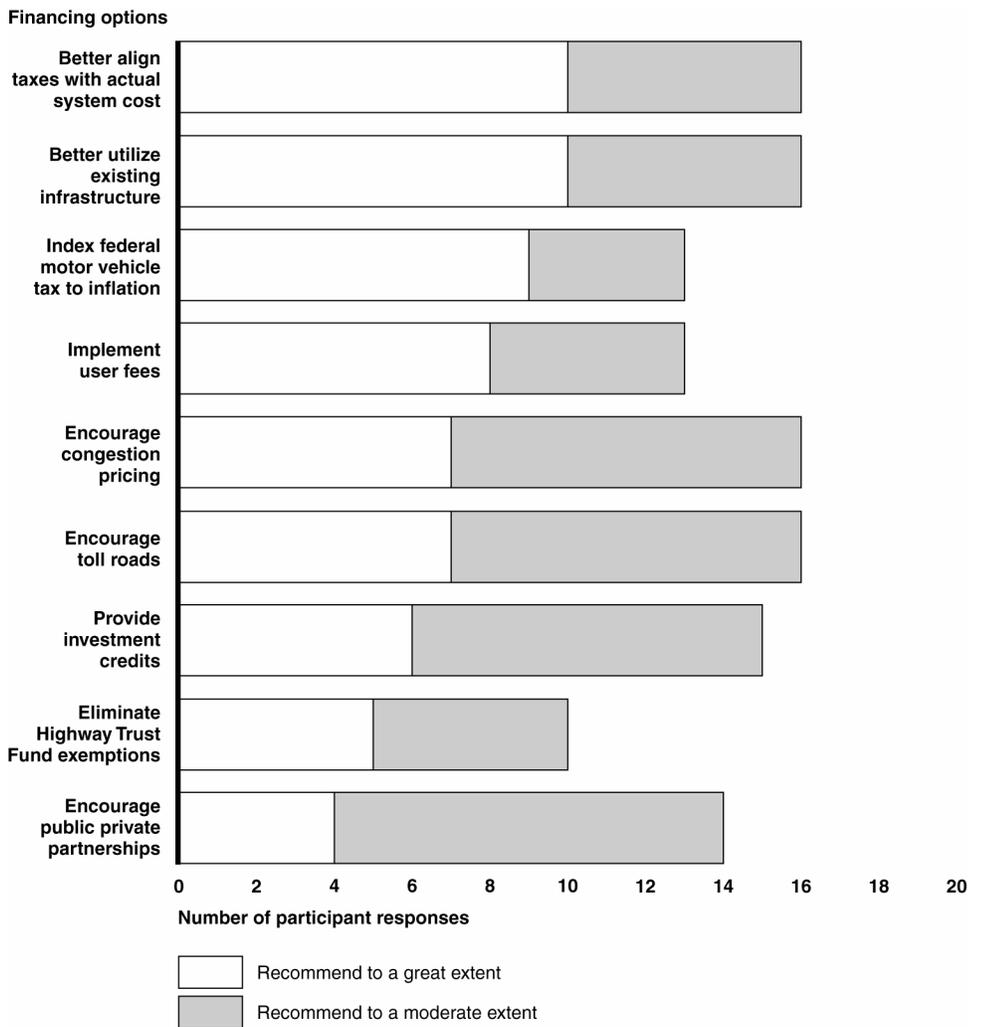
Our preforum survey results anticipated the forum discussion. In our preforum survey, participants recommended that the federal government support a variety of transportation financing mechanisms including better aligning taxes with the costs of the system, indexing the federal motor vehicle tax to inflation, and encouraging the increased use of toll roads. Participants were asked to indicate the extent to which they recommended these financing mechanisms as viable strategies to address the nation's transportation financing challenges and all of the mechanisms were recommended to some degree by nearly all participants. Each

¹¹Also see GAO, *Highway Finance: States' Expanding Use of Tolling Illustrates Diverse Challenges and Strategies*, [GAO-06-554](#) (Washington, D.C.: June 28, 2006).

¹²See our forthcoming report on public-private partnerships that is estimated to be published in the fall of 2007.

financing mechanism listed in the survey was recommended “to a great extent” by at least four participants (see fig. 2).

Figure 2: Participant Responses to Survey Question about Financing Mechanisms



Source: GAO.

Note: Twenty of 22 participants responded to our survey.

Participants Offered a Few Caveats about Financing Mechanisms

Although participants agreed that the nation must address the transportation financing crisis, they also discussed some of the drawbacks to implementing new financing approaches. Several participants commented that an increase in the current fuel tax alone would not be

sufficient to solve the transportation financing crisis. Additionally, a number of participants stated that the rules governing public-private partnerships may need to be regulated or standardized. A few participants cautioned against any reliance or planned use of the general fund as a transportation financing approach, noting that the general fund will have little left after debt financing and Social Security payments.

Furthermore, participants raised concerns about the equity of pricing mechanisms. For example, one participant asked whether, when people move out of the city to avoid the increasing cost of living, is it fair to charge them (through pricing mechanisms) to come back into the city for employment? Another participant said that equity issues are also a concern associated with increasing taxes to support transportation, because such taxes place a disproportionate burden on lower income groups. Several participants noted that these concerns should not prevent the government from encouraging or pursuing them; rather, strategies to identify and compensate the affected groups of these funding mechanisms should be considered during policy development and implementation.

Participants agreed that the public and the private sectors need to be better informed of and better educated about available funding mechanisms. They said that there is currently a general lack of understanding about transportation financing and tolling. For example, the public often opposes tolls, believing that they have already paid for the roads through gas taxes although it is widely acknowledged that the gas tax has not kept pace with the costs of operating, maintaining, and improving the current system. In addition, according to participants, the public often sees tolls as merely collecting revenues and does not understand that they can be used to manage traffic and achieve environmental benefits.

Participants Provided Examples of Effective Pilot Projects

Participants agreed that state and local governments' efforts to develop, test, and implement alternative financing mechanisms serve as an important test bed for identifying funding solutions for the nation's transportation financing crisis. Participants discussed Oregon's pilot project, the "Road User Fee Pilot Program," which tested a new road revenue system. The purpose of the program was to create and test a reliable, broad-based charge that would replace the fuel tax. The pilot project involved implementing an electronically collected mileage fee that assists in the management of road congestion levels. For example, the per-mile fee charged to drivers (at the gas pump as part of the fuel purchase) was greater for travel during rush hour than at off-peak travel times. One

participant described this pilot pricing program as successful in altering driver behaviors and added that the program infrastructure allows for the easy implementation of additional pricing schemes.

Participants also identified the Dallas-Fort Worth region as an example of an urban area that is using a variety of management and pricing schemes to raise revenue and alter travel behaviors. The approaches being used included managing separate highway lanes for trucks and commuters, using public-private partnerships and more effective pricing mechanisms to reduce demand for single-occupancy travel and shift travel times away from peak periods, charging tolls for traffic coming into the urban area from the suburbs or rural areas, and flexing toll revenues to subsidize a regional rail system. Additionally, the region has plans to build new highways, convert existing highways to high-occupancy toll lanes, and build a regional rail system, according to participants. Several participants agreed that while these types of state and local projects are important, federal incentives are needed to encourage local leaders to invest not just in a single corridor, but in the national transportation network.

Increased Consensus and Public Engagement Is Required to Transform Transportation Policy, According to Participants

While there is broad consensus among transportation experts of the need for a transformation of transportation policy to better meet current and future mobility needs, it is necessary to develop a constituency that will push for and support change. There is a need to educate and influence both political leaders and the broader public because transportation is not currently perceived as a significant national problem. The public and private sectors need to better understand the magnitude and consequences of these transportation challenges to be motivated to change the status quo. Additionally, local transportation initiatives underway may offer lessons on how to build consensus needed to address today's transportation challenges.

The Seriousness of the Problem Must Be Understood

Participants said that the current system has a lot of supporters and there is not currently enough unrest about the issues facing transportation infrastructure to motivate change on a large scale. Educating the public, the Congress, the private sector, environmental groups, and regional leaders on the consequences of the nation's transportation problems is a key step to initiating change, according to participants. Participants said that the public, and others, are not connecting the efficiency of the transportation system with their overall quality of life. In addition, the message that transportation affects the global economy and is

fundamental to the nation's economic success is currently not widely recognized. Users must be convinced that it is in their interest to move towards change. Several participants agreed that emphasizing the impending "crisis" related to transportation might create an opportunity for change. Along these lines, they suggested messages for the public and others such as:

- the current gas tax is insufficient for financing existing and new infrastructure;
- the "congestion crisis" may stifle productivity, economic growth, and the ability of the United States to remain competitive in a global economy; and
- global climate change is a crisis linked to carbon dioxide and other greenhouse gas emissions.

The importance of an efficient national transportation system is not well understood, according to participants. They agreed that the competitive advantage of efficiently moving goods needs to be recognized and several mentioned that other countries, such as China, have invested in a global transportation framework in order to ensure that their economies are globally competitive. One participant suggested that business leaders can help lead the push for change; however, the private sector must have confidence that its investment will yield a return. For example, according to one participant, the private sector and others are willing to pay tolls for new infrastructure, but are likely to resist paying new tolls for existing roads and services unless they are being improved.

Local Initiatives Offer Opportunities for Innovative Solutions

Participants agreed that states and some regions have demonstrated strong leadership by implementing innovative pilot projects designed to alleviate highway congestion and improve mobility. Additionally, participants said that regional sales taxes and other dedicated transportation taxes have encountered recent success in cases where clear transportation benefits are understood by constituencies. Participants said that the federal government should take a more active role in supporting these types of transportation initiatives at the state, regional, and local levels. They suggested, for example, that the federal government eliminate some authority over parts of the system and revisit existing statutory restrictions on certain activities such as tolling.

According to participants, while innovative local transportation initiatives are symptomatic of the current federal role in transportation, they also

offer opportunities for the federal government to support transportation solutions that may be appropriate for replication on a larger scale. For example, funding solutions, such as congestion pricing, can be especially difficult to implement on the local level because of their inherently political nature. The federal government can provide “political cover” for state and local governments’ initiatives. Such federal support is critical to moving promising local initiatives forward, according to participants.

Concluding Observations

As we have previously reported and participants discussed throughout the forum sessions, the magnitude of the nation’s transportation challenges calls for an urgent response, including a plan for the future. The current lack of clear national transportation goals, a blurred federal role in transportation, and the current funding crisis are transportation issues that need to be articulated to the American public in a way that can be understood. The nation’s people and businesses will be faced with the negative impacts of these transportation challenges in the very near future. The federal role in transportation needs to be better defined and focused on clearer national transportation priorities. Options to address transportation funding in the future are available, but there is no silver bullet solution, and implementation can be politically difficult on both the national and local levels because transportation financing options are generally not well understood by the public or the private sector. GAO and others will continue to assist the Congress and DOT as the federal government works to develop a national transportation policy for the 21st century that will improve the design of transportation programs, the delivery of services, and accountability for results.

Appendix I: List of Participants

Moderator

David M. Walker U.S. Government Accountability Office

Participants

William Ankner	Transportation Solutions
Anne Canby	Surface Transportation Policy Partnership
Frank Chin	Citigroup
Mortimer Downey	PB Consult Inc.
Tom Downs	ENO Transportation Foundation
Tyler Duvall	U.S. Department of Transportation
Peter Goelz	O'Neil and Associates
Mike Gray	Dell, Inc.
Bill Johnson	Port of Miami
Daniel Kaplan	LECG
David Lewis	HDR, Inc.
Rich Macias	Southern California Association of Governments
Robert Martinez	Norfolk Southern Corporation
Michael Meyer	Georgia Institute of Technology
Norm Mineta	Hill & Knowlton, Inc.
Michael Morris	North Central Texas Council of Governments
Robert Poole	Reason Foundation

Appendix I: List of Participants

Robert Puentes	Brookings Institution
Michael Replogle	Environmental Defense
Nancy Sparks	FedEx Express
James Whitty	Oregon Department of Transportation
Bob Yaro	Regional Planning Association

Appendix II: Forum Agenda

8:30	Check-in
8:45	Welcome and introductory remarks <i>David M. Walker, Comptroller General of the United States</i>
9:15	Session 1: What are appropriate goals for the nation's transportation policy?
10:30	Break
10:45	Session 2: What is the role of the federal government in achieving these goals?
12:00	Break
12:15	Working lunch Session 3: How can the transportation system be financed to meet these goals?
1:30	Break
1:45	Session 4: What steps need to be taken to transform the nation's transportation policy?
3:00	Closing remarks <i>David M. Walker, Comptroller General</i> <i>Pat Dalton, Managing Director, PI</i>

Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact

JayEtta Z. Hecker, Director (202) 512-8984

Staff Acknowledgments

In addition to the contact above, Nikki Clowers, Assistant Director, and Heather MacLeod managed all aspects of the work, and Jonathan Carver, Elizabeth Eisenstadt, Chir-Jen Huang, Sara Ann Moessbauer, Steven Putansu, Terry Richardson, Stan Stenersen, and Bethany Widick made important contributions to organizing the forum and producing this report.

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