Transportation Challenges for the 21st Century

The nation's economic vitality and the quality of life of its citizens depend significantly on the soundness, security, and availability of its physical infrastructure. The nation's transportation system 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 private sectors. Increasing passenger and freight travel has led to growing congestion, and policymakers face the challenge of maintaining the safety and condition of the transportation system while preventing congestion from overwhelming it. Transportation decisions are inextricably linked with economic, environmental, and energy policy concerns, and coordination across levels of government and different sectors is daunting and complex. New security imperatives in a world after 9/11 present additional challenges for all modes of transportation that must be addressed in a rapidly changing demographic and technological landscape. Successfully addressing transportation needs in the face of these complex, crosscutting challenges requires strategic and intermodal approaches, effective tools and programs, and coordinated solutions involving all levels of government and the private sector.

These requirements, in combination with the looming fiscal crisis faced by all levels of government, challenge the nation to fundamentally reexamine existing government transportation programs and commitments, to ask whether existing program constructs and financing mechanisms are relevant to the challenges of the 21st century, and to make tough choices in setting priorities and linking resources to results.

The following challenges and illustrative questions provide a framework for thinking about these issues in the future.

The transportation grant programs funded by the Highway Trust Fund—including the nation's highway and transit programs—have evolved slowly since the Trust Fund was created in 1956. While the program was created for the purpose of constructing the interstate highway system, and the interstate is complete, the basic construct of the program, in terms of its financing and delivery mechanisms, has not changed. In addition, this and other federal transportation programs do not have the mechanisms to link funding levels with

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the accomplishment of specific performance-related goals and outcomes, such as improvements in mobility and security. Most highway grant funds are apportioned by formula, without regard to the needs or capacity of recipients. Because many state and local governments select most projects receiving this funding, there is little assurance that the projects selected and funded best meet the nation's mobility and security needs.

- How narrowly or broadly should the federal role and interest in the nation's transportation system be defined? For example, should federal programs and spending be more closely aligned with specific national interests and purposes, such as interstate freight mobility or national and homeland defense? Concurrently, should responsibilities and authority for projects that support regional mobility and other needs be devolved to state and local governments along with the revenue sources that support them?
- Should the federal transportation formula grant programs for state and local governments be revised to better consider factors such as need, performance, capacity, and level of effort by the states and localities?

Transportation programs and funding mechanisms are largely stovepiped by modes of transportation. For example, while passenger and freight travel occurs on all modes, federal funding and planning requirements focus largely on highway, transit, and aviation passenger travel. This framework makes it difficult for intermodal projects and other modal projects (e.g., freight or passenger rail) to be integrated into the transportation system.

Can intermodal solutions to the needs of modes such as freight, air, and passenger rail service be effectively carried out within the framework of the existing trust funds and other transportation programs or is another model needed? Do the existing tools and delivery mechanisms, such as existing trust funds dedicated only to certain modes of transportation, have the wherewithal to provide intermodal, efficient, cost-effective solutions to mobility and security challenges?

While the trust funds were originally based on the concept of having users pay for the transportation systems, this concept is beginning to fray. Revenues to the Highway Trust Fund, which funds the

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majority of highway and surface transportation safety spending and a large portion of transit spending, are drawn from fuel taxes and user fees. The purchasing power of these revenues is declining and future fuel tax revenues will be further eroded by the increasing fuel efficiency of vehicles. Aviation Trust Fund revenues are also declining, in part because of lower cost airline tickets and other factors. The Federal Aviation Adminstration will face significant challenges in supporting its four major accounts, which include operations, facilities and equipment, airport improvement program, and research, engineering, and development. Many experts question whether the current financing scheme for transportation is ultimately sustainable. As a result, decisionmakers are increasingly looking more to the general fund to finance transportation programs, and state and local governments are increasingly relying on property and sales taxes to fund transportation improvements.

Should the federal government continue to provide public financing through grant programs or develop alternative, targeted, market-driven incentives, such as credit enhancements, to stimulate private financing, particularly in areas such as freight, maritime, and aviation where a mix of private and public beneficiaries exist?

The use of tolls, congestion pricing, and user fees holds promise for helping to solve congestion and mobility problems and provide new revenues for infrastructure improvements. However, the availability of competing federal grant funds and federal restrictions on tolling, pricing, and fees can work at cross purposes by dissuading state and local governments and transportation service providers from adopting these tools.

What other mechanisms are available—e.g., tolls, pricing, demand management, or user fees—that could be used to a greater degree than today to help finance the nation's transportation infrastructure that are both sustainable and would promote efficiency in the use of infrastructure and better capture revenue from beneficiaries?